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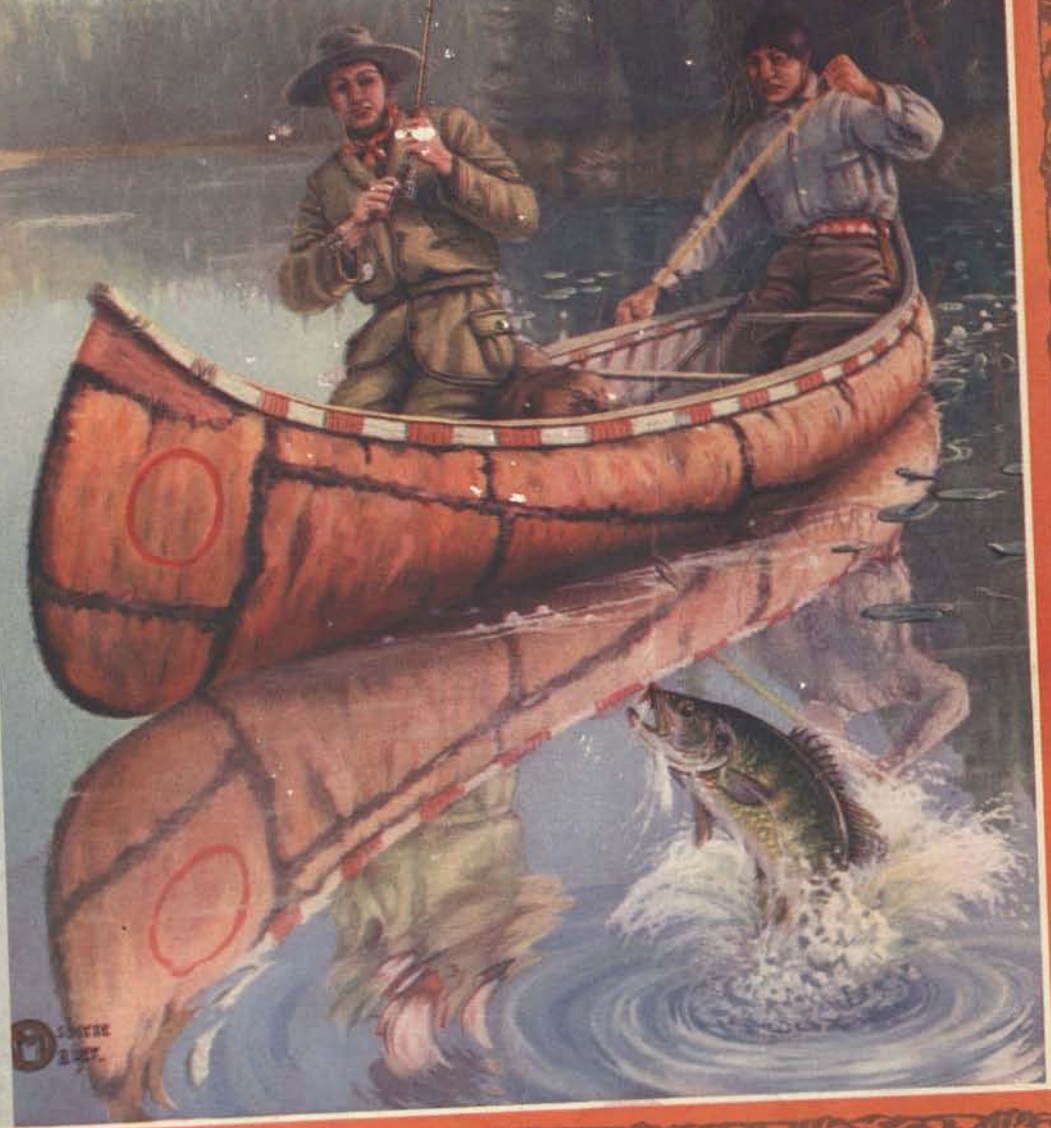
FIELD AND STREAM

OFFICIAL ORGAN of the CAMP FIRE CLUB



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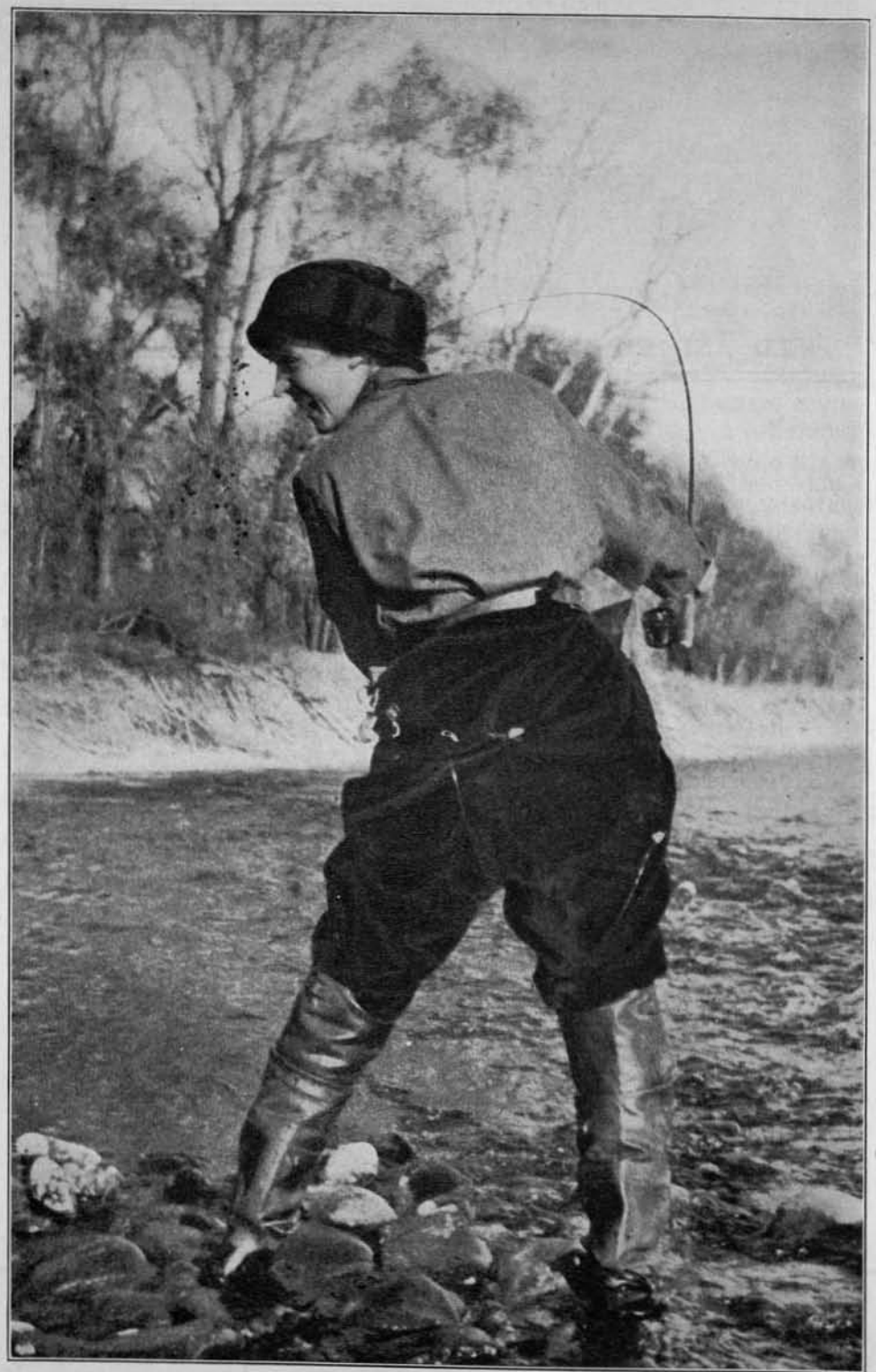

CASTING DOWN WIND—A FINE STRIKE!

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FIELD AND STREAM
AMERICA'S MAGAZINE FOR SPORTSMEN
OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR MAY, 1915 NUMBER ONE

BLACK BASS—AND THAT'S NOT ALL

BY ROBT. H. DAVIS

The Story of an Intrepid New Yorker Who Went Forth to Angle in Canadian Waters With a Novelist, a Banker, a Bushman, and the Owner of a Mica Mine

UNLESS you are interested in waters where black bass can be taken on flies three at a crack and on plugs in pairs, you had better pass this article up and turn to the advertising in the back pages. You must come to this contribution with an open mind, free, untrammeled and unsullied by narrow prejudice. I have no stomach for anyone who doubts me in advance.

Now get this:

At 12:15 on July twentieth I stepped off a Canadian Pacific train at East Templeton, Templeton Township, Ottawa County, Canada, accompanied by Frank L. Packard (author of "The Miracle Man"), an ample equipment of fishing tackle, two tump-line packs, and a light heart.

A solitary citizen standing on the platform in his shirt sleeves walked over and extended his hand to the novelist. I was introduced to a Mr. L. K. McLaurin, a grizzled, sunburned mountain man who was the soul of hospitality. I don't know that I ever met one more agreeable from the go-off.

He rounded our junk up with a practiced hand and announced that lunch was ready at a small French hotel two hundred yards from the depot.

"Have you heard anything from the lakes?" asked Packard.

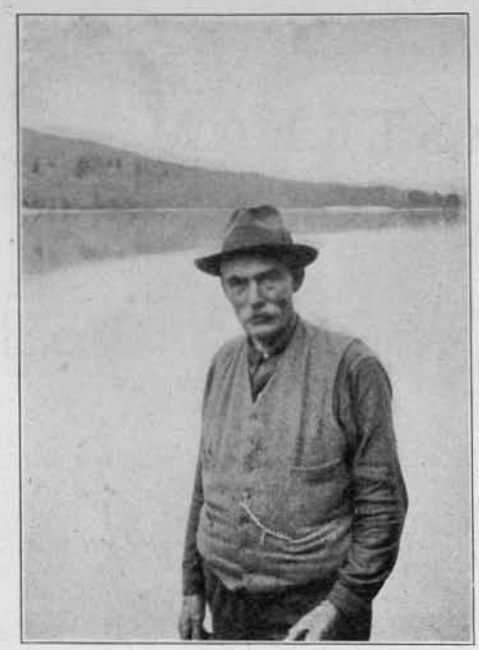
"I have," said McLaurin. "MacGowan telephoned in that the bass are taking the fly three at a crack in Grand Lake, and the speckled trout in Barnes run from five to seven pounds."

That's exactly what he said! I looked at him rather sharply.

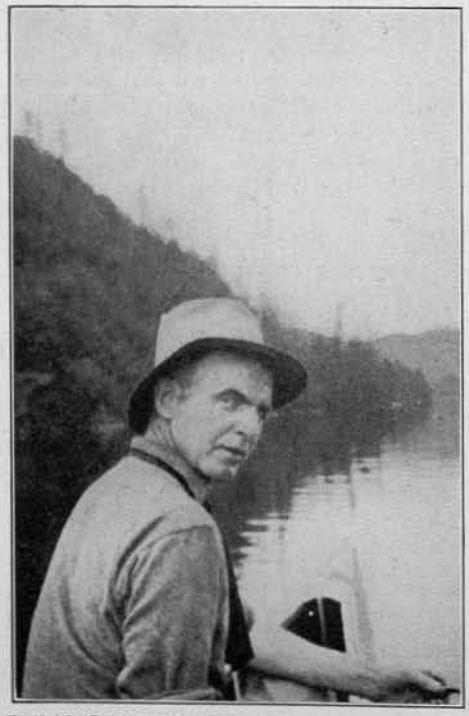
"All up and down in those waters in front of Percy's house the lake trout are slamming the minnows to beat the Dutch. We might be able to hook a few red-spots in Green Lake, and, if we're lucky, a couple of landlocked salmon. Do you care about fishing, Mr. Davis?"

"That's a fine question to ask a man who is choking to death," I replied. I never heard anybody reel off fish bunk like McLaurin.

"Well, we'll give you a run for your money. How long do you expect to stay up?"



INSPECTOR MC LAURIN, THE ONLY MAN LIVING WHO CAN INHALE SHAG TOBACCO



JIM MAC GOWAN, KING OF THE FLY-CASTERS HE OWNS THE ONLY "KICKER" ON THE LAKE THAT WILL RUN

I ventured to remark that if the fishing was as good as his rambling talk indicated, a couple of hours would be enough for me.

A pained expression flitted across Packard's face. Apparently he observed a note of incredulity in my voice.

Well, we had lunch at the French inn, a temperance pension, after which we piled our duffle into a two-seater and hit the road behind a team of draft horses. For the first five miles I had very little to say. That three-at-a-crack break of McLaurin's was quite a stiff punch from a total stranger. When we breasted the first hill, I made bold to inquire for further particulars, and by the time we got into the Laurentian Mountains, about ten miles from East Templeton, the novelist and the bushman had my angora by the whiskers for a fare-ye-well.

At four o'clock we dropped into a valley, through which crept the lower arm of Lake McGregor. A friendly voice echoed up to us, and one Jim MacGowan, who afterwards turned out to be a banker, stood up in a motorboat and gave the long yell.

Packard cupped his hands. "How are the bass biting, Jim?"

"Three at a crack," came back the response, echoing and re-echoing from shore to shore.

"Didn't we tell you?" exclaimed the two worthies who had brought me up the line.

"And the speckled boys?" yelled McLaurin, not content with the previous soak.

"Oh, four, five, six, seven pounds. All you want of 'em."

What destiny had brought me into this community of liars?

We tumbled out of the two-seater and stowed ourselves in MacGowan's boat. The first turn of the engine she got her spark and we were on the wing.

In a half hour's time we were at MacGowan's cabin, where we shifted our store clothes and climbed into the indescribable apparel which tramps, drunkards and fishermen prefer to purple and fine linen.

Again we boarded the lugger and dashed north by northwest, stopping at the wharf of the Blackburn Mica Mine, where we

took on a couple of hundred pounds of grub. Off again.

At about six o'clock we hove to in a beautiful cove, on the shores of which nestled a rambling farmhouse with a wide veranda. Altogether it was a palatial institution.

A bald-headed party, with canary-colored eyebrows and a fringe of pink hair bristling above his ears, sauntered down the path to meet us. He was dressed in the fatigue costume of overalls, hickory shirt, and policeman suspenders. Youth was in his eye—a youth that even his bald and glistening dome could not eliminate.

"Where are you fellows going?" he asked.

"Fishing," said MacGowan, throwing a line.

"When?"

"Right now."

"Where?" inquired the hairless one.

"Grand Lake, you lobster!" exploded McLaurin.

"Well, you can bet your socks I'm going with you," chortled the bronze beauty, the meanwhile yanking duffle out of the boat.

The banker, the bushman and the novelist joined in a trinity of guffaws and began slapping one another on the back.

"Get up, Bob," said Packard; "I want you to meet Percy Hamilton. He's going to guide us."

It struck me as rather peculiar that the man who had been chosen to guide a select party like ours apparently knew nothing about it in advance; but I soon learned that Percy, who received me with infinite warmth, could be lured away from home at any hour of the day or night to go fishing. Everybody else in Canada knew it, too.

He had some hay to get under cover, some corn to cultivate, a few tons of potatoes to dig, and a couple of cows coming in; but little things like that did not bother Percy at all.

In about ten minutes he had a team hitched up and was rushing around the place like a howling dervish, loading canoes, pack-sacks, fishing tackle and tents into a farm wagon. He tore into Mrs. Hamilton's kitchen, grabbed all the bread he could find, ten pounds of the best

FRANK PACKARD, WHO GAVE ME THE TIP ON GRAND LAKE

LARRY, THE BALD-HEADED MICA MINER OF THE LAURENTIANS, INCIDENTALLY OUR GUIDE

creamery butter, half a cheese, and all the preserves he could carry. I never before saw an unprepared man get into such magnificent action.

At 6:30 we were on the road again, crossing the hill between McGregor and Grand Lakes, a distance of a quarter of a mile.

"I'm glad you fellows showed up," said Percy. "The damned farm was beginning to get on my nerves. To hell with the hay! Nix on the potatoes! Raus mit the corn! No man could get through the summer without a couple of weeks' fishing at a camp in the brush. And say, boys, the bass are taking the flies three at a crack."

There it was again! Was this enthusiastic devotee of the gentle art of angling also a liar? We shall see.

Thus it came about that Percy Hamilton became the guide of the party.

I didn't like the name "Percy Hamilton" at all. He looked very much as though the cognomen of "Larry Lawrence" would fit him better, and hereafter I shall call him "Larry."

At seven o'clock we slipped our canoes into Grand Lake, haven of all havens, and paddled to the north end without a stop. The thick shadows of evening had begun to fall when we docked in a distant cove near a ridge which divides Grand from Green Lake, a sheet of water that is kin to Killarney. We pitched our tents on the highest point between, taking shelter in some scrub pine and hemlock, through which the night winds breezed a perpetual lullaby. The evening star, in a deep blue sky, twinkled a welcome. A fair moon, cold and remote, hung in the opal East.

We plied the ax to the timber, gathered our fagots, and hung the pot. Larry stoned his fire like a true disciple of the open, and presently the perfume of bacon and the aroma of coffee permeated the periphery. We gorged like men, each unfolding a separate tale of hope for the morrow.

A billion stars tumbled into the zenith, splashed down the sides of the purpling dome above us, and spangled the horizon. God was in His heaven; all was right with the world.

From the bald peaks of the aged Laurentians, oldest geological formation on the Western Hemisphere, stark-naked trees, gnarled by time, thrust their twisted forms into the gloom. A faint glow in the West paled into somber tone, darkened, and died in a sea of velvet.

It seemed as though our voices were the last in the world, our speech rising through the trees into the engulfing night. The laughter was tumbled back and forth from lake to lake. A lull in the conversation heralded the birth of indescribable silence.

Then McLaurin pulled out a corn-cob pipe, tamped it full of shag tobacco, and put the place on the bum!

Shag, for the benefit of the untutored, is a combination stench that suggests a smoldering hair mattress that has caught fire in the live-stock sheds of a State fair. During the Ty-Ping rebellion in China, when the stink-pots were introduced as a phase of warfare, shag tobacco was in its infancy. But in later years it came into its own and has since established a record for putrescence that is without a peer in the history of odors. McLaurin, through persistent endeavor, an inconquerable will, and inexhaustible patience, had learned to inhale it.

What some of us that night mistook for sleep was, in reality, asphyxiation.

On the morning of July 21st Larry, with a herculean effort, emerged from his coma and, by throwing buckets of cold water in the faces of his swooning comrades, revived us one at a time. Packard, being a sensitive man and somewhat delicate, owing to the pursuit of literature, did not recover consciousness until after breakfast. Upon discovering that he had missed a meal, he lapsed again into a state of insensibility. A hasty conference was held, after the novelist was brought around, and four desperate men notified McLaurin that thereafter, so far as we were concerned, there was an embargo on shag in Canada.

Having reached this point without any actual fatalities, we will now go forth with an angle and fish.

We put the camp in ship-shape, hung out our blankets to fumigate, and made for the canoes. The novelist and the

TWO BLACK BASS, 5½ POUNDS TOTAL, TAKEN IN ONE CAST BY THE AUTHOR ON A RED UNDER-WATER MINNOW

banker, with a full book of flies, took the west shore. Larry and I took the east. McLaurin took a nap on shore.

Grand Lake, at the point where we began to fish, was a quarter of a mile wide, and ran into an arm toward the north, which was thickly populated with lily-pads.

"You had better rig up with a Dunghill, a Royal Coachman, and a Brown Hackle," advised Larry, "and start to cast when we get up by those rocks and lily-pads on the right. Take 'em easy, now. A short cast will get 'em. Here we are. There's an idle (ideal) place."

I stripped a few feet and dropped the flies gently. No response.

"A little closer in there. Fan it a couple of times."

I had forty feet of line out. On the fourth cast a swirl parted the leaves, but nothing struck. I let ten feet more go. The trio fell like three autumn leaves. With a quick recovery I picked the end fly from the surface of the pool and flicked it.

Bang! Smash! I struck. Two small-mouth black bass got the steel. Both breasted the air at once.

"I'll hold 'er," yelled Larry, swinging the point of the canoe off to the left. "Now give 'em line. Let 'em take it down. You'll get another one on that third fly."

Such good fortune was not to come to me then. I landed the pair. One weighed two pounds, the other a pound and a half, scant. They were deep green fish, with clean, white bellies, nurtured in water clear as crystal.

I cast again. A lunker rushed it. I struck too soon and only pricked him. Plunge! He came out of the water, turned a back somersault, and fled for the open.

"Shoot one over there." The morning sun glistened on Larry's bald bean and a wild light danced from his eyes. He was a master at the paddle. The canoe crept down the shore like a ghost. "Now right off the point."

A gentle wind rounded the corner.

"Sling it in the riffle."

I got a long one out. A big bass smashed the tail fly before it hit the water. I struck him hard. He went under, describ-

ELEVEN AND ONE-HALF POUNDS OF BLACK BASS TAKEN ON FLIES IN ONE COVE OF GRAND LAKE THE LAST WEEK IN JULY. THE FISHING IS QUITE AS GOOD IN AUGUST AND SEPTEMBER

ing a wide arc to the right. Zing! Pingo! Two bass came out; but it was plain from the angle of the line that a third fish had hit for keeps.

"Three at a crack!" from Larry.

"Three at a crack!" from me.

With a dexterity born of long experience, Larry backed away. "Give 'em all the line you've got." I let them have it. The fever was upon me. I was battling with a trio of demons.

A wild yell from the other shore split the morning air. *"Three at a crack!"* MacGowan was at them, too. I had no time, however, to applaud his prowess. I had my hands full.

"For God's sake," said Larry, choking with emotion, "you've got to land these fish. Don't let MacGowan beat you to it."

Evidently Packard was *some* canoeist, as I observed when Larry brought our canoe around so that I could see the banker and the novelist at play.

It took me fifteen minutes to turn the trick. The total weight of those fish was four and three-quarter pounds. Even so, I was doomed to the low record. MacGowan's three were five plus.

I cast and recast, taking one and two fish repeatedly, and finally, from motives of pure sport, I eliminated two flies. MacGowan had two flies stripped once and landed a three-and-a-half-pound fish on the remaining Dunghill.

It was a smashing hour for both of us. Mac knew his bass tackle from every angle. He was a born caster, patient and skilful.

A light wind had begun to play upon the water, and our canoes were drawn together as we came into the apex of the pond. Within sixty feet of one another we had strike after strike, the fish running from a pound to three and one-half pounds; and in both boats we had repeated records of *three at a crack.*

Could such things be, the last week in July? Believe me, they could.

I was warm with the activities of battle.

"I'll put her nose on the shore," said Larry, "and we'll have a smoke."

Eleven bass lay in our canoe. MacGowan had fourteen. I uttered a silent prayer of thankfulness. Larry puffed at his pipe. "It's an idle spot, ain't it?"

"Yes, Larry, it's the gateway to heaven," I murmured. There are times when speech is superfluous.

The shade of a vast blue birch gave us sanctuary. MacGowan and Packard drifted in beside us. Mac's face was flushed with victory. In the softest possible voice Packard leaned over and said to me: "How about it, fatty?"

"Would either of you gentlemen like to buy a mica mine?" The voice seemed quite apart from us. I looked at Packard and MacGowan. Neither of them had spoken. Then I looked at Larry. He was leaning on his paddle, which rested on the thwarts. The voice was his. "Because if you do, I'll let you in."

I didn't quite get the drift at first.

"I know a man in Pawris (Paris) who would take all the mica you could ship to him."

Larry was astride his hobby.

"Nobody knows where this mine is but me. It's in an idle spot and it's got the best mica you ever saw; two be four, three be four, five be four. It's amber-colored. Some of it's pink. It's all up there waiting to be sacked. I thumb-trimmed it myself."

"What do you mean by 'thumb-trimmed' Larry?" I asked.

"Well, when you take it out of the ledge you break off the rotten pieces with your thumb and what's left is the two be four, the three be four, and the five be four. That means inches." He teetered forward on his paddle and then straightened up again.

"Look at that bass jump over there!" He jabbed his paddle into the water, slid the nose of the canoe from the beach, and was again on the trail of the bass. His mining hobby was forgotten.

I watched Packard during the conversation and I believe he picked up some material for his next novel.

We went to casting again and remained on the water until the sun beat too fiercely upon us. It was a glorious day. By ten o'clock we were back to camp again, after having returned the smaller fish to the water, retaining only enough for food.

THREE AT A CRACK!

Anglers who read these lines know that the god of Piscatore is a fickle deity and uncertain withal. Not so at Grand Lake. The bass bit any time you went out in a canoe and handed them a fly. In the heat of the day they weren't especially vociferous, and I cannot accuse any of them of jumping into the canoe. But in

NORTH ARM OF GRAND LAKE, WHERE THREE BASS AT A TIME WERE TAKEN ON FLIES REPEATEDLY. THE TWO PARTIES CRABBING THE VIEW ARE THE AUTHOR, ON THE LEFT, AND FRANK L. PACKARD, THE NOVELIST, ON THE RIGHT

SHOOTING THE WATER BOTTLE FOR A COLD DRINK LET IT DROP STRING AND ALL

the morning and evening they slammed it good and hard.

So far as the heat of the day is concerned, it is apropos that I set forth here a little information on the important pastime of shooting the bottle. The game is as old as the hills in Canadian waters, but I had never before seen it played.

Larry was the case-keeper. His paraphernalia consisted of a quart wine bottle, around which he had laced a coarse net of light clothes-line. On the base of the net he had woven a four-pound lead weight, upon which the bottle rested firmly and upright. Seventy-five feet of free rope ran away from the neck. Four feet up Larry had tied a wooden plug which fit the bottle quite loosely. It was so adjusted that when the bottle sank to the extremity of the rope the plug could be yanked out with a quick jerk, thus permitting the bottle to fill.

At a depth of sixty feet lake water holds about 30 degrees Fahrenheit and has got any soda-water fountain on earth whipped to a stiff, coagulated froth. The bottle always came up frosted and cold as an iceberg. The water was as clear as crystal and absolutely pure.

As a betting proposition, bottle-shooting is *par excellence*. All bets are placed as to where the bubbles will come up. The displacement of the plug permits the air to escape while the fresh water rushes in. Presently a thousand liquid pearls soon burst upon the surface. If a sperm whale had come up and blown beside us it would have given us little excitement.

Larry seemed to know just where the bubbles would appear and picked up a little loose change the first day, after which we bet him bubbles against bubbles and paid our losses in wind.

"I learned this bottle-shooting trick from a mica-miner," ventured Larry one high, hot noon, in order to turn the conversation back to a topic that lay close to his heart. Just then a loon, flying overhead, busted into loud laughter and the purchase of a mica mine was postponed.

Even good fly-fishing becomes tiresome, especially when the bass have chawed up all your leaders, wrecked every bass fly in your book, and put all your salmon tackle out of business to boot. That is what the black bass at Grand Lake did to me, and within four days after I arrived there. MacGowan was a better fly-fisherman than I ever hope to be, and his equipment lasted longer. But at the end of a week the entire outfit was in pretty bad shape.

We will now step into the bait-casting finals, for which I am always prepared. I had three 4½-foot rods—single-stickers—and a full line of Jim Heddon overwater and underwater baits.

In various coves and along sunken reefs and in sandbars Larry's father-in-law had set stakes to mark certain good fishing ground. He was a wizard in this particular, and, although a still-fisherman, he seldom planted a buoy in more than ten feet of water.

"He's a grand basser," said Larry, "and never misses a day when the season is on. If he would put as much time in mica-mining as he has in horning bass out of Grand Lake, he would be the richest man

in the world. One day we were eating lunch on the shores of Dam Lake when all of a sudden I see some mica sticking out of the ground—some three be four——"

I flipped a pebble at Frank Packard and got his eye. He rose deliberately, yawned, and sauntered toward the canoe. The novelist was a man of few words but many expressive gestures. "Good-bye, Larry!"

I followed the scribe and we made a tour of the bass stakes, around all of which we cast with red underwater plugs. We took two, three, and four fish at each stake. They generally struck on the first half dozen casts. These bass ran from three to five pounds, and the trick could be turned every morning and every night with absolute certainty. They seldom bit on flies at these points, but the underwater baits worked with gratifying regularity.

Our party returned at least five hundred bass to the waters of Grand Lake during the ten days we were there. We took all our fish on either flies or plugs. None of us cared for trolling, hence that antiquated method for luring bass was canned completely.

On the morning of the fifth day Inspector McLaurin rolled out of his blankets and announced that he was going to cook some beans, bush style. He won the title of Inspector because he spent most of his time rummaging around trying to find certain packages of shag tobacco which had suddenly, and without any ceremony whatever, disappeared.

I print in full the recipe for cooking beans bush style, *à la* McLaurin.

Take one quart of beans and cover with cold water. Let them stand all day. At nightfall strain half the water from the beans; add a cup of hot salt-pork grease and a half cup of molasses or maple syrup. Tamp down a large chunk of checked salt pork for a centerpiece. Slam the iron lid on this picture and cover it up with hot sand and coals previously prepared in the campfire. Let it cook all night. In the morning most of the moisture will have disappeared, each bean will be separate, the pork will be done to a crisp, and the palate will be tickled beyond words.

While this recipe seems very simple, it has its drawbacks. The Inspector's batting average as a beaner was high, and only one set of bean castings made by him went bung from the very go-off. A colony of ants sneaked in at the soaking stage and a chunk of rancid pork showed up before the lid went on. When the lid came off, a handful of ashes and grit did its dastardly work. The Inspector did not notice these things, however. But Larry, who was a discriminating feeder, tumbled that something was wrong.

"What's the matter with these beans?" he snorted.

"I didn't notice anything," replied Packard, who hadn't yet tasted them. "It's news to me that anybody could ruin a bean, anyhow."

Larry spat something out in his left

THE BEST WAY TO WEIGHT AND LACE A WATER BOTTLE, ACCORDING TO LARRY LAWRENCE

hand. "MacGowan, what does that look like to you?"

"Mica," said Mac, tossing a piece out of his own plate. "But I don't think it is very high grade."

Larry threw his beans over his left shoulder for luck. They rattled down a boulder behind him and fell into the lake like individual buckshot.

Personally, I prefer canned beans to any other form of bean known to science.

That night the Inspector, upon whose stomach something lay rather heavily, sat up at the campfire and had Larry read to him from an old issue of the Montreal *Star* and a battered copy of "One Thousand and One Anecdotes," by the late Alfred H. Miles. Larry dug it up in a deserted cabin on Whiteleaf Lake. He had reason before dawn to regret having captured so rare and monotonous a volume. I heard him mumbling his lines as I turned over about midnight for the second lap. Nothing is more magnificent than the mutual suffering of those who are dividing misery.

And thus we tore the coupons from our dividend of liberty. There was much criticism but no unhappiness; many hours of fatigue but none of pain.

We covered from our camp six lakes in all: Barnes, where we took our four- and five-pound speckled trout; McGregor, Grand, Green, McArthur, and Wakefield. It is impossible to go five miles in that country without encountering water.

The scenery is perfectly wonderful, although the mountains are not high. They were once, but ages have worn the Laurentians down, and they now lie tired upon the face of the earth, sprawled like wrinkled old men asleep. There is not a peak in the range. All projections have been rounded and smoothed by the batteries of heaven. It is an ideal and beautiful place, and Grand Lake, in my opinion, stands supreme as a bass water.

The best way to get to Grand Lake from New York or anywhere in the East is to go through on the New York Central via the Grand Trunk to Ottawa. From that point take a train or automobile to East Templeton, a distance of eleven miles. From East Templeton it is fifteen miles through the Laurentian Mountains to the foot of McGregor Lake, from which point all the lakes referred to in this article can be reached. There is another route by way of Montreal, where you can take the Canadian Pacific Railroad, which arrives at East Templeton about noon. The connections on either line will be found perfectly satisfactory.

If I have left anything unsaid about this incomparable corner of Canada, it is due to a lack of space. It is quite impossible to condense into a dozen pages all that a trip of this sort awakens in one.

The two things I remember most distinctly are the cast where I first landed three at a crack and the afternoon I bade Larry good-bye at the foot of Lake McGregor.

"Do you, by any accident, know a man in New York named Andrew Bridgeman?"

"Sure I know him, Larry. He's a member of the Dunwoodie Country Club. Many a time I have pounded the white pill with Andrew."

"Is he a smart guy?"

"Very smart—oh, very."

"Good business head?"

"If he lives long enough he'll have Rockefeller backed off the boards."

"You don't mean it! He's got sense, has he?" Larry scratched the pink fringe over his ear and batted his blue eyes.

"Lots of it."

"Well, he made an awful bad play up here."

"How so?"

"I offered him something."

"Did he pass it up?"

"He did."

"What was it, Larry?"

"A mica proposition."

"Well, good-bye, Larry. I'll see you next year."

Editorial, May, 1915

FIELD AND STREAM 20 YEARS OLD THIS MONTH

"The Grate Releegjious Magizeen"

UNKEL DAVID, whose quaint philosophy and quainter spelling is well known to FIELD AND STREAM readers, dubbed this magazine the "Grate Releejious" many years ago. In so doing he struck a deeper note of truth than appears on the surface, for we *are* a religious magazine and always have been, preaching ardently the religion of the great outdoors for the last twenty years. And it may be well questioned whether in this country this religion will not be the ultimate survival, outliving all other creeds, as being more suited to the peculiar genius of America, displacing the bloody and cruel doctrines brought over here from the other side of the ocean and returning our people to the simple faith of the Red Man, the original American. His creed just suits this country, as we would have it—a prayer for courage, truth, honor and chastity; an abhorrence of vast accumulations of property, a detestation of that spirit which would hog all the common bounty of the land to the end that many should starve even in sight of plenty, others toil through an existence worse than death and a very few become fabulously rich, beyond the reach of any possible bodily want, and far more endowed with the earth's riches than is good for any man. That is the White Man's way, brought over here from the other side, where all creeds are now crashing down before our eyes in blood and iron.

The people of this nation do not look favorably upon such accumulations of wealth; the Red Man's way, plenty for all and starvation for none, is the true gospel of our country. It is the gospel of the outdoor life; for he who keeps close to the good green earth and keeps out of cities, keeps his freedom and holds the secret of a successful, useful and happy existence. Like the Red Man, let him pray to keep his honor bright, his courage unenslaved by any other man's will, his tongue free from double-dealing and his feet in the paths of right living and all other creeds may quarrel and fight around him forever without ever touching the simple manliness and serenity of his own life.

FIELD AND STREAM is twenty years old this month. For twenty years we have been preaching the gospel of the out-of-doors, because we believe that it is the only true gospel for this country. By countless stories from the pens of men who have experienced the joys of days afield with rod and gun we have shown others what is in store for them if they, too, will take to the outdoor game. By countless articles on the practical technique of the outdoors we have taught those who are eager to learn how to smooth the way, by adjusting one's self to Nature's requirements, to avoid the mistakes and pitfalls which await the inexperienced man, who ventures into the wild ignorant as to what to do and how to do it. By supporting legislation in word and deed we have aided the cause of conservation of wild life, and, by throwing the limelight of publicity upon evil-doers who would exploit the resources of our game and forests for personal greed (after the way of the white man), we have exposed their fraudulent schemes and brought down the wrath of the people upon the corrupt legislators who endeavored to sneak harmful laws upon the statute books. Anything that aids and furthers the cause of the great outdoors, the great outdoors of the hunter and fisherman, not the little outdoors of the game-player, has received the help and publicity of these columns. Ours is a big country and there is outdoors enough for all. It is our creed.

Twenty years ago Mr. John P. Burkhardt published the first number of FIELD AND STREAM. For a number of years it was one of the feebler members among the

outdoor publications; other and stronger voices carried on the bulk of the work of conservation and spread the gospel of the outdoors among our people. Still it gained slowly in strength and power, and when, in 1906, nine years ago, Mr. Elting F. Warner took command of the magazine, the times were ripe for a substantial advance in quality and influence in every department of the magazine. Under his management the circulation doubled, trebled and quadrupled; new policies were inaugurated, better literary quality was demanded in the stories published and a more accurate and authoritative class of practical articles on the technique of hunting, fishing, firearms, tackle, camping equipment and all that goes to make the outdoor game in accord with the requirements of Nature was secured. Such men as Davis, Dilg, Miller, Grey, Rhead, etc., began to appear as regular contributors to the columns of the magazine. S. D. Barnes, old-timer of the outdoors, sheriff of San Marcos and author of the famous Unkel David letters, was installed as editor, and under him the magazine waxed and throve. After an administration of some four years the exacting requirements of the sedentary life of an editor proved too much for the health of an outdoorsman, born and reared in the wilderness, and ill health forced Mr. Barnes to retire from active magazine work.

For a considerable interim Mr. Warner managed both the business and editorial ends of the magazine alone, with what help he could get from the magazine staff, while searching for an editor who could take Barnes' place. He wanted someone who, like himself, could shoot and ride, kill a trout or play a bass, and yet have the literary qualifications of an editor—and he found him, in Paris, France, of all places! Mr. Warren H. Miller, who was then studying forestry in Europe, had been known since 1907 to the Field and Stream readers through such contributions as "Campfires of an Epicure," etc., and in 1910, five years ago, Mr. Warner brought him over from Europe and placed him in charge of the editorial department.

The course of the magazine under his administration is of too recent history to need much reviewing here; the magazine gained extensively in excellence; new contributors, such as Whelen, Crossman, Breck, Gilman, Clinch, Askins, Gill, La Branche, Frazer, Plumley, Singer, Beach, Hornaday, Rice, Seton, Beard, Pinchot and a host of others were added to the older authors who helped to make Field and Stream famous; many good artists, such as Stick, Forsythe, Kline, De Feo, Bull, Mayer, Hastings, etc., brought the art quality of the Field and Stream covers up to that of any other magazine published, and the subscriptions increased until it circulates at present 60,000 copies a month.

Mr. Warner introduced numerous new policies, such as the famous Prize Fishing Contest, which did more for game fishing than any other single agency in the country, and the affiliation with the Camp Fire Club of America, which enabled the magazine to take an active part in the conservation work that has been done in the last four years. Mr. Miller proved himself an able speaker at the various State and National hearings on conservation measures and, with the publicity that he wielded by the magazine, a useful and active ally to the numerous outdoor organizations which were instrumental in passing such measures as the Bayne Bill, the Federal Migratory Bird Bill, the various forestry bills, the Fur Seal legislation and the establishment of the various National parks and game refuges. Further than this, he showed himself a good all-around outdoorsman, excellent with rifle, revolver, shotgun, bait-casting rod, fly rod and surf rod; a winner in many a hard-fought match with these weapons of the outdoorsman; a practical camper and canoeist—and it is these qualities, in the long run, which the readers of such a magazine as Field and Stream demand in the man who presumes to edit their paper for them. With such a team as Elting F. Warner and Warren H. Miller as the motive power, Field and Stream should have before it a future of ever-increasing excellence, power and influence in the outdoor world.

PHOTOGRAPHS BY THE AUTHOR AND NED W. FROST

PART II

IN QUEST OF THE WAPITI

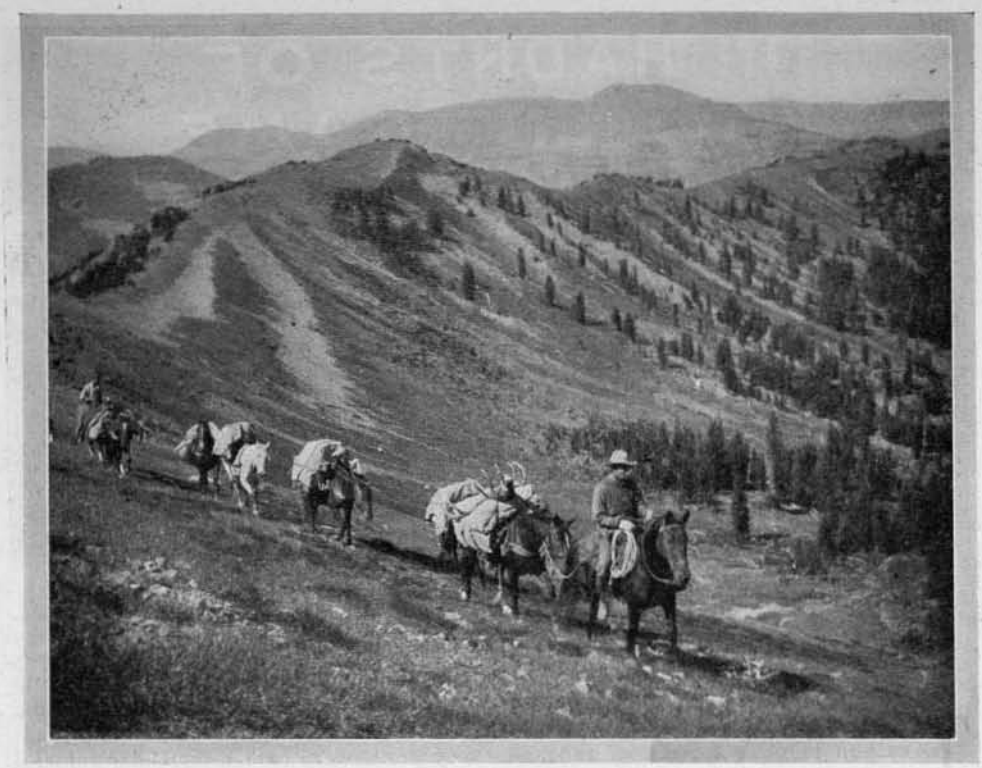
THE spear of fire shot out from the east, a blinding torrent of red and gold followed. Six pack-horses and three horsemen were slowly toiling up the Great Divide, under the glory of the awakened sun.

We were pulling over into a country that lay just east of the Yellowstone National Park. "In the section we are going to hunt," Ned was saying, as we rode along at the head of the caravan, "there are some old wapiti bulls that carry antlers as big as trees—the kind of heads you read about." Whether I was going to bring to earth one of those antlered monarchs remains to be seen, but I had made up my mind on one point. Rather than take an inferior head I would come out without any. I was going to make either a big win or a big lose.

At 10,500 feet we passed out of the last straggling bit of timber. At length we gained the top of the Divide. Here we paused a while to readjust some of the packs and view the greatest and loftiest stretch of mountains contained in all the Rockies. The traveler might well pause before the awesome spectacle of the distant view, and the overmastering grandeur of mountain peak on mountain peak, soaring upwards half way to heaven, without rest, without pause, unending, appalling.

Away in the distance the old bald shadowy peaks were bathed in tender colorful tints of violet and rose, while yet farther on they faded, then melted into the purple distance. Between each mountain lay valleys deep as the pit, where even the noonday sun never penetrated; dark, still, mysterious valleys going down forever, seemingly without end. They were choked with dense growth of lodge-pole pine and giant Englemann spruce, high as cathedral spires with old warped trunks that were wrinkled and rent.

Over the nearer peak-tops sailed puffy-white clouds before a piping breeze, while here to one side a racy stream romped and leaped down the thousand-foot ramps, with a long wild song all its own. There were pretty open grassy glades, too, all bathed in sunshine, where the cloud-shadows chased each other like frolicsome lambs at play. Mesas, plateaus, crags, cliffs, rim-rocks and bare, appalling slopes, gashed and riven and freckled with boulders—all this and more hold the spectator under its mystic spell of wonderment. Herein dwell the grizzly, wapiti, mule-deer and magnificent of the steeps—the Bighorn. And it was among



ON THE LONG TRAIL INTO THE GAME COUNTRY

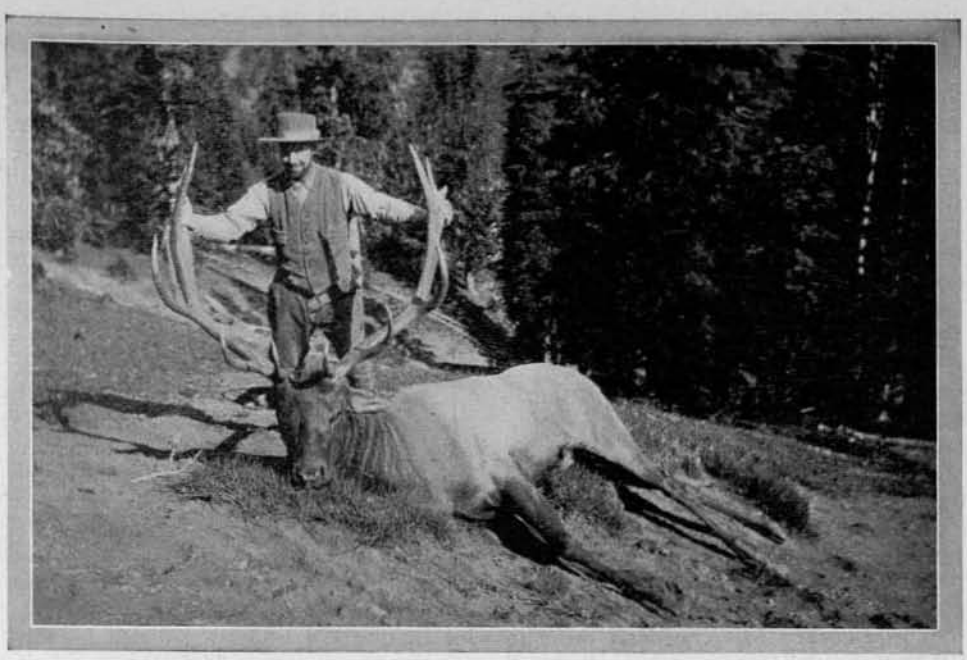
these wild folk we had come to cast our lot.

Of the feathered tribe we had seen the Clark's crow, Whisky Jack, jay, blue bird, black bird, mountain lark, wren, Richardson's grouse, rough grouse, a few ducks, and oh, yes—you over there—crowning the top of an upthrust needle of rock—I nearly forgot—you with livery as black as your heart—the bandit, the outlaw of the wild. And the same was a raven. "Caw! Caw!" said he, rising up like a black shadow, and becoming a part of the distant landscape.

The raw red light of the setting sun found us still hitting the trail. It was not until the shadows had deepened and lengthened and the lilac light in the thick forest had changed to dusk that we finally halted and unloaded our packs. "Some long day on the trail," said Art, who was the third horseman, chef, horse-wrangler and best-natured fellow I ever met. We had journeyed that day to Hoodoo Basin and were encamped at the head of little Lemair. One more day on the trail and we would pitch a permanent camp and commence to hunt in dead earnest.

On the morning that followed just as the first steel cold glint of dawn came sifting down through the giant pines we were all astir. Before the sun had peeped over the ridge, and before all the wild folk of the night had found their lairs of the day we had packed the outfit and were toiling slowly up and out of the vast basin. We were worming our way over to the very heart of the best hunting.

The day began auspiciously. It was a day of surprises especially for the wild folk, for we chanced suddenly upon several of their kin. Ned and I rode a little in advance of the outfit, thinking by sheer luck we might stumble upon an old bull. We had no sooner put the thoughts into words than a big stag leaped clear of the covert and started over a crest at top gait. A beauty was he, slick-coated,



"HE PROVED A MAGNIFICENT PRIZE, THIRTEEN TINES, HEAVILY ANTLERED"

loose-limbed and antlers!—well we shall see! Ned whipped out his field glasses. "Don't shoot until I peek at those antlers!" The stag had scarce put a hundred yards between us before I was off my horse and carefully looking over the sights of my old shooting-iron. The sight looked good and I was even taking up the creep in the trigger, expecting to get the word any instant from Ned that his antlers were O. K. "Don't shoot," advised Ned, "he's a six-pointer all right, but not quite heavy enough in the beam for us. We want the kind you read about," he cautioned, with a broad smile—and a smile helps a lot in hunting, too!

"That sun seems a little late this morning," Ned remarked as we continued our way. Then glancing to one side he pointed to a squat- slow-footed mystery. Grey-white it was, with a low brutal brow, and the eyes of a fiend; lips curled in an evil leer, just enough to hint at the sharp white fangs. Getting home from the night's hunting rather late was he, and the same was a badger. We had caught him loafing, with his hands in his pockets. so to speak, but now he was shuffling along with a gait—well, with the gait of a badger, of course—which is all his very own, and he disappeared from view rather suddenly, as all wise badgers are wont to do.

As we continued on my eye fell upon another of the wild kindred. Poised high above us, head to wind, on scarcely moving wings, a great eagle hung, in all that vast red desolation. For the sun was just creeping above the ridge. Perched atop an upthrust fang of rock was his mate, waiting to meet the day, all enthroned in the ruby gold and saffron splendors of the rising sun. Not a picture but a masterpiece, all framed against shades of scarlet and bronze. A jay piped up, a grouse called from near at hand, a fox yapped, a coyote sang out. All the world seemed to speak—day had come!

Later on, while crossing a thick wooded mountainside, we suddenly came upon two mule-deer. They were full-grown bucks with splendid antlers. With heads aloft and muscles tense a moment they sniffed the tainted air, and a moment viewed us with wide-searching eyes. Then, before I had time to draw my gun, with one

magnificent bound they vanished amid the trees.

The day wore along and had nearly worn itself out when we experienced another surprise. We were riding through a valley thickly grown with lodge-pole pine, when Ned suddenly pulled up short and beckoned to me. I glimpsed some dark forms moving through the trees about 100 yards to my left. Dismounting quickly, I ran forward a few steps, but could only see a few wapiti cows and calves. Then I caught sight of Ned pointing his gun. Thinking he was about to shoot a cow for meat (which is permissible on a native license), I stood back waiting to hear his gun crack.

Ned is a good shot, as well as quick, and I could not understand why he waited so long. Finally he looked at me in blank amazement. "What's the matter with you?" he queried. "What's the matter with you?" I retorted. "Didn't you have your gun cocked!" "You don't mean to tell me you didn't see that grizzly?" "Grizzly," I gasped—I did *not!*"

"Well don't that beat hell around a stump!" said Ned. "Why I was pointing my gun at him so you could locate him quickly. He was the very boy you were looking for with a cream-colored hide just like that skin down at the ranch you are so stuck on. I believe," continued Ned, "that he was trying to stalk one of those little elk calves. Never saw us at all, but must have scented us finally, for he suddenly went off on the jump. Little use of following him up now," Ned observed, "he will keep on hitting the high places as long as the wind holds good. Moreover, it is getting late and we want to make Canoe Lake before dark."

At length the day of surprises drew to a close. It was in the mellow glow of eventide that we arrived at crystal-clear, picturesque Canoe Lake, and camp was pitched amid singularly beautiful surroundings.

"Great morning for elk," observed Ned as we rode out of camp next day, mounted on two fine bays. "I think we'd better climb the ridge," Ned suggested, "ride along the top and if we don't hear any bull's bugle or see any fresh sign we will tie the horses and take a little jaunt on foot."

As we rode through a little open glade we saw where a small band of cows had spent the night previous. Further we found the closen impress of their lordly bull, but Ned, after examining the track, decided he was not a "big fellow." As we continued up and passed the timber limit we found numerous signs. There was no doubt that there were plenty of wapiti in the locality but on account of the lack of rain they were evidently keeping further down in the timber now, where the grass was still green and sweet.

Reaching the top of the ridge we rode to the south, stopping now and again to listen, hoping to hear the bugling challenge of some old bull. We would also scan carefully with the glasses the slopes on either side. Later, upon reaching a spur that dipped rather abruptly down to a wooded valley, we dismounted. After picking our way carefully out on a long rocky point we sat down to view the valley that spread below and listen intently for that thrilling sound of a bugling bull.

We had been seated but about ten seconds when suddenly a stag roared somewhere in the deep valley below. Then, as if a finger had been held up, all the wild held its breath, so to speak. Minutes after dead slow minutes slid by. Came answer then from another bull, a strange sonorous sound ending in a faint whistling squeal.

Ned sat there still as a stone, never winked an eye for all I could see. If he would only say something—anything to break that awful tense silence. Then the big fellow roared again. Ned's face took on a smile until it fairly beamed. I took it that the deep roar was the voice of a Royal and the other was a smaller stag.

Back along the point of rocks we hurried and down into the timber. Then the first real stalk commenced. Ned became a shadow merely, silent as a smoke-puff, a drifting something, covering ground with speed, with ease, and apparently without effort. With long strides we tiptoed down through the big silent woods, made a wide circuit; the wind shifted. Ned stopped so dead short I thought he had been suddenly turned into stone. The big fellow roared again.

With increased speed we made a short

climb back—then still another deep roar. Now came the real thrilling part of the first stalk! Quickly and quietly we wormed along. Suddenly Ned pointed to the ground, calling my attention to the track of the big bull. "Not a hundred yards off," he whispered. Then a sad thing happened. Came a sigh and a whisper, a little gentle rustle of dry leaves; one of those unaccountable caprices of nature had switched an unholy air current plumb around to our backs. We tried to make a quick run on the big bull but his time had not yet come. Our only reward was to hear him go crashing off through the forest.

Before the day had ended we made two more stalks, one resulting as did the first, the wind veering round at the crucial moment, revealing our presence. With the other, after two hours of hard work, we came upon a five-pointer but left him to go his way.

Early next morning Ned and I were at it again. To the west we rode this time. On three different occasions we tied the horses and made long detours on foot down to the timbered slopes and valleys. Once we came upon two five-point bulls lying down. We stopped to watch them. They were about seventy yards off on a little thickly wooded crest. We were in plain view, but remained perfectly still. Presently one of the bulls heaved himself to his feet and stood surveying us with inquisitive wide eyes. We then purposely made a slight movement. Instantly the other bull jumped to his feet and they presented a pretty sight as they trotted off and up the mountainside. Late that afternoon, tired and spent, we turned our faces toward camp. The air had grown chill and I was already thinking of the comforting blaze of the old camp-fire.

The sun had set. Even up there 10,500 feet in the air where a narrow trail seemed to thread the very roof of the world, and the appalling slopes fell away abruptly on either side—the last lingering sun's rays had faded. Two hunters who had put in a long hard day were riding slowly and without word toward their camp. Now suddenly they stopped. Perhaps they were viewing the splendor of the strange shifting lights of the afterglow that went drifting and wavering over the limitless sea of gigantic peaks and crags, or perhaps the object of their quest had met their gaze, but it was neither.

Ned turned half around in his saddle. "Did you hear that?" he queried. A slight nod told him I had. Up there the silence hung heavy. There was a painful stillness as the minutes dragged by. Suddenly up from the deep basin came the musical bugle of a great bull. Instantly about three hundred yards to our left front sounded the answering challenge of a deep-chested stag.

Dismounting, we ran ahead a short distance and concealed ourselves behind a small crest. To the left the slope was more gradual. There was perhaps something over two hundred yards of grassy slope before the spruces showed. It was here we expected and hoped the great stag (for surely his deep-voiced challenge bespoke a royal head) would break cover. We had not long to wait when the expected happened. What a wonderful picture he made there in that still saffron evening! How stately his pose. For upflung against the sky was his head and his antlers were indeed a worthy set.

Three shots rang out on the evening air and the great quarry yielded up his life. He proved a magnificent prize, heavily antlered with seven tines on one side and six on the other; length of horn 50 inches, with a spread of forty-five. I found that all the shots had scored; there was very little difference in their respective elevation, all taking effect in nearly the center of the body: one behind the shoulder, missing the heart; another a few inches further back, with a third still further to the rear. I paced off the distance from where I had first fired and found it to be 212 yards. The bull covered about 70 yards between the first and last shot before he fell. It was exactly ten minutes after seven when we sighted him, and the light was exceedingly poor for sighting. I was using an 8-millimeter Mauser. We dressed him out, intending to pack in the head and meat on the morrow.

Then through the pine-scented forest, silent and still, we slowly plodded our way campward. Dusk was stalking west from mountain peak to mountain peak, and the

wilderness, calm, ruthless, terrible, lay smothered in shadow, while came the starry sparkle on. As if to complete the wild beauty of it all, a big red September moon at the full sailed up into the void and hung suspended just above the tips of the somber spruces—the Hunter's Moon—a picture for an artist to dream of.

As we neared camp a familiar sound drifted up through the moon-silvered forest. Thud, thud, thud, echoed across Canoe Lake. "I hear Art exercising the axe," said Ned; "I bet he heard the shots and is going to give us an extra good feed to-night. Hope so," Ned added, "I am as hungry as a lady coyote."

"I could eat a little myself," I suggested, as the ruddy glow of the old campfire showed through the big pines. "W—wow!" yelled Ned, as we came into camp. "W—ow," answered Art with a grin. "Something tells me we are going to dine on elk steak before long," said Art. "Some bull, too," rejoined Ned with a smile like a No. 6 bear-trap.

Next morning we made several pictures of the splendid stag and packed in the head and meat. We were back in camp by noon, for it was little over a half mile to where we had come upon the bull the evening before.

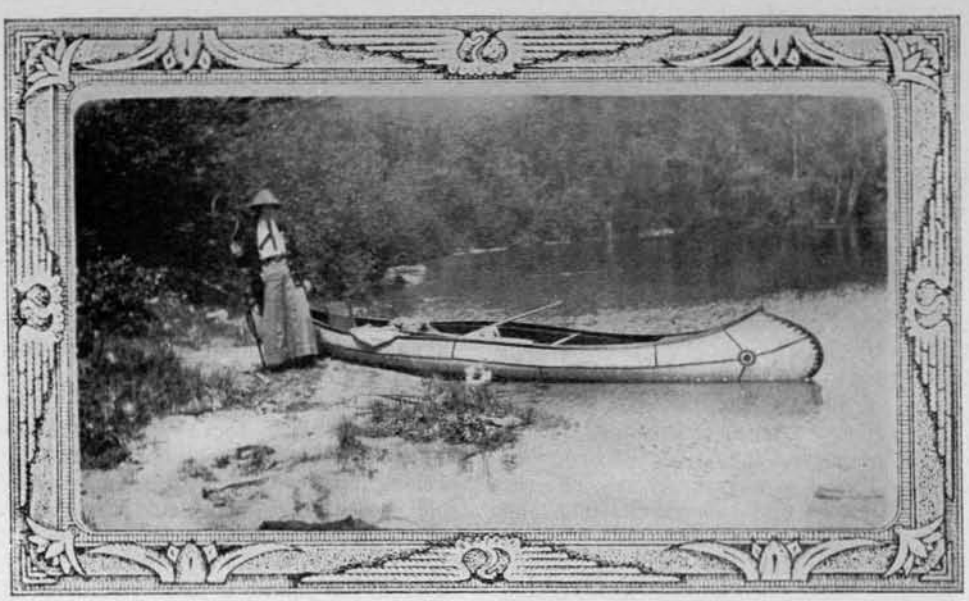
Toward evening I climbed to a high knoll to view the westering sun—the play of nature—and listen to the language of the wild. The air was clear and fresh and still, the scene a miracle of splendor. I had not long to wait before a play of life (and perhaps death) began. A rabbit, bucking and jumping, shot out of a thicket—stopped dead-short—sat tight for a moment—then jerked himself up on his haunches so quickly I had to look twice to make sure he had not removed and left me staring at a stone—so still was he. With his big staring eyes, long ears, and busy cleft nose, he was without doubt unraveling the slow drifting scents, questioning every shadow and sound, to insure his safety.

Just then a fox barked. This must have been an unlovely sound to the rabbit—for he removed in haste. One could not say he went, so as that he was gone, for one moment he was—and the next he was not.

Followed then a hushed pause, and a shifting of shadows in the deep ruby glow. Suddenly out of the pine wood opposite trotted a fox. It would seem that he had some business of an urgent and private nature on foot—I might say "paw"—for he was crossing the open straight in the direction of the departed rabbit. The fiery light of the sinking sun touched him, and behold! he was gold—shifting, fluid gold—as he glided along, and into the big pine wood. It touched the great pine boughs, too, and enchanted them into shimmering bronze; whilst a party of larks straggling home to roost, turned to a trail of fiery sparks, whose tinkling voices fell softly on the still evening air. Followed then a long interval of quiet. Caw! Caw! Caw! splintered the silence around. Then my eye fell upon the disrupter. Coal black was his livery and "crow" he is called, this jovial ruffian of the wild. Sat he, this crow, on the very tip of a lightning-smitten pine, bare, gaunt and gigantic—this age-old pine that seemed to stand nearer sky than earth. Like a graven image in jet sat yon crow—all in silhouette against the fiery red glow of ebbing day.

The dipping sun wove twisted copper tints, and clouds of gnats danced and sparkled in the glow, like steel-dust scattered wide. The *be-zeep, be-zeep* of the night hawks flapping overhead in erratic flight, fell with strange distinctness as I listened. Soon it was lost and the hush of night was upon hill and valley. A few moments later a strange sound butted through the grim silence—a deep resonant thud. Two stags were battling somewhere in the gathering gloom.

(*To be continued*)



MADAM NIMROD TAKES A BASS

BY DAISY FARRAND TEGETHOFF

Winner Special Honor Prize for Small Mouth Bass taken on a fly

THROUGH the wraith of December sunshine, falling upon the snow-capped hills across the Mohawk Valley, as in a vision I see the July sun god hurling his brazen javelins down upon a restless sapphire water; a short distance from the rugged shore line tosses a cockleshell canoe, while fifty feet away, a great bronze fish flashes his iridescent sides two feet in the air, and makes his first mighty leap for life and liberty.

It was early in June before the opportunity was vouchsafed me to respond to the red gods who had called more and more insistently, ever since the south wind had whispered her first message of spring; and I arrived at Pleasant View House, Raymond, Maine, where I was welcomed and made delightfully comfortable by my host and hostess, Dr. and Mrs. D. H. Lloy.

Few fly-fishermen who were in Maine in 1914 will soon forget the cold of June and early July. Trammels of sex and convention prevent an expression of my own private opinion of it; but the late wet spring had filled brooks, rivers, and lakes, to an abnormal height, and with the temperature far below seasonal average, the water could not warm. Small-mouth bass are distinctly a hot-weather fish, and the combination developed piscatorial conditions as unpropitious as even the most sanguine fisherman would care to see.

It was not until the week of the twelfth of July that the bass rose with any degree of vivacity—and I must return home on the eighteenth.

I had corking good fishing all of the week of the twelfth. The bass rose "with a wollop," to quote my guide—Hartwell Richardson by name, but better known to my friends as "Professor," a title by courtesy, conferred because he taught me all I know of fishing and wood lore. I can imagine no more satisfactory sport than fishing for small-mouth black bass in Sebago Lake; for the average fish will run two pounds, with many the heavier by a pound and more.

It is one of my guide's stock jokes to remark, when I appear for eight-thirty breakfast, "Good morning. Where have you been all the forenoon?" But the morning of the seventeenth—my last day—we made an early start.

The evening before, a great copper disk had rolled down behind Presidential Range, giving promise of another torrid day; and the promise was most faithfully fulfilled.

We worked down to White's Bridge with very unsatisfactory results, and at noon we crossed Jordan Bay, to the east shore of Raymond Cape, where it juts its huge rockbound finger out into Sebago Lake, and cradles the bay in the hollow of its arm. And to a fly fisherman, oh! the fascination of that cape. It is one long series of the most enchanting deep coves, bordered by great moss-backed boulders, lichen-bearded, and hoary with age, and shelving off to rocky shoals between the coves.

Slowly we weaved in and out of these coves, with the fish coming splendidly, while the pines and birches thrust their cool lace-tipped shadows farther and farther out upon the water.

Then I lost two good fish, and the guide discovered that the barbs were off both of my hooks.

We tie most of our flies, and the preceding day he had tied some flies, while I attended to my packing. One of these flies, a gray-winged affair on a No. 8 hook, he then placed on the leader as a dropper fly, in opposition to my own fly—a combination I tie, which has proved very alluring to both trout and bass—as a stretcher fly.

Working out of a cove around a particularly rocky corner, I was casting toward the shore, when Bang! and thirty-five feet sternward, in the midst of a perfect wilderness of boulders, there came a great swirl and a noise like a waterfall, and I struck. "Zzz-zz-zing" sang my reel (Can music be sweeter?), and twenty or twenty-five feet of line ripped out, and into the air His Majesty hurtled. I gave him the butt, held him, and the battle was on.

"Holy mackerel," shouted my guide, "he's a whale."

I was not very excited. I had taken a goodly number of big bass that week—a three-pounder with three or four not quite so large, for home consumption, even at that minute were reposing in the bow, and as yet I had not realized that I was playing the largest bass I had ever hooked. At the same time, a fish must be rather diminutive to permit me to witness his unceremonious departure with any degree of equanimity, so I was attending strictly to the affair at hand.

I am more than a bit exacting, casting as I do from the bottom of the canoe or boat, but my guide is most skilful in handling the boat for a fisherman, and his first efforts were directly toward reaching open water, as far as possible from those treacherous boulders—a proceeding which proved to be a task of some proportions.

Pound for pound, a small-mouth black bass is usually considered to be the gamiest fish which swims, and certainly he is in the front rank of schemers. After the first jump, my captive doubled upon his tracks, and made a twenty-foot rush straight for the boat—an exploit which afforded my guide an opportunity to make some headway out into deeper water. Then, by way of variety, as complete as it was effective, that "injia rubber idiot on a spree" tore the line out, until it seemed perforce as if, instead of accomplishing our object, we must chase him into the very midst of the boulders.

We did not say much. My guide and I have fished together so many times that our team work goes something like machinery. An occasional "stiddy now," or an injunction to keep my eye on the tip of my rod from him, or a request from me that he turn the boat to a more convenient angle, was about all.

Then occurred the very circumstance which both of us had anticipated, and which we had been bending every effort to avoid.

Mr. Fish was down behind a rock, sawing upon the leader!

I suppose I said something. I do not remember. But in retrospect I recall how I felt and the way I worked. But it seemed ages before I was rewarded by the raucous voice of my reel—at that mo-

ment more welcome than the harmonious rendering of a great symphony—and the fight was on again.

He plowed great furrows upon the surface of the water; he dived like a plummet, and he was in the air almost as much as he was in the water, while my reel hummed and chanted, and my little five-ounce Daniels doubled like a whip.

It seemed longer, but doubtless it was fifteen or twenty minutes before the doughty old warrior was sufficiently subdued to reel him close to the boat. And then! One glimpse of that craft, and like a meteor he was off and away, and for five minutes there was another lively scrimmage before, vanquished but undaunted, he was gathered, still struggling, into the net.

I have taken on a fly ounaniche and speckled trout weighing nearly two pounds heavier; but from the standpoint of pure sport, this bass afforded me by far the greatest pleasure.

And it was a fair fight, for as the gleaming burden was lifted from the net the hook dropped out of his mouth.

But the joke was on me. I have always maintained that bass and trout, in their love for brilliant colors, display taste characteristic of the Ethiopian sister. But this one had taken my guide's fly with the quiet little Quaker wings—the fly I had scorned and flouted as good only for "a little one."

I am a sportswoman whom Professor guides, but never for one moment does he forget that I am his pupil—and woe to me if my work is not well done. And so I was very proud when, with the light of approval shining in my preceptor's eye, solemnly, as if performing a ceremonial rite, he lifted his hat, and leaning forward, he extended his hand.

"Allow me to congratulate you, Mrs. Tegethoff," he said. "That is the largest bass I have ever taken into my boat, caught on a fly."

There was but one drop of bitterness in my cup—Himself was not there to see. But Nash of Maine has mounted my beauty, and Himself is in possession.

I was disheveled, hot and weary—but ecstatically happy, for had I not taken what Guy Carlton calls "an old he?"

THE POETRY OF BASS FISHING—A FLY ROD AND A BIRCH CANOE

We were four miles from home, and the shadows were growing long. From out the deep woods, hauntingly sweet, floated the even song of that "royal little minstrel," the hermit thrush, and mingled with the splash of the oars and the laplap of the water upon the sides of the boat. Far away at fashionable resorts by land and sea, thousands of beautifully gowned women promenaded elegant piazzas or trod luxurious carpets, while they listened to the latest popular air; and as I gazed down upon my dilapidated old khaki, from the bottom of my heart I pitied them for all they were missing.

PRIZE CONTEST CERTIFICATE RECORD

First Prize—Small Mouth Bass—Special Fly Class, 1914 Contest

CAUGHT BY MRS. WM. C. TEGETHOFF, HERKIMER, N. Y.

Weight—3 lbs. 12 ozs.
Length—20½ inches.
Girth—12¼ inches
Caught—July 17, 1914.
Where caught—Jordan Bay, Sebago Lake, Me.
Rod—Daniel's split bamboo.
Reel—Hardy Bros.
Line—Hardy double tapered enamel.
Lure—No. 6 fly.

MR. E. S. CHEATHAM WITH 9 LB. 6 OZ. LARGE MOUTH BLACK BASS FROM LAKE SMITH, VA.

HOW I GOT THE BIG BOY

BY E. S. CHEATHAM

Winner Second Prize, Large Mouth, Class A, Northern Division, 1914 Contest

SATURDAY was the day scheduled for my trip, but the wind whipped around to the Northeast and I decided to call it off, knowing full well the uselessness of going after the "big-mouth boys" under such conditions. Sunday broke clear, inclined to be cool, with the wind rather shifty and coming in spurts from the East. By mid-day it was nearly Southeast, and just before sundown it was coming directly from the South.

Then it was that I began to get fidgety, casting furtive glances at the clock, consulting my time-table and otherwise showing signs of sneaking off to the lakes on the Holy Sabbath day—not to fish, but to be on the ground early Monday morning. My wife relieved the tension by saying: "I think the keys to the shack (I call it "fishing camp") are upstairs on the dresser and your thermos bottle is all ready if you wish it."

Say, that was fine, wasn't it? You know, boys, you are mighty lucky when you have a side partner who knows when the "wind is right" and is willing that you should take advantage of it!

By sheer good luck I caught the last train out and within an hour was standing at Lake Smith Station in total darkness, where I was cordially received by innumerable mosquitoes, a screech owl or two, several whippoorwills, and, last, but by no means least, a voice that said: "Cap'n, I been specin yuh; yas, suh, I knowed you jes 'bleege to be here. I ain' never seen it look better'n did dis

ebnin." Good old Jim Barnes!—the father of all guides in this section—he was there, ready and waiting, when I had fully expected to have to look him up. Right then and there I had a hunch that the coming morning was to bring forth "some" fishing.

As we trudged through the woods to the shack we "argufied," as only fisherman and guide can, the outlook for the morrow's fishing. "Suppose the wind shifts to the East, Jim, what then?" I anxiously asked.

"She ain' gwine shif' " was my guide's forceful assertion, given with a confidence which I envied but in which I could not share.

"I know, Jim, but it's been on the move all day and there's no knowing what it will do before morning."

"Yas, suh, she sho been on de move, all right. I done watch her, but she been movin' de right way and she done sot whar she 'longs."

"Well, where shall we go—Lake Smith or Little Creek?—they're both good."

"Yas, suh, dey's both good"—and here, shifting his feet in an uneasy manner and with hat in hand while he scratched his head in a meditative fashion, Jim sprung the question that I had been looking for—"pow'ful good—but—Cap'n—did you fotch down anything with yuh?" And there, in the solitude of the deep woods, with only the twinkling stars as witnesses, from fisherman to guide passed a small package, which was tenderly received and carefully guarded—against breakage.

"Well, what lake did you say, Jim?" A deep-throated gurgle-gurgle of enjoyment greeted my question, and, after a time, a belated "I seen dat 'big boy' break over in Lake Smith agin Saturday. I 'specs we better try ober dar."

By the time we reached the "shack" it had been fully decided upon that we were to try out Lake Smith in the morning. Cautioning Jim for the twentieth time not to oversleep and to call me by 3:30 at the latest, I bade him good night and prepared to turn in.

Say, Mr. City Man—you in whose ears sound the clang and clatter of the street-cars, the shriek of the auto, the roar of the elevated, the rumble of the subway; whose eyes are dazzled by the flare of the Great White Way; whose chief amusement is gleaned over the footlights—you can never realize the absolute comfort and unalloyed pleasure of a night's rest in the woods, a real night's rest, away from all the hubbub of the city, lulled to sleep by the sighing of the pines when one drops gently into slumber; that easy, restful slumber that brings such dreams as come only to those who love the open.

"HE SHO' GAWD GOOD WHEN HE BAKED!"

Undisturbed, I might have slept thus beyond my story, but sharp at 3:30 my faithful Jim pounded on the door and wanted to know "Is yuh gwine tuh sleep er fish?" Assuring him that I was going to fish and mighty anxious to be on my way, I crawled out of my bunk, soused my head in a tub of cold water and was soon ready for the snack that Jim had rustled up.

Breakfast over, and with everything in readiness, we made our way through the woods to the lake's edge and to our

boat, which Jim finally unfastened while I struck matches and listened to his unprintable remarks regarding the darkness.

"How is she, Jim?" I anxiously asked.

"Dry as a bone. Did'n' I tell yuh I knowed you wuz comin'. I done got her ready dis ebnin'."

It was still dark, so dark, in fact, that it was impossible to work the edges and we were forced into the open where the water was deep, which necessitated the use of an underwater bait. Up to nearly daybreak I had landed a few small bass and a pike or two, but nothing over two pounds. The water was full of floating grass and it was impossible to keep the hooks clear.

About daybreak I had Jim leave the open—it then being light enough to cast with some degree of accuracy—and skirt the edges of the lake where I could work the lily pads and logs. I switched from an underwater to a surface bait, putting on an old Decker plug that had served in many a former battle, and settled down for some real surface casting. I was in the stern of the boat; Jim, sitting well in the bow and facing me, was backing water so easily and gently that he just fairly sneaked around the stumps and snags.

In and out among the lily pads, around stumps, down by logs, across the flat water and in the riffles I worked that old plug with every little knack and artifice that I know, hoping to induce the "big boy" Jim had seen the evening before to strike, but all to no avail. If he was there, he was too wary.

And so it went for quite a while, and then, just as I was getting ready to raise my bait from the water to make another cast, there was a swirl and a splash that came so unexpectedly, it being practically right at the side of the boat, that I was fairly taken off my feet.

"I got him, Jim! I got him!!" and the manner in which he started led me to believe that the *big one* was on. But I soon found out, even before he broke, that it was a small fish, and in a few minutes, disgusted, because disappointed, I had him in the boat—about three pounds. I took a look at Jim's face and knew what was coming. First he took a pull at his snake bite, then proceeded to unburden himself quite freely, both regarding the merits of the fish and the man who caught him, finally winding up with: "Yuh kno', Cap'n, we're out here after fish. Dat ain' de one I seen."

Pretending not to hear him, I instructed Jim to move in a bit closer to the shore line, as I was casting too far in the uncertain light. While doing so Jim pointed out a dark, shadowy spot where an old log rose slightly out of the water. "Big fish in dar, Cap'n, drap dat plug a leetle on t'udder side and drag it back easy."

It looked good to me, and fortunately I dropped the Decker just where I wanted it (don't often do this)—easy—then a slight flirt; easy again, with a rest directly by the log, a final gentle pull—but no rise!

"Nothing doing, Jim," I said as I reeled in slowly, and by this time my bait was just skirting along the edge of a bunch of lily pads. I stopped for an instant and turned my head in search of another likely looking spot when I heard a howl from Jim and instinctively threw my rod up to feel my line draw taut and see the tip bending slowly but surely. And—shame on me—I was on to a big one that I never saw strike!

Right then and there the fight was on, and, while Jim was volubly telling me the size of the fish, how big his head was, how "he bit dat plug like he gwine chaw it up," and much more that I have forgotten, "friend bass" was some busy fish. First he went straight to the bottom; then, coming up with a rush that carried him clear of the surface, I caught my first glimpse of the quivering beauty—and what a beauty he was! That he was making for the log it was easy to see. Could I keep him out? What was the chance of turning him? Would he make the log, and, if so, would he tangle himself in limbs or snags? These and a thousand similar questions raced through my mind.

And all the time that I was thinking, good old Jim was working. He shot the boat directly to one side, enabling me to get a side pull on the fish so as to turn him. In this we were successful, only to have the bass make a quick dart

back to the lily pads from which he first came, a maneuver I should have been looking for. Down he went with a hard, steady pull, and from the way the lily pads swirled and shook I knew that he was making a desperate effort to entangle himself among them, which he partly succeeded in doing, for just as I had him coming out my line stopped dead and I could feel it scrape slightly against something solid like a root or a stump.

Then cold chills commenced to sneak up and down my back. Mr. Editor, I don't mind telling you about catching that fish, but, say, I refuse to repeat the conversation that took place in that boat just then. No, sir, I won't do it. I promised my wife to stop using such language, and, by George, she might get hep—get the idea?

The fish sulked a while, and finally, unwinding my line from whatever was holding it, started in a jerky, spasmodic fashion for the log again. I made up my mind I would lose him before I would let him get under that log and I threw the hook to him good and hard. He rose once more to the surface, but I could see that he was about all in, and then it was that I had visions of a FIELD AND STREAM prize coming my way.

I soon had him alongside the boat, and when I told Jim to get ready to net him, he said: "No, suh, I ain' go take no chances wid no net, I gwine slip muh fingers in his gills"—a feat he accomplished in a safe and sure manner, characteristic of the said Jim Barnes.

It was all over—the fish was mine—nine pounds six ounces of quivering, pulsating black bass, and every ounce a fighter, lay gasping in my boat.

And there, amid the sounds that herald the approach of day, the shrill cry of an osprey, the faint bark of a dog deep in the woods, the clear, piping note of bob-white, I sat and stared and dreamed, while pleasant memories of former trips rushed over me like a flood.

Jim caught the mood, for not a word was said, not a sound made, until, with a start, I realized that I had been living over again the battles of other days—battles both lost and won.

"Jim, I guess we have done enough for to-day. I want to get to town in time to send this fellow off to a taxidermist."

"What dat yuh go sen' him tuh?"

"I am going to have him mounted, stuffed, put on a board and hung in my office," to which Jim replied: "He sho' gawd good when he baked."

We soon got back to the shack, fishing equipment was stowed away and, with my big boy properly packed, I was ready for the return trip home. Arriving in the city I had my fish sent by express to one of the leading taxidermists and am now anxiously awaiting its return.

In closing I would say that, should any follower of the big-mouth variety desire to try his luck in Lake Smith, I will be most happy to tell him what little I know about the lake and the fishing-grounds in general.

PRIZE CONTEST CERTIFICATE RECORD

Second Prize, Large Mouth Bass—Class A—Northern Division—1914 Contest

CAUGHT BY E. S. CHEATHAM,
PORTSMOUTH, VA.

Weight—9 lbs. 6 ozs.
Length—24 inches.
Girth—18½ inches.
Caught—June 22, 1914.
Where caught—Lake Smith, Va.
Rod—Heddon split bamboo.
Reel—Shakespeare Standard Professional.
Line—Abbey & Imbrie, Lake Shore.
Lure—Decker white floating lure.

JUNE ISSUE—THE SPECIAL CAMPING NUMBER—WILL HAVE SOME OF THE BEST CAMP AND TRAIL FEATURES WE EVER PUBLISHED. "CAMP COMFORTS", BY WARREN H. MILLER, IS ONE THAT EVERY CAMPER SHOULD STUDY.

DRY FLY vs. WET FLY

BY WALTER McGUCKIN

MANY fishermen do their fishing merely from a strong desire to possess fish, the desire being concentrated entirely in capture. They have absolutely no interest in angling as a delightful art in itself alone entirely apart from the final result of capture, so when they are tied up in the screen of capture they cannot possibly see all the pleasure that is produced by the pastime of angling! But, fortunately, in the world of sportsmanship there are also many anglers who fish solely from the desire to devote themselves to fishing purely as a pastime of pleasure, even if but few fish are captured. In order to increase the pleasure to be derived from the pastime of angling for trout it is wisdom's verdict, accepted to-day by many sportsmen, to use the dry fly whenever conditions will warrant the dry fly's supremacy. That these conditions do not always exist the dry fly angler will admit, for there are times when the wet fly will catch more trout than will the dry fly at that particular time; but, on the other hand, there are also other times and conditions when the dry fly will do more effective work than will the wet enticer. It is therefore again wisdom's verdict that the fly fisherman should use the dry as well as the wet fly without any consideration whatever of the relative pleasure in fishing with either the dry or wet fly, the verdict being the possibility of capture by both flies. It is a simple and easy matter for a fly fisherman to form his opinion of the advantage of the use of the dry fly by making actual casting with it, without remaining under the dark theories of those who advocate the use of the wet fly only. Let the fly fisherman who is anxious to learn from actual experience on this question first read Mr. Gill's "Practical Dry Fly Fishing," a book which is a most worthy source of practical instruction, and after having also read Mr. La Branche's book, "The Dry Fly and Fast Water," he will then have surely acquired with appreciation certain valuable knowledge of the trout world which had never been his before, even if he has spent many years on trout waters. The attempt at disclosing the possibilities of successful use of the dry fly may be easily accomplished at the start by the use of the ordinary wet fly outfit, and the wet fly itself may be put into dry fly action by the use of paraffin. All the bright red-colored wet flies such as scarlet ibis, parmachene belle, etc., should be put aside by the angler in his attempt to increase his knowledge of fishing methods, because the dry fly is a virtual reproduction of aquatic insects, and is therefore in darker color. The angler, while having but little knowledge of entomology, should simply select the fly which has the nearest resemblance in general appearance to the aquatic insect to which the trout are then rising. Let the wet fly angler begin his dry fly fishing with a desire to teach himself all that is necessary to know, and before long the results obtained will be so pleasing that the wet fly will then be hung up to dry!

Ah, yes, the possibility of capture with the dry fly is sometimes far ahead of the wet lure! Take, for instance, fishing in warm midsummer, with a glorious midday sunshine pouring down on the smooth, clear water of an open, fair-sized pool on a trout stream. Now there are surely trout in the quiet waters of this pool, but they cannot be seen because of the effect of the bright sunlight upon trout, for now they are out of sight, underneath the rocks on the bottom of the pool, and the wet fly fisherman might stand in that pool for hours and yet see no trout swimming around, nor would he catch any! Just as the angler has about

concluded that there cannot possibly be any trout in this confounded pool, a small butterfly comes flying down over the pool, near the surface of the water. Suddenly it hits on the water and floats down the pool with its wings splashing on the water's surface. It has but fluttered a short distance, when suddenly up comes a good-sized trout with a splash, and the butterfly is taken a prisoner and the trout has him for keeps. The fisherman is now surprised that he was mistaken in thinking that there couldn't possibly be any trout in this pool; so, as he is also a dry fly fisherman he now changes his leader—puts on a light-tapered leader, and puts on a yellow Sally dry fly. Then he starts casting with hope. The fly is cast lightly upon the water's surface at a spot about five feet above the point where the trout disappeared with the butterfly. The fly floats down considerably beyond this point before it is lifted from off the water and recast, and yet nothing has happened. The same cast has been made many times now, and still nothing has yet happened, but the hopeful dry fly angler continues casting always over the same course, his mind and eye concentrated on the floating fly with the hopeful pleasure of eventually enticing the fish up, so all the time spent in this method of casting produces joyous content. Suddenly his watchful eye sees the trout swim up and seize the fly with a sudden splash. Several minutes of tactful treatment and the trout is then in the dry fly angler's creel, while the wet fly is again hung up to dry!

To-day the dry fly advocate is called a purist by some who are in the wet fly ranks of claimed superiority in the angling world—and why is this done? Why should a fisherman not derive pleasure from the method of capture as well as from capture alone? The desire immersed entirely in capture must result very often in disgust to the wet fly fisherman, for often the trout caught is small and worthless, and should be put back in the water. But is it? Very often not, for the grab-all wet fly fisherman's sole desire is to fill the creel, which is done without any consideration of the fact that the bunch of trout caught is a worthless mess; while, on the other hand, nine times out of ten the trout caught with a dry fly is of a fair size and is worth keeping! Most of the trout fishing done on our Northern waters and in Canada is done with the wet fly, and many large and good trout are caught there. But is this large catch solely the result of the superiority of the wet fly? Not at all. This large catch is the result of these waters being crowded full of trout, and when a trout is surrounded on all sides by his many brothers, if he sees an object in the water which he thinks is food he makes an immediate dash for it, so that he will get it before some other brother does! It matters but little what the fly is or how well or poorly it is cast in order to capture under these conditions, and a trout thus caught with the wet fly does not prove its superiority to the dry fly, because when the dry fly is used on these same waters, which is now being often done, just as many, if not more, are caught. In most of our Eastern waters almost all trout are brown trout, with most unfortunately but few native and rainbow, and the brown trout is decidedly inferior to the other two. This fact is known and acknowledged by many anglers who have fished our Eastern waters many years ago, when only native trout (*Salvelinus fontinalis*) were in them, and their most pleasant recollections of the joyous fishing of the past make them detest the brown trout. But the brown trout will often take the wet fly when he will not notice the dry fly, for then he is feeding on the bottom and will not rise to the surface. But again, to many this does not by any means make certain the superiority of the wet fly in the capture field!

But trout are not the only pleasure victims of the dry fly. Try the dry fly on the small-mouth bass, a fish which to many well-thinking anglers is superior to trout! Fish the swift-moving rifts of the glorious Delaware River, for example, with a properly constructed grilse rod, with which the fly may be easily cast ninety feet and over, after the manner of the world-wide famous salmon casting! This long cast is necessary, for the bass is more shy than is the average trout, and consequently the fly must be placed on the water far away from the angler, so that

he will not be seen by the bass when he follows the fly downstream, because he generally follows the fly for quite a distance before he rises to it. The fly is cast a long distance upstream, of course, and as soon as it lights on the water it floats rapidly down towards the angler, the line being stripped in by him and held in loops on the left hand, and hence the line is in proper condition to strike whenever the bass rises. And when the angler has enticed a small-mouth bass weighing even a pound to become ensnared on his dry fly at the end of a ninety-foot line on swift-moving water, he will then be conscious of much more joyous conditions than he has ever experienced in landing a brown trout of twice that weight! One successful attempt of this order will drive out unbelief, and the dry fly will be still higher in the heaven of delight to the angler!

If the wet fly fisherman is also a hunter, from which does he maintain that he would derive the most pleasure: from turning around suddenly when hunting, lifting the gun from his shoulder, and shooting in the direction in which a partridge has just flown, but which he did not see when he shot, but which shot, owing to luck, was successful; or when he is stepping carefully forward, with his gun held erect by both hands, his eye and mind concentrated on the well-trained setter who is moving with caution on the scent of a partridge, finally on the point, when up flies the bird, is distinctly seen by the hunter, and is successfully shot by the concentration of thought and action? The dry fly angler derives much of the pleasure of the pastime of angling from the concentration of his mind and eye on the floating fly, also in the manner in which it should be placed upon the water, for the fly is always within his sight, placed upon the water as lightly as a feather, and then moving downstream in much the same manner as does a natural insect; while the wet fly fisherman splashes his fly into the water, it sinks and is often out of his sight, he moves it around with the action of the rod, very often pulling the fly upstream, contrary to natural insect action, most of the time does not know where his fly is, very much after the manner of fishing with bait, and very often does not see the trout at all, and only knows the trout has taken the fly when there is a sudden tension on the line. The dry fly method of fishing is of the far superior order in regard to all these considerations, and hence the dry fly method increases largely the pleasure to be derived from the pastime of angling, while the results of capture by both wet and dry flies are about on an equal basis! The acceptance of these facts, followed by the proof of trial, will be a source of satisfaction, for all wise fishermen catch all ideas they can, and then increase their catch of fish! Acknowledged! Please pass the decanter, Mr. Wet Fly!

A TWILIGHT PHANTASY

Over the mountains and over the hills,
The warm summer glades and the murmuring rills,
Sweetly, softly ringing,
I hear the sound of the wild blue-bells,
That swing in the heart of the sylvan dells,
Where wood-spirits brood in cool flower cells,
Softly, sweetly singing.

Out of the silence, out of the night,
Out of the depths of the pale starlight,
Faintly, sweetly falling,
From the elm tree on the woodland hill
Comes the sad, wild song of a whip-poor-will,
Thin and clear through the evening still,
Calling, softly calling.

And the sound of the wind as it whispers and whines,
Breathing among the evergreen pines
Melodies strange and deep,
Till thoughts of life and of mortal things
Are borne with the twilight's fading wings,
And the Spirit of Night to my tired breast brings
Dim hours of dreamless sleep.

—Arthur E. Ormande

WHAT A GOOD COON HOUND MEANS TO HIS OWNER—20 COONS IN 7 NIGHTS.
Courtesy C. E. Burkholder, Seville, Ohio.

AIREDALE, SETTER AND HOUND

V. TRAINING—AIREDALE AND HOUND

BY WARREN H. MILLER

FROM all I have been able to observe personally and from the writings of others, it seems pretty well established that the airedale is a sight hunter, purely and simply. His nose is not to be depended upon except for very hot scent. This is no detriment to him in his particular niche as a hunting dog; the deerhound of old was largely a sight hunter and had little or no nose for the trail. The knights rode with the pack until a stag was jumped, after which the hounds and horses hunted him at top speed, depending almost entirely upon vision. In the same way the airedale of to-day makes a first-rate sight hunter once he has acquired the experience. Again, in individuals sometimes the terrier, sometimes the otter hound characteristics may predominate, some harking more back to the otter-hound ancestry and therefore being more a natural hunter. Kenwyn Blaze referred more to the terrier strain and when a young pup showed no natural hunting inclinations whatever. That did not worry me—I expected something of the sort, in spite of the columns and columns in print about the airedale being a wonderful hunter. It's like the boast that the airedale "can do anything any other dog can do and then lick the other dog"—put him up against a real hound or bird dog and your airedale will be standing by looking on while the bird dogs are excitedly making game and coming to a point, or the hounds telling you by their voices not only that they have a track but what kind of a track it is, which way it is going and just how hot or how puzzling the track is. An airedale will run

A RABBIT JUST PASSED THIS WAY!

right over a fresh track not ten seconds old and never know that a wild animal had passed that way. He simply hasn't got the nose—one of those little unimportant things that the other dog *can* do and he cannot!

But that is no reason for turning the dog down. There is lots of hunting other than nose work. I have seen Blaze put up and run a rabbit at eleven o'clock at night with both hound and setter near him, neither of whose noses told them that a rabbit was anywhere about. Blaze *saw* him and that in starlight only. All three dogs gave chase, Blaze because of his speed only one jump behind Bunny. In less than two minutes the rabbit had gotten away from all three of them. A sudden big side-leap in the darkness, a silent squat in the underbrush and both the eye of the terrier and the nose of the hound had no chance. Scout took but faint interest in the affair; his nose was for birds, and rabbits always bored him, for, to point one always meant a scolding.

Blaze pointed his first bevy of quail by sight when none of the rest of us could see them at all. We knew they were quail because my boy had noticed one run across the sand road a moment before, but to see the bevy was impossible. Blaze stood looking fixedly at them, in an attitude of eager attention, much as you see him in the picture of him in the opening chapter of this series. He held staunch at my command and did not chase when the bevy whirred up. If we had had our guns and made a couple of kills he would undoubtedly have rushed in and retrieved the slain, but he was too bird-wise to chase flying flocks and had not that overmastering desire to chase them that makes it necessary to break a young setter or pointer pup of running in on a flushed bevy. After that, whenever we noted him "at attention" while in the woods or fields we always investigated cautiously, and usually discovered that he had found something. As an earth dog he lived quite up to the terrier reputation, he loved to dig, and did we hole up rabbit, 'possum, field mouse or mole he would dig furiously with plenty of nose enough to tell him whether or no a live animal was in the burrow. Working down along the ridge after flushing the first bevy, Blaze came to a second point, the same trig classy attitude that bench show men make the airedale take. This time I saw the quail myself, not six feet away and sitting still as a mouse under a young chestnut, a mere bush. Blaze undoubtedly got the idea of noticing birds in this way from what little training he had had afield with Scout that spring, and it was now October. He did not have more than a month or so with Scout, yet, by following along while the latter crept up on meadowlark, starling or

TREE-MARKING A SQUIRREL

robin, pointing puppy-fashion as eagerly as a grown dog, he had learned from Scout to notice birds and not to chase in and flush them. Just why he later pointed quail and yet did not notice smaller birds, I can only explain by the much stronger scent of the former, for even a man with a good nose can smell quail.

On rabbits and squirrels Blaze was at first keenly disappointing. He simply did not know that these creatures were meant to be noticed and hunted. I could find a squirrel up a tree and by no persuasion induce him to look up at it; and many times I jumped rabbits not four feet from him without getting him in the least interested. He only needed the hunting instinct awakened, however, for a lucky strike of a squirrel on the ground running for dear life for a tree gave Blaze his cue on them, and a rabbit, jumped in the open fields, started him in on them. Before that I experienced many a discouraging moment over him, when to make a hunter out of him seemed hopeless. I merely mention these facts that brother sportsmen who own airedales may not misjudge them and give them up without a trial. They

FAIR GAME FOR THE HOUN' DAWG

BLAZE ON QUAIL

should by rights be started on vermin when very young, say four months, a mouse or rat being liberated in a cage with the dog and the latter sicked on him and encouraged to fight and kill the animal. In the same way a live rabbit, 'possum, squirrel, 'coon, muskrat—any small fur-bearer should be introduced to Mr. Terrier for at least one battle each by way of completing his education. Cruel, but needful in order to familiarize him with the scent and fighting tactics of each of them. He will then much more readily recognize a fresh scent of any of them when hunting at large in the woods.

In the West the method of breaking in airedales is simply to hunt them with the hound pack, letting them learn by experience. The average trapper and meat man out there does not consider his airedale even partly educated when he gets him, and counts on at least one season with the hounds, including many a battle with bear and cougar, as necessary before the dog becomes a valuable addition to the pack. That he then is incomparable is proved by the growing popularity of the airedale in the West, and also in the Central States as a 'coon fighter. A large 'coon will put up quite a nasty fight for life, as I know from experience, and will succeed in mussing up your hounds considerably before one of them gets a throttle hold while the others stretch him out. The airedale, with his big slashing teeth, is just the boy in a row of this kind.

Many persons have written me lately asking for directions on training their airedales. There is no set course such as you would put a bird dog through, but there are

THE FAMOUS AIREDALE CULBERTSON ZEBEDIAH RETRIEVING PRAIRIE CHICKEN

a number of things that you can successfully train them in, the first being land and water retrieving. He is stubborn and inclined to make a whimsical game of it at first, a matter that will require much patience to overcome. Having gotten him to retrieve thrown objects, your next aim will be to get him into the habit of bringing in birds without mouthing them. I do not believe that any raw meat scheme will work here, for the terrier is too headstrong, but after you have him chicken-broken through many lickings and scolding for chasing fowl, he soon gets the idea that to bite birds of any kind is bad medicine. Procure a dead bird, quail if possible, if not, starling or any large bird recently shot, the bloodier the better, and make him fetch it. Instantly punishing with severe scoldings any attempt to mouth the bird, you soon get any idea of chewing it out of his mind. Next make false throws with the bird, dropping it near you until he gets the idea of looking for the bird upon motioning with your arm and the command "Fetch dead bird!" You can keep this lesson up daily, both you and the dog getting a lot of fun out of it, until he will search quite a territory for the bird. Let him always *find* the bird at the end of each search, however, even if completely balked and you have to aid him, so that he has the idea thoroughly imbued that there always *is* a bird to be found. Working in with your setter, he will then make a fine retriever for that vexation of quail shooting, seeking dead birds. Soon the airedale begins to note that whenever that peculiar odor of quail strikes the setter's nostrils he becomes much excited, crouches to half-points and works cautiously upwind, coming soon to a full point, while the men get equally excited and by the tones of their voices and frequent commands to himself he knows as well as you do that there is something doing and need for extreme caution. Then, the whirr of the bounding covey, the battery of guns, the falling quail, and, at the wave of the hand, in he goes to pick up the birds that he has seen fall. From that to pointing or rather freezing at attention when the quail scent strikes *his* nostrils is but the work of a season afield for the airedale, and then you will have a dog that will point quail, as many of them do. Sandy Briar, Blaze's father, is as fine a quail dog as runs in

south Jersey, and Blaze himself will be doing the same trick by next season when we get some real shooting over Scout II.

As regards running the airedale in with hound packs, particularly with beagles after rabbits, I cannot get my hunting friends to let him come along on a day's rabbit hunt. They insist that the airedale will spoil the other dogs by running in ahead of them on the rabbit track, thus killing the scent. For this reason Blaze was left at home every single time we went rabbit hunting last season, as I was already breaking in Pepper and did not feel like asking the crowd to stand for *two* green dogs.

However, I cannot see their argument. The airedale has no nose of his own sufficient to follow a rabbit track that will puzzle the wisest beagle, but, when Bunny is jumped near enough to be seen, then is the time for the airedale's speed to get in its work, and it makes little difference which dog is ahead. Again, much game is simply kicked up accidentally afield. Your party and all its dogs may go within a few yards of a rabbit in his form and no one suspect his presence. If, however, some member of the party or some dog happens to be prowling that way, up jumps Bunny and the chase is on for everyone. Now, in the day's work, the more territory thoroughly covered the more game will be jumped, and this regardless of comparatively fresh trails picked up by the hounds. The airedale, being an active, aggressive hunter, will not follow at your heels in hunting but will poke about in the brush investigating this and that, and will jump lots of game on his own hook which might otherwise be passed over unnoticed. Once he starts something his bark brings every hound to him, and the whole pack is on the fleeing animal, originally started by the airedale. For this reason I feel that he is worth while to take along with the hound pack, and certainly propose to do so with Blaze next season, now that Pepper is trained.

Finally, gun-shyness—and this applies to all dogs. The airedale is by no means timid, so that he will rarely bolt at the report of a gun, but he dislikes it, and will crouch and skulk and finally run away if much firing is indulged in which has no direct connection with his own activities. For this reason I do not think much of the practice of bringing dogs down to the gun club to get them accustomed to firearms. I brought all my own dogs down once or twice to the Asbury Park gun club, and, while they were not much alarmed at the reports, they did not enjoy it and it did not increase their liking for the gun—which is the thing you want most of all. See how experienced setters and pointers go into ecstasies at the mere sight of a gun, wagging their tails off, jumping and fawning all over the man who holds the gun, showing every sign of extreme delight. Why? Because the sight of that gun recalls to their memories great days afield and to them it means the greatest of all joys, going hunting. Do not, therefore, be disappointed if your young puppy or your airedale shows no such delight over your firearms. He has no such memories to call up in connection with that gun. If he remembers it at all it will be of a somewhat alarming and noisy implement that went off unexpectedly just when he was having a good time, and for some reason or other made you cross as thunder at him! Why should he like it, then, or show any signs of pleasure at it! That is the puppy's point of view—and it is *your fault* if that's the way he feels. Your dog should always associate that gun with good times, and he should be used to its report and recognize it as something to run *to,* not away from, for it should always mean to him lots doing and plenty of excitement. By a little staging of the scenery you can always bring this about. Of my three the only one who was naturally fearless about guns was Scout. It was in his blood, and he would sit barking away happily and wagging his tail while we were practicing with the .22 or the hand trap, while Blaze would crouch down in the field some distance off, watching for a chance to get away, and Pepper would vanish the minute your back was turned.

We began them all with .22 rifle and pistol practice. They were always present while this was going on. Did I shout and scold at Blaze and Pepper when they began to slink off after the first few shots?

By no means, as that would only have the effect of making them dislike gunfire more than ever. Instead, I tried the opposite scheme, that of having a lot of broken pieces of goodies and dog biscuit in my pockets, and they soon got the idea that "eats" were at hand when a gun was around. By holding a piece of biscuit in my left little finger under the fore end of the rifle and contriving to drop it with the report we were soon treated to the spectacle of two "gun-shy" dogs eagerly sitting under the gun and watching that bit of cracker expectantly, utterly unmindful of the report. Then, at each rush up to examine the target, in which all the dogs took part, I managed to have a hand-out of crackers or let them find some behind the target. You couldn't drive our dogs away from target practice after the first afternoon of the cracker régime, and the same was true of the field practice with the 12 and 18 gauge shotguns. Dogs are very much like boys: the strongest consideration with them in life is something to eat.

PEPPER AND HIS HANDLER STARTING FOR THE HUNT

The education of Pepper began by training him first of all to know who were his own people. It took a week to house-break him and during the same week he was tied up near the barn all day, taking but two runs a day with me. He started his first rabbit the first Sunday afternoon we had him. Bunny was crouched down as still as a stone in the center of a great smooth field. Neither Blaze nor any of our party noticed him, but Pepper spotted him right off and lit out after him like a little white and tan streak. This was too much for Br'er Rabbit, who put in some fancy steps forthwith. I never knew such speed existed as was shown off by those two streaking across that field like greased lightning, with Blaze pounding along far in the rear and all the boys yelling like Piutes. Pep did not catch the rabbit; Molly lost the dogs in a dense huckleberry thicket, which latter always bores a foxhound.

Next Saturday we all went for a hunt out in the country back of Interlaken. Blaze was left behind because of my friends' prejudice against the airedale running with beagles. But for Pep it was just the experience he needed; for, his speed being greater than the beagles', he simply needed to get started to be thrown at once on his own resources. The trouble with running a young foxhound in a pack of foxhounds is that he soon loses his initiative and depends upon the older and more experienced dogs to start something. The same is true of running him with a single first-class fox or 'coon hound, he gets to depend upon the other dog. For a little pack like mine the hound *must* do his own hunting, with the airedale as backer, and so learning the game from beagles was what I wanted to give him initiative. I had no idea of making him "rabbit proof"; rabbits are our principal game in south Jersey, with an occasional fox, 'coon or 'possum. Any foxhound will abandon a rabbit track for a fox scent, provided he runs across one, but when hunting afoot for a mixed bag of rabbits, pheasants, quail, and fox, such

as we were likely to run across, why forbid your hound the rabbit track?

Our party, Frank, the two Charlies, Boy Barse, myself, three pocket beagles, two standard beagles, and Pep, piled out of the wagon in the early morning after a three-mile drive, and the dogs were put into the fields adjoining Brier Swamp. Presently the boom of Charlie S.'s gun resounded in the thicket and we went over to look at a fine cock pheasant, in full plumage, shot from the hip when Charlie was tangled up in catbriers and, of course, the pheasant chose that particular time to make his jump. Soon after, Spotty, one of the beagles, opened up on a rabbit just jumped by Frank and the pocket hounds left the various pheasant trails they were working on and harked to Spotty's bay. Pep had been hovering around me, working out old tracks; now he looked up, sniffed the direction and set off at top speed. He had a deep musical bay with a funny break in it like a boy's voice just changing, and now we heard it right in with the beagles' tearing bray and the squeaks of the excited "mouse hounds." The rabbit was an old swamp settler and he led those dogs several miles up and down that swamp while we all scattered to vantage points on the various wood roads. You should be on the *qui vive* and ready to fire at least half a mile ahead of the dogs in this kind of work; seldom does the rabbit let them get very near him nor does he speed up any faster than they are working along the trail. Keeping a sharp eye out in every direction about the forest you will hear a faint rustling in the leaves and here comes Molly, not worrying at all about the dogs, and then is your chance. This rabbit got by the boys out in the road twice and finally shook off the dogs when I started a fresh one and we put the dogs on that. Pep was in the thick of all this, probably his first long run after rabbit. He kept right with the beagles, in fact in that dense brush there was no place to let out his speed.

Crossing the road we got into a piney, hilly country and two rabbits were routed out and both shot. I gave Pep a taste of the entrail of them first, partly to get him used to the scent, partly to give him something to think about when chasing the next one. It was a mistake, except for the one purpose intended, for one should never feed a hound in mid-trail. The effect was soon apparent; Pep curled up in a field at the first fence crossing, where we stopped for a breather, and went to sleep in the sun. We went into a thick blackberry swamp where Brownie, the other beagle, was baying now and then on an old trail, and soon the little pocket beagles were in their element, going through the thick briers like so many snakes. Mr. Rabbit was in there, and he had no idea of coming out, but even though the trail got screaming hot, Pep took no interest in the proceedings; he was full of rabbit and he didn't care to push his eyes through those thorns, thank you! However, Bunny soon fell to Charlie R.'s gun and we went back up on the hill, where we got into a nice bevy of quail. They burst into the woods after the first volley and in we all went after them. About this time Pep did a sneak and was among those missing at the roll call. I expect that noise on the rise of the covey—two double guns, two singles and a pump—was too much for his nerves, and I don't blame him much!

Right after this we got into a small cedar swamp and I missed two easy shots at rabbit not forty feet off, one of them a double. It sealed the fate of the gun I was using; for a long time I had suffered with poor trap scores with this gun in spite of its fine workmanship, because it did not *fit* me. I could always beat my scores with it at the traps with almost any other gun, even my cheap old Belgian of boyhood days; now it was missing me easy shots afield. In the swift action of field shots you have no time to do any fancy aiming, you point the gun at the game and fire. If the gun does not fit, there is no time to do any adjusting, nor do you even think of it; you simply flash the gun to shoulder, point and fire, and if it does not fit, it will not shoot where you think you are pointing it. Result, a mean miss; and in the game fields near home a very few misses mean the difference between empty bag and disappointment or a nice lot of plunder and satisfaction. That gun and I parted company that day, and

since then, with a new gun that fits me, I have had few misses to chalk up that were not my own fault.

Pep showed up along about lunch time and we went over across country to a triangular huckleberry and scrub oak swamp about a mile in extent, bounded by three forest roads. The hound hung around me after the first burst of the pack across a cabbage patch to the swamp border. He did not like that huckleberry slash a little bit! I couldn't get him to hunt at all. Presently one of the "mouse-hounds" let out a squeak, followed by Spotty's volleying bay. Pep pricked up his ears, and over the huckles he went in long bounds. The scent got hot and soon his deep bay, with the break in it, sounded. Then up and down that swamp went the rabbit with all six dogs in full cry behind him. He dashed out into the cabbage patch, where Charlie R. got a long shot at him and missed. Then back up the swamp to my position and according to the dogs he went right by me without being seen, for they came by on his track, turned, and headed back down the swamp. The next time he went out into the cabbage patch there was nobody home, and the dogs chased him out to the country road, where the scent was lost. That swamp was, however, full of rabbits, for the "mousehounds" soon found another track and all the dogs went off after him. I hardly saw Pep at all that afternoon, he was too busy to come out for me at any time and was evidently enjoying himself and picking up experience by the shovelful. We ended the hunt with two more rabbits, went over to an abandoned barn and sat down to eat while the dogs curled up in the sun, glad to get a cracker apiece and lie down. All three types had their use on this hunt, the pocket beagles, running along a few inches above the ground being invaluable in picking up scent, the standard beagles in following through in all kinds of brush, and the foxhound a good rusher when the scent got hot, because of his extra speed.

Late that afternoon we went over to an old hunting ground and I had the opportunity to see the whole chase of a rabbit from start to finish. Pep and Spotty were smelling around an old log in a thick catbrier jungle, sniffing suspiciously but not giving tongue. I went up on the brow of the ravine where I could command the whole oak forest for a considerable distance, and presently both dogs gave tongue and down the bottom of the ravine they loped, baying continuously. Then, right near me and fully three-quarters of a mile ahead of the dogs, I heard a faint rustle in the leaves and along came Bunny hopping unconcernedly. At sight of me he froze and as the gun came up, jumped into frantic flight. The shot bowled him over, but still the frantic baying down in the hollow continued. The dogs kept on past my position, circled down to the end of the ravine, went up on the sides of the hill, poked about a bit in a catbrier thicket, leaped through a tangle of wild grapevines and down saplings, and came out at my feet at the exact point where Bunny had met his end. Then they looked up at me inquiringly, jumped up on me and tried to get the rabbit out of my game pocket. Even a fast dog in heavy cover cannot follow a trail at anything like the speed he can run, so that when you get the general direction of the chase it is well to turn yourself into a rabbit for the time being and estimate about where *you* would circle in the lay of the land if you were the rabbit. He will most likely be already on his way back and if you take a place commanding all likely runways and use your ears you are quite likely to have "luck," which is more hunter's common sense than chance.

The next step in the education of Pepper was to run him in with a pack of foxhounds. We do not follow them with horses in south Jersey, as the country is too rough and sandy, but we do get quite a lot of fun hunting them with hound packs and shotguns, racing afoot to head off Reynard and get a shot at him when the music tells us that he is coming our way. Pep already had done some hunting on his own account, so he was not likely to give up all his initiative to the older dogs as he might if started with them for a first experience. He got one run with them before the winter shut down and I went South on a quail hunt, and then into winter camp in the city, much against my will, but really to please the madam.

(*To be continued*)

SOME GLACIER-FED TROUT

BY FRANK STICK

I MAY as well tell you in the beginning that this is a very exceptional piece of literature. Otherwise you might read it to the end and decide there was nothing very unusual about it. You might, in fact, say it was a decidedly commonplace and uninteresting sort of yarn. Yet, as I have suggested, all the while you would have been reading a tale, the like of which has probably never been written before and one which no doubt will be preserved and held up for future generations of writers of out-of-door fiction to gaze upon and discuss and to marvel over.

This, in a nutshell, is without doubt the only bona fide, wholly truthful article on the gentle sport ever set up in type. What of mental stress it has cost me to keep my imagination in entire subjection none but my brothers of the angle may ever know. I feel sure that men like Miller and Zane Grey and Bob Davis will understand and will probably eulogize me to a certain extent and give freely of their condolence. Yes, they may applaud my courage and self-effacement, but they will not follow my example. I do not expect it nor ask it, for I, who have blazed this lonely trail, may never follow it again.

If you are a fisherman you probably know it is a mighty easy thing for a writer, enthused by retrospective visions of a season's sport with rod and gun, to stray beyond the bounds of strict literality and to imbue the reader with expectations of sport that are not to be realized this side of the Happy Hunting Grounds. I have achieved my predetermined purpose in this instance only by keeping before my mind's eye the possibility of meeting you who read on some stream in Glacier Park this next season and of having you turn upon me the fishy eye of the skeptic.

In this newest and biggest perpendicularly of Uncle Sam's preserves there is fishing to be had that can scarcely be improved upon in another section of the country. Yet—a great big YET,—there were tourists aplenty this past season who came, viewed the mountains, lakes and glaciers, whipped a brooklet here and there and hurried on their way, firm in the belief that trout were as scarce as snowflakes in the canal zone. There are several answers. The first being the great truth that all guides are not fishermen. The second lies in the fact that a great many of the anglers went at their fishing as they would tackle a quick-lunch counter when stocks are humping. Thusly. Ragtime music. "Guide, how long till dinner. Half hour? Good. Gimme my rod. Here's a damp spot. This big red fly looks tasty." Swish—swish—swish—business of waving rod back and forth. "Nothing doing. Rotten fishing. Let's feed." . . . Slightly burlesqued, but truth—s'elp me!

Now you and I and all other honest fishermen know that our sport is not to be approached in this manner. Only after due preparation and deliberation may we undertake our angling and be assured of success.

I spent four months this past year in Glacier Park and on the reservation and in the mountains adjoining, and I enjoyed some fishing, "as *is* fishing." And because I had the time to give to it, I learned considerable c o n c e r n i n g the streams and lakes and of the personal likes of the fishes that inhabit them. Some part of this varied information I intend to unload upon the public, and, as I have stated in my introduction, which was written as a postscript, without decorations. Mr. Leader, a little soft music, please.

On the Eastern side of the Park, from Belly River on the north to Two Medicine at the southern extremity, ten or a dozen

FISHING SWIFT CURRENT FOR TROUT

streams, born of glacier and snow-fed lakes deep in the mountains, cut their devious ways eastward. (Old stuff.) All contain trout in considerable numbers but no two of them can be fished in just the same manner and have success assured.

South of Belly River, are North and South Kennedy Creeks. Few will care to spare the several days necessary for the jaunt, to fish the first-named stream, rich though it is in opportunity for the fly fisherman, but the other two can be conveniently reached from Many Glacier Camp, supposing, that is, that one has chosen a guide who knows the trails. These streams are fished less, perhaps, than any in the Park. Mainly because of the meandering trail; criss-crossed and obliterated in places by dozens of wild animal and wilder cattle trails, which ultimately branches and reaches South Kennedy at two widely separated points. Yet to one who has traveled it once or twice, the trail is neither difficult to decipher nor hard to travel, and the fishing, particularly early in the season, is excellent.

The cutthroat trout, which abound in its cold waters, reach a very satisfying size indeed, while many of the deeper holes shelter Dolly Varden trout, ranging up to six or seven pounds in weight. As in the most of these Western streams, I found the fish rising well to the coachman, royal coachman, or either of the hackles. Upon certain occasions one must resort to bait—a thin piece of fish belly, bacon or beef—and for the real big fellows nothing, of course, is quite so acceptable at any time as rightly presented bait. It has been my experience in the Western trouting that when the trout are rising to the fly, a sportsman who can handle his cast passably well is assured of better fishing than his bait-dangling brother; but, as I have stated, there are times when bait must be resorted to if one is to tote a full creel.

Supposing the time can be spared, a party could make an excellent three or four days' camping trip to either North or South Kennedy, taking the upper trail to the falls and fishing far down on the reservation, and returning by the prairie trail. There exists a small lake on lower Kennedy which abounds in Dolly Varden trout, also.

Swiftcurrent Valley, to the south mothers a stream that may be either a joy or an extreme aggravation to the fisherman. Containing fewer trout, perhaps, for its size than any brook in the Park, still what fish are found ordinarily run to exceptional size. This last season, from the pool below McDermott Falls, I landed, on different occasions,

nine Dolly Varden trout ranging in weight from four to eight and one-half pounds and numerous fair-sized cutthroats. In this same pool, late in the season, the Montana whitefish foregather in such numbers that the limit may be captured in an hour's time, supposing you ken how. The how of it consists in impaling a tiny particle of hopper upon the smallest brown fly in your book and sinking the whole. This same whitefish puts up a fair fight and early in the season rises quite freely to a small fly.

From the falls to the point where Swiftcurrent widens and merges into Sherburne Lake, five miles below, are dozens of deep holes, and all of them are favorite resting-places for Dolly Vardens of unbelievable size and energy. Fish this stream properly, and this means the fly outfit may be supplanted by the shorter rod and a free-running reel, with a bit of whitefish, or, best of all, a small mouse, and one's effort should be rewarded with one to a half-dozen goodly fish of the above-named species. There are enough cut-throats in the stream also to make it worth while to the fly-fisher. My best trout of both varieties were caught in the Swiftcurrent. In fact, of the dozens of times I fished these waters, there was but one occasion when fortune gave me the cold shoulder. This rebuff by the fickle one will be understood and appreciated by the reader as being due to no fault of mine when I make known the fact that on this jaunt I was accompanied by that child of darkness, that deathless hoodoo, in comparison with whom a cross-eyed darkey would take on all the virtues of a rabbit's left hind foot, Warren H. Miller. 'Nuff sed! Nor energy nor ability suffice against the negative waves which issue from his person.

Canyon Creek joins the Swiftcurrent a couple of miles below its source and the upper reaches of this creek and Blue Lake, from which it issues, contains large numbers of Dolly Vardens. Blue or Cracker Lake is a favorite angling point for the tourist, yet I like it least of any of the waters of the Park. The trout run from a half to a pound in weight, and it is usually a bait-fishing proposition entirely. Catches of twenty to forty trout, in the course of a couple of hours, are not unusual.

I have enjoyed some very good sport on the headwaters of the creek, however, fishing the pools to a point some three miles below the lake. The trout, though small in size, are active, and moving water is always enticing to me. My best success was with a large cow dung, and at another time with the coachman.

SOME SHERBURNE TROUT

ABOUT THE SIZE THEY RUN

One day, on this creek, as I glanced up from my fishing, I spied two goats, a nanny and her kid, following a dizzy trail a thousand feet above me, and as my eye traveled along the face of old Altyn Mountain, on the same ledge, but a bit higher up, a fine old bighorn gazed down upon his neighbors. I have seen sheep and goats in numbers throughout the Park, but never before or since in close proximity. What an opportunity it would have offered a couple of months later and a few miles distant, when Miller Johns, the Indian, and myself, hiked over the Divide on our fall hunt.

A camera is a valuable adjunct to a fishing trip in Glacier Park. I have come unexpectedly upon bear and deer more than once and one afternoon I lay and watched a big beaver for several minutes, as he swam and played before me. On a trip to Kennedy Creek with Walter Johns, than whom there never lived a better or more companionable pardner, or guide, either, if you desire or require a guide, we came unexpectedly upon an old she grizzly and her two cubs, as they delved for mice or insects on the creek bank. And mighty ferocious the old lady appeared, as she reared upright and made short rushes in our direction, when we pressed her too closely.

Three miles below the junction of Swiftcurrent and Canyon creeks, the stream widens and spreads over a mile or so of the valley, forming Sherburn Lake. Right here I endanger my reputation.

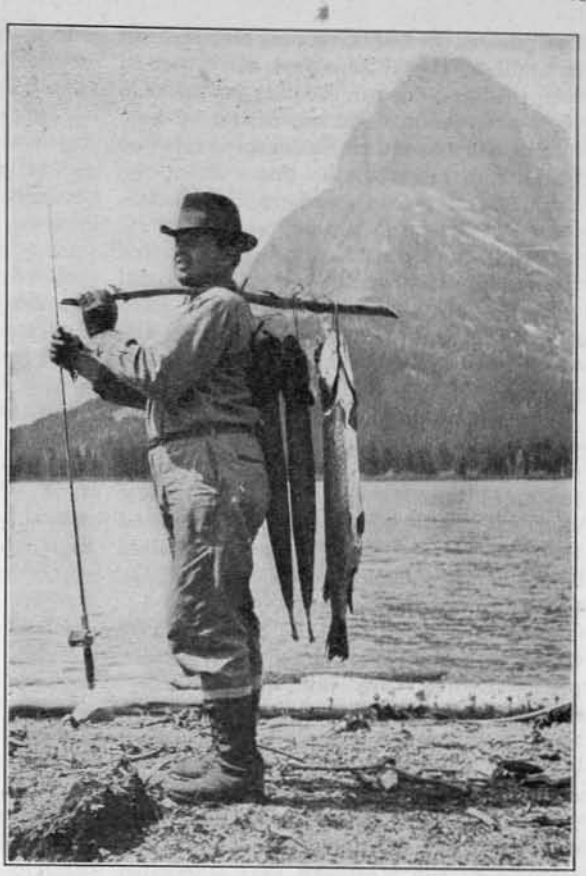
I remember that as the stage swung up the road that skirts Sherburn, the day I arrived at McDermott, I had questioned the driver concerning the fishing therein.

"Never heard of anything being caught here but whitefish," he assured me.

But the ranger, when I met him a few days later, had a better story to tell. So the morning following our meeting, I slung the short rod to the saddle, threw a leg over the little gray mare, and shortly was engaged in the grandest spell of pike fishing I have experienced in my short but varied career. Somewhere in this land, far from the trails of man, there may be another lake that holds such fishing. There *may* be, I say, but East and West, North or South, I have never found it. Where they come from, I suppose no man knoweth. The stream that flows through and empties the lake trends north, clear to Hudson's Bay, they tell me. Sufficient to me, however, that for generations the fish have lived and multiplied in Sherburn waters, unmolested by the red men in whose land it lay, and who, because the buffalo came swarming to their piskins, did not bother with the angle. Sufficient to me the knowledge that no white

man before me had disturbed the fair bosom of Sherburne with tackle other than the ineffectual troll.

Fifty feet ahead and to the right, as we entered the channel, I had spied a long, slender shadow six inches or so beneath the surface. I unlimbered my outfit and dropped the spoon and pork combination fifteen feet beyond him, intent on dragging the lure across the fish's mouth, but scarce had it moved a yard on its course, when a smaller fish darted in from the side and I fought him up to the boat and brought him in with a thumb and finger in the eye sockets. A few yards farther, a good fellow with a rush and a splash struck the bait on the surface; then, as though paralyzed by the unexpected strength of his supposed victim, allowed me to drag him to within ten feet of the boat with scarce a show of resistance, when sight of us brought power to his body, and with a sweep of his tail he was off on a run that took half my line. Again and again he made his rushes, then out of the water in a shower of spray, and when at last I had coaxed him close and had taken the grip that is better than net or gaff, I doubted the boat would hold him.



HOKE SMITH AND SOME OF THOSE PIKE

"It's just this way all spring and clear into the summer, usually," said the ranger, as he lay back on his oars, contentedly watching the sport, "then the water gets low and the pike mostly hunt the deep holes and a person's got to troll for them. This is the rig to have the real sport with, sure enough, and you can bet a lead nickel I gather in one of those outfits and do considerable spoon-throwing this winter. Then come spring, just watch me smoke."

Good old Stevenson! When cold weather chased me eastward, I left with him my five-foot rod and a South Bend self-thumbing reel, that reposed in my tackle box, and next summer I contemplate considerable competition in Pike Alley. Many a mile over mountain trails I have ridden with this big-hearted mountain man and many a mile I hope to ride with him, in seasons yet to come.

Scarce a cast missed a strike that morning, and though many a fish broke loose and many a one we returned to the water, yet when we swung shoreward at the end of two hours' fishing, the fish that lay along the bottom of the boat had almost usurped the seats of the anglers. And as we turned to the landing I made a last cast and as is sometimes the case, hooked the best fish of the day. Now, quoth I, we will play this fellow as the trollers in Wisconsin kill their muskallonge. We will drag him. And so we started for the landing, but the fish, of another mind and loath to leave the weedy shores of his beloved alley, strove to detain us. And as the

boat moved in one direction and the fish in another, I gave him foot after foot of line, till but a turn or two lay on the reel. Now a five-ounce rod, no matter of how excellent a make, has its limitations when held at an angle to the line. Point the same rod at the fish and, as Noble says, it's all in the line. I aimed at my quarry. I felt the line stretch and give as it lifted from the water. Came a sharp tug and a sudden slackening and I reeled in a spoon with the hook snapped short at the curve. The Sherburne pike had made good.

Up to the middle of the summer the pike are always hungry, it seems, in these waters, and one who can handle the casting outfit passably well, supposing he can spare a few hours from the trout and scenery, may journey the four miles from Many Glaciers camp and enjoy some pike fishing to brag about to his dying day.

One day, Morrison, who abounds with the true angler's zeal, hauled out on the grassy shore, with one fell backward rush, the granddaddy of them all. At a later date, Joe Wood and I grassed fifty odd pike in three hours' fishing, keeping only those fish which were gill-hooked. And they are the true Great Lakes pike, those fellows. As different from the pickerel as the Northern bass is distinct from his cousin of the South.

As you journey down the valley, after leaving Sherburn, you will see Boulder Creek, purling softly over a pebbly bottom, as it joins the larger stream. A moderately good brook this, but with few deep holes and one scarcely worth a day's fishing, where there are better waters to be found.

Further south, St. Mary's offers an opportunity for the troller. Personally, I am not addicted to the troll, but the big mackinaw trout which dwell in these waters and achieve a weight sometimes of thirty or forty pounds, are considerable of a temptation. No one knows St. Mary's quite so well as Bill Burns, who resides close by, and he who is fortunate enough to secure his services is reasonably sure of hooking one of the big fellows.

The entire length of St. Mary's River, after it leaves the lower lake on the reservation, is an excellent stream for the fly-fisher. A wide, clear, free-running creek, with open banks for the most part, easily fished without wading.

To ride one's pony belly deep into the icy waters of Red Eagle Lake, to make your cast, hook, play and eventually bring to net a three or four-pound cutthroat, requires no particular ability as an equestrian, but considerable level-headedness, for lines have the faculty of winding themselves around bridle buckles and pony's ears and tails, and trout have been known to dart beneath a cayuse's stomach and to take a turn or two about the animal's legs. But the fishing is worth it. It's even worth wading in, though deep, to drop a fly into those deep holes, that can scarcely be reached from the shore. I never knew a lake to contain trout of a better average size, than does Red Eagle. A big fly here, a gaudy, brightly colored affair is the thing. In fact, bass flies may be used with success.

This fishing from horseback stunt is not peculiar to Red Eagle alone. Many a mile I have ridden on more than one of the Glacier Park streams, and achieved a well-filled creel.

I like Cut Bank, I believe, best of all the trout streams of the park. Here is a brook that rises high in the mountains, tumbles and foams along for miles, in its downward course. Sometimes in mighty, spray-dashing leaps, it roars over precipices, till, reaching the valley, it takes a winding, restful course eastward. Here a boggy, brush-lined bank, where beavers have been at their building. A bit farther the creek quickens and sings across the shallows. Then a boulder-strewn stretch with a deep pool below, where you bring a half-dozen trout to creel in as many minutes.

Its upper reaches may be fished from the shore, where the necessity of doing considerable climbing, suggests the feasibility of hob nails. From the lower falls, however, to a point far out on the reservation, it should be waded. The lower length of this stream is best in spring and early summer, the headwaters late in the season.

I know a trout in Cut Bank, an ancient fellow, deep of belly and of hearty habits, who lives the livelong day in a sea-green pool, below a falls where water ousels

play. With one eye on the foam-flecked water, hissing by, and the other on the aqueous dome that forms his sky, he waits and watches in supreme content for salmon flies and other fry, to his troutship, Heaven sent. Ah me! One day I dropped a big brown hackle o'er his snout and joggled it a bit as it swept past. A glint of silver in the bright sunlight, a splash, a flash of light and he was fast. Well-hooked at that. I saw his red gills open wide, aquiver in the light, as high he leapt, then turned and darted downward. Mad with fright? Perhaps, but yet I care to think he loved the fight as these game fellows should. I stood high on that rocky point and played him back and forth till my good rod did groan in every joint. A twisted root, outcropping 'neath a jutting tree. A swerve, a lunge and he was free. Gee whiz! How near I came to garnering in that cup, on which is emblazoned the figure of a leaping trout!

The above wheeze may be taken as a separate dose if desired.

South Cut Bank contains as many cut-throat trout to the foot of free running water as any stream in the country, I verily believe, and though the fish do not grow to as great size as in most of the Park streams, still the average weight is far above that of Eastern brook trout. And they do fight, those fellows.

One evening, Miller and I and our Indian companion, climbed over a young mountain which intervened and were back in three hours with enough fish to feed a party of seven. A wild and care-free little brook, is South Cut Bank. Wending its lonely course through mountain gorges and wide valleys, to at last lose itself far out on the reservation. As it lies midway between the two larger streams, it is fished only occasionally by rare parties of campers and by the few red men who have taken to the sport of the angle.

All of the country I have mentioned in this article can be traveled in safety by women or even children. Supposing, that is, that they are temperamentally fitted for outdoor life, and that they do not shy at split skirts or riding breeches. This past season my little four-year-old daughter accompanied the small wife and myself on a week's pack-train cruise, on which trip she rode over fifty miles on the hurricane deck of old Sandy, a tow-colored critter of staid and steady habits and of benevolent aspect. She enjoyed every hour of it, did the baby, but of course she is an exceptional child. (Soft talk for the missus.)

Thus endeth the discourse on fishing the eastern slope and as the west side of the park is well known to tourists and magazine readers alike, it receives no further eulogization from my typewriter.

Big Badger Creek, eighteen miles south of the Park by pack train, is a haven for fishermen, fished scarcely more than a half dozen times each season. A day's riding brings one into a mountainous region which, from a scenic standpoint, is scarcely inferior to Glacier Park itself. Five days can be spared to this trip with advantage, and I am willing to stake my word on it, that better fishing will be hard to find in the entire length and breadth of the Rockies. With ten days at their disposal, a party could cross the Continental Divide and delve into the Big River, Morrison Creek and Sun River country. A wild region this, of range after range of sky-piercing peaks and deep-timbered cañons. The home of the big-horn, the goat, the elk and the grizzly, a country whose streams are plumb full of mountain trout. And, gentlemen, along in August, when the mercury is hesitating around the hundred mark and the dust and flies and grime and the hurdy-gurdy men, and the thousand and one other nuisances that combine to ruin the dispositions of city-dwelling people, are in full evidence—I'll be there!

ON THAT SUMMER CAMPING TRIP IS THE TIME TO STUDY—AND PHOTOGRAPH—WILD LIFE. READ "WITH FLASHLIGHT AND CAMERA," BY W. DUSTIN WHITE IN THE JUNE ISSUE TO SEE HOW MUCH CAN BE DONE WITH A SIMPLE AND INEXPENSIVE OUTFIT.

THE LINE FOR BAIT-CASTING

BY A. E. SWOYER

THE average bait-caster, no matter how discriminating he may be in the matter of rods and of reels, is all too prone to give the subject of his line little or no attention—not realizing that by a poor selection of this important part of his equipment he may not only greatly handicap the good qualities of both rod and reel, but detract considerably from his enjoyment of the sport as well. In short, although the man who wants a line simply to yank out fish and to whom strength is the main consideration, can walk into a tackle store and accept whatever the salesman hands him over the counter, the bait-caster has no such latitude; he must select a line not only suitable to bait-casting in general but to the conditions under which he expects to use it, and of a quality which will insure the results to which he is entitled.

First of all, we must accept the truism that the greater the ease with which a line may be cast, the less will be its durability; this statement cannot be made too emphatic. The soft-braided line of unfinished silk casts easily because, by virtue of its greater flexibility, it flows from the reel evenly and smoothly; it is pleasant to use because it is easy on the thumb; it is less liable to spring up in coils because it hugs the reel closely; its small size renders it less liable to pile up on the spool; and it makes for both distance and accuracy in casting in that it is light and not loaded down with dressings of any sort, so that the lure is not forced to drag a great weight of line after it.

Without doubt most of these qualities of the soft-braided lines, and the reasons therefor, will be conceded by the experienced caster; the question of the difference in friction excited between a line of this type and one of hard braid may be determined by an experiment suggested by the makers of a well-known silk line. The experiment consists in drawing two pieces of cloth of equal weight—one being a hard-finished cotton and the other a soft wool—over a smooth board; the difference in friction is apparent even to the hand, and may be exactly determined by the use of a balance.

Granting, then, that lines of this type are ideal in other ways, let us look for the cause of their short life. First of these is friction, not alone of the guides but of the thumb pressed upon the rapidly revolving spool. This same friction, of course, is present when a hard-braided line is used, but the resistance of the latter is much greater and its wear correspondingly longer. In the soft-braided line each strand is so loosely (in comparison) related to its fellows that it is, in effect, almost a separate line—which means that if the line is composed of, say, sixteen strands its entire durability is really represented by the amount of wear given by one-sixteenth of its bulk. A more apparent reason is that the softness of the line allows it to flatten out under pressure and thus present more surface to wear. This wear is most apparent in the first five or six feet of the line, where the tip and first guide get in their work under the whip of starting the cast; to counteract this effect many casters splice on a piece of heavier hard-braided line to take up this wear—this plan is also an advantage when fishing in weeds and when landing a heavy fish without a net; if the knot is objectionable it is only necessary to use care in spooling so that it is reeled well over towards the end of the spool and thus save wear and tear on the thumb.

Friction is not the only cause for the short life of special casting lines, however; owing to their texture, they soak up a good deal of water, and if they are not taken from the reels and dried, they will in time rot. This rotting is a comparatively slow process, and often the damage

blamed upon it is in reality due to mildew—a fungus growth often caused by the spores of affected water weeds which are forced into growth by heat and the sweating of the line, so that they will often destroy the latter within a day or so—the soft lines are peculiarly susceptible to both rot and mildew because of the unfinished nature of their materials. Then, too, for the same reason rust has a peculiar and rapid action upon them, so that the wise angler will case his reel in a bag of some sort before placing it in his tackle box in order that it may not come into contact with hooks or other rust-carrying articles. Sand, too, which may often cling to a line that has dragged a lure through shallow water, if wound between the coils will soon cut and ruin the fiber; alkali in the water may play havoc with its unfinished surface, and other causes may contribute to shorten its life.

Nevertheless, although such a line may last but a single day of hard casting, it will usually serve far longer than that; at any rate, the caster who delights in the finest of tackle, the lightest of lures and the most delicate and accurate of casts may use no other. But there undoubtedly are fishermen who would willingly sacrifice some measure of casting excellence upon the altar of durability, and must, therefore, turn to those of a harder braid and a more impervious finish; not necessarily those as hard and stiff as wire, however, for there is a wide latitude in the choice—and the hardest lines are also "hard" on both guides and thumb.

There is probably no better way of bringing out this point than by taking examples of the various types from the list of some well-known maker, looking at them solely from the standpoint of casting efficiency and remembering that if durability is to be the object then the order of choice would be practically reversed. While such examples must be taken as typical of lines in general, it is not easy to make comparisons between those of different makes; in addition, not every manufacturer lists a sufficient variety to enable one to select examples from his catalogue alone. For these reasons, and because the writer has not only had an extended experience with "Kingfisher" lines—invariably finding that the qualities claimed by the label were to be found in the line—but because lines of this make are generally accepted as standard, the "Kingfisher" list may be taken for comparison without suspicion of advertising motive.

A selection of lines compiled by an authority on bait-casting lines as well as an angler of repute, and thoroughly endorsed by the writer, is as follows:

LINES SELECTED FOR EASY CASTING ONLY
(For brands marked * see special note below.)

Braid	Choice	Brand	Color	Finish
Soft	1	*Special Bait Casting	B. & W.	Soft waterproof
Soft	2	*Special Bait Casting	B. & W.	None
Soft	3	Special The King	B. & W.	Plain
Soft	4	Special Little Jap	Leaf Green	None
Soft	5	Mottled Pepper & Salt	B. & W.	Plain
Medium	6	Extra Strength, Plain	B. & W.	None
Medium	7	*Slickest Casting	Various	Plain
Medium	8	Italian Casting	B. & W.	None
Medium	9	Italian Bass	B. & W.	None
Hard	10	The Chester	Drab & B.	Plain
Hard	11	*Silver Sheen	Drab & Red	Plain
Hard	12	*Diamond Back	Tan & Green	Plain
Hard	12	Mottled Giant	Various	Plain
Hardest	13	*Dreadnought	Silver	Plain

* "Special Bait Casting"; waterproofed by a new process which does not increase stiffness, but resists tendency to fluff up or to carry water; resists rot and mildew to a degree and increases life of line. "Fastest" line made.
"Bait Casting." Probably the most popular line ever made for casting only.
"Slickest Casting"; favorite of medium hard lines.
"Silver Sheen"; a beautiful but rather stiff line of great endurance.
"Diamond Back" and "Mottled Giant"; double lines, hence stiffer than ordinary, but of great strength and durability.
"Dreadnought"; an "iron-clad" line of extreme hardness.

It will be noted that these thirteen lines are divided into three groups according to the degree of hardness with which they are braided; it should be borne in mind that the shift from one group to another is not a sudden one, but that the increase in hardness is gradual from the "Special Bait-Casting" to the "Dreadnought"; between these extremes may be found the mean to meet any condition of casting. For example, the lover of light tackle as well as the man whose fishing is done in comparatively open water, where long accurate casts are the rule rather than the

exception, would find his solution in the first three lines mentioned, with perhaps a wise preference for the "Special," because of the distinct advantages offered by its waterproofing without sacrifice of other qualities. The fisherman who wants a line of greater durability than those of the softest grade, or whose conditions call for only an occasional far cast with the chance ever imminent that he will "hook on" to a big one, as well as once in a while be forced to drag a water-lily up by the roots, those of medium braid should answer—while for the angler whose lot is fishing of the "hammer-and-tongs" variety, who uses heavy lures and who wants a general purpose line of extreme durability, only those of the hardest braid would fill the bill. In this connection strength must not be confused with durability; a piece of "Bait-Casting" might test the same as one of "Dreadnought," for example yet it would not maintain this strength for so long nor would it wear for one-tenth the time; further, the soft-braided line containing less actual silk and being of smaller size than a "hard" line might lift a greater dead weight—particularly when dry—and yet be far inferior to it in wearing power.

So much for the selection of a line that will meet your particular needs from the viewpoint so far considered, but it must not be forgotten that there are other points besides these to be taken into account. There are hundreds of brands of lines upon the market which cannot all be equal in quality—yet to distinguish between them by any means outside of actual use is impossible for anyone but the linemaker, since the poorer qualities of silk will lift as great a weight as the best, although they will be far inferior in wearing qualities. The remedy, of course, is to buy only established brands or those guaranteed by dealers of repute.

Aside from the points of finish and quality, the discriminating caster should also select his lines in accordance with size—or, more properly speaking, weight—in order that they may bear a proper relation to the balance of his tackle. This is not always an easy thing to do without actual inspection of the lines themselves, inasmuch as every manufacturer grades his lines according to a different standard and even in the list of a single maker there is chance for confusion because both letters and numerals are used to designate line sizes. The best that we can do is to follow the example of practically all the makers of standard reels—such as the Talbot, Meek, Meisselbach and Vom Hofe—who use the "Kingfisher" standard in rating the capacity of their reels. In this connection a table showing the line capacity of these reels may prove of interest.

Reel Rating	Holds of G (5)	Of F (4)	Of E (3)
80 yards	80 yards	60	35
80 yards	120 yards	80	50
100 yards	160 yards	100	65

In general, these are the three sizes of line used for actual fishing, although "H," corresponding to No. 6, might occasionally find a place. For ordinary casting, size F would be preferred—but if one were casting an extremely light lure such as spinner or buck-tail, size G or even H would prove more satisfactory, just as size E might find a niche in the heart of the angler using the heavier of the wooden minnows. The reason for this difference is not obvious at first glance, but a little thought cannot fail to show the advantages of proper balance. For example, suppose that you are casting with a hard-braided line of size F, stiff five-foot rod and average wooden minnow weighing three-fourths of an ounce—a combination of great efficiency; but, wanting to do a little delicate work up into the pockets, you change your lure to a bucktail weighing a scant quarter ounce—and what happens? The light bait is incapable of drawing out the heavy line, and distance is impossible; it cannot keep it taut, and the back-lash results; and the line drags back upon the lure so that accuracy is impossible. In short, you are in for trouble, part of which is due to the stiff rod but the bulk of which may be traced directly to the line.

Suppose, on the other hand, that you are casting a light spinner—using for the purpose a soft-braided line size H or G and a somewhat limber rod between five and one-half feet and six feet in length. You want to make a far cast, or perhaps for other reasons turn to the heavier min-

nows—and find that the "whippiness" of the rod makes accuracy impossible. In addition, you will discover that the tremendous drag of the heavy lure will so wear upon the fibers of the light, soft line that after about the fifth cast the bait will part company with you and travel somewhere over into the next county.

It is not feasible to change your line to accommodate every alteration in weight of lure; but it is possible to carry two completely rigged rods—one, say, trimmed with heavy, hard line and a sturdy reel and the other fitted with a fine casting line and a free-spool for delicate work. Failing this, you *do* know the type of fishing that you most elect and can select your tackle to meet the conditions; the rest will then be compromise—as, if you are using heavy tackle, the substitution of a surface lure of size (with buck-tail attached, if desired) or an underwater minnow similarly rigged, for the straight buck-tail, spoon or pork-rind. Conversely, if using the lighter rig, you might to advantage substitute the weighted spoons for the heavier underwater minnows, and use a lighter surface lure—as, say, a "Teaser" or a "Coaxer"—in place of those of battleship design. Certainly perfect balance between rod, lure and line is essential to efficiency and to wear, while its absence cannot fail to interfere with the pleasure of the caster.

There is one other factor of some importance in the selection of a line, although it is usually overlooked; this concerns the manner in which the line is made. The so-called "round" braid makes the better looking line, but it is neither so flexible nor so elastic as the square braid; inasmuch as flexibility has much to do with ease of casting and elasticity prevents a line from breaking when put under sudden strain, the point is worth looking into. Many casters also contend that a square braid is less likely to "pinch" on the reel, which appears to be a reasonable supposition, although it is getting things down pretty fine.

Much of the wearing power of a casting line depends upon the care that is given it, this being especially true of those of soft braid; all such lines should be dried off the reel but not in the sun or by strong artificial heat. This may be managed with one of the folding line dryers sold by any dealer in tackle, or you can make such a dryer for yourself at slight trouble; failing either, the line may be coiled loosely on floor or table. The idea is simply to spread the line out instead of bunching it in close coils on the reel, in order that it may dry evenly and quickly. At all times watch out for sand and especially for rust; while casting examine the first few feet of the line frequently and as soon as a portion begins to "fuzz" cut it off—this fuzziness means that the fibers or strands are wearing through to the consequent weakening of the line, and unless this weakened portion is removed the loss of your lure or possibly of a "record" bass will be the result.

In conclusion we may summarize the points to be considered in the selection of a line as follows:

(1) Braid—soft, medium or hard, in such degree as you are willing to sacrifice casting quality to durability. Should also be square rather than round.
(2) Quality, such as offered by the makers of repute.
(3) Size, in proportion to lure and rod.
(4) Dressing, none—unless you can find a *soft* waterproofing that does not stiffen the line, or else do not object to stiffness.
(5) Color, not important.

IN THE JUNE ISSUE; "BAIT-CASTING RODS" BY THE SAME AUTHOR

THE GOLWOLOPUS

By
ARTHUR F. WESTERVELT

Winner Second Prize, Small Mouth Bass, Class A, 1914 Contest

OH, I knew he was there! "Old Golwolopus," I called him. He spent most of his time investigating the deep crevices of the granite rocks that dip into the west end of Lake Tillie Foster, Brewster, N. Y., and there is where I got acquainted with him first.

As I said before, he spent his days investigating the depths, but at evening he felt disposed at times to romp about toward the surface, making great splashes every time he came up for a white miller or some other kind of a moth. He was a beauty to watch break water, take it from me!

Yes, I met him in the evening. I'd been out all day with artificial minnows, dobsons, shiners, etc., but nary a fish of decent size had I caught. It was just sunset and I was rowing home very slowly and thinking a lot about what unusually poor luck I had had, when suddenly—swish—*splash!* I saw him. Also, I saw what he was after. A white miller had dropped and buzzed around on the surface of the lake just an instant before the splash. It was gone when the ripples ceased.

Hastily I knotted on a leader and, finding a big white miller, I made a cast. Then I spent the next ten minutes dropping those flies where I thought they would do the most good. Still my hard luck followed me. Not a rise—that is, not a rise until, purely by accident, I whipped the white miller around the corner of the rocks—then again that swish and *splash!—whirr-r-r-r!!* Honestly, it all happened so quickly that it actually took my breath away. Off he went at high speed. No stopping him, you know—fifty, sixty, seventy, eighty feet of line. Then I began to get worried, and, of course, right there I lost my nerve. I tried to turn him, and—well, he took the leader, hook and miller along with him. It was surely my unlucky day. Yet, when I stop to think of it, I am not certain but that it was my lucky day, after all; for, you see, I had then been properly introduced to "The Golwolopus," at any rate.

After that I never spent a day on Lake

"HE WAS A CORKER, ALL RIGHT, 5 LBS. 9 OZ. IN HIS STOCKING FEET!"

Tillie Foster without devoting at least half an hour to an hour trying to renew our acquaintance.

But though I fished there time and again, the big fellow didn't prove very friendly. Oh, I saw him often enough. At evening he would play around in front of the rocks just as he always did. He took white millers and brown moths occasionally, too, and once I saw him grab a field mouse that foolishly fell off the rocks and tried to swim back; but I could never get him to take anything I offered him. Little frogs in quantities were sacrificed before his altar, also helgramites and shiners and artificial white millers and, in fact, everything else that I could lay hands on; but the task seemed hopeless.

Then one evening (of glorious memory), on my way back to my landing I bethought me of a fine, big bunch of nightwalkers that reposed in the bottom of an old pail. I stopped the boat just before I reached the deep water at the foot of the rocks and, draping a large hook with a fine, big tangle of wriggling, squirming angleworms, I cast out. Smack! dropped the bait on the water, and I slowly drew the line in. Then *Zip—whir-r-r-r!!*

'E gads! I'd hooked him again! Off he raced, seventy, eighty, a hundred feet, but you may be sure that I didn't try to turn him this time. I just let him fight his own battle, and he fought. Three times he jumped out of the water, shaking his head like the proverbial bulldog. It was some fight. Battle! why, he battled like a—well, like a small-mouth bass *can* fight. Back and forth he raced, now heading for some hole under the rocks or for open water.

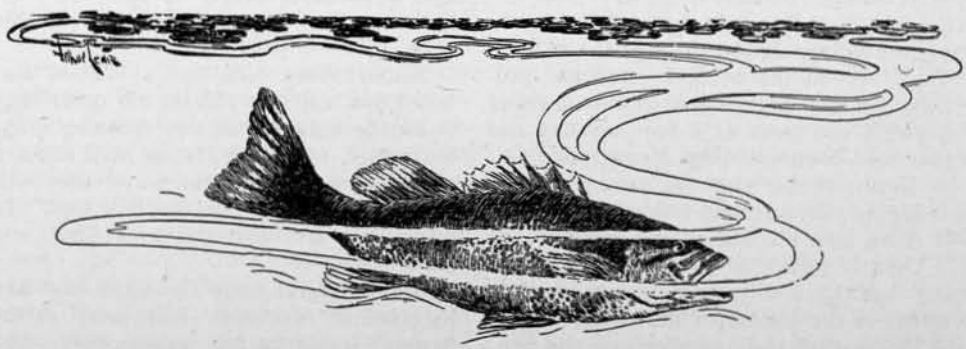
Sometimes I expected to see my oft-tested Kingfisher line part or my little Hedden rod snap when I tried to check his headlong rushes. But finally he began to tire, and then, to my dismay, I remembered that I had left my landing-net home that morning. How did I get him in? Well, I coaxed him up alongside of the boat as best I could and then landed him like the fisherman on the banks lands a big cod; just tipped the gunwale of the boat down to the water's edge and shipped him in—also a bucket or two of water. He was a corker, all right, five pounds nine ounces in his stocking feet. Some fish, say I. What d'you say, mates?

PRIZE FISHING CONTEST CERTIFICATE RECORD

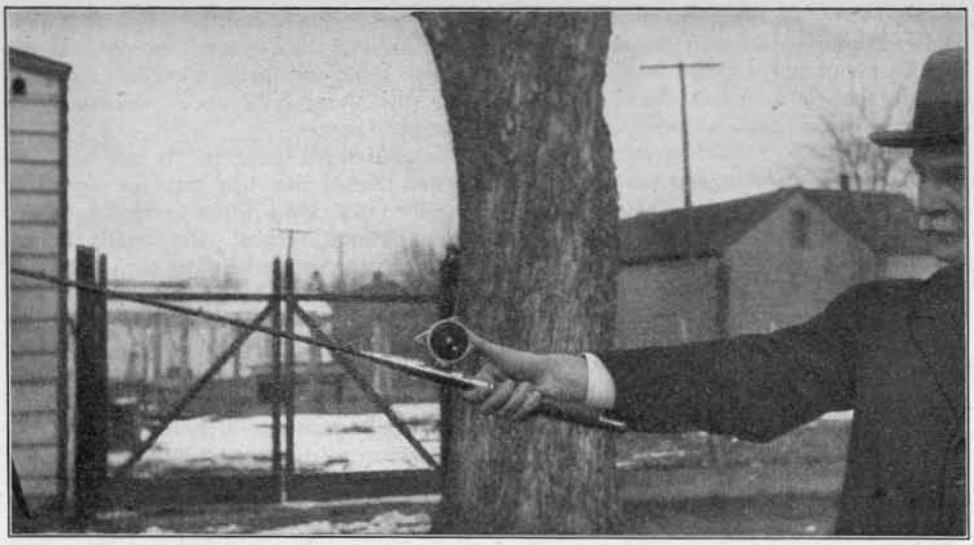
Second Prize—Small Mouth Bass—Class A—1914 Contest

CAUGHT BY A. F. WESTERVELT, NEW YORK CITY

Weight—5 lbs. 9 ozs.
Length—22½ inches.
Girth—15½ inches.
Caught—June 20, 1914.
Where caught—Lake Brewster, N. Y.
Rod—Heddon.
Reel—Tripart.
Line—Black Silk Kingfisher.
Lure—Worms.



IN THE JUNE ISSUE: "HINTS FROM OUR ARMY" BY LIEUT. TOWNSEND WHELEN



BAIT CASTING ROD WITH TIP POINTED AT FLYING LURE. NOTE POSITION OF THUMB ON REEL STANCHION

BAIT AND BLACK BASS

BY LADD PLUMLEY

CHUNG! Splash—splash—chung!

I was eating my bread and butter in the shadow of an unused and lonely sawmill on the Neversink River.

Chung! "What in the world?" thought I. Around the turn beyond the hemlocks some strange monster seemed to be coming down the bed of the stream. It might be prudent to find out about it.

I left my rod and creel, and, still munching my lunch, slipped through the willows until, beyond the bend, I came out suddenly on two bare-legged scarlet-cheeked boys—it was noon of a hot July day and they had been exerting themselves.

"Gettin' chubs," said one, poising a stone as big as his head, and suddenly smashing it down into the bed of the creek.

Then it wasn't an ichthyosaurus; nothing but boys throwing stones against stones in the bottom of the stream.

"So that's it!" I remarked, as the honest, red face looked up and he held out to me in a dripping hand a black-streaked minnow he had grabbed as it floated from under a stone he had overturned with his foot.

"Stuns 'em like. Then you heaves over the rock and grabs 'em. They're bully bait."

I watched the operation. The boys frightened the minnows, driving them back and forth until they took refuge under the stones. Then followed the stunning process. In the course of fifteen minutes a plentiful supply of bait had been gathered, and I had learned a valuable trick.

Nearly every lake has an outlet, and when you can get bait in no other way it can be obtained in this stunning manner. And, frequently, if the little fish are placed in a pail of clear water they will revive and can be used as "live bait." If not, they are useful for trolling and skittering.

Other natural baits for black bass are helgramites, crawfish, sand-eels, earthworms, young catfish, grasshoppers and crickets.

In nearly every lake where live the small-mouth black bass will be found stony stretches of shore and margin. Here, under the flat stones, live crawfish.

And in the little riverlets, too, that discharge into such lakes, if of rocky bottoms, the small fresh-water lobsters can be obtained. A little dip-net of wire netting is useful in nabbing the agile nippers, or pin him to the bottom with your forefinger on the middle of his back and then get him behind the claws. Don't let a big fellow grip your finger; there's nothing dangerous about it but it's decidedly painful.

When you use crawfish, called "crabs" in many parts of the country, hook them just in front of the articulated tail. They are generally used in still fishing, and in this style of angling it is important to use such length of line below the float that the crawfish almost touches the bottom. But be careful not to let him rest on the rocks or sand; if he is given a chance he will crawl under a stone, and you may lose your tackle.

Crickets are an excellent lure for black bass. They, too, are used in "still fishing," and take fish best in the latter part of the summer—from the middle of July to the middle of September, in ponds and lakes near the latitude of New York City. Grasshoppers are used in the same manner as their black neighbors, and both insects are hooked through the thorax, that stiff belt which passes around the middle of the body. Two or three crickets should be used at one time on a fairly large hook.

Live bait (minnows—shiners) are obtained in most lakes with a net, generally a large circular drop-net provided with sinkers at the bottom and a stout pole for yanking it up when the fish come for a "free feed" of crumbs scattered on the waters. We all know that it doesn't always work—that theory as to bread returns cast upon the water. Happy the angler who always gets bait in proportion to the crumbs expended.

There is a more pleasant way of getting bait. Use a light trout rod, a number sixteen hook, and a drawn gut leader, baiting with the smallest fragment of worm. If you have digged the worms, and in end gotten a big bass, you have helped nature quite a distance around the circle. Worms, shiners, bass—if you eat your catch you come next.

Helgramites are a bait for black bass much favored on the Delaware River. They are found under stones at the margin of streams, and, although not pretty to look at—the name speaks for itself—are a splendid bait. They are the larve of a large winged fly known to the irrevent as the doodle-bug.

The little meadow frog—or half-grown frog of any variety—is so good a lure that many anglers prefer it to any other. In "still fishing," trolling, casting and skittering, frogs and small fish are the usual bait for black bass. Frogs and fish are hooked through both the under and upper jaws, thus closing the mouth. In "still fishing" minnows are sometimes hooked just below the dorsal fin; care should be used, when this method is followed, not to set the hook too deep, that is, too far below the fin, or the fish will quickly die.

In trolling the fish or frog is dragged back of a slowly moving boat and in some waters the method is very successful.

The most modern method for taking black bass is to cast a bait, either natural or artificial, from shore or boat. The devotees of this delicate and difficult art believe that no other method of angling is more interesting. The rod and reel must be of first-class quality; their use requires great judgment and unusual skill; and the results, where black bass are at all plentiful, fully justify the output in tackle, care and training.

As in all the higher branches of angling, the novice should prepare himself, at least to some extent, before he attempts angling for fish. And, as is true of fly-casting, he can train his hand and eye at the start without access to river or lake.

It is necessary, however, to have a piece of smooth field or lawn free from trees and bushes. If it is winter and snow happens to be on the ground this is an advantage; the small weight which takes the place of the bait slides in the snow and does not catch in weeds or grasses.

I have spoken at some length of the various baits which are used in the pursuit of the black bass, and have called attention to the necessity of preliminary practise and where it can be effected. But before I take up the matter of practise casting we will consider the tackle used in this mode of angling.

BEGINNING OF CASTING STROKE

The rod for bait-casting for many years has been decreasing in length. To some extent this has also been true of fly-rods, but nothing like as much so as in rods for bait-casting. Whether rods for the latter have reached the minimum cannot be considered a matter of doubt. It is hardly likely that a rod of less than five feet in length is a practical weapon, but rods of that length are common enough.

In this connection it may be interesting to note that the shorter the rod the more control the angler has of the line, until a certain minimum is reached, and beyond this the contrary is true. An angler would have difficulty in casting with a stick one foot long, and he would find much difficulty in managing a fish with such an abbreviated wand.

It is generally conceded that for casting a frog or minnow the rod should be from five to seven feet long, and from three to seven ounces in weight. It is difficult to advise the tyro as to the length and weight he should choose for himself. Perhaps the best plan will be for him to go to a dealer and judge for himself with rod in hand, taking advice of the salesman. "A rod your own height" is a good rule of thumb. A five and one-half foot rod of about five to six ounces in weight ought to be a conservative rod for a beginner. It should be made of six-strip split bamboo. Greenheart of first-class quality comes next to bamboo, with lancewood and degamè in the order named. Whatever the wood, length and weight, it should be well balanced and perfectly true in action.

The reel should be a well-made piece of mechanism. Nothing will so much prevent sport in this kind of fishing as a poor reel. I own and use a German silver and rubber quadruple multiplying reel that seems to me very near perfection. But it is not provided with a core of cork or cedar, and I urge the learner to have such a core fitted to his reel that the line may be taken up with the maximum rapidity.

Having secured a fine multiplying reel use it as you would any delicate and expensive geared mechanism, a fine watch for example. Have it cleaned occasionally by a good workman or learn to clean it yourself. Keep it well oiled with a good quality of thin machine oil. The reel is a vital part of a bait-caster's outfit and he should spare no pains to have it always up to the severe requirements of the exacting sport.

If a first-class reel is important, so is a good line. Those sometimes sold for this work are not the thing at all. Have your dealer give you what is known as a soft silk line. But it must be understood that this kind of line is very difficult to keep in good condition. It must be carefully dried after each day's fishing, as it rots easily when left wet on the reel, and above all it must not be clumsy. Strong and light is the thing: about twelve pounds breaking strength.

I will suppose that the novice has put together the necessary tackle, and that he has attached a little piece of aluminum to the end of the line. This can be cut from a scrap of the metal and should weigh about one-half ounce.

Photograph number one shows the correct holding of the rod. Note the position of the hand, and, more particularly, the

way in which the thumb falls upon the spool of the reel.

At the very start it is well to lay great emphasis on the position of the thumb. It can be said of bait casting that the difference between anglers—their casting ability—depends almost entirely upon the use of this member.

In other crafts thumbs occupy a subordinate place; witness the proverb about "fingers are all thumbs." But in bait casting the thumb should be trained until just the correct pressure is given at all times.

The rod is to be held securely, but the grasp should not be in the nature of a grip; your fingers are not clutching an enemy's throat. An easy balancing of the butt of the rod, as if you were about to swing the wand over your shoulder in a curve, should be the attempt.

From six inches to one foot of line is supposed to be hanging from the tip of the rod with the lure in position. You are now ready to begin. Keeping the ball of the thumb pressed closely against the spool of the reel, the rod is raised and passed back of the perpendicular until the wrist of the casting arm is on a line with the angler's nose. The forearm and wrist are pressed backward until the rod is horizontal with the water. Photograph number two shows this second position.

It is almost impossible for a beginner to know if the positions he is attempting are correct. This is particularly true of this second position in bait-casting. It is, therefore, suggested that the would-be bait slinger retains the services of an observer, and, as in other crafts, he is wise who prefers criticism rather than admiration.

You are now ready to heave your lure. The tip of the rod is to be swung evenly and sharply upward, describing an arc of a circle over your shoulder, the wrist beginning the task, the forearm continuing it, and the whole energy of the two completing it. As this accelerating movement is carried to a conclusion, the thumb decreases its pressure on the revolving spool. Photograph number three shows about the point in the forward swing of the rod where the pressure of the thumb has reached its minimum. This position has been chosen, rather than the true final position, as the more important. From the position shown in the last photograph the rod is lowered until the bait falls on the water, or, in practise, on the grass or snow.

Mr. Robert H. Davis, in "The Angler's Guide," says, "Keep always in mind that the fundamental law of bait casting is epitomized in the old trick of throwing an apple from a pointed twig." Nearly every man must remember how this was done. Let your mind go back to that and your practise will have something in your own experience to follow.

I will suppose that you attempted to do all the things that you should have done, and have finished your first cast. It was, without doubt, a failure; but that should

POSITION OF ROD AT END OF CASTING STROKE —FROM HERE ON TIP SHOULD BE LOWERED, POINTING AT FLYING LURE

be nothing discouraging—nearly all first attempts are in any craft.

Perhaps the line overran and your imitation fish came back on you as if your own nose had an attraction for it. You probably did not keep your THUMB touching the spool. You and your grumbling assistant will now retire to a place where you can sit down, and with a pin—a hairpin is the thing—dig out the tangles in the line. It will take a half hour or so, if you did the thing up in good shape.

The next time, perhaps, the lure will fling itself vindictively around the rod, slapping you savagely on the back, after it has made a complicated and curious series of knots in the line, which nobody on this earth or elsewhere could ever duplicate. Your assistant chuckles or laughs, according to his age, as if this were the joke of jokes. Let him beware; the next time his very life may be in danger. You may be interested in knowing that you managed this last unique adventure with rod, reel and knots because your THUMB was pressed too severely on the spool. Try again.

In the end, and at the time when you least expect it, the little sinker will start evenly and sweetly and sail away like a bird. In a curve, as much a thing of beauty as any in pictures, the bending line will follow. Out and out the sinker will go; the reel humming kindly under the tip of the thumb and the handle a whirring blurr.

When it is all over and you proudly pace off the distance, you'll secretly wonder how in the world you ever did it, but, noting the admiration on the face of your retainer, you'll pass it off as the easiest thing possible.

After you can do this pleasant stunt one time in three you are ready to tackle the real thing. And you may count yourself fortunate if you secure a boatman who is a good bait angler. You will be more fortunate yet if you can accompany a friend who is learned in the ways of taking black bass with frog or minnow; he will teach you more in a morning than you could find out in days left to your lonesome.

But if you are obliged to try conclusions alone, a few hints may not be amiss. And you are to bear in mind that wherever you see movement on the surface of the water there direct your bait. After dropping it as near to the suspiciously agitated place as possible, you are slowly to retrieve the lure; and you should know that it is frequently at the moment that the bait begins its journey toward you it is seized with a rush.

As the bait travels through the water it sometimes spins round and round. You are therefore to keep several little swivels on your line end, to prevent kinks in your line from this turning. These swivels also allow the fish to turn in the water without tangling your tackle.

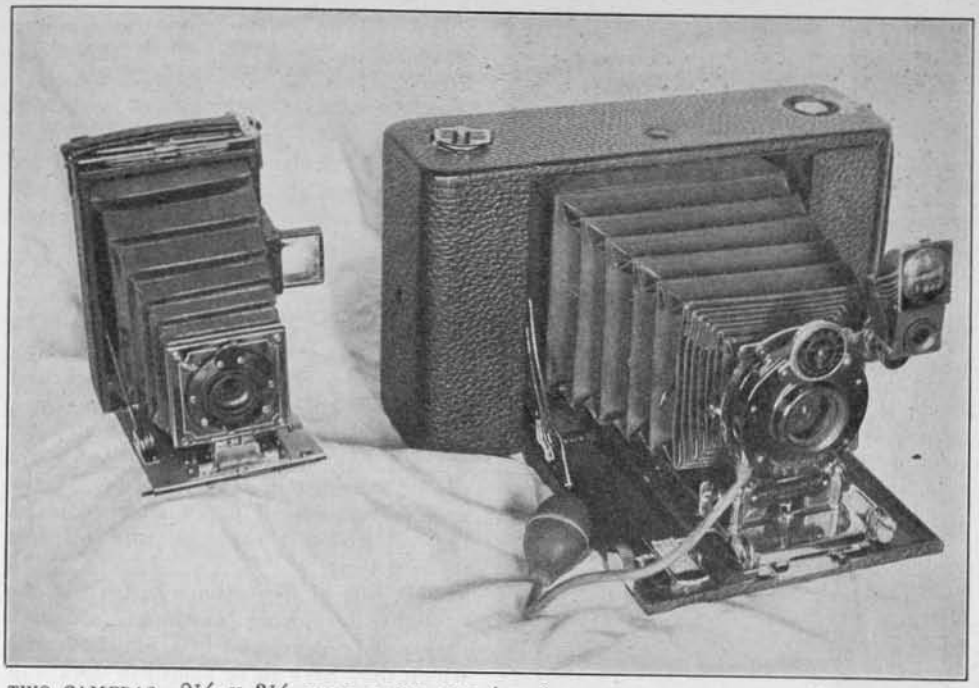
Always give your fish a little time after he has taken a natural bait; you can generally tell the exact moment for the strike; the line will then shake with a peculiar tremulous movement. This trembling is caused by the turning of his prey in the mouth of your quarry. Then is the moment to let him feel the sting of steel.

After the fish is hooked, keep cool; it is easy to get rattled and very difficult to handle successfully a black bass unless you have your wits on tap.

When it's over and the glinting green fellow is safely in the boat, think over the fight and make up your mind where you made mistakes. There is nothing like self-criticism to bring improvement, and you will gain more from your failures than from your successes.

If you lose a good fish by lack of care, deal savagely with the angler, yourself, and decide that come what will you will never be guilty of that particular asinine sin again.

In this craft of ours it doesn't pay to be careless. Let the learner take with him this lesson; it is the golden text of angling. Nothing hardly in this world leaves such heart-burns of reproach as the unnecessary loss of a fine fish. To use what the critical will think is a somewhat large metaphor, it is a Waterloo that carries after it a St. Helena of regret.



TWO CAMERAS—2¼ x 3¼ FILM PACK AND 4 x 5 ROLL FILM; WEIGHTS, 13 OZ. AND 4¼ LBS. WHICH—!

THE TAKE-ALONG CAMERA

BY EDWARD C. CROSSMAN

IF it is big and heavy it belongs to the pest species. No pest is for long taken on a pleasure trip. Therefore, when we have made up our minds what is big, and what is heavy in the camera line, we have something to work away from in our selection.

It is possible that you seek to emulate a Dimock or a Dugmore; to photograph the beasts and the birds and the fishes in their very lairs. Then this article is not for you. By the time you've acquired the outfit of a Dugmore, and learned to use it, you'll know more about cameras than the man that makes them.

The camera that is worth while from the standpoint of the outer is the camera that most nearly approaches the jackknife in its unobtrusiveness. To be a camera worthy of your love, it should not obtrude into your thoughts by reason of its weight, its bulk or the method of its carrying. It should neither hinder the swing of your good casting arm, nor add to your fatigue, where every ounce of weight counts against you. It is only such a box that will accompany you all the time—and be there when the chance comes for THE picture of the trip. From experience, I know whereof I speak. Just as sure as the camera is bulky enough to constitute a nuisance in scrambling through brush, or heavy enough to make itself known to you when you're tired, or delicate enough to insist upon being lugged in a case hung from your shoulders, just that sure will it be left in camp whenever you can conveniently forget to take it.

First, in the process of elimination, go glass plates. Consider them never, both because they are heavy, and because they have to be loaded in darkness. Also they break frequently, sometimes from logical causes, at other times when there was not

CONTRAST BETWEEN THE 2¼ X 3¼-IN. VEST POCKET AND 4 X 5 BOX CARRIED OVER SHOULDER. THE LATTER IS LEFT BEHIND WHEN REAL HUNTING IS TO BE DONE

a reason in the world for them to do so. The Jinx probably does it. If you choose to lug a glass-plate-using instrument into camp, that's your lookout—only take along a small film box for the hikes.

Then we have two popular forms of films. One rolls up on a spool with a strip of light-proof paper to go along with it and keep away the naughty light when it is out of the camera. It loads into the camera in daylight, and comes out with darkness just as scarce. It can be used in a clever machine so arranged that the entire process of developing and fixing can be carried on in broad daylight with the crude appliances of the camp. It is easy to handle in the strip if you do your own work, and really, so simple are the processes of developing via machine, and so inexpensive is the cost thereof that you are foolish ever to entrust the films to the mercies of the professional. Your tank does better work than he can do. If experience had not shown this, I would not use one myself.

The darker side of the story—not a very dark one at that—is that the film will at times roll up crooked on the winding spool in the camera, and tie things up firmly. This is more likely to happen with larger sizes, such as 4x5, and with the long, twelve-exposure films. Also on my own particular film box the spools are not tight enough and a little jolting will presently remove the number from opposite the red window in the camera back, and leave the user in blissful uncertainty as to what film is ready for exposure.

The other sort of film is the pack, a flat, thin box much the shape of a plate-holder, made of pasteboard, steel and plush, and containing a dozen flat separate films. By a clever arrangement, as each film is exposed, it is hauled out of the way, around to the back of the pack by a piece of paper attached to its tail. Then said paper is torn off and thrown away.

This sort of film cannot be used in the daylight developing machines, although they can be developed in a film tank into which they have to be loaded in darkness, or with ruby lamp illumination.

Its beauty is that by using an "adapter," a wooden box much like a plate-holder, any plate camera can be made into a daylight loading film camera, and the ground glass focusing screen can be used as though the regular plate-holders were carried. Thus the owner of the plate box, if it is suitable in weight and bulk, can convert it into a film camera, and take to camp all the film packs he chooses without running into weight, or being subjected to the annoyance of having to fill plate-holders in darkness.

Also another thing to consider, cameras built especially for the film pack are more compact and lighter than cameras built for roll film. The pockets at either end for the spools are not necessary, and save for the slightly greater thickness when the pack is in place the film pack camera is the same size as the roll film camera would be with its pockets cut off. I think that except for trips where I wanted the rolls of film put up in soldered tin cases for protection against dampness I would select the film pack type of camera.

Between you and me and the gate post there is not much sense in lugging a developing machine out into camp, and at

home you get the same simplicity of developing by using the film pack tank, even though you do have to turn out the light, and perhaps use a 50c. ruby lamp to slip the films into the tank. After that, they develop themselves as they do in the machine for roll films.

The matter of size worries the amateur as much as the question of films. Naturally, the smaller the box, the less you have to lug, the cheaper are its films, and the cheaper is the box, and perhaps a good lens to go with it. The evidence would all seem in favor of small size, but it can be overdone. You can't stick a mountain range on a 1⅝x2½-inch film and make a very impressive job of it—but this might apply with equal truth to an 8x10-inch plate.

It is surprising how much detail you can pack on a tiny 2¼x3¼-inch picture when you gaze at it from the distance at which you are reading this type. Get out your tape and see how small are most of the illustrations used in the average magazine. This does not mean that they were not originally bigger, but we're considering now how small pictures look at the ordinary reading distance, not up on the wall as a display.

Considering the question of portability and lightness, I should set the 2¼x3¼ as the low limit for the amateur. I have seen beautiful enlargements made from the tiny 1⅝x2½-inch negative, but we're considering the question from the standpoint of the picture as it comes from the film. Also for the sum of $2.00 the amateur may secure a "fool-proof" machine as simple as a printing frame, by which he can make 5x7-inch enlargements from this 2¼x3¼-inch film with the cost only that of 5x7 developing paper, Velox or something of the sort. True, when you enlarge a negative up to 5x7 from 2¼x3¼, you've got to have a good negative in the first place—but yours are going to be good, of course.

Mr. Stewart Edward White, on his second African trip, took with him as his principal picture maker a camera that makes the tiny 1⅝x2½-inch pictures, planning to enlarge them all on his return. His equipment is, of course, of the highest type, fine anastigmat lens, focal plane shutter, and the like. After we see said enlargements on his return, we'll be more convinced that he was right in his selection.

In the tiny 2¼x3¼ size we can get roll film cameras that weigh just one pound, and that measure but 6¾ inches long by 3½ inches wide. It sets you back $10 with ordinary lens, which means the sort that won't let you take snapshots in the shade.

In the film pack persuasion the same size camera weighs but 11 oz. and is 4⅝ inches long by 3¼ inches wide. With good shutter, and perhaps a bit better lens than the one on the $10 roll film persuasion this camera costs you $7.00 complete.

If you can possibly afford it, get the small box fitted with an anastigmat lens, which means one that is fast, and that gives you beautifully sharp, clear results

A 4 x 5 FILM CAMERA GOING INTO ACTION FRONT IN A HURRY. IT OR THE RIFLE MUST STAY BEHIND WHEN YOU HIT THE GAME TRAIL

over all the film. You can snapshot in the shade with such a lens, and your negatives stand enlarging far better than do the ones made with the cheap lens furnished with the stock camera.

Here is one of the advantages of the small box. An anastigmat lens and good shutter for this size costs you but $25 more than the standard instrument, and your capacity for making pictures under all conditions is increased ten-fold. The same improvement on a 4x5 camera would cost you about $35 over the cost of the stock camera, and that instrument, too, has a far better lens and shutter in stock grades than has the small camera.

Also, still talking of economy, you can fire twelve films with the 2¼x3¼ at a cost of 40c. Twelve 4x5 films cost you 90c.; a dozen 3¼x4¼ cost 70c.

The next size above the 2¼x3¼ is the 2¼x4¼. I would not advise it. The sample pictures are pretty to gaze upon, but experience has shown, in my case at least, that there is a lot of waste picture in one of this shape. A lens to throw a circle of light out of which a 2¼x4¼ picture can be gotten is large enough to make a picture 3¼x4¼, it costs the same, and the camera must be nearly as large as for the larger film. The difference lies only in the width. If you bought an anastigmat lens and shutter to make your box capable of first-class work, you'd pay as much for the lens for the long slim size as for one for the 3¼x4¼ size. A picture having much the same proportion —long and narrow is the postcard or 3¼x5½ size. Don't as first experience get either one, the broader picture is more satisfactory.

Therefore, if you want to go above the 2¼x3¼ size, go to the 3¼x4¼ size, the "quarter plate," as our English friends call it, and the most popular size in England, two to one.

This is amply large enough for any album, and if good quality the negatives will do for magazine reproduction without enlarging. Also if you desire to enlarge it requires far less of the negative in the way of sharpness to enlarge the 3¼x4¼ to 5x7 than to enlarge the 2¼x3¼-inch size.

The roll film boxes to take this size weigh 23 oz., or about 1½ lbs. They measure 7½ inches long by 4¼ inches wide and 1¾ inches thick.

The film pack cameras weigh 19 oz. and measure 5½ inches long by 4 inches wide. They are a bit thicker than the roll film boxes 2¼ inches against 1¾ inches.

As we are considering the camera actually to tote along on the trip itself, not the one to keep around the tent, I cannot see how we can go above this size and stay within our province. Figure it out for yourself.

A postcard size camera 3¼x5½, in roll film sort, weighs 41 oz. with ordinary cheap lens and shutter, and still more with fine lens and better shutter. This means 2½ lbs. It measures 9½ inches long by 4¾ inches wide, that is, it is three-fourths of a foot in length. I carried one for years, and say emphatically that it is too much camera for anybody but the man who wants his pictures badly, and who wants them large enough for reproduction whether they are excellent or merely passable.

In the film pack sort this size weighs 34 oz., or over two pounds, and measures 7¼x5 inches. The 4x5 size weighs 30 oz. and is 6½ inches long.

Undoubtedly you *can* carry an instrument of this weight—but will you, merely on the chance that a good picture might turn up. Cut it down to a mere 11 oz. and you are far more likely to go "heeled" all the time.

There is another feature of the small camera that I have not touched upon. It is a photographic fact, leaving out here the scientific explanation, that the shorter the focus of the lens the greater the depth of focus at a given stop or diaphragm size. Translating, the smaller the camera the less carefully need you focus it for a given distance. This explains why the snapper of the humble "Brownie," devoid of photographic skill, gets such nice "sharp" pictures, where the man with a larger box and more experience falls down.

This kicks two ways. The more you open up the diaphragms or stops of your lens—the part of the shutter with the stop marks says 4, 8, 16, 32, etc.—the shallower the depth of your focus. If you

get a fine fast lens of the anastigmat family, you get one that is fast only when you open it up to its full capacity, to four or smaller number on the shutter. Then, while you can snapshot in the shade. you've got to focus more carefully for the thing you want to take than you do with the cheap lens that cannot be opened up. With the little 2¼x3¼ size even this does not matter greatly, but in the 3¼x 5½ it matters a whole lot, and the most careful focusing and estimating of distance is called for. Even then part of your picture is going to be "out of focus" and fuzzy if you are using the lens wide open to make pictures in the shade, and have to take in things both near to the camera and far away.

You see the little box simplifies matters in a number of ways, and its sole drawback is that it *is* little.

Let me suggest that if you get a camera with fine lens, an anastigmat, and are going to the hills or mountains, that you tell the camera man to give you a ray filter to fit the lens of a shade that will need about three times the normal exposure.

Then, when you run across one of those hazy, blue distance views, slip on the filter, open up the lens to its full aperture, and give as slow a snap shot as experience shows you can give and not show motion—probably a 25th of a second. Otherwise your beautiful blue distance will be a white nothing when you develop the picture. Don't try this with the cheap, slow lens.

In the hope of saving you a chase and considerable guessing as to the cameras meant herein, I list below the most popular makes, both in stock quality, and with special lenses. They divide themselves into three classes, those with ordinary rectilinear or meniscus lenses; those with special finish and anastigmats, and the ultra-fine European outfits such as the Goerz Tenax, Zeiss Palmos, Adams Vesta, etc.

Size 2¼x3¼: Ordinary grades, Kodak No. 1 Folding Pocket, roll film; Ansco, same size, roll film; Ingento, roll film; Ensign and Ensignette, roll film; Adams Vesta, Newman & Guardia. Film pack type, Premoette, Jr.

Size 3¼x4¼: No. 3 Folding Pocket Kodak; No. 3 Folding Hawkeye; Models 7 and 8, Ingento; Ensign; all roll film. Film pack. Premo No. 1, Pocket Premo C, Filmplate Premo, Korona Petit, Korona Royal Petit, Seneca, Ernemann and nearly any small size of plate camera that can be carried without trouble.

Special Equipment: American cameras with fine lenses, shutters, extra finish, etc., and European cameras made especially for the highest sort of work and bringing high prices.

Size 2¼x3¼: Roll film, No. 1 Folding Pocket Kodak with anastigmat lens; Ensign, anastigmat lens; Ansco, anastigmat lens; Adams Vesta; Newman & Guardia. Film pack, Premoette, Jr., Special, anastigmat lens, compound shutter; Ensign, anastigmat lens; Goerz Coat Pocket Tenax, highest form of small camera, anastigmat lens; Ernemann, anastigmat lens; Zeiss Minimum Palmos, focal plane shutter, anastigmat lens; Blocknote, anastigmat; Newman & Guardia Sibyl, anastigmat, special construction; Adams Vesta; Ica Bebe; Rietzschel, anastigmat lens; Dallmayer Carfac, anastigmat lens, special construction.

This **Size 3¼x4¼** can be obtained in practically the same makes as those mentioned above, and in addition are available the Hawkeye with anastigmat lens and special shutter, for roll film, and for film pack the Korona; Voightlander Alpine, Radiar and folding metal cameras; the Goerz Anschutz, Autofoc Tenax and Ango; and a long, long list of other fine European "quarter plate" cameras of the finest construction and lens equipment.

If your camera appropriation will stand the strain of a really fine outfit, then don't snap up the first thing the camera man shows you, which will be one of the common or garden variety of American camera, but look into the beauties of some of the lesser known in this country and far better cameras, made for the finest work that a camera will do.

LESSONS LEARNED IN TROUT FISHING

BY ERNEST WARREN BROCKWAY

IT was so small a brook that some might have classed it a drain. It was not more than a foot wide, yet it was about eighteen inches deep. It wound through a meadow. My friend was crossing the meadow and heading for a stream which would inspire any ardent trout fisherman —a stream made up of pools from three to six feet deep, of long, smooth stretches, and of wild, boisterous rapids—all sorts of conditions it offered for the enthusiastic trout angler. "Oh, come on over where there's a brook," called my friend, who at the same time unhooked a laugh which silently bespoke me a dunce for wasting time where I was. But he had barely finished speaking when I pulled out on the soft, green bank a three-quarters-of-a-pound trout. I merely shouted my friend's name and held up the trout for him to see. He was at my side in a moment, and he began fishing in the "drain."

I have related this incident to show that it does not pay the trout fisherman to pass by a small and unpromising appearing brook. I know an experienced angler of the brooks who finds keen delight in visiting just such streams, and who is always on the hunt to find some new ones of just that kind. It was last spring that he discovered such a brook, and he drew from it six of the fattest and best formed trout I have ever seen, and all of which weighed around the half-pound mark. And the greatest depth of that brook was not more than seven inches!

How distinctly I remember a personal experience of last spring which further substantiates the efficacy of fishing the small and inferior streams. I started from home in the early morning and headed for my favorite stream. In about three hours I caught five handsome fish. After going the entire length of the stream, I decided to visit a much larger and more inviting stream three miles away, and which I had never fished under favorable conditions. My mind was focused on big things. I was confident I would have a tussle with a "pounder" in a certain deep pool. I whipped the stream until the sun was dropping below the horizon line, and not a fin did I have to show for my efforts. I had been a victim of too great expectations. The big and tempting stream had taught me to despise not the little streams.

As I started over the hills, homeward bound, I remembered a tiny brook which I could reach by going a quarter-mile out of my course. I decided I would make a try. It was near dusk when I arrived at the brook. I made a cast in a small pool above which was a rail fence. My hook had barely struck the water when a trout leaped for it, and did the topsy-turvy act. He shook the hook and snarled about a brush lying at the side of the pool. I feared his experience would preclude his making another strike. However, I was very careful about freeing the line. I made another cast and Mr. Trout gave another jump. But this time his freedom was doomed; the hook was firmly imbedded in his throat. Yet he fought to a finish, darting and jumping about the small pool every second. He weighed a half-pound, and he was the most active trout that I caught during the season. The brook was filled with underbrush so I could not fish it any longer that evening. The memory of landing that fish at the edge of evening, and from that miniature brook, will never leave me; I don't want it to.

Of course, the fishing of a small stream is not so pleasant always as fishing a large one. Where bushes fringe the sides of the little stream one's patience is often taxed to its utmost, yet that is part of the trout fishing game. I recall fishing a small brook which flowed down a thickly-wooded hillside. I came to a pool surrounded by alder bushes and a thick growth of briars. I dared not disturb

these, lest a wary trout should get a signal of invasion in his domains. And so for fully ten minutes I worked to enter my hook through the bushes and briars and thence into a select place in the pool. When accomplished, I was amply paid for my trouble, for I caught two six-ounce fish. Just below this tangled retreat was a pool completely unobscured from bushes, but it was as completely free from trout. Now I do not wish to give the impression that in small brook fishing one should look for the secluded pools wholly, thinking that trout do not exist in the open ones; but I do say emphatically that experience has taught me that the most trout and the best are to be found beneath the networks of underbrush. In larger and deeper brooks the fish do not have to depend so largely on these tangled canopies for protection.

The trout fisherman, therefore, who is out for a day's good sport, and who hasn't such great expectations as to be content with filling his creel with only pounders and near pounders, should not spurn the little streams, neither should he be continuously on the lookout for open pools. It is true that great patience is needed for this kind of angling, and the person who hasn't patience or who cannot cultivate it, should fish only in the big streams or not fish at all. It would be better for his moral and spiritual welfare.

While I have emphasized the importance of thoroughness and patience (which are almost synonymous) in successful small stream fishing, I must say that these qualities are equally essential in large stream fishing.

Yes, thoroughness and patience do count. Let others rave about all the latest tackle and lures as essential to success, and then show me the angler whose tackle is the simplest, even primitive, yet who fishes a stream thoroughly and never displays impatience, and I would count on the latter person every time. Of course, the quality of skill must be employed by each type, in a comparison of this kind. I am well acquainted with an old and experienced trout fisherman who recently told me of a day's fishing which bears out the foregoing declaration. In company with a friend, he hired the right of fishing the brook for the day. The two started in in the morning and fished until nightfall. They began fishing only a short distance apart, yet they did not see each other again until the wind-up of the day's sport. His friend hustled on ahead and fished all the promising pools, while the other did no skipping, fishing the rapids as well as the pools. When notes were compared, the "skipper" had six trout in his basket, while the latter had fifty-six. That was before the law of limitation of a day's catch prevailed in Connecticut.

Only last spring I left home for a couple of hours' fishing. As my time was so short, I violated the rule of thoroughness. I visited several large pools and gave them a fair trial, yet I did not have a strike. Just at dark, as I was walking homeward along the bank of the stream, I carelessly and indifferently made a cast in a long open stretch of still water—a home for dace, I knew. I wanted to hook a dace just to feel the thrill of a tug at my line once more. In an instant there was a strike—a sharp one—and I let out more line and played the fish. I thought at the time he was exceptionally active for a dace, yet I still clung to my first belief. You can imagine my surprise when I reeled in a flopping half-pound trout. Two days later, at the same place, I landed his mate. That was a lesson that I shall never forget when I am whipping any kind of a brook—a lesson to despise not the unpromising appearance of any formation of water in any kind of brook. As in all other phases of human activity, experience is the master teacher in trout fishing, and its instruction is the only kind that will be heeded by many. And I guess I'm one of the many.

THAT NEW .250-3000 RIFLE:—EVERYONE WANTS TO KNOW SOMETHING OF ITS CAPACITIES ON BIG GAME. READ E. C. CROSSMAN'S EXPERIENCES WITH IT IN THE JUNE ISSUE.

DESERT GOLD

A NOVEL, BY ZANE GREY

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V

A DESERT ROSE

Belding assigned Dick to a little room which had no windows but two doors, one opening into the patio, the other into the yard on the west side of the house. It contained only the barest necessities for comfort. Dick mentioned the baggage he had left in the hotel at Casita, and it was Belding's opinion that to try to recover this property would be rather risky; on the moment Richard Gale was probably not popular with the Mexicans at Casita. So Dick bade good-bye to fine suits of clothes and linen with a feeling that, as he had said farewell to an idle and useless past, it was just as well not to have any old luxuries as reminders. As he possessed, however, not a thing save the clothes on his back, and not even a handkerchief, he expressed regret that he had come to Forlorn River a beggar.

"Beggar hell!" exploded Belding, with his eyes snapping in the lamplight. "Money's the last thing we think of out here. All the same, Gale, if you stick you'll be rich."

"It wouldn't surprise me," replied Dick, thoughtfully. But he was not thinking of material wealth. Then, as he viewed his stained and torn shirt, he laughed and said: "Belding, while I'm getting rich I'd like to have some respectable clothes."

"We've a little Mex store in town, and what you can't get there the women folks will make for you."

When Dick lay down he was dully conscious of pain and headache, that he did not feel well. Despite this, and a mind thronging with memories and anticipations, he succumbed to weariness and soon fell asleep.

It was light when he awoke, but a strange brightness seen through what seemed blurred eyes. A moment passed before his mind worked clearly, and then he had to make an effort to think. He was dizzy. When he essayed to lift his right arm, an excruciating pain made him desist. Then he discovered that his arm was badly swollen, and the hand had burst its bandages. The injured member was red, angry, inflamed, and twice its normal size. He felt hot all over, and a raging headache consumed him.

Belding came stamping into the room.

"Hello, Dick. Do you know it's late? How's the busted fist this morning?"

Dick tried to sit up, but his effort was a failure. He got about half up, then felt himself weakly sliding back.

"I guess—I'm pretty sick," he said.

He saw Belding lean over him, feel his face, and speak, and then everything seemed to drift, not into darkness, but into some region where he had dim perceptions of gray moving things, and of voices that were remote. Then there came an interval when all was blank. He knew not whether it was one of minutes or hours, but after it he had a clearer mind. He slept, awakened during night-time, and slept again. When he again unclosed his eyes the room was sunny, and cool with a fragrant breeze that blew through the open door. Dick felt better; but he had no particular desire to move or talk or

eat. He had, however, a burning thirst. Mrs. Belding visited him often; her husband came in several times, and once Nell slipped in noiselessly. Even this last event aroused no interest in Dick.

On the next day he was very much improved.

"We've been afraid of blood poisoning," said Belding. "But my wife thinks the danger's past. You'll have to rest that arm for a while."

Ladd and Jim came peeping in at the door.

"Come in, boys. He can have company —the more the better—if it'll keep him content. He mustn't move, that's all."

The cowboys entered, slow, easy, cool, kind-voiced.

"Shore it's tough," said Ladd, after he had greeted Dick. "You look used up."

Jim Lash wagged his half-bald, sunburned head. "Musta been more'n tough for Rojas."

"Gale, Laddy tells me one of our neighbors, fellow named Carter, is going to Casita," put in Belding. "Here's a chance to get word to your friend the soldier."

"Oh, that will be fine!" exclaimed Dick. "I declare I'd forgotten Thorne. . . . How is Miss Castañeda? I hope——"

"She's all right, Gale. Been up and around the patio for two days. Like all the Spanish—the real thing—she's made of Damascus steel. We've been getting acquainted. She and Nell made friends at once. I'll call them in."

He closed the door leading out into the yard, explaining that he did not want to take chances of Mercedes's presence becoming known to neighbors. Then he went to the patio and called.

Both girls came in, Mercedes leading. Like Nell, she wore white, and she had a red rose in her hand. Dick would scarcely have recognized anything about her except her eyes and the way she carried her little head, and her beauty burst upon him strange and anew. She was swift, impulsive in her movements to reach his side.

"Señor, I am so sorry you were ill—so happy you are better."

Dick greeted her, offering his left hand, gravely apologizing for the fact that, owing to a late infirmity, he could not offer the right. Her smile exquisitely combined sympathy, gratitude, admiration. Then Dick spoke to Nell, likewise offering his hand, which she took shyly. Her reply was a murmured, unintelligible one; but her eyes were glad, and the tint in her cheeks threatened to rival the hue of the rose she carried.

Everybody chatted then, except Nell, who had apparently lost her voice. Presently Dick remembered to speak of the matter of getting news to Thorne.

"Señor, may I write to him? Will someone take a letter? . . . I shall hear from him!" she said; and her white hands emphasized her words.

"Assuredly. I guess poor Thorne is almost crazy. I'll write to him. . . . No, I can't with this crippled hand."

"That'll be all right, Gale," said Belding. "Nell will write for you. She writes all my letters."

So Belding arranged it; and Mercedes flew away to her room to write, while Nell fetched pen and paper and seated herself beside Gale's bed to take his dictation.

What with watching Nell and trying to catch her glance, and listening to Belding's talk with the cowboys, Dick was hard put to it to dictate any kind of a creditable letter. Nell met his gaze once, then no more. The color came and went in her cheeks, and sometimes, when he told her to write so and so, there was a demure smile on her lips. She was laughing at him. And Belding was talking over the risks involved in a trip to Casita.

"Shore I'll ride in with the letters," Ladd said.

"No you won't," replied Belding. "That bandit outfit will be laying for you."

"Well, I reckon if they was I wouldn't be oncommon grieved."

"I'll tell you, boys, I'll ride in myself with Carter. There's business I can see to, and I'm curious to know what the rebels are doing. Laddy, keep one eye open while I'm gone. See the horses are locked up. . . . Gale, I'm going to Casita myself. Ought to get back to-morrow some time. I'll be ready to start in an hour. Have your letter ready. And say —if you want to write home it's a chance. Sometimes we don't go to the P. O. in a month."

He tramped out, followed by the tall cowboys, and then Dick was enabled to bring his letter to a close. Mercedes came back, and her eyes were shining. Dick imagined a letter received from her would be something of an event for a fellow. Then, remembering Belding's suggestion, he decided to profit by it.

"May I trouble you to write another for me?" asked Dick, as he received the letter from Nell.

"It's no trouble, I'm sure—I'd be pleased," she replied.

That was altogether a wonderful speech of hers, Dick thought, because the words were the first coherent ones she had spoken to him.

"May I stay?" asked Mercedes, smiling.

"By all means," he answered, and then he settled back and began.

Presently Gale paused, partly because of genuine emotion, and stole a look from under his hand at Nell. She wrote swiftly, and her downcast face seemed to be softer in its expression of sweetness. If she had in the very least been drawn to him—— But that was absurd—impossible!

When Dick finished dictating, his eyes were upon Mercedes, who sat smilingly curious and sympathetic. How responsive she was! He heard the hasty scratch of Nell's pen. He looked at Nell. Presently she rose, holding out his letter. He was just in time to see a wave of red recede from her face. She gave him one swift gaze, unconscious, searching, then averted it and turned away. She left the room with Mercedes before he could express his thanks.

But that strange, speaking flash of eyes remained to haunt and torment Gale. It was indescribably sweet, and provocative of thoughts that he believed were wild without warrant. Something within him danced for very joy, and the next instant he was conscious of wistful doubt, a gravity that he could not understand. It dawned upon him that for the brief instant when Nell had met his gaze she had lost her shyness. It was a woman's questioning eyes that had pierced through him.

During the rest of the day Gale was content to lie still on his bed thinking and dreaming, dozing at intervals, and watching the lights change upon the mountain peaks, feeling the warm, fragrant desert wind that blew in upon him. He seemed to have lost the faculty of estimating time. A long while, strong in its effect upon him, appeared to have passed since he had met Thorne. He accepted things as he felt them, and repudiated his intelligence. His old inquisitive habit of mind returned. Did he love Nell? Was he only attracted for the moment? What was the use of worrying about her or himself? He refused to answer, and deliberately gave himself up to dreams of her sweet face and of that last dark-blue glance.

Next day he believed he was well enough to leave his room; but Mrs. Belding would not permit him to do so. She was kind, soft-handed, motherly, and she was always coming in to minister to his comfort. This attention was sincere, not in the least forced; yet Gale felt that the friendliness so manifest in the others of the household did not extend to her. He was conscious of something that a little thought persuaded him was antagonism. It surprised and hurt him. He had never been much of a success with girls and young married women, but their mothers and old people had generally been fond of him. Still, though Mrs. Belding's hair was snow-white, she did not impress him as being old. He reflected that there might come a time when it would be desirable, far beyond any ground of everyday friendly kindliness, to have Mrs. Belding be well disposed toward him. So he thought about her, and pondered how to make her like him. It did not take very long for Dick to discover that he liked her. Her face, except when she smiled, was thoughtful and sad. But it seemed too strong, too intense, too nobly lined. It was a face to make one serious. Like a haunting shadow, like a phantom of happier years, the sweetness of Nell's face was there, and infinitely more of beauty than had been transmitted to the daughter. Dick believed Mrs. Belding's friendship and motherly love were worth much striving to win, entirely aside from any more selfish motive. He decided both would be hard to get. Often he felt her deep, penetrating gaze upon him; and, though this in no wise embarrassed him—for he had no shameful secrets of past or

present—it showed him how useless it would be to conceal anything from her. Naturally, on first impulse, he wanted to hide his interest in the daughter; but he resolved to be absolutely frank and true, and through that win or lose. Moreover, if Mrs. Belding asked him any questions about his home, his family, his connections, he would not avoid direct and truthful answers.

Toward evening Gale heard the tramp of horses and Belding's hearty voice. Presently the rancher strode in upon Gale, shaking the gray dust from his broad shoulders and waving a letter.

"Hello, Dick! Good news and bad!" he said, putting the letter in Dick's hand. "Had no trouble finding your friend Thorne. Looked like he'd been drunk for a week! Say, he nearly threw a fit. I never saw a fellow so wild with joy. He made sure you and Mercedes were lost in the desert. He wrote two letters which I brought. Don't mistake me, boy, it was some fun with Mercedes just now. I teased her, wouldn't give her the letter. You ought to have seen her eyes. If ever you see a black-and-white desert hawk swoop down upon a quail, then you'll know how Mercedes pounced upon her letter. . . Well, Casita is one hell of a place these days. I tried to get your baggage, and think I made a mistake. We're going to see travel toward Forlorn River. The federal garrison got reinforcements from somewhere, and is holding out. There's been fighting for three days. The rebels have a string of flat railroad cars, all iron, and they ran this up within range of the barricades. They've got some machine guns, and they're going to lick the federals sure. There are dead soldiers in the ditches, Mexican non-combatants lying dead in the streets—and buzzards everywhere! It's reported that Campo, the rebel leader, is on the way up from Sinaloa, and Huerta, a federal general, is coming to relieve the garrison. I don't take much stock in reports. But there's hell in Casita, all right."

"Do you think we'll have trouble out here?" asked Dick, excitedly.

"Sure. Some kind of trouble sooner or later," replied Belding, gloomily. "Why, you can stand on my ranch and step over into Mexico. Laddy says we'll lose horses and other stock in night raids. Jim Lash doesn't look for any worse. But Jim isn't as well acquainted with Greasers as I am. Anyway, my boy, as soon as you can hold a bridle and a gun you'll be on the job, don't mistake me."

"With Laddy and Jim?" asked Dick, trying to be cool.

"Sure. With them and me, and by yourself."

Dick drew a deep breath, and even after Belding had departed he forgot for a moment about the letter in his hand. Then he unfolded the paper and read:

DEAR DICK,—You've more than saved my life. To the end of my days you'll be the one man to whom I owe everything. Words fail to express my feelings.

This must be a brief note. Belding is waiting, and I used up most of the time writing to Mercedes. I like Belding. He was not unknown to me, though I never met or saw him before. You'll be interested to learn that he's the unadulterated article, the real Western goods. I've heard of some of his stunts, and they made my hair curl. Dick, your luck is staggering. The way Belding spoke of you was great. But you deserve it, old man.

I'm leaving Mercedes in your charge, subject, of course, to advice from Belding. Take care of her, Dick, for my life is wrapped up in her. By all means keep her from being seen by Mexicans. We are sitting tight here—nothing doing. If some action doesn't come soon, it 'll be darned strange. Things are centering this way. There's scrapping right along, and people have begun to move. We're still patrolling the line eastward of Casita. It'll be impossible to keep any tab on the line west of Casita, for it's too rough. That cactus desert is awful. Cowboys or rangers with desert-bred horses might keep raiders and smugglers from crossing. But if cavalrymen could stand that waterless wilderness, which I doubt much, their horses would drop under them.

If things do quiet down before my commission expires, I'll get leave of absence, run out to Forlorn River, marry my beautiful Spanish princess, and take her to a civilized country, where, I opine, every

son of a gun who sees her will lose his head, and drive me mad. It's my great luck, old pal, that you are a fellow who never seemed to care about pretty girls. So you won't give me the double cross and run off with Mercedes—carry her off, like the villain in the play, I mean.

That reminds me of Rojas. Oh, Dick, it was glorious! You didn't do anything to the Dandy Rebel! Not at all! You merely caressed him—gently moved him to one side. Dick, harken to these glad words: Rojas is in the hospital. I was interested to inquire. He had a smashed finger, a dislocated collar bone, three broken ribs, and a fearful gash on his face. He'll be in the hospital for a month. Dick, when I meet that pig-headed dad of yours I'm going to give him the surprise of his life.

Send me a line whenever any one comes in from F. R., and inclose Mercedes's letter in yours. Take care of her, Dick, and may the future hold in store for you some of the sweetness I know now!

Faithfully yours,

THORNE.

Dick reread the letter, then folded it and placed it under his pillow.

"Never cared for pretty girls, huh?" he soliloquized. "George, I never saw any till I struck Southern Arizona! Guess I'd better make up for lost time."

While he was eating his supper, with appetite rapidly returning to normal, Ladd and Jim came in, bowing their tall heads to enter the door. Their friendly advances were singularly welcome to Gale, but he was still backward. He allowed himself to show that he was glad to see them, and he listened. Jim Lash had heard from Belding the result of the mauling given to Rojas by Dick. And Jim talked about what a grand thing that was. Ladd had a good deal to say about Belding's horses. It took no keen judge of human nature to see that horses constituted Ladd's ruling passion.

"I've had wimmen go back on me, but never no hoss!" declared Ladd, and manifestly that was a controlling truth with him.

"Shore it's a cinch Beldin' is agoin' to lose some of them hosses," he said. "You can search me if I don't think there'll be more doin' on the border here than along the Rio Grande. We're just the same as on Greaser soil. Mebbe we don't stand no such chance of bein' shot up as we would across the line. But who's goin' to give up his hosses without a fight? Half the time when Beldin's stock is out of the alfalfa it's grazin' over the line. He thinks he's careful about them hosses, but he ain't."

"Look a-here, Laddy; you cain't believe all you hear," replied Jim, seriously. "I reckon we mightn't have any trouble."

"Back up, Jim. Shore you're standin' on your bridle. I ain't goin' much on reports. Remember that American we met in Casita, the prospector who'd just gotten out of Sonora? He had some story, he had. Swore he'd killed seventeen Greasers breakin' through the rebel line round the mine where he an' other Americans were corralled. The next day when I met him again, he was drunk, an' then he told me he'd shot thirty Greasers. The chances are he did kill some. But reports are exaggerated. There are miners fightin' for life down in Sonora, you can gamble on that. An' the truth is bad enough. Take Rojas's harryin' of the Señorita, for instance. Can you beat that? Shore, Jim, there's more doin' than the raidin' of a few hosses. An' Forlorn River is goin' to get hers!"

Another dawn found Gale so much recovered that he arose and looked after himself, not, however, without considerable difficulty and rather disheartening twinges of pain.

Some time during the morning he heard the girls in the patio and called to ask if he might join them. He received one response, a mellow, "*Si*, señor." It was not as much as he wanted, but considering that it was enough, he went out. He had not as yet visited the patio, and surprise and delight were in store for him. He found himself lost in a labyrinth of green and rose-bordered walks. He strolled around, discovering that the patio was a courtyard, open at an end; but he failed to discover the young ladies. So he called again. The answer came from the center of the square. After stooping to get under shrubs and wading through bushes he

entered an open sandy circle, full of magnificent and murderous cactus plants, strange to him. On the other side, in the shade of a beautiful tree, he found the girls, Mercedes sitting in a hammock, Nell upon a blanket.

"What a beautiful tree!" he exclaimed. "I never saw one like that. What is it?"

"*Palo verde,*" replied Nell.

"Señor, *palo verde* means 'green tree,'" added Mercedes.

This desert tree, which had struck Dick as so new and strange and beautiful, was not striking on account of size, for it was small, scarcely reaching higher than the roof; but rather because of its exquisite color of green, trunk and branch alike, and owing to the odd fact that it seemed not to possess leaves. All the tree from ground to tiny flat twigs was a soft polished green. It bore no thorns.

Right then and there began Dick's education in desert growths; and he felt that even if he had not had such charming teachers he would still have been absorbed. For the patio was full of desert wonders. A twisting-trunked tree with foliage of small gray leaves Nell called a mesquite. Then Dick remembered the name, and now he saw where the desert got its pale-gray color. A huge, lofty, fluted column of green was a *saguaro,* or giant cactus. Another odd-shaped cactus, resembling the legs of an inverted devil-fish, bore the name *ocatillo.* Each branch rose high and symmetrical, furnished with sharp blades that seemed to be at once leaves and thorns. Yet another cactus interested Gale, and it looked like a huge, low barrel covered with green-ribbed cloth and long thorns. This was the *bisnaga,* or barrel cactus. According to Nell and Mercedes, this plant was a happy exception to its desert neighbors, for it secreted water which had many times saved the lives of men. Last of the cacti to attract Gale, and the one to make him shiver, was a low plant, consisting of stem and many rounded protuberances of a frosty, steely white, and covered with long, murderous spikes. From this plant the desert got its frosty glitter. It was as stiff, as unyielding as steel, and bore the name *choya.*

Dick's enthusiasm was contagious, and his earnest desire to learn was flattering to his teachers. When it came to assimilating Spanish, however, he did not appear to be so apt a pupil. He managed, after many trials, to acquire *"buenos dias"* and *"buenos tardes,"* and "señorita" and *"gracias,"* and a few other short terms. Dick was indeed eager to get a little smattering of Spanish, and perhaps he was not really quite so stupid as he pretended to be. It was delightful to be taught by a beautiful Spaniard who was so gracious and intense and magnetic of personality, and by a sweet American girl who moment by moment forgot her shyness. Gale wished to prolong the lessons.

So that was the beginning of many afternoons in which he learned desert lore and Spanish verbs, and something else that he dared not name.

Nell Burton had never shown to Gale that daring side of her character which had been so suggestively defined in Belding's terse description and Ladd's encomiums, and in her own audacious speech and merry laugh and flashing eye of that never-to-be-forgotten first meeting. She might have been an entirely different girl. But Gale remembered; and when the ice had been somewhat broken between them, he was always trying to surprise her into her real self. There were moments that fairly made him tingle with expectation. Yet he saw little more than a ghost of her vivacity, and never a gleam of that individuality which Belding had called a devil. On the few occasions that Dick had been left alone with her in the patio Nell had grown suddenly unresponsive and restrained, or she had left him on some transparent pretext. On the last occasion Mercedes returned to find Dick staring disconsolately at the rose-bordered path, where Nell had evidently vanished. The Spanish girl was wonderful in her divination.

"Señor Dick!" she cried.

Dick looked at her, soberly nodded his head, and then he laughed. Mercedes had seen through him in one swift glance. Her white hand touched his in wordless sympathy and thrilled him. This Spanish girl was all fire and passion and love. She understood him, she was his friend, she pledged him what he felt would be the most subtle and powerful influence.

Little by little he learned details of Nell's varied life. She had lived in many places. As a child she remembered moving from town to town, of going to school among schoolmates whom she never had time to know. Lawrence, Kansas, where she studied for several years, was the later exception to this changeful nature of her schooling. Then she moved to Stillwater, Oklahoma, from there to Austin, Texas, and on to Waco, where her mother met and married Belding. They lived in New Mexico awhile, in Tucson, Arizona, in Douglas, and finally at Forlorn River.

"Mother could never live in one place any length of time," said Nell. "And since we've been in the Southwest she has never ceased trying to find some trace of her father. He was last heard of in Nogales fourteen years ago. She thinks grandfather was lost in the Sonora Desert. . . . And every place we go is worse. Oh, I love the desert. But I'd like to go back to Lawrence—or to see Chicago or New York—some of the places Mr. Gale speaks of. . . . I remember the college at Lawrence, though I was only twelve. I saw races—and once real football. Since then I've read magazines and papers about big football games, and I was always fascinated. . . . Mr. Gale, of course, you've seen games?"

"Yes, a few," replied Dick; and he laughed a little. It was on his lips then to tell her about some of the famous games in which he had participated. But he refrained from exploiting himself. There was little, however, of the color and sound and cheer, of the violent action and rush and battle incidental to a big college football game that he did not succeed in making Mercedes and Nell feel just as if they had been there. They clung breathless and wide-eyed upon his words.

Some one else was present at the latter part of Dick's narrative. The moment he became aware of Mrs. Belding's presence he remembered fancying he had heard her call, and now he was certain she had done so. Mercedes and Nell, however, had been and still were oblivious to everything except Dick's recital. He saw Mrs. Belding cast a strange, intent glance upon Nell, then turn and go silently through the patio. Dick concluded his talk, but the brilliant beginning was not sustained.

Dick was haunted by the strange expression he had caught on Mrs. Belding's face, especially the look in her eyes. It had been one of repressed pain liberated in a flash of certainty. The mother had seen just as quickly as Mercedes how far he had gone on the road of love. Perhaps she had seen more—even more than he dared hope. The incident roused Gale. He could not understand Mrs. Belding, nor why that look of hers, that seeming baffled, hopeless look of a woman who saw the inevitable forces of life and could not thwart them, should cause him perplexity and distress. He wanted to go to her and tell her how he felt about Nell, but fear of absolute destruction of his hopes held him back. He would wait. Nevertheless, an instinct that was perhaps akin to self-preservation prompted him to want to let Nell know the state of his mind. Words crowded his brain seeking utterance. Who and what he was, how he loved her, the work he expected to take up soon, his longings, hopes and plans—there was all this and more. But something checked him. And the repression made him so thoughtful and quiet, even melancholy, that he went outdoors to try to throw off the mood. The sun was yet high, and a dazzling white light enveloped valleys and peaks. He felt that the wonderful sunshine was the dominant feature of that arid region. It was like white gold. It had burned its color in a face he knew. It was going to warm his blood and brown his skin. A hot, languid breeze, so dry that he felt his lips shrink with its contact, came from the desert; and it seemed to smell of wide-open, untainted places where sand blew and strange, pungent plants gave a bittersweet tang to the air.

When he returned to the house, some hours later, his room had been put in order. In the middle of the white coverlet on his table lay a fresh red rose. Nell had dropped it there. Dick picked it up, feeling a throb in his breast.

Had Nell left it there by accident or by intent? Was it merely kindness or a girl's subtlety? Was it a message couched elusively, a symbol, a hope in a half-blown desert rose?

The WORK OF THE CAMP-FIRE CLUB

A MAN ON THE SPOT

IT is well that FIELD AND STREAM readers should know that the Camp-Fire Club is maintaining a first-class lawyer constantly on guard at Albany looking after the interests of wild life. The situation this year warrants such action; the legislature is new and raw, and far too prone to listen to the demands of new legislators, many of whom received their elections partly on the promise to try to repeal game laws in the interests of selfish local constituents who think more of their own peculiar local sport conditions than of the larger interests of the State's game supply. The laws that were enacted during the last few years were only made after careful thrashing out of all the questions involved; that they have been exceedingly beneficial to the game all over the State has been amply proven by the results, which are patent to every sportsman who goes afield and notices the manifest increase in the supply of game. That these laws are not lightly to be repealed by thoughtless and selfish legislators after so many years of effort spent in getting them passed goes without argument, but there are so many of these pernicious bills now being proposed that, without a watchdog on guard, one or another of them may be railroaded through and the mischief done before the sportsmen of the State can be rallied to checkmate the evil. For this reason the Camp-Fire Club has seen fit to retain such a man, an experienced legislator, and his report for the past month's work has been received and approved by the Conservation Committee.

THE ADIRONDACK FORESTS

Several omnibus meetings have been held, attended by representatives of all the bodies interested in the preservation of the Adirondack and Catskill parks. The Camp-Fire Club's committee on this work reported upon these meetings. As the State Constitutional Convention will be in session as this goes to print, the principal effort of all the organizations has turned around what amendments shall be offered to the wording of the Constitution as it now applies to our forests. The Camp-Fire Club has taken the final stand against any amendment at this time permitting lumbering operations in the Adirondack and Catskill parks, and, as regards clearing out dead or fallen timber and cutting fire lanes, suggests the wording for the second paragraph of the proposed amendment to read "sale of dead or fallen trees," instead of "timber," in order to clear up any possible ambiguity. In the matter of permitting the leasing of camp sites, the Committee recommended the omission of the clause "nor for leasing of camp sites," thus removing the present prohibition against their establishment.

THE POWER DAM IN THE GRAND CANYON

This matter has been under action by the committee in charge, and it is believed that the power project at the foot of Bright Angel Trail will not likely be favored by the U. S. Forest Service, under whose jurisdiction the canyon is at present. The slowly accumulating weight of evidence against this pernicious grab measure will make its force fully felt against it when Congress next convenes.

QUAIL IN NEW YORK STATE

The committee in charge reported that the bill, introduced in the Assembly but not in the Senate, restoring the open season for quail throughout the State, had been withdrawn and that at present the only efforts being made to attempt to remove the present protection on quail would be confined to Westchester County where the senator from that county was introducing a separate bill for that purpose. This bill has been already introduced into the Senate, and should be opposed by all Westchester County sportsmen who wish to see a reasonable in-

crease in the supply of quail before recommencing their shooting. In regard to the Long Island quail, considerable effort is being made in certain quarters to extend the season on the plea that a short open season is now no longer necessary. The chairman of the Quail Committee reported an offer on the part of the magazine *Country Life in America* to assist in defeating any such measure, which offer was gladly accepted.

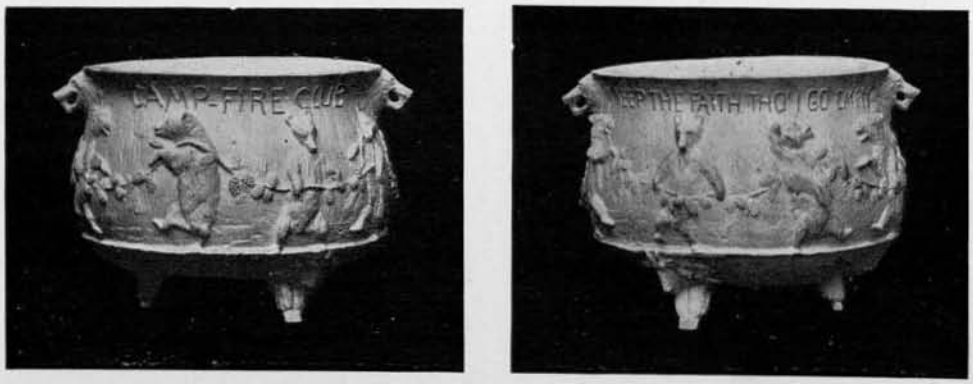
THE ELK SITUATION

The chairman reported upon the synopsis of the proposed changes of the game laws of Wyoming, stating that they appeared very satisfactory, and, further, had the approval of Mr. Chas. G. Moore, who recently advised the committee as to conditions in Wyoming. Provisions for extra wardens were incorporated. No report was as yet handed in on the situation in Montana.

A NEW GAME REFUGE

Correspondence looking to the establishment of a new game refuge on Blackbeard Island, off the Georgia coast, was read before the committee. This island, originally a quarantine station, and therefore part of the property of the United States Government, comprises about 9,000 acres of uplands and extensive marshes on the inland side. Upon abandoning it as a quarantine station its use was transferred to the Agricultural Department as a refuge for migratory wildfowl and other birds. Since the present appropriation of $25.00 per month for the salary of a custodian to take charge of the bird-life is utterly inadequate for any such purpose, the State Game Commission of Georgia suggests the transfer of the use of this valuable refuge to the State Department of Game and Fish, which will be in position to expend money for the protection of the game birds now on the island and for the propagation thereof. The project has the approval of Mr. John B. Burnham, of the American Game Protective Association, and Mr. T. Gilbert Pearson, of the Audubon Societies. It was moved and carried that the committee on National and International Parks take up this matter with the U. S. Bureau of Biological Survey, with a recommendation that the transfer of the use of the island as a game refuge to the State of Georgia carry with it provision for supervision by the Treasury Department.

TWO VIEWS OF THE CAMP-FIRE CLUB CHOWDER POT



THE MOTTO FOR THIS POT, "KEEP THE FAITH, THO' I GO EMPTY," WAS DEVISED BY GEO. L. HUBBEL, VICE-PRESIDENT, 1914-1915. THE POT WAS DESIGNED BY THE SCULPTOR, FREDERICK M. SPIEGLE, MEMBER OF THE CLUB

Where to Go

EDITOR'S NOTE—The aim of this department is to present to our readers reports on desirable localities for fishing and hunting. We have a great many of these coming in by every mail. Only the best have been culled out—not places where the luck was "fair," but where it was *"splendid."* It is impossible for us, in the limited space available, to print names of hotels, guides, etc., but write us direct for information concerning any locality whatever you are interested in, and be sure to mention in writing, later, to the hotel or guide, that your information came from our "Where to Go" department. This is important, as you will then get the best treatment, both as to terms and accommodation.

NEW ENGLAND STATES

Jackman, Maine, reached by Canadian Pacific Ry. to Attean Landing, a flag station. Accommodations at Attean Camps; Ruel E. Holden, proprietor, $14 a week. Good fishing in the surrounding ponds and lakes.

Oakland, Belgrade County, Maine, reached by the Bangor & Maine R. R. and Maine Central R. R. Accommodations at East Pond Camps; E. W. Clements, proprietor, $13 a week. Small mouth bass in the surrounding lakes. Suitable for ladies.

Belgrade Lakes, Kennebec County, Maine, reached by Maine Central R. R. Good accommodations at Belgrade Lakes Camp; F. Thwing, proprietor, $2.50 a day. Guides with boats $3 a day. Black bass in Long, Big and North Ponds, also perch and lake trout.

Oakland, Kennebec County, Maine, reached by Boston & Maine Ry. Accommodations at North Pond Camp; W. W. Clement, proprietor, $2 a day. Fishing in Belgrade lakes for small mouth bass, pickerel and perch.

Sebec Lake, Piscataquis County, Maine, reached by Boston & Maine Ry. Accommodations at Packard's; B. M. Packard, proprietor, $8 a week. Good fishing in Sebec Lake for small mouth bass, landlocked salmon and pickerel.

Island Falls, Aroostook County, Maine, reached by Bangor & Aroostook Ry. Accommodations at Hook Point Camps, Mattawamkeag Lake; W. W. Sewall, proprietor. Good bass and trout fishing.

Schoodic, Hancock County, Maine, reached by Bangor & Aroostook Ry. Accommodations at Lake Side Camp; N. W. McNaughton, proprietor, $8 to $15 a week. Guides $3.50 a day. Bass, trout and pickerel fishing in Schoodic Lake, Ebeeme Ponds and Pleasant River.

West Alton, Belknap County, N. H., reached by Boston & Maine Ry. Suitable accommodations for ladies at Broad View House, $1 a day. Fishing in Lake Winnepesaukee for bass, pickerel and perch.

Brandon, Rutland County, Vermont, reached by Rutland Ry. Accommodations at Mountain Spring Hotel; H. E. Bissell, proprietor, $3 a day. Guides $1.50 a day. Bass, pike and perch in nearby streams and lakes; also lake and brook trout.

St. Albans, Franklin County, Vermont, reached by Champlain Transportation Line. Fine small mouth bass fishing in St. Albans Bay, also trolling for pike and pickerel.

Newport, Orleans County, Vermont, reached by Rutland Ry. Accommodations at Raymond House; D. Tesco & Son, proprietors, $2 a day. Guides with boat $3 a day. Good fishing for bass, lake trout, pickerel and perch in Lake Memphremagog. Large lake trout and landlocked salmon.

Lake Bomoseen, Rutland County, Vermont, reached by Delaware & Hudson Ry. Good accommodations at Cedar Grove House. Good fishing for bass, pickerel and perch.

North Scituate, Providence, R. I., reached by Port Townsend Southern Ry. Party camped out. Accommodations at Whipp Hotel, $8 to $12 a week. Small mouth bass and white perch in Lake Moswansicut.

New Canaan, Fairfield County, Connecticut, reached by New York, New Haven & Hartford R. R. Accommodations suitable for ladies at house of Mrs. Albert Schofield, $1 a day. Bass, pickerel and perch in Trinity Lake.

Litchfield, Connecticut, reached by New York, New Haven & Hartford R. R. Accommodations at various hotels. Small mouth bass fishing.

Congamond, Hampden County, Massachusetts, reached by New York, New Haven & Hartford R. R. Accommodations at various hotels and boarding houses. Bass and pickerel fishing in Congamond and Southwick Ponds.

MIDDLE ATLANTIC STATES

Mamakating, Sullivan County, New York, reached by Ontario & Western Ry. Accommodations at

Six Lake House; Brown & Kennedy, proprietors, $8 a week. Suitable for ladies. Small mouth bass, pickerel and perch in Fowlwood, Masten and Tankee Lakes.

Adirondack, Warren County, New York, reached by Delaware & Hudson Ry. Suitable accommodations for ladies at Valentine Farmhouse; Henry B. Hayes, proprietor, $7 a week. Large and small mouth bass, pickerel, lake and brook trout. Fishing in Valentine Pond and Schroon Lake.

Cohecton, Sullivan County, New York, reached by Erie R. R. Good accommodations at Erie Hotel; W. F. Heuser, proprietor, $1.50 a day. Bass, pike, perch, pickerel, trout. Fishing in Delaware River and Swago and Laurel Lakes.

Long Eddy, Sullivan County, New York, reached by Erie R. R. Accommodations at house of Mrs. Ed. Hinnamon, $7 a week. Small mouth bass in river; rainbow and native trout in Basket Brook.

Old Forge, Herkimer County, New York, reached by New York Central R. R. Accommodations at Bay View Camp; O. C. Tuttle, proprietor, $12.50 a week. Suitable for ladies. Bass in Fulton Chain of Lakes. Brook trout in mountain streams.

Tupper Lake Junction, Franklin County, New York, reached by New York Central R. R. Accommodations at Sunset Cottage; Mrs. Cameron, proprietress, $10 a week. Many bass, pike and pickerel in Tupper Lake, Simond's Ponds and Raquette River.

Cape Vincent, Jefferson County, New York, reached by New York Central R. R. Accommodations at Carleton Hotel; C. E. Reed, proprietor, $3 a day. Guides and boats $5 a day. Bass fishing in Lake Ontario and St. Lawrence River.

Raquette Lake, Hamilton County, New York, reached by New York Central R. R. Accommodations at Brightside; J. O. A. Bryere, proprietor, $17.50 a week. Bass and trout fishing.

The Glen, Warren County, New York, reached by Delaware & Hudson Ry. Accommodations at Friends Lake House; D. Murphy, proprietor, $10 a week. Guides $3.50 a day. Good bass fishing, also pike.

Newton, Sussex County, New Jersey, reached by Delaware, Lackawanna & Western R. R. Good accommodations at Spring Lake Cottage; George D. Budd, proprietor, $7 to $14 a week. Black bass, pickerel, perch, in Hunts Lake.

Lake Hopatcong, New Jersey, reached by Delaware, Lackawanna & Western R. R. or Central Railroad of New Jersey. Accommodations at Anglers Retreat; Charles Marin, proprietor, $2 a day. Good bass fishing. Number of prize winners have been caught here.

Andover, Sussex County, New Jersey, reached by Delaware, Lackawanna & Western R. R. Accommodations at Lakeside Hotel; J. A. Maines, proprietor, $2 a day. Bass and pickerel in Long Pond.

Bridgeville, Warren County, New Jersey, reached by Delaware, Lackawanna & Western R. R. Accommodations at Mountain Lake House; F. Buckmeyer, proprietor, $2.50 a day. Good large mouth bass fishing.

East Berlin, Adams County, Pennsylvania, reached by Western Maryland Ry. Good accommodations at Mouls Camp; Mr. Roth, proprietor, $3 a day. Large and small mouth bass, perch, carp, pike.

Beach Lake, Wayne County, Pennsylvania, reached by Erie R. R. to Narrowsburg, N. Y., thence by team. Accommodations at Eureka Cottage; J. Gregory, proprietor, $10 a week. Boats free. Bass, pickerel, crappie, etc., in Beach and other surrounding lakes. Some trout brooks.

SOUTHERN STATES

Rileyville, Page County, Virginia, reached by Norfolk & Western Ry. Accommodations at farm of J. M. Hoffman, $1 a day. Guide and boat $1.50 a day. Small mouth bass in Shenandoah River.

Petersburg, Grant County, West Virginia, reached by Baltimore & Ohio R. R. Hotel accommodations $1 a day. Bass fishing in Potomac River.

Clermont, Lake County, Florida, reached by Atlantic Coast Line. Accommodations at house of A. L. Cashwell, $7 a week. Black bass, pickerel, crappie.

Camp Walton, Santa Rosa County, Florida, reached by L. & N. R. R. to Pensacola. Accommodations at Gulf View; Theo. Staff, proprietor, $1.50 a day. Guides $2 a day. Large mouth bass, also salt-water fishing.

Leesburg, Lake County, Florida, reached by Seaboard Air Line or Atlantic Coast Line. Good accommodations at Lake View Hotel; Mr. Herbst, proprietor, $2.50 a day. Guide and boat $1.50 a day. Good bass fishing.

Ocala, Marion County, Florida, reached by Seaboard Air Line. Good accommodations at Harington Hall; R. T. Adams, proprietor, $3 a day. Good bass fishing.

Astor, Lake County, Florida, reached by Atlantic Coast Line. Good accommodations at house of J. P. Doss, $10 a week. Large mouth bass in St. Johns River and Lake George and Lake Dexter.

MIDDLE WESTERN STATES

Bellaire, Antrim County, Michigan, reached by Pere Marquette Ry. Good accommodations at the Fisherman's Paradise; H. D. Smith, proprietor, $12 a week. Guides with boat $2.50 a day. Large and small mouth bass, Muscallonge, pike and pickerel. Also at The Maples; W. C. Green, proprietor, $8 a week.

Dowagiac, Cass County, Michigan, reached by Michigan Central Ry. Accommodations at Dewey Lake Hotel; Theo. Crane, proprietor, $10 a week. Bass, perch.

Dorset, Hubbard County, Minnesota, reached by Great Northern Ry. Accommodations at Pine Cone Camp; C. L. Thomas, proprietor; or at Fisherman's Lodge; A. O. Wambold, proprietor, $12 a week. Guides $2.50 a day. Good bass, muscallonge and pike fishing.

Marcell, Itaska County, Minnesota, reached by Minneapolis & Rainey River Ry. Accommodations at resort of E. A. Strickler, on Potato Lake. Good bass fishing in Potato and surrounding lakes.

Hackensack, Cass County, Minnesota, reached by Northern Pacific Ry. Accommodations at Spain House; W. J. Spain, proprietor, $6 a week. Good bass, pike and muscallonge fishing.

Cable, Bayfield County, Wisconsin, reached by Chicago & Northwestern Ry. Accommodations at the Cavalier; L. E. Cavalier, proprietor, $10 a week. Good bass, musky and trout fishing.

Lake Owen, Bayfield County, Wisconsin, reached by Chicago & Northwestern Ry. Accommodations at Eagle Knob Resort; J. Stokes, proprietor, $8 a week. Large and small mouth bass.

Grand View, Bayfield County, Wisconsin, reached by Northwestern Ry. Good accommodations at Camp Fire Island Camp; H. A. Scotford, proprietor. Bass, muscallonge, in Upper and Lower Clam Lakes.

WESTERN STATES

Lake Andres, Charles Mix County, South Dakota, reached by Chicago, Milwaukee & St. Paul Ry. Accommodations at hotel. Guides with boats for hire. Good bass fishing in Lake Andres.

Del Rio, Val Verde County, Texas, reached by Southern Pacific Ry. Fishing in Blaine's Lake, Devil's River. Party camped out.

Regan Wells, Bowles P. O., Uvalde County, Texas. Reached by Southern Pacific Ry. to Uvalde, thence by stage. Accommodations $7 a week. Large mouth fishing in Dry Frio River.

Soledad, California, reached by Southern Pacific Ry. Accommodations at Abbott's Ranch. Good fishing in recently stocked lake.

CANADA

Coe Lake, Nipissing County, Ontario, reached by Grand Trunk Ry. Good accommodations at Algonquin Hotel; L. E. Merrell, proprietor, $3.50 a day. Small mouth bass, and speckled trout. Fishing in Crown Lake, Lake Louise and Rock Lake.

French, Nipissing County, Ontario, reached by Canadian Pacific Ry. Good accommodations at hotel kept by M. H. Fenton, Wanakewin P. O. Guides $2.50 a day. Small mouth bass, muscallonge and pike.

Stanley Island, Ontario, reached by Grand Trunk Ry. to Cornwall, Ontario. Accommodations at Algonquin Hotel; J. R. Duquette, proprietor, $15 a week. Guides $3 a day. Good bass, pike and musky fishing in St. Lawrence River.

Algonquin National Park, Ontario, reached by Grand Trunk Ry. to Joe Lake Station. Accommodations at Algonquin Hotel; L. E. Terrel, proprietor, $2 to $3 a day. Suitable for ladies. Complete outfits for camping trips on hand. Guides $2.50 a day. Bass plentiful in surrounding lakes in the park.

Magnetawan, Ontario, between Algonquin National Park and Georgian Bay. Good accommodations at Lake of Many Islands Camps; Fred J. Schmeling, proprietor. Small mouth black bass and also trout fishing.

The SPORTSMAN'S WORLD

HUNTING AND WOODCRAFT

MY FIRST BUCK

L. T. McKenney

We fellows who go into the silent woods to hunt deer for two weeks, after fifty weeks of nerve-racking work and worry in the noise and confusion of the city, can hardly expect to level a rifle with calm nerves and steady muscles when a fine buck stalks into view and tosses "his beamed frontlet to the sky."

With our feet better trained to city sidewalks than to picking our way silently over the rough ground in the forest, covered with rustling leaves and dry branches, and with our eyes accustomed to gaze at brick walls rather than to distinguish the obscure forms of deer among tree trunks of the same color, it becomes no easy matter to bag a big buck. These deer are crafty, cunning and fleet.

Our dull stupidity and clumsy awkwardness in unaccustomed surroundings, compared with the keen senses of the deer in their native element, give us a serious handicap when we pit our wits against theirs. Moreover, while deer are fairly abundant in some parts of the Maine woods, they are not standing around in plain sight waiting to be shot. For the city greenhorn, therefore, to go into the woods without a guide and, by his own prowess and perseverance, hang up a deer, is a stunt the difficulties of which are not appreciated either by the trained hunter or by the fellow who has never hunted at all. It is a task that requires tireless tramping, vigilance, patience, and cool, quick action at the right moment.

It is not surprising, therefore, that many a night we reach camp weary, wet and empty-handed, to repeat the "oft told tale" of flags seen, deer sighted, shots made, but no hits scored. Frequently the tale is "not a sight of hide or hair of game." We report plenty of "signs" and huge tracks where the wary game has been "jumped" by our clumsy noise and has bounded away without our eyes even catching a glimpse of it.

Imagine, then, the supreme satisfaction with which one of us fellows, a tenderfoot, returns to camp with the news that he has hung up his game, and his great exultation when he can boast that he has bagged a record buck. So much in general to show how easy it is not to get a deer. Now, for a personal experience in getting one.

In the fall of 1914 Mr. M. B. Parkinson and the writer, known in the hunting camp as "Ivory Park" and "Moccasin Mac" respectively, were following the game trails in our old hunting grounds at Spencer Lake, Maine.

Thus far this season we had each shot a doe, and of course were both desirous of securing another deer, especially a buck. On reaching camp one night after a day's hard tramp and seeing nothing, Ivory suggested that we go together the next day to Hardwood Mountain. We wanted to go to the most likely place to find game. Ivory said that a hunter from the camp had fired at a buck up there that day and missed him. Of course it did not follow that either of us would kill the buck that the other fellow had missed, or that we would even see the buck. However, the idea struck me favorably, and although I had other plans in mind for the day, I accepted Ivory's invitation. The following morning, accordingly, we crossed Fish Pond in a row boat, followed the Rock Pond road a short distance, and took an old trail to the left up the side of Hardwood Mountain. This trail led two miles through a thick growth of small white birches. We then came to a heavy open hardwood growth. Here Ivory suggested that I hunt off through the woods to the right while he kept on up the trail. Right here is where Ivory claims he made a mistake. He says, had he gone to the right himself and sent me up the trail, Ivory Park would have the following experience to relate instead of Moccasin Mac. It might have been. But for Ivory's consolation, I want to say,

"Of all sad words of tongue or pen,
The saddest are these—'it might have been'."

It was a cloudy morning, though not raining. The leaves were wet and it was pretty easy to move silently through the woods. I hunted carefully along, stopping frequently beside a tree, so as not to attract the attention of any deer that might be in the vicinity, while I looked over every yard of ground within my field of view. About ten o'clock I heard a stick crack. I knew some heavy creature not far from me had stepped on a dead stick and broken it. I instantly obeyed the railroad warning, "Stop. Look! Listen!" I waited five minutes. Possibly Ivory had come back and was moving over my way. He did not appear and I saw nothing, but was certain that there was some large creature near by. I redoubled my caution and vigilance and silently crept forward a hundred yards to the sheltering side of a huge spruce and peered over a low ridge into a small ravine. My nerves were set aquiver by seeing a deer's rump, the rest of the

body being concealed by intervening trees. My first impulse was to fire. But I collected my shattered nerves in time to realize that the deer was undisturbed and would, if given a little more time, move out into full view, while to shoot at the game in the position it then was meant only to wound, if not to miss it altogether. Therefore, in the language of a world-famous hunter, "with rifle at the ready" I waited, subduing my excitement as best I could, and I certainly was some excited, for I believed the rump I saw belonged to a buck, judging by its size and the location there alone on the mountain. Presently the deer moved along until the front half of its body was past the trees. Then he raised his magnificent head and looked calmly down through the vista of trees before him, not noticing me beside the tree eighty yards to his right. It was a buck! "The antlered monarch of the waste" stood before me, not a bush or twig intervening. What a splendid fellow! The sight of that fine buck in plain view, utterly unconscious of my presence, was enough to quicken the blood in any hunter's veins. I realized the supreme moment had arrived. I steadied my nerves, held my muscles as rigid as I could, and, taking careful aim, just back of the shoulder, fired. I half expected—yes, I guess rather more than half—that the buck would bound away with his white flag waving me a glad farewell. But he did not, and he did not fall. He seemed to settle down several inches in his tracks. I sent another hasty shot in his direction—only in his direction—it did not hit him. But at that instant he fell and rolled over several times down the side of the mountain. I thought he was struggling to regain his feet and before he stopped rolling, I stood over him, ready to finish him, but he was already finished. My first shot had gone home and the monarch of the mountain lay stretched at my feet. I had killed my first buck with horns.

A NEW DOG ASSOCIATION IN NEW YORK

The Dog Lovers Protective Association of America, Inc., through proper organization and well directed co-operation, is sure to become a power for good and its influence will be recognized throughout the country. Similar organizations probably will be organized in different sections of the country whenever the local conditions warrant it, but the parent organization will be in a position to serve and protect the interests of its individual members wherever located.

Two phases of protection which will be given serious consideration are, in general terms:

1. Protection through precautionary measures to discourage the sale of unhealthy and unsound dogs and gross misrepresentations by unscrupulous dealers in making sales, especially when shipped to a distance.

2. Adoption of a standard form of bill of sale, with health and identification certificate on the reverse side thereof.

The Bertillon system of measurements and characteristics can be intelligently applied to dogs and the record will prove valuable for identification purposes and be a safeguard against possible substitutions. A standard form of bill of sale can be worked out by the D. L. P. A. and its use recommended to prospective dog purchasers. Such a bill of sale should set forth concisely the terms of sale (not necessarily the prices paid), and the representations and guarantees, if any, made by the seller.

On the reverse side two blank certificates to be filled in by a licensed doctor of veterinary science (D. V. S.); one a health certificate as to whether the dog is apparently sound and healthy, and the other an identification certificate with measurements and characteristics based on the Bertillon system. The use of the veterinary certificates will be optional with the prospective purchasers.

Arrangements can no doubt be made by the D. L. P. A. with veterinarians of recognized standing to make the examinations and take the measurements at their offices for a nominal fee. Having horses examined by veterinarians before purchase is a general practice; why not dogs? The protection and satisfaction of such a certificate is well worth the small expense of securing it. Possible substitution of dogs intended for shipment can be further safeguarded against, if necessary, by a tag certificate under a seal of the veterinarian placed around the dog's neck at the time examination is made.

STEEL TRAPS, THEIR USE AND ABUSE

FIELD & STREAM PUB. CO.:

With your permission I would like to "jump in the swim," and make my spiel (providing you will give me a little space), especially after reading the article by Mr. Edward Breck, in the August number, denouncing the steel trap as cruel. He has only viewed the subject from one standpoint; of course there is more than one side to everything, and we cannot judge anything by seeing one side only.

Now, in the first place, why doesn't Mr. Breck denounce the gun as cruel and stop the use of it? Probably because he owns one himself, maybe two or three. There is no denying that the gun is cruel; one has only to read the pages of any sporting magazine to prove this. For instance: Mr. Jimson tells of wounding a deer in the flank, but had to give up the chase on account of melting snow. Again Mr. Smith tells of killing moose with a 25-20; of course, it is natural to suppose that the use of too small guns cause lots of wounded animals. Also, look at the suffering the gun is causing across the pond.

But, leaving out this war problem, I consider the gun just as cruel, or more so, than steel traps; of course a great deal depends on the man using them. I have used both rifle and traps for the past six years (and I expect to for a while longer) and I have noted cases where the trap would have saved, and *did* save, much suffering. For example: Last summer I did quite a little hunting for ground squirrels and quite often a squirrel would drag himself into a hole after being shot too far back. I was using a model 1890 rifle chambered for the .22 W. R. cartridge, and, as you probably know, this is a good little killer. If I had used traps this would not have happened, but I wanted a little practise; besides, I did not have any suitable traps. And again, last fall I caught a badger in a steel trap and I put six 45 grain bullets in him and he was as full of life as ever, so I finished him off with a club. What would have been the result if I had met him while hunting? He would have crawled into his den with one or two bullets in him, and probably died in a day or two, but nobody would have known, as he would have been three feet under ground. On another occasion I shot a wild duck which proved to be full of shot. He was tangled up in some drift and did not have the strength to work himself out. His mate was not so full of shot and so had strength enough to fly across the stream and get away.

To my notion of thinking, an animal does not suffer as much as Mr. Breck would have us think. When an animal is caught in a trap the part below the jaws of the trap becomes numb and without pain. It is the great desire to get to cover that causes them to make such efforts to free themselves that Mr. Breck tells of, as their instinct tells them they will be safe if they get to cover. As an example, we will take the muskrat, who uses the water as his protection: The moment a rat feels the grip of the trap he makes a lunge for deep water and the trap pulls him under and in a few moments he is a dead rat. This shortcoming is taken advantage of by all trappers; as a result a great many animals are drowned as soon as caught, as all aquatic animals will do the same thing.

A person who is shiftless and lazy enough to leave an animal in a trap to starve would just as soon wound a deer and leave it to die; and as I said before it is up to the man behind the gun or traps, for that matter. Even one of those new Newton guns won't kill a rabbit unless you hit it. Get the idea?

What I don't believe in is killing meat when you have no use for it. It appears that some of these fellows chop off the head and leave the meat to spoil (of course they obey the law) while if a native so much as kills a squirrel out of season, from necessity, he has to suffer for it. What I say is do not kill any more game than you have use for and get it in a sportsmanlike manner. What we need is a revision of the game and fur laws. I say do without State laws and have Federal laws; also a Federal license.

JOE PARKINSON.

CONSERVATION

MONTANA STOPS HUNTING MOUNTAIN SHEEP AND GOATS

Down to the present year the States of Montana, Wyoming, Idaho and Washington have steadfastly maintained the privilege of hunting mountain sheep and mountain goats. In view of the fact that both of these species have been exterminated locally throughout nine-tenths of their former range, strong representations have several times been made to those States in behalf of a five-year close-season law.

During the month of January, while the legislatures of the four States were in session, Dr. W. T. Hornaday issued an urgent circular appeal in behalf of the sheep and goats, and placed a copy of it in the hands of each member of the four legislatures. It asked for a five-year close season, all around.

Wyoming responded with the information that no new bills could be introduced in the legislature after January 20th.

Montana immediately responded with the introduction of a bill to give mountain sheep and goats absolute protection for three years. This was largely due to the efforts of Mr. John E. Brown, an attorney of Helena, who volunteered to render active service in the cause of sheep and goat protection, and who assisted in drafting the bill.

ROCKY MOUNTAIN BIGHORN NOW UNDER ABSOLUTE PROTECTION IN MONTANA

The Montana bill has been duly enacted into law, and the Rocky Mountain sheep and goats of Montana are now under absolute protection for three years. It is extremely probable that by the time this period has expired, the sportsmen of Montana will unite in asking that it be extended for a considerably longer period.

Mr. Brown has sent to Mr. Hornaday, as a souvenir of the reform in Montana, the pen with which Governor Samuel V. Stewart signed Senate Bill No. 124. The enactment of this law means that the seed stock of mountain sheep still remaining in Montana will now have a chance to slowly restock their mountain home. The great success of Colorado in bringing back the mountain sheep species gives ground for the hope that similar results may be achieved in Montana.

OLD TIMES ON THE CHESAPEAKE FLATS COMING BACK

That the framers of the Weeks-McLane migratory law have reason to feel that their dictum of no spring ducking on the Chesapeake flats has been vindicated was shown by the semi-official inspection trip made by a party of sportsmen last Saturday afternoon. Old gunners who can remember when the "flats" were the most famous on the Atlantic seaboard declare that after several seasons of the "no spring shooting" law there will be ducks enough for all and plenty left for seed.

Circling around the party's boat the ducks, geese and swan showed by their uneasiness that they were ready for the spring migration to their breeding grounds in the heart of Canada. At one time the experts in the party estimated that there were 60,000 birds in the air. Such a sight in the spring of the year had not been seen on the "flats" in many seasons.

Inquiry among the sportsmen of Cecil and Harford counties developed belief on their part that the "no Spring shooting" law is going to do all that was expected of it, and all of the better class of hunters are entirely satisfied. The framers of the new law knew that they were right, but it is well to have their judgment vindicated at so early a date.—Courtesy *Baltimore News.*

DISEASE AMONG RABBITS

Practically every sportsman in the country will be interested in the following statement by Professor C. P. Fitch of the Veterinary College, showing that the alleged prevalence of tuberculosis among the rabbits of this country does not exist.

Most gunners have, at some time or other, shot rabbits having a growth or swelling on the neck, and the question as to whether or not this affection was tubercular has caused no end of discussion. The scientific explanation by Professor Fitch will probably settle these discussions for all time.

His article is as follows:

"Editor of The Journal:—There has been considerable discussion during the past two seasons among local sportsmen concerning the existence of tuberculosis in wild rabbits. A large number have been killed which have had abscesses and other diseased conditions. The cause of these lesions has in many cases been ascribed to the tubercle germ.

"A number of diseased rabbits have been described to the author and he has killed several which have been affected. A rabbit which was supposed to have tuberculosis was also sent to him for examination. This latter animal was shot in an orchard near Taughannock Falls.

A careful examination of the animals has in all cases failed to show any evidence of tuberculosis, which is extremely rare in wild rabbits. The cause of the trouble has been some form of parasitic infestation. The condition which is probably most often mistaken for tuberculosis is due to a grub or larva of a fly similar in every sense to that which attacks cattle, producing that so-called "grubs in the back" which are so common in the spring and summer months. The adult fly is large and has some resemblance to a bumble bee. Its technical name is Cuterebra fontinella. The head is black and the thorax above is covered with a yellow-brown hair, the first segment of the abdomen with yellow hair and the rest of the abdomen of a blue-black color.

"The egg and early stages of the larva are unknown, but the full-grown larva is a large, black, spiny creature from one inch to an inch and a half in length and found beneath the skin of the rabbit. It is larger even than the one found beneath the skin of cattle. This grub forms a large swelling and in the spring of the year finally makes a hole in the skin through which it escapes during the late spring and summer months.

"The opening in the skin left by the grub may heal and the wound pass unnoticed in the fall and winter months, but, as often happens to any open wound or sore, pus-forming bacteria get in and an abscess results. The pus may burrow for a long distance underneath the skin, as in the case of the rabbit from Taughan-

nock. The grub had come out near the ear but the pus extended from the ear down around the neck and head and had come to a focus under the lower jaw. The flesh of a rabbit which has a local abscess may be eaten if the part affected is not too large, provided the diseased area is carefully removed.

"Another common parasitic affection in rabbits is the Cysticerus pisiformis. This is the larval stage of a dog tapeworm called Taenia serrata, which is a common intestinal parasite of hunting dogs. The cyst is a whitish sac about one-half inch in length filled with fluid. At one end is a darker yellowish spot, which is the head and neck of the tapeworm. This cyst is found most commonly attached to the covering of the intestines and to the muscles along the back on the inside of the abdominal cavity. Occasionally in a case that is badly infested the cysts are found in the liver and lungs. The rabbit received from Taughannock had cysts of the tapeworm in nearly every part of the body, the lungs, liver and peritoneum.

"When a dog eats a rabbit which contains these cysts, he in turn becomes infested with the larval tapeworm. This develops into the adult form in the dog's intestines and the eggs are passed out with the feces. The eggs get on grass, vegetables or clover which are eaten by the rabbit and it becomes infected with the cyst. A rabbit which contains these cysts can be used as food if there are not too many and provided the cysts are all removed when the animal is dressed. So far as the author knows there is no case on record of this tapeworm affecting man.

"Another disease found among wild rabbits is known as Coccidiosis. This is especially common in the liver and has been observed in man. It is due to a parasite called Coccidium oviforme, having an ovoid body, flattened at the ends and miscroscopic in size (about 1-800 of an inch in length). The disease is manifested by small yellowish-white tumors or swellings varying in size from a wheat grain to a pea, or even a hazelnut. They project slightly from the surface of the liver. Sometimes these parasites are in the walls of the intestines but they can be found only by the aid of a microscope.

"It is very questionable if a rabbit infested with coccidia should be used for food. The safest way is to destroy the carcass by burning.

(Signed) C. P. Fitch.

Courtesy Ithaca *Journal*.

DEVASTATING THE FISHERIES OF SOUTHERN CALIFORNIA

The Southern California Fish Dealers Association is demanding the throwing open of the Santa Catalina Fish Reservation to the market fishermen which, according to Dr. David Starr Jordan and other experts, means the ruin of the Fisheries. Here is what Dr. Henry Van Dyke says:

"This is what I saw when I arrived at Catalina, April 14th, too early in the season for the best fishing, but at a good time to look over the layout and study the value of the island as a natural spawning ground of fish, and a natural outing-resort of folks.

"A beautiful island, with high, green hills, many-colored cliffs and cañons, and clean, pebbly beaches, surrounded by the deep, pure, sapphire waters of the Pacific; a natural breeding place for the little fishes and the big fishes of the prolific sea.

"A lovely crescent harbor, named Avalon, nestled among the hills, and trails zigzagging up the slopes in every direction, among the oaks and laurels and wild lilacs; a natural playground for the people of Southern California and Arizona and New Mexico, who want salt breezes and a simple life and a little healthful sport on sea and shore.

"A few hotels and a multitude of camps and bungalows and cottages and tenting-grounds arranged for the accommodation of the thousands of families who will flock hither in the summertime to have a great deal of fun for a very little money.

"A tribe of boatmen, with launches and rowboats, well equipped with fishing tackle of the true sporting kind, light rods and slender lines, which teach the angler to match his skill against the strength of the fish and cultivate the spirit of sport in the men, women and children who visit this favored isle.

"Into the midst of this goodly scene, about the middle of the afternoon, came the Spoilers of the Sea. Three snub-nosed, thick-set vessels, piled high with nets, owned by firms of fish dealers, manned by foreigners, came butting down the coast. They set their nets close to the shore and ran a quarter of a mile out to sea, sweeping in everything that came in their way. One of the boats must have scooped out a couple of tons of yellowtail and white sea bass; to be sold to the dealers at perhaps five or ten cents a pound, and to the people at twenty cents, thirty cents, whatever the dealers choose to ask for them.

"Those were the fish that would have spawned around the kelp-beds and gravel-banks of Catalina this spring and summer, providing a new supply of food for millions of people. Those were the fish that would have given good sport to thousands of Californians seeking their recreation in this ideal island. Those were the fish upon whose continuance and propagation the living of the Catalina boatmen—three times as many as the foreign net-haulers—must depend.

"What kind of a democracy is it that permits these Spoilers of the Sea to carrry on their work of ruin?

"An hour after the nets were hauled there was not a fish, large or small, along the shore of the island. Those that were not caught were scared away. At the time of the present writing, three days later, they have not come back. Some year they will never come back; the spawning beds will be deserted; the Catalina fishing will be killed.

"For what? Not to benefit the people at large, for they have to pay the marketman's price for sea food. Not to enrich even the foreign net-haulers, for they get only meagre wages. But simply to add to the profits of a few firms of fish dealers, Spoilers of the Sea.

"How long will California permit this wasteful work to go on? A bill is now before the legislature to protect the fish within the three-mile limit from this destructive netting. It is a bill in the interest of all the State. It is a bill to save one of the great assets of California. The sooner it is passed by the legislature and signed by the Governor, the better it will be for everybody.

"Yes, it will be better even for the men with the nets. It will change them from Spoilers of the Sea, to legitimate market-fishermen."

ESTIMATE OF GAME KILLED IN PENNSYLVANIA DURING THE SEASON OF 1914

Based on Reports Received From the Officers in Charge of the Different Sections.

400,000	Ruffed grouse at 1½ lbs.	600,000 lbs.
2,000,000	Rabbits at 2 lbs.	4,000,000 lbs.
37,150	Quail at ½ lb.	12,383 lbs.
234,288	Squirrels at 1 lb.	234,288 lbs.
17,039	Woodcock at ⅓ lb.	5,680 lbs.
37,000	Water fowl at 3 lbs.	111,000 lbs.
9,599	Raccoons at 10 lbs.	95,990 lbs.
378	Bear at 150 lbs.	56,700 lbs.
1,102	Deer at 130 lbs.	143,260 lbs.
2,736,556	pieces of legal game	2)5,259,301 lbs.

2,629 tons, 1,301 lbs.

5,259,301 lbs. at 18 cents a pound = $946,674.18 value game killed in 1914.

NOTE: This estimate does not include the value of shore birds killed, as will be noted above. To this might have been added the value of the snipe and reed birds, at least, but was not done because same would be difficult to ascertain.

Courtesy Pennsylvania Game Commission.

The attention of California sportsmen is called to the above article by Dr. Van Dyke. Every effort should be made to keep this Reservation free of market fishermen.

SHOTGUNS AND RIFLES

THE CARE OF MODERN HIGH POWER RIFLES

By Virgil G. Duncan, Member Hoosier Rifle Club

The true rifleman is known by the spotlessness of the bore of his arm. He takes as much pride in the care of this delicate piece of machinery as the housewife does in her biscuits. It is well that he should, too, for almost any rifle neglected for twenty-four hours will lose considerable of its accuracy. The writer once knew a bolt action arm to be left prone a week with the magazine half full of water. The present day high powers, if properly cared for, are good for 10,000 to 20,000 rounds, or a lifetime for the average shooter.

High power rifles, if well cared for, will last for many years. In order to get the best result a rifle should be kept scrupulously clean and well lubricated. It is seldom necessary to take the action apart, although it should be done occasionally and the parts well greased. The residue of smokeless powder destroys the smooth surface of the steel and causes the chamber to become rust-eaten. When the rifle is not in use it should be cleaned, oiled, and kept in a dry place. All parts should be thoroughly cleaned and then well lubricated.

It is well to know why we should clean, before studying how we should do it. There are two kinds of fouling left as the result of firing a high velocity cartridge, the powder fouling and the metallic fouling. The powder fouling is the residue left after the powder has burned. This is practically all pure carbon. This fouling could be easily wiped out by a dry rag and the rifle would not deteriorate very rapidly in a dry climate, but without further attention the rifle would soon rust, due to the residue left by the primer. This fouling is acid in nature and in contact with the moisture in the air causes rusting. The second fouling is known as metallic, due to the action of the composition of the bullet with the walls of the rifle under high pressure and intense heat. This is deposited over the inside walls of the rifle as though it had been sifted there. Oil and water will not remove this fouling because the two form a crust, with the primer fouling beneath. The primer fouling slowly pushes its way up through the metallic fouling, thus gradually and slowly rusting the bore.

Metal fouling is practically eliminated when copper jacketed bullets are used. Jackets whose composition is cupronickel, have a chemical affinity for the steel of the barrel. Hence, when the two metals are brought into contact under high pressure and high temperature, fusion takes place and the jackets stick to the steel. Accuracy is preserved by using copper jackets because then fouling never builds up on the lands.

Powder fouling is less when using nitrocellulose powder than when using nitroglycerine powder. The former burns cool and the barrel erodes less when fired rapidly than when using nitroglycerine powder.

Thus we see the absolute necessity of the thorough cleaning of the bore, if we wish to preserve the accuracy of the arm.

A straight, steel-jointed rod is the best to use in cleaning. A few strips of medium weight canton flannel, about three-eights inch wide and four long, should be used as cleaning and drying agents. Strong ammonia, 28 per cent pure, as the cleaning liquid is best adapted because it dissolves the metallic fouling and neutralizes the acidity of the primer fouling.

The arm should be cleaned from the breech, as then the wear on the rifling is considerably reduced. In case the rifle has been under a severe test, an empty cartridge should be placed in the chamber and the bolt locked. Now pour a few tablespoonfuls of ammonia in the barrel at the muzzle, and with the cleaning rod and rag thoroughly wash the bore. The bore should then be rubbed dry with flannel strips, and then oiled with sperm oil. Cosmoline oil is also good to use in both the bore and chamber. This drying precaution must be taken because the ammonia draws moisture from the atmosphere and rusting results. Care should be taken not to allow any to fall upon the stock or action. Gun greases are good for the action, but only the best should be used. It is better to use sperm oil on the action than thin oils, as they permit rusting.

Raw linseed oil is best for the stock. Whenever the stock gets wet it should be thoroughly oiled. It is best to give the stock an oiled finish, as then the labor of keeping the stock in condition is lessened. Above all keep the rifle clean. Allow no one to handle the rifle with wet or dirty hands without afterwards wiping the arm with an oiled cloth. A rifleman takes pride in keeping his arm always ready for inspection.

TWENTY-BORE NOTES.

By H. P. Sheldon.

Part IV.

Never did Fortune so consistently favor a mortal, for, with an abrupt cessation of wing beats as startling as was their commencement, the hurtling body dropped them a halo of feathers into the brown leaves of a hazel clump—from which I retrieved him an instant later, a fat, proud old alderman of the partridge tribe.

Meanwhile, the flock had swooped down upon Doc and Jim and I heard a succession of flat, toneless reports as they endeavored to make the best of their ambuscade.

Presently, having smoothed each glossy feather, I slid the three birds into the capacious maw of the weather-stained shooting coat and picking up the now doubly beautiful 20 I made my way down the slope and joined my companions in the birches. Investigation led to the discovery that but one luckless bird had fallen to their hurried fusillade; so I said no word, but smiled a most patronizing smile, which was as acid to their tender vanity. The endurance of the precious pair exceeded all expectations, their courtesy was beyond cavil, albeit I detected a strained, repressive quality in their dulcet tones.

Reorganizing with closer intervals we moved along the floor of the valley. Here the birches leaned aside to let an occasional heavy furred pine find standing room, and scattered throughout the fragrant tangle were the two large coveys of partridge known to haunt this paradise of green and gold.

Here again did Fortune, with a consistency usually denied her sex, visit me with a fourth example of her kindness to those otherwise ungifted by Providence. As our line widened out a single bird, flushed from decently open cover in front of Jim, drew his fire and, unscathed by either charge, swept down upon the waiting Doc. I saw his brown barrels tilt and gleam and tilt and gleam again, while the double report echoed through the valley. And then, in an instant, it was my turn. By virtue of my position in line I had time to prepare for the feathered rocket; but she had by this time attained a momentum well calculated to carry her safely past the last danger zone. At thirty-five yards, buzzing like a top, she tore past. I tried frantically to get along her plane of flight with a suitable lead, only to forsake science in a panic and "jump" the gun somewhere ahead and pull. The nitro cracked wickedly and the bird, just darting behind a pine, disappeared from view. There came to my ears, however, a certain gratifying "thump," and a minute later I had gathered my fourth bird, clean killed, as were all the others by the

spiteful little load of chilled sevens.

Then, and not till then, the floodgates burst their stays and Doc and Jim disgorged themselves of a pent volume of mild profanity, in which Luck, myself, and the 20 came in, each for an equal share. Silence was my most vitriolic weapon, so in silence I laid down the four birds and beside each bird a single empty shell.

Although I have shot many birds with the 20 since that fateful day I never worked under so auspicious an application of fortunate circumstances, and I doubt much if by any means less complete I could have forced home small-bore truths upon those hard-bitten veterans, my companions.

Since that first experience I've carried my 20 in search of a wide variety of game and have yet to return empty-handed upon any occasion when success depended upon the ability of the gun.

One will, as the French would say, find it more convenient to hold a trifle closer than when using a gun of larger bore, but as I have already observed, the measure of a game is in the skill required to play it, and we hope and trust that the day is past forever when men count success by the number of victims alone.

Thanks to the keen foresight of our gunmakers, the 20 is offered in a satisfying variety of lengths, weights and specifications, from which any particular man can readily pick an affinity.

For close, brushy shooting the light, fast gun, with 24-inch open or modified barrels, is perhaps the most suitable, and for long ranges at wild fowl the seven-pound double gun or repeater, equipped with 30 or 32-inch full choke barrels and chambered for a three-inch shell, will prove pleasantly efficient. As a weapon for all purposes, and capable of doing good work at either of the above extremes, I unhesitatingly cast my ballot in favor of the six-pound, full-choked double gun with a barrel length of 28 inches. Chambered for the 2¾-inch case, such a gun invites any number of load combinations and will shoot satisfactorily either in the brush or, with heavier powder charges, over the decoys some bleak November morning.

Nor are the small-bore possibilities exhausted in this category of virtues. Every movement of progress in powder and shotgun ammunition gives an added impulse to the small bores, and I believe there will be a day when the now little known 28-bore will be as popular as is the 20 at present.

TO START A RIFLE CLUB

Field & Stream Pub. Co.:

While reading through your magazine, I came to a place where I found that the old Krag-Jorgenson rifles formerly in use in the United States army, were being distributed throughout the country, together with ammunition, for the use of rifle clubs.

I would consider it a very great favor if you would send me instructions for obtaining these. Have started to organize a rifle club here in St. Joseph, Mo., and would like to get these rifles for use on our range.

E. C. Newcombe.

Ans.—Write to Frank J. Kahrs, 1502 H Street, N. W., Washington, D. C. who will tell you how to get your club on the shooting map.—Ed.

A CORRECTION

To the many Peters and U. S. cartridge enthusiasts who have directed our attention to the omission of the mention of the Peters and U. S. cartridge companies in answering Mr. A. W. Summers' inquiry on page 1287 of our April issue, explanation is hereby offered that the apparent discrimination was unintentional and due to no prejudice against the excellent products of those manufacturers. For the benefit of Mr. Summers, and all others who may be interested, the metal-jacketed and the soft-nosed cartridges for the .30 Krag may be had of Peters and U. S. make as well as those mentioned previously.

SINGLE TRIGGERS AND EJECTORS

By Paul A. Curtis, Jr.

Part II

Personally the writer does not value their advantages high enough to warrant the additional expense involved, and as the pursuit of feathered game often takes him far from the beaten paths, or a repair shop, he does not wish to complicate to an undue extent the mechanism of what is now a simple gun.

All of the reputable gun manufacturers have refrained from putting out a single trigger until they had perfected one that they could thoroughly guarantee. In fact, the best single trigger in the world was invented by an American, but it had to be taken to Europe, where it was quickly adopted, before it was recognized here.

If the writer were using a double gun for trap shooting he would most certainly adopt the single trigger as an important part of the gun—due to the one length of stock which it makes posssible.

What has been said of the single trigger also applies, in part, to the automatic ejector.

For when they first came out many gunmakers, in their eagerness to quickly get an ejector on the market, turned out imperfect ones, which failed to stand up under the severe test in the field. And they gained an unsavory reputation, which it has taken a long time to dispel. But most of the good patents have now run out, so that the gunmaker has a great choice, and nothing to pay for any good ejector which he might select for use in his gun.

Consequently, almost all of the manufacturers now supply good ejectors, and no gun should be without one, as the testimony in favor of them is overwhelming.

Compared with the ordinary hammerless gun, the auto ejector is superior, because it performs the total withdrawal of the fired shells from the gun quicker and easier than the best drilled expert could possibly do by hand.

When scattered birds are rising intermittently before the gunner, or in the duck blind, particularly for shooting over the cripples, the time saved by the automatic ejector in reloading is of tremendous advantage; the gun can be reloaded in exactly half the time required with a non-ejector; also, if a man schools himself with the ejector, and uses a shell clip, attached to one of the fingers of his right hand, he can get four shots from a double gun as fast as it could be done with a repeater.

The shell holder consists of a ring that fits on the second or third finger of the right hand, with two steel clips on the outside of it, which each holds a shell. The clips are placed about as far apart as the two chambers of the gun would be, so that only the ends of the shells need be inserted in the breech of the gun, and a slight pull upwards will release them from the clips.

The automatic ejector was first applied to double-barreled guns by Mr. J. Needham in England in 1874. And Mr. Needham's system still remains one of the best. Though seemingly numerous, the varieties of the ejecting mechanisms in actual use are very few.

In fact, they may be divided into only two classes—those that are operated by the main spring, like the Needham; and those that are operated by a separate lock situated in the fore-arm; of which type the Deeley is the most representative. When, however, they are compared for strength and simplicity, the great difference between the various makes is manifest. Simplicity is the first thing to be sought for in an ejector, and the only reason for the extreme complexity of some of the various types is to get around the patents held by other makers.

The ejector should always be made in two parts, so that each barrel operates independently of the other; otherwise, when one barrel is discharged, the good shell is thrown out of the gun with the one that was fired. Particularly is this of importance in a boat, as otherwise a lot of ammunition will be wasted.

Many people think that an ejector is a strain on the joint of the gun. But this is not so, as the shells only require a slight flip to throw them clear of the barrels (which is all that the ejector does). The ordinary ejector lifts the shells out of the chamber about a quarter of an inch, and this loosens the shells if they are tight or jammed.

Avoid the selection of an ejector that has many moving parts, as it increases the chances of its getting out of order.

For this reason the writer prefers an ejector that works on the Needham principle, and uses the main spring of the lock to provide the necessary force to throw out the shell. This method was protected in Needham's patent, so that the other makes had to fall back on using another lock, which was placed in the forearm of the gun, and geared with the main lock; nat-

urally, the ejecting lock required a spring of its own to give the force necessary to expel the shell.

The writer is an enthusiastic advocate of the ejector, but would not sacrifice efficiency by adopting a complicated type.

A CURE FOR GUN-SHY EYES

FIELD AND STREAM PUB. CO.:

About three years ago, when I was off on a duck shoot, I was so unfortunate as to have received an injury to my eye from a piece of the metal portion of a cartridge flying out from the breech of my gun. Since that date I have been, in the common parlance of the hunting profession, gun-shy, and I apply the word to myself in the same way it would be applied to one of the lower animals, because it is utterly impossible for me by any means I have been able to bring to bear upon myself, to keep my eyes open when I pull the trigger, therefore as a consequence, as you and those who are acquainted with such conditions know, the results are almost invariably unsatisfactory. Once in a while it seems this does not affect me to the extent it does at other times, but always it is more or less true. This has put a very decided damper upon my enthusiasm in the way of seeking the festive Bob White, and as this is about all I attempt to shoot, I am very much distressed at the state of affairs.

What I want to know is whether or not there is any one who is attempting to give instructions to a person that would enable them to so change their brain cells as to be able to open their eyes at the time when they would involuntarily close them. I apprehend this is a very difficult problem to solve, but I do think it is possible for some means or other to be devised that would enable a person to change his mental state at that extent moment, and enable him to formulate his ideas so as to prevent this from occurring, but I have not been able to work it out; I have done my very level best, and when the time comes for me to shoot, then snap they go together, and I can't for the life of me understand it, because immediately after I realize there has been a lapse of memory; it is an absolutely involuntary act that I perform, and it affords me a great deal of humiliation. If you can assist me in this matter, or refer me to anyone who can give me any information, etc., I am not only able, but perfectly willing to remunerate them to any extent they desire, as several years more of my life I wish to, in part, give to this delightful recreation, and unless this can be changed, it will certainly be a source of a great deal of annoyance and a great drawback to me in this present pursuit.

DR. W. A. C.

ANS.—My advice to you would be to take up trapshooting. You would get over it in the first four boxes of shells.—ED.

THE 250-3000 SAVAGE RIFLE

By Lieut. Townsend Whelen

This new arm has just appeared on the market. I received one of the first made about five months before its public appearance, and have put it thoroughly through its paces, and am glad to be able to give the dope on it for those who are interested.

First please notice the new caliber nomenclature. The number "3000" indicates the velocity of the bullet. This is the highest velocity attained by any rifle regularly manufactured in the United States.

The rifle is made up in the featherweight model 1889 Savage action, the mechanism being slightly modified to adapt it to the rimless shell. The barrel is 22 inches long. The standard rifle has a well-checked pistol grip stock and forearm and a checked steel shotgun butt plate. The pistol grip is of new design pushed well up toward the trigger and curved much more than the old model. This offers a fine grip, and allows an easier compression of the mainspring when the lever is closed, thus making it possible to fire more rapidly than with the former model. The rifle is made only in Takedown model, and is furnished with the best open sights on any factory arm—a straight bar rear sight with a good "U" and a platinum bead front sight. The rear sight is adjustable for both elevation and windage as it should be.

The cartridge is rimless. Imagine the 30-cal. model 1906 shell cut off to a total length of 1.9 inches and necked down to .25 caliber, and you have a good picture of this new shell. The bullet is a Spitzer in shape with just a little lead exposed at the point, weighs 87 grains, and is jacketed with copper. The powder charge is 32 grains of Du Pont Military Rifle Powder, No. 21, which is a finer cut of the nitro-cellulose powder which is used in our Springfield rifle. The primer is the United States Cartridge Co., No. 8, the best primer on the market. The total length of the cartridge is 2.5 inches, which is as long as the Model 1889 action will handle. Altogether the cartridge is ultra-modern, the copper-jacketed bullet and the primer insuring against the lumpy metallic fouling, and the nitro-cellulose powder giving long life to the barrel.

When the rifle came, I hurried it out to the range just as it was, to give it its first trial. I fired 80 shots at 100 yards, muzzle and elbow rest, open sights, and got three ten-shot groups measuring 2.75, 2.85 and 1.85 inches. This was so fine for a starter that I equipped the arm with the No. 30½ Lyman Rear Sight, a Lyman gold bead front sight, and obtained Ideal Reloading Tools for it, and started in to find all about its capabilities. Several weeks later I started a regular series of tests with it, to determine its exact accuracy, develop reduced loads for it, and get it sighted in for field work. I fired ten groups of ten consecutive shots each at 100 yards, muzzle and elbow rest, the smallest group measuring 1.40 inches, the largest 4.12 inches, average 2.96 inches. The Lyman sights were used in this test. Comparing this with tests made with other American rifles it may be said that it shoots very much better than the average, in fact it is excelled in accuracy only by the .30-40 U. S. and .30 cal. Model 1906 U. S. cartridges.

I worked up a reduced load for it, the cartridge being in every respect the same as the full factory load, except that the powder charge was 10 grains of Du Pont Gallery Rifle Powder, No. 75 (Marksman). This load, too, shot splendidly, the largest group at 50 yards, muzzle and elbow rest measuring 1.90 inches, smallest 0.95 inches, average 1.42 inches, about the same accuracy as the .22 long rifle cartridge at this range. This load should prove fine for small game. The velocity is not sufficient to mushroom the bullet to any great extent, thus grouse and similar game will not be spoiled for the table. With the full charge and this reduced load, one has a fine all around combination for large and small game. When sighted for the high power load so that that load will hit ½-inch above the point of aim at 50 yards, the reduced load in my rifle struck on an average 5½ inches below and 2 inches to the left of the point of aim at the same distance. Adjustment for either cartridge can easily be made on the Lyman No. 30½ rear sight by remembering that one degree change in elevation changes the point of impact 6.1535 inches at 100 yards, and one point of windage equals 2.4614 inches at the same distance. For the sake of simplicity and memory, call it 6 inches and 2½ inches. When I got the rifle sighted in, I made the following memorandum for future reference in the field:

Factory load — Elevation 3 points, windage 0. Point of impact at 100 yards is one inch above the point of aim.

Reduced load—Elevation 5 1-3 points, windage 1½ points right. Point of impact at 50 yards is ¼-inch above the point of aim.

Now briefly my opinion on this new rifle. It's a mighty handy, unobtrusive little gun. Light and well-balanced, one can carry it all day on most any kind of a trail with positive pleasure. It weighs but 6½ pounds. The ammunition also is very light. I believe it will be found a splendid killer on deer, sheep, goats, black bear and such game. I cannot imagine a better arm for deer in thick timber, because it is so short, handy, and quick, and deer when hit with it most any old place fall as though hit by lightning. Undoubtedly many moose and larger game too will be killed with it, but I do not regard it as a moose gun. A bullet as light as 87 grains, no matter how high the velocity, is prone to go to pieces and fail to penetrate through a thick shoulder blade or through the rump.

BALLISTIC TABLE—.250-3,000 SAVAGE RIFLE

	Muzzle	100 Yds.	200 Yds.	300 Yds.
Velocity, ft.-sec.....	3,000	2,657	2,340	2,042
Energy, ft.-lbs.....	1,740	1,375	1,061	783
Trajectory, inches.....	——	.5	2.5	6.3

DOES YOUR SHOTGUN FIT?

By Jack Fanning

Realizing the importance of this question, Englishmen have had shooting schools for some time in which were to be found try-guns for fitting purposes, but we Americans have only recently considered the idea. In this country many a trapshooter has been able to break 75 to 85 out of 100 targets for many years, but there he stops.

SHOWING ADJUSTING MECHANISM IN STOCK

Nine out of ten chances his gun does not fit him.

Realizing this, American shooters recently decided to make use of the try-gun. They think its use will decrease the number of "misfits." The great influx of men, and even the fair sex, into the trapshooting army has brought guns of all sizes and styles into play. John Brown has a gun, which seems to fit him; Bill Jones likes it and buys the same kind. Such purchasing has caused the "misfits."

Star baseball players have their bats and gloves made for their individual use. This is especially true of bats. Each player has his grip, manner of swing and other individualities noted or measured and the bat made accordingly. So it is with clothes, a 150-pound man couldn't wear the suit a 230-pound man could, and yet at the trapshooting club they often use the same size and style gun.

The first to take an active interest in the try-gun has been the Du Pont Powder Company. Just recently they called their shooter salesmen to the Wilmington office and had Jack Fanning, who has made a study of the try-gun, explain its use and value to them.

The instructions were given on the grounds of the du Pont Trapshooting Club, and in the party were D. D. Gross, Kansas City, Mo.; Arthur Killam, St. Louis, Mo.; C. O. LeCompte, Asheville, N. C.; W. D. Stannard, Chicago, Ill., and J. E. Dickey, Minneapolis, Minn. All are pictured in the illustrations herewith except Mr. Dickey.

Fanning explained the adjustability of the try-gun as to length of stock, cast-off and drop of comb and heel. After stating that the breadth, height and usual shooting position of the shooter governed his measurements, he took up separately the different parts of a gun that should fit the shooter. First, he measured the length of stock required by resting the butt of the gun in the bend of the arm, finding at what length the forefinger comfortably reached the trigger. Then having the shooter take the gun in his natural shooting position, he studied carefully the position of the butt and the comb. He made any necessary adjustments until the butt finally fitted the shooter's shoulder and the heel had the correct drop.

JACK FANNING FITTING A SHOOTER FOR DROP OF STOCK

The comb was a harder proposition. The shooter's eye had to be sighted, and attention paid to the way he cheeked the gun. Fanning adjusted the comb several times until it fitted snugly to the shooter's cheek, making sure that it was impossible for the shooter to hide his sighting eye behind the breech of the gun. To note these points, he stood in front of the shooter, making proper adjustments. He also observed whether or not the stock must be cast-off to permit easy sight down the rib. In adjusting for cast-off, he turned the stock to one side, and made a slight alteration in the setting of the comb.

After satisfying himself that the gun was a correct fit for the shooter, he locked the stock with its attached jam screws. This completed the fitting, which had been attentively observed, as the illustrations indicate.

After each of the salesmen had been fitted they shot over the traps, using the try-guns. Each, on leaving the club, took a try-gun with him.

On all future visits to clubs and other shooting affairs in their territories, these salesmen will be prepared to measure any one who contemplates buying a new gun, or who wants to know just why his old one is not breaking 90% or better.

GROUSE, WOLVES AND DEER GUNS

FIELD AND STREAM PUB. CO.:

Will you please give the correct weight of the Wisconsin grouse?

Also, is it true that Wisconsin has more timber wolves than any other state?

Is the 32-40 smokeless high power Ballard and Marlin a satis-

factory cartridge for all around big game?

TENDERFOOT.

Ans.—The average weight of a Wisconsin grouse is 12 to 14 ounces. The record cock that we know of weighed 44 ounces.

It is very probable that Wisconsin has many timber wolves, since that part of Canada to the north of it is overrun with them.

The 32-40 is not especially good for game larger than deer, and the 32-20 is more suitable for them as having nearly equal power, besides using the .32 Smith & Wesson in same chamber.—ED.

SMOKELESS POWDERS IN THE SHOTGUN

By Edward C. Crossman

Part II

In the past some trouble has come from the use of these dense powders, both from the careless setting of measures and from the clogging of the measures by the powder itself. Out on the Pacific Coast, due to the blunder of a loader in a factory, a large quantity of double-loaded shells got out and many were the guns that ceased to be useful. Another cause, now removed, was the fact that in the earlier days of dense powders, before it was carefully screened, the fragments of the sheet from which the grains were cut would sometimes find their way in with the grains. In the loading machine these fragments would once in a long time plug the measure, and then probably throw two loads into the next shell if the fragment worked out of the way about that time.

Shooters sensitive to gun-headache complain about the sharp vicious crack of the dense powder. Either this or the fumes, or both, do combine to make some people miserable every time they shoot a dense powder.

Only long experience will suffice to let the shooter thoroughly decide between the various powders. They do vary considerably in some ways easily seen. For example, some of our best powders seem to leave far more residue than other bulk powders. In the face of a high wind this is noticeable. At the same time this residue in the barrel itself is an excellent thing. It seems to confer comparative immunity from rust on the steel of the barrel, and such powders in small bore guns uniformly lead far less than do the cleaner burning variety. In the 20 and 28 bore this is a very serious consideration because they accumulate lead fast enough at any time, and lead aids no shotgun pattern.

Smokeless powders give far higher pressures than the old black powder, the difference being apparently in the more rapid evolution of gas. While black powder burns all the way up the barrel, smokeless does its work in less than a foot of tube. In theory it would be better to retard this gas production, but this is difficult, because smokeless requires pressure to make it do its work—by pressure meaning gas pressure in the chamber. If the burning is continued while the shot travels well up the barrel, the pressure is bound to fall rapidly with the increasing room in the barrel, and the last of the charge to burn would do it very imperfectly and help not the least in the driving of the shot.

This peculiarity gives us our full ballistic efficiency of smokeless powder in very short barrels. Barrels of 32 inches show so little advantage in velocity over 26-inch barrels that the difference is not at all worth the extra barrel length. We use longer barrels for alignment and balance and steadiness, not for added velocity—because the latter is mainly imaginary.

With black powder things were different. The old-timers used to chuck in black powder until unburnt grains were blown right out of the barrel. The longer the barrel, the more could be gotten out of the powder—and the more powder could be used.

While gun-cotton and nitroglycerine and wood pulp form the basis for practically all our shotgun smokeless powders, there are a few exceptions. One American company uses picric acid as its basis. Picric acid is made of carbolic acid and nitric acid—the result a nitrophenol with peculiar qualities. From the same base are made the fiendish, poisonous Lyddite of the British service, and Melinite, an explosive favored by the French, used for torpedoes and high explosive artillery shells. In more peaceful form it is used as a yellow dye for fabrics. Our Japanese imitative friends make a picric acid explosive—for which as usual they claim world-beating virtues. It is called Shimose, and is practically Lyddite over again.

Regularly there bobs up the cheerful idiot who knows how to make his own smokeless powder. Did this pest restrict his activities to his own guns—and stand well off from the common herd in doing his shooting—we would not complain, but a symptom of his ailment seems to be that he must have company.

We had one in California and he was a beaut. He claims to have the secret of driving shot without recoil. He used to drive shot, too. As usual this specimen is equipped with the full equipment of the ballistic expert, pressure gun, chronograph, and all—under his hat. He had not the first idea of the pressures that went on in his barrel. Of course the stuff was our good old friend, potassium chlorate and sugar, possibly with sulphur or some other dope added. It's as old as the sun, and as treacherous as a rattlesnake, but regularly the boob bobs up with it in his teeth in some section or other of the country, and proclaims it as a marvelous discovery.

Evolving something that will go off and push shot out of a barrel is as easy as rolling off a log; lots of explosives are easily made. Also monkeying with them is just about like allowing the five-year-old to amuse himself with the buzz-saw. Beware of the fool with the recipé for making smokeless powder, or the stuff itself that he wants you to try. Gun history is full of the results of such procedure. Powder makers, with all their skill and apparatus and experience and chemical knowledge, get off bad at times—what can the Fiji Islander in powder-making hope for?

It seems almost useless to repeat the old statement that no smokeless shotgun powder is cumulative in its barrel fouling. Black powder on hot days would foul and cake and lead up until some measures had to be taken to remove it. Smokeless powder fouls the barrel as much in one shot as it does in five hundred. Its residue does not cake and pile up. Wiping out the barrel—save to remove possible lead that may accumulate—is as useful to the shooting of the gun as wiping off the stock would be.

The high development, the hair-splitting refinement of the British powders is due to hot competition between absolutely separate powder makers. Over there the Britisher in most cases is enabled to judge the work of his powder—not by whether or not he breaks up a clay disc, but by its killing effect on large number of birds. Neither you nor I have ever had a chance to fire four or five hundred rounds in a single day at birds—killing most of them because of their closeness. If we had, we would doubtless have considerably greater knowledge on whether or not we liked one powder as well as we did another.

On clay birds it is almost impossible to judge of powder effect. I'd bet my other shirt that were a lot of shells loaded up with the same shot load, but with various powders—and then the lot mixed, not one old trapshot out of one hundred could tell when he changed from one shell to another. And did he detect some slight indication of the switch, he could not tell from which powder he had gone, and to which powder he had changed.

Yet, stick any one of the said trapshots up at a big shoot, with the necessity for using some other one of the lot mentioned instead of his favorite, and he'll yowl to high heaven that he's ruined before ever he starts to shoot. There is a fair chance, too, that he won't shoot worth a hang, but the reason lies in his head, not in the powder load.

It is a fact, undeniable by any man who has shot much game, that while two powders may work alike on clay birds, where even patterns and a lot of shot are all asked for, yet on game one powder will kill emphatically, and the other will wound. Chronograph and pressure gun, with the patterning board, might explain the difference from the ballistic standpoint, but the fact of the difference remains.

The professional shot or representative for a big arms company usually gets the nonsense knocked out of him by travel and rubbing up against other men. When he makes a statement as to the shooting of a gun or powder and you know it's not in the line of boosting the goods he's paid to boost, then it is well and advisable to sit up, listen and profit thereby.

VELOCITIES AND CHAMBER PRESSURE OF SOME 12 AND 20-BORE LOADS, AS REPORTED BY AN AMERICAN POWDER COMPANY.

Gauge.	Powder.	Load.	Tons Pressure.	Remaining Velocity at 20 Yds.
12	Du Pont	3 dr. 1¼ oz. 7 chilled	3.84	870 f. s.
12	Schultze	3 dr. 1¼ oz. 7 chilled	3.71	841 "
12	E. C.	3 dr. 1¼ oz. 7 chilled	3.34	836 "
12	Deadshot	3 dr. 1¼ oz. 7 chilled	4.49	863 "
12	Ballistite	24 grns. 1¼ oz. 7 chilled	4.18	841 "
12	Infallible	24 grns. 1¼ oz. 7 chilled	4.10	819 "
12	Du Pont	3⅛ dr. 1¼ oz. 7 chilled	3.97	881 "
12	Schultze	3⅛ dr. 1¼ oz. 7 chilled	3.84	852 "
12	E. C.	3⅛ dr. 1¼ oz. 7 chilled	3.47	847 "
12	Deadshot	3⅛ dr. 1¼ oz. 7 chilled	4.62	874 "
12	Ballistite	25 grns. 1¼ oz. 7 chilled	4.31	852 "
12	Infallible	25 grns. 1¼ oz. 7 chilled	4.23	830 "
20	Du Pont	2¼ dr. ⅞ oz. 7 chilled	5.22	866 "
20	Schultze	2¼ dr. ⅞ oz. 7 chilled	4.57	830 "
20	E. C.	2¼ dr. ⅞ oz. 7 chilled	4.29	836 "
20	Deadshot	2¼ dr. ⅞ oz. 7 chilled	5.68	851 "
20	Ballistite	18 grns. ⅞ oz. 7 chilled	4.78	838 "
20	Infallible	18 grns. ⅞ oz. 7 chilled	4.77	825 "
20	Du Pont	2½ dr. ⅞ oz. 7 chilled	6.00	923 "
20	Schultze	2½ dr. ⅞ oz. 7 chilled	5.35	887 "
20	E. C.	2½ dr. ⅞ oz. 7 chilled	5.07	893 "
20	Deadshot	2½ dr. ⅞ oz. 7 chilled	6.46	908 "
20	Ballistite	20 grns. ⅞ oz. 7 chilled	5.56	895 "
20	Infallible	20 grns. ⅞ oz. 7 chilled	5.55	882 "

Note—Tons are long tons, 2240 lbs. Therefore 4 tons equals 8960 lbs. per square inch, 6 tons means 13,450 lbs.

UNKEL DAVID'S LETTER

Dere Felde & Streme.

The war tawk in the grate reelijus maggyzeen maiks me think of Peeter Jon Tuttul hoo was mi deppyty when I was hi sherriff of San Marcos Kownty, whitch is in Texas. The Injuns was on a rade & every buddy puld their frate for the soljer's kamp eksept Peeter Jon, Missus Peeter Jon & two (2) yung Peeter Jons abowt haff grone. "Run, you cediut," sais the nayburs, "Wattinell? A hull tribe & you onlie got one (1) sawdoff muskit!" But Peeter Jon woodent skare for shux. "The Injuns are app to bring sum moar," sais he; & soe they did. After the fite Peeter Jon had guns to swopp for whisky.

Whitch is the ansur to this tawk abowt us being unpreepaired for an uther big skrapp. When peepui want to fite reel bad they'll find sum thing to knok with. Menny a awl-wool millyterry heeroe has got hisself knokt in the hed with fenserales & popp bottulz, jest bekoz he thot his yooniform & knapsak had got the buntch blufft.

Moarover awl this abowt Ammerykans beeing sorry rifel shots has been writ by city fokes hoo don't knoe no better, & to be red by citty fokes ekskloosive—the saim beeing the Beljum orfuns of Ammeriky & not exspekted to doo moar than kontinyoo to git their breth suffishent to holler for help. We don't antissypate menny Stoanwall Jaxonz & Setting Bulls from the swett shops & deepartmint stoars when the heal of the invader is on owr nek. Noo Yawk has shotguns enuff to maik evry strete corner a battel grownd, but citties wont fite bekos it's hard on good cloathes, plait glass & eenammel. "Don't munky with them soljers—they mite git mad & braik sum thing."

But wate till the ennymy gits to Montklare or Eest Orrinje! It is the waist plaises of owr grate country that will rize in their rath & straiten things owt. This ain't Yoorup. A army of invayshun woodent find seement bullyvards to roll their big guns over, & eeting howzes a eezy day's martch apart. Its ruff wawking even betwixt Noo Yawk & Cheekawgo, & it wood taik ten (10) milyun men to reebild the raleroads as fast as wee kood tare them upp. How long was we getting from Washington to Ritchmund? Fotty-ait (48) munths. Menshun that fakt to the Yewrupeeans. Are we likt if we lose Noo Yawk & awl the Yankee Staits? Not so you cood notis it. Sum buddy wood be kept purty bizy setting on owr heds—& then we'd kik.

The trubbel is that the felloes hoo rite can't see nothing but their best Sundy shooze in a muddy trentch, & no chooing eksept sody krakkers & Cammel soop, which is the troo millyterry campane stile. The Amerrykan plan is to taik it bairfoot, fill yore pokkits with cold potatoze, & lay behind a tree with Dad's old rifel. Befoar the enemy gits here, trentches will be owt of fashun, eksept for coald stoarij purpusses. They woodent sell for two (2) bits a mile, bekos what good is a trentch when no buddy is in frunt of it?

But owr maggyzeen strattyjists sais that war meens dooing like they doo in Yoorup. Eether we must dig a hoal & stay in it, or we must stand up elbo to elbo so the enymy wont waste their ammynishun. It aint fare too indoose a army awl this way from hoam, & then chanje the rewls without notis. A felloe in a foar (4) doller check soot can't shoot a soljer in yooniform, bekos he's got his fingers crost. If he goes ahed & shoots him enny how, it don't cownt, & if we skatter owt & git behind things, when we otter gang up & stawmp owr huffs & look purty, like a litter of poalkat kittens—that's beeing onsivilized, & mebby the enemy will git mad & refooze to play.

That's what we're upp aginst. The peepul arownd Noo Yawk are eddycated enuff to maik war like they doo in Yoorup, but further West moar or less roodness is app to kreep intoo the gaim. We meen rite, but owr millyterry training has been neeglekted. Krowd us & we'll shoot & run. We'll tare up the rodes, & bushwhak, & steel terbakker. We mite doo worse than that to a enymy that exycooted prizzuners & bumbarded meetinghowzez. Menny a kyoty & prayry dog has been skalpt that never heerd a gun fire.

Yore Unkel David preedikts that:

Noo Yawk wont be hurt haff so bad as sum riters appeer to hoap.

The ennymy will be likt befoar we knoe we're in a fite.

There wont be no invayshun.

The above is mi matoor dedukshuns, & Sar An sais so too. The duv of peess will kontinyoo to huvver—but in the meen time I wood advize gitting the koal dust krokt owt of the old smoothe boar & swopping several duzzen turky egz for ammynishun & praktiss up sum, saim as me & Sar An—pikking yore tree with doo refferense to size & distunce from the firing line. Elbo grayzers & cote tail kutters to cownt the same & pull down the chooing gun; blud above the nee, pownd of kandy; ded senter, full soot of moarning. The valyoo of this praktiss is beeyund kompoot. It straitens the manly figger, taiks owt side bends, & beets a korset for reedoosing abdummynel surkumferrense. I wood chearfully rekkymend it to the Eddytur & awl uthers of his bild.

Yores trulie,

UNKEL DAVID.

SAR AN

Would you like to have one of the Field and Stream Cups for your Gun or Fishing Club? This makes a dandy prize for one of your big events. Write us for the full particulars.

TRAP-SHOOTING DEPARTMENT

CONDUCTED BY DAVID H. EATON

FRED GILBERT ANNIVERSARY SHOOT

Over 500 gun clubs, located in every section of the country, joined in celebrating the 20th anniversary of Fred Gilbert's first appearance in the ranks of professional shooters by holding a special shoot on one day of the week March 13 to 20, inclusive. Never before in the history of trapshooting has such honor been accorded to one of the devotees of the sport, and surely the honor has never been more richly deserved, nor would it be possible to name a more popular recipient in either the professional or amateur ranks. Up to October, 1895, Fred Gilbert was entirely unknown outside of his own immediate neighborhood. He stepped into the limelight when he made his debut in the shooting game at Baltimore, Md., and in the contest for the World's Championship defeated a field of the best shots ever gathered together. In the years which have passed he has never been ousted from his place at the top of the trapshooters' ladder of fame. He has shot in every State of the Union, in most of the provinces of Canada, and in England, Scotland, and on the Continent, when a member of the All-American team which toured these countries some years ago. Despite the honors he has won, enough to give most men a severe case of "swelled head," he has always remained simply "Fred" Gilbert to his friends, and the list includes every trapshooter in the country. Mr. Gilbert has been dubbed "The Wizard of Spirit Lake," and his skill with the scatter gun has justly earned him the title. His records for the twenty years he has been before the public as a shooter have never been equaled; for six consecutive years he won high average for the year, over thousands of other shooters, a feat that has no parallel and may never again be equalled.

In order to properly commemorate the twentieth anniversary of Mr. Gilbert as a shooter, the Du Pont Powder Company arranged for this nation-wide celebration, and offered a silver loving cup, suitably engraved, as a prize to the clubs holding a "Fred Gilbert" shoot on the dates named above, the only stipulations being that not less than 100 targets should be shot at, and that there should be at least ten contestants.

Cincinnati Gun Club

Twenty-two members took part in the Gilbert shoot on March 14. The contest was held under distance handicap, and was won by R. F. Davies, with a score of 93 from 18 yards. L. Gambell, 20 yards, and Schartzman, 16 yards, were runners-up with 90 each. Due to rather hard weather conditions, coupled with the extra distances some of the shooters drew, the scores were not quite up to the club's average.

Story Gun Club, Cincinnati, Ohio

The club held its Gilbert shoot on the afternoon of March 14, with sixteen members taking part. Charles Schneider (10 added targets allowance) and Ed Story (19 added targets) tied for first on a total of 86. Schneider won the shoot-off with 22, his handicap of 6 targets giving a perfect 25; Story broke 11, and had a total of 19 with his handicap of 8 targets. Charles Rentz was runner-up with a total of 83, including his handicap of 15 targets.

Chicago Gun Club

Thirty shooters faced the traps on March 14 in the Gilbert trophy contest. The cup was won by Jerome Lino, 19 yards, on a score of 92. R. Chisholm (20 yards) and O. A. Johnson (18 yards) tied for second place on 89.

Kansas City (Mo.) Gun Club

Thirteen amateurs and four professionals were at Elliott's shooting park on March 13, and contested for the Gilbert cup. The handicap was an allowance of extra targets to shoot at, the breaks being added to the score made in the 100 targets of the event. Dr. F. M. Planck and Harry H. Craddock tied for first on total scores of 100, including their handicap. The former had 10 and the latter 20 extra targets to shoot at. Planck broke 93 out of the 100, and Craddock 85, each scoring enough of their extra targets to bring their score up to 100. In the shoot-off, Planck won with 22 out of 25. D. W. Bovee was high professional with 96.

Blue River Gun Club, Kansas City, Mo.

The twelve shooters attending the Gilbert shoot on March 14 were divided into three classes. Class A started at 20 yards, Class B at 18, and Class C at 16 yards. Class B shooters were allowed 10 extra targets to shoot at, and those in Class C were allowed 20 extra targets. This handicap allowed a new shooter, E. I. Reeves, to win the cup on a total score of 94. He broke 77 out of the 100, and 17 out of his 20-target allowance. The runner-up was W. H. McCreery, in Class B, with a total of 89; breaks in the 100 were 81, and he scored 8 of his allowance of extra targets. The scratch men in Class A made a poor showing on account of their distance handicap and the high wind.

West End Gun Club, Richmond, Va.

The club had thirty-nine entries, including three professionals, in the Gilbert contest on March 13. C. D. Coleman won the cup on a score of 96. N. G. Chalkley, W. Cary Bragg, and William Rueger, Jr., tied for second place on 94. Coleman and E. M. Garrett were tied for first place at the halfway post on 50 straight, but Coleman left him four targets behind in the third round, and gained another target in the last round.

Indianapolis (Ind.) Gun Club

Ed Apperson won the Gilbert cup on March 13, defeating a field of thirty-four contestants. He broke 146 out of 150, his nearest competitor being D. C. Rogers with 143. C. A. Young was high professional with 145.

Sunset Hill Country Club

Sixteen shooters attended the shoot given by this club. High scores were rendered impossible by the hard weather conditions, but James W. Bell, of St. Louis, won the Gilbert cup by breaking 92. Bart Williams was runner-up with 83. Spencer and Ebert headed the professionals with 88 each.

Cleveland (Ohio) Gun Club

There was a good attendance at the shoot on March 20, fifteen members taking part in the Gilbert trophy contest. The cup was shot for under a handicap, taking each man's percentage of 1914, and where he broke it he was given a point, and for each target broken in excess of his handicap he received one additional point. This system gave the cup to Dr. T. D. Rowley, who made 19 points, his total score being 83. C. E. Doolittle was runner-up with 9 points, and a total score of 96.

Delaware Championship

J. T. Skelly, of Wilmington, holder of the cup emblematic of the open championship of the State, was challenged by E. E. du Pont immediately after winning in open competition several weeks ago, and the match was shot early in March. Du Pont had the best of the start, but Skelly tied the score at the half-way post. Then du Pont forged to the front, winning the match by a score of 88 to 85.

St. Louis Trapshooters' Association

On March 14, thirty-five shooters participated in the Gilbert anniversary trophy contest. W. S. Spencer (scratch) and D. J. White (4 added targets allowance) tied on 99. In the first shoot-off they tied on 30 out of 33, and in the second shoot-off Spencer won with 32 out of 33 to White's 27. C. G. Spencer was high professional with 98 out of the 100.

Alti Sita Club

There was a large attendance at the Gilbert shoot of this club, located in East St. Louis, Ill., in spite of bad weather conditions. The feature event was, of course, the contest for the Gilbert cup, in which Bart Williams (scratch) tied with Parsley (12 added targets allowance) on 96. The shoot-off was won by Williams with 22 out of 25, to Parsley's 15. Art Killam was high professional with 96.

Gilbert Day at Livermore, Ia.

The Livermore Gun Club held its Gilbert shoot on March 17, fifteen members taking part. M. Freilinger and B. Tawney tied on 95 for the cup, the former being scratch man, and the latter having an allowance of 12 added targets. In the shoot-off Tawney won with a score of 21 to 20.

Gilbert Day at Dayton, Ohio

There was a good bunch at the N. C. R. Gun Club's grounds on March 20, thirty shooters trying their best to capture the Gilbert Cup. Frank Oswald, of Dayton, won on 88 from 18 yards. J. E. Cain was runner-up with 86.

Des Moines, Ia.

The Gilbert Cup shoot was held on March 14 at Birdland Park. The snow, which covered the ground, and a cold, raw wind, did not prevent twenty shooters and nearly 100 spectators from going to the grounds. Frank Card won the cup on a score of 90, starting at 16 yards and shooting his last 20 targets from 19 yards. Skinner was the runner-up with 87, shooting his last string from 21 yards.

Beloit (Wis.) Gun Club

George Vosberg won the Gilbert shoot of the club on March 13, breaking 93 targets from 16, 18 and 20 yards. A. E. Short was second with 92, standing at 16, 18 and 19 yards. Neither of these shooters had ever shot back of the 16-yard mark before.

Gilbert Day at Kansas City, Mo.

The Social Target Club held a shoot for the Gilbert trophy at the Schmelzer Park on March 16. The race resulted in a tie on 100 between W. D. Deshong and Vernon Ross, each scoring 100, including their handicap of 7 added targets in each string of 25. The shoot-off was won by Deshong with 21 out of 25.

Herron Hill Gun Club, Pittsburgh, Pa.

The shoot for the Gilbert trophy was held on March 17 under fine weather conditions, and 46 shooters took part in the event. The cup was shot for under a handicap of target allowance, no shooter being allowed to score more with his handicap than the highest score made out of a possible 100. F. H. Mellon and A. H. King, scratch men, broke 94 each, establishing the high score, and the handicaps allowed twelve other shooters to get in the tie. In the first shoot-off ten dropped out; in the second round two more were left out of the running, leaving J. E. Penrod and R. Conrad to shoot another round of 25 targets. Conrad won the round with 22 to 21, and captured the cup. His score in actual breaks was 83 out of 100, and his handicap of 11 targets put him in the tie; Penrod, the runner-up, broke 84 and had a handicap of 10 targets.

Championship Race

Fede Cockrell successfully defended his title to the Elliott Interstate Championship Cup in a match at 50 live birds at Elliott's Shooting Park, Kansas City, Mo. McCreery, the challenger, lost by a score of 39 to 34, Cockerell withdrawing after the 46th bird, as his opponent had no chance to catch up.

Gilbert Day at Wilmington, Del.

The big time of the Gilbert Anniversary celebration was naturally staged at Wilmington, Del., the home of the du Pont Company, in whose service he has spent the past twenty years. The du Pont Trapshooting Club arranged a big trap shooting event in his honor on March 17th, which was attended by over ninety shooters, many of them coming from a distance for the express purpose of showing their appreciation of "Fritz" both as a man and as a target-smasher. In the Gilbert Cup event 87 amateurs took part, the conditions being 100 targets, added target handicap, open only to amateurs, all total scores of 100 or more tying for the cup. The result was a tie between D. Linsay, of Providencetown; M. Chase, of Wilmington, and W. H. Reed, of Aberdeen, Md., on total scores of 100 or more. The ties were not shot off owing to the lateness of the finish, but were decided by lot, Chase winning in the draw. The scores were: Chase, 86, handicap 16 targets, total 102; Reed, 86, handicap 15 targets, total 101; Lindsay, 87, handicap 16 targets, total 103. C. H. Newcomb, of Philadelphia, was runner-up with 97 breaks, his handicap of two targets giving him a total of 99. The programme called for 100 targets, five events at 20 targets each, at 16 yards rise. The Lewis Class system was used so as to give all a chance to win a prize, two fine prizes being offered in each class. In Class A, C. H. Newcomb won the first prize on a score of 97; A. B. Richardson, Dover, Del., second, with 95. Class B, Harry B. Cook, Atlantic City, N. J., first on 80; Edward Bartlett, Baltimore, Md., second prize on 80, Class C, Frank E. Butler, Cambridge, Md., first with 75; M. G. Gill, Baltimore, Md., second with 75. Class D, T. W. Matthewson, Wilmington, first on 65; John Stevens, Atglen, Pa., second with 65. The banquet in the evening was held in the Hotel du Pont, T. E. Doremus, the popular manager of the sporting powder division of the du Pont Company, with Fred Gilbert, the guest of honor, heading the line on the way from the hotel lobby to the grill room. In response to his introduction by the toastmaster, Hon. Charles B. Landis, Fred Gilbert told how he got into the shooting game. As a small boy he owned a muzzle-loading gun and a dog. He would run errands until he had accumulated ten cents, with which he would buy powder and shot, getting about enough for three shots. He continued hunting and would go out with his father and other men on hunting trips, having fairly good luck. Through the interest of friends he was brought to the attention of a representative of the du Pont Powder Company who sent him 25 pounds of smokeless powder, and later went with him on a hunting trip. This trip resulted in an invitation to enter the Baltimore live bird shoot, which he won, and then was enrolled as a professional shooter in the employ of the du Pont Company. The tale was told simply, as might be expected of "Fritz," but it was listened to with interest by those present. Many old-timers in the game were present. The list is too long to give, but they each added their part to the pleasure of the occasion.

Princeton (Ill.) Gilbert Shoot

Twenty-nine shooters took part in a hot race for the Gilbert trophy on March 19. John D. Martin, of Bureau, Ill., won the cup on a score of 97, beating Max Kneussl and A. F. Foulk by one target.

Gilbert Day at Toledo, Ohio

The Toledo Power Boat Gun Club held a shoot for the Gilbert trophy on March 17. Twenty men were entered and the race was a hot one between George Volk and McAfee, the former finally winning the cup on a score of 85 to McAfee's 84. The puffy wind made hard targets.

Peoria (Ill.) Gun Club

The Gilbert Cup was won by H. H. Hotze, of Peoria, on a score of 89, defeating a field of thirty shooters. Gerstner was runner-up with 87. The shoot was under the Eliot sliding handicap system, and was held on March 14.

Gilbert Shoot at Billings, Mont.

The special shoot of the Billings Rod & Gun Club for the Gilbert trophy was held on March 14, under hard weather conditions. The shooters, sixteen in number, shot under a distance handicap. R. A. Prater, the winner of the cup, shot his first 40 targets from 18 yards, and the remaining 60 from 20 yards, making a score of 89. F. A. Weatherhead, the runner-up, shot 40 targets from 22 yards and the balance from 16 yards. His score was 85.

Gilbert Anniversary at Los Angeles, Cal.

Twenty-one shooters contested for the Gilbert trophy, at 100 targets, distance handicap. H. E. Dickerman, of Chicago, Ill., shooting from 20 yards, annexed the cup on a score of 95. Mark Lane, a 17-year-old youth, formerly of Chicago, was runner-up with 94 from the 17-yard mark.

We should be pleased to receive reports of the big shoots held by your club, and will print same in these columns. If you are going to hold an important shoot of state-wide interest, we will be glad to make a short announcement of it for the benefit of the trap-shooting fraternity.

FISH AND FISHERMEN

Preliminary Announcement of the 1915 International Tournament of Fly and Bait Casting to be held in San Francisco, Cal., August 12th, 13th, 14th and 15th, under the Auspices of the San Francisco Fly Casting Club.

The events at present planned, open to all amateur fly and bait casters, are as follows:

Fly Casting—Light Tackle Accuracy, Heavy Tackle Accuracy, Delicacy and Accuracy, Dry Fly Accuracy, Heavy Tackle Distance, Light Tackle Distance, Salmon Fly.

Bait Casting — Accuracy, ¼-ounce; Accuracy, ½-ounce; Distance, ¼-ounce; Distance, ½-ounce; Distance, 2½-ounce; Distance Slam, ¼-ounce; Distance Slam, ½-ounce.

Trophies will be awarded to the winners and valuable prizes to the contestants of these events, which will be cast under the rules of the National Association of Scientific Angling Clubs.

All fly events will be cast at the club grounds at Stow Lake, Golden Gate Park.

The bait events, provided suitable arrangements can be made, will be cast at the Exposition Grounds.

A Banquet for the fly casters and their friends will be held on Thursday, August 19th, on which date the trophies and prizes will be awarded.

The San Francisco Fly Casting Club plans to take visiting casters to its preserves on the Truckee River, 240 miles away. Leaving San Francisco by train Friday night, the guests will be welcomed the following morning at the club's lodge, which will be at their service Saturday and Sunday, August 21st and 22d. These days will be spent on the river fishing or, if preferred, in seeing the wonders of Lake Tahoe nearby. Transportation can be arranged to return East with stop-over privilege at Truckee.

A Cordial Invitation is extended to all members of casting, rod or fishing clubs, as well as all unattached casters, to take part in this tournament, which is expected to prove the greatest event of this character ever held.

F. J. Cooper, Chairman,
742 Market Street.
Stanley Forbes, Secretary,
1221 Merchants Exchange.

THE SQUID FOR SALT WATER FISHING

Field & Stream Pub. Co.:

Will you please describe the squid, or small devil-fish, which is used for bait for salt water fishing? Also how may it be obtained at the Jersey coast resorts? For surf fishing is the squid used alive or is it cut into pieces?

C. B. Suttle.

Ans.—The squid, used for bait for both surf and off-shore fishing, has a reddish skin covering which when peeled off exposes the hard white meat which is used as bait. This is cut up into strips about three inches long and an inch or so wide, which is baited on the hook with one end dangling free. The head is considered the choicest part for striped bass fishing. It is for sale at the various fish stores, or at the fish pounds, and costs about 10 cents a pound.—Ed.

UNIFORM RULE FOR CASTING

The Asbury Park Fishing Club has taken the initiative in having representatives of several fishing clubs meet to formulate a uniform set of rules governing surf casting tournaments, and the following clubs have signified their intention of joining in the movement: The Midland Beach Fishing Club, of Staten Island; the Ocean City Fishing Club, of Ocean City; the Belmar Fishing Club and the Asbury Park Fishing Club. The National Association of Scientific Angling Clubs of Chicago has also been invited to send representatives to the conference.

It is hoped that the Chicago board will revise the rules affecting surf casting to conform with conditions that exist, and it is the intent that if it should so decide, and adopt the standard weights and other necessary rules required, to have it assume supreme jurisdiction over this character of contests. The committee appointed representing the Asbury Park Fishing Club is represented by Elvin C. Burtis, chairman; Robert H. Corson and Hartie I. Phillips, and it is proposed to have the representatives of the different clubs meet in the near future, when the matter can be discussed in full detail. Any fishing club desiring to join in the movement can address Elvin C. Burtis, Marlborough Hotel, Asbury Park, N. J.

Hartie I. Phillips,
Secy., Asbury Park Fishing Club.

NEWARK BAIT AND FLY FISHING CLUB TOURNAMENT DATES

Field & Stream Pub. Co.:

Following are the dates and events of the 1915 Bait and Fly casting contests, Newark Bait and Fly Casting Club, to be held at the club platform, Wequahic Lake:

April 24 and July 17: Distance bait, ½ ounce.

Accuracy bait, ½ ounce. Distance fly, heavy rod. Accuracy, wet fly.

May 22 and August 14: Fisherman's distance bait. Fisherman's accuracy bait, Distance fly, 5-oz. rod. Accuracy, dry fly.

June 17 and October 2: Distance bait, ¼-oz. Accuracy bait, ¼-oz., Roll fly, Accuracy and delicacy fly.

First event called 2.30 p. m. sharp.

Interstate Tournament September 11. Events:

1. Distance Bait, ½ oz.
2. Distance fly, heavy rod.
3. Distance fly, 5-oz. rod.
4. Accuracy bait, ¼ oz.
5. Accuracy and delicacy fly.
6. Distance bait, ¼ oz.

First event 9 a. m.

Visitors always welcome.

A. Jay Marsh.

WASHINGTON SPORTSMEN ORGANIZE TACOMA BAIT & FLY CASTING CLUB

The Tacoma Bait & Fly Casting club was decided upon as the official name for an organization formed on Feb. 10, 1915, by a body of Tacoma sportsmen who are particularly interested in the art of using the fly and bait rod. This organization is to be a permanent one, will be regularly chartered and will affiliate with the national association. It is the first organization of its kind in the Northwest.

The first annual meeting of the club was held March 23. Officers and trustees were elected to serve until the annual meeting, and in the meantime draft a constitution and by-laws, incorporate the club, and be prepared to elect permanent officers at the annual meeting. G. T. Dutcher was elected president; William J. Bailey, vice-president; R. B. Nason, secretary-treasurer; Dr. R. Hutchison, Dr. E. A. Montague and Mark L. Davies, trustees.

The club will at once make arrangements for suitable practice and tournament grounds, where men, women and children may learn the use of the bait and fly rods.

BUILDING A BLACK BASS GROUND

By "Zeb Dork"

On a perfectly calm day in August, 1892, one of the greatest bass grounds in the State of New Hampshire was built. For a young fellow of 16, who never dreamed of clergymen fishing, you can imagine my surprise to find contractors and builders, in this particular case, to be two Methodist ministers.

Almost all this eventful day I watched the strange proceedings. Great boatloads of green brush were rowed out into the lake some 150 feet from the wooded point on which the clergymen had their camp. A couple of long frock coats would appear amidst the green foliage, a splash would follow, and the brush would slowly settle to the lake bottom.

A cottage was in the course of construction on that point of land, which was heavily wooded. I figured and figured: could it be possible that these two men were deliberately making a dumping ground of the lake? But, listen!

A few days later I was anchored off "J. I.'s" ledge, the first good bass ground I had discovered. Anchored, mind you, day in and day out, only returning home at the "toot" of the dinner and supper horn. Presently a boat put out from the "Minister's Point" and soon dropped anchor off the sandy bar, as you will guess, in close proximity to that pile of brush, now at the bottom of the lake. I did not "butt in," but watched as best I could over the stretch of about one-quarter of a mile of water. For two hours I witnessed a pantomime that would arouse to action the most fastidious of bass anglers. And that night, when our clergymen neighbors borrowed our fish scales, I was "raring to go."

The next morning at daybreak found me paddling about that sandy bar looking for the coveted brushpile. Did you ever look for a few yards of something at the bottom of a lake? Well, I anchored and anchored, cast in all directions with as tempting a breakfast as Mr. Bass could desire: nice fat, lively frogs; nothing doing. It must have been 5:30 when life stirred on shore. Soon a boat shot out—my guides to the brushpile had come. They anchored about 100 feet north, and before I had "nosed" my boat as close as decency would allow, one minister was playing a bass.

That morning I did not have time for any breakfast. How many strikes I missed, how many yards of slack I gave to bassdom is not on record, but the walls of our old woodhouse, where for ten years I recorded in pencil each day's catch, shows seven bass, a total of 31¼ pounds, brought home that noon.

For twenty-one summers now this one ground has yielded sport to scores of anglers. It's a noted spot for the "big ones" and "hair-raising" tussles. And this season, from July 1st to September, will find the fisherman and small-mouth bass "at it again" right over that pile of brush.

After careful study and trials I built, years ago, two excellent grounds myself, and consider both equally as good, though in quantity not so many bass have been caught, simply because they are not fished so hard.

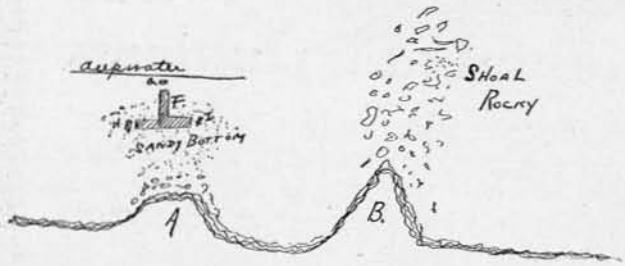
Grounds of this nature are protected, to some extent, because there is no visible guide to them, and you must anchor "just right" for results. "Any old" wind or weather, in season, seems to make no difference. Bass travel, and if you have but located in their beaten path those who pass are sure to stop. Fishing on such grounds calls for every ounce of your skill. Get one between your anchor line and a brush pile, and see for yourself.

Get an axe and some old rope, for here is the recipe:

In selecting a location, investigate on a clear day, either along shore of an island or mainland where you find a rocky shoal running far out from one point, say 100 to 200 feet, close by. There must be another point of land, more or less pronounced, but having sandy and muddy bottom. See "A" and "B" on diagram.

The point to build your resting place for the bass is on sandy bottom off point "A." Your "built grounds" must be selected just where, on a calm, clear day, the sandy bottom vanishes into the blue-green of lake or stream.

Cut limbs that may be trimmed from trees on shore, which will help your cause and the forest, too. Do not use fir, pine or hemlock boughs. Let your limbs run ten feet and up in length, the more leaves the better. Attach to each limb a light anchor, attaching not over two feet from butt. Be sure and give three to five feet play in your rope between bough and anchor. This allows brush to sink at an angle which is necessary. It will take fifteen well-leaved boughs; more will be better.



PLAN OF THE BUILT-UP BASS GROUNDS

In sinking each distinct pile of brush follow form of a letter T, Diagram "F." Use ten boughs for side running parallel to shore and five boughs for line running at right angles. Sink all brush so tops point towards deep water. This is hard to do and takes some patience.

Take a large soap box, or rather three of them; fill with rocks and nail on covers. Paint each one bright red. Deposit one of these boxes at "G," "H" and "I," respectively.

Finally, get a twelve-pound horse weight and a set of one dozen quoits. Paint horse weight red. Paint six quoits solid red and balance white in color. This is not your regular "S" anchor, as you will see.

Always anchor, in manner you are accustomed, *in deep water*, off brush 25 to 30 feet. After you have anchored and no luck, or still better, you have landed a whole bass family who were enjoying your brush, with its inviting shadows, look to your quoits and horse weight.

Splash horse weight overboard and tie taut to your boat; allow no slack rope at all. Be sure and not use white, clean rope, either. Every fifteen minutes or so slip a quoit down the horse-weight rope, holding rope very taut. Alternate first a white and then a red quoit in color. This method is a sounding line to deep water. It will attract passing bass who, heading in, investigate colors, to finally play about your brush. Also, as is often the case, a big, lazy fellow stirs himself from the brush at the click of quoits against horse weight, coming out, and actually strikes, not only because bait is tempting, but because his pugnacious spirit has been aroused. The "bouncers" certainly like to boss an attractive pile of brush.

My description and method is, of course, more or less elaborate. Special "sounds" may be eliminated; sometimes it is not necessary to use them at all. The bass is curious and the right kind of noise truly attracts it. I have had my launch, with blades almost set on a center, sent right over my brush, in one case of three straight trips. I was anchored to one side and cast so my lure landed in the roil created by the propeller, and secured three straight strikes, this when I could not get the bass into action any other way.

Grounds that I have known built for years are as good to-day as years ago. All the ground needs is a little attention in the way of a few fresh limbs each season.

Erecting your resting place on the "Great White Way" of the black bass, in your particular lake or stream, means dividends a thousand fold in your chosen sport.

UNTANGLING A BACKLASH

FIELD & STREAM PUB. CO.:

To all fishermen who use reels I would like to make the following suggestion, as I suppose the best of them sometimes have their troubles with the backlash, and to get at this loop caused by the reversing of the reel is very difficult with the fingers. Would say that I have tried the following stunt to good advantage: Get a piece of hardwood and whittle down to about the size of an ordinary lead pencil; let it taper to a point; carry this in a convenient pocket; it beats the fingers all hollow in getting under that little loop and can be done in a jiffy; or, if you have a nut-pick set in the house, get one of these picks, it is just the thing you want, better than the wood pick mentioned above. You can make a holster out of leather just to fit this pick; have a buttonhole at the top, button on the trousers' button near the watch

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A detachable Bicycle Motor—think what that means! A thoroughly practical, easily operated motor that you can attach to any bicycle in five minutes. It will take you anywhere you want to go at a speed of 4 to 20 miles an hour and will run 100 to 125 miles on a gallon of gasoline. The

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Write for "Motorwheeling," the big, free catalog and learn where you can see and ride a Smith Motor Wheel.

A. O. Smith Company, Motor Wheel Division 51 **Milwaukee, Wisconsin**

Largest Manufacturers of Automobile Parts in the World

Calendar of the Trout Stream Insects

Herewith we issue the first of Mr. Louis Rhead's Nature Fly Charts to enable our readers to fish intelligently according to time, date and rise. June chart will appear in that month.

PLATE II. MAY INSECTS

No.	Name.	Date of Rise	Time of Day.	Weather.	Family.	Order.
1.	Green drake.....	Late	Any time	Warm days	Drake	Ephemera.
2.	Brown drake.....	Early to late	All day	Warm days	Drake	Ephemera.
3.	Yellow drake.....	Early to late	All day	Warm days	Drake	Ephemera.
4.	Mottle wing.....	Early to late	All day	Warm days	Drake	Ephemera.
5.	Cinnamon	Early	Afternoons, evenings	Cloudy dark days	Duns	Trichoptera.
6.	Sandy	Late	Mornings, evenings	Cloudy dark days	Duns	Trichoptera.
7.	Purple drake.....	Early	Mornings	Cold days	Drake	Ephemera.
8.	Black ant.....	Middle	All day	Warm days	Ants	Hymenoptera.
9.	Gauze wing.....	Middle	Afternoons, evenings	Warm days	Stone fly	Perlidae.
10.	Yellow sally.....	Early to late	Evenings	Warm days	Stone fly	Perlidae.
11.	Flathead	Early to late	All day	Warm days	Stone fly	Perlidae.
12.	Alder	Early to late	Evenings	All times	Dun	Trichoptera.
13.	Orange stone.....	Early to late	All day	All times	Stone fly	Perlidae.
14.	Horn spinner.....	Early to late	All day	All times	Spinner	Diptera.
15.	Crane spinner.....	Early to late	All day	All times	Spinner	Diptera.
16.	Green spinner.....	Early to late	All day	Evenings	Spinner	Diptera.
17.	Golden spinner.....	Middle	All day	Warm days	Spinner	Diptera.
18.	Cotta fly.....	Late	Afternoons	Warm days	Four wings	Hymenoptera.
19.	Glossy fly.....	Middle	Day, evening	All times	Four wings	Hymenoptera.
20.	Bluebottle	Early	All day	Windy days	Two-wing fly	Diptera.
21.	Cowdung	Early	Daytime	Cold days	Two-wing fly	Diptera.
22.	Yellow horn.....	Early, late	Evening	All times	Dun	Trichoptera.
23.	Speckled dun.....	Early, late	All day	Warm days	Dun	Trichoptera.

pocket or any place that will be handy; it will save you lots of time, and I have seen a good line spoiled by being picked to pieces with the thumb nail in an effort to get it untangled.

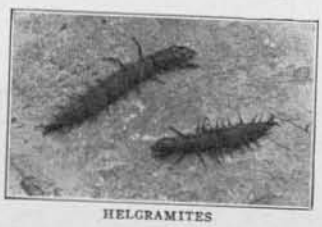
L. E. Catterton.

THE HELGRAMITE AS A BASS BAIT

Harry N. Holmes

The helgramite as a bass bait is familiar enough to most expert fishermen, but many a novice knows nothing of that appetite tickler. The small mouth bass likes an active lively bait and minnows and crawfish soon cease their struggles. Not so with the nine-lived helgramite. Properly hooked—under the plate-like collar—he is good for hours, if there are no bass in the river. It is seldom, however, that game fish will permit this inveterate wriggler to disport himself long with impunity.

The worst objection to its use is the skill with which this bait will crawl under a rock and go out of business. To dislodge him again is no slight task. Only a series of short tugs—not too



HELGRAMITES

hard—will avail. The best plan is to avoid such trouble by keeping him above bottom. Consequently shallow water is unsuited to the helgremite.

As a stranger in Indiana I asked an old fisherman if helgramite were found in the local streams. He professed familiarity with the subject but showed no enthusiasm. Finally I induced him to take me to Big Twin, a stream of some reputation as a haunt for bass. I selected a "ripple" of very rapid water broken by many flat stones and eagerly held my net in the current while Isaac upset stones a few feet upstream. To my delight a fine, vicious black worm about three inches long swept into the net, dislodged from the underside of some flat rock by the force of the current. To test my guide I told him to lift the helgramite out of the net.

"No, you take him," Isaac protested. "I don't know where to grab the brute."

"So you don't know a helgramite after all!" I retorted. With that I seized the worm by the collar between finger and thumb so that his sharp horns could not cut and, with an eye to the needles in his tail, jerked him loose and dropped him in the bucket of water.

We caught a dozen in that ripple and followed the stream for a mile, stopping at every ripple swift enough in my judgment to give us our prey. At last we came to a tempting pool where Isaac vowed there were bass by the score. The fun came when my guide started to bait his hook.

"I don't know how to handle the pesky thing," he remarked after a disgusted look in the bucket at the fighting dozen or so.

"Just slip the barb under his collar without hurting him," I said, suiting the action to the word.

Isaac tried it and said something forcible as the helgramite landed a pinch on his awkward fingers. He was game though, and with another try caught the collar plate firmly on each side, finger and thumb, and soon had his twisting, wriggling bait in the water.

"Just wasting time on them things," opined my guide as he prepared to bait again. I had waded out to a shallow bar and cast under some overhanging willows. A quick strike and a hard one started the excitement. But it seemed it was all over in a minute for my line quickly slackened so much that I thought my fish had torn free from the hook. I started to reel in for another baiting, but quickly learned my mistake. Mr. Bass was only sulking and with that he started on a dash upstream that made the reel hum.

"He's a big one!" I yelled excitedly.

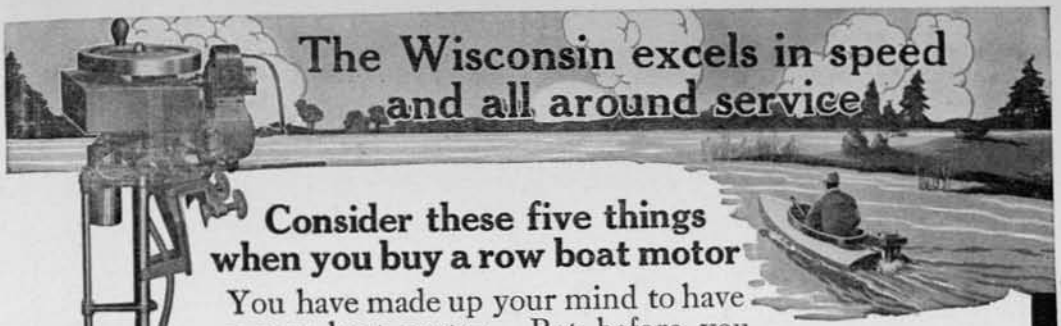
Isaac stopped baiting to watch—and advise. I needed advice for suddenly that bass made a bee line for me with such speed that I couldn't reel in the slack at all. There was a nice jagged rock behind me and I saw my line would be cut if that fish ever reached it. He actually grazed my boots as he rushed by, so I'm privileged to say he was a several pounder.

What should I do? To grab the line in my hand was my first thought and I did. Instead of letting him have more line with a drag to it I stopped him short. Snap! went my nice silk line and the prize was gone.

"What a darned fool trick!" snorted Isaac.

"You're not half as mad as I am," I retorted and then we told each other just how we would catch him if we had it to do over again.

Well, there were other chances and we caught enough bass to please us. Several times the bait was extracted from the fish's mouth lively enough to use again. All things considered, the helgramite proved to be superior to either minnow or crawfish—even the prized soft shells.



The Wisconsin excels in speed and all around service

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You have made up your mind to have a row boat motor. But before you decide *which* motor you will buy, consider five things carefully: the maker behind the motor, price, reliability, simplicity, ease of operation—and you can't "go wrong." Your satisfaction will depend on the manner in which you investigate these vital points.

Model M—Two H. P., equipped with special waterproof true high-tension magneto. Independent rudder for steering. Watercooled, noiseless Wisconsin Silencer. Weight, 59 lbs.

Wisconsin Detachable Row Boat Motor

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The maker—In 1911 we produced a perfected and guaranteed detachable row boat motor. This motor has been refined and improved from time to time. It possesses the advantages gained by 14 years of practical and successful experience in designing and manufacturing marine motors.

Thousands are in use

The price—The Wisconsin line is so complete that whatever your tastes, whatever your requirements, whatever the price you have decided to pay—you can get exactly what you want—and with it more real value, pleasure and satisfaction than from any other motor—bar none.

Reliability—You get full service from a Wisconsin because practically every ounce of power developed is delivered to the propellers.

Simplicity—You can attach the Wisconsin to any boat in two minutes. Our *patented adjustment* at top of motor enables you to keep the propeller shaft in alignment without moving from your seat.

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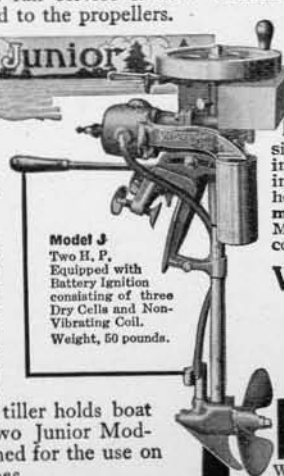

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Weight, 50 pounds.

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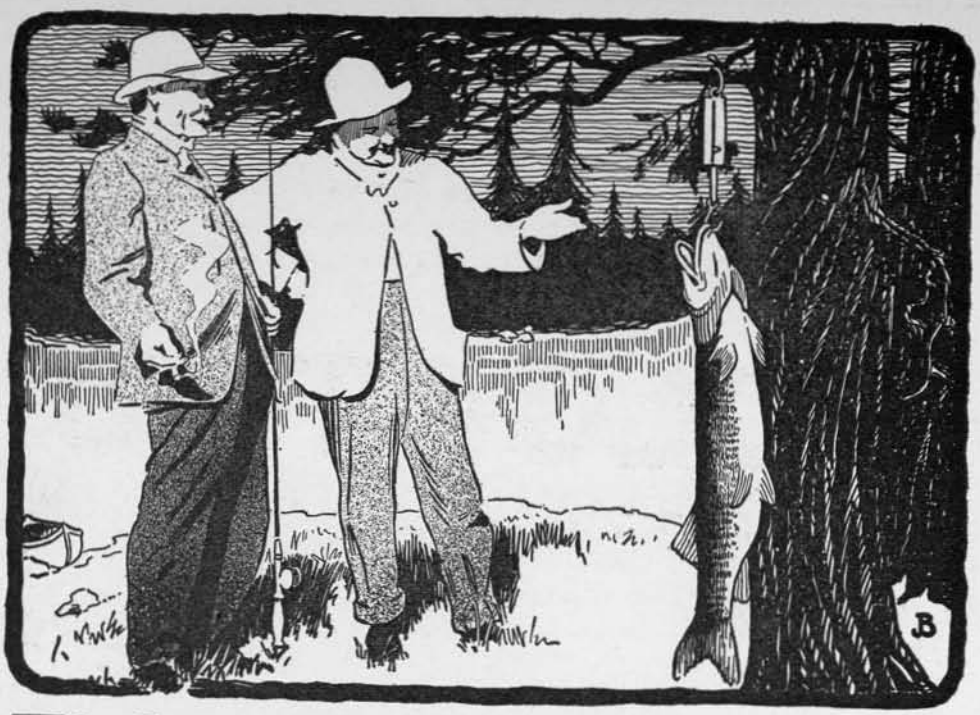

Field&Stream PRIZE FISHING CONTEST

MY NEW YEAR'S BASS

By E. Bruce Hunt, Minneola, Fla.

Winner Second Prize, Large Mouth Bass, Class C, Southern Division, 1914 Contest

The morning I landed the big boy I had no intention of fishing, but started out to build a few lengths of fence into a pond to keep stock from our orange grove. On my way I met a boy who had caught an 11½-lb. bass the day before, and somehow fence-building didn't appeal to me any more. However, I drove to the pond, but my mind was on that big fish. It is my habit to keep my rod and reel with my farming implements and, after a good day's work, reward myself by enjoying a half hour or so of my favorite recreation, so as usual my rod was in the wagon, and I decided to make a few casts, as I felt very sure there were big fish in the pond, it being connected, when the water is high, with Lake Minneola, a sheet of water 3 miles long and 2½ wide. Well, the first cast my line backlashed, and I reeled it off and wound it on straight, and made a 40-yd. cast. Right then the fun began, for as the bait struck the water I saw a big fish make a start toward it, and I reeled very slowly. I suppose it was only a matter of a few seconds from the time I saw him start until my bait stopped as though it had caught a log. I struck him, but he didn't start pulling immediately. However, he soon came to life with a rush that took several yards of line, showing me the pillar on my reel. When I checked him he must have been in deep water, for he sulked for several seconds, but suddenly changed his tactics and, before I expected, he came out of the water for one of the prettiest shakes I ever saw a big fish make. He followed this with another rush, and before I could tighten the line well he came to the surface again. This time he couldn't make a clean shake as he was hooked in both jaws. By this time I had him within 25 yards and managed to hold him down whenever he tried to shake, which he only did two or three times, contenting himself with occasional rushes, but mostly he stayed deep and hung back. I was steadily working him toward the tussock on which I stood. When he hit the shallow water he made one last desperate rush for about 25 feet, and then gave up completely. I pulled him to me, put my fingers in his gills and carried him to the wagon, and some two hours later he tipped the scales in the Minneola post-office at 12 pounds. To me, this was a most satisfactory way of ending the old year, it being the last day of 1914.

My outfit consisted of a Bristol steel rod, a Tripart reel, a Wexford line, and a 5 treble, underwater Dowagiac minnow. This bait was made by Mr. Will Heddon while he was here trying out his baits some ten years ago.

This outfit, with slight variations, has landed many another big fish from the lakes about here. This is not the largest fish I have caught, by any means. As this second prize which I won for the last quarter of 1914 has a string, and that string the story of how I caught the fish, I have endeavored to tell it with as little exaggeration as one could expect from an inveterate fisherman.

Prize Fishing Certificate Record. Second Prize—Large Mouth Bass, Class C, South—1914 Prize Fishing Contest.

Weight—12 lbs.
Length—27 in.
Girth—21 in.
Caught—December 31, 1914.
Where Caught—Minneola Lake, Fla.
Rod—Bristol.
Reel—Tripart.
Line—Wexford.
Lure — Dowagiac Under-Water Minnow.

MY NEVERSINK BROWN TROUT

By H. B. Christian, Neversink, New York

Winner Second Prize, Brown Trout, 1914 Prize Fishing Contest

It was August 29th, 1914; the weather was very warm and muggy and the Neversink very low.

If you can find the woman's statement below, clip it and mail it to us with a letter

We will send you free a trial size of Colgate's Shaving Stick, Powder or Cream—whichever you wish. If you cannot find the woman's statement, send 4c. in stamps for the trial size. In either case you will prove *our* statement "You cannot be sure you are using the best till you have tried"

COLGATE'S
SHAVING LATHER

Stick

"To show that one can get the money's worth from your shaving stick, I enclose what is left of mine.* I am sending it to show the complete satisfaction of an old customer."

Powder

"Its coming marked the beginning of shaving comfort for me. I am delighted with it. My skin is so tender that shaving usually leaves it irritated and sore, but your Rapid-Shave Powder is soothing."

Cream

"Your Shaving Cream leaves that smooth comfortable, velvety feeling and never leaves the skin with the sensation of having been stretched and the hair pulled out."

"Colgate's leaves no smarting sensation." "I sent for a sample of Colgate's and I want nothing better for my use." "Makes the skin smooth and comfortable with a most delightful and cool feeling not obtained with other soaps." "Colgate's superiority is particularly pronounced in the point of *not drying on the face.* My experience is by no means isolated for I have yet to find a man who having tried Colgate's would go back to the soap he formerly used." "Yours has a heavier and firmer lather than any other I have used." "To any man with a wiry beard and tender skin I most heartily commend Colgate's." "Shaving has been a bug-bear to me—but since I used Colgate's, a real pleasure." "In all the time that I have been using Colgate's, I have never had my face smart though I have used dull razors, cold water and all the other drawbacks. I have a very tender skin." "It is so far superior in smoothness, freshness of scent and otherwise, that I wonder how I ever remained a slave to another so long." "Have been troubled with stinging sensation after shaving and blamed my razor. With your soap and the same razor I enjoy a fine, quick shave." "I shaved with Colgate's today and had the first delightful shave since I began shaving myself." "Have purchased several sticks for friends who are as much pleased with it as I am." "You don't say enough for it." "It is absolutely the best. I know for I have tried them all." "It is the best I ever used and I have been shaving for 40 years." "With its soothing and softening qualities it is now a pleasure to shave." "I find the lather continues moist until I have finished." "I have more than my money's worth." "The handiest, cleanest and best soap I ever used." "You must try it—it makes your skin look wonderful, so clear and alive. I massage with lather and brush about twice a week. Your skin will respond almost at once and you will have people raving about your complexion as they have about mine this winter." "My morning shave is a luxury since using your soap." "It is all and more than you claim for it." "It is a better lather and lasts longer."

Colgate's Shaving Stick, Rapid-Shave Powder and Perfected Shaving Cream are sold everywhere. The satisfaction of the user finds frequent expression in such endorsements as those printed here—which are wholly unsolicited. The name of any writer sent on request.

Colgate's Needs No Mussy "Rubbing In" With the Fingers

*Less than 2 grains left. Even this he could have stuck on a new stick—no waste with Colgate's

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Makers of Cashmere Bouquet Soap —luxurious, lasting, refined.

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In order to get fish of good size it was necessary to go out very early in the morning or else after dark.

There was a man from Walden, Orange County, N. Y., by the name of LeRoy Decker, stopping at my place, and he asked me if I didn't want to go with him and see if we could get a few trout that evening. I promptly said yes, and about 6:30 that evening we started out and walked up to a big pool called the Big Bend. Nearly every one who has fished the Neversink has fished this pool or at least heard of it. When we got there it was just the right time of day and just the time a fellow likes to be on a stream, about a half hour before dark. I looked the pool over and saw two or three trout feeding in the upper end, so I tied on my leader, a No. 12 quill Gordon, and after a couple of casts I hooked and landed the trout that was feeding the lowest down in the pool, a nice brown trout of about 12 inches. I dried my fly and the first cast I caught another about the same size. Mr. Decker said: "If you keep that up you will soon have a basketfull." I dried my fly again and tried for another, but it had become so dark I couldn't see my fly, so I couldn't tell if it was floating or not, but by this time I could see more trout jumping than when we came to the pool, but there didn't seem to be any very large ones, so I went ashore, changed my leader for a heavy one and put on a Wickham's fancy for a drop fly and a Pig's Wool for a tail fly, both tied on No. 8 hooks. I tried wet fishing for a while and caught another of about 11 inches, but it wasn't dark enough for the trout to take these big flies yet, so I told Mr. Decker we ought to go down a little ways below to another pool and fish there a while and by the time we got back it would be dark. We fished in this lower pool for a time and Mr. Decker caught a trout about 14 inches in length, and after a while I threw my line across the stream and broke the point off my tail fly. I had a small piece of candle, so I lighted it and handed it to my companion to hold while I tied on another Pig's Wool fly, the last I had of the kind, and while I was tying it on we heard a great commotion in the stream just above us. Whatever it was seemed to be coming our way, and as it came in front of us we saw that it was a fine big deer, splashing along not more than 35 feet away.

It was now so dark we couldn't see the water even when we were standing in it, so we made our way back to the Big Bend again and went to the upper end of the pool where the fish had been jumping before dark, but we couldn't get a strike. I left Mr. Decker at the head, while I fished on down the pool and had come to a place where the water was a little shallower, when I got a strike. The fish started and I was sure I had a good one. I walked up and down with him, whichever way he wanted to go I went, too, and gave him plenty of time and after a while he began to tire, so I called Mr. Decker to come down. He came stumbling along over the stones, lighting matches as he came, and when he got to me I told him I thought the fish was about played out and that there was a dandy place to beach him just below, where there was a nice sand bar. I commenced to lead him that way, and after we got to the bar I had Mr. Decker light the candle so I could see the fish when he came in, but when he lighted the candle, away went the fish again, but he soon came back and came right up so his back fin was out of the water; he turned over and I reached down and picked him up. He was a beauty. Mr. Decker thought he would go 6 pounds, and so did I, but he weighed just 5 pounds 13 ounces. After I filled my pipe I went to the head of the pool and caught two more small ones about 11 or 12 inches long, and then I went to the lower end of the pool, caught four more—one of them was about 16 inches—and then it was about 1:30 in the morning. We had plenty of fish, 11 in all, and it looked like rain. I told him we had better go somewhere, and pretty quick, too, if we didn't want to get wet. Down the stream about 500 yards there is a sawmill and we started for it with about an inch of candle, and that was running on my fingers and almost burning them. The candle lasted until we got within about 100 yards of the mill and I couldn't hold it any longer, so I dropped it and went the rest of the way by lighting matches. When we got to the mill we had a good smoke and went to bed in the sawdust and rested well until 4 o'clock in the morning, and then started for home with a good appetite. The shower went north of us and it didn't rain at all. I couldn't get any picture of my fish without driving to Liberty, a distance of six miles, and this I was unable to do.

Mr. Decker took this fish home, intending to have him mounted, but spoiled him so the taxidermist could do nothing with him.

Prize Contest Certificate Record.
Second Prize—Brown Trout—1914 Contest.
Weight—5 lbs. 13 oz.
Length—24 in.
Girth—15¼ in.
Caught—August 29, 1914.
Where caught—Neversink River.
Rod—Mills Standard.
Reel—Neversink.
Line—Intrinsic double tapered.
Lure—Pig's wool fly, No. 8.

THE BASS THAT NEARLY GAVE ME HEART FAILURE

By E. B. Warder, Chicago, Ill.
Winner Second Prize, Large Mouth Bass, Class B, Northern Division

My friend Ward had invited me to his farm on Knickerbocker Lake, about three miles from Decatur, Michigan, and when the opportunity presented itself I accepted.

I had been there some five years previous, and at that time had all my fishing paraphernalia with me, but my success with fishing was poor. Consequently, my hopes in that direction were not especially buoyant, and I did not feel badly because I had loaned my outfit to a friend. However, I borrowed a small outfit of rod, reel, line and two different styles of hooks—one a frog tandem and the other one of those white-fluted Wilson Wobblers, in which, by the way, I had little faith when I packed it, but have since changed front.

I arrived at Ward's place at 5:30 P. M. and we had dinner at 6:30. It was shortly after seven when I looked to the rod. You know the feeling you have when you see a likely looking lake and have a rod along. You can't resist it. So when I told Ward of my determination to cast a little before dark and asked him if he cared to come along he looked at me rather dubiously, and I figured his hidden thought to be: "I guess I'd better humor this fishing bug—he's probably harmless," and he came.

We decided to fish from the shore. A frog was waiting on the bank; likewise on the third cast a bass was waiting for the frog. The bass got the frog and we got the bass—4⅜ pounds. This opened our eyes, as I had anticipated only casting practice. A few more casts and another strike; he weighed 3⅜ pounds. By this time it was apparently too dark to fish, also the frog was badly scarred. I had the white Wobbler in my pocket, and, as later developments proved, the conditions were ideal for its use, but at the time I didn't have faith (or, rather, sense) enough to try it. We went back to the house, and astonished them all, as they expected us to catch nothing.

The next day, Thursday, July 23rd, was a "scorcher"—100 degrees or so in the shade; no limit in the sun. We tried a small lake called Keeler Lake for about an hour, but the heat was too much for us, and we gave it up. I say "we," for by this time the disease for fishing was taking hold of Ward, also his son had an attack of "fishitis."

This left the evening fishing to be reckoned with, so we had an early supper and went after them.

On the first few casts I got a small bass—1⅝ pounds; a little later one going 3½ pounds. The light was fading away rapidly, so I told Ward I would try the white Wobbler. Whew! How it did cast—a perfect balance and weight. It seemed as though it never would stop going through the air, and then it came in, darting from one side to the other gracefully, just the right depth under the surface, according to my notion. I thought immediately: "It's a pleasure to cast 'this thing' even if a fish doesn't touch it." A few more casts and, Bang! Something annexed to it, going about 30 feet one way and then back over the route and 30 feet the other way, only to let go. Ward said: "If you'd had that frog on you'd got him." My hopes were rising by this time, and I tried a few more casts. Another strike, the bass rising clear and throwing the hook. More chance for Ward to talk frogs, and I was beginning to wonder whether I was playing with the fish or they with me.

Gangs of Tough Boys Breed Criminals

To know criminals, study their origin, study the years spent, as boy and man, with dissolute, lawless, perverted companions. Study the slow, inevitable death of every moral impulse. Study the finished product: debased, diseased, drug crazed—wholly dangerous.

Then admit that as long as society continues to breed thousands of criminals every year it is a civic duty for every honest man to protect himself and his family. The law has but one representative in your home—you are that representative. The

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is well adapted for home defense. It is the most dependable, the simplest and quickest to operate, and the safest small arm that you can own. It is so safe that you can drop it, throw it against a wall or "Hammer the Hammer." Only by an intentional pull on the trigger can it be fired. It is equipped throughout with unbreakable, permanent tension wire springs.

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And it is for the wisely moderate man that we make a wonderfully mild and mellow Whiskey—

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A few moments later I had another bang at the bait, and Ward implored me to use a frog. The Wobbler went back in the same spot as the previous cast when, Grabbo! A tremendous jerk and Mr. Bass came clear of the water, shaking his head like a terrier. And his size! It was a great sight, the reflection from a beautiful western sky giving enough light to see in his direction. Ward mumbled something about it being "a young whale," while I said: "Won't he be a 'beaut' if we can only land him!" My skepticism had now gone from the bait to the line, it being a Hub special No. 4, which had been used on many occasions. Ward immediately said: "He looks like 10 pounds to me," and I believe he would have looked that large to me *if he had got away*, but I would never have dared to tell it. I might as well have thought of 40 pounds. You know how they shrink if you are serious enough to tell it, and have to add that he got away. I don't believe a Class "A" liar could make his wife believe it, even if she were in a confidential mood. So I held my breath as he slipped back into the water and started up the bay. For sixty feet or more he raced, ten feet out and parallel with a long line of pond lily leaves. Had he turned toward them there wouldn't have been a story to write. The general direction of the line could be fairly seen in the twilight, but it now seemed to be gradually working toward the pond lilies. There was nothing left to do but to throw on the brakes; he threw on his also at the same moment, hesitated for a short space and started back breakneck speed toward the boat. I never reeled so fast before, and just managed to keep even with him till he got under the forward end of the boat. The tension was off the line for a second, his speed beat mine, and my jaw fell a notch as things felt so loose. Anticipating his crossing under the boat, I quickly swerved the pole around my end—line loose all this time and my breath leaving me—but the line suddenly tightened from the other side of the boat, and another rush was on.

My breath was back by this time and hope r i s i n g. The rod—a Heddon No. 2½—was on the job, and the line was holding. At the end of this rush he again came clear of the water. Another batch of vigorous shakes, but the hook held tight. He acted as though he was used to tossing them, but this Wobbler had his "goat." He slipped back again and stood firm. He wouldn't move, so we both stood our ground. Then he came again toward the boat the full sixty feet and under my end, away in the direction of his original strike, for fifty more feet—only ten more feet to the lilies. If he r e a c h e d them—"Good Night!" But he changed his mind with freedom in sight. Again he rose, again his silhouette against that western reflection in the water. He seemed to be standing on his tail as he endeavored to shake the hook loose. Were I a cartoonist my pencil would show him as a triangle, with the lower point his tail and the upper side his mouth; that seemed my momentary idea of his proportion. Never will I see a finer sight as he made his last effort to get rid of that white behooked torpedo. His mouth wide open, he shook, and, as the line swung, one of the loose hooks caught in the other side of his mouth, holding it open. A quick jerk which pulled him from his balance, a skid over the top of the water for a few feet, and most of the fight was gone. I called to Ward to row for shore, and with some thirty feet of line out skidded him slowly near the surface, mouth wide open.

Ward's speed with the boat was good, but not quite fast enough for me, so, when the boat was about ten feet from shore, over I jumped, running the fish up on the bank.

We both breathed a sigh of relief as we realized he was ours. His weight as shown on a tested scale was 7 pounds 2 ounces. He was the grandest fish I ever saw, put up the greatest fight, and the memory of his silhouette against the reflection of that western sky will cling to my mind forever.

Prize Contest Certificate Record.
Second Prize—Large Mouth Bass, Class B, North—1914 Contest.
Weight—7 lbs. 2 oz.
Length—24¼ in.
Girth—17¾ in.
Caught—July 23, 1914.
Where Caught — Knickerbocker Lake, Decatur, Mich.
Rod—Heddon No. 2½.
Reel—Pennell Tournament.
Line—Hub Special No. 4.
Lure—Wilson Wobbler.

NEW DIVISION IN THE LARGE MOUTH BASS CONTEST

In answer to the many letters from bass fishermen in Virginia and West Virginia in regard to the new boundary between the Northern and Southern Divisions, Large Mouth Black Bass, we have made a change: Delaware, Maryland, Virginia and West Virginia are to be a division in themselves. There are now only two classes in the Southern Division, A and B.

Prizes for new class announced in list of prizes in this issue.

PHOTOGRAPHIC CONTEST

Field and Stream offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submitted. The prizes for next month will be: First Prize—Three years' subscription to Field and Stream. Second Prize—Two years' subscription to Field and Stream. Third Prize—One year's subscription to Field and Stream. For all others, 50c. will be allowed when used.

Address all entries to Photographic Contest Department, Field and Stream, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO.

Made by H. F. Hardy. 3A Eastman Kodak. Time 1/25th second. Stop 8. Afternoon. Distance 15 feet. Subject—Mule Deer in the velvet.

SECOND PRIZE PHOTO.

Made by J. H. Burns. No. 3A Eastman Special. Zeiss lens. Stop 6.3, 1/100th second. Hazy sunshine. Subject—Snowshoe Rabbit.

THIRD PRIZE PHOTO.

Made by I. H. Riggall. No. 1A Kodak. Time 1/25th second. Stop 4. Bright sun. Subject—Male Grouse.

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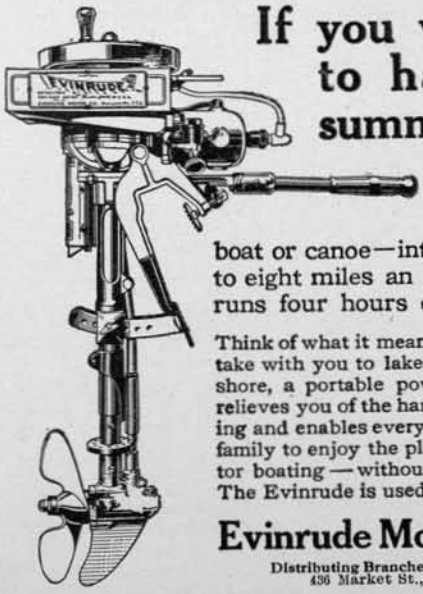

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The Evinrude is a powerful little marine motor that enables you to instantly convert any kind of craft—rowboat, sailboat, houseboat or canoe—into a power boat. It drives a rowboat seven to eight miles an hour—a canoe ten to twelve miles—and runs four hours on less than a gallon of gasoline.

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SPORTSMAN'S WORKSHOP

BUILDING A SPLIT BAMBOO FLY ROD.

By George Parker Holden, M. D.

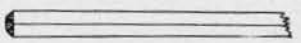
Part II

It will be found an added convenience if you make a double mold by utilizing opposite surfaces of the strips, one groove running from about ¼" deep at the large end to 3-16" at the small end, and the other being slightly shallower. The grain of the wood will preferably run vertically in these molds.

The groove of such a mold is at first of a uniform depth throughout its length. To make of it a tapered groove, it but remains to plane down the face of the mold to whatever tapering depth is desired, bearing in mind that *the diameter of the finished grooove at any point, and consequently of a surface of the bamboo-strip that shall fit the groove at the same point, is just one-half the diameter of the completed rod-joint at the corresponding point, provided that we measure the rod's diameter from angle to the opposite angle of its hexagonal section*, and not from between opposite flat surfaces. To put it in another way, the half of a six-slip rod-joint that has been divided lengthwise presents an inside plane surface composed of only *two* adjoining strip surfaces, laid up edge to edge. Hence, for the sake of greater convenience, we will throughout these articles speak of the diameter from angle to angle when referring to rod calibers.

This planing of the mold's grooved surface to taper is best done with a long plane that the carpenter calls a fore-plane, and such surface should be carefully tested lengthwise with a straightedge and crosswise with a try-square.

The only planing of our strips thus far, consisted in cutting off the pith from the inner, convex side to a flat surface, and this is preferably done as advised—that is, previous to heating and the straightening out of the angularities. We now place the strip in one or the other of our wooden groves—most convenient as determined by the size of the joint under construction—with this smooth beveled edge and the enameled surface lying against their respective sides of the groove, and cut down the other split side to a smooth surface parallel with the face of the mold. Proceed to plane, a little first on one, then on the other of these sides of the strip that are to lie within the rod-joint, and so continue, alternatingly, until the strip very nearly fits this wooden groove, which is larger than the steel grove that you will make use of for the final dressing down.



HALF A ROD JOINT DIVIDED LENG.H-WISE

Just before we reach this stage, it will, however, become necessary to adopt some method both of holding the strip while planing and of guarding against cutting our fingers with the razorlike edges of bamboo when cut to triangular form; for no other holding device can compare in either simplicity or efficiency with the thumb and finger of one hand. But if these are unprotected, as the plane takes a firmer bite occasionally, the strip will be pulled or pushed between the fingers and a deep and painful cut will result. The edges are sharp enough to make a clean cut even through the heavy leather of an old walking-glove, which the writer uses on his left or holding-hand, but if you wind a few turns of a one-inch gauze roller bandage around the last joints of the thumb and forefinger of that hand, before slipping on the glove, then you are safe and may plane away fearlessly.

The first planing may be done with short, rapid, overlapping strokes and with the planing-iron set rather coarse, so that it will cut comparatively short and thick shavings; but as you approach closely to the surface of your steel mold, the plane is set fine and each stroke should be continuous from the butt to the smaller end of the strip, there should be an even heavy pressure on the plane and it should be pushed ahead with slow deliberation. This last caution is all-important when planing the slender strips of delicate Y-rod top-joints. There must be no backing up here, no lifting of the plane from the strip, from start to finish of the stroke, as such a maneuver is likely to cause buckling and breakage of the strip.

Early change in the position of the holding-hand, so soon as the stroke is fairly started, as illustrated in Figures 1 and 2, is likewise an important caution to be heeded in the planing of strips for light tops. But should the accident of buckling and fracture occur, the whole strip is not necessarily ruined for use, if cut off and pieced out with a separate section, *at exactly the point where a guide is subsequently to be placed.*

The holding-hand, in the position shown in Fig. 1, must be only a few inches in advance of the plane, and it is shifted forward for subsequent strokes, as the plane closely approaches it. The strip under the plane is *pushed* against the hand so held. As the second

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or slenderer half of the strip is planed, the holding-hand is shifted to a position behind the plane, and the thumb and forefinger holding the end of the strip, which is now lifted from the groove, prevents the strip from being *pulled* ahead; and the finishing-stroke, on the smaller half, is a single continuous one, at times being facilitated by a slight drawing of the strip toward you from under the plane as the plane is forced ahead.

Another important point in the technic here is that of the direction of the pressure imparted by the holding-hand's thumb and finger. With the plane behind the hand, on starting to go over the strip, they should press the strip down into the groove and at the same time either to the right or left—a lateral pushing or pulling—in order to *force the rind side firmly against its side of the groove.* When the holding-hand is shifted to the second position, the fingers twist the strip a little toward one or the other side to accomplish the same end. Once again, heed the caution *always to plane with the plane's face moving parallel to the mold's surface*—not tilting it either to the right or left.

If the above cautions be not observed the result will be a strip that is irregularly triangular on section. To prevent a strip from thus "going off" lopsidedly, remember in your planing of sides alternately that it is the *narrower* surface which requires cutting to even up the section; so make frequent observations of your work with this in mind. The endeavor should be made to have the triangular section *equilateral early in the planing and to keep it so,* rather than to be careless at first with the intention of making the correction later.

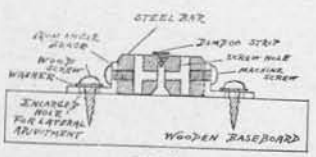


FIG. 1.

End view of steel planing mold.

As previously instructed, the blade of the plane is set very fine, so as to cut the thinnest possible shaving, for the ultimate planing down; and a few short strokes are permissible over those places felt to be still high as tested by drawing the finger across the strip and face of the mold.

A few drops of a thin oil, if placed occasionally upon the metal surface of the mold, are helpful, as the plane begins to hug that surface closely.

The writer has found it sufficient for the production of accurate joints, to finish his strips with the plane, except only in the case of tops for the lighter fly-rods. He finishes these by scraping lengthwise with discarded safety-razor blades, an ordinary razor-blade removed from its handle, or a common jackknife. In making his lighter top-joints he very carefully takes off just the feather-edge at the junction of the inner sides of the strips, so that there shall be no question about their pushing home when gluing up; for this delicate work the old safety-razor blades are just the thing.

Now for the details of the metal finishing-mold itself, and the manner of its adjustment for getting out joints of the definite length and taper desired for the rod that it is determined upon to build. This is very simply constructed of two four-foot bars of ¾" square cold rolled steel, and it can be made at any machine-shop at small chinist must be cautioned that the beveled edges must be absolutely true in order to correctly form your 60-degree-angled groove when the bars are brought together side by side. But you will soon see that they are kept slightly apart in actual use, as our taper is obtained by the beautifully easy "stunt" of spreading the separate halves of our mold at the ends precisely to the minute fraction of an inch required. The center-gauge will attest the mold's accuracy.

Each of the four edges of our square steel bars is cut off then, to a bevel of the same inclination, as above noted, but of varying widths, respectively as follows: 1-32", 1-16", ⅛" and ¼". The bars are held in any degree and position of expense. The illustrations herewith will fully explain for you exactly what is wanted, and the maseparation wanted, by means of five pairs of right-angled braces, secured by appropriate screws to their respective bars, and the whole to a base of any well-seasoned wood plank about six inches in width, one inch thick, and having an unwarped surface. The short or upright arm of the braces is ⅝" long, the longer or horizontal is one inch, and they are one inch wide. Machine-screws with rounding heads secure the bar-arms of the braces to the bars and they are 3-16" in diameter. The longer arms are fastened to the wooden base by one-inch wood-screws having rounded heads, and small iron washers are used under their heads. The holes in both arms of the braces are made enough larger than the screws so as to permit considerable play and consequent separation of the halves of the mold. If desiring to increase this range of side-play of the bars, enlarge the screw holes in the long arms of the braces by filing with a small round or rat-tail file. Five pairs of braces, centered 10½" apart, are used.

The whole arrangement is at once understood by reference to the sketches, which represent end and top views of the mold. It but remains to explain its adjustment. Suppose it is desired to make a butt-joint 3½ feet long, having a diameter of ½" at its larger end and 3⅜" at its smaller end, measuring, please remember, from angle to angle. Marks on the baseboard, at A and B in Fig. 2, will note the length of 3½ feet, A being at the butt or larger end of the proposed rod-joint. We separate the mold halves at this point so that the space from bevel edge to bevel edge of the mold's surface is exactly ¼", or half the diameter wanted there for the completed joint; and we separate the edges 3-16" at B. The edges of the

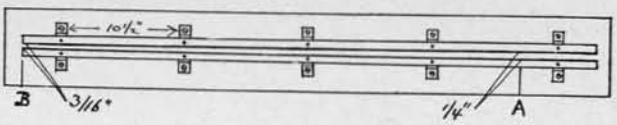
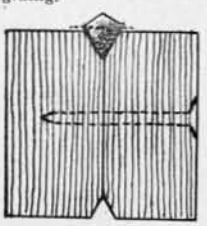


FIG. 2.
Top view of steel planing mold.

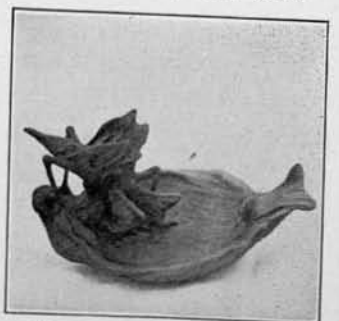
mold that we make use of for our groove, whether one of the narrower or wider bevels, are those best facilitating the construction of the particular diameter of joint wanted; we are practically unlimited as to the larger rod calibers that may be produced, but the minimum is gauged by the 1-32" beveled edges, which, when brought close together at one end of the mold, enable us to get out the component strips for a top-joint 1-16" wide at its tip, and this may be further reduced when the joint is sandpapered after gluing.



DOUBLE WOODEN PLANING MOLD.

(To be continued.)

A "FIELD AND STREAM" "FISHING BUG" ASH TRAY



Miss Beulah Marsh, of Avon Park, Florida, inspired by the "Fishing Bug" in the pages of FIELD AND STREAM, made the novel ash tray which appears above.

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FIELD AND STREAM'S Fifth National PRIZE FISHING CONTEST FOR THE RECORD FISH CAUGHT IN 1915

CONDITIONS

First—The fish must be caught with rods and reels as specified,* and in legal season.

Second—The fish must be weighed on tested scales and measured with a tape measure, length to be taken from end of lower jaw with mouth closed, to tip of tail.

Third—The affidavit blank printed on the last page of this announcement, or an exact copy, must be used in applying for a prize and signed by the man who caught the fish, together with two witnesses, and sworn to before a Notary Public and his seal affixed. In case any contestant catches a fish when accompanied by a single guide, the affidavit as signed upon coming out of the woods by himself and guide before a Notary Public stating the circumstances will be duly considered.

Fourth—The weight, length and girth, date, place, and manufacturer's name and full specifications, if possible, of the rod, reel, line and lure (or bait) used in taking the fish must be stated.

Fifth—The winners in each class must send us a short account of how, when and where the fish was taken, and what tackle was used in catching the fish. The account to be published in **Field and Stream.** These accounts will not be asked for until the prizes have been awarded.

Sixth—All affidavits must be sent to the Editor of the Prize Fishing Contest, **Field and Stream,** 331 Fourth Avenue, New York. All affidavits in classes designated by A, B, and C, must be in our hands within 5 days from closing date of class. **In all other classes affidavits must be in within 15 days from closing date.**

Seventh—No fish caught from State or private hatchery will be allowed in this contest.

Eighth—In the Pike and Wall-eyed Pike Classes an outline drawing of the fish must be sent in with affidavit, drawing to be made by placing fish on side on large piece of paper and drawing an outline of fish with pencil on the paper with fins of fish all erect.

Ninth—In event of two fish weighing and measuring exactly the same number of pounds, ounces and fractions, duplicate prizes will be awarded in each case.

The Judges of this contest will be: Robert H. Davis, Editor *Munsey's;* Will H. Dilg, Chicago, Ill.; W. H. Miller, Editor, FIELD AND STREAM; E. F. Warner, Publisher, FIELD AND STREAM; E. M. Gill, Camp Fire Club; W. P. Corbett, Charles Frederick Holder.

In Tarpon Class length of fish is only measurement required. It is not necessary to give weight or girth.

* Where no special kind of tackle is specified, any tackle is allowable, provided it consists of rod, reel, line and lure.

Be sure to get a photograph of yourself with fish, if possible

FRESH WATER GAME FISH

BROOK TROUT (Salvelinus fontinalis)

CLASS A—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between opening of season and July 31st

FIRST PRIZE: One Dirigo Trout Fly Rod, length and weight to suit winner, made by F. E. Thomas, value $15.00; also one No. 200 Cream City Tackle Box, made by Geuder, Paeschke & Frey, value $3.50. **Total value $18.50.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one No. 29 Bristol Fly Rod, made by Horton Mfg. Co., value $6.50. **Total value $16.50.**

THIRD PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and one Frostco Hydrostatic line, 50 yards, made by H. J. Frost & Co., value $3.75. **Total value $11.75.**

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Fly, Telescopic, Trolling, Bait, Still, Casting

Go right in after 'em, old sport. You have been taking care of yourself all winter. Now cut loose. Get your feet wet. Get soaked to the skin. Be game for a couple of weeks and show your sporting blood. You will come back with the fish and with the renewed power that comes from confidence. The easy chair and the blanket are all right for those who must, but what you want is adventure, new experience, a thriller, something to make conversation with the boys.

Write for the new "BRISTOL" Catalogue (free, of course), and then go to your dealer and look over the No. 5 Telescopic Fly Rod, the No. 8 ten foot Jointed Fly Rod, the No. 38 Adjustable Telescopic Joint-Locking Fly Rod, the No. 29 5½ ounce Fly Rod, the No. 33 light Bait Casting Rod, the No. 35 new Adjustable Telescopic Joint-Locking Bait Casting Rod, the No. 30 Pocket Bait Casting Rod, the old reliable No. 11 Trolling, Bait and Steel Fishing Rod or the New Silk Wound De Luxe "BRISTOL" Fly Rod or Bait Casting Rod.

"BRISTOL" Steel Fishing Rods are made by experts, exactly suited to each kind of fishing. Every Rod is guaranteed 3 years. They are all reliable, strong, well-balanced, beautiful to look at and delightful to work with.

They all say it's going to be a good fishing season.

THE HORTON MFG. CO., 81 Horton St., Bristol, Conn.

FOURTH PRIZE: One Pigskin Leather Cooper Fly Book, made by Cooper Fly Book Co., value $6.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $8.00.**

CLASS B—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between July 31st and October 31st

FIRST PRIZE: One Junior Reflex Camera, made by Reflex Camera Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50; and one Justrite No. 95 Camper's Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $15.50.**

THIRD PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one Persian Alligator Cooper Fly Book, made by Cooper Fly Book Co., value $4.50. **Total value $12.50.**

FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

GRAND PRIZE—For largest Brook Trout caught during season 1915 with Fly: Oil Painting of Brook Trout by H. A. Driscole—Value $75.00

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

RAINBOW TROUT (Salmo irideus)

GRAND PRIZES—For Rainbow Trout caught between April 1st and October 15th

FIRST PRIZE: One 9½-foot, 5¾-ounce Fly Rod, made by Edward F. Payne. **Value $25.00.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Kelso Quick-apart Quadruple Reel (80 yard), made by H. J. Frost & Co., value $8.50. **Total value $18.50.**

THIRD PRIZE: One 80-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.50; also one Three Years' Subscription to FIELD AND STREAM, value $4.50. **Total value $12.00.**

FOURTH PRIZE: One Russian Leather Cooper Fly Book, made by Cooper Fly Book Co., value $4.50; also one Frostco Combination Steel Rod, 9½ feet long, made by H. J. Frost & Co., value $3.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

SPECIAL HONOR PRIZES—For Rainbow Trout Caught with Fly on Fly Tackle

FIRST PRIZE: One VesTong Hunting and Fishing Coat, made by VesTong Mfg. Co., value $7.00; also one VesTong Hunting and Fishing Pants, made by VesTong Mfg. Co., value $5.50; and one 60-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.00. **Total value $19.50.**

SECOND PRIZE: One Pfleuger Redifor Anti Back Lash Reel, made by Enterprise Mfg. Co., value $7.50; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $11.00.**

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

BROWN TROUT

GRAND PRIZES ONLY—For Brown Trout caught casting a FLY with Fly Fishing Tackle, between April 15th and October 1st, 1915

FIRST PRIZE: One Vernley Fly Rod, made by Horrocks-Ibbotson Co., value $15.00; also a two years' subscription to FIELD AND STREAM, value $3.00. **Total value $18.00.**

SECOND PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one selection of A. F. Meisselbach & Bros. to value of $10.00. **Total value $15.00.**

THIRD PRIZE: Selection from catalog of Schoverling, Daly & Gales to value of $10.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $12.50.**

FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $8.50.**

LAKE TROUT—TOGUE (Christivomer namaycush)

GRAND PRIZES ONLY—For Lake Trout caught between April 1st and October 1st

FIRST PRIZE: One No. 1 5x7 Film Premo Camera, made by Rochester Optical Co., value $16.00; also one selection from catalog of Abbey & Imbrie, to value of $5.00. **Total value $21.00.**

SECOND PRIZE: One Ecruette Sportsman's Style Compac Tent, made by Compac Tent Co., value $11.50; also a three years' subscription to FIELD AND STREAM, value $4.50. **Total value $15.00.**

THIRD PRIZE: One selection from catalog of A. F. Meisselbach & Bros., to value of $10.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $12.50.**

FOURTH PRIZE: One selection from catalog of Abbey & Imbrie to value of $5.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.20.**

LANDLOCKED SALMON, OR OUNANICHE

GRAND PRIZES ONLY—For Landlocked Salmon caught from April 1st to Oct. 1st

FIRST PRIZE: One Pneumatic Mattress selected from catalog to value of $22.00, made by Pneumatic Mfg. Co.

SECOND PRIZE: One Remington Model 12A .22 caliber repeating rifle, made by Remington Arms-U. M. C. Cartridge Co., value $10.50; also one Utica Automatic Reel, made by Horrocks-Ibbotson Co., value $5.00. **Total value $15.50.**

THIRD PRIZE: One Kelso 50-Yard Automatic Reel, made by H. J. Frost & Co., value $5.00; also one three years' subscription to FIELD AND STREAM, value $4.50; and one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50. **Total value $11.00.**

FOURTH PRIZE: One Yawman & Erbe No. A Reel, made by Horrocks-Ibbotson Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

SMALL MOUTH BLACK BASS (Micropterus dolemieu)

CLASS A—For Small Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One No. 33 Bristol Bait Casting Rod, made by Horton Mfg. Co., value $12.00; also one pair No. 210, 10-inch height, Hunting Boots, made by Mohawk Moccasin Co., value $6.00; and one selection from catalog of Abbey & Imbrie to value of $5. **Total value $23.00.**

SECOND PRIZE: Five Quick Change Bass Baits, made by Skvor & Co., value $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $18.75.**

THIRD PRIZE: One selection from catalog of James L. Donaly to value of $10.00; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one VesTong Automatic Cleaning Rod, for Shotguns, made by VesTong Mfg. Co., value 50c. **Total value $12.00.**

FOURTH PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co., value $6.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $8.00.**

SPECIAL PRIZE OFFER

FOR CONTESTANTS IN THE "FIELD AND STREAM" FISHING CONTEST OF 1915

To encourage the use of better and more dependable tackle we offer a special prize to every contestant.

WRITE US FOR FULL INFORMATION

LANDING A PRIZE WINNER

It is well worth the consideration of *careful* anglers to note that since the beginning of this contest the great majority of contestants have used—***always with success***—the peerless "KINGFISHER" line.

An analysis of the 1914 contest, counting ***all*** contestants using silk lines, including winners, shows the following:

Different Makes and Names of Lines Reported	58
Different Makers of Lines Reported	11
"Kingfisher Brand" Scored	50% of Total
Next Nearest Make "	18% " "
Average of 9 Other Makes	3½% " "

EVERY OTHER MAN USED A "KINGFISHER" LINE!

MADE ONLY BY

E. J. MARTIN'S SONS :: Rockville, Conn.

CLASS B—For Small Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Detroit Refrigerator Grip for fish, in shape of traveling bag, made by Detroit Refrigerator Grip Co., value $15.00; also one South Bend Anti Back Lash Casting Reel, value $7.50; one $4.50 selection of Buck Tail Baits and Minnows, made by South Bend Bait Co., total value $12.00. **Total value $27.00.**

SECOND PRIZE: One selection from catalog of Hartung Brothers & Co., to value of $10.00; also Hildebrandt Spinners, made by J. J. Hildebrandt Co. to value of $10.00. **Total value $20.00.**

THIRD PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one two-years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: Four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co. **Value $9.00.**

CLASS C—For Small Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One of H. A. Driscole's Famous Bass Paintings. **Value $75.00.**

SECOND PRIZE: One Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $15.00; also one Tripart Reel, made by A. F. Meisselbach & Bros., value $3.00. **Total value $18.00.**

THIRD PRIZE: One Alaska Hunting Jacket, made by George F. Webber, value $5.00; also one selection from catalog of Buck Tail Baits, Spinner Hooks, Minnows and Spoons, made by South Bend Bait Co., value $7.50. **Total Value $12.50.**

FOURTH PRIZE: One pair 10-inch height Sporting Shoes, hand sewed, two buckles at top, full-length sole, made by M. L. Getchell Co., value $6.00; also one Frostco 120-Yard Reel, made by H. J. Frost & Co., value $3.00. **Total value $9.00.**

GRAND PRIZE—For largest Small Mouth Bass caught during season: One Aerothrust Twin Cylinder Rowboat Motor, gasoline or kerosene operated, made by Aerothrust Engine Co. Value $64.75.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One Maxim Silencer for .22 Rifle, made by Maxim Silencer Co., value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

SPECIAL HONOR PRIZES—For Small Mouth Bass caught on Fly with Fly Tackle

FIRST PRIZE: One Free Spool Takapart De Luxe Reel, made by A. F. Meisselbach & Bros. **Value $13.50.**

SECOND PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co. **Value $6.00.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

NORTHERN DIVISION—North of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One Model 1912 .22 Caliber Savage Repeating Rifle, made by Savage Arms Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $13.00.**

FOURTH PRIZE: One assortment 12 South Bend Minnow Baits, made by South Bend Bait Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

CLASS B—For Large Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Abercrombie Snow Tent, size 7x7, made by David T. Abercrombie Co. **Value $30.00.**

SECOND PRIZE: One pair Gitchee Gamee 15-inch Height Shoes, with strap and buckle at top, No. B 1175, made by Northern Shoe Co., value $10.00; also one assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00. **Total value $20.00.**

THIRD PRIZE: One No. 11 Bristol Bait Rod, agate tip and guides, reversible cork handle, made by Horton Mfg. Co., value $8.50; also one Ecruette Poncho, made by Compac Tent Co., value $4.80. **Total value $13.30.**

FOURTH PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

CLASS C—For Large Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One selection from catalog of Moonlight Bait Co. to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $3.60; and one Style E Sextoblade Razor in leather case with soap and collapsible shaving brush, made by Edward Weck & Son, value $5.00. **Total value $18.60.**

THIRD PRIZE: One selection from catalog of W. J. Jamison, to value of $10.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

GRAND PRIZE—For Largest Large Mouth Bass caught between opening of season and October 31st: One Ferro Rowboat Motor, with Kingston Float Feed Carburetor, Bosch High Tension Reversible Magneto and Rudder, made by the Ferro Machine & Foundry Co., value $85.00.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One two-years' subscription to FIELD AND STREAM, value $3.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $5.95.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

SOUTHERN DIVISION—South of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between January 1st and June 30th, inc.

FIRST PRIZE: One No. 33 Talbot Sapphire Jeweled Reel, made by Talbot Reel and Mfg. Co. **Value $28.50.**

SECOND PRIZE: One Meridan Model 15 .22 Caliber Repeating Rifle, made by Sears, Roebuck & Co., value $12.00; also one Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $6.00. **Total value $18.00.**

THIRD PRIZE: Selection of Heddon's Dowagiac Minnows, made by James Heddon Sons, value $4.50; also one Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $12.50.**

FOURTH PRIZE: One Camp Cot, made by the Gold Medal Camp Furniture Co., value $3.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and three "Chippewa" Bass Baits, 3½ inches, revolving spinner in body, made by C. J. Frost, value $2.55. **Total value $8.55.**

Be Sure To Have A Chippewa Skipper In Your Bait Box

Here's a lure that fishermen who know what's what in bait will appreciate instantly. It has the features that make game fish strike quick as a flash. And once they strike, they're yours. The Skipper is designed not only to *attract* the beauties, but to get 'em—every time. The Chippewa Skipper is a "2-*in*-1" bait because by using the two different fins you can produce two distinctly different motions of the same bait. Give the Skipper a fair trial, then you'll understand why all the wise anglers are using them.

The Chippewa Skipper is the very latest type of floating bait. By means of two separate interchangeable fins, two distinctly different motions of the same bait are produced.

CHIPPEWA
The Bait That Makes Good

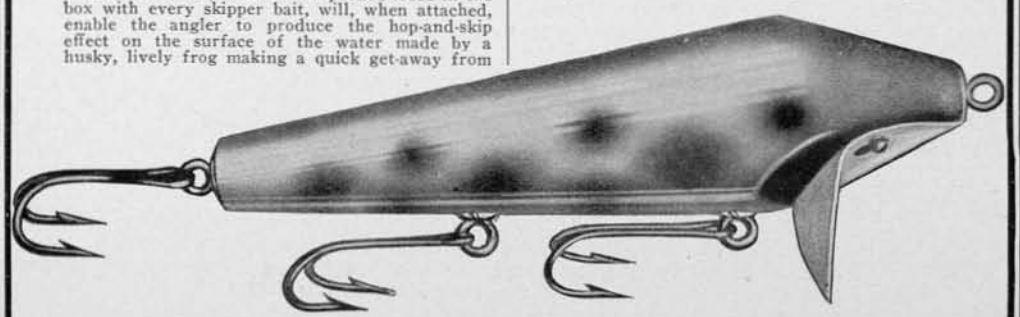
The No. 1 fins, which come attached to the bait, produce a life-like wiggling effect, much like the wake of a swimming mouse. A bait with this movement has proven one of the most killing ever devised, as witness the thousands of wiggling, darting, wobbling and diving baits now in use. The bait travels with a rocking motion, for all the world like a live swimmer. If given a short, sharp jerk the bait produces a sound like that of the surface strike of a bass—a sound which arouses the curiosity of every game fish within reach.

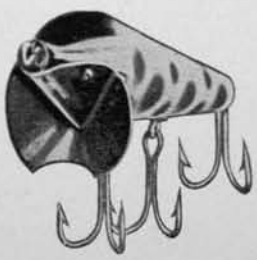
The No. 2 fins, which come packed loose in the box with every skipper bait, will, when attached, enable the angler to produce the hop-and-skip effect on the surface of the water made by a husky, lively frog making a quick get-away from a dangerous locality. This motion is given the bait by rapidly retrieving it—giving it a long, quick pull.

With fin No. 2 attached, and with the hooks reversed, the bait becomes practically weedless and can be successfully cast among lily pads and weeds. It takes but a minute to change fins and reverse the hooks. This feature alone makes the Skipper exceptionally valuable.

The fins are quickly and easily interchangeable, without tools, so that changes may be made frequently and without having to suspend operations more than a moment during the day's fishing.

Get a Skipper before you go fishing next time, then you'll be sure to come home with a nice string, instead of an "almost-got-'em" story.





Ask Your Dealer

for the Skipper and other Chippewa Bait—the bait that makes good. If your dealer does not have them in stock, write us, enclosing price and stating which number you want, and we will send you a Skipper by mail postpaid anywhere in U. S.

No. 1 Fin

No. 2 Fin

PRICE 75c EACH

One size only—4½-inch body.
Colors: S-76—Fancy Spotted. S-77—Green and White.

Illustrated circular mailed free upon request.

C. J. FROST, 300 Ellis Street, Stevens Point, Wis.

CLASS B—For Large Mouth Bass caught between July 1st and Dec. 31st, inc.

FIRST PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $24.00.**

SECOND PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one selection from catalog of Abbey & Imbrie to value of $10.00. **Total value $18.00.**

THIRD PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Meisselbach Automatic Reel, made by A. F. Meisselbach & Bros., value $3.50; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $11.50.**

FOURTH PRIZE: One Style E Sextoblade Razor in leather case with soap and collapsible brush, made by Edward Weck & Son, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

Maryland, Delaware, Virginia and West Virginia Division

For Large Mouth Black Bass Caught during the season within the State laws

FIRST PRIZE: One No. 3 Jeweled Meek Reel, made by B. F. Meek & Sons. **Value $32.00.**

SECOND PRIZE: One No. 041½ Moose Head Brand Knee-length Sporting Boots, made by John Palmer Co., value $10.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $18.00.**

THIRD PRIZE: One selection from catalog of Fred S. Sabey Co. to value of $12.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75; also one Abercrombie Frame Pack, made by David T. Abercrombie Co., value $4.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.95.**

GRAND PRIZE—For largest Large Mouth Bass caught during season: One of H. A. Driscole's famous Bass Paintings—Value $75.00

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates. **Value $4.00.**

SPECIAL HONOR PRIZES—For Large Mouth Bass caught casting a FLY with Fly Fishing Tackle.

FIRST PRIZE: One Navajo Sweater Coat, made by Bradley Knitting Co., value $10.00; also 200 yards Hasting Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $15.00.**

SECOND PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

GREAT NORTHERN PIKE (Esox Lucius) *(See Condition No. 8)*

GRAND PRIZES ONLY—For Pike caught between May 1st and October 31st, inc.

FIRST PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one pair 12-inch height Witch Elk Hunting Boots, made by Witchell-Sheill Co., value $10.00; and 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $25.00.**

SECOND PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one Milburn Combination Campers' Table Lamp and Lantern, made by Alexander Milburn Co., value $6.00. **Total value $16.00.**

THIRD PRIZE: One assortment 22 South Bend Buck Tail Baits and Weedless Hooks, made by South Bend Bait Co., value $7.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $12.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; and one Milburn Acetylene Hand Lamp, made by Alexander Millburn Co., value $1.75. **Total value $8.75.**

MUSCALLONGE (Esox Nobilior)

GRAND PRIZES ONLY—For Muscallonge caught between May 1st and Oct. 31st, inc.

FIRST PRIZE: One 1915 Evinrude Row Boat Motor, with automatic reverse and waterproof built-in magneto, made by Evinrude Motor Co., value $80.00.

SECOND PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00. **Total value $19.00.**

THIRD PRIZE: One Abercrombie Cook Outfit, made by David T. Abercrombie Co., value $10.00; also three "Chippewa" Muscallonge Baits, 5 inches, with revolving spinner in body, made by C. J. Frost, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; and three "Chippewa" Skipper Swimming and Jumping Baits, made by C. J. Frost, value $2.25. **Total value $8.75.**

LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

WALL EYED PIKE—PIKE PERCH *(See Condition No. 8)*

GRAND PRIZES ONLY—For Wall-eyed Pike caught from May 1st to October 31st

FIRST PRIZE: One Joymotor Outboard Motor, with reversing propeller and high tension magneto, made by Joy Engineering Co. Value $75.00.

SECOND PRIZE: One selection from the catalog of James L. Donaly to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $17.50.**

THIRD PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles Co., value $5.00; also one selection of Heddon's Dowagiac Minnows, made by James Heddon & Sons, value $4.50; and three "Chippewa" Pike Baits, 4-inch body, made by C. J. Frost, value $2.70. **Total value $12.20.**

FOURTH PRIZE: One Takapart Reel, made by A. F. Meisselbach & Bros., value $4.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; one year's sub. to FIELD AND STREAM. **Total value $9.50.**

SALT WATER GAME FISH

BLUEFISH (Pometomus Saltatrix)

GRAND PRIZES ONLY—For Bluefish caught between May 1st and October 31st

FIRST PRIZE: One Comfort Sleeping Pocket, made by Metropolitan Air Goods Co. **Value $25.00.**

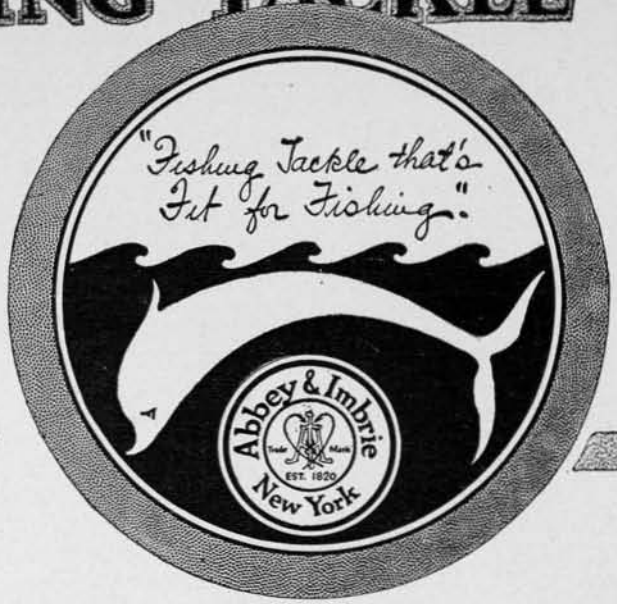
SECOND PRIZE: One Neptune Reel, made by A. F. Meisselbach & Bros., value $10.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $15.00.**

THIRD PRIZE: One Interchangeable Lens Lamp, Style 2, made by R. C. Kruschke, value $7.00; also one three-years' subscription to FIELD AND STREAM, value $4.50. **Total value $11.50.**

FOURTH PRIZE: One Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $9.00.**

Abbey & Imbrie
FISHING TACKLE

You Know He's An Angler



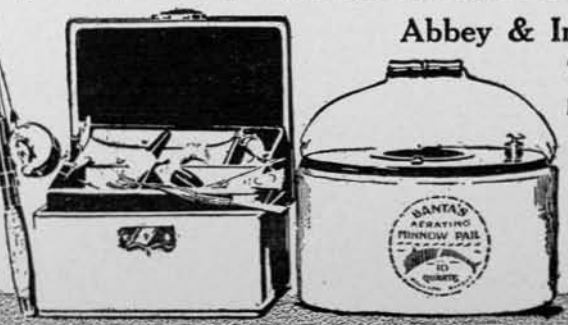
EVER ease your boat up close to a fellow-fisherman and swap fish stories? Right off you look at his tackle. There's the sign of the "Leaping Dolphin." Then you *know* you're talking to an *angler*.

On stream or lake or open sea the man who uses Abbey & Imbrie "Leaping Dolphin" tackle knows that he has *fishing tackle that's fit for fishing.*

Look for the Sign at your tackle dealer's—on his door or window; on the tackle on his shelves. Have confidence in the judgment of critical anglers, and insist—as they do—on rod or reel, hook or line that bears the sign of the "Leaping Dolphin." In city, town or camp it's the emblem of quality and reputation; the mark of the makers of best tackle since 1820.

You get full value at whatever the price because nearly a century of intelligence and good faith in tackle making is back of everything from a rod for tuna to a hook for minnows.

New illustrated catalog "F" (236 pages) sent *on receipt of parcel postage* (10 cents) to any angler *who will give us his tackle dealer's name.*



Abbey & Imbrie
Established 1820
18 Vesey Street
New York City

GRAND PRIZES ONLY—For Weakfish caught between May 1st and October 31st

FIRST PRIZE: One Improved Ocean King 350-Yard Reel, made by H. J. Frost & Co., value $14.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $16.50.**

SECOND PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one selection from catalog of Abbey & Imbrie to value of $5.00; and two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

THIRD PRIZE: One selection from catalog of New York Sporting Goods Co. to value of $10.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; also one Northwestern Clasp Knife, made by R. C. Kruschke, value $2.50; and one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00. **Total value $8.00.**

SPECIAL PRIZE: For Largest Weakfish caught on 5½-ounce, or less, rod, length not less than 4½ feet, 9 thread, or less, line: One selection from catalog of Marble Arms and Mfg. Co. Value $10.00.

STRIPED BASS (Roccus lineatus)

GRAND PRIZES ONLY—For Striped Bass caught between May 1st and October 31st

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One 10-ounce Army Duck Wall Tent, size 8 x 10, height at center 6½ feet, made by George B. Carpenter Co., value $15.00; also one Parker Press-The-Button Self Filling Fountain Pen, made by Parker Pen Co., value $5.00. **Total value $20.00.**

THIRD PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $11.75.**

FOURTH PRIZE: One pair Russell Neverleak Moccasin Boots, made by W. C. Russell Moccasin Co., value $9.00; also one Western Outing Knife, made by R. C. Kruschke, value $1.50. **Total value $10.50.**

LADIES' PRIZE: One Parker Jack Knife Safety Fountain Pen, made by Parker Pen Co., value $5.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $7.50.**

CHANNEL BASS (Sciaena ocellata)

GRAND PRIZES ONLY—For Channel Bass caught between April 1st and October 31st

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One "Rite Lite" Nifty Balloon Silk Tent, 5x7, with sewed-in floor, made by Indianapolis Tent Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One pair Gokey Boots, selected from catalog to value of $10.00; also two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20; and one Komfort Lantern, made by R. C. Kruschke, value $4.50. **Total value $10.70.**

TARPON (Megalops Atlanticus)

GRAND PRIZES ONLY—For longest Tarpon caught Jan. 1st, 1915, to Jan. 1st, 1916

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One Alamo Motion Picture Camera, made by Simplex Photo Products Co. **Value $25.00.**

THIRD PRIZE: One No. 26 Tarpon Rod, cork handle, made by Horton Mfg. Co. **Value $14.00.**

FOURTH PRIZE: One 300 candle-power Coleman Arc Lantern, complete, made by Coleman Lamp Co. **Value $10.00.**

SPECIAL PRIZES FOR ALL WINNERS

A. F. Meisselbach & Bro. will present to each and every prize winner in the Contest one of their Utility Scales, one "Good Luck" Fish Scraper, and One Drop Oil Can. **Total value 50 cents.**

NOTICE

It is impossible, with the number of prizes and limited space, to give the proper description and illustration of these valuable prizes. By writing the manufacturers represented, a complete catalog will be sent showing full description of any prize in which you are interested.

AFFIDAVIT

I hereby swear to statement signed by me before two witnesses and a notary public.

Kind of fish.....Weight.....Length .....Girth.....

When caught .....Where.....

Rod used .....Reel.....Line.....

Lure or bait.....Give Mf'r's names of each and full specifications

Caught by (Signed).....

Street .....

City .....State.....

Witnessed by: (Give names and addresses)

1 .....

2 .....

Sworn to before me this.....day of.....

Notary Public .....

(SEAL)

GRAND PRIZES ONLY—For Weakfish caught between May 1st and October 31st

FIRST PRIZE: One Improved Ocean King 350-Yard Reel, made by H. J. Frost & Co., value $14.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $16.50.**

SECOND PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one selection from catalog of Abbey & Imbrie to value of $5.00; and two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

THIRD PRIZE: One selection from catalog of New York Sporting Goods Co. to value of $10.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; also one Northwestern Clasp Knife, made by R. C. Kruschke, value $2.50; and one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00. **Total value $8.00.**

SPECIAL PRIZE: For Largest Weakfish caught on 5½-ounce, or less, rod, length not less than 4½ feet, 9 thread, or less, line; One selection from catalog of Marble Arms and Mfg. Co. Value $10.00.

STRIPED BASS (Roccus lineatus)

GRAND PRIZES ONLY—For Striped Bass caught between May 1st and October 31st

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One 10-ounce Army Duck Wall Tent, size 8 x 10, height at center 6½ feet, made by George B. Carpenter Co., value $15.00; also one Parker Press-The-Button Self Filling Fountain Pen, made by Parker Pen Co., value $5.00. **Total value $20.00.**

THIRD PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $11.75.**

FOURTH PRIZE: One pair Russell Neverleak Moccasin Boots, made by W. C. Russell Moccasin Co., value $9.00; also one Western Outing Knife, made by R. C. Kruschke, value $1.50. **Total value $10.50.**

LADIES' PRIZE: One Parker Jack Knife Safety Fountain Pen, made by Parker Pen Co., value $5.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $7.50.**

CHANNEL BASS (Sciaena ocellata)

GRAND PRIZES ONLY—For Channel Bass caught between April 1st and October 31st

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One "Rite Lite" Nifty Balloon Silk Tent, 5x7, with sewed-in floor, made by Indianapolis Tent Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One pair Gokey Boots, selected from catalog to value of $10.00; also two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20; and one Komfort Lantern, made by R. C. Kruschke, value $4.50. **Total value $10.70.**

TARPON (Megalops Atlanticus)

GRAND PRIZES ONLY—For longest Tarpon caught Jan. 1st, 1915, to Jan. 1st, 1916

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One Alamo Motion Picture Camera, made by Simplex Photo Products Co. **Value $25.00.**

THIRD PRIZE: One No. 26 Tarpon Rod, cork handle, made by Horton Mfg. Co. **Value $14.00.**

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Kind of fish.....Weight.....Length .....Girth.....

When caught .....Where.....

Rod used .....Reel.....Line.....

Lure or bait.....Give Mf'r's names of each and full specifications

Caught by (Signed).....

Street .....

City .....State.....

Witnessed by: (Give names and addresses)

1 .....

2 .....

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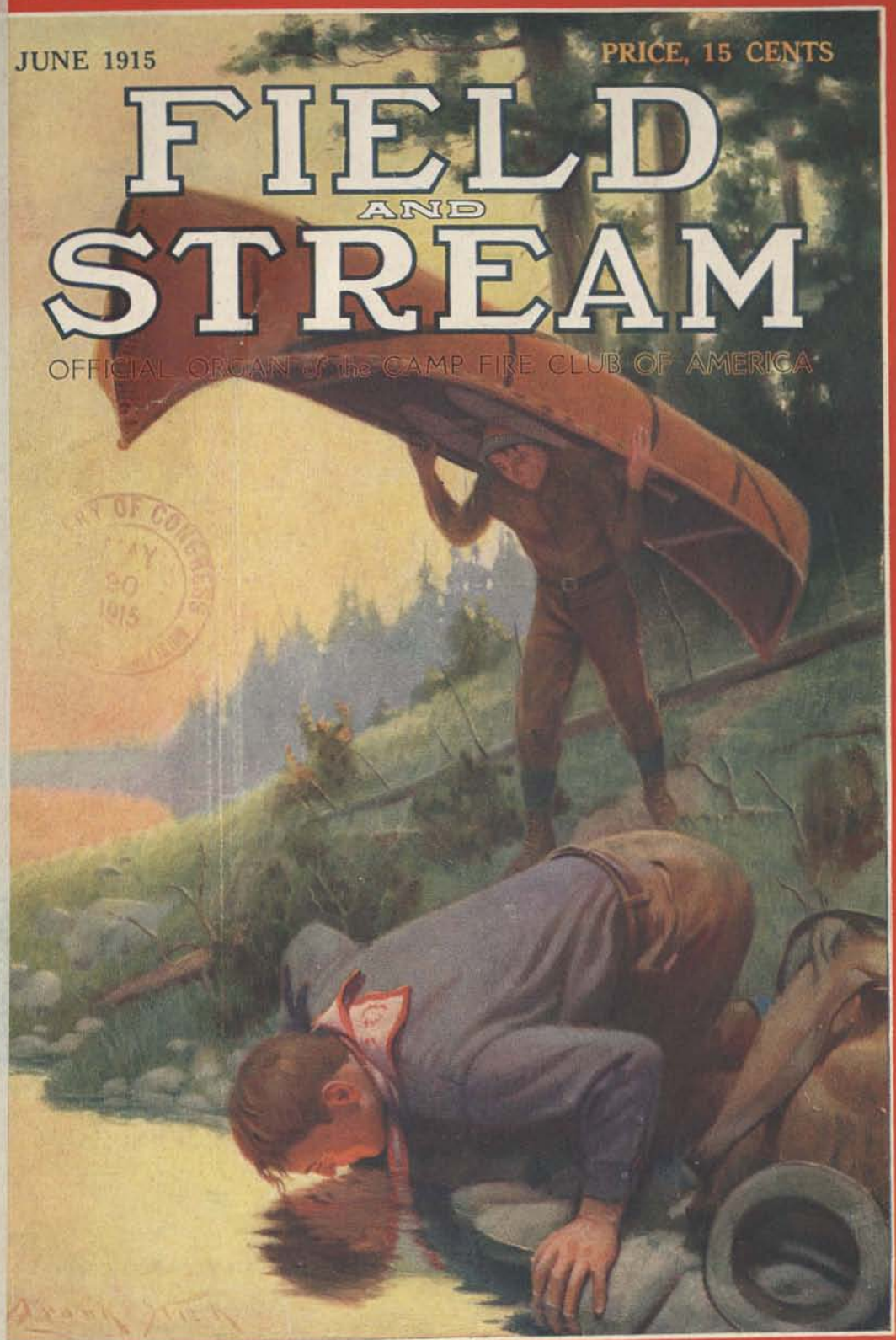

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for her morning sup
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Soil looks
up"
—OMAR

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Your Trophy I.—A Pictorial Story by J. F. Reynolds Scott.

THE HOME CAMP—ALWAYS A WELCOME SIGHT

BUT WE LEAVE ITS CHEERFUL HEARTH—

—AND PORTAGE TO THAT LITTLE NAMELESS POND IN THE FOREST DEPTHS

Your Trophy II.

WHERE WE PITCH THE OUTLYING CAMP—

—AND OUR INDIAN MANIPULATES THE BIRCH-BARK HORN

AFTER MUCH COAXING, OUT HE COMES!

Your Trophy III.

AND IS LAID LOW BEFORE THE WHITE MAN'S RIFLE

WE PACK OUT THE HEAD—

—ALSO THE HIDE AND HOOFS

Your Trophy IV.

ARRIVED AT THE OUTLYING SHELTER—

—THE TROPHY IS MADE READY FOR THE PORTAGE

THEN THE CANOE, AND YOUR MOOSE IS STARTED FOR THE HOME CAMP

FIELD AND STREAM
AMERICA'S MAGAZINE FOR SPORTSMEN
OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR JUNE, 1915 NUMBER TWO

THE LUCK OF THE CASTING LURE

BY THEO. MACKLIN

ALL nature has its lure. The pleasant woods and old gravel path down to the lake shore, the boat with squeaky oarlocks, and the worn little cushion filled with straw are things that call one more loudly than words. The balmy air, filled with bright sunshine and scented with the fragrance of flowers and pine needles, wafting the songs of bird voices and the rippling sounds of the waves, soothes the cravings of a nature-lover as completely as does the game with a sporty member of the finny tribe. Fishing is more than catching. Its pleasures are the whole outdoors. Appreciation is the secret of the lure. Yes, the very dream pictures which hang in the gallery of one's mind are the roots of the pleasures that one may hope to have. And happiness consists of that happy faculty of appreciation for whatever to-day brings forth, with optimism for the days to come.

Steve was one of these weather-beaten, quiet persons of the North woods. His dark skin and half-Indian features gave silent answers for all one's queries. His manner was steady, friendly, but far from demonstrative. As the oars swished in and out of the water and hour after hour the shore-line slowly changed, beautiful rocky points melting into sandy bays and deep, dark waters disappearing before lily-grown shallows, his way was ever the same, his silence profound.

One day, after many meals without fish to fry, something broke his long silence. The placid countenance which had for so long been somber and emotionless grew animated. His eyes sparkled. The story of real life in the North woods broke loose from him. A life it was of logging and hunting in the winter and guiding through the summer months. In the back of the boat it seemed that I was dreaming, now and then coming to myself with a jerk when a weed tried hard to act like a fish, or rather when I tried harder to believe that a weed was a fish. In a moment again the dream always came back where it had left off. Steve was again recounting tales of old times before the logging crews had done their work.

Twenty years ago these little lakes were surrounded by great walls of pine trees. Their great dog-toothed tops loomed far up into the blue and, in the evenings, after the moon had risen, cast great dark shadows out over the water. It was a great, silent country. And the quiet red man was the only one who came. He crossed these lakes in his trips to the Sand River bottoms to pick wild rice. Fish

"LUCK! THERE'S EVERYTHING IN BEING OPTIMISTIC"

were plentiful then. In those years, when Steve was a small boy, his father often took him with his brothers down to the boat. And then, with a great birch bark, pine-cone torch and a spear, they would all start out to spear great, monstrous muscallonge! Fish were plentiful then. One could go out anywhere from the log house on the point in Big Sandy Bay and get all that could be desired in a short time. It was too easy. The great torch-light was so bright that one could see a fish twenty feet away. The boat was paddled from the rear. It was a much quieter way than rowing. Then, too, oars scared the fish, while a paddle moving in the rear of the boat never did. If it was shallow, the one with the paddle pushed the boat along. Steve's father would stand back of the blazing torch, with the spear ready in his hand. Now and then a fish was spotted, and slowly the boat would draw near to it. As long as the boat moved slowly and noiselessly the fish would remain suspended there like a kite sailing in mid-air. All at once the spear would be plunged. The water would foam. The throw must have been true, for the battle was being waged, the results of which were certain. Sometimes those great muskies fought terribly before they were brought into the boat. And such was the story of every spearing trip. In those days everyone speared fish, and they usually got the big fellows, eight to fifty pounders.

"But, Steve," I asked one day, "wasn't that great fun to go fish-spearing?"

"Not much. We did it to secure enough food to eat. Nowadays, when we want meat we go to the butcher-shop. But in those early days we had to spear for it. It was part of our day's work."

But, after all, there are people who at times think that spearing muskies is a sport far ahead of trolling or casting for whatever might strike. Sometimes, when there has not been a strike during an almost unbearable length of time, the idea suddenly bobs up that all the fish that bite must have been speared out in the years gone past, and one dreamily longs for

SPORT THAT CALLS FOR MORE OF THE SAME KIND

what is thought to be good fishing—fishing which creates quite a stir when the boat is pulled up on the beach and you have reached the cottage by way of the path up through the pines. The flicker of lights from behind the tree-trunks—lights that converge toward your cottage—bring sensations that call for repetition in the days that follow. Somehow or other any fisherman can tell about them—yes, and fish, too. And what of the story of the catching and all that? But that is another story when the fish are speared.

. . . . . .

It was a dark night. The lights of summer cottages danced back and forth among the trees like so many fireflies as we passed on toward the boat. Ahead of us was a long two hours of rowing before we should reach the "pork barrel." The stars shone bright overhead. Steve and I had reverted, for a night, back to the days of Indians and torch-lights. Not spearing, but seeing, was the object of our stealth. Steve had taken my bluff. If I thought there were no muskies left, he would show me.

Is it fun to turn all ears, in the fear of being heard? I could hear Steve's heart beat. Cold shivers coursed up and down my spine with every silence that Steve created in the attempt to make out the nature of each unsuspecting sound. At last the boat grated on the bar. A moment and we shoved off into the "pork barrel." The "muskie heaven" which Steve was convinced of lay beneath and all around our boat. The day before, one beautiful striped body had seen fit to make fun of my bait, but it was one and only one. And, furthermore, it was still in its "muskie heaven."

It was deathly still. The sound of my heart seemed to break through the spaces between all the ribs of my body. All was inkiness about. As soon as our nerve strengthened. Steve would strike the match and all would be bright. It was very late. Surely no one would drive along the lonely road, a few hundred yards back of the

bluff! In those seemingly age-long minutes of listening not a sound had reached us. But uppermost in my mind was the thought that someone, a game warden, perhaps, might pass by. Steve was all ears.

"STEVE—WEATHER-BEATEN, QUIET REDMAN OF THE NORTH WOODS"

With a crackling roar the torch flared up. The path of light swept along in front of the boat as it slipped into shallow water where rushes grew. They seemed like mere shadows in the white light of the torch. Here and there great dark objects casting shadows on the bottom of the lake drifted aimlessly, as if suspended among the rushes. And then, as the moving of the boat brought us too close, a quiver of these suspended objects sent them darting out of sight. We stopped paddling. By drifting we would not scare them. My wildest notions vanished before the array of unbelievably large fish. One slowly floated under the boat, and its head was visible on one side while its tail was still in sight on the other. Here a fish with a back eight inches wide, there one with a head as large as a dog. It was beautiful and again it was monstrous. There were enough fish to stagger the ideas of any fisherman. Steve pointed here and there. He was jubilant to the highest degree. Right? The evidence on the lake bottom was an exaggeration of his wildest tales.

All at once both of us cowered to the bottom of the boat. Steve plunged the torch into the water. The scorching, sputtering sound of that mass of burning bark, rags and oil still rings in my mind when I recall the horror that had suddenly gripped us. Someone was on the bank. Steve had heard the rumble of wheels over the gravel road, had detected the sound of moving brush as someone came toward the shore from in the direction of the road. We dared not breathe. Who would under the circumstances? If it was a game warden, no proof would convince him that we were not spearing. An endless silence it seemed! And then Steve knew that something moved again. I believed it, too. I was positive, certain that we were to be caught. It was time we were gone. Yes, gone, and making distance between us and the "pork barrel" as fast as we could.

"Nevermore!" said Steve, after our courage returned and we dared to talk. And Steve had expressed my sentiments.

That night in the cottage, back among the shadows of the pines, with the morning moon sending its pale rays through openings in the trees down to my windows, the ideals or the pictures of my future longings arranged themselves. I came back to the pleasant, easily satisfied philosophy of the angler who has fished often, even though the catching was poor.

What's the use of grumbling because bacon finds its way into the frying-pan instead of musky? It is only noon. The crisp bacon and black coffee will nourish one amply for the afternoon, and who knows but that the big fellows will get busy after dinner? Why forget all about the beautiful point, grown with birches and white pine, just because Mr. Fish did not happen to be hungry? Why miss the music of the birds, the happy voices of friends and guide, and the pleasant rippling of the waves because you have a few small bass instead of a regal "tiger fish"?

Steve pushed the boat off and we headed

for Lake Emma. "There are lots of fish," he said, "and, whether we catch any or not, it's all a matter of luck." And I wondered that if, instead of fish, we got nothing, how much of our disappointment would be attributable to luck. Surely happiness, appreciation and fisherman pals should all stand in their full radiance, even though our luck be poor. Indeed, the tendency to happiness hangs not on the chance of luck so much as upon the qualities of our angler. Temperament is rarely changed by good luck. It is merely demonstrated.

"DINNER WAS NOT BACON, BUT——"

The muskies were not biting. "We'll portage into Round Lake," Steve suggested, and pulled in toward an open spot in the rushes. There were bass in Round Lake. By good chance we might yet have fish for dinner. It was a shallow lake, with rather steep banks. The loggers had tumbled slashings into it in many places. An ideal place it was for the gamy black bass. Casting was always a welcome change from trolling, so the song of the reel soon began. As usual, Steve had a place in mind for dinner, and besides he had fish booked. "Right under that log," he pointed, and the wooden minnow went straight to the mark. Zipp! Zipp! A jump! "My! he's a little beauty, Steve!" And, sure enough, he was.

"Over a pound and a quarter," came his glad report. "Almost enough for dinner." The fun was on. We were moving along a beautiful sandy shore, sloping gently off into the water where huge fallen trunks lay just beneath the surface. Seldom are such excellent spots for bass seen. In front, a boulder point jutted out into the lake. Some alder bushes and birch trees were bunched in groups. And there in the shade stood motionless, as we passed, a number of partridges. Beyond the point in the shallow bay a great heron stood eyeing us from his clump of weeds, and then, when we seemed to rudely come too close, lifted his long legs and left for other quarters.

Suddenly I realized that I was fishing, for the plug was again fast—not to a log, but to another of those rascally black bass. He fought like a regular little trooper. And Steve was not backward in announcing him an exact equal of the first. He knew, too, for it was lying in the sack with the other. When we reached Steve's dinner spot there were three fish, all alike. And our dinner was not bacon, but fried bass—and that, too, all within a few short moments after we had been fishing long enough to have been thoroughly hopeless. It is the same old story. Fish—any kind of them, no matter what sort are being tried for—are welcome to an angler. He appreciates luck, whatever it may be, for the reason that fishing, as one of nature's great experience lessons, teaches one to be thankful for any and even small favors. It makes us appreciative.

Luck! A good fat dinner of fish on the shore of a beautiful lake, bright sunshine, and afternoon of wondrous chances ahead, a keenness for sport, and all that—you know the whole story—everyone does who knows about fishing.

There is everything in being optimistic, whether there has just been a violent thunderstorm, or in spite of the fact that the fish are shedding their teeth. Of course, it is some such reason which accounts for that great shadowy figure that followed up as the line reeled in and turned with a flop of its huge tail as

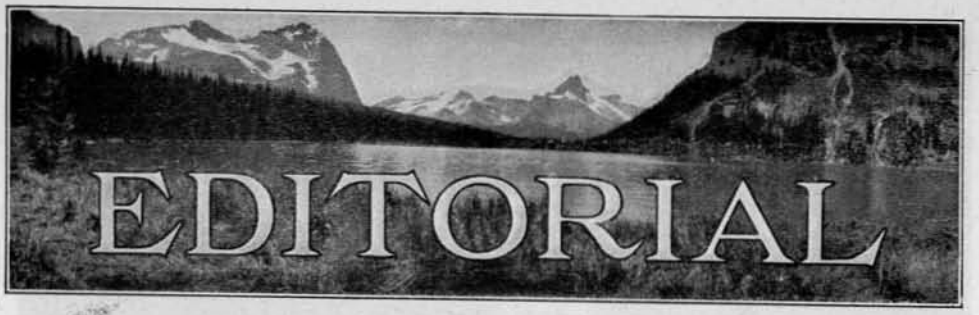
—AND ENOUGH FOR SUPPER, TOO

the lure came to the surface. But the visions of that sort always key one up to G and the afternoon runs along, continually set with surprises.

The moon was peeping over the dagger-like points of the jack-pines. Great streamers of shadows slanted across the water, and in the west the landscape brightened up with the silvery sheen of moonlight. The oars swung rhythmically in and out of the "drink," and every pull brought us closer home. Strange, indeed, fishermen ever feel something pull them in that direction. And then—something struck! That something was a real muskie. Of course! The folks back at the cottage were wild to see it. Yes, anxious to hear how it broke away and rushed wildly, eating up line at a fearful, heart-thrilling rate! Thrilled to know how close it came to being lost when the lunge took it clear under the boat and the line almost wound around an oar. They almost gasped when you related that the hooks were loose, and that but for your gaff your prize would not have been.

After all, the pleasures of fishing are simply the faculties of making use of what luck brings us—brings us in the every-day sort of way. One muskie caught with the line beats all of the ones we might have speared. And so with the fisherman and with life: appreciation for the things we have are worth far more than unhappy bewailings for the things that luck did not provide us.

WELL! IT'S ABOUT TIME TO OVERHAUL THAT SALT WATER RIG AND CATCH SOME BIG ONES OUT OF THE SURF. IN JULY WILL BE A SURF YARN OF THE LONG ISLAND BEACHES BY WM. S. MULLER THAT GIVES YOU THE WHOLE GAME - AND THEN SOME!



Another Victory for Conservation

AS we go to press the welcome news comes in that Mr. George D. Pratt, president of the Camp-Fire Club, has been appointed Conservation Commissioner of New York State by Governor Whitman, has accepted the trust, and that the Senate has confirmed his appointment without a dissenting vote.

This news will be welcome to all those who have been engaged during the last few years in the fight for real conservation in New York State, particularly in the fight for the welfare of our forests. For the situation in the forest service of New York State is by no means ideal, nor are the propositions for management of our Adirondack and Catskill forest parks, so far put forward, at all satisfactory for the best interests of the people of the State. Not only does the organization of the service require remodelling more on the lines of the National Service, and this in spite of the excellent personnel which now composes our New York State service, but the problems in utilizing the parks for the best interests of all require the clearest sort of clean thinking. At such a time the appointment of a Commissioner who can be depended upon to handle our State conservation affairs with wisdom and knowledge and rise above all partisan and political considerations is a boon to all the conservation societies of this State.

We have had four years of continuous effort to introduce reforms in the forest policy of New York since Gifford Pinchot made his memorable report on conditions to the Camp-Fire Club. A great number of conflicting interests had to be subserved, but at the bottom of it all lay the forests themselves, which needed restoration where burnt, protection from further reckless cutting, and the people who own these forests as a corporate body of citizens known to the world as the People of New York State.

In the effort to placate the commercial interests to whom the cutting of lumber in the Adirondacks was essential, and to please the State forest service, eager to plant, restore and manage the park forests as a commercial enterprise conducted on the most scientific lines, the People and the Forests seemed rather lost sight of in the mass of legislation proposed.

Broadly, the lines to be followed that stand out clearly after these years of discussion are: the preservation of the Adirondack and Catskill Parks forever as wild land for the recreation of the people of the State, the use of certain minor parts of the Parks for the practise of commercial scientific forestry, and the reforestation of burnt lands throughout the parks and the clearance of roads and trails.

The Constitutional Convention is in session this year. Never was there a time when so much can be done towards a permanent betterment of forest conditions in the Adirondacks and Catskills. The problem is to so change the organic law of the State as to permit just enough and not too much advance in the practise of forestry in the people's parks. Let us not lose sight of the necessity for a preserve of wild land for the public while we are doing it. New York is a big State and can afford a big playground for her citizens' recreation. With George D. Pratt at the helm as Commissioner, backed by a sympathetic and upright Governor, may we not hope that the forces working for wise conservation may at last see their efforts crowned with success?

A STAND-UP EATING-TABLE MADE OF A LOG PUNCHEON. THE RIGHT HEIGHT FOR IT, WHEN NO BENCHES ARE USED, IS 40 INCHES

CAMP COMFORTS

THE WAYS BY WHICH THE OLD-TIMER AUTOMATICALLY PROTECTS HIMSELF AGAINST THE MINOR HARDSHIPS OF CAMP LIFE

BY WARREN H. MILLER

ONE of the hall-marks of the veteran woodsman is the way he contrives to make himself comfortable in camp, mainly by utilization of the forest materials ready to hand. He has gotten past the stage of unnecessary roughing it, knowing well that the hardships of the hunting trail will be quite enough without imposing any additional burdens in camp. Doctor Hornaday, than whom there is no more experienced wilderness traveler, has small patience with the man of harrowing experiences afield or with the novelist who builds his themes upon the sufferings supposedly inevitable in the waste spots of the earth. These who so suffer simply do not know the game, are inadequately supplied with either equipment or knowledge, or both, and richly deserve all the misfortunes that befall them or are heaped upon them by the malignant novelist. The Doctor, like many another veteran explorer, has proved in his own person the truth of his argument; any man who can and did make the Pinacate trip virtually without a harrowing incident or can spend two years in the Malayan jungles without serious misfortune, as Hornaday has done, surely is entitled to speak strongly on the subject.

A PORCUPINE AND ANT PROOF CUPBOARD, SWUNG FROM A CROSS-POLE

Doctor Wallace, the English naturalist, spent eight years in the Malay Archipelago, living in the open the entire time, also with no incidents of battle, murder, and sudden death to relate.

As in the game of life, it is attention to the little things that counts, the *savoir-faire* that enables a man to guard himself, seemingly without effort, against the petty annoyances which the wilderness sets over against him for a pitfall and a gin. This body of ours has certain needs which intrude themselves upon our consciousness at regular intervals and give us distress until satisfied. It must be fed, couched in a comfortable nest at night, and washed, shaved, and curried periodically, besides which it demands a change of position occasionally, objecting decidedly to the standing position all the time; and it is annoyingly vulnerable to insect attack.

Nature has provided no comforts at all, and she launches her armies of insect life or her legions of chilly particles of air and water against the poor body without respite and without pity. The veteran woodsman automatically puts up screens against any and all these annoyances with the same skill with which he follows the faint game track. Comfortable sleeping, comfortable eating, comfortable cooking, and comfortable washing are his without fail, for he knows the necessity of guarding the body against the fret and wear of minor hardships.

Comfortable eating is the feature most often neglected by the tyro. To grab a plateful of food and squat down somewhere not out of range of the acrid smoke of the camp-fire seems to him all right and part of the fun. So it is, for the first day or so maybe, but it soon palls. The necessity of an eating-table of some sort has been given much study by veteran outfitters, so important is it in the long run. For the permanent camp the log and plank tables shown in our illustrations solve the problem amply and, with a log bench on each side, make for comfortable, happy meals. The right height for a table with benches is 30 inches (the length

of your gun barrels), and the height of the bench is 18 inches, from soles of feet to just below the kneecap. If the meal is eaten standing, 40 inches is a better height for the table. A mere plank, or two logs side by side and packed in with pebbles to form a level surface, will make a very comfortable table for four men and will not take over an hour's time with the belt-axe for some ambitious member of the party. A four-leg table, also gravel-filled, will take a setting for eight, the legs being 4 inches in diameter by 6 feet long, and a light fly over it makes eating in rainy weather possible without bringing the food into the tents. But what of the nomadic camps, such as on a down-stream canoe trip where no stop is made long enough to warrant any extensive construction? For this one firm of outfitters have studied up a wooden suitcase, made of the hardest and toughest veneers, light and strong and rendered water-proof by a rubber gasket running around the joint between the faces. Such a suitcase will be about 12 inches deep by 24 by 16 in area and holds all the smaller provisions or sometimes a complete aluminum cook-pit of pots of the right height to fit inside it. When making camp, four stakes are cut and driven in the ground, the suitcase opened out flat, and at once you have a table 24 x 32 inches, useful as a cooking-table and bread-board while preparing the evening meal and later for setting the aluminum table-service upon.

The care and stowage of provisions is another matter apt to wear and abrade upon the chef's mental economy unless automatically met by various little woodsman's dodges. Mice, squirrels, and porcupines love to get into a provision cache left unprotected while the party is away on the day's pursuit of game and fish. Also ants, which will march in regiments upon all foodstuffs left in their reach. Two devices for thwarting them are shown herewith, one used by the writer and the other by Lieutenant Townsend Whelen. Mine is a light maple crate which holds all the provisions when in some permanent camp reached by boat, canoe or automobile. Turned on its side and swung by two stout cords from a pole nailed across two trees, it makes an insect and animal

A WHELEN CAMP, WITH RUCKSACK SWUNG FROM CROSS-POLE HOLDING GRUB-STAKE

LOG-AND-GRAVEL EATING TABLE SET FOR FOUR. LIGHT, 2¼-LB. FLY, 6 x 10 FT.

SIDE-OPENING GRUB-BAGS, PACKED, AND OPEN, SHOWING POCKETS FOR FORKS, ETC.

PARAFFINED MUSLIN FOOD-BAGS AND FRICTION-TOP TINS FOR BUTTER AND PORK

FOLDING CAMP CHAIR AND TABLE, ALSO FOLDING CANDLE LANTERN

proof storehouse, as shown, and at night a light oiled tarp is tied over it. The folding cupboards sold by the outfitters serve the same purpose admirably, but are not good to pack in. Three flat boards 10 x 30 inches in size are enclosed on three sides by canvas walls and back tacked to them and, when hung up by the top board, drop down to form a three-shelf cupboard. The device is easily made at home by any enthusiast who has the time and the inclination.

Lieutenant Whelen's camp cupboard is shown next. A cross-pole laid between two trees on jutting stubs holds the straps of his knapsack and canteen, thereby hanging provisions and valuables out of harm's way and handy to get at. A woodsman's pothook, made of a forked stick with a nail in the lower end, is to be noted over the camp-fire. The point not to be overlooked in these rigs is the necessity that they argue for order and completeness in the woods. Things thrown about or left about in the leaves get lost much more easily than in any house and are impossible to replace. I will never forget the loss of a humble fork once from our kit in Montana. There were four forks and four hunters. About the eighteenth day out one of the forks turned up missing. Some one had to go without or wait his turn at the steak, and there was almost a row over who should be the man. However, I whittled a hard-wood fork that answered during the rest of the trip and which was duly washed and carried along each day with the rest of the outfit. All small articles must have a place and be in their place when camp is struck, or one by one they will unaccountably disappear and their loss not be discovered until many arduous miles lie between you and the lost article.

For carrying provisions and culinary utensils, table-service, etc., it is hard to improve upon the side-opening food-bags described before in these pages. Two detail photographs are shown, giving some idea of what these bags look like, open and rolled up, and also of the paraffined muslin food-bags that go inside of them. Note the khaki pockets sewn to the back of the bag, in which are to be put the knives, forks, spoons, pepper, salt, and celery shakers, dish mops and towels, soap, can-opener, cooking-gloves, and pothooks for the trip. When these bags are rolled up, a glance into these pockets will show at once if anything is missing, and *then* is the time to look for it. When cooking, the muslin food-bags lie side by side in the packs, easily found, and, what is more important, easily replaced, so that they can be found again. That is where this pack is superior to the ordinary end-opening war-bag. On laying out the outland kitchen the chef hangs up one or more of the side-opening bags by the stout hickory rods which are sewed into one lip of each bag and provided with a grommet hole at either end of the seam for that purpose. Two stakes driven in near the cooking-fire serve to hold up the pack with its side hanging open to the hand. As fast as the provisions are used the food-bags are chucked back into the pack, and from it also are taken the table-service utensils when needed. At night the bag is closed up by its straps and is then water-proof and animal-proof. Even in the case of an upset the provisions will come by no harm, for the rolling up of the two lips around the wooden rod makes a seal quite as tight as the pucker string of the ordinary tump-bag. The large cans shown in the second illustration have friction tops and will hold pork, bacon, and butter, some 4 pounds' weight in the shallow cans and 8 in the deep one. To pack the bag, stand it on end with a single paraffined bag on the bottom; next a large can, then the other bags one atop the other; finally the two shallow tins, and then squeeze in a muslin bag for a buffer between them and

the end of the pack. The normal diameter of both bags and tins is 8 inches, and the muslin bags assume a thinner or thicker depth with the same diameter, depending upon how much provisions are carried. I have taken provisions for a party of eight for two weeks in two of these side-opening grub-bags, each weighing 40 pounds.

One of the handiest kinks I ever saw in the way of camp comforts was a combined eating, cooking, and sleeping camp, made of a canoe and a 10 x 13 foot green silk shelter cloth. When camping time came, the canoe was hauled out and carried up to the camp site where it was turned on its side and hoisted up so that it could be lashed to two trees with its lower gunwale about 4 feet from the ground. The shelter cloth was next pegged down to the ground behind the canoe, led over the back of the canoe and forward over the space in front, where it was guyed out with poles and guy-ropes led down to pegs in the ground. In front of the canoe, under the shelter, were then driven four stakes, upon which a wooden suitcase was spread out bottom up, making a table, and the fire was located just in front of the edge of the shelter cloth. All the food-bags, cooking-pots, etc., were spread in a row along the bottom gunwale inside of the canoe, which formed a most excellent shelf; and then bread-making and food preparation went ahead merrily under shelter in spite of a rain outside. When the meal was over the suitcase was lifted off out of the way, its stakes pulled up, and the party gathered under the shelter cloth before the bright camp-fire blaze. After a while the sleeping-bags were rolled out, their pillows coming under the canoe up against the shelter cloth at the rear, and there was ample room for four men to sleep in a row. The shelter cloth weighed 4 pounds, and the canoe, which held all the provisions, duffle, and cooking utensils up out of harm's way, being part of the scenery, could not legitimately be charged as weight at all. In other words, on a weight of 4 pounds this idea provided a cooking, eating, and sleeping shelter for four men.

In making oneself comfortable for the night a number of comforts are attended

THE MORNING WASH-UP, IN FOLDING CANVAS BASIN

to by the seasoned camper as a matter of course, nor will he go to bed satisfied until they are to his mind. There is plenty of time to make oneself a comfortable sleeping-place in the hours between finishing with supper and bedtime, and one sign of the inexperienced man is his anxiety to attend to his sleeping quarters about sunset when he ought to be helping the others in preparing supper or else cutting night firewood, for no axe work should be done in the dark. All this out of the way, however, and the dishes washed and set aside, the veteran will roll out his sleeping-rig and see to it that it is comfortable before retiring. The subject of sleeping-bags has been thoroughly treated in these pages before, and will not be gone into here, merely adding a few cautions such as to see that the bed site is level ground, particularly in the side-to-side direction, for sleeping sideways on a slope is one of the impossibilities of the outdoors. If using a very thin mattress, such as a skin or quilt, see that suitable hollows for hips and shoulders are scooped in the duff and filled with dry leaves, your aim being to distribute the area of your body as evenly as possible, so that all of it may be supported and not have the whole weight concentrated on hips and shoulders. And arrange some sort of windbreak, made of any available cloth or duffle-bag, so that the prevailing wind will not sweep over you at night. Outside of water-proof gabardine or silk I know of no weave that will not let night winds creep in and steal away by conduction the bodily heat that you depend upon for night warmth. Cautions about sleeping with too

A TWO-MAN OR LONE-HUNTER OUTFIT, SHOWING PACKSACK USED AS STRETCHER BED

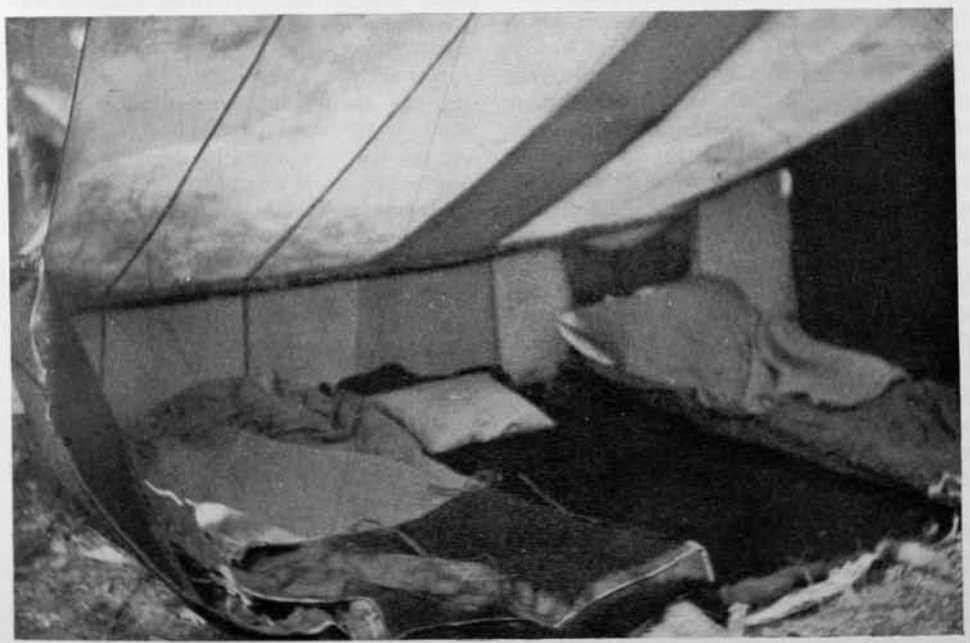
many clothes on seem almost superfluous, yet men *will* go to bed of a cold night with so much clothing on them as to cause uncomfortable sleeping and be colder in the end than if without them, due to the hampering of free circulation during the sleeping hours. Better put these extra things on outside the bag and under the dew cloth, reserving only a few soft undergarments for night wear. A pair of warm, dry socks and wool sleeping-slippers are almost a necessity in freezing weather, for one's feet are not constructed so as to resist much cold, and the chilly, cavernous lower regions of the sleeping-bag do not seem to help much either. At the upper end attention will have to be paid to details also. Man cannot sleep in temperatures below freezing with his head outside the bag without a night-cap, and if he pulls the flaps of the bag high enough to cover his head he does not get enough outside air for breathing purposes. A wool skull-cap or night-cap solves the difficulty and is one of those little things that are not overlooked or made light of by the veteran. In the same category is the pillow. Without it some men, particularly if of high-strung mentality, cannot get along. One does not have to pack anything of any size; a mere pad will do, so that it has a fine, smooth surface and a soft feather or wool interior. It is intended to cap the pile of duffle and spare clothes that you will build at the head of your sleeping-bag to raise your head at the level which suits you personally when sleeping. On this your head can lie serene with the small pillow atop, even if the under components of the pile include such lumpy commodities as a pair of leather hunting-boots stuffed with leaves.

All these little night comforts, besides your toilet-kit, must go somewhere, in a water-tight bag or a dry poke, so that all of them will be in one place and not scattered through your duffle when wanted. Perhaps as good a receptacle as comes for the purpose is the kit roll, about 36 inches long by 30 inches wide when opened out

flat, and which is provided with rows of pockets to hold soap, shaving tackle, comb and brush, night-cap, night socks and slippers, looking-glass, tooth-brush, mending-kit, etc. This is hung up on two stakes alongside your sleeping-bag, and then each article is handy and there is a place for every one of them when you get up in the morning. As you divest yourself of knife, watch, compass, pipe, bandanna, belt, tobacco-pouch, electric flasher, and the like, on retiring, these go into the pockets lately occupied by the night outfit, and at the top of one of the stakes is just the place to swing the carbide lamp by its pointed hook. When packing the kit up in the morning the pillow is folded flat and laid lengthwise across the roll; an inspection shows that all the articles are in their accustomed pockets, and the kit is then rolled up around the pillow and tied with its tapes.

On dressing in the morning, after one's hunting-boots have been softened up and put on, the first thing wanted is a good wash; and the thing to do it with is hot water, poets and amateur campers to the contrary notwithstanding. A very little out of the cook's big boiling-water pail will make an astonishing quantity of water as hot as your face can bear, and so you sidle up to him with your folding canvas wash-basin already part full of cold water and get a dipperful. Somewhere at the bottom of your tump-pack, or flat in your knapsack should be a small, 12-inch canvas basin of this type. It folds down flat as the proverbial pancake, and opens up to about 3 inches high, and it's one of those little comforts weighing some 6 ounces that will repay its weight by keeping you looking fresh and well and feeling so, too.

Along after dark in camp, another bodily infirmity makes its presence known, the inability to see things in the dark (and especially to find a lost belt-axe or salt-shaker). No man in the party should be without his own light-producing apparatus: carbide lamp, candle lantern, or electric flasher. The camp-fire and one or two carbides will just about supply enough working light for the cooks and firemen; meanwhile you have your share of the work to do, to get water or go skirmishing for dead trees in the dark, and should have your own lantern. Personally I am never without both a flasher and a small



A LEAN-TO CAMP FOR THREE MEN, SHOWING TWO TYPES OF SLEEPING-BAGS

carbide, the latter usually loaned for general illumination as soon as it can be filled and lit. Our illustration shows one of the types of candle lanterns, very popular for individual and tent lighting. It collapses flat in your pack and takes very little space and weight—9 ounces—and it has the advantage of being always ready to light and can be put out in a second, which the carbide cannot, so that one is loath to light the latter merely for some private errand of short duration, but rather it is held until after nightfall, when it is lit for its run of three hours and is then at the service of the whole party except when you need to borrow it for private purposes. Neither it nor the candle lantern can be blown out by any ordinary breeze, so that they are reliable and serviceable in rain, snow, storm, or almost any weather conditions that obtain in the wilderness. The electric flasher is no doubt the handiest individual light of them all. Carried in your pocket after nightfall, it gives a strong light, always available on the instant, and is a great convenience for finding things in the dark, reading the compass when night traveling, finding tools and trees in the woods, and looking over everything at night before turning in. In getting one, see that its button is of the sliding variety; otherwise it will quite likely set itself going in your pocket, using up the good current for no available purpose. The button should also stay put at will, for there will be times when you may want to set the light down and use both hands for a considerable period of time.

In mild weather, from early spring to late fall, the dusk and the early morning are the grand display periods for insect life. Mosquitoes, no-see-ums, and black flies hover about in countless thousands, and woe betide him who has no protection against them! The ten-cent brown cotton camping-gloves, worn when cooking or paddling, will render your hands immune from their attacks, and a light head-net is the only really comfortable defense for your face. Oil of citronella carried in a nickel screw-top oil-can and sprinkled on the net front will keep them from lighting on it and singing you to death, while the net itself, if of the kind that straps securely to your shoulders, will hold them at bay from doing you personal violence. The net is a light and easily stowed comfort, and one will not leave his behind, nor two of them if on a long trip, after one encounter with the ungodly, unprotected except by fly smears and "dopes," some of which they appear to regard as attractions rather than repellants.

In permanent camps, a quantity of light, easily packed and transported camp furniture will be worth the owning, particularly if the stay is to be a long one, for it is the little comforts in the long run which decide whether such camping can be called a failure or a pleasurable experience. Such conveniences as folding chairs, cots, tables, bureaus, tent clothes-hooks, etc., are utterly out of place in travel camps into wild game and fishing country, but they have their place in tenting beside some lake where the fishing is good, and where a team is to bring in the whole establishment and the party is to spend an entire vacation in one spot. In such camping one should not scorn these light and easily transported articles but get together the needful equipment of them, for it cannot be too much emphasized that they will contribute manifold to the enjoyment of such a camp. Take what your transportation facilities will permit, and don't listen to the man who laughs because up in the Maine woods no one but tenderfeet use these things! So they do—the blessed innocents—but it is because of ignorance of what can and cannot be carried in the wilderness rather than because of any intrinsic lack of merit in the articles themselves.

MOST OF US WOULD LIKE TO KILL A SALMON AND IT'S PLEASING TO LEARN THAT THERE ARE A FEW WATERS LEFT WHERE THE RICH MEN HAVE NOT LEASED ALL THE FISHING RIGHTS. DOUGLAS W. CLINCH WILL TELL US OF SUCH A PLACE IN THE JULY ISSUE—ONE OF THOSE STORIES THAT YOU WILL LIKE TO READ, EVEN IF YOU CANNOT GO.

PHOTOGRAPHS BY THE AUTHOR AND NED W. FROST

PART III

Battle of the Bull Elk and Camping in the Sheep Country

EARLY morning discovered us again with the pack-train, bound yet deeper into the great rugged mountains. We hoped for another big stag, even larger than the one already taken. Ned had a camp site in mind which was a short day's journey, where, if his plans did not fail, I would secure my second stag. We would then move on and turn our attention to other game—sheep, deer, and bear.

This day on the trail resolved itself into a strictly up-and-down proposition. A long climb to the summit of the intervening mountains and an equally difficult descent to the valley below. It was mid-afternoon when we arrived at the camp site, which was situated near the top of the second mountain. Here, on a high plateau covered with a most luxuriant growth of grass and dotted with jack-pines, we unloaded our packs. It was an ideal spot and we christened it "Terrace Mesa Camp." The far-reaching view was a cyclorama of splendor on all sides, except directly to the north, where it was obscured by a hump-backed ridge of rim-rock which topped the mountain.

There were yet a few hours of daylight, so Ned and I went out for a scout. Finding a break in the ridge to the north, we climbed to the other side. Under the knife-edged rocks of the divide we squatted to sweep the new country to the north with the glasses. It was one of those bleak, cold afternoons, with a piping wind from out the northwest.

I looked across the level sea of peaks for a tremendous distance, then slowly ran the glasses down the mountain-slope opposite until I could see the little stream quarreling through its rocky bed in the deep valley. Suddenly Ned shifted his position. To all appearances I was still looking through my glasses, but in reality was taking in Ned from the corner of my eye. "He's sighted something," I told myself, "I can just feel it." I followed with my eye the direction of his glasses, then I tried to train mine to the same point. I could view plainly the big trees, open parks, boulders, and logs on the opposite slope, but no sign of life could I find.

"I see a big bunch of elk," Ned announced.

"The deuce you do! Where?"

"Wait a minute," Ned paused—"maybe"—another pause—"yes, I've got my glasses on the very boy you're looking for."

"The deuce you say; where is he?" I questioned.

"WE SQUATTED TO SWEEP THE NEW COUNTRY WITH OUR GLASSES"

"Well, I can show him to you, all right," said Ned, "but it is too late to go over there now—it would be dark before we reached the creek bottom, to say nothing of climbing up the other side; but to-morrow will be our scarlet-letter day," he smilingly advised.

In an open grassy glade I sighted the band of cows and calves, about thirty of them, feeding peacefully, lazily, contentedly. The little calves every now and again disported themselves with many a curious gambol. On the opposite side of the glade, close to an age-old spruce, stood the very spirit of the place, and the same was a grand old stag. A sight for the gods was he, carved in russet and brown, staring proudly, defiantly down the glen, while the stooping sun's rays had the same effect as the spotlight on the stage. A wonder of strength he seemed, with massive shoulders, thick neck, and a set of antlers that the old bull himself seemed to hold aloft with pride.

Suddenly the monarch of the glen lifted his head and stood at gaze, so rigid that he might well have been a part of the tree under which he stood, for all the movement he showed. Certainly something in the valley below gave him much concern, for his eyes seemed to grow sullen and red, so defiant appeared his attitude. Then it was that a sound, faint and far, borne on long north wind, came undulating across the far-flung valley. It was the muffled, bugling challenge of another bull and it came from out the very spot at which our big stag so defiantly stared.

Up the mountain he came, this second stag, who elected to do battle. Defiant and mad all through stood the big fellow up the slope, under the big spruce. But now, as his wrath grew with each approaching step of the bold intruder, he at last broke his wonderful pose, stamped his hoof in furious rage, and roared a threatening challenge to his foe. What the intruding stag lacked in stature he seemed to more than make up in courage, for he showed no intention of being turned aside by anything less than a battle ending in his defeat.

What looked like about twenty feet was all that now intervened between the two great lords of the wilderness. Then, as if by silent command, the battle was on. With heads lowered between their forefeet the two adversaries walked around, waiting for an opening. Suddenly there was a savage rush, and as they met their antlers came together with such terrific force that their forefeet raised from off the ground. Slowly retreating, bellowing and threatening in a paroxysm of rage, they again circled around. Then came another charge, even more savage than the first. The intruder, or challenging bull, seemed to be doing most of the offensive fighting.

At length he appeared to be weakening. Once when they came together he went to his knees. Finally he backed off; it was plain the daring young bull had been worsted. Still ugly and bellowing he sullenly moved off, turned down the mountain and passed into the shadows of the gathering gloom.

"The big bull wins to-night," said Ned, then added slowly after a pause, "but to-morrow is another day."

"I suppose that means he is to reckon with us," I questioned.

"We'll do our worst," answered Ned, as we started back for camp through the deepening dusk. The air was clear and crisp, with the tonic of frost. One by one the little stars came out and showed diamond-bright as they winked and twinkled down through the vast blue vault. A huge copper moon with one corner knocked off, so to speak, hung in the east like a dreamy, half-played-out sun. The ground, the trees, and all things were washed in silver under the dead, cold glare of the unwinking moon. The wind had quite gone with the day, and there was that appalling silence that dwells amid the mountains at night.

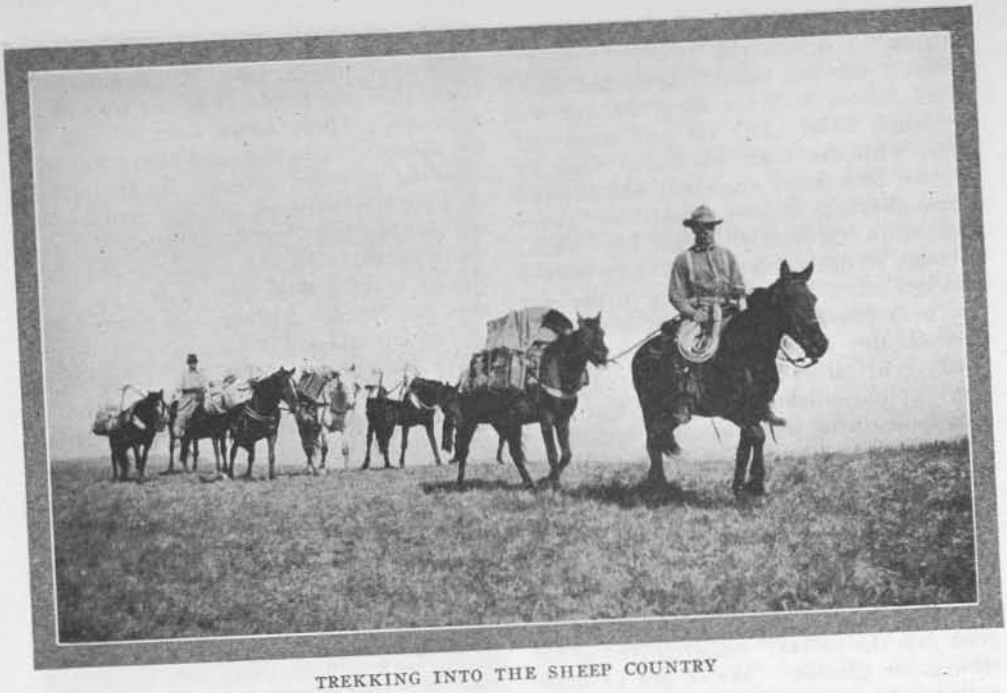
Picture, please, Ned and I in the pink freshness of dawn, again at the same spot of the evening before, sweeping the country opposite with the glasses. Almost at once Ned sighted the old bull. "He's just gone into the timber," reported Ned as he stowed the glasses. "We've got to show a little speed, hike down the valley, up the other side, then still-hunt two or three strips of timber, and with a little luck we ought to be celebrating again to-night."

Ned took the lead while I followed, trying to keep up, which I really never could quite do, in spite of the fact that I was thin and hard and hadn't smoked in a month. Three hours later we gained the opposite mountain, and above the sections we intended to hunt. In the crotch of a big tree we deposited our coats, camera and lunch, in fact everything we could do without. We had spoken the last word; nothing but sign language from now on. In other words, we were down to the fine art of stalking.

We transformed ourselves as nearly as possible into phantoms, stealing, gliding shadows, employing all our craft and without noise. Was there a shadow behind a rise in the ground, we used it; was there a tree or a rock before us, we took advantage of its cover, sometimes stopping for seconds to listen in the vast silence, and peer ahead into the shadowed glen we were about to enter. Down through the ancient trees of pine and spruce we passed, and into the dark, thickly grown glen. The old trees were of great girth, some towered straight up, while others slanted ponderously; again by some trick of nature others lay stark and prostrate on the pine-covered earth.

The overpowering, windless shadow,

"LENGTH OF HORN 50 INCHES, WITH SEVEN TINES ON SIDE"



TREKKING INTO THE SHEEP COUNTRY

which lay thick as if no sound had ever entered, gave the suggestion of something monstrous in all that the eye could see through the contorted, inert shapes of dull grey roots and trunks. A few moments later a dim form took shape, two, three, four—it was the big band of elk we had sighted lying down and apparently at ease. By sheer luck we had played the game just right. But what had become of Ned. A moment ago I could have touched him, now he was gone—simply vanished. An eye-wink later I made him out, he had stepped behind a big leaning tree and might have been a part of it for all the life he showed. There was an odd light in his eye that spoke wonders.

Suddenly a twig snapped somewhere; instantly the whole band jumped to their feet and went crashing through the forest towards an open park to the left. Then I got one fleeting glimpse of a great set of antlers.

"Get the bull as he passes that big spruce," breathed Ned; "it's your last chance." The old Mauser spoke, ripping the silence of that ancient wood to shreds.

"Run for the open," called Ned, "he's hard hit, but may need another pill," as he put it. I ran parallel with the bull for some fifty yards, the forest being too thick to get in another shot. But he was making for the park to the left, and my hope was to get a good open shot upon our reaching the park.

"He's a little wobbly," said Ned, as he came out in the open. "Take your time." At eighty yards I placed another shot behind his shoulder, which apparently snapped out his life like the blowing out of a lamp. The first shot had entered just behind the shoulder, the second had smashed the opposite one. Just before the second shot the bull swung around and headed back for the timber from which he had just emerged. He was a much finer specimen than the first, considerably heavier in the beam; length of horn a little over 50, and on account of the very basket-like sweep of horn the spread showed only 48 inches.

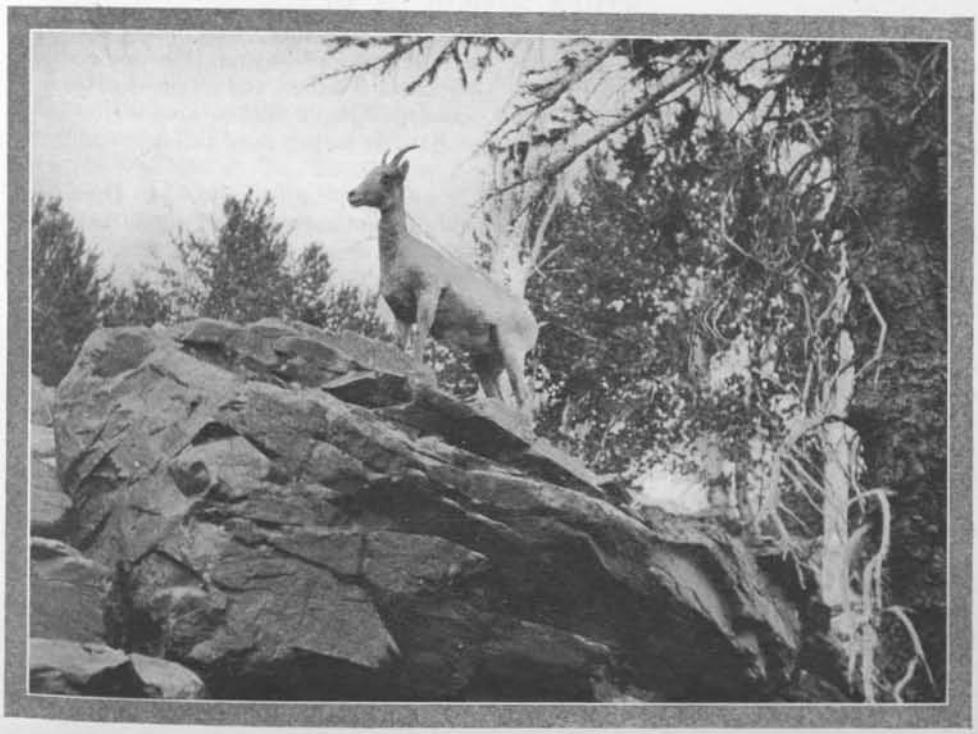
On the ensuing morning we packed the outfit and journeyed several hours to the north. We were off now to try conclusions with the big horn—magnificent of the steeps, and our thoughts as well as our conversation dwelt mostly on one subject—sheep.

Looming big and grey against the paling sky of late afternoon a line of monstrous peaks frowned down from a giddy height. At the base of this imposing range we pitched our little camp, a mere white speck it may have looked from one of those dizzy heights. That night around the campfire we all talked sheep, of course, and nothing but sheep. Good-natured Art, the chef, announced he was going to make a fancy pie, but not a mouthful was to be eaten until a pair of huge sheep horns adorned our camp.

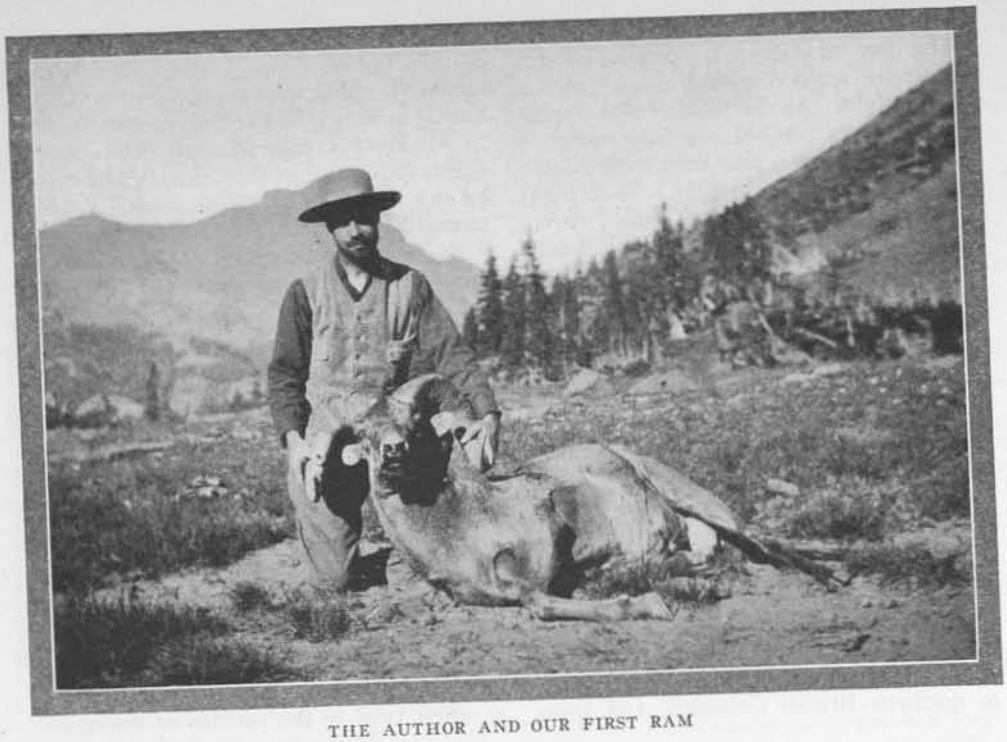
"Oh, nothing less than 17 inches, you know," said Ned, but of course I didn't know whether I was going to get *any*, much less just what size they would be. Surely, though, after all had been said that night I couldn't with any grace kill anything smaller in size than an ox.

A few brief points on the big horn may prove of interest. Generally speaking, the range of the big horn mountain sheep (*Ovis canadensis*) may be said to extend from the northern states of Old Mexico to northern British Columbia, and from the eastern base of the Rocky Mountains to the Pacific Coast. There are many mountain ranges, however, within these limits, in which it has never been found. In Alaska it is replaced by the white sheep (*Ovis dalli*), and in the Cassiar Mountains by the black sheep (*Ovis stonei*). This animal has few characteristics in common with the domestic sheep. The horns of the wild ram resemble somewhat those of the domestic species, although more massive.

The wild ewe has horns from six to eight inches long that curve backward, whereas the domestic ewe has none. The big horn is one of the wildest, shyest and most difficult to hunt, successfully, of all American game animals. His habitat being the highest, roughest and most forbidding mountain ranges, it is only by the most arduous toil, wearisome and in many cases dangerous climbing that the hunter can reach the home of the sheep at all. After one has toiled for hours he will be fortunate if a capricious current of wind, so often fatal to the success of mountain



"THE WILD EWE HAS HORNS 6 TO 8 INCHES LONG"



THE AUTHOR AND OUR FIRST RAM

hunters, does not sweep round in a direction exactly opposite to that from which it has been blowing, and carry the scent of the hunter to the keen nostrils of the quarry.

The big horn runs and bounds up and down the most dangerous-looking precipices with a courage and surefootedness that challenges the admiration of everyone who has an opportunity to study him in his mountain home. Colonel Roosevelt considers the chase of the big horn the manliest of all sports, and states, "It means heart-breaking fatigue for any but the strongest and hardiest, for it must be sought in its mountain fastnesses where it lives and grows fat, even in winter, scorning even then to follow the elk and other animals to lower altitudes."

The general color of the big horn is grey-brown, with a large white or cream-yellow patch on the hind quarters, completely surrounding the tail. A large ram would stand about 40 inches at the shoulder, and measure something near 60 inches from nose to tail, the tail occupying about 3 inches, and weigh close to 300 pounds. Fifteen inches around the base of horn is large; over this is considered exceptional.

I was sleeping soundly, when from outside my tent came a thud, thud, thud that took me out of the land of nod. Surely Art must have gone clean crazy to get up in the middle of the night and chop firewood—or could it be possible daybreak was near? I was asking myself, as I worked down a little further in my blankets, for it felt a bit frosty around my ears. I was just sighting my rifle over a rock not twenty yards from a sheep as big as a horse, with horns as large as those of a musk-ox, and trying to pull the trigger, which somehow wouldn't go off—when I heard Ned's voice saying, "You'd better get up and take a little breakfast for that snore, or you'll scare all the sheep out of the country."

IN OUR NEXT ISSUE:—MOUNTAIN SHEEP

THE OUTFIT—SHOWING HOW IT WAS MOUNTED ON THE BOAT

WITH FLASHLIGHT AND CAMERA

BY W. DUSTIN WHITE

QUIETLY the boat slipped away from the camp wharf and silently stole up the western shore of the lake, urged onward by the powerful, noiseless stroke of the Man in the Stern. For an hour we had been sitting on the camp piazza waiting, with what patience we could command, for darkness to descend and allow us to try a most fascinating sport—photographing wild deer by flash-light. It was a new experience for me and I was all expectation.

About the time I was planning a short vacation, I stumbled on to a magazine article, illustrated with several splendid photographs, and telling in a most interesting manner the charms of flash-light photography. I got into communication with the author at once. He answered all my inquiries and added some suggestions. Consequently, when I started for the Second Connecticut Lake, about the middle of last July, a flash-light rig was part of my outfit. My stay was to be short—only four days—hence my impatience to be trying it that first night.

A slight mist arose from the water and floated across the ray of light which the jack lantern cast ahead. On our left a row of ragged spruce tops could be faintly outlined against the star-flecked sky. On the right the big lake stretched away—an endless void. Suddenly there was a splashing sound in a little cove just ahead. Silently the bow of the boat swung in that direction. The splashing had stopped, however, and soon we could hear the deer tramping around in the brush back on the bank. We continued on up the shore.

With the softness of a star ray the jack-light sought out each little cove and bay. Back in the woods an owl hooted solemnly. A muskrat splashed into the water at the mouth of a little brook, while occasionally a white-throated sparrow, awakened by the light, would burst out in its clear, sweet song. As we neared the main inlet we could hear a great splashing. There must have been six or eight deer in the water. With straining ears and staring eyes I peered into the mist ahead. It was impenetrable. Still the boat worked

"THE DEER PAID NOT THE SLIGHTEST ATTENTION TO THE LIGHT UNTIL SHE CAUGHT SIGHT OF HER OWN SHADOW ON THE BUSHES BEYOND"

forward and the splashing grew louder. I raised the cover of the flash-pan, removed the caps from the lenses and opened the shutters. Then the splashing stopped and the boat stopped, too. For what seemed hours we sat there listening, every nerve tense. The mist hung thick all about us. Close in to the shore it was not as thick. Therein was our only chance. Hundreds of insects floated about, attracted by the light. I could hear them striking against the lantern and began to be afraid the deer would hear them. Then we heard a faint splashing directly ahead. The boat trembled and slipped forward once more. The mist began to thin and soon we could see two great green lights. Still we slip nearer, and soon the form of the deer is discernible. With bated breath I watched its every move. We had worked up to forty feet or so when a buck began blowing, up on the bank at our right.

"Whew! Whew! Whew!" he said. "Run! Run! Run!"

"Shut up, you son-of-a-gun," breathed the Man in the Stern.

I expected to see the doe leave the water at one bound; but no, she looked all around and continued her feeding. Once again we slipped forward. The deer paid not the slightest attention to the light until she caught sight of her shadow on the bushes beyond. The steady bright light might be the sun, or it might be the moon, but a big black shadow was something to be investigated. We slid up to the twenty-foot limit and I pulled the wire.

"Puff!" exploded the flash-gun in a great flare of blinding white light. I was so anxious to see what the deer did that I never thought to close my eyes; consequently, I was blinded for a minute or two. The deer turned and came right alongside the boat, so close I thought she was coming in, while three or four more were splashing around close by.

Then we ran into the shore and reloaded. All the while we were doing it we could hear one splashing around just a little way out, and, when everything was in shape, started for it. It was not inclined to pose for a picture, however, and soon took to the shore, whereupon we paddled up the main inlet.

About half a mile up the stream we sighted another feeding close in to the bank. This proved to be a big buck with a fine set of antlers. He stood just at the edge of the water, and the background was good. Altogether, it made just the kind of a picture I was after, and I was trembling with excitement long before we were within range. The buck was as cool as you please; in fact, he never raised his head from feeding. We slipped up to the fifteen-foot limit and still he fed on. The Man in the Stern whistled softly. The buck raised his head and looked directly at us while I pulled the wire. But I had neglected to close the cover of the flash-pan after reloading and the powder had gathered so much dampness that it flew out in several lumps, some of which fell to the water still flaming. Of course, this made the light last too long, and the resulting negative was a failure.

After reloading we went back down to the lake and around a bay on the left. None were seen, however, and as it was then about midnight, I suggested going home; but the Man in the Stern wanted to try the East Inlet first. So we paddled around the point, scared one on the other side and got another picture at the mouth of the stream. There were two together, and one of them started blowing, which made the other nervous, so I did not try to run as close as I otherwise might. I was well satisfied with the first night's work, so folded up the cameras, took up the extra paddle and helped the Man in

the Stern paddle back to camp. Next day we went up the East Inlet on a fishing trip, and on the way back got a picture of a fox, but the image is so small on the plate as to be very indistinct. Toward night we came back and went out for a few daylight pictures of deer, but we could not get nearer than one hundred feet, which is too far for a short-focus lens.

In the evening I developed the films exposed the night before. The deer came out quite a good picture, but the background was hidden in the fog.

We decided to try South Bay and the lower end of the lake that night. A buck was sighted soon after leaving camp, and we worked up to about thirty feet, but he was nervous and acted as if he might leave at any time, so I fired the flash. It was just a little too late, however, for he had jumped, and the image was stretched nearly across the plate. The deer seemed to be blinded by the flash worse than we were, and it was some little time before he could get up into the bushes on the bank.

We hadn't gone ten rods after reloading before we came suddenly upon another—so suddenly, in fact, that I had only one camera open. We ran up and photographed her at twenty feet and again reloaded. Along down toward the lower end of the lake we could hear a great splashing, and soon the jack began lighting them up. There must have been half a dozen in the bunch. But I had raised the jack above the cameras, to try it, and I think the light from the airholes shone back and the deer could see us, for they left the water and began blowing on the shore. Anyhow, it is much easier to approach one deer than a whole bunch. There are apt to be some in the bunch not in front of the light who will see the boat and give the alarm.

After fixing the jack we paddled down into Little Bay. As we neared the lower end the boat began to slow down, and I thought the Man in the Stern must have either seen or heard something, but I didn't know what.

"Up on the bank," he whispered. "See that eye?"

Over the low bushes a light-green spot could be seen. A deer was standing there and looking directly at us. We waited and waited, but it wouldn't move. Then we backed slowly out into the lake. When the deer came down to the water we again approached. When we were about forty feet away she went back and stood watching us as before. For nearly an hour we played a sort of hide-and-seek game with that deer; in fact, we kept it up until the jack began to dim for want of fresh carbide. We ran in to the shore on the point and refilled it.

". . . A SMALL DOE THAT ALLOWED YOU TO APPROACH TO FIFTEEN FEET, THEN POSED AS NATURALLY AS YOU PLEASE"

Meanwhile one had come into the water just across the neck, so we went over there. This proved to be a small doe that allowed us to approach to fifteen feet, then posed as naturally as you please.

Next we went down into Big Bay and photographed a buck that was intently watching his shadow. When the flash exploded he scarcely moved, so we backed away out into the lake, reloaded and tried it again. He was not there, however, when we got there. It was getting late and I was chilled to the bone, so we went back to camp. Next night was cold and windy. We saw but one deer, and then the flash-gun missed fire.

When my films and plates were all developed I found I had but three good negatives. I had exposed seven. There are about sixty little things to think about when operating a flash-light rig, and perhaps if I explain about my outfit you will better understand a few of the things one might easily forget.

I used two cameras—one using 5 by 7 plates and the other using 3¼ by 4¼ roll films. It is not necessary to use two cameras, but it gives one two chances instead of one. I prefer the roll films or film pack to plates, on account of lightness in weight and portability. A high-grade lens is not necessary or even desirable. A short focus lens gives more depth of focus, which is a great advantage for night work, as it is sometimes hard to correctly estimate the distance. There must be some covering for the lens, otherwise it will gather moisture. For that reason a box camera with the lens back of the shutter would be preferable.

A bicycle lantern makes a good jack, but the side lights have to be covered and the airholes shielded. One burning acetylene gas is the best.

The Spred-lite is a good flash-gun, but it needs some tinkering. I had some ends riveted into the pan, a cover hinged on, and a reflector put on the back.

Instead of a canoe, we used a Rangeley boat, which has much more stability and is paddled almost as easily.

The cameras and outfit were mounted on a swinging table on the bow. The jack was in the middle, the flash-gun on an old fork-handle directly over it, and one camera on either end of the table. One camera was focused at fifteen and the other at twenty feet. When the game was sighted I had to remove the caps from the lenses, open the shutters, draw the slide in the plate-holder, raise the cover of the flash-pan and not make noise enough to alarm a deer that was perhaps within twenty-five feet, and all in pitch darkness. One night I got a slide in wrong side out, and later took a picture over the one of the South Bay buck. On the second night my little camera was set at the smallest stop when it should have been at the largest. But it is all those things that make it a good sport.

For excitement it is far ahead of deer hunting. I have hunted every fall since I was old enough to carry a rifle, but never had so much fun as on those two nights on Second Lake. The guide gets enthusiastic the first time.

Second Connecticut Lake is a splendid place to go for this kind of work. Deer are as plentiful as they could be anywhere, and the camp, "Idlewild," is run by some of the very nicest kind of people. The camp proprietor has done a little flash-lighting himself and is in a position to help a great deal in arranging the outfit on the boat, and he knows whom to choose for a guide for such work.

Try it next summer, about the first of July. You will come home convinced that an enlarged picture is a better trophy than a mounted head, and without that regretful feeling that so often comes after a fine animal has been slain and you have taken a life that you cannot give back.

CONDENSED FOODS FOR CAMPERS' USE

BY CLAUDE P. FORDYCE

IN choosing equipment for any outdoor trip, the weight and bulk must be accommodated to the means of transportation at hand. Thus, for a long hike, with the outfit carried on the back, one must "boil" the necessaries down to the minimum, whereas if one travels by wagon or canoe he can be more indulgent. While food should be concentrated, one must see to it that it is as nourishing, digestible and appetizing as possible.

In making out food lists the average camper limits himself to those articles easily procurable at any grocery. Hence we must rule out evaporated foods, such as eggs, vegetables and soups, which must be ordered especially unless one cares to make them at home himself. One learns many skilful tricks at woodcraft on his trips to the woods, and he may well employ the same ingenuity at home in the following suggestions for the preparation of concentrated foods.

Light-weight outfitting in regards to foods is a question largely of the amount of water we will carry in the foods.

Canned goods are entirely out of place in average camp lists, for they are too heavy to carry. For instance, for one can of peaches weighing 2½ pounds and composed of 88 parts of water can be substituted the dried peaches, which are practically devoid of water and weigh ounces where the canned variety weighs pounds. In regard to concentrated foods, one must constantly keep in mind that they must be easy to digest as well as able to furnish nutritious, appetizing food. Thus cheese, nuts, beans and rice are highly concentrated, but they differ greatly in their digestibility.

Evaporated foods are a boon to the camper. In their preparation the fresh article is deprived of water, and all that one has to do in getting them ready for table use is to add water and cook in the usual way. Their chief value for our purpose is that they save so much in weight. For example, a pound of evaporated potatoes will represent seven pounds of the fresh product; or, again, one pound of granulated dried egg represents four dozen fresh eggs. These are also palatable and nutritious as foods, and permit a variety in the bill of fare. One caution should be observed, and that is that they should be so packed as to exclude moisture, and they will then keep for an indefinite time. Tins with pry-up lids, such as molasses is marketed in, are fine for storing these products, but when out on a hike one can use sacks of closely woven muslin which have been waterproofed by painting with paraffin shavings dissolved in hot gasolene or turpentine and dried.

DEHYDRATED NAVY BEANS

In preparing dried bean meal one uses ordinary navy beans, which are cooked in the usual way and then baked in an oven. By spreading this out in a broad, flat-bottomed pan and continuing the baking or frying process in the oven the moisture is all driven out and only a crumbling crust remains. This is pulverized and packed in tight-fitting tins or in the waterproofed sacks. It is used as a soup or gruel. Common baked beans which come in cans from the corner grocer may be put into the broad bake-pans and thoroughly dried and then packed away.

EVAPORATED EGG POWDER

Probably the most remarkable dried food of all is the evaporated egg powder. Take ½ dozen eggs and beat them up hard with an egg-beater. Take two large, flat-bottomed baking-pans from the kitchen and spread a very thin layer of egg thereon. Now, in drying, should you put this in the oven it will cook, whereas if simply set in the hot sun during the day the moisture is evaporated and a crust of the essential elements retaining all the nourishment and flavor of the egg remains. True, the product is shapeless, so far as the ordinary conception of an egg is concerned, but it is very efficient in cooking where weight and fragility in packing are undesirable.

After the eggs have been in the sun all day, remove indoors and, if dry enough, run through a cleaned coffee mill. This pulverizes the mass. It should next be completely dried out in the sun and packed away in empty molasses tins with friction-top lids. A pound of the evaporated egg equals four dozen fresh eggs, and one tablespoonful of egg powder with two tablespoonfuls of water represents an egg. Besides being a great saving in weight, since one does not have to carry around the water, the evaporated preparation enables us to utilize eggs on the hardest kind of a hike, where if we were forced to use fresh eggs their place in the knapsack would be prohibited because of their fragility unless packed in flour in a can.

JERKED MEATS

In the palmy days of the "late lamented" wild West, the Indian hunters preserved meats by a method called "jerking." The flesh would be cut into strips and laid on light wooden racks in the sun or in the smoke of a camp-fire until dried and hard. This would be packed away and used in the winter much the same as we use the dried beef of the butcher shops to-day. You can preserve meats—steaks, game or fish—in this way or after the improved method of Hornaday. He takes meat cut into strips and works well into the flesh a mixture of salt 1 pound, allspice 1 1/3 tablespoonfuls, and black pepper 1½ tablespoonfuls. Then he hangs it up by a string

in the sun, if the air is dry as in the mountain air; or, if not, in a camp-fire smoke protected from wet. It is eaten uncooked and tastes fine after a month or so of "ripening."

SWEETS IN CAMP

Much is written in camp outfitting concerning a preparation called saccharine, or crystallose, which is a chemical of remarkable sweetness, a small portion of it equaling several hundred times its bulk of sugar. Do not use it except in emergency, for its chemical action delays digestion, and it does not furnish the food value which sugar does. Sugar is the most concentrated food which we have, for it supplies so much heat and energy to the body. In cold weather Nature calls for more heat in the body, and one's appetite for sweets usually increases in proportion. Mind you, sugar in camp does not refer to "piecing" between meals on candies, but to the use of pure sugar in foods when the cook shouts, "The grub's ready!"

SELF-RISING BREAD OR FLAP-JACK FLOUR

To save packing several ingredients separately, it is often recommended to mix the johnny-cake and pan-cake flour at home and carry it in one sack on the trail. Then merely mixing with water to a given consistency will be sufficient to supply a good dough. If dampness is kept from it while packing away it is very good, and the following recipe will be found satisfactory: Take of granulated yellow corn-meal 1 quart, of white wheat flour 1 pint, sugar ½ cup, salt 1 teaspoonful, and baking powder 4 teaspoonfuls. For flap-jacks in camp, take a portion of the above flour mixture and add sufficient water to make a stiff batter, and allow it to stand for a few minutes before dropping it in spoonfuls on the hot, greased fry-pan.

To make johnny-cake or corn bread, use less water than above, so as to make a doughy mass; turn it into the fry-pan, set it before the fire and leave until the top sets, then turn over.

EMERGENCY FOODS

Dried fruits, such as raisins and figs, should always be included in the ration list. They make fine emergency rations to be carried in the knapsack (with a cake of chocolate added), and when they are cooked up into a stew, alone or with rice, one gets an agreeable change in the bill of fare. Rice is one of the most concentrated foods we have, is easy to pack and cook, and has great sustaining powers as an article of diet. It has food elements of such kind that it can be taken in place of potatoes or bulky breakfast foods. Powdered milk is on the market and is more satisfactory purchased than prepared at home. In place of this, the evaporated cream in tins does very well if transportation facilities permit one to take it.

LEMONADE POWDER

Take the clear juice of three lemons and 15 teaspoonfuls of sugar and put into a broad, flat baking-pan. Since so much water is to be evaporated, it is best to dry this out in an oven, but prolonged exposure to a hot sun will do the trick. The lemon powder should be perfectly dry and then pulverized and stored in pry-up tins. For use, add one teaspoonful of lemon powder to a cupful of cold water.

ERBSWURST

One of the best concentrated foods for campers and one admirably suited for use as an emergency ration is erbswurst, a meal preparation used by various European armies. It is hard to get except from grocers of the larger cities or sporting-goods dealers. One can well make it at home as follows: Procure common dried peas and navy beans and desiccate them after cooking as suggested above (see paragraph on "Dehydrated Navy Beans"). Of the pea meal use 1 pound, of the bean meal 1¼ pounds, bacon chopped fine and dried, pulverized onions, of each ⅛ pound. Mix all together and run through the grinder and pack away. It is used to make a thick soup and is very nutritious.

Condensed foods will be found most useful in making knapsack lunch rations. The foregoing suggestions enables one to prepare them at home, and the work will be found an interesting bit of handicraft. Good campers will also have at least a rudimentary knowledge of general camp cookery in order to be prepared to take care of oneself in the emergency bivouac.

TAKING THE BIG CUTTYHUNK STRIPER

By C. B. CHURCH

Winner First Prize Striped Bass, 1914 Contest.

I SUPPOSE you are all waiting to hear just how, when and where I caught that 53-lb. striped bass which won the first prize in the 1914 contest. On Monday morning, the 24th of August last my brother-in-law, Carl F. Kraut, remarked that it looked like a good day to catch another prize winner, as in company we walked over to the south side of Cuttyhunk Island to take a look at the surf which was running quite high. On the way over I noticed the wind kept breezing from the S. E. and the tide had made flood and the sea was making up very fast, so when we got to the south shore it was too rough to fish with any comfort, and I decided that we had better wait till the swell went down some, perhaps by to-morrow the wind would come out N. W. and we could try our luck.

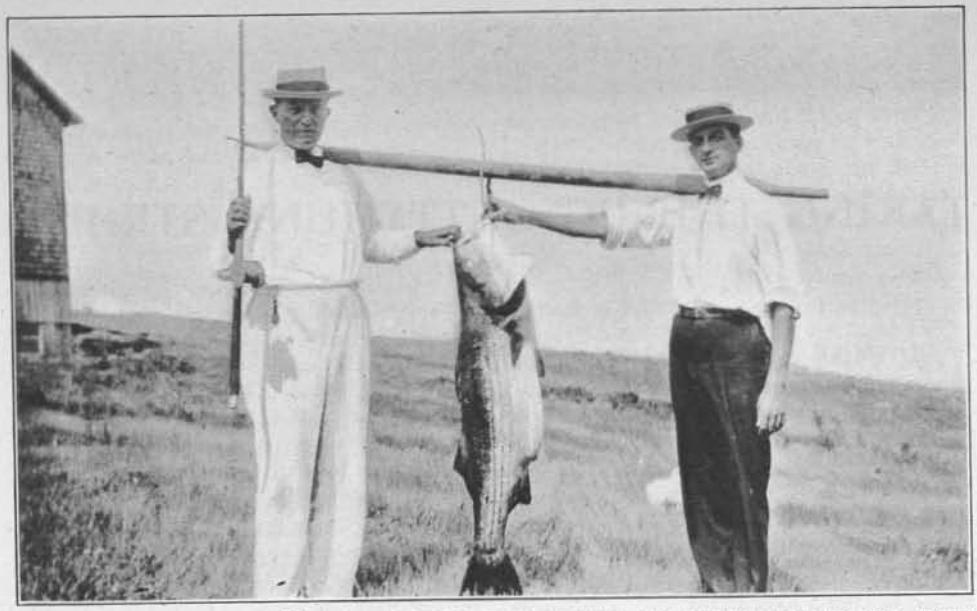
Early Tuesday morning we both anticipated a great day, but the wind had hauled into the S. W. and blew harder than the day before and continued so until Sunday, Aug. 30, when it came out N. W., so we knew that the sea would go down very fast in the Vineyard Sound. Early Monday morning, Aug. 31, we were up and had breakfast and at just about day-break we started for the shore. Getting into my little skiff we rowed out to my 13-foot smack, hoisted my sprit-sail and sailed down to Canipisit, which is the passageway between Nashawena and Cuttyhunk Islands.

Here I took in my sail and Carl took the oars. As he rowed through I noticed that the water was clearing very fast, for I could see bottom quite plainly, and I knew it had been very thick for there had been an awful sea running for a week or more, so I knew the water conditions were good for sea bass. Getting down off the S. W. point of Nashawena I took my little eel car, in which I had about 50 live eels, and, selecting a bright yellow-belly I hooked my 7/0 O'Shaussey hook through his two lips and said to Carl "Here goes!" I cast my eel in towards the shore and then reeled him back to me and so I kept on doing, Carl in the meantime rowing the boat slowly along the shore of Nashawena, going east until we got abreast of "White Rock Pool."

"For heaven sake," exclaimed Carl impatiently, "aren't you going to do something pretty soon? A day like this we ought to get a strike most anywhere!"

The cliffs of Nashawena are quite high and the sun was just getting up when we got down to White Rock pool, so I said, "Well, Carl, it does seem as though we ought to get a strike; the tide has just made ebb and everything looks fine."

Said Carl, "Try another eel; one that is good and lively, perhaps they're fussy to-day," so I put on another eel, a silver-belly about a foot long, and we worked to the eastward into my old favorite "Five Rock Pool," but still no strike. "Row along now and I will troll this eel awhile and rest my legs," I suggested, for it is quite tiresome standing up in a boat when it's rough. He had rowed about 100 yards when just abreast of "Merrill's Rock," I got a strike. I hollered "Hold on!" but he was going so fast I could not let my eel sink naturally, so Mr. Fish would not take hold and we then turned around and went back about 100 yards and started east again. This time you can bet I was standing up casting my eel as I ought to. Just as we got almost abreast of "Merrill's Rock" Carl said "Here's where he was before." "Yes, and here's where he is *now*," said I, "so hold on," for I had felt him strike my eel. I waited some few seconds till the line began to move offshore when I struck, and, sure enough I was fast to a good-sized one, for I strike



MR. C. B. CHURCH AND 53-POUND STRIPED BASS CAUGHT OFF CUTTYHUNK ISLAND, MASS.

a fish very hard and will lift its head to the surface unless quite heavy. Well, he ran off-shore in a series of flurries which took about 50 feet to a flurry, Carl rowing off-shore as fast as possible, for we both knew if we could get him into deep water where he couldn't go to bottom he was our fish. But Mr. Bass knew, too, for he made a turn to the east, going across our bow and in towards the point where it was breaking way off-shore on account of its being so shoal that we couldn't get in there, so I knew it was up to me to turn him or all was over.

"Pull hard on your right oar and work her to the west as fast as you can," said I to Carl, and all the time I was thumbing my reel just as hard as I dared to, for my rod was bent awfully. But I knew it was my only chance, and, to my delight, I saw he was turning into the N. W., going right for shore almost where I hooked him. All of a sudden he whirled and came right for the boat. Well, I had to reel some in order to keep that line taught, but he went by us on the inshore side, going west just as if he was playing with us. I was beginning to feel a little tired, for he was on the jump from the minute the hook pricked him. I saw that he was going off-shore, but quite well to the westward, and so I let him go, Carl rowing about S. W. so as to just keep outside of him. In this run I must have let him have 150 yards of line, for I was a long way from him when he turned south and began to slat his head, whereat I said to Carl, "For Heaven's sake, where is this fish hooked!" I made up my mind I had to hold him hard, so I began to reel in, and so succeeded in shortening my line as fast as might be. When I got within 50 yards he would make a new spurt, but these were of short duration, so finally he came to the surface; but he had no notion of letting us get near him, for when I tried to reel up so that I could lead him along side the boat he would dig for bottom. It must have been the third time I had him on top of the water that Carl got the gaff into him and lifted him into the boat. Well! I was glad he was in, but I wanted to see why it was that he put up such a fight, and no wonder, for he was hooked in the skin of the upper lip, and I don't believe it hurt that fish a particle, but that he only got tired out. We both filled up our pipes and had a smoke, all the time viewing our fish.

Said Carl, "Let's go home; it looks awful black up there," and, sure enough it did look like a squall, so we made sail and home we came, and as we made the stake where I keep my boat I saw quite a few people looking, so we just lifted our prize over from the smack-boat to the skiff. Of course they saw it and in ten minutes we

had a crowd waiting for us to come ashore. Some of them had brought down a wheelbarrow, but nothing would do but that Carl must put a rope through his jaw and I find a pole, and then we strung him up between us and took him triumphantly to the scales with the crowd all following. I think there were more pictures snapped of that bass than of all the bass I ever caught, for everybody wanted a snapshot and everybody had a camera, or at least it seemed so to me.

Well, boys, all I can say is: Come down any time between June 1 and Oct. 1 and if you don't get a winner it's your fault, for take it from me, the fish are *here!* All you have to do is to catch them. I'll be here and will give you all the points I know free, for I have fished here 29 years. After catching my 73-pound bass last year I thought some of you would be down this summer, but if any of you came you did not make yourself known. Of course there were a lot of bass fishermen here, but no one that spoke of the FIELD & STREAM Contest, either of this year or last. There are plenty of hotels here and you can catch bass here almost any time in the season. I hope I have made it plain to all the readers of the FIELD & STREAM so that you can all catch a 53-pound bass just as well as I. Yes,—I want one of those honor certificates.

PRIZE CONTEST CERTIFICATE RECORD

First Prize Stripe Bass, 1914 Contest

CAUGHT BY CHARLES B. CHURCH, GOSNOLD, MASS.

Weight—53 lbs.
Length—52½ inches.
Girth—29½ inches.
Caught—August 31st, 1914.
Where caught—Vineyard Sound, Mass.
Rod—Abbey and Imbrie split bamboo.
Reel—J. B. Crook, N. Y.
Line—Hall, 15-thread.
Lure—Live eel.

THAT BIG-MOUTH BASS ON A FLY

BY LOUIS WACHS

Winner First Prize Large-Mouth Bass, Caught on a Fly, Southern Division, 1914 Contest.

SINCE boyhood, I have loved the fishing game, never missing an opportunity to try for the wiley bass, in lake or stream. A bait caster for years, I have forsaken the short rod and plug, and find the keenest pleasure in whipping the white water of swift streams, or among the lily-pads of the many small lakes that are to be found in the Blue Grass State.

The 8th day of July found myself and fishing chum, Joe Dilger, at one of our favorite haunts, Armstrong's Lake, Kenton County, Kentucky. I have been uniformly lucky at this beautiful place and, as usual, found the big-mouths ready for business, but I wanted a prize winner, and determined to get him, if perseverance would do it.

Late in the afternoon we located an old-timer feeding among the pads, and I made up my mind I would get him, so quietly casting my Montreal fly from the shore, I worked down the lake to the spot I could best reach him from and, casting in the neighborhood of his last rise, I was fortunate to get him on my first try. I struck him hard; instantly he started for deep water, in double quick time; I realized I had the fight of my life to net the big, game fighter; to land him, I must bring him in, over, or through those thick pads. Every fisherman knows this is no child's play; right then and there I wished I was in a boat, as the task would have been much easier.

With his first rush, he went out, clear of the pads; but gradually stopping him, I brought him to the surface, and then such a series of leaps one rarely ever witnesses; three times he jumped clear of the water, and each time I more fully realized my long-hoped-for "big one" was working desperately on the end of my line, trying to his utmost to rid himself of that awful little fly, that seemed so tempting when first discovered.

Disregarding wet feet, I waded in as far

6¾-LB. LARGE-MOUTH BASS, CAUGHT ON A FLY BY MR. LOUIS WACHS

as possible, and waged the war at close quarters, yet with the greatest care, as by this time I had quite an audience of excited fishermen, who were loud and profuse in their advice as to how I should proceed to make sure of my beauty—as I did not lose him, of course. In time I tired him out, working him carefully within reach and, grasping him by the back of his head, I began a marathon to the cottage, surrounded by the clamoring throng.

This is quite a big bass for our section, and I was congratulated by all present, as I triumphantly carried him to the home of Col. Jerry Armstrong, who weighed and measured him, and found him to tip the scales at exactly six and three-quarter pounds.

He is mounted on an oaken placque, along with a few smaller specimens, and is a constant reminder of my lucky afternoon, last July, at one of the prettiest lakes, down in "Old Kentucky."

PRIZE CONTEST CERTIFICATE RECORD

First Prize Large-Mouth Bass, Fly Class, Southern Division, 1914 Contest

CAUGHT BY LOUIS WACHS, COVINGTON, KY.

Weight—6¾ lbs.
Length—24 inches.
Girth—16 inches.
Caught—July 8th, 1914.
Where Caught—Armstrong Lake, Ky.
Rod—6-oz. fly-rod.
Reel—Carlton.
Line—Enamel Salive.
Lure—Montreal fly.

THE RULE OF DAHINDA*

This is the Rule of Dahinda,
  Built for the comfort of men;
Stock your Camp well while the sun shines,
  Lest the to-morrow bring rain.
Pile to its limit the wood-box,
  Fill every lantern with oil,
So shall Dahinda bring blessing—
  Rest—the reward of your toil.

This is the Rule of Dahinda,
  When you are leaving for good,
See that the Camp be replenished
  With candles, oil, matches and wood.
Tea, sugar, coffee, and flour,
  Bacon and beans-in-the-tin,
So shall the Campers who follow
  Find comfort and plenty within.

JEAN DWIGHT FRANKLIN.

Printed on the door of a certain Berkshire Camp.

——* The Bullfrog in Hiawatha

THE FIRST BUCK TO FALL TO A .250 FIRED BY A LADY

THE NEW .250-3000 HIGH POWER

BY EDWARD C. CROSSMAN

AS usual, when I see big game, I had my mind on something else than my work. In this case it was a whale of a buck that had stood silhouetted against the morning light at the top of the ridge. Silhouetted all but his horns, and as I stopped to fumble for the field-glasses he walked out into sight with a set of horns like a young tree, then faded out of sight across the ridge, nearly above my head as I labored up the steep slope.

I growled softly to myself as I walked along the mountain in the early morning light; I said that I'd shoot first, and inquire afterward, the next time I saw a deer as big as that one.

Then I came to life with a jerk. Possibly 80 yards away there was a most amazing red rump sticking out of a patch of manzanita. Just that red rump, outlined against the green of that brush-covered slope. I stopped and squatted to see under a little spruce, and put the glasses on the bush.

A pair of bright eyes and a pair of long ears, and then a set of horns seemed to take up all the field of the little Busch lenses.

The little glasses fell and dangled at the end of their lanyard. A Stewart gold bead flickered in the gray light of the early morning, just where the red of the hide and the green of the manzanita joined. Then a spat of white flame came from the little rifle muzzle, and a bellow woke the silence of the lonely mountain-side.

The red rump disappeared, and in the middle of the bush something red, dimly seen, floundered with crashings. A second shot bellowed almost before the echoes of the first had died away, then the floundering ceased.

No need was there for that second shot;

THE FIRST BUCK MAC KILLED WITH THE .250

had it been with a proved rifle, or in other country than that, the purposeless floundering of the red body would have proved enough, but here a steep canyon wall fell away just below the manzanita patch, and a flounder too much might have sent that buck rolling down hundreds of feet.

Also I didn't know what the little rifle would do.

He lay limply in a bed of pressed-down manzanita, where he had rolled. Red drops marked his trail in his ten-yard roll down the slope. And so fell the first head of big game ever killed with the .250-3000 Savage.

Six more head we killed on that trip with the little terror, four of them going to Wen and me in a couple of exciting minutes, but all that is another story. The .250 had killed this buck most decisively, nor was my second shot even remotely necessary.

Presently my friend came up the slope from the depths of the dark canyon, and we went into the case of the slain buck.

After we had removed his clothes we decided, one of us with glee, the other with amazement, that the fellow shooting the deer had been mixed up as to which way the buck was facing when he was shot. Lo, under the hide, there lay a gaping hole in the shoulder. Quite evidently it was a hole of exit, although queerly enough the hide showed a tiny round hole. We could not find a hole of entrance, but thought we might have overlooked it in the hair.

Also I had a vivid mental image of that buck, standing in the manzanita, with his left side exposed, and I knew blame well that I had hit him where that gaping wound lay.

The second shot, fired while he floundered in his effort to hold his feet, struck far back, ranged back and across, and the next day, eating roast ribs, I bit into the remains of the bullet, some 45 grains, a jagged fragment broken up by nothing more than the passage through the soft part of the body. It had stopped against a rib, but if this had been an ordinary slow-coach .30-30 or similar missile, nearly the whole bullet would have been there.

Of the other bullet, the one that inflicted the first blow, we could find only small bits of copper jacket and lead. The wound channel ran nearly, but not quite, through the body.

It was a puzzler, but later on, after killing more bucks, we came upon the solution.

The big wound *was* where I had hit the buck, I had been right in my mental picture, and the hole was a hole of entrance.

The bullet had broken up so speedily on the shoulder, after passing through the hide, that it had made a huge wound channel from the very first, and we had mistaken it for a hole of exit. This proved true time and again with other deer, and there is no disputing the fact.

As to whether the bullet lacks sufficient penetration for heavy game, the future will have to say. I have killed five bucks with it, and helped cut up two others shot by the lady and friend MacFarland. Each buck hit was knocked out by the one shot landing. Five of the deer were anchored in their tracks, or else knocked

FOUR AT A CRACK WITH A PAIR OF .250 RIFLES

bottom side up. One, hit just grazing across the brisket, ran 50 yards, then fell. One, shot by the lady through the heart, gave three huge bounds, and was dead before we could get to him.

On such game this .250-3000 Savage is certain, breaks up even more quickly, and has the paralyzing shock peculiar to high-speed bullets. I should classify it as being about doubly as severe as the .22 HiPower. In energy it figures about 45 per cent more powerful.

Every deer hit was smashed from side to side, the wound channel reaching clear to the hide on the farther side in spite of the tremendous blowup of the bullet. There is not for a moment any question of the bullet ever wasting its energy going clear through and traveling on, with the softest-fleshed game—yet it does seem to have a most wicked power to smash up a deer's shoulder from side to side. I know that I would far rather hunt deer with this cartridge than with the good old soft-point .30-40 or U. S. Army. The little demon has but 1,740 foot-pounds' energy against 2,000 for the .30-40, but when one punch is applied in the form of a bullet at 3,000 foot-seconds, and the other in the form of a bullet at 2,000 foot-seconds, I'll take the lesser energy but more certain bullet. . . .

All right, I'll get down to brass tacks, and introduce the rifle and cartridge in person! As preamble let me say that I have had four of these rifles in experimental and finished form, that I have been monkeying with this .250 since March, 1914, when the first experimental rifle came out; that I was the first to shoot big game with it—the only one, I believe, with the lady, and my friend MacFarland; and, therefore, after having fired some thousand rounds of this .250 cartridge, I feel that I can sum it up with reasonable accuracy and without having to refer to anybody's catalogue, or anybody's claims.

As a matter of fact, experimental shooting for trajectory and angles of elevation disproved the designer's claims as to the ability of the bullet to hold its velocity; in other words, its ballistic coefficient C, and I calculated the attached figures on the basis of the coefficient shown by the shooting and by calculation of the shape of the point, which is also a matter of considerable certainty.

The manufacturer's engineer stated that the bullet had a coefficient C of .32. This

would mean a bullet that requires an angle of elevation of 30 minutes to reach 800 yards, that had a trajectory over 600 yards of 34.70 inches, and a trajectory over 500 yards of 20 inches.

Careful experimental shooting demonstrated that the angle of elevation for 800 yards is 40; the 600-yard trajectory height is 46 inches, and the 500-yard is about 25 inches.

As this agreed with the coefficient obtained by calculating the shape of the bullet, we found it advisable to discard the maker's figure, and establish a new one of .254, merely because it agrees with the shooting of the rifle, and this is what the sportsman wants.

At that, it is good enough, and the best little game cartridge yet developed by an American factory—which does not take in the 1906, which was not evolved by an American factory, but which is, of course, a better cartridge even than the .250 in power and all-round goodness.

The rifle before the house is merely the "Featherweight" take-down, with 22-inch barrel, and all the feathers scaled off it, as it comes out nearly 7¼ pounds. The bolt and magazine are changed very slightly for the rimless shell, otherwise it is our old friend the Model 1899.

The standard stock has a full pistol grip, checked, and checking on the forestock.

The stock does not fit my peculiar style of human architecture a little bit. It may fit others, but for me it is one-half inch too low in the comb and too short by one-half inch in length.

With, to my mind, a super-abundance of wood in this stock, the rifle comes out over 7 pounds, when it might weigh about 6½ to 6¾ pounds. There is no recoil to mention, less even than the .30-30.

The rifle, with its small barrel, and its trim receiver outline, should carry out the general idea, but in my opinion the stock does not measure up to the standard set by the rest of the rifle. Merely my own opinion, but examine the first one you see, and see if you do not agree.

The butt plate is of checked steel, a good thing, too. The rear sight is the best open sight I have seen, a flat bar with a clean "U" cut in it, the bar movable for *lateral* adjustment by a milled-head screw. It is, of course, only an open sight, but a good open sight, compared with the freaks sometimes sent out on the factory production. Save for substitution of a different front bead, this rifle is ready to take into the field—which is not true of the forky-horn productions we often find alleged to be rear sights on some factory rifles.

The cartridge is rimless, precisely like the 1906 or Springfield cut off at the shoulder and necked down for the .250-calibre bullet. It, of course, fits the Springfield or Mauser bolt head. Suggests an idea to you? Thought so. Yes, the magazine would have to be changed over if the bolt action fiend got to fussing around with it.

The bullet, of .258 diameter, weighs 85 to 87 grains. It is loaded in front of 31 grains of a special cut pyro, precisely as used by the Government, but of finer cut than the latter, to adapt itself to the lighter bullet of the .250. All the freedom from erosive effect and from sensitiveness to temperature extremes that we get from the Government powder we get from this No. 21 used in the .250-3000.

The primer is non-mercuric, and of brass. The shell is fully as good as that used in the Springfield, so far as the first shot goes. I do not know whether it would stand reloading so well or not.

Out of 700 rounds, fired in the last three rifles sent out, there was not one misfire, not one punctured primer, and but one split neck. The sole trouble was in some large-headed shells that got through during the production of this lot in the summer of 1914, and that were productive of trouble in the magazine. This is purely a matter of inspection and shop practice, and the trouble would probably never occur in later runs.

Not always was this true. A rifle and ammunition sent out in March, 1914, gave huge trouble in punctured and leaking primers, split necks, misfires, and even broken cases in the chamber, showing that some of the rifle companies are going to have joy when they start to make .250-3000 actions.

I have never seen better commercial ammunition than this .250-3000 stuff finally put out, and no .22 HiPower food has ever

approached it in virtue, despite the length of time the .22 has been out.

The bullet is jacketed with copper, unplated, and therefore the color of the bright copper itself. About ⅛ inch of the point is the soft lead core. It is ample from the results I got. I tried battering up these points, but so little lead is exposed that no battering I could give it short of actually maltreating the bullet seemed to affect the 200-yard shooting.

A lot of ammunition that I carried to Oregon on a five weeks' hunt, some of it loose in the rucksack from broken boxes, gave 5-inch groups at 200 on the return home.

Metal fouling appeared at no stage of the game, although I used no grease. Ammonia gave color, but it does this with any jacket bullet.

The shells extract easily and the rifle functions very smoothly in every way. I have never liked that magazine, with its clumsy, slow loading, but it works with this rimless shell more easily than ever it did with the old rim cases.

The recoil of the rifle is too slight to so dignify. In the 7¼-lb. rifle, the recoil is 7.2 ft.-lbs. The .30-30 cartridge in the same weight rifle gives 10.2 ft.-lbs. The 1906 in the same weight rifle gives 19 ft.-lbs.

The accuracy of the little rifle is very high—far greater than the .22 HiPower ever gave, and about that given by the Birmingham Small Arms Co. Martini for the .22 HiPower cartridge, having 30-inch barrel and giving 3,000 ft.-secs. through this increase of barrel length.

I got repeated 5-inch groups, while one evening firing at 800, I landed 17 bulls out of the last 18 shots, using the standard 3-foot bull, and muzzle and elbow rest, with a flat-top military front sight and Lyman rear. This is ample for any rifle of game-shooting type, and up in the class of the Springfield.

It is, of course, a delightful little brute to shoot, the recoil being nil—more a jump than a kick—while the "get-there" of the bullet gives you the same uncanny feeling you experience in shooting the .22 HiPower. You feel still more uncanny when you see a big buck go bottom side up when the little rifle jumps in your hands.

Using now the factory figures, for the first time in this story, they state that in testing for long strings, the little rifle put 35 shots at 200 yards into 10½ inches, with 19 shots in 4 7/16 inches. Also, that firing prone at 600 yards, they got 48 ex 50, and then 50, or 10 straight, in the 20-inch bull. The group obtained at 800, they write, measured about 22 inches, counting, due to being not placed centrally, 45 and 48 out of 50. My own shooting, as reported by the target boy, checks up close to this, although I did not see my group, owing to the approaching darkness and the inclination to go home rather than climb up a ridge to the 800-yard target.

They claim, also, 9/16 to ⅝ inch penetration in steel. I got about ⅜ inch, so far as I could tell; but, anyhow, not quite through the ½-inch steel.

Firing on the ¼-inch steel plate, the little rifle jammed through at 300, and nearly through at 400. A wallop sufficient to penetrate ¼ inch of clear steel at 300, soft-point bullet, is quite enough to knock out a buck or a bear unless the ba'r is unusually big and tough.

In wood it penetrates 11¾ ⅞-inch pine boards. They claim that it starts to break up in an inch of tissue, and this I can believe.

The barrels are not straightened—an excellent thing. So, unstraightened, the shooter can depend that when they get hot they won't start to "walk," or change their zero, because of their tendency to alter back to the old shape they had before being hammered. Unstraightened barrels are chosen for the use of American International rifle teams, armed with New Springfield.

Looking down on the dark side of this new shooting-iron departure, the bullet is very light—far too light to be perfect ballistically. Its deadly effect, and its goodness, is in spite of this light weight, not because of it. With the bullet of 120 grains or so, then the cartridge would be all we could ask of the .25, under modern practice.

But this particular rifle action is very short, and, in spite of the use of the rimless case, suggested with the cartridge first sent the rifle makers by Mr. Charles Newton, the thing finally boiled itself down to

about this: Either a bullet of about 85 grains and 3,000 ft.-secs., or else a bullet of around 100 grains and 2,800 ft.-secs., or some happy medium. Limited receiver space forbade more cartridge; increased velocity with even the 100-grain bullet meant more powder and more powder space, and this could not be had with the 100-gr. bullet already using up some of the length available.

So, to the disgust of Mr. Newton, who sent down the first sample of the .250, they decided on the 87-gr. bullet and 3,000 ft.-secs. What they should have done was to have increased their receiver space; but this entailed rebuilding the rifle, and they were not willing to do this. Mr. Newton washed his hands of the cartridge, and Charles Nelson, ballistic man for the rifle makers, finished up the job, evolving the new bullet and getting out the .250-3000 as it stands.

Between the 100 gr. at 2,800 ft.-secs. and the 87 gr. at 3,000, I should say that the 87 gr. is the proper choice, the added 200 ft.-secs. being worth more as a killing power than the added 13 grains of lead.

The point of the bullet is short—much shorter and blunter than the Springfield, but a bit sharper than that of the .22 Hi-Power. It is between three and four diameters in radius of curve, against over six for the Springfield. With the light sectional density of the bullet—1,665 grains, against 2,015 for the Springfield and over 1,700 for the .22 HiPower—the ability of the bullet to overcome air resistance is not very great. It loses more than half its velocity in traveling 500 yards, and has but 55 per cent of it left at 400 yards.

Its ability to overcome air resistance is nearly as great as that of the .30-30, which loses practically half its velocity in going 500 yards; but the deadly effect of the little .250 is dependent not upon weight, but upon velocity, and it is important that it land with a considerable amount of this.

As I have said, on paper it is ballistically a poor cartridge, because of this deficiency in bullet density and its poor-shaped point. At the same time, its work on big game—one of the bucks being hit at nearly 350 yards—demonstrates that over game ranges it will prove far more efficient than any American game cartridge commonly used, barring the 1906.

With all this true, the bugs will go shooting moose with it, and killing moose with it, and swearing that it is the greatest little moose gun that ever came over. Also, some chap in the year 1915 will tangle with a grizzly or Kadiak bear, and land said bear, and swear that it is all the gun a chap needs. Wait and see.

Yet I'd take something bigger; not that the little gun failed me, nor that I believe it will not kill the game mentioned, but I like the comforting surplus of power in the Ross, or the 1906, or the .318.

Some years ago, after trying out on goats the first Savage .22 HiPower, which I christened "The Imp," I stated that the makers had builded better than they knew; that the little gun was a big-game gun, powerful enough for deer and small bear, instead of only for wolves and coyotes. The Catalina goats were the first to fall before its bullets, but since then hundreds—thousands—of big-game animals have crumpled under the tiny 70-gr. bullet. It has been used on animals far too large, according to my notions; but, still, it has killed them.

So once more I put myself on record as the first person to shoot big game with the .250, and say that it will prove one of the most popular game cartridges ever put out in this country, and it can kill everything that walks on four legs in these United States.

Sight elevations are number of points on Lyman and Marble sights necessary to raise to strike the ranges listed. Elevations correct only when rifle is sighted in at actual point blank at 12 yards; and then elevations taken as shown from this zero. Computed for standard Savage .250, 27-inch sight radius, Marble sight having 1/24-inch graduations, Lyman having 1/20 inch.

Last column shows actual move in fractions of an inch; any sight in the position of the tang sight must be moved to strike the mark at the range listed.

(*Table to be found in Sportsman's World, page* 184)

BY THE SAME AUTHOR: COMMON SENSE IN TWENTY BORES, IN JULY ISSUE

HINTS FROM OUR ARMY

BY LIEUT. TOWNSEND WHELEN, U. S. A.

FOREWORD

MANY articles of equipment which are in use in our Regular Army have been found good and efficient and well suited to the use of sportsmen. In fact, in many cases they are far better than the substitutes which the sportsman uses. As a rule these articles are practically unknown outside of the Service, and it seems therefore well worth while to draw attention to some of them.

There are also certain practices which pertain to troops in the field, certain ways of doing things, and certain precautions which have been observed in the Service which are the result of many years' experience outdoors in many climes, and which are more practical or more sensible than the sportsman's methods. These, too, are worth telling about.

To enumerate all these in one article would require many more pages than this entire magazine. But they are worth telling, and the telling must not be so abbreviated as to lack the element of practical information. For the first of these hints I have chosen one which appears to be most important to all sportsmen and, in fact, to all men of this country.

SHOES AND DEFORMED FEET

Practically all men choose their footwear by visiting a shoe store, selecting a type of fashionable shoe, having their foot measured by a clerk who has been trained to invariably fit the shortest and narrowest size bearable—a snug fit. The purchaser then tries on one of the shoes, takes a few steps in it, and, if the shoe does not hurt him, purchases the pair.

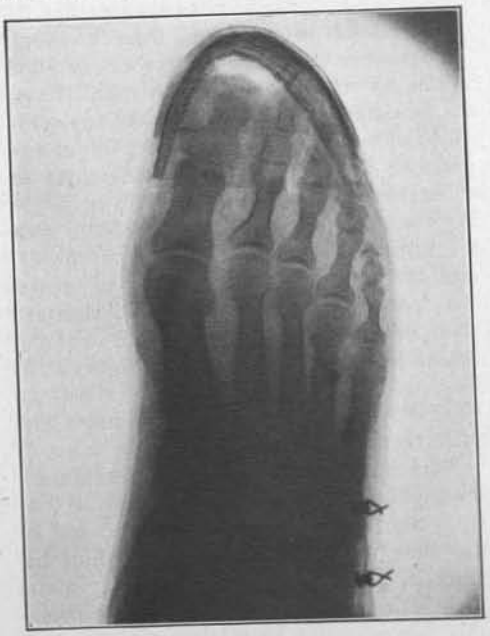
Virtually all men in this country have deformed feet, and practically all children of four years of age and less have anatomically perfect feet. The shoes do the deforming. Not one recruit in a thousand presenting himself for enlistment in the United States Army has undeformed feet. Thousands of young men are rejected annually for service in the Army on account of foot defects. The men who apply for enlistment are young men in their prime. The percentage of deformed feet in older men is naturally much higher than in young men. A deformed foot decreases the marching ability of the individual and increases the likelihood of foot injuries. Deformed feet place a very decided limit on the number of miles of trail the sportsman can hit in one day. They cause one to be a perpetual tenderfoot.

There is *but one* shoe made in America which does not deform the feet. It is rare to find in civil life a shoe that even approaches the normal foot in shape and contour. Few manufacturers make them, as they are not saleable to the general public, whose choice is swayed rather by consideration of fashion than comfort. This applies with equal force to the shoe of the sportsman and the city man. Even the so-called orthopedic lasts do not actually follow normal foot outlines under expansion, but make certain concessions as to narrowness and other matters to popular ideas as to sightliness. Add to this the firm resolve of nearly every purchaser, and certainly every shoe clerk, to crowd the foot into the narrowest and shortest shoe that it can be forced into without actual suffering, and the evil results to the foot are apparent. The result is that at least 999 men in every thousand have had their feet more or less injured by shoes.

As I have stated, the purchaser almost invariably puts one shoe on, takes a few steps across the floor of the shop, and if the shoe does not actually hurt him he takes it. If this purchaser is a city man, with little red blood in his veins, he probably never walks over three miles at a stretch, nor on rough roads. The shoe

PRIVATE H. FOOT DEFORMED WITH BUNION BY CIVILIAN MODEL SHOE

simply deforms his foot. If, however, he should be called upon to walk ten miles over a country road in average shoes, his feet will invariably be seriously abraded.



CAPTAIN C. NORMAL FOOT, BUT DEFORMED BY CIVILIAN SHOES

Reader: if the "shoe pinches your foot," or if you are a rank disbeliever, go out next Sunday in your civilian shoe, the same you wear to the office, and walk ten miles in 3½ hours over a rough country road. You will have had a valuable experience.

Every sportsman should know: (a) That deformed feet cannot march well or far, and are exceedingly prone to abrasions which make continued walking almost torture; (b) that when the full weight of the body falls on a foot it lengthens and widens about half an inch; (c) that long-continued walking or rough roads cause an increased blood supply in the feet, which still further increases their size; (d) that the usual method of fitting shoes to the feet makes no allowance for this great increase in the size of the feet during such walking as usually falls to the daily lot of the sportsman; (e) that in absence of detailed knowledge on the subject, the best rule to follow is that when the clerk advises a No. 8-B, to take a No. 9-E; but even this will not suffice if the shoes are so shaped as to deform the feet.

The probabilities are that every man you see on the street has deformed feet. If the individual points his toes outward in walking, this probability is increased to a certainty. The chief defect in the shape of all shoes made in this country, with the exception of two patterns only, is that the inside of the toe of the shoe curves inward—only slightly in some, much more in others. Even a slight curve inward of this part of the shoe will force the great toe out of the line in which it should repose and work. The "Meyer's Line" in the normal undeformed foot starts from the tip of the great toe and passes as a straight line through—and parallel with—the long axis of the great toe, and, continuing on, emerges from the heel at its central point. The ordinary shoe presses the great toe inward, tends to make the foot centrally pointed, and soon causes the deformity known as Hallux Valgus, which in aggravated form is usually accompanied by a bunion on the joint of the great toe. Other deformities, too numerous to mention here, are caused by the ordinary shoe and improper fitting.

The new United States Army shoe, built on what is known as the "Munson last," is the only perfect shoe made. This is a pretty broad statement, but it is an actual fact. This shoe is the product of the shoe board convened about four years ago to select a new shoe for the Army. The board spent many months at the work. Tests with whole regiments, involving hundreds of miles of marching, were made. The shoe has now had several years' test in service. It has proved that a shoe designed to meet the anatomical construction and physiological action of the foot, when fitted with common sense and in accordance with certain principles adduced from experience with thousands of men, will neither deform nor abrade the feet under continued hard marching over rough roads. And experience has also shown that practically every other shoe, particularly if not properly fitted so as to allow of the natural expansion of the foot, will.

Lasts for the Army shoe, Munson pattern, can be had by any shoemaker. There is no restriction in its manufacture, as it is desired that the shoe become so popular that it can be found in any shoe shop. Already there are a number of firms who make this shoe. Those who are interested —and everyone should be—should read "The Soldier's Foot and the Military Shoe," by Major E. L. Munson, which can be obtained from the U. S. Infantry Association, Union Trust Building, Washington, D. C.

This shoe business is enough to make anyone rise up and swear, and particularly those who have ever had sore feet. In the light of what the Army now knows, sore feet are absolutely inexcusable, and the presence of sore feet in an officer's command is a cause for investigation as to the efficiency of the officer. All of us should determine that never again will we wear deforming shoes or ones which do not allow for the natural enlargement and swelling of the feet in walking.

The following pertinent remarks on this subject are extracts from Major Munson's book:

". . . Seven per cent of conscripts annually drafted for the German army are found unfit for military service by reason of foot defects due to bad shoeing. . . . In 1908 a battalion of U. S. Infantry took a practice march in shoes which the men themselves selected. It marched eight

PRIVATE H. FOOT RETURNING TO NORMAL IN NEW ARMY MODEL SHOE

CAPTAIN C. FOOT WITH PRACTICALLY NO DEFORMITY IN ARMY SHOE

THE U. S. ARMY SHOE, MUNSON LAST

miles, went into camp twenty-four hours, and then returned by the same route to the post. The members of the board examined the feet of all the men of the battalion at the end of the first day and again on their return. On the first day 30 per cent, and on the last day 38 per cent, of the command were found to have severe foot injuries, some requiring hospital treatment. The feet of many others were red and sore from this short march. . . . [Since the adoption of the Munson shoe, and rules for proper fitting, sore feet have practically ceased to exist or occur in the Army.—T. W.] . . . In the great number of soldiers' feet examined by the Shoe Board, practically not one was free from some appreciable deformity or blemish. The condition is not so much produced by the mere fact of wearing shoes, as by the wearing of individual sets of shoes which do not fit. . . . The average soldier may be expected to object more or less vigorously to the size and width of the shoe given him under his first fittings by his company commander. Accustomed as he has been to shoes which constantly bind and compress his feet, he will regard the new shoe given him as too long and too loose. The squeezing of his feet by the shoes he has himself habitually chosen has been so long continued as to appear to him to be natural and necessary. Hence any complaint that the shoes are unduly large should be looked upon with doubt. . . . In the fittings made by the Shoe Board, a large number of protests of this nature were made at the time that the shoes were issued and during the first day or so of the march test. It was noticed that these complaints practically disappeared by the time the march test was half over; and in no single instance during the foot examinations, when the man complained of his shoes being too large, did his feet show any evidence of injury whatever."

WATER STERILIZATION IN THE FIELD

In the tropics practically all water, even that from uncontaminated watersheds, contains the amœba germ. To drink such water sooner or later means that one will contract amœbic dysentery, which is a most serious disease, in a majority of cases proving fatal. In the tropics, therefore, it is an invariable rule that all drinking water must be boiled. Hunters in Africa always have to observe this precaution. Americans are drinkers of cold water. To be confined to hot or lukewarm water is considered a hardship, although as a matter of fact it quenches the thirst better than ice water. Still, to all of us it is a hardship never to have a cool drink in climates where the temperature is always soaring.

No filtering will kill the amœba germ, and no practical filter for the field has yet been designed. Then, too, besides this germ of the tropics, we have the typhoid fever germ, which is liable to be present in any water in temperate climates, and also occasionally the cholera germ. Any of these are liable to prove fatal.

It is possible to sterilize water chemically, but until recently no practical method of doing this in the field had developed. Recently, however, Major W. J Lyster, of the Medical Corps of the Army, has devised a method which is practical alike for the Army and sportsmen in any climate.

Every company, troop and battery in the Regular Army is now being furnished with a water-sterilizing bag of the pattern designed by Major Lyster. It consists of a large waterproof canvas bag holding 30

gallons of water, with a rope handle for hanging up. On the bottom of the bag are five spigots to facilitate the filling of a number of canteens at a time. The bag is filled with water and into the water is dropped the contents of a "Calcium Chloride Tube." In five minutes the water is perfectly sterilized and safe to drink. Not the slightest taste is imparted to the water by this treatment—all germs are simply killed. The sealed glass tube carries 15½ grains of calcium chloride containing 30 per cent of available chlorin, giving in the 30-gallon bag 1 part of chlorin to 490,000 parts of water. Filled tubes cost about a cent apiece.

It is easy to see how this method can be adapted to the needs of the sportsman. All sportsmen in warm climates now carry self-cooling water bags. Water is placed in these and the evaporation of a little exuding through the semi-waterproof canvas serves to cool the contents. To sterilize the water in the bag it is only necessary to have a supply of the small calcium chloride tubes containing sufficient chemicals to sterilize 5 gallons of water, or one-sixth of the above quantity given for the Army bag. It is to be hoped that in the near future some chemical firm will bring out these tubes of the correct size for 5-gallon bags, thus greatly simplifying the supply of sterile water in the sportsman's camp.

BELTS AND AMMUNITION

A fundamental rule, applicable alike to all soldiers and outdoor men, is that there should be no tight clothing or tight belts around the waist. Restriction here impedes the circulation and the proper action of the vital organs, as well as preventing that full, deep breathing so necessary in active exercise. In the new equipment of the Army, all belts are very loose and are suspended from the shoulders. There is, however, little objection to a belt sagging well down on the hip bones, provided the belt is wide and very lightly laden. To carry in this manner a heavy cartridge belt containing perhaps 50 cartridges, a revolver and holster, and a knife and sheath, also perhaps a hand-axe, is very unwise. I have found by actual experience with a belt carrying revolver ammunition, revolver and holster, and field glasses, that free and easy movement, particularly in climbing or on rough ground is greatly restricted, and that after about four hours of marching the restriction of the circulation is very noticeable. After seven hours of marching with such equipment the legs became so stiff as to practically preclude any more walking that day.

Only those things which are liable to be needed in a great hurry, and as few of these as possible, should be carried on the belt. For the hunter these articles should be limited to a pair of light field glasses and not to exceed ten rounds of rifle ammunition. Cartridge belts, or a series of loops to slip on a plain belt, are the usual methods of carrying cartridges. These methods are antiquated. Cartridges in loops are hard to get out in a hurry, are exposed to weather, dirt and injury; and, besides, the modern rifle uses cartridges contained in clips of five rounds.

One of the components of the new infantry equipment of the Regular Army is the "Garrison Belt for Enlisted Men." This is a plain web belt with "U. S." buckle, about 1¾ inches wide. Two woven web-clip pockets slip on this belt, each carrying a clip of five rounds. The flap of each pocket is fastened with a snap fastener, which will stand at least 5,000 openings and closings without becoming loose. These pockets will hold five rounds of ordinary sized rifle ammunition, either loose or in clips. They are noiseless, do not corrode the cartridges, offer perfect protection, and the cartridges can be gotten out much quicker than from loops. By having a soft leather belt about 1¾ inches wide, two of these pockets can be slipped on the belt, pulled around to the right front where they can be quickly gotten at, and form the best method known to me for carrying such ammunition as one is liable to need in a hurry. If it is desired to carry more cartridges than this on a day's hunt, the additional ones, with such articles as skinning knife, hand-axe, camera and lunch had best be carried in a small rucksack on the back, where their weight is not noticed and where they do not impede movement.

POWHATAN, THE $1,200 PRIZE WINNER

PRESENT-DAY FIELD-TRIAL WINNERS

BY A. F. HOCHWALT

(Author of "The Pointer and the Setter in America," "Dogcraft," etc.)

HOW tenaciously we cling to early impressions! The old-time hunter of the sixties will tell you confidentially that "these new-fangled rifles of the present day ain't in it with the smooth-bore" that did such deadly execution for him in the days of his youth, and he believes every word of what he says, too; the field shot of ante-bellum days stoutly avers that the plebeian muzzle-loader of his boyhood brought more birds to bag than he can bring down with the finest modern fowling-piece; the antiquated bird-dog lover affirms with much positiveness that there are no good setters and pointers at the present time, and that the field-trial dogs of to-day are mere racing machines as compared with the wonderful bird-finders of thirty years ago.

Perhaps all these types of sportsmen are correct in their way of thinking; but there is another phase to the question which they do not take into consideration: they forget that present-day conditions are not the same as they were half a century ago, and that our sports and pastimes have undergone an evolution with the spirit of the times which has opened new lines of thought, given us new inventions and advanced ideas to fit this enlightened twentieth century; they do not realize that they are living in the past and are unable to adapt themselves to the present.

The above was called to mind by a letter I had recently from an old-time field-trial handler, who seems to mourn the good old days that are gone and sees little to encourage him in the to-days or the to-morrows that are on our threshold. He was successful as success went in the yesterdays of field trials; but, like many others of the so-called "old guard," he has

THE POINTER CHAMPION JOHN PROCTOR

allowed the procession to pass him by. He has not attended field trials in recent years, but seems to be content to sit back and make his deductions from the rumblings that come to him out of the distance, and, like all such opinions, they must be taken at their face value, which is far from being par value in instances of this kind. He is one of that type who seems to think that the pointers and setters of our times are degenerating; that we no longer have the high-class dogs which performed such wonderful feats in the days of his prime.

As a matter of fact, the bird dog, whether he wears long hair or short, never reached such a high state of development that he enjoys at the present time. The above does not apply to field-trial dogs alone, but to all shooting dogs, for, after all, the field-trial performer is but a shooting dog of the highest class and there is no reason why this should not be so. The case is parallel with that of horses: you can easily bring the speedy trotter down to the work of a first-class roadster, and you can bring the speediest, widest ranging field-trial dog down to high-class gun-dog form, provided both are level-headed; if they have no brains, then it is a waste of time to put money in either for any purpose. On the other hand, you can never make a good one out of a plug horse or a plug dog.

Perhaps this statement of mine that our pointers and setters of to-day are better than they were in the days of early field trials may be challenged by some of the self-styled "old guard," and in that event it can easily be substantiated.

In the latter eighties and early nineties I had the opportunity of seeing such well-known dogs as Bohemian Girl, Orlando, Paul Bo, Chance, Rowdy Rod, Ossian, Rip-Rap and a host of others perform, and since then I have kept in close touch with field-trial affairs. During the past ten years there were few field-trial races run that I did not see, and I have shot over a number of these modern winners, too, incidentally obtaining decidedly more satisfaction than I did over dogs that I used two decades or more ago. Perhaps I have formed a different set of ideals as to what

CHAMPION BENSTONE, A FIELD-TRIAL WINNER WHO ALSO MADE A CRACK GUN DOG

constitutes a high-class shooting dog; but, at all events, I believe the majority of men who have followed the fortunes of the bird dog in this country closely will agree with my assertion that we have better dogs now than we did when field trials were in their infancy.

The specific charge that is made against the field-trial dog of the present is that he has too much speed for his nose and that he has developed heels at the expense of his pointing instinct. That he ranges wider and has more speed, I grant; but the second allegation is entirely wrong. Naturally, the present-day field dog has developed more speed; so has the world in general. We are not content to travel in stage-coaches these days, are we? Neither are we who are progressive content with the slow, pottering dog of the past. The latter did very well thirty years ago, when game was plentiful everywhere and you had only to take up your gun, call your dog and get a bag of birds in that old stubble field just across the road. With birds in such abundance as they were those days there was no occasion for a speedy or wide-ranging dog; the ordinary plug dog answered all requirements. And as we look back to that period and recall old Sancho or Dash, and how they found birds for us, we are prone—at least, many of us are—to overrate their qualities, for there is nothing like seeing things in the dim perspective to give them a softer tone.

Nowadays, with game less plentiful, a dog must necessarily cover more territory to get results, but he will find the birds contained in a given territory much quicker; that is a logical conclusion, at least. It also follows that our depleted fields do not yield as many points, which naturally accounts for the charge that the dogs of the present day do not find birds like the slower ones did. Put this same fast dog down in a section where game is still plentiful and he will make five points to the old "grass prowler's" one. I saw this demonstrated quite frequently last season. I recall one particular instance at Towner, North Dakota, last September, during the running of the All-America Field Trial Club's Championship stake on prairie chickens. The English setter Summit Rex, owned by Col. Gustave Pabst, of Milwaukee, was the dog in question. I had shot over Rex on the preserve of W. H. Elliot, in Mississippi, a year or so before. Birds were plentiful there and the dog, notwithstanding his great range and speed, found them galore, giving us a

THE POINTER COMANCHE FRANK, WHO WON THE NATIONAL CHAMPIONSHIP OF 1914

splendid half day afield. In the All-America Championship, Summit Rex was cast off on a course literally alive with chickens, and if any of these skeptics of the old school could have seen how he found and pointed covey after covey their minds would have been disabused of the idea that the modern field-trial dog has lost his nose. Previous to this, Summit Rex had been going down the circuit, running many birdless races simply because he drew bad courses. Personally, I was fully aware of the fact that he had a good nose, but here in the All-America trials he demonstrated it in public for the first time. At that, he did not win the highest honors in the stake, for one competitor ran even better than he; but Rex was declared the runner-up, which is equivalent to second place.

The winner of that race was the big, slashing pointer, John Proctor, owned by A. L. Curtis, of Belton, Texas. This dog drew a less "birdy" course than Summit Rex; therefore he was obliged to work harder for his points. It is this searching ability that a dog possesses which counts for so much in these days of game scarcity. The way that pointer went out and negotiated his country was a revelation, and I am sure there never was a pointer or a setter of the old days which could have surpassed the heat that won for him the title of "Chicken Champion of 1913." John Proctor was well known on the field-trial circuit previous to his championship win last September, for two years previous to this event, when he was competing in the derbys (a stake for dogs under two years of age), he won many places. The year following, as a three-year-old—which is generally the transition period in a dog's life—he made a rather poor showing and did not win a place during that entire season. When he ran in the All-America Championship it was his first appearance for the season of 1913 and '14, and a very auspicious beginning it was, indeed. But John Proctor did not rest on these early laurels. Coming South, he won second in the Georgia All-age stake, first in the Continental Subscription, and first in the All-age, first in the National All-age, second in the United States Club's All-age, and two firsts in the Texas trials. Every one of these races, too, was won on his range, speed and excellent bird-finding ability.

As for style, few pointers or setters, past or present, surpass him in this respect, for on point he is a veritable statue. We read of sculptors and artists endeavoring to get movement in their works; when John Proctor assumes that cataleptic con-

dition due to the scent of game he stands like Hermes—the embodiment of suspended motion. He would make an excellent artist's model at these times if the said artist or sculptor wished to portray animals. As proof that field-trial dogs can be utilized in a practical way, the owner of John Proctor used him as a shooting companion after his successful season.

A dog which has had the attention of the field-trial public for quite a few years past and has always been a favorite of mine is the setter Powhatan. Hobart Ames, of Boston, bought him for a shooting companion only a few years ago, and paid $1,200 for him. Previous to his change of ownership Powhatan had won probably half a dozen places in field trials, and subsequently to that he has been used regularly on the preserve of Mr. Ames in Tennessee to shoot over; but between times the dog is run in field trials. As an indication of his versatility, it might be mentioned that Powhatan has been runner-up in the National Championship three times and has won several very important places in the large trials, all of which transpired since Powhatan has been relegated to the shooting-dog ranks. As a bird dog there are few which are his equal. He is very wise on the ways of quail, and the manner in which he finds birds for the large parties which shoot over him every winter down on that excellent preserve of Mr. Ames' near La Grange, Tennessee, makes him the prime favorite among the forty or fifty setters and pointers which are owned by the well-known Boston field shot.

The pointer champion, Comanche Frank, who came into the limelight several years ago, and who distinguished himself particularly last January by winning the National Championship, has as yet not been used as a shooting dog, but he is a remarkably wide and fast ranger, and, since he has had considerable experience on game, he is proving that he also has an excellent nose to back up his heels.

The English setter Benstone is another example of a high-class field-trial winner being bought and used for a shooting companion. When this dog made his appearance as a puppy, several years ago, his speed and range were so great that the field-trial public—and many of the knowing ones—freely stated that he was too fast for his nose. As a matter of fact he did go through his derby year without winning a place, which naturally substantiated the claims of the slow-dog exponents. Some dogs, however, do not come to the use of their noses as early as others. Occasionally it is the individual, at other times it is a family trait. In the case of Benstone it was, I think, a family trait, for many other dogs of his breeding showed the same characteristic. As Benstone acquired age and experience, however, he developed into a bird dog of the first magnitude, not only winning a number of places in the regulation short heats, but also in two-hour races, including a championship in Manitoba, on prairie chickens. Benstone was purchased by John Dunn, one of the owners of the Baltimore Baseball Club, and his owner is a man who loves a dog for the sport he obtains out of him by using him afield. I have never personally shot over Benstone, but I know from his owner that the latter gets a lot of pleasure out of this dog when he takes him afield each winter.

Previous to the running of the All-America Amateur Championship stake, down at Rogers Springs, Tennessee, last January, the setter, Smith's Lady Gladstone, was an unknown quantity in the realm of field-trial dogs, but in that stake she distinguished herself to the extent of winning that very important two-hour race and the title of "Amateur Champion of America," and thus had the spotlight turned in her direction. Smith's Lady Gladstone is the property of G. W. Smith, of Lamar, Miss., who is himself a professional handler; according to the rules of the All-America Amateur Championship, a dog must be handled by an amateur in order to be eligible. Louis N. Hilsendegen, of Detroit, saw this setter in the United States trials, which were run just previous to the amateur events, and he made up his mind to win with her; so he accordingly made arrangements with Smith. The next week found amateur and dog over at Rogers Springs. Now, it is some feat to handle a high-class dog the first time, and this is particularly so when you handle in public; but Louis Hilsendegen

SMITH'S LADY GLADSTONE, WHO WON THE TITLE OF AMATEUR CHAMPION OF AMERICA

essayed the task. He had quite a little trouble in the first heat, for Lady ranged far and wide, and, as he was a stranger to her, he was not always able to keep her on the course. The judges were prompt to recognize in Smith's Lady Gladstone a very high-class setter, however, and she was taken into the second series. She began by promptly finding birds, and for two long hours on a warm morning the latter part of January—and sometimes it gets very warm in Tennessee at that season—she sustained her excellent work, finding bevies where birds had never been seen before, and all of her points were of the flashy variety which invariably brings down the galleries. Despite her handicap of having a stranger blow the whistle over her, she won the stake in a class by herself. And what became of Smith's Lady Gladstone after that race? my readers may ask. Well, she was shot over regularly by friends of her owner who came down to Mississippi for their winter vacations. She was just as wide and fast as any of the high-class dogs to which group she belongs, and she was never too fast for her nose.

Security, a pointer which won, in all, seven places in field trials and distinguished himself by winning the All-age stake at Towner, N. D., last September, in a field of twenty-eight starters, is another great bird dog. It was on his excellent nose that he won his many victories, too. When it comes to an adept on prairie chickens there are few dogs that are his superior; but he is none the less a good quail dog, also, and his owner has brought down many a bird over his points and hopes to have that pleasure frequently unless something happens to the dog in the meantime.

The dogs above alluded to are all seasoned veterans which have had abundant experience, and that proves another theory which has been disputed, viz., that the high-class setter or pointer teeming with nervous energy is susceptible to thorough breaking. There are any number of young dogs coming on which are just as likely to prove to be all that those described have developed into. Among the young dogs seen in the derbys last year, none was more conspicuous than the setter Willie J., which Trainer E. D. Garr, of Kentucky, brought to the front. Willie J. was sent to Garr to be developed for a shooting dog,

provided he had enough quality. It did not require many tests afield for the astute Kentucky handler to ascertain that Willie J. had qualities of a high order, and he suggested that he be allowed to run the dog in the derbys. His owner was lukewarm on the subject, but Garr persisted and brought this setter before the public the first time in the Independent trials in Illinois. The dog had had little experience up to that time, consequently he did not make much of an impression upon the judges there; but a few weeks later, in the derby of the Southern trials, down at Letohatchie, Alabama, Willie J. easily won the stake, and the week following carried away first honors in the National Derby still more handily. His next appearance was in the United States trials, where he again won the derby. All of these wins were made not because Willie J. had heels alone, but because he could go fast and wide and find birds, too, for this setter which Ed. Garr brought out among the puppies last year was the real bird dog of his age.

No, the setter and the pointer are not deteriorating; on the contrary, we are nearing the millennium in the breeding of the bird dog.

THE ROD FOR BAIT CASTING

By A. E. SWOYER

IN the selection of a casting rod, the angler must choose between two sets of conditions: those of *action* vs. *durability,* and of *action* vs. *convenience.* Then, in turn, action, durability and convenience depend upon both material and form, so that a proper choice is not so easy as might at first appear. Thus, while one material might be selected as ideal by a caster desiring the perfection of rod action, irrespective of the life of the rod under conditions of continual fishing, another man might well prefer tackle built for catch-as-catch-can work, without consideration of feel and balance. In the same manner the choice of a one-piece rod might be made because of its casting power, regardless of the awkwardness of carrying it about, or a multi-joint trunk-rod might appeal because of its portability —with no thought given to its efficiency as a casting implement.

Considering, first, material as related to rod action only, split bamboo, solid wood (bethabera, greenheart and lancewood, ranking in that order), or steel would be your choice; to the man looking for a rod requiring little care and capable of enduring the roughest of usage, the steel rod might well be first. Split bamboo rods are the lightest of this trio, weighing approximately one ounce for every foot of length; they have the quickest and most resilient action, as well as the best balance and feel. In short, a good rod of this type is a joy to the experienced caster. Split bamboo is to be preferred for tournament work, as well as by the careful angler for open-water fishing, where it is not often necessary to check up a big bass suddenly. A rod of this material is not designed for pulling in a fish by main strength; it cannot be stored safely in any old place, and occasional re-winding and varnishing are necessary to keep it in good condition.

The solid wood rods have the advantages of the split bamboo as well as its defects, but both in a lesser degree; that is, they are not so good in action, but better for rough-and-ready fishing—about 20 per cent greater in weight, but require a trifle less care, except that the wood itself is subject to dry rot if inadvertently stored in a damp place. For average use, where it is desired to obtain some delicacy in handling coupled with the ability to withstand occasional rough usage, a good solid wood rod, costing, say, twelve or fifteen dollars, would be the choice of many anglers.

In referring to steel rods, it is necessary to say that reference is made alone to those of the best grade; these makes are as far separated from the steel casting

rods selling for a dollar or so as if they were made of entirely different materials. The best makes at least approach the wooden rods in action, whereas the others have no claim to consideration except on the score of possible durability. A good steel rod is extremely strong and durable, and requires but little care; if it is kept free from rust there is practically no limit to its life. While it is inferior to the wooden rods in action, it is built to stand the racket; for casting heavy lures or for the use of the chap who wants to get his fish into the boat in the least possible time, it is their superior. All this, of course, at a considerable sacrifice in delicacy and with an increase in weight approximating 50 per cent. In this last connection it is well to note a special light-weight rod gotten out by some of the tackle firms. Its weight is about that of the standard bamboo, and presumably its action is better than the heavier rods.

Action and strength also depend upon the form of the rod, with the factor of convenience in carrying almost directly opposed to them. That is, from the standpoint of perfection in casting, the one-piece rod, or that composed of tip and detachable butt, is undoubtedly in first place; rods of this type are always made of wood, generally split bamboo. To understand the superiority of the single-piece rod, it is only necessary to remember that every ferrule impairs the action and weakens the rod itself; this rule does not apply so forcibly to steel rods as to those of wood.

The chief objection to the one-piece rod is that it is practically impossible to carry it upon actual fishing expeditions, unless you use an ingenious case for doing so, described in a previous number of Field and Stream. One-piece rods in split bamboo cost from six dollars up to thirty dollars; the lower price is for a strictly one-piece rod, a first-class article, with agate or steel guides. Indeed, nickeled steel ones, set on a slant with a loop tip, are preferred by many anglers, because of greater accuracy and less tendency to backlash. A better selection is of bamboo with all agate guides, and sells for ten dollars. A little higher in price is a rod with a detachable butt type made from the design of a world's champion tournament caster, made of good stuff, and retails at fifteen dollars; metal case for same, four dollars.

Next to the one-piece rod in casting force, strength and general pleasure of handling is the new long-tip, short-butt design recently placed on the market. This rod is, to my mind, well nigh perfection, and is a medium-priced split bamboo which I would not hesitate to compare, grade for grade, with rods costing twice as much. The rod is easily portable, and the joint is placed so far down towards the butt that any effect that it may have either as interfering with the rod's action or as weakening it is unnoticeable. From the grade retailing at one dollar and fifty cents to the one priced at fifteen dollars, they are a delight to handle.

Third in the list I would place those two-piece rods with the joint in the middle, and rank the rods with three joints as tied with them for the position. Lest this appear to clash with the former statement that "the fewer the ferrules the greater the strength and the better the casting qualities of the rod," it must be noted that the single joint placed in the middle comes pretty close to the point of greatest strain, which is thus concentrated upon the ferrule. With the three-joint rod this point occurs in solid wood, the remaining strain being divided between the two ferrules. This construction has the advantage of easy carriage, gained at the expense above noted.

Fourth may be placed the multi-joint wooden rods, the trunk rods, and those for the coat pocket. If you must have a rod which you can carry in your grip, these will serve the purpose. Classed with these are the so-called convertible rods, made with a reversible handle and extra joints, so that they may be used for every need of fresh-water angling. Such rods are jacks of all trades, and cannot on the face of it possess the finest qualifications for all. For the traveler and the hunter who can pack but one rod they answer nicely, with the above limitations; they are a good thing to have in the kit, but are not recommended for steady use.

So far the rods described have been those made of split bamboo or of solid

wood, since steel rods are almost invariably made with a number of joints; as previously noted, the extra ferrules make but little difference in the strength or the casting force of these. In the wooden rods the ferrules are stiff pieces of metal encasing the material of the rod; they are necessarily unbending, and strain applied to them is transferred to the wood at either end of the ferrules. With the steel rods, the ferrules may be considered actually as parts of the rod, and although the extra thickness of metal may stiffen the rod somewhat, yet they are not entirely robbed of elasticity and will bear their share of the strain.

Still another form of rod, but one of necessity found only in those of metal, is the telescopic type—this must not be confused with the old model of telescopic rods in which the line was led out through the hollow center, as that model is not adapted to bait-casting. The principle of these rods is based upon the joints simply sliding into each other and may be locked at any point, thus providing a rod of any length between the maximum and the minimum, and practically of any stiffness desired; in one make this is effected by an ingenious arrangement of the guides, in another by a spring-catch inside of each section. The butts of many makes of steel rods are reversible to place the reel seat either above the hand or below it. In action, balance and strength rods of this type are superior to the combination rods; they are also especially handy to carry through brush, in that the rod may be telescoped without either taking off the reel or removing the line from the guides —a pull to again extend the rod, and it is ready for further use.

There are other points to be considered in the selection of a rod besides those of material and form; weight, length, stiffness and trim each demand the attention of the discriminating angler. It would, of course, be foolish to expect the light four-ounce trout rod to handle a muscallonge, and it is but little more unreasonable to expect a five-ounce casting rod to do stump pulling in a snaggy pond or to drag a rushing five-pound bass away from the lilies—that is, as a regular thing.

Of course, the fishermen who expect the same rod to do the work of delicate casting and of a steam crane are few—but the number who fail to consider the weight and length of rod in connection with the style of lure and the size of line to be used are many. Thus, while an extremely light rod may be used to cast a heavy lure it will yield neither great distance nor accuracy, and its use for such a purpose will in a short time give it a permanent set, and destroy its resiliency and action by a breaking down of the fibers under the strain. On the other hand, such a rod used with a casting spoon, bucktail or other light lure—provided the line is of proper size—will give maximum results.

The other side of the question concerns the use of a short, stiff rod in connection with the light lures just mentioned; such a course will not result in any injury to the rod, but it implies strong-arm work of the hardest kind on the part of the angler in order to get any distance whatever—and, because to get this distance you are bound to try to coax a little more speed out of your reel, backlashes will multiply, your accuracy will fall off and you will decrease both your pleasure and your efficiency fully fifty per cent.

In short, to cast the heaviest of "plugs" a rod not much longer than five feet and of corresponding stiffness will be about right; for those of the average weight five feet is standard, and for casting spoons and spinners the especially light models about five feet six inches to six feet in length will do well. These weights and lengths are for rods of split bamboo; rods of solid wood or of steel are stiffer and weigh more in equivalent lengths, so that for them six inches should be added to the lengths given above.

The matter of rod mounting is to some extent a matter of individual preference, but the combined experience of casters and of manufacturers has tended to standardize these. Thus, agate is conceded to be the best material for guides—not so much because the friction produced by them is greatly less than with those of German silver, but because, being harder, they will retain their smoothness for a longer time. Thus, the agate guides increase the wear of both rod and line, and

are fitted on the best rods; the greatest wear comes upon the first guide and the tip, so that if these two points are guarded by agates the other guide (too many guides spoil the casting) may be of German silver—at a considerable saving in cost. The narrow ringed agate guides are to be preferred as offering less surface to the line, and an offset tip should be used.

The shape of the rod grip should suit the user; my own preference is for those flared at the end, as with them it is unnecessary to clench the rod so tightly to prevent it from slipping when making a cast. The best material is either the solid cork, or cork rings driven onto the shaft and clamped by the rod mountings; there is little to choose between them, and either one will wear as long as the rod and give a good grip at all times. The polished wood grips used on some cheaper rods are extremely slippery when wet, although durable enough; corrugated celluloid is better in this respect although harder on the hands, and veneered cork is to be avoided at all hazards.

In form, grips may be had either single or double; the latter, that is, the short cork grip, in front of the reel seat, adds but little to the weight of the rod, and is a help in avoiding cramp in the fingers that hold the rod when reeling in—a small point, but worth bearing in mind. The finger hook, once so popular, is going out of style and the best rods either no longer have them, or are removable. A locking reel band is also usually furnished; in this connection, too, one should consider a patent attachment which I have illustrated —this is a handy and light little device made of solid German silver which may be instantly clamped about rod and reel, thus locking them firmly; it also serves as a hand rest to ease the strain on the fingers holding the rod while reeling in, and supplies a finger grip for those who desire it. It retails for one dollar.

The best rod mountings are those of German silver; those of brass, nickel-plated and with a buffed finish are more often seen and are not noticeably inferior. The best ferrules are welted and serrated —the latter feature does not make so sharp a joint between rod and ferrule, and therefore detracts less from the action of the rod; incidentally, some of the strain is thereby taken off the rod, so that the serrated ferrules do not weaken the rod so much.

Having selected your rod with its material in accordance with the use that you expect to make of it and with weight, length and mountings to suit your especial needs, there remains to be considered the care that you must bestow upon it in order that it may retain its efficiency; in this matter the rods of split bamboo probably require the most attention and will most amply repay it. Such rods must not be stored in a dry, hot atmosphere, or the ferrules will become loose; the rod must not be put into its case wet and tied up tightly, or it will warp and take a permanent set; and it must be rewound and revarnished occasionally. The latter process is not at all difficult to do at home, and but little difficulty will be experienced if care is used to warm both the rod and the varnish before the latter is applied. As an additional safeguard, do the varnishing in a warm room, and, if possible, suspend the rod to dry from the ceiling in a place where it will be free from dust and not close to a wall that is either cold or damp. These directions apply as well to rods of solid wood, although with them possibly neither so much care in winding or in varnishing is necessary, inasmuch as there are no glue joints to be protected.

Steel rods are popularly supposed to be indestructible; nevertheless, they respond to good treatment. Rust is the chief enemy of such rods, a good preventative being to wipe them off after use with a rag dipped in any good non-rust oil. Many coats of enamel are baked on good rods of this type, and afford adequate protection; but if this enamel wears off or is scratched through, attention should be given to the matter at once; you can easily fix things by means of bicycle enamel or even Japalac.

Having outlined the principal points which differentiate the best rods from those inferior to them, it remains only to summarize this information by listing the classes of rods in a definite manner and in their order of merit. Naturally, such a selection represents but the choice of the present writer, although it is only fair to

say that the selection has been approved by others of experience.

First Selection.—For the caster who appreciates fine tackle and knows how to use it. Specification No. 1: Long-tip, short-butt construction, with extra tip; all agate guides and tips, German silver mounted, canvas cover, and waterproofed leatherette carrying case. Price, about $15. May be had in other weights and lengths at same price.

Second Choice.—Specification No. 2: Rods of steel or of solid wood (less delicate in action and heavier than the bamboo, but having greater backbone and requiring less care). Solid wood rods, all agate mountings, are priced in best quality as follows: Noibwood, $17.00; bethabera or greenheart, $15.00; lancewood, $7.50. Best grade of steel rod, with all agate guides and top, double grip of ringed cork and detachable finger pull, $12.00. Other steel rods in cheaper mountings sell at proportionate prices. Equivalent grades of the new-model telescopic rods—to the paragraphs on which you are referred—cost from $6.50 to $9. Lightest steel rod weighs five ounces, with agate top and first guide, and sells for $7.50.

Third Selection.—This has to do with the man wanting maximum quality at a medium price; it concerns quality of finish and mountings only. Choice between steel and bamboo must be governed by reasons given in preceding paragraphs. Specification No. 3:

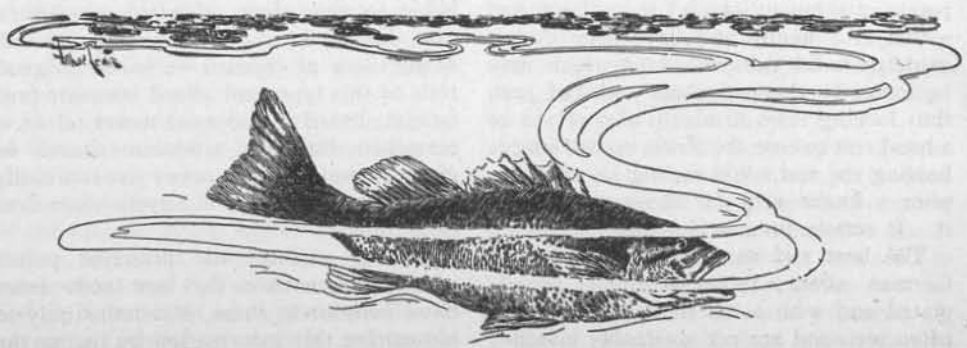
(a) Standard heavy or light weight, depending on class of fishing; long-tip, short-butt construction, with extra tip, ringed-cork double grip, and part agate mountings. Price, about $6.00.

(b) Best steel, with German silver guides and agate tip, single ringed-cork grip and finger pull, $7.00.

(c) Telescopic in part, agate mountings, $6.00.

Miscellaneous.—Coat-pocket and other rods made in many joints are not recommended except on the score of portability. If this style is necessary, you will do well to select one of steel, since it is not weakened by the numerous ferrules. Steel rod with special double grip of ringed cork, finger hook and part agate trim—in lengths, 4½, 5, and 5½ feet—$10.00. Unguaranteed rods of this type in steel are sold for from $3.00 up; in wood, $4.00 up. See any tackle catalogue.

Combination rods fitted with reversible grips and extra joints, by means of which they may be adapted to any style of fishing, necessarily do not have the action or the balance of rods designed for a single purpose. Such rods in wood or steel may be found listed in a wide range, both as to price and quality, in any tackle catalogue. The best type is not, to my mind, found in the jointed combinations, but in the telescopic combination rods. These are listed in several models, of which a typical rod is 8½ feet long when fully extended, telescopes to 2½ feet, has reversible grip, and, with agate guides and top, sells for $7.75. As it may be used at any length between the two extremes, it forms a good general-purpose rig.



CAN YOU BEAT THE DECKED CANVAS SAILING CANOE FOR SALT WATER BAY CRUISING? MANY OF OUR READERS LIKED THE EDITOR'S PRACTICAL "HOW-TO" ARTICLE ON BUILDING SUCH A CANOE AND IN OUR JULY ISSUE YOU WILL FIND A YARN BY ONE OF THESE ENTHUSIASTS ON THE CRUISES TAKEN IN THE ONE *HE* BUILT.

DESERT GOLD

A NOVEL, BY ZANE GREY

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VI

THE YAQUI

TOWARD evening of a lowering December day, some fifty miles west of Forlorn River, a horseman rode along an old, dimly defined trail. From time to time he halted to study the lay of the land ahead. It was bare, somber, ridgy desert, covered with dun-colored greasewood and stunted prickly pear. Distant mountains hemmed in the valley, raising black spurs above the round lomas and the square-walled mesas.

This lonely horseman bestrode a steed of magnificent build, perfectly white except for a dark bar of color running down the noble head from ears to nose. Sweat-caked dust stained the long flanks. The horse had been running. His mane and tail were laced and knotted to keep their length out of reach of grasping cactus and brush. Clumsy homemade leather shields covered the front of his forelegs and ran up well to his wide breast. What otherwise would have been muscular symmetry of limb was marred by many a scar and many a lump. He was lean, gaunt, worn, a huge machine of muscle and bone, beautiful only in head and mane, a weight-carrier, a horse strong and fierce like the desert that had bred him.

The rider fitted the horse as he fitted the saddle. He was a young man of exceedingly powerful physique, wide-shouldered, long-armed, big-legged. His lean face, where it was not red, blistered and peeling, was the hue of bronze. He had a dark eye, a falcon gaze, roving and keen. His jaw was prominent and set, mastiff-like; his lips were stern. It was youth with its softness not yet quite burned and hardened away that kept the whole cast of his face from being ruthless.

This young man was Dick Gale, but not the listless traveler, nor the lounging wanderer who, two months before, had by chance dropped into Casita. Friendship, chivalry, love—the deep-seated, unplumbed emotions that had been stirred into being with all their incalculable power for spiritual change, had rendered different the meaning of life. In the moment almost of their realization the desert had claimed Gale, and had drawn him into its crucible. The desert had multiplied weeks into years. Heat, thirst, hunger, loneliness, toil, fear, ferocity, pain—he knew them all. He had felt them all—the white sun, with its glazed, coalescing, lurid fire; the caked split lips and rasping, dry-puffed tongue; the sickening ache in the pit of his stomach; the insupportable silence, the empty space, the utter desolation, the contempt of life; the weary ride, the long climb, the plod in sand, the search, search, search for water; the sleepless night alone, the watch and wait, the dread of ambush, the swift flight; the fierce pursuit of men wild as Bedouins and as fleet, the willingness to deal sudden death, the pain of poison thorn, the stinging tear of lead through flesh; and that strange paradox of the burning desert, the cold at night, the piercing icy wind, the dew that pene-

trated to the marrow, the numbing desert cold of the dawn.

Beyond any dream of adventure he had ever had, beyond any wild story he had ever read, had been his experience with those hard-riding rangers, Ladd and Lash. Then he had traveled alone the hundred miles of desert between Forlorn River and the Sonoyta Oasis. Ladd's prophecy of trouble on the border had been mild compared to what had become the actuality. With rebel occupancy of the garrison at Casita, outlaws, bandits, raiders in rioting bands had spread westward. Like troops of Arabs, magnificently mounted, they were here, there, everywhere along the line; and if murder and worse were confined to the Mexican side, pillage and raiding were perpetrated across the border. Many a dark-skinned raider bestrode one of Belding's fast horses; and, indeed, all except his selected white thoroughbreds had been stolen. So the job of the rangers had become more than a patrolling of the boundary line to keep Japanese and Chinese from being smuggled into the United States. Belding kept close at home to protect his family and to hold his property. But the three rangers, in fulfilling their duty, had incurred risks on their own side of the line, had been outraged, robbed, pursued, and injured on the other. Some of the few waterholes that had to be reached lay far across the border in Mexican territory. Horses had to drink, men had to drink; and Ladd and Lash were not of the stripe that forsook a task because of danger. Slow to wrath at first, as became men who had long lived peaceful lives, they had at length revolted; and desert vultures could have told a gruesome story. Made a comrade and ally of these bordermen, Dick Gale had leaped at the desert action and strife with an intensity of heart and a rare physical ability which accounted for the remarkable fact that he had not yet fallen by the way.

On this December afternoon the three rangers, as often, were separated. Lash was far to the westward of Sonoyta, somewhere along Camino del Diablo, that terrible Devil's Road, where many desert wayfarers had perished. Ladd had long been overdue in a prearranged meeting with Gale. The fact that Ladd had not shown up miles west of the Papago Well was significant.

The sun had hidden behind clouds all the latter part of that day, an unusual occurrence for that region even in winter. And now, as the light waned suddenly, telling of the hidden sunset, a cold, dry, penetrating wind sprang up and blew in Gale's face. Not at first, but by imperceptible degrees it chilled him. He untied his coat from the back of the saddle and put it on. A few cold drops of rain touched his cheek.

He halted upon the edge of a low escarpment. Below him the narrowing valley showed bare, black ribs of rock, long, winding gray lines leading down to a central floor where mesquite and cactus dotted the barren landscape. Moving objects, diminutive in size, gray and white in color, arrested Gale's roving sight. They bobbed away for a while, then stopped. They were antelope, and they had seen his horse. When he rode on they started once more, keeping to the lowest level. These wary animals were often desert watchdogs for the ranger; they would betray the proximity of horse or man. With them trotting forward, he made better time for some miles across the valley. When he lost them, caution once more slowed his advance.

The valley sloped up and narrowed, to head into an arroyo where grass began to show gray between the clumps of mesquite. Shadows formed ahead in the hollows, along the walls of the arroyo, under the trees, and they seemed to creep, to rise, to float into a veil cast by the background of bold mountains, at last to claim the skyline. Night was not close at hand; but it was there in the east, lifting upward, drooping downward, encroaching upon the west.

Gale dismounted to lead his horse, to go forward more slowly. He had ridden sixty miles since morning, and he was tired, and a not entirely healed wound in his hip made one leg drag a little. A mile up the arroyo, near its head, lay the Papago Well. The need of water for his horse entailed a risk that otherwise he could have avoided. The well was on Mexican soil. Gale distinguished a faint

light flickering through the thin, sharp foliage. Campers were at the well, and, whoever they were, no doubt they had prevented Ladd from meeting Gale. Ladd had gone back to the next waterhole, or maybe he was hiding in an arroyo to the eastward, awaiting developments.

Gale turned his horse, not without urge of iron arm and persuasive speech, for the desert steed scented water, and plodded back to the edge of the arroyo, where in a secluded circle of mesquite he halted. The horse snorted his relief at the removal of the heavy, burdened saddle and accoutrements and, sagging, bent his knees, lowered himself with slow heave, and plunged down to roll in the sand. Gale poured the contents of his larger canteen into his hat and held it to the horse's nose.

"Drink, Sol," he said.

It was but a drop for a thirsty horse. However, Blanco Sol rubbed a wet muzzle against Gale's hand in appreciation. Gale loved the horse, and was loved in return. They had saved each other's lives, and had spent long days and nights of desert solitude together. Sol had known other masters, though none so kind as this new one; but it was certain that Gale had never before known a horse.

The spot of secluded ground was covered with bunches of galleta grass upon which Sol began to graze. Gale made a long halter of his lariat to keep the horse from wandering in search of water. Next Gale kicked off the cumbersome chaparejos, with their flapping, tripping folds of leather over his feet, and drawing a long rifle from its saddle sheath, he slipped away into the shadows.

The coyotes were howling, not here and there, but in concerted volume at the head of the arroyo. To Dick this was no more reassuring than had been the flickering light of the campfire. The wild desert dogs, with their characteristic insolent curiosity, were baying men round a campfire. Gale proceeded slowly, halting every few steps, careful not to brush against the stiff greasewood. In the soft sand his steps made no sound. The twinkling light vanished occasionally, like a Jack-o'-lantern, and when it did show it seemed still a long way off. Gale was not seeking trouble or inviting danger. Water was the thing that drove him. He must see who these campers were, and then decide how to give Blanco Sol a drink.

A rabbit rustled out of brush at Gale's feet and thumped away over the sand. The wind pattered among dry, broken stalks of dead *ocatilla*. Every little sound brought Gale to a listening pause. The gloom was thickening fast into darkness. It would be a night without starlight. He moved forward up the pale, zigzag aisles between the mesquite. He lost the light for a while, but the coyotes' chorus told him he was approaching the campfire. Presently the light danced through the black branches, and soon grew into a flame. Stooping low, with bushy mesquites between him and the fire, Gale advanced. The coyotes were in full cry. Gale heard the tramping, stamping thumps of many hoofs. The sound worried him. Foot by foot he advanced, and finally began to crawl. The wind favored his position, so that neither coyotes nor horses could scent him. The nearer he approached the head of the arroyo, where the well was located, the thicker grew the desert vegetation. At length a dead *palo verde*, with huge, black clumps of its parasite mistletoe thick in the branches, marked a distance from the well that Gale considered close enough. Noiselessly he crawled here and there until he secured a favorable position, and then rose to peep from behind his covert.

He saw a bright fire, not a cooking-fire, for that would have been low and red, but a crackling blaze of mesquite. Three men were in sight, all close to the burning sticks. They were Mexicans and of the coarse type of raiders, rebels, bandits that Gale had expected to see. One stood up, his back to the fire; another sat with shoulders enveloped in a blanket, and the third lounged in the sand, his feet almost in the blaze. They had cast off belts and weapons. A glint of steel caught Gale's eye. Three short, shiny carbines leaned against a rock. A little to the left, within the circle of light, stood a square house made of adobe bricks. Several untrimmed poles upheld a roof of brush, which was partly fallen in. This house was a Papago Indian habitation, and a month be-

fore had been occupied by a family that had been murdered or driven off by a roving band of outlaws. A rude corral showed dimly in the edge of firelight, and from a black mass within came the snort and stamp and whinny of horses.

Gale took in the scene in one quick glance, then sank down at the foot of the mesquite. He had naturally expected to see more men. But the situation was by no means new. This was one, or part of one, of the raider bands harrying the border. They were stealing horses, or driving a herd already stolen. These bands were more numerous than the waterholes of northern Sonora; they never camped long at one place; like Arabs, they roamed over the desert all the way from Nogales to Casita. If Gale had gone peaceably up to this campfire there were a hundred chances that the raiders would kill and rob him to one chance that they might not. If they recognized him as a ranger comrade of Ladd and Lash, if they got a glimpse of Blanco Sol, then Gale would have no chance.

These Mexicans had evidently been at the well some time. Their horses being in the corral meant that grazing had been done by day. Gale revolved questions in mind. Had this trio of outlaws run across Ladd? It was not likely, for in that event they might not have been so comfortable and carefree in camp. Were they waiting for more members of their gang? That was very probable. With Gale, however, the most important consideration was how to get his horse to water. Sol must have a drink if it cost a fight. There was stern reason for Gale to hurry eastward along the trail. He thought it best to go back to where he had left his horse and not make any decisive move until daylight.

With the same noiseless care he had exercised in the advance, Gale retreated until it was safe for him to rise and walk on down the arroyo. He found Blanco Sol contentedly grazing. A heavy dew was falling, and, as the grass was abundant, the horse did not show the usual restlessness and distress after a dry and exhausting day. Gale carried his saddle, blankets, and bags into the lee of a little greasewood-covered mound, from around which the wind had cut the soil; and here, in the wash, he risked building a small fire. By this time the wind was piercingly cold. Gale's hands were numb, and he moved them to and fro in the little blaze. Then he made coffee in a cup, cooked some slices of bacon on the end of a stick, and took a couple of hard biscuits from a saddlebag. Of these his meal consisted. After that he removed the halter from Blanco Sol, intending to leave him free to graze for a while.

Then Gale returned to his little fire, replenished it with short sticks of dead greasewood and mesquite, and, wrapping his blanket round his shoulders, he sat down to warm himself and to wait till it was time to bring in the horse and tie him up.

The fire was inadequate, and Gale was cold and wet with dew. Hunger and thirst were with him. His bones ached, and there was a dull, deep-seated pain throbbing in his unhealed wound. For days unshaven, his beard seemed like a million pricking needles in his blistered skin. He was so tired that, once having settled himself, he did not move hand or foot. The night was dark, dismal, cloudy, windy, growing colder. A moan of wind in the mesquites was occasionally pierced by the high-keyed yelp of a coyote. There were lulls in which the silence seemed to be a thing of stifling, encroaching substance—a thing that enveloped, buried the desert.

Judged by the great average of ideals and conventional standards of life, Dick Gale was a starved, lonely, suffering, miserable wretch. But in his case the judgment would have hit only externals, would have missed the vital inner truth. For Gale was happy with a kind of strange, wild glory in the privations, the pains, the perils, and the silence and solitude to be endured on this desert land. In the past he had not been of any use to himself or others; and he had never known what it meant to be hungry, cold, tired, lonely. He had never worked for anything. The needs of the day had been provided, and to-morrow and the future looked the same. Danger, peril, toil—these had been words read in books and papers.

In the present he used his hands, his senses, and his wits. He had a duty to a man who relied on his services. He was a comrade, a friend, a valuable ally to riding, fighting rangers. He had spent endless days, weeks that seemed years, alone with a horse, trailing over, climbing over, hunting over a desert that was harsh and hostile by nature, and perilous by the invasion of savage men. That horse had become human to Gale. And with him Gale had learned to know the simple needs of existence. Like dead scales the superficialities, the falsities, the habits that had once meant all of life dropped off, useless things in this stern waste of rock and sand.

Gale's happiness, as far as it concerned the toil and strife, was perhaps a grim and stoical one. But love abided with him, and it had engendered and fostered other undeveloped traits—romance and a feeling for beauty, and a keen observation of nature. He felt pain, but he was never miserable. He felt the solitude, but he was never lonely.

As he rode across the desert, even though keen eyes searched for the moving black dots, the rising puffs of white dust that were warnings, he saw Nell's face in every cloud. The clean-cut mesas took on the shape of her straight profile, with its strong chin and lips, its fine nose and forehead. There was always a glint of gold or touch of red or graceful line or gleam of blue to remind him of her. Then at night her face shone warm and glowing, flushing and paling, in the campfire.

To-night, as usual, with a keen ear to the wind, Gale listened as one on guard; yet he watched the changing phantom of a sweet face in the embers, and as he watched he thought. The desert developed and multiplied thought. A thousand sweet faces glowed in the pink and white ashes of his campfire, the faces of other sweethearts or wives that had gleamed for other men. Gale was happy in his thought of Nell, for something, when he was alone this way in the wilderness, told him she was near him, she thought of him, she loved him. But there were many men alone on that vast southwestern plateau, and when they saw dream faces, surely for some it was a fleeting flash, a gleam soon gone, like the hope and the name and the happiness that had been and was now no more. Often Gale thought of those hundreds of desert travelers, prospectors, wanderers who had ventured down the Camino del Diablo, never to be heard of again. Belding had told him of that most terrible of all desert trails—a trail of shifting sands. Lash had traversed it, and brought back stories of buried waterholes, of bones bleaching white in the sun, of gold mines as lost as were the prospectors who had sought them, of the merciless Yaqui and his hatred for the Mexican. Gale thought of this trail and the men who had camped along it. For many there had been one night, one campfire that had been the last. This idea seemed to creep in out of the darkness, the loneliness, the silence, and to find a place in Gale's mind, so that it had strange fascination for him. He knew now as he had never dreamed before how men drifted into the desert, leaving behind graves, wrecked homes, ruined lives, lost wives and sweethearts. And for every wanderer every campfire had a phantom face. Gale measured the agony of these men at their last campfire by the joy and promise he traced in the ruddy heart of his own.

By and by Gale remembered what he was waiting for; and, getting up, he took the halter and went out to find Blanco Sol. It was pitch-dark now, and Gale could not see a rod ahead. He felt his way, and presently as he rounded a mesquite he saw Sol's white shape outlined against the blackness. The horse jumped and wheeled, ready to run. It was doubtful if anyone unknown to Sol could ever have caught him. Gale's low call reassured him, and he went on grazing. Gale haltered him in the likeliest patch of grass and returned to his camp. There he lifted his saddle into a protected spot under a low wall of the mound, and, laying one blanket on the sand, he covered himself with the other and stretched himself for the night.

Here he was out of reach of the wind; but he heard its melancholy moan in the mesquite. There was no other sound. The coyotes had ceased their hungry cries. Gale dropped to sleep, and slept soundly

during the first half of the night; and after that he seemed always to be partially awake, aware of increasing cold and damp. The dark mantle turned gray, and then daylight came quickly. The morning was clear and nipping cold. He threw off the wet blanket and got up cramped and half frozen. A little brisk action was all that was necessary to warm his blood and loosen his muscles, and then he was fresh, tingling, eager. The sun rose in a golden blaze, and the descending valley took on wondrous changing hues. Then he fetched up Blanco Sol, saddled him, and tied him to the thickest clump of mesquite.

"Sol, we'll have a drink pretty soon," he said, patting the splendid neck.

Gale meant it. He would not eat till he had watered his horse. Sol had gone nearly forty-eight hours without a sufficient drink, and that was long enough, even for a desert-bred beast. No three raiders could keep Gale away from that well. Taking his rifle in hand, he faced up the arroyo. Rabbits were frisking in the short willows, and some were so tame he could have kicked them. Gale walked swiftly for a goodly part of the distance, and then, when he saw blue smoke curling up above the trees, he proceeded slowly, with alert eye and ear. From the lay of the land and position of trees seen by daylight, he found an easier and safer course than the one he had taken in the dark. And by careful work he was enabled to get closer to the well, and somewhat above it.

The Mexicans were leisurely cooking their morning meal. They had two fires, one for warmth, the other to cook over. Gale had an idea these raiders were familiar to him. It seemed all these border hawks resembled one another—being mostly small of build, wiry, angular, swarthy-faced, and black-haired, and they wore the oddly styled Mexican clothes and sombreros. A slow wrath stirred in Gale as he watched the trio. They showed not the slightest indication of breaking camp. One fellow, evidently the leader, packed a gun at his hip, the only weapon in sight. Gale noted this with speculative eyes. The raiders had slept inside the little adobe house, and had not yet brought out the carbines. Next Gale swept his gaze to the corral, in which he saw more than a dozen horses, some of them fine animals. They were stamping and whistling, fighting one another, and pawing the dirt. This was entirely natural behavior for desert horses penned in when they wanted to get at water and grass.

But suddenly one of the blacks, a big, shaggy fellow, shot up his ears and pointed his nose over the top of the fence. He whistled. Other horses looked in the same direction, and their ears went up, and they, too, whistled. Gale knew that other horses or men, very likely both, were approaching. But the Mexicans did not hear the alarm, or show any interest if they did. These mescal-drinking raiders were not scouts. It was notorious how easily they could be surprised or ambushed. Mostly they were ignorant, thick-skulled peons. They were wonderful horsemen, and could go long without food or water; but they had no other accomplishments or attributes calculated to help them in desert warfare. They had poor sight, poor hearing, poor judgment, and when excited they resembled crazed ants running wild.

Gale saw two Indians on burros come riding up the other side of the knoll upon which the adobe house stood; and apparently they were not aware of the presence of the Mexicans, for they came on up the path. One Indian was a Papago. The other, striking in appearance for other reasons than that he seemed to be about to fall from the burro, Gale took to be a Yaqui. These travelers had absolutely nothing for an outfit except a blanket and a half-empty bag. They came over the knoll and down the path toward the well, turned a corner of the house, and completely surprised the raiders.

Gale heard a short, shrill cry, strangely high and wild, and this came from one of the Indians. It was answered by hoarse shouts. Then the leader of the trio, the Mexican who packed a gun, pulled it and fired point-blank. He missed once—and again. At the third shot the Papago shrieked and tumbled off his burro to fall in a heap. The other Indian swayed, as if the taking away of the support lent by

his comrade had brought collapse, and with the fourth shot he, too, slipped to the ground.

The reports had frightened the horses in the corral; and the vicious black, crowding the rickety bars, broke them down. He came plunging out. Two of the Mexicans ran for him, catching him by nose and mane, and the third ran to block the gateway.

Then, with a splendid vaulting mount, the Mexican with the gun leaped to the back of the horse. He yelled and waved his gun, and urged the black forward. The manner of all three was savagely jocose. They were having sport. The two on the ground began to dance and jabber. The mounted leader shot again, and then stuck like a leech upon the bare back of the rearing black. It was a vain show of horsemanship. Then this Mexican, by some strange grip, brought the horse down, plunging almost upon the body of the Indian that had fallen last.

Gale stood aghast with his rifle clutched tight. He could not divine the intention of the raider, but suspected something strikingly brutal. The horse answered to that cruel, guiding hand, yet he swerved and bucked. He reared aloft, pawing the air, wildly snorting, then he plunged down upon the prostrate Indian. Even in the act the intelligent animal tried to keep from striking the body with his hoofs. But that was not possible. A yell, hideous in its passion, signaled this feat of horsemanship.

The Mexican made no move to trample the body of the Papago. He turned the black to ride again over the other Indian. That brought into Gale's mind what he had heard of a Mexican's hate for a Yaqui. It recalled the barbarism of these savage peons, and the war of extermination being waged upon the Yaquis.

Suddenly Gale was horrified to see the Yaqui writhe and raise a feeble hand. The action brought renewed and more savage cries from the Mexicans. The horse snorted in terror.

Gale could bear no more. He took a quick shot at the rider. He missed the moving figure, but hit the horse. There was a bound, a horrid scream, a mighty plunge, then the horse went down, giving the Mexican a stunning fall. Both beast and man lay still.

Gale rushed from his cover to intercept the other raiders before they could reach the house and their weapons. One fellow yelled and ran wildly in the opposite direction; the other stood stricken in his tracks. Gale ran in close and picked up the gun that had dropped from the raider leader's hand. This fellow had begun to stir, to come out of his stunned condition. Then the frightened horses burst the corral bars, and in a thundering, dust-mantled stream fled up the arroyo.

The fallen raider sat up, mumbling to his saints in one breath, cursing in his next. The other Mexican kept his stand, intimidated by the threatening rifle.

"Go, Greasers! Run!" yelled Gale. Then he yelled it in Spanish. At the point of his rifle he drove the two raiders out of the camp. His next move was to run into the house and fetch out the carbines. With a heavy stone he dismantled each weapon. That done, he set out on a run for his horse. He took the shortest cut down the arroyo, with no concern as to whether or not he would encounter the raiders. Probably such a meeting would be all the worse for them, and they knew it. Blanco Sol heard him coming and whistled a welcome, and when Gale ran up the horse was snorting war. Mounting, Gale rode rapidly back to the scene of the action, and his first thought, when he arrived at the well, was to give Sol a drink and to fill his canteens.

Then Gale led his horse up out of the waterhole, and decided before remounting to have a look at the Indians. The Papago had been shot through the heart, but the Yaqui was still alive. Moreover, he was conscious and staring up at Gale with great, strange, somber eyes, black as volcanic slag.

"Gringo good—no kill," he said, in husky whisper.

His speech was not affirmative so much as questioning.

"Yaqui, you're done for," said Gale, and his words were positive. He was simply speaking aloud his mind.

"Yaqui—no hurt—much," replied the Indian, and then he spoke a strange word —repeated it again and again.

An instinct of Gale's, or perhaps some suggestion in the husky, thick whisper or dark face, told Gale to reach for his canteen. He lifted the Indian and gave him a drink, and if ever in all his life he saw gratitude in human eyes he saw it then. Then he examined the injured Yaqui, not forgetting for an instant to send wary, fugitive glances on all sides. Gale was not to be surprised. The Indian had three wounds—a bullet hole in his shoulder, a crushed arm, and a badly lacerated leg. What had been the matter with him before being set upon by the raider Gale could not be certain.

The ranger thought rapidly. This Yaqui would live unless left there to die or be murdered by the Mexicans when they found courage to sneak back to the well. It never occurred to Gale to abandon the poor fellow. That was where his old training, the higher order of human feeling, made impossible the following of any elemental instinct of self-preservation. All the same, Gale knew he multiplied his perils a hundredfold by burdening himself with a crippled Indian. Swiftly he set to work, and with rifle ever under his hand, and shifting glance spared from his task, he bound up the Yaqui's wounds. At the same time he kept keen watch.

The Indians' burros and the horses of the raiders were all out of sight. Time was too valuable for Gale to use any in what might be vain search. Therefore, he lifted the Yaqui upon Sol's broad shoulders and climbed into the saddle. At a word Sol dropped his head and started eastward up the trail, walking swiftly, without resentment for his double burden.

Far ahead, between two huge mesas where the trail mounted over a pass, a long line of dust clouds marked the position of the horses that had escaped from the corral. Those that had been stolen would travel straight and true for home, and perhaps would lead the others with them. The raiders were left on the desert without guns or mounts.

Blanco Sol walked or jog-trotted six miles to the hour. At that gait fifty miles would not have wet or turned a hair of his dazzling white coat. Gale, bearing in mind the ever-present possibility of encountering more raiders and of being pursued, saved the strength of the horse. Once out of sight of Papago Well, Gale dismounted and walked beside the horse, steadying with one firm hand the helpless, dangling Yaqui.

The sun cleared the eastern ramparts, and the coolness of morning fled as if before a magic foe. The whole desert changed. The grays wore bright; the mesquites glistened; the cactus took the silver hue of frost, and the rocks gleamed gold and red. Then, as the heat increased, a wind rushed up out of the valley behind Gale, and the hotter the sun blazed down the swifter rushed the wind. The wonderful transparent haze of distance lost its bluish hue for one with tinge of yellow. Flying sand made the peaks dimly outlined.

Gale kept pace with his horse. He bore the twinge of pain that darted through his injured hip at every stride. His eye roved over the wide, smoky prospect seeking the landmarks he knew. When the wild and bold spurs of No Name Mountains loomed through a rent in flying clouds of sand he felt nearer home. Another hour brought him abreast of a dark, straight shaft rising clear from a beetling escarpment. This was a monument marking the international boundary line. When he had passed it he had his own country under foot. In the heat of midday he halted in the shade of a rock, and, lifting the Yaqui down, gave him a drink. Then, after a long, sweeping survey of the surrounding desert, he removed Sol's saddle and let him roll, and took for himself a welcome rest and a bite to eat.

The Yaqui was tenacious of life. He was still holding his own. For the first time Gale really looked at the Indian to study him. He had a large head nobly cast, and a face that resembled a shrunken mask. It seemed chiseled in the dark-red, volcanic lava of his Sonora wilderness. The Indian's eyes were always black and mystic, but this Yaqui's encompassed all the tragic desolation of the desert. They were fixed on Gale, moved only when he moved. The Indian was short and broad, and his body showed unusual muscular development, although he seemed greatly emaciated from starvation or illness.

Gale resumed his homeward journey. When he got through the pass he faced a great depression, as rough as if millions of gigantic spikes had been driven by the hammer of Thor into a seamed and cracked floor. This was Altar Valley. It was a chaos of arroyos, cañons, rocks, and ridges all mantled with cactus, and at its eastern end it claimed the dry bed of Forlorn River and water when there was any.

With a wounded, helpless man across the saddle, this stretch of thorny and contorted desert was practically impassable. Yet Gale headed into it unflinchingly. He would carry the Yaqui as far as possible, or until death made the burden no longer a duty. Blanco Sol plodded on over the dragging sand, up and down the steep, loose banks of washes, out on the rocks, and through the rows of white-toothed *choyas*.

The sun sloped westward, bending fiercer heat in vengeful, parting reluctance. The wind slackened. The dust settled. And the bold, forbidding front of No Name Mountains changed to red and gold. Gale held grimly by the side of the tireless, implacable horse, holding the Yaqui on the saddle, taking the brunt of the merciless thorns. In the end it became heartrending toil. His heavy chaps dragged him down; but he dared not go on without them, for, thick and stiff as they were, the terrible, steel-bayoneted spikes of the *choyas* pierced through to sting his legs.

To the last mile Gale held to Blanco Sol's gait and kept ever-watchful gaze ahead on the trail. Then, with the low, flat houses of Forlorn River shining red in the sunset, Gale flagged and rapidly weakened. The Yaqui slipped out of the saddle and dropped limp in the sand. Gale could not mount his horse. He clutched Sol's long tail and twisted his hand in it and staggered on.

Blanco Sol whistled a piercing blast. He scented cool water and sweet alfalfa hay. Twinkling lights ahead meant rest. The melancholy desert twilight rapidly succeeded the sunset. It accentuated the forlorn loneliness of the gray, winding river of sand and its grayer shores. Night shadows trooped down from the black and looming mountains.

(To be continued)

THE CLUB'S PROPOSED AMENDMENT TO THE NEW YORK STATE CONSTITUTION

THE amendment, which reads as follows: "The foregoing prohibitions shall not prevent the State from cutting or removing or selling dead or fallen timber or trees, nor from constructing roads and fire trails. The Legislature may authorize the sale of lands outside the limits of the Adirondack Park and of the Catskill Park as such Parks are now established by law, excepting State lands in and adjacent to Lake George and lands contiguous to the Adirondack Park.

"The proceeds of such sales of lands and all other net revenue from the Forest Preserve shall be set apart in a separate fund and shall be used for the purchase of lands by the State in the Adirondack and Catskill Parks, for the reforestation of lands owned by the State in said Parks and for such other purposes for the benefit of the forest in said Parks as the Commissioner shall approve.

"The forests of the State shall be under the care and management of a Commissioner. He shall be appointed by the Governor for a term of ten years and may be removed by the Governor upon reasons publicly stated and after a public hearing if the Commissioner demand one. The

Commissioner shall appoint all officers and employees engaged in the service of the Commission from eligible lists resulting from open competitive examination conducted by the Civil Service Commission.

"Action may be brought in the Supreme Court by any citizen to enforce the provisions of these sections and to prevent their violation." This amendment was submitted to the Board of Governors, approved and placed in the hands of Mr. Andrew P. McKean, delegate to the Constitutional Convention, who will present it before the convention at the proper time.

THE ELK SITUATION IN MONTANA

The committee in charge reported an interview with Mr. Ransom, of Montana, with reference to the drift-fences complained of in a recent letter to FIELD AND STREAM, and were informed that there were no drift-fences in Montana so high that they would endanger the elk or antelope in any way whatsoever. The committee recommended that matter of the elk in the Sun River Reservation should be dropped.

AGAINST REOPENING SPRING SHOOTING

The sub-committee reported a bill, now being introduced in the New Jersey Legislature, extending the season on wild fowl from October 1st to March 1st. A very strong protest was ordered forwarded to the New Jersey Legislature by the chairman, and a request to Governor Fielder to veto the bill in case it passes the houses of the Legislature.

Further reports were handed in by this committee concerning the agitation among the sportsmen of Kansas and Missouri in favor of a third or passing zone. In the mind of the chairman the important question was "How late in the winter months is it safe to allow the shooting of migratory waterfowl if there be a third or passing zone?" More light on the biological facts of the case would be advisable, and the committee was instructed to confer with the American Game Protective Association committee and others who have started gathering exact information as to the question of the mating periods of the birds. With such information in hand the committee would be in position to take a stand in regard to the establishment of a third zone.

SHOOTING WILDFOWL BRED IN CAPTIVITY

A bill was reported pending in Albany which provides in substance that wildfowl bred in captivity may be killed by shooting during the open season under rules promulgated by the Conservation Commission. The chairman reported conferences with Dr. Field and Dr. Hornaday in regard to marking ducks bred in captivity to safeguard against the killing of wild stock under the proposed law. He advised the committee that it would be safe to endorse the bill, since it was to apply only during the open season and the birds would be properly marked. His motion was approved by vote of the committee.

INTERNATIONAL AND NATIONAL PARKS

The sub-committee reported that in considering the enlargement of Waterton Lakes Park it had been in considerable correspondence with the Dominion authorities concerning the question of game protection and the prohibition of the sale of game, and that the sentiment across the line is at present considerably more favorable than at any previous time.

INCREASE OF GAME DUE TO FEDERAL LAW

Reports were handed in from various parts of the country showing the beneficial effect on the game supply in recent years of the no-sale-of-game and Federal Migratory bird laws.

Where to Go

EDITOR'S NOTE—The aim of this department is to present to our readers reports on desirable localities for fishing and hunting. We have a great many of these coming in by every mail. Only the best have been culled out—not places where the luck was "fair," but where it was *"splendid."* It is impossible for us, in the limited space available, to print names of hotels, guides, etc., but write us direct for information concerning any locality whatever you are interested in, and be sure to mention in writing, later, to the hotel or guide, that your information came from our "Where to Go" department. This is important, as you will then get the best treatment, both as to terms and accommodation.

We are publishing in this issue a list of the very best muscallonge, pike and pickerel fishing localities in the United States and Canada, together with the best camps to make your headquarters and the best ways of getting there. Here also the camper and canoeist will find the necessary "dope" on good camping grounds near the best fishing waters, where he can spend his vacation far away from the touch of civilization. If you are looking for a good canoe trip, this is the place to find it. In our July number will be found real information on salt water fishing both on the Atlantic and Pacific coasts.

Don't start on your fishing trip until you find out all about our 1915 Prize Fishing Contest. In this number, in the Sportsman's World, will be found the full list of prizes, together with the necessary affidavit, and the rules governing the Contest. Better tear out these five pages and tuck them away in your wallet for reference when you catch that whopper.

NEW ENGLAND STATES

Norcross, Penobscot County, Maine, reached by Bangor & Aroostook Railroad. Accommodations at Buckhorn Camp, Jasper Haines, proprietor, for $1.50 a day. Guides $3 a day. Pickerel, perch and trout fishing in Jo Mary Lakes, Church, Henderson, Rabbit and other ponds.

Oakland, Belgrade County, Maine, reached by the Bangor & Maine Ry. and Maine Central Ry. Accommodations at East Pond Camps, E. W. Clements, proprietor, for $2.50 a day. Pickerel, bass and perch fishing in East, North, McGraw's and Great Ponds.

Schoodic, Piscataquis County, Maine, reached by the Bangor & Aroostook and Eastern Steamship Company, via Bangor. Accommodations at Lakeside Camps, Cable & McNoughton, proprietors, for $2 a day. Pickerel, bass and brook trout.

Springfield, Penobscot County, Maine, reached by the Bangor & Aroostook Ry. Accommodations at Bay View Hotel, J. M. Patten, proprietor, for $2 a day. Guides $2.50 a day. Pickerel, perch, salmon and trout.

Island Falls, Aroostook County, Maine, reached by the Bangor & Aroostook Ry. Accommodations at Hook Point Camps, W. W. Sewall, proprietor. Pickerel, bass, perch, salmon and trout fishing.

Norcross, Penobscot County, Maine, reached by Bangor & Aroostook Ry. Accommodations at Katahdin View Camps, W. H. Davis, proprietor. Pickerel, bass, landlocked salmon and trout fishing in neighboring waters.

Bridgton, Oxford County, Maine, reached by the Maine Central Railway. Accommodations at Lake View House, C. T. Plummer proprietor, for $10 a week. Pike and bass found in Highland Lake.

Canoe trip. Take Maine Central Railway to Kineo Station on Moosehead Lake. Steamer to Northeast Carry, where guides meet you. One mile wagon haul to Penobscot River; 20 miles down the Penobscot to Chesuncook Lake, 12 miles down the lake to Chesuncook Dam; half mile carry to Ripogenus Lake; three miles down lake is long carry. Wagon haul costs $5.00 per canoe. Continue to Lake Ambajejus where steamboat can be taken to Norcross or journey may be made by canoe to Norcross, where connection is made with Bangor & Aroostook Ry. About a four-day trip from Kineo.

Epsom, Merrimack County, New Hampshire, reached by Boston & Maine Ry. Our informant camped out on Chestnut Pond. Bass up to 5 pounds. Good camping facilities near a farm.

Good camping places on North and South Hero Islands, Lake Champlain, near the Gut, which is an excellent fishing ground for pike, pickerel and bass. L. J. Willard of Plattsburgh, N. Y., rents boats and transports parties to the islands. Provisions can be obtained from farmers.

Averill, Essex County, Vermont, reached by Boston & Maine Grand Trunk Ry. Accommodations at Cold Spring Camp, Charles M. Quimby, proprietor, for $3 a day. Muscallonge, salmon and trout in

Leach Pond, Little Averill and Big Averill Lakes.

Lake Bomoseen, Rutland County, Vermont, reached by Delaware & Hudson Ry. Accommodations at Cedar Grove House. Pickerel, bass and pike.

Short canoe trip from Springfield, Hampden County, Mass., to Groveton on Connecticut River. Fishing for pickerel and bass reported good.

MIDDLE ATLANTIC STATES

Cohecton, Sullivan County, New York, reached by the Erie Railroad. Accommodations at the Erie Hotel, Wm. F. Heuser, proprietor, for $1.50 a day. Pike, perch, pickerel, black bass and trout in Delaware River, Swago and Laurel Lakes.

Clayton, Jefferson County, New York, reached by the New York Central Ry. Our informant camped out. Good fishing for pike, pickerel, bass and muscallonge in the St. Lawrence River.

Garnet Lake, Warren County, New York, reached by the Catskill & Tannersville Ry. Accommodations at Garnet Lake Camp, J. C. Priest, proprietor. Good pike fishing reported in Garnet Lake.

Tupper Lake Junction, Franklin County, New York, reached by the New York & Ottawa Ry. Accommodations at Sunset Cottage, for $12 a week. Guides with boat $3 a day. Pike and bass fishing.

Wurtsboro, Sullivan County, New York, reached by the New York, Ontario & Western Ry. Accommodations at Yankee Lake Inn, J. E. Best, proprietor, for $2 a day. Bass fishing, also pickerel.

Riverside, Warren County, New York, reached by the Delaware & Hudson Ry. Our informant camped out on Loon Lake. Boat $3 a week. Good bass fishing, also pickerel.

Stormsville, Dutchess County, New York, reached by the New York Central Ry. Our informant camped out. Pickerel and bass fishing in White Pond.

Canoe trip. Ship canoe to Troy via Citizens' Line from New York. Follow the Champlain Canal from there into Lake Champlain, up Lake Champlain to Fort Ticonderoga, where a one-mile wagon haul must be made to Lake George. Thence down Lake George to Lake George Village, where Delaware & Hudson Ry. is taken to Fort Edward on the Champlain Canal. Follow canal back to Troy. About a two week trip, costing around $25 a man. Fair fishing in Lake George and Lake Champlain.

Canoe trip. Start from Old Forge, Herkimer County, New York, which is reached by the New York Central Ry. Our informant went through the eight lakes of the Fulton Chain, Raquette Lake, up the Marion River to Utowana Lake, thence to Eagle Lake, and Blue Mountain Lake. Thence back to Raquette Lake, down to Forked Lake, following Raquette River into Long Lake, then back by the river, Forked, Raquette and Fulton Chain of Lakes to Old Forge. This is a two weeks trip, costing about $30 each man. Fishing along route for pickerel, bass and trout.

Crown Point, Essex County, New York, reached by the Delaware & Hudson Ry. Accommodations at Lake House, M. Gilligan's Sons, proprietors, for $2 a day. Pike, pickerel, bass in Lake Champlain, Eagle Lake and Putts Pond. Guides charge $3 a day.

Silver Lake, Wyoming County, New York, reached by the Buffalo, Rochester & Pittsburgh Ry. Accommodations at Fairview House, H. J. Lary, proprietor, $1.50 a day. Muscallonge, pickerel and bass fishing.

Harrisville, Tompkins County, New York, reached by the Delaware, Lackawanna & Western Ry. Accommodations at Forest House, Walter Humes, proprietor, for $7 to $10 a week. Good trout fishing.

Green Pond, Morris County, New Jersey, reached by the New York, Susquehanna & Western Ry. to Newfoundland (3 miles to Green Pond), and the Lackawanna Ry. to Wharton, Wharton & Northern Ry. to Green Pond Junction. Accommodations at Lake End Hotel, Shawger and Hartenstine, proprietors, for $2 to $2.50 a day. Pickerel, black and Iswego bass and perch.

Budd Lake, Morris County, New Jersey, reached by the Delaware, Lackawanna & Western Ry. to Netcong. Auto to lake 25 cents. Accommodations at Edgerton Boat House, J. A. Edgerton, proprietor. Pickerel and bass fishing in Budd Lake.

Lake Hopatcong, New Jersey, reached by the Delaware, Lackawanna & Western Ry., also Central Ry. of New Jersey. Accommodations at Angler's Retreat, Charles Marin, proprietor, for $3 a day. Pickerel and bass fishing.

Canoe trip. Ship canoes to Hancock, New York, via Erie Ry. Float down river to Trenton, New Jersey. This is about a two weeks' trip. Supplies can be had at various towns along the river. Although country is pretty well populated, the rifts and rapids in the Delaware River make it a pretty good trip and one requiring good canoe management. Pickerel and bass fishing along the route.

Holtwood, Lancaster County, Pa., reached by the Pennsylvania Ry. Accommodations at McCalls Ferry, Mr. McQuade, proprietor, for $1.50 to $2 a day. Wall-eyed pike and salmon fishing in Susquehanna River.

Fishing Creek Station, Lancaster County, Pa., reached by the Pennsylvania Ry. Our informant camped out. Wall-eyed pike, small-mouth bass and salmon in Susquehanna River.

Cambridge Springs, Crawford County, Pa., reached by the Erie Ry. Accommodations at Hotel Riverside. Rates $2.50 to $4 a day. Muscallonge fishing in Conneaute Lake.

MIDDLE WESTERN STATES

Bainbridge, Ross County, Ohio, reached by the Detroit, Toledo & Ironton Ry. Party camped out on Paint Creek. Good fishing for bass and channel catfish.

Shawneetown, Gallatin County, Illinois, reached by the Baltimore & Ohio Ry. Accommodations at Big Lake Camp, $1.50 a week for tent privileges. Bass and crappie fishing.

Chardon, Geauga County, Ohio, reached by the Baltimore & Ohio Ry. Accommodations at Bass Lake House for $15 a week. Bass, pickerel, perch, blue gills in Bass Lake.

South Bend, St. Joseph County, Indiana, reached by the Grand Trunk Railway. Accommodations at Oliver Hotel for $1 a day. Pike, bass and blue gills in St. Marys and St. Joe Lakes.

Winemac, Pulaski County, Indiana, reached by Pennsylvania lines. Report from party who made canoe trip down the Tippecanoe River from Winemac to Monticello, about 50 miles. Pike, bass and walleyed pike fishing, good camping sites and supplies easily obtained from farmers along route.

Bellaire, Antrim County, Michigan, reached by the Pere Marquette Ry. Accommodations at the Maples, W. C. Green, proprietor, for $8.50 to $12.50 a week. Muscallonge, pike, large mouth and small mouth bass, also speckled trout.

Roscommon, Roscommon County, Michigan, reached by the Michigan Central Ry. Accommodations at Log Cabin Home, D. Procunier, proprietor, for $1.50 to $2 a day. Pike, pickerel, bass and perch fishing in Houghton and Higgins Lakes.

Fabius, St. Joseph County, Michigan, reached by the Michigan Central Ry. Accommodations at Hotel Lennox, J. Lennox, proprietor, for $1.50 a day. Large mouth bass.

Round Lake, Oakland County, Michigan, reached by the Pere Marquette Ry. Accommodations at Long Lake Hotel for $2 a day. Pike and bass fishing in Long, Round, Crooked and Buell Lakes.

Bellaire, Antrim County, Michigan, reached by the Pere Marquette Ry. Accommodations at Fisherman's Paradise, H. D. Smith, proprietor, for $12 a week. Pike and bass fishing.

Luther, Lake County, Michigan, reached by the Pere Marquette Ry. Our informant camped out. Bass fishing in lake and trout fishing in Little Manistee River.

Central Lake, Antrim County, Michigan, reached by the Pere Marquette Ry. Accommodations at Fisk Lodge, J. P. Fisk, proprietor, for $12 a week. Muscallonge, pike and bass fishing in Intermediate Chain of Lakes.

Canoe trip. Start from Conway, Oden or Alanson, Michigan, which are reached by Grand Rapids & Indiana Ry., and follow Crooked River, through Burt Lake, Indian River and Mullet, then the Cheboygan River to Cheboygan. There are camps and resorts all along the route, and good bass and trout fishing.

Grand View, Bayfield County, Wisconsin, reached by the Northwestern Ry. Accommodations at Camp-Fire Island Club, H. A. Scotford, proprietor, for $2 a day. Muscallonge and bass in Upper and Lower Clam Lakes.

Island Lake, Rusk County, Wisconsin, reached by the Soo Line.

Accommodations at the Getchel Hotel, D. Getchel, proprietor, for $1.50 a day. Muscallonge, pike and bass fishing.

Powell, Iron County, Wisconsin, reached by the Chicago & Northwestern Ry. Accommodations at the Flambeau Lodge, W. G. Watrous, proprietor, for $2.50 a day. Muscallonge, pike, Oswego bass and brook trout.

Eagle River, Vilas County, Wisconsin, reached by the Chicago & Northwestern Ry. Accommodations at the Red Oak Resort, George Jackson, proprietor, for $10 to $12 a week. Muscallonge, pike, pickerel and bass in Lakes Alma, Moon and Little St. Germaine.

Minocqua, Oneida County, Wisconsin, reached by the Chicago, Milwaukee & St. Paul Ry. Accommodations at the Mercer Lake Resort, Mrs. M. J. Bishton, proprietress, for $8 a week. Wall-eyed pike and bass in Twin and Fence Lakes.

Lac Du Flambeau, Vilas County, Wisconsin, reached by the Central and Northwestern Ry. Accommodations at the Cedar Lodge, William Hill, proprietor, for $12 a week. Guides $2 a day. Muscallonge, pike and bass fishing.

Hayward, Sawyer County, Wisconsin, reached by the St. Paul, Minneapolis & Omaha Ry. Accommodations at Grinstone Resort, C. J. Smith, proprietor, for $2 a day. Muscallonge, bass and perch.

Fifield, Price County, Wisconsin, reached by the Wisconsin Central Ry. Accommodations at Feely's Pike Lake Resort, J. E. Feely, proprietor. Muscallonge and bass fishing.

Hayward, Sawyer County, Wisconsin, reached by the St. Paul, Minneapolis & Omaha Ry. Accommodations at the Idlehurst Lodge, C. D. Benack, proprietor. Muscallonge, small mouth and Oswego bass, and trout fishing.

Marcell, Itasca County, Minnesota, reached by the Great Northern Ry. Accommodations at Camp Idlewild, Walter Stickler, proprietor, for $12 a week. Black bass fishing.

Hackensack, Cass County, Minnesota, reached by the Northern Pacific Ry. Accommodations at North Star Camp, W. J. Spain, proprietor, for $2 a day. Muscallonge, pike and pickerel.

Dorset, Hubbard County, Minnesota, reached by the Great Northern Ry. Accommodations at Fisherman's Lodge, A. O. Wambold, proprietor, for $2 a day. Muscallonge, pike, pickerel and bass fishing.

Dorset, Hubbard County, Minnesota, reached by the Great Northern Ry. Accommodations at Pine Cone Camp, Thomas Brothers, proprietors. Muscallonge, bass, pike and pickerel.

Alexandria, Douglas County, Minnesota, reached by the Great Northern Ry. Accommodations at Cottage Grove Hotel, Fred Glade, proprietor, for $2 a day. Wall-eyed and northern pike, also bass and crappie.

Jenkins, Hubbard County, Minnesota, reached by the Northern Pacific Ry. Accommodations at house of David Hardy for $1.50 a day. Muscallonge, pike and pickerel, also bass.

Cook, St. Louis County, Minnesota, reached by the Canadian Pacific Ry. Accommodations at Seldom Inn, J. H. Burris, proprietor. Muscallonge, bass in Elbow and Long Lakes.

Spicer, Kandiyohi County, Minnesota, reached by the Great Northern Ry. Accommodations at the Interlaken, Oliver Larsen, proprietor, for $10 a week. Guides with boat $2.50 a day. Pike, bass and pickerel fishing.

Winton, St. Louis County, Minnesota, reached by the Duluth & Iron Range Ry. Party camped out. Reported good muscallonge, pike and lake trout fishing.

WESTERN STATES

Glacier National Park, Montana, reached by the Great Northern Ry. to Glacier Park Station. There are numerous camping trips possible in Glacier Park, where good fishing may be had for pike, trout, etc. Traveling either by stage, pack outfit or hiking. Also many camps where stops may be made at night.

Maiden Rock, Silver Bow County, Montana, reached by the Oregon Short Line. Accommodations at the Maiden Rock Hotel, C. W. Bennett, proprietor, for $2 a day. Rainbow trout and whitefish.

Klamath Falls, Oregon, reached by the Southern Pacific Ry. Accommodations at the Eagle Ridge Inn, Mrs. Griffith, proprietress, for $2.50 a day. Trout and salmon fishing in Klamath Lake, Williamson River and Spring Creek.

Granite Falls, Washington, reached by the Northern Pacific Ry. Several varieties of trout in Pilchuck and Stilliguamish Rivers. Good place for camping without guides. V. G. Wood, of Granite Falls, will give information.

Loon Lake, Stevens County, Washington, reached by the Great Northern Ry. Hotel accommodations $2 a day. Boats 75c a day. Bass, perch and trout fishing.

Dixie, Idaho County, Idaho, reached by the Northern Pacific Ry. Accommodations at Five Mile Ranch, J. R. Painter, proprietor. Fishing in the Salmon River for trout and salmon. Big game in season.

Ashton, Fremont County, Idaho, reached by the Union Pacific Ry. and by the Oregon Short Line. Party camped out. Good fishing for cut-throat, rainbow and mackinaw trout in Red Rock Lakes and North and South Fork of Snake River. Accommodations at ranch of C. W. Orton for $12 a week.

Yellowstone National Park, Wyoming, reached by the Chicago, Burlington & Quincy Ry. Party camped out. Good trout fishing reported.

Dubois, Fremont County, Wyoming, reached by the Chicago, Northwestern Ry. Accommodations at Amoretti Lodge, situated 8 miles from Dubois, E. Amoretti, proprietor, for $3 a day. Trout fishing in all streams; big game hunting in season.

Shell, Big Horn County, Wyoming, reached by the Chicago, Burlington & Quincy Ry. Accommodations at Trapper Lodge (16-1) Ranch, W. H. Wyman, proprietor. Camping trips a specialty. Good trout fishing, also big game in season.

Kings River, Inyo County, California, reached by the Southern Pacific or Sante Fe Rys. Camping proposition. Rainbow, lake, brook and golden trout in Kings River, Marble Creek and Raye Lake.

CANADA

Rainy River, Ontario, reached by the Canadian Northern from Duluth and Winnipeg. Party camped out. Muscallonge, bass, trout, pike and pickerel fishing. Muscallonge up to 60 pounds reported and lake trout to 35 pounds in Lake of Woods.

North Bay, Ontario, reached by the Grand Trunk or Canadian Pacific Rys. Party camped. Indian guide $3 a day. Muscallonge, pike, bass and pickerel in North and South channel of the French River.

Wanakewin, Ontario, reached by the Canadian Pacific Ry. Accommodations at the Wanakewin Hotel, M. H. Fenton, proprietor. Nearest station at Pickerel Landing. Muscallonge, small-mouth bass and pike in French and Pickerel Rivers.

Penetang, Simcoe County, Ontario, reached by the Grand Trunk and Northern Navigation Co. Accommodations at the Campbell House, Arch. Campbell, proprietor, for $2 a day. Muscallonge, northern pike, pickerel and small-mouth bass fishing.

Canoe trip. Down the Southwest Miramichi from the forks, to Boiestown, about 100 miles. No carries. Good fishing. Murdock McKenzie, of Sparkle, N. B., furnishes guides, outfits and canoes for this trip, which takes about a week. Salmon, sea trout and brook trout fishing.

Temagami, Ontario, reached by the Grand Trunk Railway. Accommodations at Wabi-Kon Camp, L. A. Orr, proprietor, for $12 a week. Fishing in Lake Temagami for pike, pickerel, bass and salmon.

Algonquin Park, Ontario, reached by the Grand Trunk Railway. Accommodations at the Hotel Algonquin, L. E. Merrell, proprietor, for $21 a week. Canoes, outfits and guides can be secured here. Bass and trout fishing in the park.

Bobcaygeon, Ontario, reached by the Canadian Pacific Ry. Accommodations at the Iroquois, John Kenny, proprietor, for $10 a week. Guides $3 a day. Muscallonge and bass fishing.

Quebec, Kipawa County, Canada, reached by the Delaware & Lackawanna to Montreal and the Canadian Pacific Ry. to Matawa and Kipaw. Accommodations at Kipawa House. Pike and trout fishing. Pike up to 12 pounds.

La Tuque, Quebec, reached by the Lake St. John & Quebec Railroad to La Tuque Junction, then change to branch for La Tuque, 80 miles. Accommodations at Chateau St. Maurice, A. Twombly, proprietor, for $2 a day. Lake and speckled trout.

Cardston, Alberta, reached by Canadian Pacific & Great Northern Ry. Accommodation at the Lakes, John Hazzard, proprietor, for $2 a day. Brook, brown and lake trout.

The SPORTSMAN'S WORLD

HUNTING AND WOODCRAFT

A CAMP COOK KIT AND ITS USE

By Emery J. Newhall

The cooking kit forms a necessary and important part of any good camp outfit, and should be carefully selected. Nothing is more annoying than insufficient or leaky cooking utensils. They must be serviceable, yet light and compact. Excellent outfits in aluminum may be obtained from the dealers, but the first cost is rather high, and the man who only camps occasionally does not need such an expensive outfit. The writer is one of those who find a good deal of pleasure in getting up the camp outfit according to their own ideas, so when a two-man cook kit was needed, he first carefully decided what was wanted and, armed with a two-foot rule, visited several stores dealing in tinware. The stock of tin dishes was carefully examined and measured until those of the desired size and shape were obtained, as follows:

Three tin kettles with covers and bails, the largest 6½ inches by 5 inches high and holding three quarts; the other two just enough smaller to nest inside; two tin basins 6½ inches by 2 inches, for soups; one tin basin 7 inches by 3 inches, for a mixing pan; two tin cups, one steel frying pan 7 inches in diameter, two tin plates 9 inches in diameter, two knives, forks, and spoons, and one large spoon.

On reaching home the handle of the frying pan was cut off, with the exception of about an inch, and a ferrule riveted on, through which a green stick could be thrust to form a handle. Three pot hooks were made from heavy wire. A small folding baker was needed and the writer made one from bright tin at a cost of thirty cents. These bakers are very convenient in camp, weigh but little, and are easy to use. They may be obtained from the dealers, but are not at all difficult to make. Anyone of ordinary mechanical ability can make one in two or three hours with no other tools than a hammer and tin shears. The complete outfit is packed in two bags of brown denim as follows:

THE COOK KIT UNPACKED

The two smaller kettles with their covers nest inside the largest kettle, the cups go inside the smallest kettle and there is room also for small packages of tea, salt, or sugar. The two soup dishes and the frying pan go inside the mixing pan, and the whole four are placed bottom side up on top of the largest kettle. This fits into a bag 7 inches by 9 inches high and weighs about three pounds. The baker folds flat and goes in another bag with the plates, knives, forks, spoons, and pot hooks. The knives, forks, and spoons are enclosed in a small cloth bag to keep them together. If a folding grate is needed, buy a bread toaster, cut off the handles, fasten on three pairs of legs made from heavy wire, and pack in the bag with the baker. The size of this bag depends on the dimensions of the baker, but the weight complete should not be over 2½ to 3 pounds. If desired, a folding canvas water pail may be added to the outfit. They are very handy, especially when camp is some distance from good water.

This makes a very satisfactory outfit for two people. It contains all the dishes needed, is light and compact, costs very little, and can be obtained in almost any town. Although the dishes are mostly tin, they will last a long time with ordinary care, and when an article gets old it can be easily replaced.

When hiking and camping either alone or with one companion, the program is about as follows: At an hour before sunset we reach the camping ground, the pack is slipped off, the axe taken from its sheath, and a few minutes' search yields the necessary tent poles and stakes. Several armfuls of good firewood are procured, and the nearest spruce thicket supplies

THE COOK KIT PACKED FOR THE TRAIL

boughs for a bed. All of these materials are carried to the camp site. A large flat rock or two small logs placed one above the

other and supported by stakes, form a back log for the fire and a reflector for the baker. Two forked stakes are driven into the ground each side of the fire and another stick laid across the forks to support the kettles. The pack

THE BAKER AKD PAILS IN USE

is then opened, the rubber blanket (placed on top to keep things dry) is taken out and la'd aside. The side opening food bag containing all the food is hung up near the fire. The cook kit is unpacked and the baker put together. A trip to the spring and the three kettles are filled with water. The fire is now lighted, baking powder biscuits are stirring up in the mixing pan and put into the well-greased pan of the baker, which is set in front of the fire. The ingredients of some sort of soup or stew are placed in the medium-sized kettle and hung over the fire by one of the pot hooks. The small kettle is filled with water for tea and hung beside it. By this time the sun has dropped low in the west, but camp and supper are well under way. After seeing that the fire is burning nicely, the camper turns his attention to the pile of spruce boughs, and makes a soft, fragrant bed on the ground. The floor cloth of the forester tent is stretched over the bed and the corners staked down. Two tent poles are put in place and the tent is raised, stretched tight, and the front and back lines pegged out or fastened to convenient trees. By this time the fire needs attention, the biscuits have begun to brown, the soup needs stirring, and the water for the tea is hot. After attending to these things, the camper lays out the cups and plates, and gets the sugar, condensed milk, butter, and some dried or fresh fruit or berries from the food bag. The rubber blanket is spread out on the floor of the tent and the sleeping bag laid on top of it. By this time supper is about ready, the soup is removed from the fire, and the largest kettle, filled with water for the dishes, is hung in its place. The camper now sits down to a delicious supper of soup, hot biscuits, tea and fruit, with an appetite such as comes only from healthy exercise in the great out-of-doors. Supper over, the dishes are washed and dried, perhaps by the light of the fire or the carbide camp light, for darkness comes early in the forest. Wood is heaped on the fire and then follows the most pleasant hour of the day, when all work is done, and one can sit by the campfire talking over the events of the day with his trusty companion, or busy with his own thoughts, at peace with all the world, as he watches the dancing flames of the campfire.

TALKING OVER THE EVENTS OF THE DAY

A TRAINING COLLAR FOR FIELD DOGS

FIELD & STREAM PUB. CO.:

Can you give me any information regarding use of spike collar in training dog to retrieve, or can you put me in touch with any one who can give me this information? Is there, to your knowledge, any book published which would give desired information?

STERLING G. TURNER.

Ans.—"Amateur Trainer," by Ed. F. Haberlen, and "Modern Breaking," by Dr. W. A. Bruette. Both have admirable chapters on the use of the force or spike collar in dog training. These collars may be bought from any of the large sporting goods stores.—ED.

HOW I TOOK THE EDITOR'S ADVICE

FIELD & STREAM PUB. CO.:

Some months ago you published an editorial about every true sportsman having an idea, or perhaps merely a pipe-dream, of some day building a shack back in the quiet woods, away from civilization, where he could go for a week-end, a week or a summer's vacation, and there find his guns, fishing tackle and a silent welcome awaiting him at all times.

That editorial, thanks to you, put the idea in my head which, from the time I read it, and began to reread it from a practical standpoint, has grown until the conditions at the present time are these: The ground has been chosen and acquired, the plans drawn, the material all bought and a carpenter engaged to erect same in March or April. So you can see what you have "went and done."

I have an excellent location, far back in the hills in a beautiful piece of timber, with drainage, water, sunshine, storm protection, and view ideal.

The fact is, having decided to build it, no detail that could add to comfort and pleasure has been omitted. It will be, as you said, a place to go to smooth things out; a retreat from business and the madness of the present-day commercial world; a place where tackle is always in shape, and guns are together and *everything* where it can be brought instantly into use; not packed away promiscuously in town apartments where you struggle and sweat for hours, perhaps, collecting equipment for an outing; for now it will be out of the office, on an interurban electric car, a 45 minutes' ride, a three-mile walk and there I am! Whooppee! It gets in your blood thinking about it, so I beg that you pardon the above enthusiasm.

C. GEORGE BLISS.

NEW JERSEY PASSES ALIEN GUN LAW

Clerks and wardens must not issue a hunting license to any unnaturalized, foreign-born person to hunt, except such unnaturalized person is the owner of real estate in this State to the value of $2,000 above all incumbrances.

An Act approved April 20th, 1915, says: "It shall be unlawful for any unnaturalized, foreign-born person to hunt for or capture, or kill in this State, any wild bird or animal, either game or otherwise, of any description, excepting in defense of person or property; and to that end it shall be unlawful for any unnaturalized, foreign-born person, within this State, to either own or be possessed of a shotgun or rifle of any make; . . . provided, however, that this act shall not apply to any unnaturalized, foreign-born person who is the owner of real estate in this State to the value of $2,000 above all encumbrances."

This act was passed subsequent to the Hunters and Anglers law of April 9th, 1914, and modifies the Hunters and Anglers law to the above extent.

REMOVING HAIR DEER HIDES

FIELD & STREAM PUB. CO.:

I am a steady reader of your magazine and ask if you can advise me as to method of removing hair from a raw deer hide, which I have unsuccessfully tried to do.

C. D. CORNISH.

Ans.—Soak in strong wood ashes for three days until hair slips, and then remove with a scraper.—ED.

If you want any information of the above sort, write us. We are glad to help.

CONSERVATION

THE NEW CONSERVATION COMMISSIONER OF NEW YORK

Geo. D. Pratt, President of the Camp Fire Club, is Appointed, and His Nomination Confirmed by the Senate without a Dissenting Vote

Mr. George D. Pratt, who has just been appointed Conservation Commissioner by Governor Whitman, is a resident of Glen Cove, L. I., and for many years has been prominently associated with many of the activities of New York City. As treasurer of the Pratt Institute, as treasurer and a member of the Executive Committee of the Boy Scouts of America and as chairman of the Physical Department of the Y. M. C. A., Mr. Pratt has taken a very large interest in the education of our Young America in teaching them how to handle themselves in the out-of-doors.

As president of the Camp Fire Club of America, as a member of the Boone & Crockett Club, of the New York Zoological Society, and as a member of the Wild Life Protective Fund, Mr. Pratt has prominently identified himself with all out-of-door conservation. He is also a member of the Public Recreation Commission of New York City, and vice-president of the Brooklyn Institute of Arts and Sciences, and is actively interested in the work of improving our parks and our public museums.

Mr. Pratt not only has an intimate acquaintance with forest and game conservation, but is a level-headed man of large affairs and wide business experience, and his appointment is therefore an ideal one.

GREAT INCREASE IN BIRD LIFE IN MARSH ISLAND BIRD SANCTUARY, LOUISIANA

Mr. Stanley C. Arthur, formerly a newspaper man of New York, but now living in New Orleans, has been appointed State Ornithologist of Louisiana. Very recently he made an official inspection of Marsh Island, in the edge of the Gulf, about 100 miles west of New Orleans, which three years ago was purchased by Mrs. Russell Sage as a bird preserve. Its cost was about $150,000.

Mr. Arthur's report of conditions in the first week of February, is sufficient to thrill every friend of wild life, and make every market-hunter turn green with covetousness.

Says Mr. Arthur: "At Marsh Island I saw more wild geese in one hour than I ever expect to see again in my life. On one occasion I rode up on my horse to within 125 feet of a flock which numbered fully 5,000. They were so tame that I was able to obtain four pictures of the flock before the geese rose. In this flock were the greater and lesser snow geese, blue, Canadian and brant varieties. In the three days spent on Marsh Island I included in my census sixty-six different varieties of birds.

"Last Tuesday, from 9 to 11 o'clock a. m., I counted twenty-two flocks of geese, the smallest flock containing about 1,500, while the largest contained fully 25,000 geese. The average flock would number about 15,000 geese. You can imagine what a sight it was. When the geese rose they dimmed the sun like a cloud."

Unquestionably in creating the Marsh Island bird sanctuary, Mrs. Sage made a great hit. Already it has brought back a degree of bird abundance that has not been seen in Louisiana during the past twenty years. The increase in the sheltered bird life of that great island has been both quick and enormous.

W. T. Hornaday.

NORTHERN OHIO FISH AND GAME PROTECTIVE ASSOCIATION FORMED

On Thursday evening, March 4th, a number of local sportsmen of Cleveland held a very enthusiastic meeting and launched the Northern Ohio Fish and Game Protective Association, the following officers being elected: Morris Ackerman, president; Frank D. Thompson, vice-president; L. Frank Rosenbery, treasurer; Wade N. Shrum, secretary.

The following compose the Board of Trustees: Morris Ackerman, Frank D. Thompson, L. Frank Rosenbery, Wade N. Shrum, George T. Lowrie, Paul North, Fred W. Clarke, Robert A. Hawley, Louis Englander.

This Association has some very definite objects in view, and they should have a far-reaching effect on the conservation of our fish and game. The purposes of the Association are as follows:

"To collect valuable and useful information relating to fish and game for the purpose of sharing same among its members; to protect and propagate fish and game in the State of Ohio; to oppose the enactment of laws prejudicial to the interests of fish and game and to encourage wise and useful legislation; to assist in the propagating of song, insectivorous and game birds; to assist in the prosecution of any violation of the fish or game laws of the State, any municipality in the State, or the laws of the United States; to prevent malicious destruction of property by hunters and fishermen; to promote a greater feeling of good will between sportsmen and property owners in fishing and hunting territory; to promote a healthy interest in scientific angling and shooting and to encourage and hold bait and fly-casting tournaments and other contests."

The Northern Ohio Fish and Game Protective Association is affiliated with the League of Ohio Sportsmen, and will also be affiliated with the American Game Protective and Propagation Association.

It is the intention of this Association to provide refuges for game birds, such as quail, grouse, Hungarian partridge, etc., throughout northern Ohio during the winter months, and to furnish farmers with grain with which to feed these birds.

BIRD PROTECTION LAW STILL EFFECTIVE

Department of Agriculture Will Continue to Prosecute Illegal Killing of Migratory Game and Insectivorous Birds

Many of the press comments on the decision of the United States District Court, rendered March 20, at Topeka, Kansas, holding that the Federal Migratory Bird Law is unconstitutional, according to the United States Department of Agriculture, are erroneous and are apt to mislead the public concerning the real situation in this matter.

The Kansas decision, like a former decision to the same effect in the Eastern District of Arkansas, is limited in its operation solely to the district in which it was rendered. Neither decision settles or nullifies the law, and the exact contrary has been held by the United States District Court for South Dakota. The Arkansas case has been appealed to, and is now pending in, the United States Supreme Court. The Act of Congress protecting migratory birds stands effective until the Supreme Court finally decides the question of its constitutionality. In the meant me, it is incumbent on every law-abiding citizen to observe its provisions and regulations. It is the duty of the Department of Agriculture to enforce this law and the officials in charge will endeavor to do so as long as it is in force. Reports of violations will be carefully investigated and when sufficient evidence is secured they will be reported for prosecution. In this connection it should not be forgotten that an offender against this, as in the case of other United States laws, is subject to prosecution any time within three years from the date the offense is committed.

MINNESOTA HAS NEW GAME REFUGE LAW

This new law provides two methods for establishment of such refuges. Owners or lessees of not less than 640 acres of land may join in a request that such lands be declared a game refuge and the commission may declare it to be a refuge. Or twenty-five or more residents of any district may petition the commission which, after notice and hearing, can declare that district a refuge. Such refuges may include contiguous public lands and waters.

There is seen by the authorities an opportunity for abuse of this new law and they are prepared to guard against it. When a refuge is established hunting thereon is to be prohibited the year round and this will apply to the owners and tenants as well as to the general public. The state authorities

will discourage any attempt to establish private game refuges for a chosen few.

PROVISIONS OF THE NEW NORTH DAKOTA GAME LAW

North Dakota will soon have a new game law. The measure has passed both branches of the legislature after amendments in each house and is now in the governor's hands. It was the longest bill introduced in the legislature this year and for that, and for other reasons, attracted considerable opposition. It was finally passed through the co-operation of the state game and fish board and the thousands of sportsmen over the state and evidently indicated some good team work between the sportsmen and the officials.

The new law is now a thoroughly modern game measure and not only has the endorsement of the sportsmen of North Dakota, but the O. K. of the federal department of biology at Washington, which has the direct charge of the enforcement of the federal laws regarding the protection of migratory birds.

The chief changes of interest to the sportsmen are that shooting hours were changed to conform to the federal law by necessity and shooting will not be permitted before actual sunrise and later than actual sunset. Formerly the state law permitted shooting a half an hour earlier than sunrise and a half an hour later than sunset, while the federal law said sunrise and sunset. The opening date for chickens and ducks remains Sept. 7, chickens closing Nov. 1, as under the old law, and ducks Dec. 1, to conform to the federal law; the bag limit on ducks was reduced from twenty-five to fifteen; the limit on chickens remains at ten. The penalty for "sooner" shooting and for violations of the bag limit was increased from a minimum fine of $10 to a minimum of $25; the old law regarding being afield with a gun and dogs was amended to "with or without dogs"; dog training days were changed from Aug. 15 to begin Aug. 1, to give owners of pups more time to train their young dogs, but with stricter provisions regarding entering grain fields and trespassing on lands.

Some of the other amendments make it a penalty to impersonate a game warden; require hunters to show licenses on demand of officers and provide a penalty for refusal; prohibiting shooting from automobiles or other vehicles; more clearly define duck blinds and prohibit shooting from moving boats at any time or from boats in open water and also prohibit entirely the use of rifles by duck and goose hunters.

Seining of any nature is prohibited except in DesLacs Lake, the Mouse River and Long Creek in Divide County, the fish coming from Canada into these waters.

Deer were protected until 1920. Better provisions regarding the disposition of beavers doing damage were made and the trapping season on mink and muskrat made to open Dec. 1 instead of Nov. 15 that the furs may become more prime and valuable.

Among the new legislation is a measure providing for the establishment of a game farm for the propagation of game birds which will be distributed over the state to perpetuate the hunting for future years. It is planned to place partridges, or ruffed grouse, which are now numerous in four or five counties of the state, in other sections. Experiments will also be conducted with quail and pheasants of different varieties.

The law provides for the creation of game refuges, not to exceed ten acres in size and not more than six sections in any township, and the game refuges to be dedicated for a period of not less than ten years. This is purely a voluntary movement by bird lovers who are land owners. It makes a provision for refuges for both land birds and waterfowl and is in line with advanced legislation in other states. After the dedication and acceptance of these refuges they are marked and protected by the game officials.

There are a number of other features of interest to bird lovers and sportsmen. The new law protects more rigidly all song and insectivorous birds and protects pheasants, quail and swan permanently, and ruffed grouse or partridge until Oct. 1, 1917, when short open season of ten days with a bag limit of five birds is provided for in Battineau, Cavalier, Pembina and Rolette Counties only. This is for the purpose of protecting the birds that will be sent to other parts of the state for stocking purposes.—*Courtesy of the Forum, Fargo, N. D.*

NEW YORK AMENDMENTS SIGNED BY THE GOVERNOR

The fish and game law amendments signed by Governor Whitman are as follows:

The Kenyon bill, making the provisions of section 193 against dogs applicable "in the forest preserve," instead of "in Adirondack Park." The prohibition against dogs is now in force under the new law only on State lands within the Blue Line.

The Horton bill, providing for a non-resident's fishing license in the Niagara River, and prohibiting a person taking fish in the river without such license unless he is a bona fide resident of the State at least 30 days immediately prior thereto. The license is $2 and 50 cents fee.

The Brereton bill, making it a misdemeanor in a county which includes part of the forest preserve, or any adjoining county, to send up without a pilot so-called hot-air balloons.

The G. L. Thompson bill, providing that lobster traps shall have an opening not less than 1½ inches wide on each side at the bottom of the trap.

The Parker bill, permitting the spearing of fish, black bass, muscallonge and pickerel except in the Niagara River between the lower steel bridge and the suspension bridge at Lewiston Heights during the open season, and requiring a license therefor to be obtained from the town or city clerk.

The Mackey bill, providing that mullet, carp, suckers, bullheads and eels may be taken by snatch hooks only at any point in any stream not less than five miles below the source, between Nov. 1 and April 30. Driving is permitted.

The Arnte bill, providing that yellow perch may be taken between May 1 and March 1 in any quantity from Oneida, Casanovia, Otisco, Skaneateles, Cross and Onondaga Lakes and Jamesville Reservoir.

The Fairbank bill, providing that tags required by section 371 to be used for trout raised in private hatcheries, and a machine for tagging, shall be supplied at cost to each applicant by the Conservation Commission.—*From Conservation Department, Albany, N. Y.*

NEW DUCK SEASON IN NEW JERSEY

CHAPTER 194. SESSION OF 1915.

An Act to amend an act entitled "An act for the protection of certain kinds of birds, game and fish, to regulate their method of capture and provide open and close seasons for such capture and possession (Revision of 1903)," approved April fourteenth, one thousand nine hundred and three.

Be it enacted by the Senate and General Assembly of the State of New Jersey:

1. Section eight of the act to which this act is amendatory be and the same is hereby amended to read as follows:

8. It shall be unlawful to capture, kill, injure, destroy or have in possession any wild geese, wild swans, brant and wild ducks excepting only between the first day of October and the fifteenth day of March following, both dates inclusive, in each year. Any person violating any of the provisions of this act shall be liable to a penalty of twenty dollars for each duck, swan, goose, brant captured, killed, injured, destroyed or had in possession in violation of this act. The having in possession of any duck, swan, goose, brant whatsoever during the period prohibited in this section shall in every court and place be deemed prima facie evidence that the same is unlawfully in possession.

This act shall take effect immediately.

Approved April 6, 1915.

We regret that the above has become a law in New Jersey, and trust that all the sportsmen's organizations in the state will work together for the repeal of this law. It has been proven that the abolishment of spring shooting has greatly aided the increase of duck life, and if duck shooting is to be enjoyed in the coming years the closed season in the spring must remain.

SHOTGUNS AND RIFLES

NEW ORGANIZATIONS ELECTED TO MEMBERSHIP IN THE NATIONAL RIFLE ASSOCIATION OF AMERICA DURING THE MONTH OF MARCH

Civilian Rifle Clubs

Junior O. U. A. M. Rifle Club, New Haven, Conn.
Battle Creek (Mich.) Rifle Association.
Audubon (Iowa) Rifle and Revolver Club.
Chicago (Ill.) Rifle Club.
South Haven (Mich.) Rifle Club.
San Juan (Porto Rico) Rifle Club.
Rumford (Me.) Rifle Club.
Springville (Utah) Rifle Club.
Clatskanie (Ore.) Rifle Club.
Eldorado (Ill.) Rifle Club.
South Bend (Ind.) Rifle Club.
Interwoven Rifle Club, New Brunswick, N. J.
Enterprise (Ore.) Rifle Club.
Waitsburg (Wash.) Rifle Club.
Meeker (Colo.) Rifle Club.
Lakeside Rifle Club, Somers, Mont.
Savoy (Ill.) Rifle Club.
Garfield (Utah) Rifle Club.
Allen M. Osborn Camp, U. S. W. V. Rifle Club, New Haven, Ct.
East Garland (Utah) Rifle Club.
Pulteney (N. Y.) Rifle Club.
Grand Valley (Idaho) Rifle Club.
Briscoe Rifle and Gun Club, Jackson, Mich.
Dolores (Colo.) Rifle Club.
Norwich (Conn.) Rifle Club.
Eastern Detroit (Mich.) Gun Club.
Manhattan (Kan.) Rifle Club.
Wakefield (Mass.) Sons of Veterans Rifle Club.
Gothenburg (Neb.) Rifle Club.
Gastonia (N. C.) Government Rifle Club.
Harlowton (Mont.) Rifle Club.
Eugene (Ore.) Rifle Club.
Reedley (Cal.) Rifle Club.
Irish Volunteers Rifle Club, Cleveland, Ohio.
Mosier (Ore.) Rifle Club.
Spanish War Veterans Rifle Club, Syracuse, N. Y.
Battery B Rifle Club, Elizabeth, N. J.
Iron City Rifle Club, Youngstown, Ohio.
Coeur d'Alene (Idaho) Rod and Gun Club, Rifle.

College Clubs

New York State Forestry College Rifle Club.
Georgia Tech. Rifle Club, Atlanta, Ga.

COMING SHOOTING EVENTS

The Florida Matches

National Matches, October 15 to 20.
National Rifle Association Matches, October 8 to 14.
Southern Rifle Association Matches, October 6 and 7.
Florida State Matches, October 2 to 5, inclusive.

The Sea Girt Matches, Sept. 9th to 18th

The Matches of the New Jersey, New York and Pennsylvania State Rifle Associations.

—Courtesy *Shooting News.*

TELESCOPE SIGHTS PERMITTED IN THE INTERNATIONAL SHOOTING TOURNAMENT

Marksmen of California and of the whole Pacific Slope are jubilant over the decision of the Exposition authorities to permit the use of the telescope sight in the great international Panama-Pacific shooting tournament to be held on the Shell Mound range from August 8th to September 26th. The question whether the telescope sight would or would not be permitted was a mooted question all over the country. The decision means that the greatest marksmen of the country are to be relied upon to take part in the tournament. Some of the leading marksmen of the bay district are practicing daily for the great event, the most important shooting tournament in the history of this country. There will be shoots for soldiers, sailors, recruits and veterans, cadets, students of academies, and colleges, indoor and outdoor contests, natural and artificial light, rifles, pistol and revolver shooting.

The tournament will be inaugurated by a brilliant military demonstration, in which civic bodies will participate. The officers in charge predict that fully 40,000 men will be in line on that occasion. Many shooting societies from all sections of the country will be represented.

SMOKELESS POWDER FOR RIFLES

By Edward C. Crossman

PART I.

Forty-six grains of tiny black beads. A thimble will almost hold them. Put them down and light them, and they burn with deliberation and hissing, not with the "whoof!" of black powder. Seemingly they are harmless enough.

But, put them into the brass cartridge case of the Government army rifle, behind the 150-grain, sharp-point bullet. Ignite them with the hot flash from the big primer. Here, because they cannot have their own way, because they are held in by the walls of the chamber, and the base of the bullet, and the base of the shell, they become furious.

That sharp-point bullet is rushed out of the rifle with a speed of 2,700 feet a second, and the gases from the 46 little grains rush after it with fearsome bellow. Over 5,000 yards would that bullet travel with the rifle pointed to 45 degrees. Through nearly four feet of timber would it tear at the muzzle, or nearly through a half inch of good solid steel. Its power is equal to 2,440 lbs. dropped a foot. And all from those harmless little black grains, that burned so peacefully when we lighted them in the open air.

To the average man, nitroglycerine and gun-cotton are fearful sounding words. He knows that gun-cotton is used in torpedoes that tear tunnels in battleships' sides and he feels vaguely that he and guncotton can remain strangers forever without his feeling that he had missed a desirable acquaintance. He knows that nitroglycerine is a liquid of evil repute. He has heard tales of the way cans of it, jarred a trifle, have torn out the immediate vicinity and rearranged it to suit. He has heard tales of the Pennsylvania oil well shooters traveling about the country with long cans of the "soup," as the burglar has it, and how their wagons have disappeared into surrounding void with only a hole to show where it happened.

So he feels that both of these pleasant substances, while useful commercially, have nothing for him, and like rattlesnakes, deserve all the room they want.

Also if he gets a can of smokeless powder, he puts it away with the shells in the gunroom or in the cabinet. A celluloid comb, however, he gives to the baby to play with, and daily he runs the mate to it through his own locks —which in turn lie very close to his brains of which he is somewhat careful.

When he goes hunting he handles his cartridges or his shotgun shells with the utmost freedom. He doesn't climb for the door when the dealer rudely slams a box of 12's out on the counter. His hair does not turn grey if he drops the shells on the way home and they hit with a smash on the pavement. Why should he worry: he's now dealing with smokeless powder. And as for the comb, that's only celluloid.

Every time the before described citizen pulls trigger on a smokeless powder rifle or shotgun shell, he ignites a pleasant compound that may be practically guncotton—like our Government rifle powder—or that may be only two-thirds guncotton and one-third nitroglycerine. It is certain to be one of the two—guncotton or a mixture of this and nitroglycerine.

When he combs his hair he does it with a comb that is nitro-cellulose—which is another name for guncotton—but the trade name of which is celluloid. So he finds that he's on quite familiar terms—the back-slapping stage of acquaintance—with substances that he wouldn't touch with a ten-foot pole did he know what they were.

Smokeless rifle powders all have for their basis just the same stuff as the celluloid comb. They are so similar that a very slight change would make the comb an explosive. In fact, it can and does explode under some provocation. This is not to infer that celluloid is unsafe; it is not. Aside from its readiness to light if properly urged with a flame—or contact with an overheated neck—celluloid is quite safe. So are smokeless powders unless confined when lighted. You can burn smokeless powder in the open or shoot into it with a rifle, and not feel the worse for your liberties. It has the delightful quality—almost—of doing just what you'd like to have it do—use its energy when you want it, otherwise remain in a quiescent state. This is not true of black powder. It's uproarious at all times, and it will as cheerfully blow off a town without other provocation than a match as it will drive a bullet out of a barrel when properly confined and given the word to go according to Hoyle.

To make any modern smokeless powder—with but few exceptions—our two before-mentioned friends with bad reputations are first prepared.

Guncotton is made by the simple process of soaking in a mixture of strong nitric and sulphuric acid hanks of ordinary cotton, or cotton waste, previously washed to remove grease and resin and other impurities. The sulphuric acid is to take up the water that results from this soaking, the nitric acid does the work.

The resulting stuff—that still looks like cotton—is guncotton, and its meanness of disposition depends solely on the strength of the acid used. It is washed and rewashed to remove all the acid, and then it is used up in the arts, from making harmless combs and soap-boxes and "Parisian ivory" to removing the battleships of parties not in agreement with our policies.

The weaker acid is used for making celluloid and collodion. The cotton obtained is soluble in various substances and, being soluble, is not called guncotton. Guncotton, made with a stronger acid, is not soluble, and is a more powerful and sensitive explosive. This is the main difference.

To get the other member of this pleasant twain, glycerine is poured into our mixture of sulphuric and nitric acid. Then, when they get rid of the left-over acid, they have a yellow, thick liquid—nitroglycerine.

As before stated, practically every modern smokeless powder is either our guncotton friend, taken straight, or else a mixture of the two explosives in varying proportion.

Powder is smokeless because it evolves a minimum of solid, unconsumed matter. In the reaction that follows its ignition under proper conditions, it breaks down and gives off enormous volumes of elastic gases. These are mainly carbon monoxide, carbon dioxide, water in gaseous form, and nitrogen.

For example, if you detonate, which means instant and complete burning, a charge of guncotton, you get 18 parts carbon monoxide, 6 parts carbon dioxide, 14 parts water in gaseous form, and 12 parts nitrogen. This is the chemical theory of it. As a matter of fact, you get also marsh gas, nitric oxide and less nitrogen than shown in the formula.

There is no half burned matter like charcoal to blow out into the air, and hence the powder is nearly smokeless. By the same token, as you get complete burning, and hence evolution into gas, smokeless powder, weight for weight, is enormously more powerful than is black powder.

Black powder is made up of charcoal, saltpeter and sulphur in the proportion of 15, 75 and 10 per cent. When it is burned in a gunbarrel it gives off about 35 per cent gas, and presents the gun with 65 per cent solid matter to be blown out or to coat the inside of the barrel. Smokeless powders give off about 70 per cent gas and 30 per cent residue. As we get our required velocity in shotguns from half the amount of smokeless as of the old black charge, because we have just seen that the smokeless is twice as efficient as black, we therefore have but a fourth as much solid residue to blow out of the barrel as when we use black powder. As driving this solid residue out against the air is what runs up recoil we see why with the same muzzle velocity we get less kick from smokeless powder.

(To be continued.)

EFFECT OF ALTITUDE ON TRAJECTORY OF RIFLE BULLET

Field & Stream Pub. Co.:

I wish a little enlightenment, and this is what I want to know: Will a rifle sighted to hit, say, an eight-inch bull's-eye at 200 yards, at sea level, be correctly sighted to hit a similar bull's-eye at a similar distance at an altitude of, say, 5,000 to 7,000 feet. Or, at the higher altitude, would the resistance against the bullet be less and the rifle have a tendency to overshoot or overcarry.

Alfred Ruckle.

Ans.—Owing to the lessened resistance of the air the rifle will overshoot at high altitudes; in other words, it will carry farther for the same height of trajectory parabola.—Ed.

CRIMPING SHOTGUN SHELLS

Part I.

The proper amount of crimp to put on a shotgun shell is a continual source of anxiety to the conscientious loader, as the uniformity of the load is the one thing desirable in cartridges. Without it a sportsman can never tell where he is shooting, and nothing is more important to the regularity of the load than the crimp.

Undoubtedly a great many more men would load their own shells if they could satisfactorily crimp them. Particularly men who use repeating or automatic guns complain that their hand-loaded shells stick in the chamber or jam in the magazine.

This trouble is caused by many different reasons: shells that have been reloaded are apt to be swollen, or too large a size wad is used, which also causes them to swell, as a result of which they need resizing. But more often the shells are crimped too hard, and the crimp is irregular, and broken or rough.

If one will exercise a little care in crimping, and get the knack of it there should be no cause for dissatisfaction.

To perform this work properly a well-made implement is essential; the inferior forms of crimper on the market must, in the first place, be avoided. Purchase a good one to begin with; one that operates on a straight line, and is equipped with a steel chuck, as a brass chuck, such as is put on the cheap tools, will quickly wear out.

Now as to using it—

If the amount of turnover varies in the slightest degree the force necessary to eject the load of shot from the shell will vary also. This will have a corresponding result upon the velocity of the load.

Tests show that the ideal turnover which will give the best results represents a resistance of about 45 pounds, and to attain this amount of resistance an allowance of .275 of an inch must be left for the crimp after the top wad is seated.

If the crimp varies more than 1/64th of an inch one way or the other the resistance to the load will also vary about five pounds, which will naturally alter the force of the powder.

At least a quarter of an inch is needed in any case to get a crimp that will hold its shape.

Many amateur loaders will measure the amount of powder and shot with the greatest care, overlooking completely the importance of the amount of pressure brought to bear on the powder wads in seating them and in crimping the shell. Yet they wonder why their results are so unsatisfactory.

A great difficulty which many men experience is due to their belief that the whole charge must be forced down snugly by the crimp. As a result the head of the shell is crushed. When the turnover is wrinkled and uneven it shows that it has been forced into the crimping machine with too much strength, and the turnover upset by the pressure.

The shell should be forced into the machine very slowly, and the crank revolved as rapidly as possible. Do not force the shell faster than it is crimped; remember that it is only made of paper. Continued pressure on the lever after the shell is sufficiently turned over will only result in injury.

It is very hard to get a really good crimp on a shell that has been fired once, as the paper is softened. So, if possible, select shells to reload that are long (2⅞ or 3 inches) and cut them off below the old turnover. They are then as good as new, and if loaded with a little less wadding will generally be satisfactory.

If you shoot at a gun club you will often find some man that shoots shells of this length, and you can pick up his discharged cases. If you cannot find any long enough to be cut off melt some tallow or wax in a shallow pan until it is about one-quarter of an inch deep. Then dip the paper ends of the shells in the tallow and let them stand until they are cold and the tallow has hardened before crimping. This simple method will insure a good crimp.

Another source of difficulty is caused by a change in the size of the shot used, for a charge of 1 oz. of No. 4 shot will take up more room in the shell than the space required for 1 oz. of No. 8 shot. This necessitates the readjustment of the load at times so that the proper turnover is acquired. By a little thinner wad being used this can generally be accomplished.

This does not mean that the best results can be gained with very little wadding; the more wadding over the powder the better.

Should there be any tendency towards rough turnovers, smear the end of a shell with a mixture of oil and emery. By turning this rapidly in the chuck of the crimping machine the rough surface which has formed will be polished out by the friction.

Until the repeating and automatic shotguns became popular, the square crimp was universally used here, as it is abroad. For it was believed to meet the expelling force of the powder with greater resistance than the round crimp and held its shape better. But it does not function as well at times through the action of a repeating gun, as it will sometimes catch on entering the chamber, therefore the round crimp is generally used.

The new Marlin crimp support, which has just been placed upon the market, will be found to be of great advantage to the users of repeating guns.

This simple device is made of brass, in the form of a ring with a flange on it, the center being cut out to lighten it so that it will not follow the charge of shot. The ring is placed on the top wad before crimping, and the shell is then crimped in the regular way, the paper overlapping the reinforcement. The crimping of the shell is made comparatively easy by the use of the crimp support, but the main advantage lies in the fact that the crimp strengthened in this manner will not bulge when subject to the shock of recoil in the magazine of a repeating gun.

This is the greatest cause of jamming in a repeating or automatic shotgun, as the shells are often damaged on the end while in the magazine by repeated recoil when the gun is fired once or twice, as is generally the case, and new shells forced into the front end of the magazine. A magazine spring that is too strong will have the same effect.

As regards the effect that the crimp support has upon the pattern of the load we have tested it and cannot find that it injures the pattern in any way, but, of course, it cannot improve it. A little thicker wad over the shot will be found satisfactory ("B" thickness). In fact the pellets seem to hit the target with slightly greater force, for undoubtedly the crimp support increases the resistance to the initial force of the explosion, and increases the combustion of the powder within the barrel.

PENETRATION OF THE .22 HI-POWER

Field & Stream Pub. Co.

Will you please explain why the .22 Savage high-power rifle, having a velocity of 2,800 feet per second and a muzzle energy of 1,206 foot-pounds, penetrates no more than 7¾ inches in pine? This is all the manufacturers claim for it, yet bullets but slightly larger and not having nearly as much velocity and muzzle energy, penetrate as much as 30 inches.

J. Phillips.

Ans.—Bullet breaks up in the wood tissues, as we understand it, and the manufacturers claim it as a good feature, because the whole energy of the bullet is thus delivered as shocking power. The bullet is made of such materials as to facilitate this breaking up on animal tissue.—Ed.

COYOTES SHOT FROM AIR CRAFT

Inaugurating a new epoch in the hunting world and showing the ever-increasing practicability of aviation, Fred Mills, one of the best amateur marksmen in California, one day last week shot and killed from an aeroplane driven by Glenn Martin at a speed of between sixty and seventy miles an hour, and at an altitude of three or four hundred feet, two coyotes which had been loping along in pursuit of quail, little suspecting that they themselves would soon be quarries.

This stalking of game by aeroplane, which Martin declared marked the beginning of the revolutionizing of hunting, was accomplished in the San Fernando Valley, which was chosen by the ingenious aviator and the clever marksman as a likely area to demonstrate the possibilities in a combination of hunting and flying.

It was at 3.45 in the afternoon that Martin and Mills, in one of Martin's standard aeroplanes, left the aviator's Griffith Park hangar, near Los Angeles, and mounted skyward, circled once over the aviation field in a farewell to a few friends who were interested in the exploit, and then sailed away to the north, while the reports of Mills' Remington auto-loading rifle, fired in joyous anticipation of "bringing home the bacon," mingled with the whirr of the machine's motor.

It was at 5.20, or an hour and thirty-five minutes later, that the aeroplane returned to the hangar, bringing a happy airman and an equally happy hunter, as well as three coyotes and two wildcats which Mills had shot about seven miles north of Roscoe, or about twenty-five miles north of their starting point.

Two of the coyotes were shot by Mills from the machine as it sped through the air at a speed exceeding sixty miles an hour. The other animals were killed by him on the ground after Martin had made a landing in order to take into the aeroplane the two Mills potted while both he and they were in motion.—*The Game Breeder.*

This form of hunting should be confined by law to vermin only.—Ed.

SHOTGUN LOCKING BOLTS

By Herbert K. Savage

One Saturday recently I took my new shotgun to the traps and entered for the regular week-end shoot. Being justly proud of my purchase, I showed it to several of my friends who admired it, putting it to their shoulders, swinging it after an imaginary bird, and testing it for balance, and, in a word, going through the regular formula used where a new gun is concerned. A stranger standing by, after watching us for several minutes, said, "I wouldn't own a gun of that make, the locking system is no good!" I asked him why he said that and he then told of a gun of the same make which had shot loose within the first six months of use. Finally pinned down to facts, it appeared that he really did not *know* of the instance in question, but had heard it from a friend of his who, in turn, had been told by another man. Thus, in a good many instances, a gun is given a bad name, not through actual knowledge or from the speaker's experience, but only through the statement made by another party, name unknown. Even the most narrow-minded gun crank must admit that for every gun that shoots loose, there are hundreds of the same make in use which are just as tight as the day they were bought. A reputable gun-maker cannot afford to turn out a poorly fitted or bolted gun; his product is the best his designers and mechanics can turn out.

If you are going to buy a gun, do not rely solely upon the advice of a good shot whom you may happen to know, just because he is able to break his 95 out of a hundred birds in nearly every shoot. He may not know anything of guns outside of his own particular pet which, of course, he considers the best made. I knew of a dandy shot who used a gun for wh ch he only paid $20.00, and which he declared would never shoot loose, but later developments did not bear out his assertion. If a number of good shots speak well of a gun you may be sure there is a solid foundation for their argument, and vice versa. By far the better way is to study over the various guns, how they are bolted, the system by which the barrels are bored, the kinds of main springs used, whether V-shaped or coil, the various cocking and firing mechanisms, and note

whether they have side plates or box frames. When you have done this, you will have some idea of the working of the various makes, and can make a wise choice, picking out the gun which you think has most in its favor. As all the well-known guns are first class and well worth what you pay for them, personal opinion is really the last resort, for no matter what the other fellow says, and how convincing his argument sounds, deep down in your heart you have a feeling that although his gun may be a dandy, you know that the one you looked at during the lunch hour yesterday suits you a little better, even though it may be built on a different system than his.

The principal locking systems are by means of either lug bolts or bolts through the extension rib. Some guns, especially those of English make, are held by lug bolts only, two bolts generally being used, one at the rear end of the lug, and the other a little further forward. Guns bolted in this manner are very liable to shoot loose, for, while the barrels are held down by the bolts, they have nothing to keep them from jumping forward away from the standing breech every time the gun is fired, with the exception of the joint, which soon wears, and the gun then becomes loose.

One of our best-known gunmakers employs a lug bolt and a tapered crosshead extension rib. The upper surface of the lug bolt is fitted with a plate of hardened steel, cut on an incline, thus allowing for the wear of the bolt. If this should ever become too much worn a new plate can be fitted on at the factory, and the gun will be as tight as when new. The tapered crosshead rib takes care of the forward pull of the barrels away from the breech. The lug of a gun is that piece of metal attached under the barrels at the breech end, which fits into the frame of the gun and on which the barrels hinge.

Another of the well-known American guns is fitted, in addition to a lug bolt, with two extension rib bolts, one of which goes through the extension rib and the other into a bite at the end of the rib. All three of these bolts are fitted on an incline, and the longer the gun is used, the finer seated the bolts become.

In general, all locking bolts are operated by the top lever which rotates the pillar concealed in the frame, the bolt being either forged to the pillar and working by its rotary motion, or else being attached to the pillar by a small crank which slides the bolt backwards on rotating the top lever.

One firm, turning out a gun equipped with side plates, makes use of a rotary locking bolt cut on a bevel. This bolt goes from one side of the frame entirely through a square hole in the extension rib and enters into the other side of the frame, at the same time another part of the bolt closes over a notch on the end of the extension rib. A gun so equipped has the wear automatically taken up by the bevel, which keeps the gun always tight. No lug bolt is necessary with this style of fastening.

Another equally well-known firm makes a gun having a square-shouldered wedge-shaped extension rib into a notch in the end of which enters the bolt, both notch and bolt being cut at an angle of 15 degrees, thus allowing the bolt which enters from the right side to move further into the rib as the wear takes place. This prevents any upward jump of the barrels. To keep the barrel from moving forward from the breech at every shot, a compensating screw is placed in the forward end of the frame (the end of screw being the same width as the lug under the barrels), and when the surface of this screw, which fits into a notch in the forward end of the lug, becomes worn, a slight turn to the right will compensate for the wear and make the gun tight again.

Still another manufacturer employs for the locking system a heavy tapered rotary bolt pinned to the pillar, and on rotating the latter by the top lever, it passes through the extension rib from one side of the frame to the other, in this way securely pinning the barrels to the frame. This bolt is controlled by a new type coil spring which is warranted by the maker never to break.

Several other firms which turn out guns well worth your money employ the rotary bolting system, this being the type used by a great many American makers. This bolt, when the gun is open, is concealed in the right side of the frame, but when the gun is snapped shut the bolt is automatically released and enters the hole in the extension rib in something the same manner as the curved hook on a padlock engages with the latch.

As before remarked, it is always well to know something of the different locking systems before going into a store to purchase your gun. Every gun salesman has a favorite make of gun and no matter how fair-minded he may be, is sure to extol his particular favorite to the detriment of the others, and when you recover from his harangue you may find yourself in possession of a gun which you may later find does not quite come up to your ideas of what a good gun should be, for, of course, we all have an ideal in the gun line which we would like to attain.

UNKEL DAVID'S LETTER

Dere Felde & Streme:

An uther soopreem judj has riz & tolde the trooth abowt the Fedderel Duk Law. This is rite & propper. Why shood a soopreem judj hezzytate to bust a stattoot whitch maiks trubbel for the boys at the rong time of the yere? The Fedderel Law is plum unkonstitoeshunel—not jest wunst, but awlwais, whuther it protex dux & medder larx, or keeps a onnist man from maiking his nubbiny corn into good likker. Awl laws is moar or less trubbelsum, but them put owt by the Stait can clame sum slite ekskoos in the deepravvity of a few retched beeings hoo are neether Krisschuns or good Demmykrats, & moar over the Stait offisers are hooman beeings hoo never lok a man upp so long as he voats the rite way at eelekshun time. But Fedderel laws is infoarsed bi Yoonited Staits marshuls, & I never knoo one (1) yet hoo wasent as meen as a drunk yaller nigger at a Foarth of Jooli sellybrashun. So I am tikkeld bekos the soopreem judjez in Arkinsaw & els whare have spoak rite up in meeting & give this duk law a blak I. Awl the saim yore unkel has greezed upp his ottymattik reepeeting duk-bootcher & pakt it away in Red Kross abzobbent kotton till futher notiss from Kongriss. It wood be offel if awl them soopreem judjez shood have to taik it bak—& me with duk fethers skatterd arownd in the bak yard. Don't put awl yore munny on an uther felloe's first impresshuns. If I shood say Jak Jonson is a hoss theef & a lier, it woodent be wize to repeet it in his heering. I mite onlie be mistaiken, but you wood be a konjennytel iddyutt.

Me & Sar An (mi dere & moar or less bewtyful help meat) has past throo the winter in pritty good shaip. By whitch I meen that we have kep owr hare slik & haint shed owr hoofs; but we hit a leen streck erly in the spring befoar the shepperd sprowts & poak sallud got big enuff to bile. Owr jeenyel hoast maid soop of the saim hamm boan foar (4) days strate, till you coodent find a spek of greess on the watter; & then we bid him a teerful adoo & aksepted a invite to vizzit a Felde & Streme subskriber hoo had just morgidged his plantashun to the stoar keeper. Addishunel proof that the grate reeljus maggyzeen sirkullates onlie amung the best peepul. For sum reezun the Eddytur is ankshus we shood stay in the brite & orrindj-sented South, but sum of these nites I'll set intoo the rite sort of a poaker gaim, & then me & Sar An will bi ralerode tikkits for Neo Yawk. It wood be cheeper to go by bote, but I don't want no purtekted krooser hitting me in the sturn bilje with one (1) of them white-hedded torpeedoze. Yore unkel is a nootral in this war, & heerbi noatyfies all bellijerents to that effekt. Sar An has got my prommis in riting, as folloes, too wit: "This is too sertify that Unkel David is frendly to Jermunny & the Alleys, espeshully the latter, & wont take no undoo advantidj of eether onless they munky with him." A kopy ot the above is on eksibishun in the Felde & Streme offis—awlsoe in the seekret arkives of evry kappitul in Yoorup. Free admisshun Sundys & Toozdys.

Sar An has a romanse, whitch has brot the rozes to blossum wunst moar in her ajid cheex. They shode up last nite after a vizzit to the ten (10) sent stoar, & it tuk pritty neer a hull box to git the rite effekt. She is awl workt up abowt a letter from a stoar keeper hoo sais that he speshully deesires her patternaje & wants her to cawl at the ekroo silx deepartmint at a spessyfied day & owr. Sar An sais he is a absaloot stranjer, but I shell be sum whare in the bakgrownd, rozes or no rozes. I am not a might jellus, but Sar An has maid mi life mizerbel bei now abowt resterrunt tabel girls etsettery, & if I tare loose amung them eekroo goods it will put rite smart of a krimp in that letter riting bizness beer after. Just the uther

day Sar An herd me tell a red-hedded casheer that the appel pi was pritty deer, & she said I was cawling her that—whitch the Lord knoes I woodent. But that's the way with wimmen. They awlwa's heer what is sed to the uther one (1) whuther you sed it or not. It was Sar An's fawlt that I dide mi hare & tuk a Van Dike shaive, & she maid me pay ate dollers ($8) for a white soot whitch turns up at the bottum & a neer pannymaw hat. I shoodent have did it, for he hoo lets hisself be bootified akkording to his wife's idee must expekt to be wacht with jellus kare. This is a fakt knone to the Eddytur & awl marrid men. If you want libbuty to speek to the fare seks reegardless, ware overhauls & a dob of axul greess on yore noaze. Sollymun in awl his wizdum was no wizzer than this. (P. S. Leeve out a *z* if thare is too menny—eether one (1) will doo.)

Sevral spoartsmen of moar or less lokul repoot have been kritisizing FELDE & STREME bekos it has too mutch abowt artifishul flys, whitch is of no intrust to commun peepul. They want a artikel on fish wurmz, & whitch end to stik on the hook, & how mutch shood be left to wiggel. Awlsoe a few eerodite & pregnunt remarx on bobbers & sinkers, with a dyagram of how to ty a granny nott. An uther man wants to knoe if hornits nest is better than noozepaper for wodding a shotgun, & if you perfer a Demmykrat paper to a Soshulist. Sar An heer interrups my floe of thot to reekwest moar advenchurs by wimmin riters. She sais haff the maggyzeen woodent be too mutch for reely good litterytoor of that tipe—a littel abowt whare they went & how they slipt up to the 4th ruffel in the watter, & moar in reegard to whuther it was reel Irish point or deepartmint insershun. Mi idee wood be to have this stuff rit in the offis & save the munny that utherwize be waisted. That pritty kurlyhedded stenografer that looks so mutch like me will dowtless have the reekwired teknikkel nollidj & the Eddytur can suppli the fish storys. Stik in a few Lattin wordz like Sallylinus Dijjytallus, & the deer reeder will akspt it as the pewr kwill.

Yores trulie,

UNKEL DAVID.

AN OLD HUNTER'S REMINISCENCE

"Outside the day is cold and dark and dreary," but within my sitting room, with its cheerful wood fire, it is pleasant and comfortable and, lying back in my easy chair, I have been watching through the window the snowflakes as the wintry wind whirls them about, piling them up in fantastic mounds, and gradually covering the shrubbery and trees with a ghostly shroud.

I settle back in my comfortable quarters with a magazine in my hands, intending to read and feeling at peace with all mankind. As I do so my eyes rest upon a beautiful mounted specimen of the "summer" or wood duck that adorns the mantelpiece above the fireplace. As I gaze upon it memory carries me back to a beautiful day in early November, one of those Indian summer days that always tempt the lover of dog and gun to try just once more, before the snows of winter set in, the possibility of picking up a belated woodcock or of flushing an old cock grouse sunning himself at the edge of the woods or in some sheltered alder patch.

I had a young Irish setter dog, ten months old, that I had hunted some during the fall, and the desire to give him one more lesson, together with the beauty of the day, could not be resisted, so hustling into my shooting togs we boarded the train for North Yarmouth, a place about ten miles from the city and a favorable spot for a day's sport.

The air was sharp and bracing, but tempered by the bright sunshine, it made an ideal day for hunting. It got to be well along into the afternoon and the sun was sinking below the distant hills, and thus far we had not seen so much as a feather. As we neared the banks of "Royal River," working through an alder covert that led to the river, I noticed my dog marking game. Speaking a word of caution to him we worked along towards the river. Soon there was a rush of wings and a rustle of dead leaves, and a flash of something that I just caught a glimpse of through the bare alders. As the bird broke cover I hastily threw my gun to my shoulder in the line of direction and pulled the trigger. A splash in the water of the river told me that my eye had been true—and

"A trusty comrade this old gun,
And certain if you hold it right
To drop the Jack snipe one by one,
Or stop a partridge in his flight."

In this instance, however, it was not a Jack snipe or a partridge. Calling in my dog and hastening to the river bank, I saw the bird lying about two-thirds of the way across the river and that it was a wood duck. How to recover it was a problem. As my dog had never retrieved from the water, I doubted his doing it now, especially as it was icy cold. But at command, "Fetch dead bird!" he boldly plunged in and swam over, taking the bird carefully in his mouth, continued on and, gaining the opposite bank, climbed out and shook the cold water from his body, stood shivering with the cold. I called to him, but could not induce him to face the icy water again. A short distance up the river I knew there was a log boom, and walking up the river bank, the dog following on the opposite bank with the bird in his mouth, we soon reached the boom and he quickly crossed on the logs and, dropping the bird at my feet, looked up at me with every expression of joy possible for a dog to show. Needless to say, I did not fail to commend him, I hope to his satisfaction. The bird was a wood duck in full plumage and is the beautiful specimen that adorns the mantel over my fireplace and is the cause of this reminiscence. I have been telling it as though it happened but yesterday, but it was in the days of long ago, for it was in the year 1871, and now I am near the four-score mark.

I can no longer tramp the covers with dog and gun, or wade the streams with rod and lure for the wily trout. The spirit is just as strong, but the flesh is weak, and so I sit and dream and recall with pleasant memories the many good times of which, I guess, I have had my share.

"SANEZ."

BALLISTICS OF THE SAVAGE .250-3000

BULLET

Weight, 87 grains.
Diameter, .257 inch.
Length, .82 inch.
Sectional density, 1665 grains.
Point, Spitzer, 3 to 4 diameter; lead exposed ⅛-inch.
Jacket, pure copper unplated.
Muzzle velocity, 3,000 ft. secs.
Muzzle energy, 1720 ft. lbs.

CARTRIDGE

Weight, 265 gr.
Shape, Rimless.
Head diameter, .465 inch.
Length complete, 2.5 inches.
Powder chamber, 1.5 inches.
Powder charge, 31 gr. Pyro.

.30-30 muzzle energy is 1540 ft. lbs.

Range in Yds.	Angles of Eleva.	Time of Flight	Remaining Velocity	Remaining Energy	Height of Traject.	Elevation Required on Lyman Sight	Elevation Required on Marble Sight	Actual Sight Rise, Inch
100	2.00	.10	2625	1360	.54 inch	.31	.39	.016
200	4.50	.23	2275	1000	2.55 inches	.72	.86	.036
300	7.50	.37	1955	730	6.60 "	1.20	1.45	.060
400	11.00	.50	1665	530	12.00 "	1.76	2.10	.088
500	15.50	.74	1410	380	26.00 "	2.50	3.00	.124
600	21.50	.96	1215	283	44.00 "	3.44	4.15	.172
700	27.00	1.22	1085	225	6.00 feet	4.32	5.20	.216
800	40.00	1.53	1000	190	9.05 "	6.04	7.70	.320
1000	60.00	2.13	875	148	18.00 "	9.06	11.50	.480

Sight elevations are number of points on Lyman and Marble sights necessary to raise to strike the ranges listed. Elevations correct only when rifle is sighted in at actual point blank at 12 yards and then elevations taken as shown from this zero. Computed for standard Savage .250, 27-inch sight radius, Marble sight having 1/24-inch graduations, Lyman having 1/20 inch.

Last column shows actual move in fractions of an inch any sight in the position of the tang sight must be moved to strike the mark at the range listed.

TRAP-SHOOTING DEPARTMENT

CONDUCTED BY DAVID H. EATON

TOM MARSHALL AND HIS SHOOTING BIOGRAPHY

Every trap-shooter knows the genial Tom A. Marshall, High Chief Long Talk of the Indians, and will be interested to learn that he has added another line to his already varied industries, and that, in addition to the many honorable titles won in the political arena and on the firing line, he has recently acquired the right to use the editorial "We." His efforts will be concentrated on educating the general public in an appreciation of trap-shooting as a clean and most alluring sport, and in keeping the shooters' interest active with such live items as "Tom" knows how to write, his medium being the columns of a prominent Chicago daily. The story of Tom's climb to fame in trap-shooting circles is rather a long one, but is full of interest, as may be seen by the following scraps of biography given by him in his terse, inimitable style. Answering the oft repeated question of how he got into the shooting game he says: "Drift back with me to a time when I was living in Keithsburg, Ill., on the banks of the Mississippi River. That was when the noble red man yet paddled his canoe upon the Father of Waters, migrating as did the ducks, impelled by the seasons. En route the Indians would give exhibitions of their skill with the bow and arrow, shooting small coins from split sticks. Of an evening they would follow with Snake, Sun, Green Corn and other dances which, to the spectators, looked the same. It was the bow and arrow exhibitions by the Indians that aroused in me the desire to shoot. Hence my first attempt was with the weapon used by the redskins, and this taught me to shoot with both eyes open, as do all trap experts like Heikes, Crosby, Gilbert and others who have been successful in this particular line of endeavor. My next step was with the single-barrel, muzzle-loader, which was only a gun in name. Yet with careful and continuous crawling I occasionally killed a duck. On my twelfth birthday I was presented with a Joe Manton, double-barrel muzzle-loader, with a duck engraved on the lock, much to the envy of the other boys. It then became necessary for me to win the friendship of some older person who could and would teach me the fundamentals of shooting. Louey Charbonnaux was the man, and I made no mistake in my choice. Louey was a typical French voyageur, spoke broken English, was well educated, honest, congenial and faithful. I grew to love him. Louey discovered in me (as he in later years confided) shooting ability which he determined to develop. He first impressed upon me the necessity of accuracy, then care. "Take no chances," was his motto. His knowledge of the great outdoors was such that he was at home in the woods day or night. The stars were his lamps. The touch of a tree gave him direction. Louey educated me to shoot and to hunt, taught me the secrets of the forests, and to commune with nature. He was the moving spirit that put me in the shooting game. My next gun was a breech-loader. The game was plentiful, the seasons long, and all my spare time was spent afield. Before long I had built up a local reputation as a game shot. Then came trap-shooting. I wanted to try conclusions and did. My first success was the winning of the Mercer County championship. I still have the trophy and prize it highly. Never again did I win a cup that really looked as large to me, yet it was only about four inches high. After that victory I admitted to myself that I was a real shooter. A few pats on the back by my old shooting pard, Ed Ott, sent me out to conquer wider fields. I was asked to become a member of the Northern team which toured the South in 1881. We visited all the principal cities, shot against the best Southern teams, and never were defeated. In 1897 E. S. Rice, of Chicago, organized a team of twelve Western shooters to compete in the Grand American Handicap. Up to this time the honor had never been carried off by a Western shooter. Our team was composed of Grimm, Williamson, Merrill, Powers, Dr. Carver, Dunnill, Vorhis, Bingham, Budd, Gilbert, Stannard and myself. The shoot was held in New York City and lasted three days. From the start the Western contingent was in evidence. When the smoke cleared away I had the premier trap event of the world in my game sack. I was the only contestant who made a perfect score. Two years later (1899) a second delegation visited the East, chaperoned by Rice. There were 101 in the party, 65 of them shooters. The handicap was another three-day affair, with 263 shooters participating. Eight men were tied for first honors. In the shoot-off for first honors I was again successful, taking the Grand American for the second time. No other shooter ever has duplicated this performance. In 1901 the All-American team was sent abroad to compete in the international shoot. I was honored by being elected captain of the team. We never encountered defeat, and returned to this country with a big string of successive victories."

Mr. Marshall has been actively engaged in trap-shooting since his return from that trip, and has visited and competed in every State in the Union, and is personally acquainted with most of the shooters.

Careful computation places the number of gun clubs in the United States at 3,221, and the total membership at close to 162,000. The sport is fast growing in popularity, and at the rate of increase in the past few years, there should be nearly 500,000 shooters by the close of the present season.

KENTUCKY STATE TRAP-SHOOTERS' LEAGUE

At a called meeting the Kentucky State Trapshooters' League unanimously decided to hold the State tournament under the auspices of the Louisville Gun Club, on June 24 and 25, and that the rules of the League should govern. The tournament was registered with the Interstate Association, but the registration has been withdrawn, which means that scores made at the shoot will not be included in the official averages for the year. The Louisville club is making great preparations to care for the visitors, and over $1,000 in cash and trophies will be offered for competition.

GRAND AMERICAN HANDICAP

Ray E. Loring, a prominent amateur of Marseilles, Ill., has been appointed on the Grand American Handicapping Committee in place of H. Kennicott, resigned. Mr. Loring has been active in the sport for a number of years, and is one of the best informed men in the country regarding the average and ability of the shooters. His selection will meet with the approval of the great majority of trap-shooters.

SIXTEENTH ANNUAL TOURNAMENT OF THE INDIANS

The sixteenth annual tournament of The Indians is scheduled for June 29 to July 2, with practise events on June 28. The tournament will be held at Cedar Point, Sandusky, Ohio, well named the "Atlantic City of the West," and an ideal place for a week's outing. The cash prizes and trophies will exceed $1,000 in value, the latter including gold watches, handsome cut glass pieces, etc. The shoot is for amateurs; professionals to shoot for targets only. The organization is one of the oldest of its kind in the country, its membership including amateurs and professionals from all sections, and its tournaments rank with the Grand American and Westy Hogans.

PREPARATIONS FOR THE G. A. H.

Preparations for the Grand American Handicap in Grant Park, Chicago, are progressing favorably. The place where the big event will be staged is on the lake front, within a few squares of many of the hotels. The prospects are that the record of last year, at Dayton, Ohio, over 500 shooters, will be exceeded.

DELAWARE CHAMPIONSHIP

Eugene E. du Pont and W. M. Hammond had a spirited contest at Wilmington, the middle of April, for the title of champion of Delaware. The former was the holder and was successful in retaining the honor. Weather conditions were hard, and the scores made were really better than they look on paper. In the first round the contestants tied on 22; in the second string du Pont gained a lead of 1 target, with 21 to 20; in the third frame Hammond got busy and finished 2 targets ahead, 23 to 21, giving him a lead of 1 target in the total. Du Pont had the best of the last round by 1 target, 21 to 20, thus tying the score on 85. The shoot-off was won by du Pont, 21 to 19.

WEST JERSEY TRAP-SHOOTERS' LEAGUE

Harry H. Sloan, member of the Farragut Sportsmen's Association of Camden, won the President's cup, emblematic of the high individual score of the season in the contests of the West Jersey Trap-shooters' League. His score was 285 out of 300 targets, or 95 per cent. William A. Borden, of the Delanco Gun Club, was runner-up with 261, or 87 per cent. The cup was donated by Frederick von Neida, of Camden, president of the League.

CONNECTICUT TRAP-SHOOTERS' LEAGUE

The first shoot of the Connecticut Trap-shooters' Association, held at Meriden, was well attended, 68 amateurs and 10 professionals shot through the entire program of 150 targets, and two amateurs shot at 50 targets. Louis H. Bradley, of Hartford, was high amateur with 140, including runs of 35 and 40. His good work gave him the hammerless repeating gun. He won first money in Class A, a $5.00 gold piece, for high amateur average, and also a leg on the State championship trophy. H. R. Sedgwick, of Hartford, was runner-up with 138, including a run of 58. "Hank" Stevens, the popular representative, was high over all with 144, his score including a run of 85. Four teams entered for the five-men team race, 100 targets per man. Hartford won with a score of 443. The Bridgeport team was runner-up with 442. Bradley and Sedgwick, of the winning team, made high individual scores, tying on 93. Other scores on the Hartford team were: Newsome, 88; McFetridge, 87; Trumbull, 82.

MAPLEWOOD (N. H.) GUN CLUB

The Maplewood (N. H.) Gun Club is following the example of Pinehurst, which has made trap-shooting in mid-winter as popular as golf or tennis, and has announced the first annual mid-summer tournament to be held the last week in July, beginning on the 27th. Preliminary sweeps will be shot on Tuesday and Wednesday; the Maplewood championship on Thursday; Preliminary Handicap on Friday, and the Mid-summer Handicap on Saturday. There will be $500 added money, and a big list of trophies. The shoot is registered and will be in charge of Lloyd Lewis and Jack Fanning.

MISSOURI ATHLETIC ASSOCIATION SHOOT

A feature of the opening shoot of the Missouri Athletic Association at St. Louis was the fine work of Art Killam, the local professional; he broke the entire program of 100 targets, and 25 targets in a preliminary practise event, making a total straight run of 125, over the new traps which throw the regulation 50-yard targets. B. Williams was high amateur with 96 out of 100; Watkins and Willechen tied on 94, and James Bell followed with 92. Watkins won Class A trophy with 48 out of 50; B. Williams a close second with 47, and Anheuser 46. In Class B, J. Locatel and Doc. Dorsey tied for first on 42, the former winning the trophy in the shoot-off. Fitzwilliams won the trophy in Class C, on a score of 39. In the 50-target handicap event for the season's championship, E. Williams scored 49 from scratch; Watkins and W. Hawley 48 each, including their handicaps of 2 and 4 targets respectively; Ford came next, with 47, including his handicap of 2 targets.

DRESDEN GUN CLUB

In the registered shoot of the Dresden (Ont.) Gun Club, H. O'Loan and J. W. Hart were high amateurs on 94 each out of 100 targets; H. L. Taylor and J. W. Malott next with 93 each; W. Bilton third with 92. R. Day was high professional with 93.

UTAH STATE SPORTSMEN'S ASSOCIATION

Utah State Sportsmen's Association's registered shoot in April had a fair attendance. The high amateurs were: A. P. Bigelow, 140 out of 150 targets; C. Reilly, Jr., 137; M. Skeen, 136. The high professional was L. A. Cummings, who tied the amateur high score of 140.

ATGLEN (PA.) GUN CLUB

Atglen (Pa.) Gun Club held a registered shoot the middle of April, with 53 amateur and five professional contestants. The amateurs were headed by A. B. Richardson with 142; Wm. Foord and C. H. Newcomb tied for second place on 140, and J. G. Martin was third with 137. O. S. Sked was high professional with 138.

EXETER (NEB.) GUN CLUB

At the Exeter (Neb.) Gun Club's registered shoot in April, S. A. Huntley finished at the top of the amateur division with 145 out of 150 targets; E. Varner came next with 141, and C. Holzworth and C. Gallatly third with 140 each. D. D. Gross was high professional with 141.

SPENCER (IOWA) GUN CLUB

The amateur contestants at the shoot of the Spencer (Ia.) Gun Club had V. B. Asher in the lead with 193 out of 200 targets; J. A. Schmitz 191, and E. J. Skinner 186. Fred Gilbert was high professional with 195.

MINNEAPOLIS GUN CLUB

Fred Richter was the bright star at the shoot of the Minneapolis (Minn.) Gun Club, held the latter part of April over the Fort Snelling traps, breaking 100 straight. M. W. Thompson and J. E. Harker tied for second place with 98 each, the same score as made by Hershey, the professional. Third amateur place was filled by F. S. Novotny and W. D. Haggens with 97 each. M. W. Thompson defeated W. B. Shepherd for the Twin City championship trophy, and was challenged in his turn by F. S. Novotny.

METUCHEN GUN CLUB

Trapshooting has been revived in this vicinity within the past two or three months. Clubs that were almost dead have come to life, shooters who had given up the sport have "come back," and several new clubs have been organized and many new enthusiasts have entered the ranks of the followers of the "sport alluring."

Notable among those who have again taken up the sport is "Furm" Bissett, of South River. Mr. Bissett, several years back, held the trapshooting championship of New Jersey for two seasons and, although he has not yet struck his old gait, by the looks of things it won't be long before he will again be making many perfect scores. He is a member of our club and sometimes shoots with us against other teams.

On Washington's birthday an all-day shoot was held at Milltown to decide the team championship of Middlesex County. Eight clubs sent teams, as follows: New Brunswick, Perth Amboy, Metuchen, Sayreville, Parlin, Dayton, Colonia and Milltown. Milltown's team won with the creditable score—considering the day—of 212 out of a possible 250.

Since that time there have been several inter-club matches and last Saturday the first of a series of three was held between Dayton and Metuchen, Dayton winning by the breaking of 209 as against Metuchen's 197. Team scores follow:

DAYTON	25	25	
Vanderveer	22	22	44
Farr	21	21	42
Barclay	22	19	41
Parent	20	21	41
Davison	20	21	41
			209
METUCHEN	25	25	
Bissett	21	20	41
Tait	20	20	40
Guest	20	19	39
Clarke	18	21	39
Brantingham	19	19	38
			197

LOUIS E. CLARKE, Sec.

Don't forget about the Field and Stream Cup for trap-shooting and casting events.

OUR HUNTING COMPANIONS

FIELD AND STREAM DOG PAGE

Every lover of the rifle and the shotgun is interested in dogs. He who has not owned and loved a good bird dog or hound has missed a lot in his outdoors, has handicapped himself unnecessarily, has deprived himself of a cheerful companionship and an efficient aid to locating game that is not to be replaced by that of any human companion whatever. The man whose one outing of the year is a big game trip to some far-off wilderness may not miss a dog, but if you are an all-year-around sportsman you cannot do without him. Pal, chum, side-partner of your days afield—oh, but you are the richer for the devotion of that doggy heart! It is to give him a page in FIELD & STREAM that is all his own; to give his master a place for discussion of doggy subjects; to interest the general sportsman in the ownership, training and care of hunting dogs, that this page is introduced into FIELD & STREAM as a permanent fixture. It will be here every month, right following our Trapshooting Department and anyone who owns pointer, setter, foxhound, 'coonhound, beagle or Airedale will find here, month by month, a selection from our mails of interest to dog owners, a list of the dates and data of standard American kennel fixtures, and brief mentions of the winners in the various field trials being held from time to time all over our country. Owing to our having but limited space available we must make these latter reports very condensed, but enough to keep the dog-lover posted on who is winning and what is doing in field trial dogs in America. If you have any question to ask concerning the welfare, training or antecedents of your pet, or have in mind the purchase of a hunting dog, do not hesitate to write us. We will send you a personal reply and if the matter is of general interest to dog owners the question and answer will be published in this page so long as there is space. This with the reservation, however, that we decline to answer questions regarding the registration numbers or genealogy of some particular dog. The *American Field*, of Chicago, is the proper authority to which all such questions should be addressed. Our subscribers, however, will find us prompt and reliable in answering all other inquiries, and we trust that this department will fill a long-felt want in the magazine, a page devoted exclusively to our furry hunting partners.

Field Trials

Twelfth American Field Futurity for pointer and setter bitches bred on or after October 30, 1914. Nominations of dams close October 29, 1915. Nominations must be made within thirty days after bitches have been bred. Send for nomination blanks containing full information. American Field Publishing Company, 801 Masonic Temple, Chicago.

Great Western Field Trial Club, Aberdeen, S. D., September 13, M. H. Bantz, secretary.

Eleventh American Field Futurity, Fall of 1915. American Field Pub. Co., 801 Masonic Temple, Chicago.

Orange County Field Trial Club, Middletown, N. Y., October 5. C. C. Haines, secretary.

Pennsylvania Field Trial Club, Carmichaels, Pa., October 19. H. H. Cahoon, secretary.

Southern Ohio Field Trial Association, Dillsboro, O., October 26. G. R. Harris, secretary.

Piedmont Field Trial Association, Durham, N. C., November 16. J. J. Lawson, secretary.

Georgia Field Trial Association, Waynesboro, Ga., November 22. R. L. Miller, secretary.

National Field Trial Championship Association, Grand Junction, Tenn., January 17, 1916. W. B. Stafford, secretary.

Beagle Trials

Sixth American Field Beagle Stake, Fall of 1915. American Field Pub. Co., 801 Masonic Temple, Chicago.

Empire Beagle Club, October 18. J. R. MacElroy, secretary.

Central Beagle Club, October 25. John Waldron, Jr., secretary.

Northern Hare Beagle Club, October 25. Earl Edick, secretary.

New Jersey Beagle Club, October 25. Gordon B. Phillips, secretary.

Western Beagle Club, November 2. J. V. Burton, secretary.

ENGLISH SETTER CLUB FIELD TRIAL DAY

This field trial was unusual in that Hungarian partridges were liberated for a bird supply, the trials being held so near a big city that the usual supply of wild birds was not available. As so many trials have been held of late over nearly birdless courses the club tried the innovation of liberated foreign partridges, with but little success, however, as the birds were in poor condition and would not take wing. The dogs naturally broke point and chased as they would in the case of cripples in ordinary quail shooting such as they had been accustomed to and were, therefore, not penalized. The meet was held at Medford, Pa., a suburb of Philadelphia and the judge was that veteran sportsman, Mr. Washington A. Coster. Results: Members Derby, for English setter dogs and bitches whelped on or after October 1, 1913. Seven starters. 1st, Reliew's Splash; 2d, Rod's Destiny's Doc; 3d, Rod's Tecla. Members' All-Age stake, 1st, Eugene M's Mike; 2d, Jersey Sue; 3d, Eugene M's Queen. Open All-Age stake, 1st, Medford Eugene; 2d, Armstrong's Daisy; 3d, Fannie. Open Derby, 1st, Reliew's Splash; 2d, Rod's Destiny's Doc; 3d, Jersey Joe. Owing to there being no real birds on the course the judging was on speed, ranging and style in making what few points were available. The dogs got on an average one or two points per heat and as the Hungarian partridges were great runners the dogs chased, caught and killed a number of them. As an instance of what can be done near big cities where a larger number of entries can be obtained than in the western and southern field trials over wild-bird courses this meet was interesting.

REGISTER YOUR HUNTING DOG

GARRETT, May 4, 1915.

FIELD AND STREAM, N. Y.:

Enclosed please find photo of my registered foxhound "Blue Grass Dolly II," 190417 A. K. C., 76443 U. K. C., 35299 B. G. S. B., 5479 N. F. A.

Yours truly,
W. J. Brocht, Garrett, Pa.

We are publishing Mr. Brocht's registrations in four different kennel associations for the good example that he sets to sportsmen owning dogs open to registry, that is, with three generations known on dam and sire's sides. It entitles him to entry in the bench shows and field trials of these organizations.—ED.

STANDARD VS. POCKET BEAGLES

Station F, Route 1, Box 53,
Minneapolis, Minn.

FIELD AND STREAM:

Gentlemen—I want a beagle hound for rabbit hunting. Will you kindly tell me either by private letter (stamps enclosed) or through your magazine, of which I have been a subscriber for years, which in your judgment is the better, where but one dog is used, the standard or the pocket beagle, and some good, reliable kennel where a pup might be secured for a reasonable amount.

Very cordially, Geo. Stanley.

Ans.—Depends upon the country he is to hunt. Unless in very dense huckleberries and briers the standard beagle is better. The pocket beagle has the advantage in a small hunting field of not following too fast so that the rabbit will potter around instead of getting clear out of the region. The standard beagle, however, is much faster, hunts a wider range of territory and in reasonably open country will afford plenty of shots at the game he is pursuing.—ED.

BENCH SHOWS

New Bedford District Kennel Club, New Bedford, Mass., May 14 and 15. J. E. Horsfield, secretary.

Nassau County Kennel Club, Belmont Park, L. I., May 15. Dr. E. H. Berendsohn, secretary.

Golden Gate Kennel Club, San Francisco, Cal., May 18, 19 and 20. Alex. Wolfen, secretary.

Kearny Kennel Club, Kearny, N. J., May 22. J. F. Galloway, superintendent.

San Mateo Kennel Club, San Mateo, Cal., May 22. N. T. Messer, secretary.

Devon Dog Show Association, Devon, Pa., May 22. John Sinnott, secretary.

Santa Clara County Kennel Club, San Jose, Cal., May 24 and 25. N. J. Stewart, secretary.

Gwynedd Valley Kennel Club, Ambler, Pa., May 29. L. R. Blynn, secretary.

Long Island Kennel Club, Sheepshead Bay, L. I., May 31. W. H. Jones, secretary.

Scottish Terrier Club of America, New York City, June 1. Mrs. A. P. Saunders, secretary.

Ladies' Kennel Association of America, Mineola, L. I., N. Y., June 3 and 4. Entries close May 13. James Mortimer, superintendent, Hempstead, L. I.

Irish Terrier Club of America, Philadelphia, Pa., June 4. J. R. Thorndike, secretary.

Wissahickon Kennel Club, Philadelphia, Pa., June 5. J. Sergeant Price, Jr., secretary.

Ladies' Kennel Association of Massachusetts, Auburndale, Mass., June 9. Helen M. Talbot, secretary.

German Shepherd Dog Club, Greenwich, Conn. June 11. P. H. Throop secretary.

Aurora Kennel Club, Aurora, Ill., June 12. A. W. Cates, superintendent.

Edgewood Kennel Club, Greenwich, Conn., June 12. G. F. Foley, superintendent.

Westchester Kennel Club, White Plains, N. Y., June 19. C. D. Tainter, secretary.

Orange Bide-a-Wee Association, Orange, N. J., June 26. W. B. Johnson, superintendent.

TREATMENT OF DOGS FOR ECZEMA

Field & Stream Pub. Co.:

In reading your article in Field & Stream for March, entitled "Airedale, Setter and Hound" No. III, I became very much interested over your treatment of eczema.

We have two dogs, an Irish Setter and a Chow Chow. The Chow has been troubled very much with eczema, and I have used many remedies. Sometimes his coat will be perfectly well, and then he will commence scratching again. I used "Glover's Mange Cure" and found it the best remedy of all. He hates this, however, and seems to rub much of it off as soon as it is put on. I notice in your article that you speak of a good remedy consisting of crude oil and flowers of sulphur, which you got at the Kenwyn Kennels. Do you think I could get some of the same preparation through them, or could I get it elsewhere?

Speaking of salmon, I have used it for the chow a great deal and he is very fond of it. It does not seem to heat him the way other things do. He gets very little meat of any kind.

Marjorie Zoreighaft.

Ans.—He needs more meat and a complete change of diet and more exercise. Many dogs get ezcema through too rich a diet, but I do not think yours gets enough. Kenwyn Koat Kure is advertised in Field & Stream, and sold by the Kenwyn Kennels, Point Pleasant, N. J.—Ed.

A FRIEND OF THE POINTER DOG

Field & Stream Pub. Co.

The many readers of Field & Stream will read with many regrets and great sadness of the death on Feb. 5th, 1915, of our friend and brother, Jno. R. Daniels, of Cleveland, O. No man ever lived who was a truer and cleaner sportsman with a dog and gun, and certainly no American who did as much for the bird dog, especially the pointer—as Dr. Jno. R. Daniels. His name is familiar, all over the United States, Canada, and England with those who know and love the pointer dog. Among those imported by him at great expense and well known were Ch. Lord Graphic, Beppo III, Ightfield Domino, and Ch. Woolton Druid from England, and Plain Sam from Canada. His great work along this line, and his plain honest way and his integrity of soul and purpose have made him many friends wherever the English language is spoken, and men go out to recreate in forest or field.

J. H. Loomis.

DOG DISEASES

Field & Stream Pub. Co.:

Will you please give me the name of a good book on the treatment of the diseases of dogs? I want one that describes the symptoms of dog diseases as well as their treatment.

Walter H. Browner.

Ans.—See "Kennel Diseases," by Ashmont, Little, Brown & Co.; "First Aid to Dogs," by W. Gordon Stables, Chas. Scribners; also March issue of *Airedale, Setter and Hound*.—Ed.

DOG QUERIES

Dog owners are invited to send us inquiries on any subjects pertaining to the selection, care, training and health of hunting dogs. Secretaries of kennel and field trial associations will do well to mail us reports and notices of coming fixtures.

NATIONAL DEFENSE

Field & Stream Pub. Co.:

I have just read the article by Lieutenant Whelen, U.S.A., and Captain X—, of the New York National Guard. I also read with much interest your editorial, all three articles pertaining to the sportsman as a national defense. I am sure that thousands of sportsmen—and good marksmen most of them are, too—will agree with me that you are right in your contention, even though the uniformed gentlemen above referred to cannot see it that way. Lieutenant Whelen talks about shooting at a thousand yard distant enemy with accuracy. I wonder how many men there are in the United States Army—the Lieutenant, of course, excepted—who can hit a man at a distance of one thousand yards. The National Guard is at present a component part of the regular army, I believe. And, again, how many battles are fought at a distance of one thousand yards? In Europe to-day the armies are not doing much fighting at a thousand yards, if reports be true. And I feel safe in saying that if the Lieutenant and Captain X— will come out in this part of the woods they will find about as many sportsmen who can hit a man at one thousand yards as there are in the Army and National Guard, and perhaps more. And what is also to be considered in the matter, they won't need three hundred rounds of ammunition a day to do it with, either. Of course, they may not be able to stiffen into an automaton, and salute according to prescribed regulations at the approach of an officer, but they can take their rifles and frypan and a pocketful of shells and account for their share of the enemy. It is not becoming for the above-named gentlemen to sneer at the sportsmen of this country, for the sportsmen are, to a great extent, the men who pay the taxes; and also a large majority of the sportsmen are men who can travel on foot from morning till night over mountains, valleys and plains, and take care of their health while doing so, and I venture the assertion that if one thousand sportsmen could be taken from any of our Western States, and pitted against one thousand soldiers from the regular Army or National Guard—leaving out the sportsmen from the National Guard—the sportsmen would be up and going when the soldiers are down and out. I believe they would prove superior to the soldiers as marksmen, travelers and cooks, and in locating the enemy; also in being able to traverse the country in any direction, and in taking advantage of the natural shelter afforded.

I believe the sportsmen of the country will be found ready to respond to their country's call when they are needed, and that they will be found fully efficient as regards marksmanship and other needed qualifications, and that, man for man, they will account for their share of the enemy.

S. E. Wright.

FISH AND FISHERMEN

GOING AFTER THE ELUSIVE ATLANTIC TUNA

FIELD & STREAM PUB. CO.:

In the list of prizes you are offering for the capture of the largest fish this year, I am sorry to note the absence of any prize for the greatest of all the game fishes, viz., the tuna.

Up to last season, I am aware that, with one exception, no one seemed to take it up seriously, and most people considered this form of sport as rather fluky and impracticable. However, last season, I took it up seriously and gradually got the suitable tackle together and was successful in landing two of these monsters, or rather bringing them to the gaff, of 520 and 480 pounds, respectively.

It was also with my rod and improved tackle that Mr. L. D. Mitchell captured the world's record tuna of 710 pounds, and I was there when he hooked it.

I have made considerable preparations for the coming season and at least ten sportsmen have already promised to join me at Port Medway and try and beat the record of 710 pounds. Some are coming from the Tuna Club at Catalina Island, some from England and some from the U. S.

Under these circumstances, it would be very sporting of you to offer a prize, and it would do a lot to encourage this, the greatest of all fishing.

A new club, as you are doubtless aware, has been started at Block Island for tuna fishing and, with a bit of encouragement, there is no reason why this fishing should not be as popular as it is in California, or tarpon fishing is in Florida.

It is possible that the record of 710 pounds may be beaten this season, but I greatly doubt it.

The conditions I inaugurated up there were that the fisherman and the men in his boat were to swear to an affidavit that no one had touched the rod or line but the fisherman, from the time of the fish being hooked to when it was gaffed, also the fish to be weighed on a guaranteed scale and the certificate sworn to by two reputable witnesses as well as by the fisherman.

To be assisted by first one man and then another is not "sporting" or sportsmanlike, any more than it is to go ashore and "handline" the fish.

The fish should be captured by fair fishing, as in tarpon fishing or in salmon fishing.

If it is landed by a syndicate, it ceases to be of interest to anyone, and might just as well be harpooned, from another boat, which, I am assured, is the way another fish was landed last season.

When these fish get tired and begin to "circle," it would be an easy matter to harpoon them from another boat and equally easy to get a harpoon into them from a harpoon gun from one's own boat, and now that this fishing is just about to "take on," and has been shown to be quite possible, all these matters and points should be settled beyond doubt, and no records recognized that have not conformed to all the fair and sportsmanlike conditions which should be definitely laid down, a few of which I have mentioned above and endeavored to establish.

If you would now take the matter up in your powerful and far-reaching magazine, I feel sure the whole question would be settled before the season commences, next July, and sportsmanlike conditions firmly laid down.

L. MITCHELL-HENRY.

Ans.—As so little interest was shown in our tuna class, we have decided not to offer prizes for tuna this year, but if the interest in this class of fishing shows a manifest increase during the 1915 season we will list it in our contest next year.—ED.

TWO NOVEL FISHING EXPERIENCES

FIELD & STREAM PUB. CO.:

Last summer, while on a canoe trip up the old Chesapeake & Ohio Canal, which runs parallel to the Potomac River, I had two very unusual experiences, or so they seem to me. The first of these a number of people seem to doubt, of whom I have been one for a number of years.

About 1 o'clock one particularly dark morning, when we were about one hundred miles from Washington, we were looking for a suitable place to pitch a tent, and were paddling close to the towpath. I was in the bow, and when I heard a loud splash thought for a second that my partner had jumped overboard. But that was not the case at all. A bass weighing fully two pounds had jumped out of the water and landed in my partner's lap, and had then fallen to the bottom of the canoe, where my partner, with great presence of mind, promptly put his feet on it. Neither of us knew what it was until we shoved into the bank and made a light, and you may be sure it was a most welcome addition to our breakfast.

A few days later while spooning for bass in the river, I made a rather short cast under some overhanging bushes. I had only reeled in a few feet of line when I had a strike. There was no run but a stubborn back pull, and I continued to try to reel in. On looking closely, the water being very clear, imagine my surprise at seeing a large snapping turtle holding stubbornly to my spoon blade. He held on for possibly half a minute, and then let go. He was untouched by the hooks and had closed down with sufficient force to bend the stiff spoon blade quite a lot.

R. G. INGERSOLL.

FLY-ROD GUIDES AND TOPS

By Robert S. Lemmon

With the interest in dry-fly fishing and tournament casting here in America, leading, as it has done, to a realization of the value of the "shoot" at the end of a cast, there has come a better understanding of the importance of proper guides on the fly-rod. It was not so very many years ago that the ring-and-keeper guides were the usual thing. Nowadays the snake-guide takes their place to a great extent and adds to the fisherman's peace of mind.

Good though it is for most of the rods—and I am speaking now of rods used in actual fishing—the snake style is open to criticism when used for the hand guide, the first one above the reel.

A great many fly-fishermen now fish with a loop of line held in the left hand, to be "shot" at the end of the cast or stripped in as the fly is retrieved. From the very nature of the case, this means that the line is bent, at the hand guide, at a more or less abrupt angle. The resultant friction wears grooves in even the best snake-guide I have ever been able to buy, and grooves are not good medicine for a soft enamel line that cost three or four dollars.

A small, light agate hand guide is the remedy for the above situation. Tournament casters know this, but fishermen pure and simple may not be so familiar with the idea, which is offered here for what it is worth. Some may object to the agate because of the comparative ease with which it may be broken, even when protected by an encircling metal band or ring. Personally, I have never broken one of them during several seasons' use on rocky streams, though a direct blow against a rock might have put it out of commission. But then, dropping on a big stone is not good for a pet rod, anyway.

The top ring on a rod also comes in for a lot of line wear, and here again agate may be used. There is an excellent substitute for it, however, in the loose-ring phosphor-bronze tops which can be bought in some of the large tackle stores.

These tops are very simple and much less expensive than agate ones. They consist of a piece of steel wire so bent that it encloses a phosphor-bronze ring, grooved on the circumference to receive it.

The ends of the wire are parallel so that they can be whipped to the rod, one on either side.

The result is a light, strong top, neat in appearance and practically wear-proof. The phosphor-bronze ring fits a little loosely so that it turns in its socket occasionally, thus obviating any tendency to wear in one spot. It is extremely hard, highly finished, and a real line-saver.

MY BEST HOUR'S BASS FISHING

By John B. Martin

Can you recall the best hour's fishing you ever had? No doubt you remember the most successful outing, or, even, the biggest day's catch; but can you look back over your entire fishing experience and select the sixty minutes which afforded you the rarest sport?

I must confess that my own answer to such a question would have been a negative one, had it not been for the fact that my brother, Will Martin, of Covington, Ky., and I spent three weeks fishing for bass in Duck Lake, Mich., one August. Then came that memorable afternoon of several seasons' fishing in northern lakes, when, between 5 and 6 o'clock, we succeeded in landing 10 large-mouth beauties weighing 29½ pounds, or an average of nearly 3 pounds each. It was the hour of hours of all the splendid sport I have known since being a devotee of the rod and reel for practically twenty-five years.

Incidentally, we hung up the season's record for Duck Lake, if not a record for several seasons—and much of the credit belonged to "Dad" Terrell, our boatman. "Dad" literally seemed to have eyes for things under the water, one of his accomplishments being to row a boat with mathematical precision over the irregular outlines of the principal bass beds.

Probably the biggest factor in our luck that day was the bait used. It consisted of a piece of salt pork rind, cut in the shape of a minnow and attached to a Mayer hook, which was covered with red feathers and equipped with a small revolving spoon.

"Dad" rowed us into water of a depth of about 3 feet, near some lily pads and half-submerged logs. After an hour's casting we totaled up the result, as follows: 1 bass, weighing 5 pounds, caught by my brother; 4 weighing 3½ pounds each; 3 weighing 2½ pounds each and 2 weighing 1½ pounds each. Will caught one of the 3½ pounders, while I accounted for the other eight.

The bass appeared to be more infuriated than fascinated by the strange-looking bait, which was a tempting, tantalizing arrangement, designed to appeal through either characteristic. They struck at the bait almost the instant it came in contact with the water. Never shall I forget the sensation of hanging these gamy creatures, sometimes with as much as 125 feet of line out. Several of them broke water, in a frantic endeavor to free themselves, while it was with the greatest difficulty that we guided them past the logs and stumps.

After the big catch that afternoon, which occurred during the early part of our three weeks' stay, the pork and red feather arrangement became our favorite bait. We used the "yellow kid" with considerable success and had more luck with either of these artificial devices than with live minnows or frogs.

Duck Lake is located fifteen miles south of Traverse City and is one of the best of several small bodies of water in Michigan and Minnesota that I have fished in during the past few years. There are both small-mouth and rock bass in the lake and the still live bait fishing to be had is fully up to the average. The hotel accommodations are exceptionally good.

A TRUE FISHERMAN'S FRIEND

Out in Maple Grove Township, Barry County, Michigan, lives a farmer who has developed a type of humor not entirely pleasing to the city chaps who go fishing. At the side of the road he has placed a sign which reads "No Fishing Allowed." Now, that sounds well, and one would naturally think it was placed there to keep fishermen away. But it isn't. It's to bring them on. The joke comes in when a fisherman begins to look for the place he's supposed to stay away from. There isn't a place to fish within nine miles of the sign!

MY EXPERIENCES WITH ARTIFICIAL MINNOWS

Now that the fishing season is near at hand and the boys are giving their tackle a thorough going over I would like to swap experiences as what seems to be the best for inducing the game fish to strike. Not being much on live bait we will leave that out, as usually as good a string can be caught on the artificial minnows if the person using them fishes where fish lie—near the shore, pond lilies and weeds or over bars. For trolling for walleye pike I prefer a small minnow about 2 inches long, either aluminum or white, and for all round fishing I prefer this to some of the larger minnows. For small-mouth bass at times a small red minnow does better work than any other color.

For large-mouth bass I prefer a green back and aluminum belly, as this resembles the natural minnow in color. I have had great success with a 2 inch minnow of this color made by Keeling, both for bass and pike. Early in the year when casting the shore I enjoy using one of the wiggle minnows such as Good Luck wobbler, Heddon's wiggler and Keeling's wiggle minnow. Has any one tried out these wiggle minnows for muscallonge as it would seem the ideal bait for them? The old-time top bait is good for the "muskie," but I am going to try out the wiggler for him this summer.

N. Y. City. C. H. G.

A SUCCESSFUL ARTIFICIAL BAIT FOR BASS

FIELD & STREAM PUB. CO.:

Having been a constant reader of FIELD & STREAM for some two years, and a devotee of the sport of angling for the small-mouth bass, would like to hear from some of the brother sportsmen in regard to the most efficient artificial bait they have used to capture this king of our fresh-water lakes and streams. Having always used live bait until a few years ago, when I exhausted my live bait supply when on a short fishing excursion, and as they were taking the bait at practically every cast, I substituted a small red and-white underwater minnow in lieu of the live bait that I had been using. As I was fishing over the apron of a dam in the Maumee River, in very swift water, I attached a heavy lead sinker several inches above the wooden minnow, so as to carry it through the overflow and to allow the bait to be worked near to the foot of the dam. Having made everything ready, I cast the bait over the crest of the dam and started to work my way over to the other side, and when about two-thirds of the way across I had a strike that made me think that I had connected to a whale. Out into the boil the line swished, and then back and forth to a shoal immediately below the dam, and then up in the atmosphere he rushed, trying to shake the bait loose, but there was nothing doing on the getting-away order. During this time yours truly was getting some excited, causing quite a lot of merriment for his better half, who was watching him from the abutment of the dam. After about five minutes of give-and-take I was able to work the fish in near a platform at the abutment of the dam and lift him out, not a very large one but weighing something over two pounds. As this was the first bass that I ever caught on artificial bait, I became enthused and from then on have used nothing else but artificial bait for this fishing. Although this was the first and only bass that I ever caught on a wooden minnow, it is not the only one that I have caught on artificial bait.

I find that a number 2 standard

spinner, with either a Royal Coachman or a Brown Hackle fly, very good, and have practically done all my fishing in the last season with this outfit, finding lots more pleasure and enjoyment than when fishing with live bait.

I wish to further state that we have organized a local Fish and Game Protective Society, which, with the aid of the local Game Warden, is doing effective work in preserving what fish and small game that are left, and also putting a stop to the net fishing during the spring months.

Hoping to hear from some brother sportsmen in regard to their success, and the kind of artificial bait used when fishing for small-mouth bass,

H. V. Holzer.

ANTICIPATION DAYS

Every trout fisherman has 'em. The fever or the spirit gets you at least a week before the opening of the season, and becomes more intense each day, while the "breaking point" sets in "the night before."

(*By Ernest Warren Brockway*)

Oh those happy days of anticipation!—those few days that serve as a vanguard for the opening of the trout-fishing season! During those days the little freckled-faced farmer's boy has carefully selected and cut and trimmed a young hickory, a prince among the scores of other specimens which fringe the old stone wall down in the "forty-acre pasture." With his keen-edged jack-knife he has "shaved down" every little projection on the young hickory, for he's going to use it the "hul" season. During the evening before the opening day he sits by the kitchen stove and fits his spool reel on his rod, and then tightly winds on the reel a cotton line, and fastens thereto a penny hook. Out in the open woodshed he has laid up on a beam a pepper box full of fat angle-worms. The lad's outfit is complete. For a few moments he sits idly and meditates on the fun that the morrow will bring and then he scampers off to bed. But happy and healthy as he is, he doesn't sleep well, for he's waiting for the first twitterings of the birds to proclaim the hour of dawn so he can jump out of bed into his clothes and run down through the pasture to the old stone bridge, where he had seen a big, sly old trout the week before.

Ah, yes, those happy days of anticipation! Comfortably seated in a large velvet upholstered chair in the luxurious lounging room of the City Club, with ringlets of blue smoke from his 'special made" cigar floating above him, is the president of the First National Bank. A week before cheery visions of the first day's visit to the streams took possession of his soul, and while his body was in the counting house his spirit was miles away, away back to the saucy little brook that gurgled and foamed in gleeful effervescence,—the brook from which he had pulled many a spunky trout in years agone when he was a freckled-faced and bare footed youngster. Yes, there in the midst of exclusive splendor, sits idly banker-king with mind painted with happy visions of the morrow's offerings, — visions of bright sunshine; a sparkling, singing brook; a catch of shining, handsome trout. His reverie suddenly breaks into action. He jumps to his feet and hurries to an ante-room, where his costly slender rod and commodious creel have been brought after a revarnishing at a sporting-goods store. He summons his big six-passenger car and soon he is flying through the streets to his home for a few hours' slumber before the break of dawn. But like the freckled-faced youngster back on the farm, the banker finds his slumbers are disturbed by the hauntings of happy anticipation. He has become a boy again; he has temporarily reversed the wheels of evolution.

It certainly grips us all, who love the great free outdoor world and the joy of the trout streams,—this pre-season spirit. It makes men boys, and makes boys men in the spirit of zest and skill and endurance. When the "tired business man" gets out his fishing equipment to polish it and rig it up for the forthcoming trouting season he finds that he has been transported in thought from a world of care into a realm of freedom from worry and care. He can fairly feel the red blood shooting through his veins because of the quickening influence of this pre-season thought. Each year he has experienced the sensation, and he knows it is the best mind tonic in Nature's unrivaled apothecary shop.

And then, when the first day comes! When one actually lives the pre-season visions of the mind, it is then that the latter takes on added health and vigor, as it vies with bodily comfort and freedom.

To every normally minded man there is an inexpressible happiness that comes into his being when he comes in sight of a brook for his first day's outing. It is not the great catch that thrills him most, but it is the matching of his skill against the skill of one or more thoroughly educated old trout; and the banker-king or the astute lawyer each knows that he must have with him on the brook a fund of ready foresight and wisdom, just as he would have in the banking house or at the judge's bench, respectively. That's one of the phases which make the game so interesting. The other phase is its æsthetic offerings, and the one or the other, or the two combined, are bound "to get" the normal man.

When one starts for a stream on the first morning, he sees all around him the signs of Nature in the process of awakening from her winter's slumber. The birds have caught the spirit of the awakening, and from the high tree-tops and from the underbrush of the meadow lands, they are sending out across the valleys and over the hills their antiphonal notes and songs, while from the ponds and swamps, blinking, sleepy-eyed frogs are supplementing the grand orchestra by their shrill peepings. By the edges of the ponds and streams the pussy-willows are bowing to and fro under the influence of the soft spring breezes, seemingly proud that they are among the first in the floral realm to show their wide-awakeness after a winter's sleep. From somewhere the breezes are bringing a subtle, fragrant perfume—the breath of the trailing arbutus whose pink and white blossoms are in hiding beneath the dead brown leaves on the hillside. In warm, sheltered places blades of grass are shooting triumphantly upward—everywhere is the breath, the voice, the wholesouled expression of the early springtime.

And so, after one returns home at night from the first day's outing along a gleeful, sparkling brook, enriched in mind and soul and body from the wholesome, invigorating influences of the great and wonderful outdoor world, and with a creel well filled with toothsome trout, and a head chock-full of memories of how he landed the cunning old chaps, be he banker-king or farmer's boy, he knows that those pre-season days of anticipation yielded a full crop, and that the next year he'll plant another.

PHOTOGRAPH OF A LEAPING BASS TAKEN BY ROBERT S. PERRY, OF WOONSOCKET, R. I.

A PALAVER ON PREPARATION FOR PISCATORIAL PURSUITS

By S. Imple Bell

Of course, if you can afford a recreation secretary to do your planning for you, you need not exert yourself. But every true angler takes a lively interest in every detail of the sport, especially in the details of his equipment, and loves to plan for the trip to the streams.

The inheritor of the true Waltonian strain of predilection for piscatorial pursuits may be in bad health, in debt, or in jail, but he can, nevertheless, dream of foliating forests, of sweetly susurrating streams, and bird songs blithe and free. In fancy he stands by a lovely lake, its limpid waters, stirred by the morning breeze, lapping the lichened ledges as if to mollify and soothe the harshness of the age-scarred rock, flashing the sunbeams from its sparkling wavelets in cheering messages of light and joy. Again he visualizes the lake in the motionless re-

Calendar of the Trout Stream Insects

Herewith we issue the third of Mr. Louis Rhead's Nature Fly Charts to enable our readers to fish intelligently according to time, date and rise. July chart will appear in that month.

PLATE III—JUNE INSECTS.

No. Name	Date of Rise	Time of Day	Weather	Family	Order
1. Female green eye.	First three weeks	Day, best at evening	Warm	Drake	Ephemera
2. Male green eye..	First three weeks	Day, best at evening	Warm	Drake	Ephemera
3. Broadtail	Early and late	All times	Cold windy days	Drake	Ephemera
4. Green back	Early and late	Evening	Warm days	Drake	Ephemera
5. Yellow tip	Middle	All times	Any time	Drake	Ephemera
6. Spot wing	Entire month	Afternoons, evenings	Warm	Drake	Ephemera
7. Lemon tail.....	Entire month	Afternoons, evenings	Warm	Drake	Ephemera
8. Shiny tail.....	Early to middle	All times	Cold windy days	Drake	Ephemera
9. Chocolate	Entire month	Late afternoons, even.	Warm days	Drake	Ephemera
10. Orange black....	Entire month	All times	Any time	Drake	Ephemera
11. Tawny drake....	Entire month	All times	Any time	Drake	Ephemera
12. Black head.....	Middle to late	Afternoons, evenings	Any time	Drake	Ephemera
13. Big eye.....	Middle to late	Afternoons, evenings	Any time	Drake	Ephemera
14. Pointed tail.....	Early to late	All times	Any time	Dun	Trichoptera
15. Gold rim.....	Middle to late	Afternoons	Warm days	Four wing fly	Hymenoptera
16. Emerald	Early to late	Afternoons, evenings	Warm days	Stone fly	Perlidae
17. Little yellow stone	Entire month	All times	Warm days	Stone fly	Perlidae
18. Black dun.....	Early to late	All times	Warm days	Dun	Trichoptera
19. Hairy spinner...	Middle to late	Evenings, afternoons	Warm days	Spinner	Diptera
20. Gold body spinner	Early to late	Evenings, afternoons	Warm days	Spinner	Diptera
21. Tiger spinner....	Early to late	Evenings, afternoons	Warm days	Spinner	Diptera
22. Whirling spinner.	Early to late	Evenings, afternoons	Warm days	Spinner	Diptera

pose of evening's calm, its surface, lacquered o'er with molten glory flowing from the sunset's glowing fires, mirroring the radiant clouds and sky—zip!—smash!

Of course, if you object so strenuously, I'll change the tenor of my remarks and come to the practical side of things. Draw up your chair and light up your old pipe, and listen while I impart a few juicy, predigested hunks of wisdom in regard to that fishing trip that you are to take this year.

"But," you say, "my business is my pleasure."

Ha, ha! You said that last year, and the year before, and every year since you've had a business; but, when the phantasmagorial Bugolonius Anglemania plunged his pernicious proboscis into your cerebral apparatus and injected the deadly germs of the fiery "letsgofishin'" fever, and after the fever had paralyzed and scorched and consumed your willpower, why then you abandoned all of the idle, vain pleasures of business and responded to the call of duty, did you not? Of course you did, and you'll do it again when the time comes! Now get out your tackle and all of the tackle catalogues you have, and—one, two, three, um-m-m—only twenty-seven catalogues! And, say, if the minister could find in your house a certain black-covered book as well thumbed as these catalogues how his heart would warm towards you. I see, also, that the corners of a number of the leaves are turned down, and there is a check mark by one or more of the articles listed on that page—aha! I thought so! Let's have that sheet that you slipped into your pocket when you thought that I was not looking. Of course it's only a *few* things that you really need—a rod, two reels, lines, hooks, sinkers, waders, creel. See here, old man! You know that you cannot afford to spend over fifty dollars, and this list foots up two hundred and fifty. Wonder what your wife would say if she saw that list! Don't think that I'm scolding you—I'm proud of you. It is one of the solemn mysteries of angling that every angler shall, at least once a year, make out a list of equipment that will cost from three to eight times as much as he can afford. You measure up fully to this high standard of our honorable profession in this respect, so we will pass on to another feature of angling which is too often neglected until the last minute.

Just what kind of a story have you fixed up to tell the boss as an excuse for getting off when the trout season opens? This is quite an important matter. A last year's excuse is likely to look good, just as an old rubber boot will; but both may have developed leaks during the fall and winter, and, unless the boss has a very shallow memory, you may get "cold feet." By all means get a brand new excuse before venturing into the private office.

Owing to the rapid increase in the temperance sentiment in many parts of the country—"nuff sed." The angler who wishes to reconnoiter the waters in advance through a high-capacity flask-o-scotch will find the new "Unkel David" coat, described in a recent number of Field and Stream, a decided convenience. This coat permits the carrying of a glass that, at a range of twenty-eight drams per day, has a field of four days.

And now we come to what is perhaps the most delightful part of angling, namely, the tale that we tell on returning from the trip. It is dreadfully embarrassing to recite an ornately replete narrative, and then hear some one in the crowd remark that you got that yarn off as good as the fellow who wrote it, in last year's Official Organ, could have done. Neither does it conduce to a pleasant frame of mind, when you have given an extemporary account, to have several glaring contradictions gleefully pointed out by loving friends. If you choose to use borrowed yarns, you should carefully select them, as the texture of a bass yarn is wholly unsuitable to provide a satisfactory garb in which to clothe the account of a trouting foray, and vice versa; and, having made your selection, do not fail to redye them, so that they will have the lustrous appearance of originality. In all forms of angling the natural born raconteur has a decided advantage over his less gifted brethren. The latter, when facing an emergency wholly unprepared, should speak mainly in generalities and appear to deprecate his feats. Such a course, if followed with skill, will often produce as favorable an impression on his audience as a highly ornamented fabrication would.

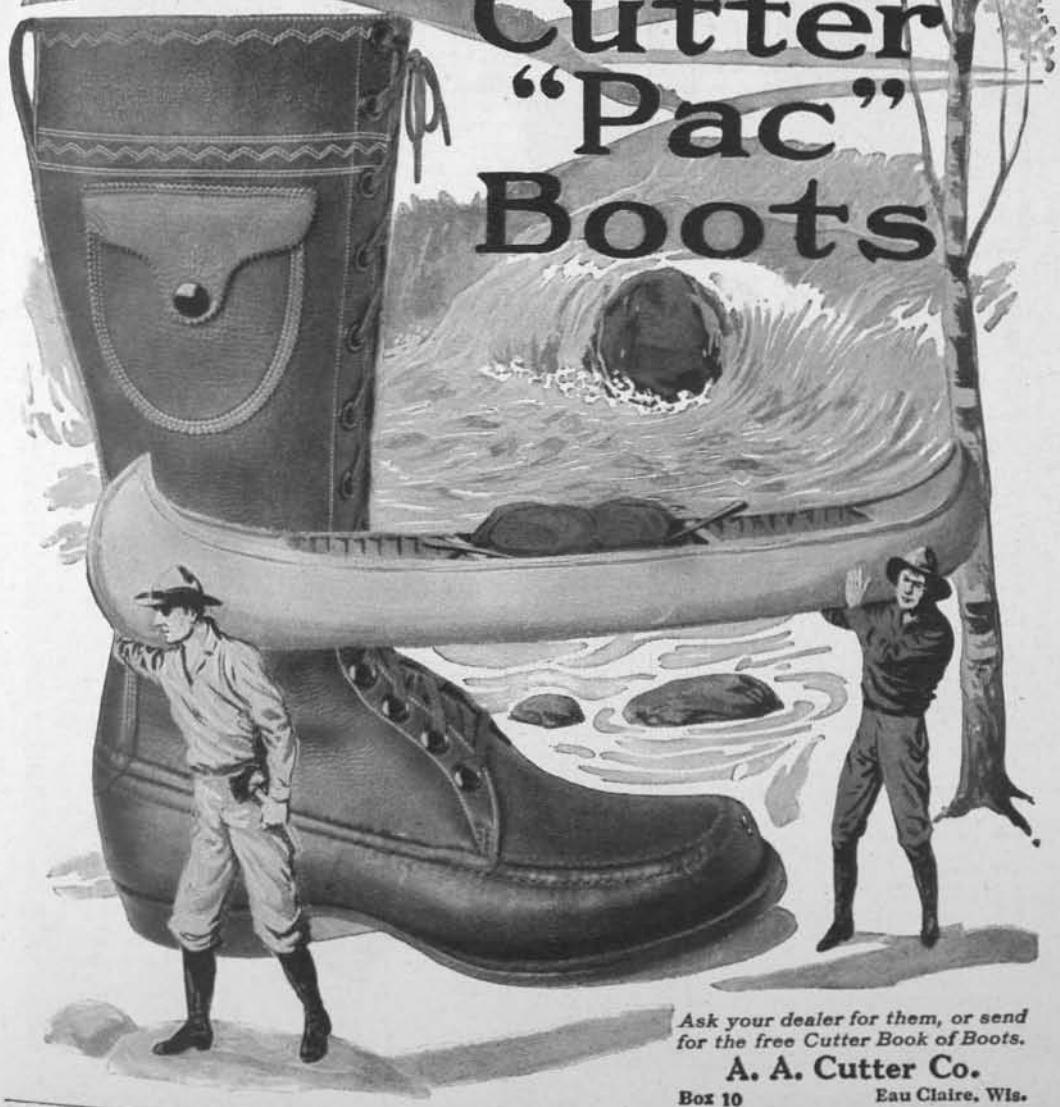
While meditating on the above mentioned phase of angling, the following problem has presented itself to my mind: Given the average angler, just returned from the average angling expedition, having experienced the average fisherman's luck, and being surrounded by the average bunch of envious or skeptical acquaintances for the purpose of cross-examination, what would be the effect produced on said crowd if said angler should, in an open, unreserved, unblushing manner, tell the truth, the whole truth, and *nothing but the truth?* Each of us is entitled to his own theory in the matter, at least until a well-authenticated case of such a nature is available as a base for conclusions. Perhaps the lack of such an occurrence is indicative of an instinctive feeling in each angler's breast that the results would be too appalling to permit him to venture on such an experiment.

Some folks would have you believe that you should post yourself in regard to the laws governing angling in order to avoid trouble. Pay no attention to such advice. Should you venture out a day or two before the open season, or should you creel a few fish under the legal length, it will afford the fish warden unbounded pleasure to put you wise to the fact; and his language, if not so chaste as that of the written law, is entirely without the ambiguity of the latter. Besides, you know that knowledge benefits you most which costs you most. Pipe's out? Well, so long.

YOUR footgear is the most important part of your outing rig. When you are well shod—Cutter Booted—you find the miles are shorter and the going less rough. With your feet always dry—Cutter Booted—you forget there are such things as chilblains, scalds and blisters.

Only the centers of the best hides are good enough for Cutter Boots—and only masterworkmen, men who have grown up with cobblers' needles in their hands, are skilled and careful enough to make them. Cutter "Pac" Boots, made to be worn over heavy wool socks, combine moccasin comfort with boot protection. Probably your dealer carries them.

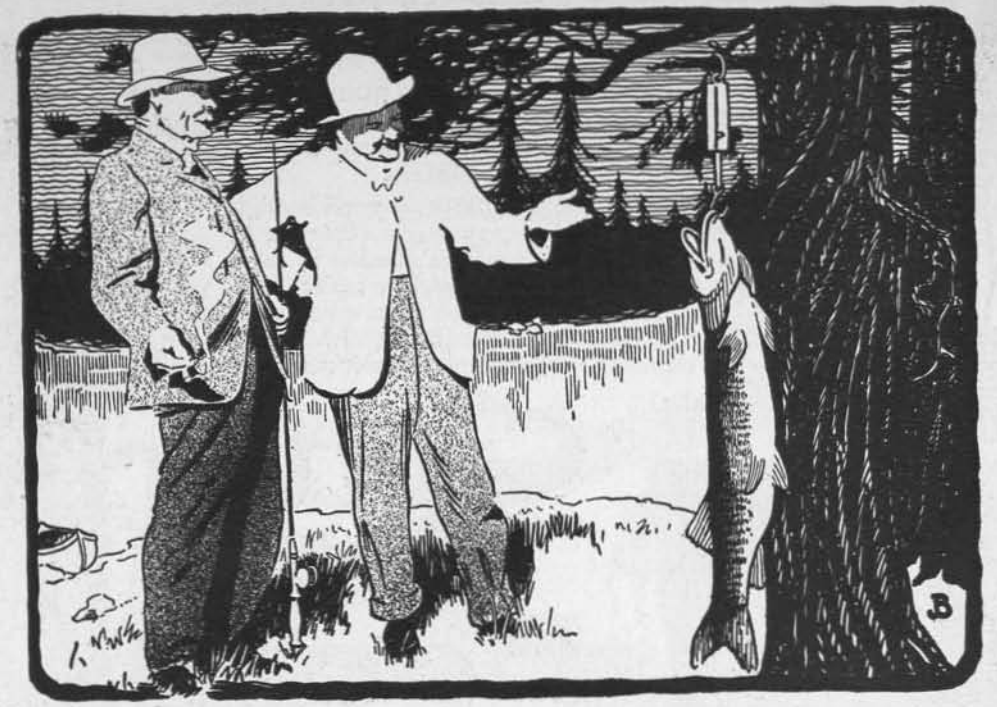
Cutter "Pac" Boots



Ask your dealer for them, or send for the free Cutter Book of Boots.

A. A. Cutter Co.

Box 10 **Eau Claire, Wis.**



Field & Stream PRIZE FISHING CONTEST

MY FRENCH RIVER MUSKY
By Isaac K. Myers, Pittsburgh, Pa.
Winner Second Prize Muscallonge, 1914 Contest.

We left Buffalo, N. Y., July 30, 1914, and when I say "we," I refer to my wife and myself, for be it understood that this fishing trip was our honeymoon. Can any angler realize what it would mean, to land a 37-pound muscallonge while on his honeymoon? I hardly think he could. July 31st found Bess and me at North Bay, Ontario. I prefer calling my wife "Bess," and so does she, for she is a good sport. The trip we had planned was to be a two weeks outing down the Big French River, and to make a trip of this kind a fellow must take provisions, boats, medicine and everything necessary for living out in the open. I had been there before, and my former experiences helped me a lot. The next morning we were down to the boat early, to see if the camping outfit was aboard, and found everything O. K., and soon the old *Northern Belle* pulled out for Chaudiere Falls, and we were really on our way. The day was ideal, and that little five-hour trip across the lake was well worth remembering.

We docked at Chaudiere about 2 o'clock and there met our old friend and guide, Sandy Dokis, who is a brown skin and comes from the old Dokis family. He is as honest as the day is long, and a boon companion. I said to him, "Sandy, I want you to meet my wife," and he said, "Very much pleased," and doffed his hat. We had intended to go on down and make camp that night, but Sandy said he wanted to go to Big Mass the next morning, so we had to wait over until Sunday afternoon. Sunday noon came around and with it a steady downpour of rain. I was very much disappointed, for the day before had been perfect. "Are you game?" I said to Bess, and she said "Sure, I am," so after dinner Sandy put in his appearance, and we got things in shape for the trip down the river. At 2 o'clock we had our duffle packed, and bade farewell to the old Alabama Hotel. It was still raining, and all indications pointed to a disagreeable trip.

About half a mile below Chaudiere Falls there is a big portage to make, so we had to unload and get to work. We were all pretty well soaked from the steady rain, but not one of us showed any signs of quitting. We made the portage in something less than an hour, and were ready to continue our journey. I said to Sandy, "Look at that big cloud passing over." "Yes," said Sandy, "pretty soon the rain stop," and he was right, for the sky cleared and I never saw a more beautiful day. The sun came out good and hot, and I shall never forget how beautiful the shores and pine trees looked after the rain, and Bess remarked she never saw any scenery to equal it. The French River is wonderful for its beauty, and one who has never visited its waters has something in store. The farther down the river the more primitive seemed the outlying shores. After hours of such splendor we pulled up at our old camping grounds, and Sandy gave a sigh of relief, for we had covered about fifteen miles.

We selected an island opposite what is known as Five Finger Rapids, pitched our tents, which were to be permanent, and made preparations for the night. Our bed was far from being a feather tick, but we were tired, so turned in and slept the sleep of the godly. Next morning old Sandy was up bright and early and had a dandy fire working by the time Bess and I rolled out. I asked Bess how she was feeling, and she said, "Someone must have been using a club on me." I had to laugh, for my joints were never so sore in my life. We finally got the kinks out and were soon ready for the breakfast prepared by Sandy, who is some cook. After breakfast we got our tackle in shape and were ready for the sport of sports. I said to Sandy, "Well, we are here, and I've been waiting a long year for this time to come around." Sandy grinned and said, "Now for big lunge!" I replied. "Now, see here, Sandy, I don't want one over forty pounds, and

BIG "EATS" IN THE BIG WOODS

Remember that smell of coffee, balsam, and campfire smoke? How it floated out across the lake? How you paddled for shore? Remember that appetite? Get ready for it now, by making up a box of

HEINZ 57 VARIETIES

Easy to pack; easy to handle; easy to serve. Save time and bother of cooking. Good, pure, nourishing foods that have the real flavor. Make out your list now:

Heinz Baked Beans, of course—good hot or cold—four kinds;
Heinz Cream Soups, tomato, celery, pea;
Heinz Spaghetti, cooked with tomato sauce and cheese;
Heinz Tomato Ketchup, makes everything it touches good;
Heinz Peanut Butter, always keeps sweet;
Heinz Pickles, Preserves, Jellies, etc.

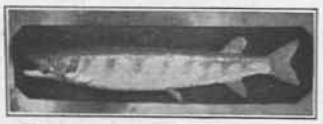
All grocers have them.

Send for list of the 57 Varieties

HEINZ **H. J. HEINZ CO., Pittsburgh, Pa.**

don't forget it." Another famous grin from him and we were off for the day. We stayed close to camp trying out different lures, but there was nothing doing.

The next day we made the trip to Woolsley Bay, which is noted for its muscallonge fishing, and again were unsuccessful. Our guide was somewhat down in the mouth for he had rowed that boat for two days and there were no signs of a musky strike. Canada is noted for its fishing grounds, but let me say, the big muscallonge are not so plentiful as advertised. A brother angler of mine by the name of A. C. Porter, of Sharon, Pa., spent seven summers on the same waters before he was successful in landing his fish, which measured 51 inches. Hence the scarcity of big lunge. After we got back to camp we held a conference and I berated Sandy for the last two days' fishing. After some hesitation he looked at me and said, "Maby to-morrow we go to Little Pine Rapids we get big lunge." I said, "Now you are talking, Sandy," so the trip was planned. Sandy had worked hard the two days before, and I didn't have the nerve to ask him to make the Pine Rapids trip, but he was anxious and game to the core, so early the next morning found us headed for Little Pine Rapids.



53 INCHES OF FIGHTING MUSKY

The morning was grand, and I'll never forget how eager we were for that outing. I got out my No. 27 Kalamazoo bait casting rod and one of Heddon's red Dowagiac minnows, No. 104. I removed the tail hooks and put on a large feathered triple hook, which made an excellent lure and great for casting. My reel was a Shakespeare Standard with 150 feet of Martin's mottled Kingfisher 28-pound test line. I am very partial to the casting rod, and used it throughout for both casting and trolling. I also take great pride in my tackle and make it a point to use the best. On our way down Bess caught a six-pound pike, so we were sure of fish for dinner. After rowing five miles we landed at the head of Little Pine and tied our boat for the afternoon. The site is a delightful place to stop and is known as Camp Isabel. We had a half-hour or so until dinner, so I suggested we go down to the foot of the rapids, for I was anxious to try out my old favorite lure and new line. I also had a favorite spot there, made so on my former trip, two years before, when I took a 42-inch pike from the same waters with the same lure. It was fully a quarter of a mile walk through thicket, and the going was rough, but we got through all right and stood once more on that old favorite rock of mine. Looking at my watch I saw it was 12 o'clock and time to eat, so I told Sandy he had better go up and get dinner, plank that pike and boil some spuds and Bess and I would be up in a few minutes. Of all the spots in the French River this spot was the most inviting to me. About a hundred feet from where I stood there was a mighty rapids coming down, which continued for more than a hundred yards and eddied toward shore. The sky was clear and the wind perfectly calm, and I hardly think there was ever a more ideal day for casting. My first cast was a little up-stream and to the edge of the riffle; nearly a hundred-foot cast. The second was straight from the shoulder and about twenty-five feet below the first cast, and my, oh! my, how pretty that minnow looked sailing through the air. I put him right on the edge of the current again and began to reel but was soon stopped by a terrific yank. I struck him and the fight was on. I yelled for Bess to come on down, that I had a strike, and she ran down, all excited and out of breath, wanting to know all about him. I said, "Never mind now, just watch that line—Gee! there he goes now; what do you think of that? Say! there's some weight to that gentleman, for he's pulling like a steer." My heart seemed to stop beating, for it was a shock to me. I had done some game fishing in my time but this was the only real fishing I had ever experienced. The first thought I had was will my tackle hold him, and although I had the best, I was somewhat dubious. He started head downward, and I could see the line on the reel lowering at a great rate of speed. He must have struck bottom, for up he came like a shot out of a gun. Bess asked me what kind of a fish it was, and I said I didn't know, but thought it might be another big pike. He was over a hundred feet from me, and I was unable to distinguish whether he was pike or lunge. First thing I knew I saw his nose poke out of the water, and I immediately turned him and he headed for down stream. I said to Bess, "I believe he is a lunge, for his tactics indicate one." He had plenty of water to run in, and I want to tell you he made my 150 feet of line look sick. When I checked him, I only had a few turns on my reel, and I thanked Providence for that. He started upsteam then, and if I ever did any reeling I did it at that time, for he was crazy mad, realizing that he was up against it. When the rush was over and I had tightened up again, he was within ten feet of me. The water was very deep, and I was unable to get a look at him. I said to Bess, "It is strange he doesn't come up out of the water, for that's one of their old tricks." My curiosity was soon gratified, for as quick as a wink up he came and cleared the water fully two feet. I said to Bess, "By Jove, there's my lunge! If I lose him I won't fish another minute." He tried the same trick time and again but I was on the job and kept him under. While this was going on Bess was trying to get a picture of him, but he was too speedy for the camera. It was first one way and then the other, trying every trick imaginable to free himself of the hook. He fairly churned the water for fully fifteen minutes before he showed any signs of weakness. At this time Bess managed to get a picture of him churning the water, which we prize very highly. I reeled him in inch by inch, for I saw he was getting weaker all the time, and when I raised him to the top I saw he had broken two of the tail hooks, and the remaining hook was all that held him. I flipped the minnow around and the small hooks on the side caught him under the jaw, and I breathed much easier.

"YOU'RE A HERO AND A REAL FISHERMAN!"

After all that fighting he was still game and made a final dive. I raised him again and began to reel him in to where I stood. He was the prettiest sight I ever saw. He rocked like a disabled ship, and I knew he was all in. I said to Bess, "I'm going to try to take him out," and she said "Don't lose him, whatever you do." I handed Bess the rod and told her to take it back out of the way. Then I went down the line and, after some difficulty, I managed to run my gloved hand through his gills and the fingers of my right in his eye sockets and swung him out onto the rock. I dropped down on him and threw my left leg over him, for he was still kicking, and I was playing safe. That posture would have made some picture, but in our excitement a picture was far from our thoughts. I never felt so good in all my life, for it was always my desire to land a big lunge. As I lay there I patted and caressed him as I would a child, for I knew he was mine and I felt very proud. Bess was all fussed up, too, and gave vent to her feelings by saying, "Honeybunch, you are a hero and a real fisherman." I felt very much elated, for I knew she meant it. She had witnessed the whole performance and said it was a great fight from beginning to end, my one regret being that Sandy was not there, for I knew he would

Harley-Davidson Wins
International Grand Prize Race

Breaking Another World's Record
Travels 68½ Miles an Hour for 300 Miles

Otto Walker, riding a Harley-Davidson, carried off the first money in the 300 mile International Grand Prize Race at Venice, California, April 4th. Next came Leslie "Red" Parkhurst, also on a Harley-Davidson. Both Walker and Parkhurst shattered the world's record and both rode stock 1915 Harley-Davidsons, just like you can buy of any Harley-Davidson dealer.

By finishing 15 3-5 seconds apart these two Harley-Davidsons gave the most remarkable demonstration of consistent performance in the history of the motorcycle industry.

To win the International Grand Prize Race, the greatest motorcycle classic on record, is an achievement worth while, but for the stock Harley-Davidson to win not only first but second also, against special racing machines, built for speed and speed only, is a truly remarkable and convincing performance.

Never before has the Harley-Davidson Motor Company turned out a machine with the speed and power of the 1915 Harley-Davidson. With an eleven horsepower motor and such additional features as three-speed sliding gear transmission, an automatic oil pump, and double clutch control, it is no wonder that this is Harley-Davidson year.

Any Harley-Davidson dealer will explain in detail the many superiorities of the 1915 Harley-Davidson.

Descriptive literature upon request

More Dealers for 1915 Additions to the Harley-Davidson factories enable us to add more dealers for 1915. Dealers, situated where we are not represented who feel qualified to represent the Harley-Davidson in keeping with the Harley-Davidson name and reputation, should get in touch with us at once.

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Producers of High Grade Motorcycles for Nearly Fourteen Years

have enjoyed it. After our pulses became normal we started for Camp Isabel with Mr. Musky over my shoulder. It was some plugging through the woods of thick underbrush and fallen trees, but we got there just the same in time for dinner and gave Sandy the surprise of his life, and I will never forget the satisfied expression on that Indian's face as he looked at me and said, "Good! You catch big lunge!"

Prize Contest Certificate Record —Second Prize Muscallonge, 1914 Prize Fishing Contest.

Weight—37 lbs.
Length—53 in.
Girth—24 in.
Caught—August 5, 1914.
Where caught—French River, Canada.
Rod—5½-foot Bristol.
Reel—Shakespeare.
Line—Kingfisher silk line No. 2.
Lure—Heddon Dowagiac No. 104.

A WALL-EYED PIKE FROM BALLARD LAKE

By George E. Stanton, Chicago, Ill.

Winner Fourth Prize, Wall-Eyed Pike, 1914 Contest.

On July 21, 1914, three of us got into a rowboat about 5 p.m. to go out fishing for bass on Sandy Point in Ballard Lake. The weather was calm, not a breeze stirring, not a ripple on the water, and to our sorrow the fish were not biting.

The day passed with small success for us and now evening was coming down. Soon we heard the ringing of the supper bell, usually a welcome sound, for the air of that region is invigorating and whets one's appetite, so we started homeward. Ruth was in the bow of the boat, Mr. Jaeschke rowing and I in the back seat. Being unwilling to accept defeat I thought I'd try fishing the bottom of the lake, so out went my line for 75 feet and with a mud minnow, a Skinner spinner, a triple strength line and Fairview rod, I at last made a catch of a 12-pound wall-eyed pike. And what a time I had landing it. In the first place I did not know just what I had on my line after I got the strike. The fish pulled and pulled and I would reel him in 25 or 30 feet and out again he would go, and great excitement prevailed. We still could not tell what kind of fish I had, for there had been no pike caught in Ballard Lake for years, muskies, bass and perch being the catch there, so I was somewhat puzzled when the fish did not rise out of the water. I again got him up to the boat where I could see him, then with a dash he went under the boat. I asked Mr. J. to get the gaff hook ready, but he said he did not know how to use it, so we had to get the landing net. I reeled him up to the boat and told Jaeschke to get ready, and I led him right into the net, reaching out with my left hand and landing him in the boat. And what he didn't do to that boat is not worth mentioning. I thought he would knock the bottom out. Little Ruth was so excited I thought she would jump overboard. Mr. J. jumped on the head of the pike and I held his tail down until he quieted. We ran the gaff hook through the gills of the fish and then we had him secure. We were a happy trio, being justly elated over the fine catch and, landing, we took him up to the cabin. The crowd gathered around us and it is a wonder my head was not turned by their congratulations. I have had this fish mounted and he makes a fine memento of this great occasion.

Prize Contest Certificate Record. —Fourth Prize Wall-Eyed Pike, 1914 Prize Fishing Contest.

Weight—12 lbs.
Length—32¼ in.
Girth—17 in.
Caught—July 21, 1914.
Where Caught—Ballard Lake, Wis.
Rod—Fairview.
Reel—Meek.
Line—Triple strength.
Lure—Skinner double spinner.

THE BIG BASS FROM THE "FISHED OUT" LAKE

By H. E. Hildreth, New Decatur, Alabama

Winner Second Prize, Large Mouth Bass, Southern Division, Fly Class—1914 Contest.

One night last summer a lone fisherman ambled up Bank Street, Decatur, Alabama, supperless and tired. He staggered under the weight of rods, landing nets, creel, etc. The creel was filled with plug baits, reels, lines, flies and other interesting bric-a-brac, but no fish. The real reason there was no fish in the creel was carried in the fisherman's other hand. It was a glorious handful.

At Cartwright's drug store he stopped for a drink (the town being otherwise dry) and in an unostentatious manner slipped his fish to the floor, covering as much as possible of it with his creel. (The creel was not large enough to hold it.) Some desultory talk there was with the masculine Undine of the soda fountain and a tall, thin glass passed from hand to hand. In the meantime Dr. Cartwright gently eased himself around to the front of the store where he has a position of advantage to take in the "lay of the land." As he looked his eyes grew larger and the larger his eyes grew the more he looked. The fisherman chuckled inwardly while he watched the Doctor out of the tail of his eye.

"Well, Hildreth! glad to see you have a big one at last."

If he had said "There is a big fire across the street" the effect could not have been more electrifying. The young man tending the fountain leaned over the counter and smiled a long smile. One or two from behind the prescription case came forward and joined the throng. Knowing for a fact, as I do, that this was not the largest bass ever seen in that store, the joke must have been on me. In fact, no one had ever seemed able to conceive of my catching any fish worth mentioning.

"What does he weigh?" We weighed him. That is to say, we tried to weigh him, but the scales were not large enough. Will Wyker came in, saying: "I hear you have a real one. Looks fine. Would you mind taking it down to the store and letting father see it?"

"Yes, Will, it is a fine one, but not as large as the one you caught in May at Blue Water." At Wyker's store it weighed over six pounds, and to make sure it was weighed again at the post-office.

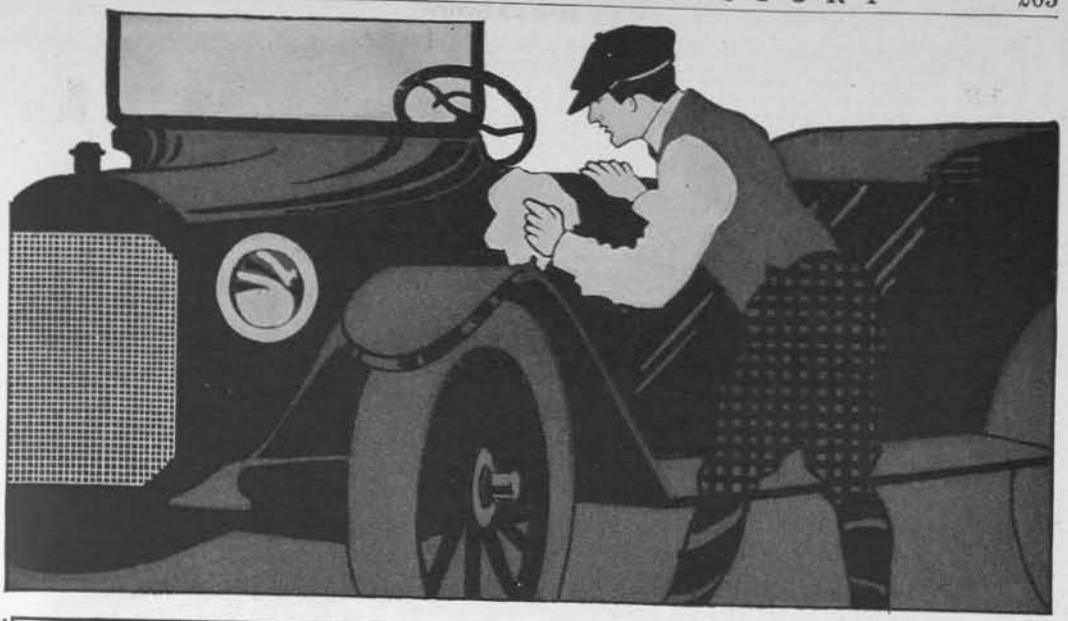
Of all the stories published in connection with this series of contests in the last four years, I have read every one relating to black bass, and some of the others, too. Three are fixed in my memory: One written by the gentleman who caught the 9 lb. brook trout. It was one of the first ever published. The modesty of the writer was commendable. He said what he had to say with few words and no frills. Yet his description of tackle, weather, water and manner of fishing left nothing to be desired.

The second, I call to mind, was written by Master White and was the most entertaining one I ever came across. I read it over two or three times and once to my wife.

The third was written by a Southern gentleman. I remember less about it than the others except the excellent directions he gave for fishing with a white floating minnow. The meat in the cocoanut was to reel slow.

Across the middle of Swan Lake is a railroad bridge, and while casting around one of the piers on *the* eventful day, I had a small strike. At the time I was using a No. 3 spinner (Hildebrandt) with a fly attached. In striking the fish the hook caught on a rock and damaged the whole outfit. Being prepared for such an emergency, I had a snelled Royal Coachman, size 1/0, with a split shot fastened to the snell (was casting into a strong east wind). The change was made in a hurry for fear the small one would get away. Fate has its own way of dealing with such matters, however, and in making the cast my line caught around the tip guide after the cast was made. While shaking the rod and pulling the line to free it, the fly naturally was left to its own sweet will. It slipped from the shallow water around the pier into the deep water between them, sinking and fluttering all the time.

As I make it out, the big bass was after the smaller fish and vented his disappointment on the feathered intruder. The first I knew was a slight tremor of the rod. Do big fish ever take a fly hurriedly? The fight was handicapped on my part by not having anyone to manage the canoe for me, and even more so by the fact that a trotline was stretched between me and my prize. On the other hand, I had an able ally in the wind, which blew us out from under the bridge and into the deep water in mid-lake. There the bass had but one position from which he could place me at a disadvantage and he promptly availed himself of it. Nearly all his fighting was done under my boat. Every time he rushed from one side of



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It forms a thin protecting film over the varnish greatly prolonging its life—it prevents checking and cracking—it will keep **new cars** bright and good looking for an indefinite time—and will make **old cars** look as well as a coat of paint or varnish.

DOES NOT GATHER DUST

Johnson's Prepared Wax imparts a perfectly hard, dry polish which will not collect dust. It preserves the varnish and protects it from the weather—it covers up small scratches—is clean and easy to use—and

"SHEDS WATER LIKE A DUCK'S BACK"

You will find Johnson's Prepared Wax invaluable for polishing your office desks. It gives a dry, glasslike finish that does not collect and hold dust, show finger prints or scratches. On **bookkeepers' desks** and tables where heavy books are used it gives a slippery surface on which the ledgers can easily be slid around, obviating the necessity of lifting them. Johnson's Prepared Wax is splendid for polishing **gun stocks, golf clubs** and **leather goods** of all kinds—also for floors, woodwork, furniture and pianos.

For sale by all leading hardware, paint and drug dealers.

1 pint 60c by Parcel Post—enough for a season's use.

S. C. JOHNSON & SON
"The Wood Finishing Authorities"
RACINE, WIS.

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I enclose 10c for a can of Johnson's Prepared Wax—sufficient for one polish on a large car.

*Name*_____

*Address*_____

*City & State*_____

the canoe to the other I had to carry the line either around the front or back end. There was a five-foot tail oar attached to the back end. Some day I am going to write a description of Southern canoes. They are not pretty, but they are very efficient.

Walter Clark, whose father runs the boat business at the lake, was in a boat about ten feet away watching the whole performance, and a negro named Clay (a well-known character at the lake) was fishing at the next pier. One of them offered to net the fish. Nothing doing.

Although I used the very lightest line, together with a suitable leader, the fish gave up in about 15 minutes and I landed him in the boat, where he lay flopping feebly. Somehow I had an idea big bass fought longer than that. But looking back I don't see how it could be possible, even with still lighter tackle. There was never a minute I felt sure the leader would hold, even if the fish were well hooked. No angler can be sure his fish is well hooked. To see a bass rise a foot or two out of the water and shake his head may cause anyone to fear his hook is not well set.

About the rod. It once belonged to my uncle, H. C. Robinson, of San Francisco. It came to me in a glove-leather case but was so old that if the manufacturer's name was ever on it it could not be discovered. I don't think it ever was. I sincerely regret that my uncle is not alive to rejoice with me in the success of his rod. He must have selected it with care and kept it with love for it to be in as good condition as it is now.

There is another big one in this lake at the upper end under a sunken log, and some day I am going to land him, and maybe he will also prove a prize winner.

Prize Contest Certificate Record. Second Prize, Large Mouth Bass, Southern Division, Fly Class, 1914 Prize Fishing Contest.

Weight—6 lbs. 5 ozs.
Length—24 in.
Girth—16 in.
Caught—June 27, 1914.
Where caught—Swan Lake, Alabama.
Rod—Steel fly-rod.
Reel—Meisselbach.
Line—Raw silk.
Lure—Royal coachman.

SAVED HIMSELF

The capable but careless liar may sometimes save himself much trouble by a little tact in getting out of the hard places he creates for himself in his own stories.

There had been much violation of the fish and game laws in Idaho, but the local deputies had not been able to check the illegal practises. A State warden, from another part of the State, was sent to try to break up the organized poaching.

One day, sauntering along a stream, rod and gun in hand so as to be ready for any kind of game—including poachers!—he met a loud-mouthed braggart who began to boast of his catch.

It was a Brobdingnagian tale of slaughter that the braggart told; it made him many times a criminal in the eyes of the law, to have killed so much game.

Finally the warden broke in on the bloody recital:

"Look here, my friend, do you know who you are talking to? I am the game warden, and I've come to get you for all this killing!"

The story teller stood appalled for an instant. He had condemned himself many times over. An inspiration came to him:

"Say, Mr. Game Warden, do you know who you are talking to? You are talking to the dog-gonedest liar west of the Rocky Mountains, and I can prove it in any court in Idaho!"

The officer of the law took him at his word as to that, and the case never got into court. But the poaching was broken up!

STRIPED AND CHANNEL BASS PRIZE WINNERS OF THE 1913 AND 1914 FISHING CONTESTS

Field & Stream Pub. Co.

I would appreciate it greatly if you would tell me the weights of the first prize fish in the 1913 and 1914 Prize Fishing Contest, channel bass and striped bass classes.

A Subscriber.

Ans.—1913 Channel Bass.—Weight, 48 lbs. Length, 48½ in. Girth, 28½ in. Caught at Brigantine Beach, N. J., by Dr. R. Johnson Held, of New York City.

1913 Striped Bass.—Weight, 73 lbs. Length, 60 in. Girth, 30½ in. Caught at Nashwena Island, Vineyard Sound, by Charles B. Church, of Cuttyhunk Island, Mass.

1914 Channel Bass.—Weight, 55 lbs. Length, 53 in. Girth, 28¼ in. Caught at Avalon, N. J., by John Arthur Brown, of Philadelphia, Pa.

1914 Striped Bass.—Weight, 53 lbs. Length, 52½ in. Girth, 29½ in. Caught at Vineyard Sound, Mass., by Charles B. Church, Cuttyhunk Island, Mass.

PHOTOGRAPHIC CONTEST

Field and Stream offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submitted. The prizes for next month will be: First Prize—Three years' subscription to Field and Stream. Second Prize—Two years' subscription to Field and Stream. Third Prize—One year's subscription to Field and Stream. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, Field and Stream, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO

Made by Charles L. Tatro. 3A Eastman Kodak, 1/25th second. Subject—Gray gopher eating bacon.

SECOND PRIZE PHOTO

Made by L. B. Faulkner, Jr. 1A Kodak Jr. 1/25th second. Silver pheasant drumming.

THIRD PRIZE PHOTO

Made by F. N. Whitman. Auto Graflex, Zeiss Tessar lens. f4.5. 1/25th second. Subject—Young Wilson tern.

Mr. E. C. Crossman
on the
.250-3000 SAVAGE

YOU all know Mr. Crossman is not throwing undeserved bouquets at rifles "made in the U. S. A."

Read his article on the .250-3000 Savage in this issue and ponder on it a little.

Is the .250-3000 Savage *accurate?*

Mr. Crossman knows accuracy. He won the military rifle championship of California.

He reports "The accuracy of the little rifle is very high" and "5 inch groups at 200"—even with ammunition exposed to the battering of a five weeks' mountain hunt. What military or target rifle can equal that?

Is the .250-3000 Savage *powerful?*

"It can kill anything that walks on four legs in these United States."

Does it *kick?*

"The recoil of the rifle is too slight to so dignify."

The .250-3000 Savage has been submitted to the greatest experts of the world—Lieutenant Whelen, Mr. Gilman, Mr. Askins, Mr. Crossman, Mr. Danse, Mr. Haines—and they've said it was *right,* rifle and cartridge, down to the last detail.

In details and finish the .250-3000 Savage is fully equal to the expensive European rifles which it totally outclasses in accuracy, convenience and efficiency. It has the original Savage solid breach hammerless six shot repeating action, the only American action strong enough and safe enough for cartridges of the highest concentration.

Takedown pattern 22 inch tapered round hi-pressure steel barrel with integral front sight base, checked extra full pistol grip stock and forearm, checked trigger and corrugated steel butt-plate, weight 7 lbs., price $30. Cartridges with soft nose or full metal cased bullets $4.20 per hundred.

Write us for particulars.

SAVAGE ARMS CO., 246 Savage Avenue, UTICA, N. Y.

The new expanding bullet for the .250-3000 Savage.

SPORTSMAN'S WORKSHOP

BUILDING A SPLIT BAMBOO FLY ROD

By George Parker Holden, M.D.

PART III.

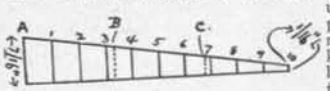
Rod Tapers and Rod Plotting

The novice is now prepared to digest profitably some data regarding rod tapers, and for directions how to plan a rod. For a split-bamboo rod for fishing with the fly, the author believes in one having a straight or even taper throughout, from butt to tip. He believes that by varying the caliber, principally at the butt of such a rod, any degree of stiffness or flexibility of practical purport may be obtained.

A principle that we regard as fundamental is that the butt-joint should be enough heavier than the middle-joint, and this second-joint enough heavier than the top-joint, so that the hand wielding the rod senses that it has perfect control of the rod tip, from its hold upon the handgrasp. In other words, the rod should not have the top-heavy feeling imparted by a jerky top. So it is far more preferable that the butt end of the middle-joint be smaller than the small end of the butt-joint, and that the same relations exist between the contiguous ends of top- and middle-joints, than that the contrary state of affairs should exist.

In thus planning a rod having a uniform taper from butt to tip, the caliber of that rod at any section throughout its length is readily determined by means of a diagram plotted as follows. Say that we have in mind a fly-rod of ten feet in length, of 7/16″ diameter at the butt and 1/18″ at the tip. We will reduce it to drawing in this way, each quarter-inch of *length* in this illustration representing one foot of rod length.

In actual practise we prefer to let each 1½″ represent a foot, when ⅛″ then represents an inch and 1/16 stands for a half-inch. The diameters of your rod are the *actual* lengths of these cross-lines of your diagram at the sec-



TAPER DIAGRAM

tions marked respectively 1, 2, 3, 4 feet, etc., from the butt end. Next we must get at the diameters of the respective ends of our middle-joint, the rod being composed of three joints; and for the reason that we prefer all three *completed* joints to be of the same length, and because allowance must be made for the variable ferrule lengths, this is not so easily computed as it may seem. For absolute accuracy in our figures, each ferrule length must be known.

The butt male ferrule of the middle-joint will be seated about 1½″ in the female ferrule at the smaller end of the butt-joint, and the top-joint ferrule will be seated about one inch in its companion half; thus the total length of the rod when jointed will be 2½″ shorter than the total length of its three joints if simply laid end to end. We want a total length, *jointed*, of 120″; then we must have a total length, unjointed, of 122.5 inches, to be equally divided into three parts. This gives us 40.85 inches for each completed joint, including its projecting ferrule. The female or projecting ferrule of the first- or butt-joint reaching 1½″ beyond the wood, gives 39.35″ for the wood length of that joint; the corresponding ferrule of the second-joint projecting one inch, leaves that amount less than 40.85″, or 39.85″, for the wood length of the second-joint.

Referring again to the above diagram, we measure 39.65″ from A, which gives B as the common caliber of the adjoining ends of the first- and second-joints; measuring, once more, 39.85″ from the point B, gives us C as the remaining caliber wanted. We now know the length of each of our bamboo joints irrespective of the ferrules, and the diameters at the respective ends of these joints, and can proceed to set our grooved mold accordingly, using half of each diameter as the measurement from bevel edge to bevel edge. Of course we maintain the mold so set by tightening up the screws. It is understood that some ten or twelve inches at the butt of the first-joint is occupied by the handgrasp, in the completed rod.

You will want two tops for this rod, top-joints being always supplied in duplicate with rods from the dealer as they are the parts most frequently broken.

We have now planned a ten-foot fly-rod, weighing in the neighborhood of seven ounces, suitable for heavy fresh-water angling. For a second, lighter, but very serviceable all-round fly-rod, the writer advises one of nine feet, having a butt caliber of ⅜″ and measuring 1/16″ at tip.

Weights of Fly-rods

We will now note some of the standard sizes and weights of fly-rods. The figures given below are subject to some slight changes, owing to the varying weights of different samples of bamboo-cane, and to differences in the windings and metal fittings of completed rods. The style of handgrasp and whether a rod is fitted with metal reel-seat or simple reel-bands, are also important modifying factors of the total weight. Keeping these qualifications in mind, we may make the general statement that fly-rods for trout and bass fishing range from eight feet in length and weighing four ounces, to

Your Best Friend in the Big Outdoors

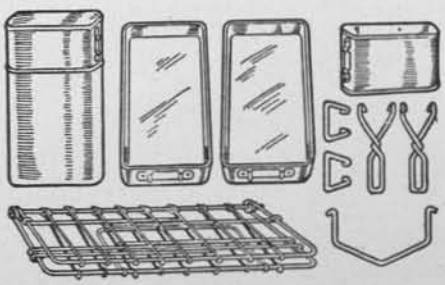
IN camp or on the trail, on long trips or short ones—when you go fishing, hunting, motoring or just 'hiking', you're sure to get hungry. When you do you will find the

STOPPLE
Kook Kit

mighty handy. With it you can prepare a meal for two persons at a moment's notice, and while the Kook Kit consists of six very useful utensils, when not in use the various utensils fit together so snugly and into such convenient bulk, that the complete kit can easily be carried in the pocket.

The Stopple Kook Kit is not a toy, but a practical mess kit that means priceless convenience to people who like to be out of doors.

If you don't happen to know a Hardware or Sporting Goods store where you can buy a Stopple Kook Kit, we will ship you one upon receipt of the price—$2.50.



STOPPLE KOOK KIT CO.
Dept. 35 Alma, Michigan

eleven feet with a weight of nine ounces; though a ten-foot rod weighing seven ounces will, except in rare instances, be the advisable extreme for heavy rods of this class. For bass fishing, we recommend nothing under nine feet, and weighing five ounces at the very least. An 8½-foot rod weighs about 4½ ounces; 9½-foot, 6 ounces; and 10½-foot, 8 ounces.

As to calibers, the 8- and 8½-foot rods will measure about 9/32" at the extreme butt end, and 2/32" at the tip; the same size of ferrules, ¼" and 9/64", will be used for both. Nine- and 9½-foot rods will be 11/32" to 12/32" at butt, and 2¼/32" at tip, and will take ferrules of 17/64" and 11/64". Ten- to 11-foot rods will measure from 13/32" to 14/32" at butt and from 2½/32" to 3/32" at tip; taking either 19/64" and 12/64" ferrules or the next larger size, 22/64" and 14/64".

For calipering rods and for determining the diameter of the ferrule required in individual cases, some form of accurate calipering instrument is quite indispensable. The handiest form for the rod worker is that like a miniature monkey-wrench, gauged to measure 64ths of an inch. It is made by L. S. Starrett & Co., and costs $1.50 at the hardware store.

Gluing Up

The attempt at gluing up his rod-joints has proven the Waterloo of many an aspirant rod-builder. About all the recommended methods were given trial before formulating the technic which has worked out most successfully in our own case, and which we shall conscientiously explain.

If the joints can be wound in a single direction only, and this be accomplished while at the same time *straightening instead of twisting* the joints, such a technic is highly desirable.

Any ordinarily good glue will suffice. The writer has even glued up satisfactory joints with the sheet gelatine that you buy in grocery stores for kitchen use, dissolved in hot water. Since the advent of the best-known brand of a prepared liquid glue, which is on sale in almost any hardware store, a practical carpenter or cabinet-maker who in these days resorts to the old-time method of gluing, is a rarity.

No matter how good the glue, if the joint be not kept protected from dampness by a sufficient coating of varnish, the glue will not save the rod for usefulness. While the function fulfilled by the glue in binding the strips together is tremendously effective from the standpoint of the increased rigidity of the glued joint as compared with its strips when simply bound together by windings, it is nevertheless true that all the glue has to accomplish is to prevent the strips from sliding one against another—that is, to prevent them acting individually instead of as a solid whole joint when a bending strain is applied. Now, a very slight adhesive force between the strips will suffice for this when it is distributed along their whole length, and when this bend is reinforced by strong permanent silk-windings held in a plentiful coating of varnish.

This malleability of the joints, and just how they act until the wet glue has stiffened, may be well observed in a joint whose finished strips are assembled and held by a snug temporary winding, without any glue having been applied as yet. Both the winding and fresh glue permit the strips to slide, one upon another, as you bend the joint; and to remain in whatever was the form when the bending force was interrupted, because they also hold the strips from slipping back into their original position, until a counteracting force is applied. Bend the joint into an S-shape and so it remains until bent some other way. Thus it is that *this time of gluing up is the most advantageous time for molding the completed joints straight.*

Get a small camel's-hair brush, not over one-half inch wide—or better, the stiffer ox-hair kind that paint stores carry—and have your liquid glue in readiness, the can resting in a saucepan of water

SLIPS GROUPED READY FOR GLUING

which is warming over a convenient oil- or gas-heater. Loose the strips of your joint from the winding that has bound them since they were finished. The writer uses Barbour's linen thread—obtainable at the dry goods store—No. 25 for all except top-joints, and No. 40 for these; and he makes use of the one piece, both for temporary binding and for the winding used in gluing. This winding-thread, made long enough, doubled, to wind the whole length of the joint, has a slip-noose turned in its looped end; place this thread conveniently nearby, so that you can *grab it instantly* when wanted.

Lay the strips down in front of you, arranged in two groups of three strips each, and in this order:

Pick up strip No. I in your left hand, grasping it near its middle, and rapidly but thoroughly, with long strokes, apply the glue to the whole length of the inside surface, A, of beginning at the smaller end; then lay the strip down again, on its remaining dry, planed surface. Next, treat strip No. III in the same way, applying the glue to its planed surface B; lay this down. At any time that the brush may stiffen or the glue on the brush is too thick to spread well, limber the brush and thin the glue a bit, at one and the same time, by cleaning out the brush in the warm water in which the glue-can sits. Next, pick up strip No. II and cover *both* of its planed surfaces with glue; and *don't* lay this down—yet—but transfer it to your right hand (having laid that brush in a *safe place,* mind you, where it won't fall on the floor and annex a choice collection of dust), which grasps it between thumb and forefinger, at the butt. Now, seizing it similarly in the left hand, pick up strip No. I, and bring the glued sides of the strips Nos. II and I together; and then, holding them both in the left hand, pick up strip No. III and bring that up against the first two. Then pinch all three up tight, along their whole length, between the left hand's thumb and fingers, sufficiently for them to stick together as a unit. Place this half-section down on the bench, on its back, with planed surfaces looking up.

(To be continued)

WATERPROOFING FOOD BAGS

FIELD & STREAM PUB. CO.:

May I take the liberty of asking a few questions which are troubling me?

What is the best method of waterproofing muslin food bags? Will the alum and lead process do, or will the lead have a tendency to poison the foods in the bags?

J. E. Moss.

Ans.—Dissolve paraffin in warm turpentine and soak muslin in it, or you can buy the cloth from any of the big outfitters.—ED.

PACKING FRESH-WATER FISH FOR SHIPMENT

By C. Percy Marks

After a fish has been landed and if not badly hooked place at once in livebox (if boat contains same) or in a net fish bag, hanging this overside in the water so fish can swim, thus keeping him alive and out of the sun. Be sure to tie the bag securely to some part of the boat, but lift it into the boat when rowing for home. On arriving kill the fish, clean, scale, removing the gills, and after a good wash in cold, clean water dry off each fish with old rag. Now gather some dry moss, fresh clover, grass or green leaves and fill each fish (including the head) with a bunch of the material collected.

If there is an ice-house where you are staying place the fish in a dry pan next to the ice and let them freeze; if there is no ice-house to be had but a cool cellar or milk house place fish here in pan and cover over so the farm cat can't enjoy; leave them here till they are cold all through. Now gather some additional dry moss and after this is cold pack with the fish in wooden box and ship home by express. Fish packed this way will keep several days and better than if ice is used.

Have you any dope on the making of outdoor articles? If so, send it in. That's what the Workshop is for.

Message From a Pipe Smoker Who Calls Himself a "Tobacco Bug"

A. F. Bemis, Pres. J. S. Bemis, Sec. and Treas. S. A. Bemis, V.-Pres.
Jackson Fibre Company
Branch of
BEMIS BRO. BAG COMPANY
Boston and St. Louis

Telegraph Address, Western Union, Jackson, Tenn.
Telephone Address, Jackson 598.
American Express, Bemis, Tenn.

J. B. Young,
Res. Mgr.

Bemis, Tenn., March 16/14.

Larus & Bro. Co., Richmond, Va.

Gentlemen: This morning a traveling man from Atlanta was in the office, an old friend, who handed me a cigar and we fell to talking about "smoke."

He asked me if I smoked a pipe and I replied that it was my steady diet, that I smoked but few cigars. He said that was the case with him, and asked what tobacco I smoked, and I replied, "Edgeworth."

He nodded and smiled and said: "I was introduced to that about three years ago, and have smoked nothing else since; it is the best yet."

I simply mention this for the reason that it seems to be the same story everywhere; once you smoke Edgeworth, nothing else will do.

What is your "Qboid"? Is it higher or lower grade than Edgeworth? I mean in price—or how does it differ? You can't improve on the Edgeworth flavor. I am simply curious, am sort of a "tobacco bug" anyway, and am always experimenting, but "never again." Yours truly,

(Signed) B. F. Young.

Have you been introduced to Edgeworth yet?

The pleasure will be yours.

Your name and address on a post card, with the name of some store where you sometimes buy tobacco, will bring a liberal sample of Edgeworth Ready-Rubbed to you postpaid.

Send in the post card and ask for your sample. To say "you will like it" might be going a bit too far, but the fact is that practically every person who tries Edgeworth smokes it with a glad-to-have-met-you expression.

If you roll cigarettes, try Edgeworth that way. It makes a tight, round cigarette with a refreshingly different flavor. In a cigarette the flavor of Edgeworth is slightly milder than in a pipe.

Send your request for the free package to Larus & Brother Co., 27 South 21st Street, Richmond, Virginia.

The original Edgeworth is a Plug Slice, wrapped in gold foil and sold in a blue tin. Edgeworth Ready-Rubbed may be bought in 10 and 50c tins everywhere, and in the handsome $1.00 humidor package. Edgeworth Plug Slice, 15c, 25c, 50c and $1.00. Sold by practically all dealers or mailed prepaid if yours has none.

The writer of the above letter asks about Qboid. This is a granulated plug, cut into cube shape. It requires no rubbing before being put into the pipe and is guaranteed not to bite the tongue.

To the Retail Tobacco Merchant—If your jobber cannot supply Edgeworth, Larus & Brother Co. will gladly send you a one- or two-dozen 10c size carton by prepaid parcel post at the same price you would pay the jobber.

FIELD AND STREAM'S

Fifth National PRIZE FISHING CONTEST FOR THE RECORD FISH CAUGHT IN 1915

CONDITIONS

First—The fish must be caught with rods and reels as specified,* and in legal season.

Second—The fish must be weighed on tested scales and measured with a tape measure, length to be taken from end of lower jaw with mouth closed, to tip of tail.

Third—The affidavit blank printed on the last page of this announcement, or an exact copy, must be used in applying for a prize and signed by the man who caught the fish, together with two witnesses, and sworn to before a Notary Public and his seal affixed. In case any contestant catches a fish when accompanied by a single guide, the affidavit as signed upon coming out of the woods by himself and guide before a Notary Public stating the circumstances will be duly considered.

Fourth—The weight, length and girth, date, place, and manufacturer's name and full specifications, if possible, of the rod, reel, line and lure (or bait) used in taking the fish must be stated.

Fifth—The winners in each class must send us a short account of how, when and where the fish was taken, and what tackle was used in catching the fish. The account to be published in **Field and Stream.** These accounts will not be asked for until the prizes have been awarded.

Sixth—All affidavits must be sent to the Editor of the Prize Fishing Contest, **Field and Stream,** 331 Fourth Avenue, New York. All affidavits in classes designated by A, B, and C, must be in our hands within 5 days from closing date of class. **In all other classes affidavits must be in within 15 days from closing date.**

Seventh—No fish caught from State or private hatchery will be allowed in this contest.

Eighth—In the Pike and Wall-eyed Pike Classes an outline drawing of the fish must be sent in with affidavit, drawing to be made by placing fish on side on large piece of paper and drawing an outline of fish with pencil on the paper with fins of fish all erect.

Ninth—In event of two fish weighing and measuring exactly the same number of pounds, ounces and fractions, duplicate prizes will be awarded in each case.

The Judges of this contest will be: Robert H. Davis, Editor *Munsey's;* Will H. Dilg, Chicago, Ill.; W. H. Miller, Editor, FIELD AND STREAM; E. F. Warner, Publisher, FIELD AND STREAM; E. M. Gill, Camp Fire Club; W. P. Corbett, Charles Frederick Holder.

In Tarpon Class length of fish is only measurement required. It is not necessary to give weight or girth.

* Where no special kind of tackle is specified, any tackle is allowable, provided it consists of rod, reel, line and lure.

Be sure to get a photograph of yourself with fish, if possible

FRESH WATER GAME FISH

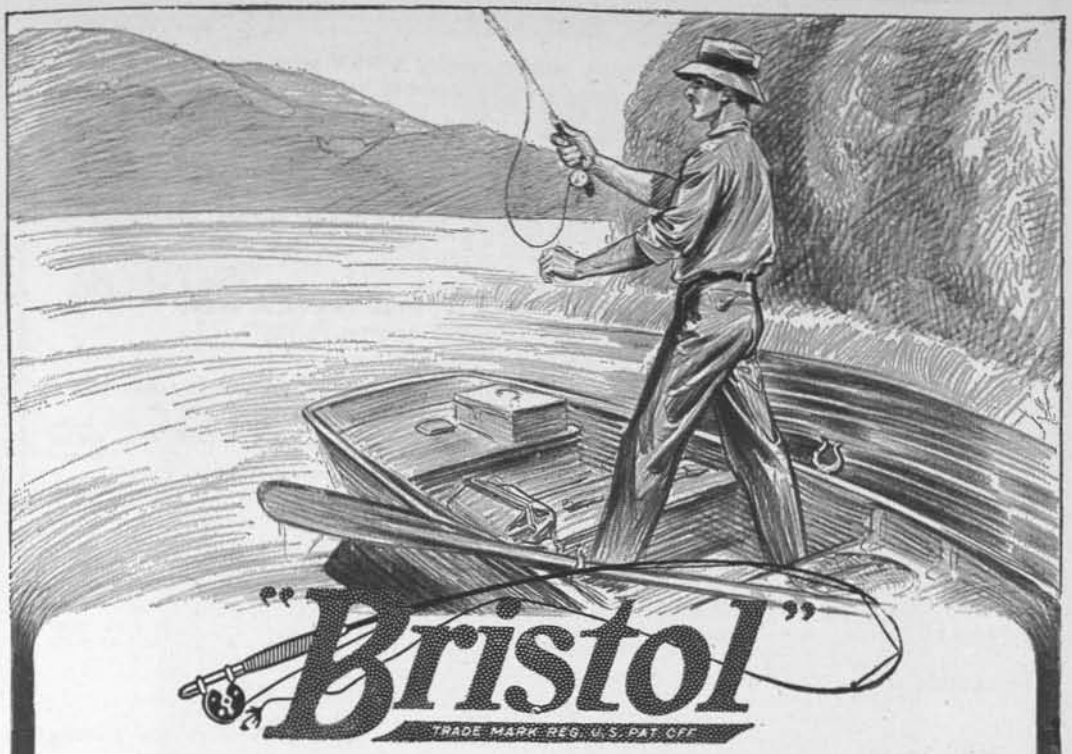
BROOK TROUT (Salvelinus fontinalis)

CLASS A—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between opening of season and July 31st

FIRST PRIZE: One Dirigo Trout Fly Rod, length and weight to suit winner, made by F. E. Thomas, value $15.00; also one No. 200 Cream City Tackle Box, made by Geuder, Paeschke & Frey, value $3.50. **Total value $18.50.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one No. 29 Bristol Fly Rod, made by Horton Mfg. Co., value $6.50. **Total value $16.50.**

THIRD PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and one Frostco Hydrostatic line, 50 yards, made by H. J. Frost & Co., value $3.75. **Total value $11.75.**



Bait and Bait Casting Rods
Trolling, Telescopic and Fly Rods

A vacation morning. Ripple on the lake. Bass, Pike, 'Lunge, Pickerel, hungry as wolves.

City duds left at home. Arms free, neck open. The reel singing to the tune of 75 yards of line. "Bristoling" is the greatest vacation on earth. No other sport like it, so interesting or so pleasant to remember. Nothing else so beneficial.

You can buy any kind of a "Bristol" Rod for any kind of fishing at a low, medium or high price—depending on handle, grip, style, finish, mountings and agates. Prices range from $3.00 to $25.00. They are on sale in over 17,000 stores which handle fishing tackle. We guarantee every "Bristol" Rod for three years.

Write for New "Bristol" Catalogue FREE

THE HORTON MANUFACTURING COMPANY

81 Horton Street - - - - Bristol, Conn.

FOURTH PRIZE: One Pigskin Leather Cooper Fly Book, made by Cooper Fly Book Co., value $6.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $8.00.**

CLASS B—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between July 31st and October 31st

FIRST PRIZE: One Junior Reflex Camera, made by Reflex Camera Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**
SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50; and one Justrite No. 95 Camper's Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $15.50.**
THIRD PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one Persian Alligator Cooper Fly Book, made by Cooper Fly Book Co., value $4.50. **Total value $12.50.**
FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

GRAND PRIZE—For largest Brook Trout caught during season 1915 with Fly: Oil Painting of Brook Trout by H. A. Driscole—Value $75.00

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

RAINBOW TROUT (Salmo irideus)

GRAND PRIZES—For Rainbow Trout caught between April 1st and October 15th

FIRST PRIZE: One 9½-foot, 5¾-ounce Fly Rod, made by Edward F. Payne. **Value $25.00.**
SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Kelso Quick-apart Quadruple Reel (80 yard), made by H. J. Frost & Co., value $8.50. **Total value $18.50.**
THIRD PRIZE: One 80-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.50; also one Three Years' Subscription to FIELD AND STREAM, value $4.50. **Total value $12.00.**
FOURTH PRIZE: One Russian Leather Cooper Fly Book, made by Cooper Fly Book Co., value $4.50; also one Frostco Combination Steel Rod, 9½ feet long, made by H. J. Frost & Co., value $3.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

SPECIAL HONOR PRIZES—For Rainbow Trout Caught with Fly on Fly Tackle

FIRST PRIZE: One VesTong Hunting and Fishing Coat, made by VesTong Mfg. Co., value $7.00; also one VesTong Hunting and Fishing Pants, made by VesTong Mfg. Co., value $5.50; and one 60-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.00. **Total value $19.50.**
SECOND PRIZE: One Pfleuger Redifor Anti Back Lash Reel, made by Enterprise Mfg. Co., value $7.50; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $11.00.**
LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

BROWN TROUT

GRAND PRIZES ONLY—For Brown Trout caught casting a FLY with Fly Fishing Tackle, between April 15th and October 1st, 1915

FIRST PRIZE: One Vernley Fly Rod, made by Horrocks-Ibbotson Co., value $15.00; also a two years' subscription to FIELD AND STREAM, value $3.00. **Total value $18.00.**
SECOND PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one selection of A. F. Meisselbach & Bros. to value of $10.00. **Total value $15.00.**
THIRD PRIZE: Selection from catalog of Schoverling, Daly & Gales to value of $10.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $12.50.**
FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $8.50.**

LAKE TROUT—TOGUE (Christivomer namaycush)

GRAND PRIZES ONLY—For Lake Trout caught between April 1st and October 1st

FIRST PRIZE: One No. 1 5x7 Film Premo Camera, made by Rochester Optical Co., value $16.00; also one selection from catalog of Abbey & Imbrie, to value of $5.00. **Total value $21.00.**
SECOND PRIZE: One Ecruette Sportsman's Style Compac Tent, made by Compac Tent Co., value $11.50; also a three years' subscription to FIELD AND STREAM, value $4.50. **Total value $15.00.**
THIRD PRIZE: One selection from catalog of A. F. Meisselbach & Bros., to value of $10.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $12.50.**
FOURTH PRIZE: One selection from catalog of Abbey & Imbrie to value of $5.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.20.**

LANDLOCKED SALMON, OR OUNANICHE

GRAND PRIZES ONLY—For Landlocked Salmon caught from April 1st to Oct. 1st

FIRST PRIZE: One Pneumatic Mattress selected from catalog to value of $22.00, made by Pneumatic Mfg. Co.
SECOND PRIZE: One Remington Model 12A .22 caliber repeating rifle, made by Remington Arms-U. M. C. Cartridge Co., value $10.50; also one Utica Automatic Reel, made by Horrocks-Ibbotson Co., value $5.00. **Total value $15.50.**
THIRD PRIZE: One Kelso 50-Yard Automatic Reel, made by H. J. Frost & Co., value $5.00; also one three years' subscription to FIELD AND STREAM, value $4.50; and one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50. **Total value $11.00.**
FOURTH PRIZE: One Yawman & Erbe No. A Reel, made by Horrocks-Ibbotson Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

SMALL MOUTH BLACK BASS (Micropterus dolemieu)

CLASS A—For Small Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One No. 33 Bristol Bait Casting Rod, made by Horton Mfg. Co., value $12.00; also one pair No. 210, 10-inch height, Hunting Boots, made by Mohawk Moccasin Co., value $6.00; and one selection from catalog of Abbey & Imbrie to value of $5. **Total value $23.00.**
SECOND PRIZE: Five Quick Change Bass Baits, made by Skvor & Co., value $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $18.75.**
THIRD PRIZE: One selection from catalog of James L. Donaly to value of $10.00; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one VesTong Automatic Cleaning Rod, for Shotguns, made by VesTong Mfg. Co., value 50c. **Total value $12.00.**
FOURTH PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co., value $6.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $8.00.**

SPECIAL PRIZE OFFER

FOR CONTESTANTS IN THE "FIELD AND STREAM" FISHING CONTEST OF 1915

To encourage the use of better and more dependable tackle we offer a special prize to every contestant.

WRITE US FOR FULL INFORMATION

LANDING A PRIZE WINNER

It is well worth the consideration of *careful* anglers to note that since the beginning of this contest the great majority of contestants have used—***always with success***—the peerless "KINGFISHER" line.

An analysis of the 1914 contest, counting *all* contestants using silk lines, including winners, shows the following:

Different Makes and Names of Lines Reported	58
Different Makers of Lines Reported	11
"Kingfisher Brand" Scored	50% of Total
Next Nearest Make "	18% " "
Average of 9 Other Makes	3½% " "

EVERY OTHER MAN USED A "KINGFISHER" LINE!

MADE ONLY BY

E. J. MARTIN'S SONS :: Rockville, Conn.

CLASS B—For Small Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Detroit Refrigerator Grip for fish, in shape of traveling bag, made by Detroit Refrigerator Grip Co., value $15.00; also one South Bend Anti Back Lash Casting Reel, value $7.50; one $4.50 selection of Buck Tail Baits and Minnows, made by South Bend Bait Co., total value $12.00. **Total value $27.00.**

SECOND PRIZE: One selection from catalog of Hartung Brothers & Co., to value of $10.00; also Hildebrandt Spinners, made by J. J. Hildebrandt Co. to value of $10.00. **Total value $20.00.**

THIRD PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one two-years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: Four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co. **Value $9.00.**

CLASS C—For Small Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One of H. A. Driscole's Famous Bass Paintings. **Value $75.00.**

SECOND PRIZE: One Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $15.00; also one Tripart Reel, made by A. F. Meisselbach & Bros., value $3.00. **Total value $18.00.**

THIRD PRIZE: One Alaska Hunting Jacket, made by George F. Webber, value $5.00; also one selection from catalog of Buck Tail Baits, Spinner Hooks, Minnows and Spoons, made by South Bend Bait Co., value $7.50. **Total Value $12.50.**

FOURTH PRIZE: One pair 10-inch height Sporting Shoes, hand sewed, two buckles at top, full-length sole, made by M. L. Getchell Co., value $6.00; also one Frostco 120-Yard Reel, made by H. J. Frost & Co., value $3.00. **Total value $9.00.**

GRAND PRIZE—For largest Small Mouth Bass caught during season: One Aerothrust Twin Cylinder Rowboat Motor, gasoline or kerosene operated, made by Aerothrust Engine Co. Value $64.75.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One Maxim Silencer for .22 Rifle, made by Maxim Silencer Co., value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

SPECIAL HONOR PRIZES—For Small Mouth Bass caught on Fly with Fly Tackle

FIRST PRIZE: One Free Spool Takapart De Luxe Reel, made by A. F. Meisselbach & Bros. **Value $13.50.**

SECOND PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co. **Value $6.00.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

NORTHERN DIVISION—North of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One Model 1912 .22 Caliber Savage Repeating Rifle, made by Savage Arms Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $13.00.**

FOURTH PRIZE: One assortment 12 South Bend Minnow Baits, made by South Bend Bait Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

CLASS B—For Large Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Abercrombie Snow Tent, size 7x7, made by David T. Abercrombie Co. **Value $30.00.**

SECOND PRIZE: One pair Gitchee Gamee 15-inch Height Shoes, with strap and buckle at top, No. B 1175, made by Northern Shoe Co., value $10.00; also one assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00. **Total value $20.00.**

THIRD PRIZE: One No. 11 Bristol Bait Rod, agate tip and guides, reversible cork handle, made by Horton Mfg. Co., value $8.50; also one Ecruette Poncho, made by Compac Tent Co., value $4.80. **Total value $13.30.**

FOURTH PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

CLASS C—For Large Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One selection from catalog of Moonlight Bait Co. to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $3.60; and one Style E Sextoblade Razor in leather case with soap and collapsible shaving brush, made by Edward Week & Son, value $5.00. **Total value $18.60.**

THIRD PRIZE: One selection from catalog of W. J. Jamison, to value of $10.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

GRAND PRIZE—For Largest Large Mouth Bass caught between opening of season and October 31st: One Ferro Rowboat Motor, with Kingston Float Feed Carburetor, Bosch High Tension Reversible Magneto and Rudder, made by the Ferro Machine & Foundry Co., value $85.00.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One two-years' subscription to FIELD AND STREAM, value $3.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $5.95.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

SOUTHERN DIVISION—South of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between January 1st and June 30th, inc.

FIRST PRIZE: One No. 33 Talbot Sapphire Jeweled Reel, made by Talbot Reel and Mfg. Co. **Value $28.50.**

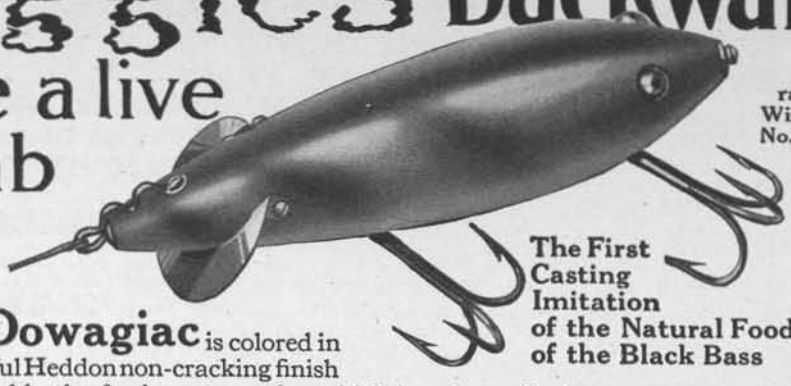
SECOND PRIZE: One Meridan Model 15 .22 Caliber Repeating Rifle, made by Sears, Roebuck & Co., value $12.00; also one Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $6.00. **Total value $18.00.**

THIRD PRIZE: Selection of Heddon's Dowagiac Minnows, made by James Heddon Sons, value $4.50; also one Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $12.50.**

FOURTH PRIZE: One Camp Cot, made by the Gold Medal Camp Furniture Co., value $3.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and three "Chippewa" Bass Baits, 3½ inches, revolving spinner in body, made by C. J. Frost, value $2.55. **Total value $8.55.**

Wiggles Backward

Like a live Crab



rab Wiggler No. 1809

This New Genuine Heddon Dowagiac is colored in the wonderful Heddon non-cracking finish

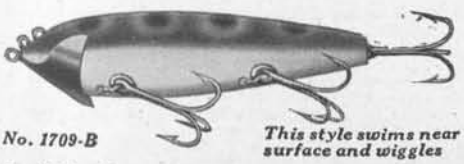
The First Casting Imitation of the Natural Food of the Black Bass

to exactly resemble the fresh water crab—which is universally known to be the favorite natural food of Mr. Gamefish—and ingeniously constructed to exactly imitate the crab's hurried, lively zig-zag when scurrying backward to cover. The triumph of all wiggling, wobbling baits, swimming and diving deep or high at will, floating when at rest, with non-fouling hooks, almost weedless. Variable line fastening governs depth and action. No movement like it ever achieved in a casting bait before—no finish so natural and alluring, nor hooking so certain. Quick—add it to your kit! At your dealer's or mailed prepaid for 85c. Also supplied in other Heddon colorations at same price **85c**

It's a Year of Wigglers

Wiggling, diving baits have the call this season—more will be used than all other styles put together. They have proved their effectiveness. Even hard-shell "live baiters" have become converted to them. The pioneer Dowagiac "Wigglers" will naturally be in the big majority. It was Jim Heddon, you know, who put out the first diving and swimming minnow, half a dozen years ago.

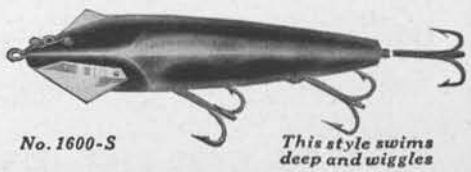
Two More Popular Styles of Dowagiac "Wigglers"



No. 1709-B — *This style swims near surface and wiggles*

A deadly lure for any depth of water, but specially suited for in-shore work, in the shallows near weed beds and reeds. Floats when at rest, but darts and dives when reeled in, yet stays near the surface. This style in six colorations:—

No. 1700—Fancy Green Back, White Belly
No. 1700-S—White body, Red and Green Spots
No. 1702—White Body, Red Head
No. 1705—Yellow Body, Red and Green Spots
No. 1709-A—Imitation Perch
No. 1709-B—Imitation Frog.



No. 1600-S — *This style swims deep and wiggles*

Another remarkable killer for bass, pickerel, pike and muskie. Generally used in deeper water than our No. 1700 style, though it's used effectively in shallows too. Its action is very lifelike, darting to and fro like a frightened minnow. Floats when at rest. Six colorations:

No. 1600—Fancy Green Back, White Belly
No. 1600-S—White Body, Red and Green Spots
No. 1602—White Body, Red Head
No. 1605—Yellow Body, Red and Green Spots
No. 1609-A—Imitation Perch
No. 1609-B—Imitation Frog

Heddon's Dowagiac "Wigglers" have the exclusive features that put them far ahead of other diving baits. Finished in the famous Heddon porcelain enamel, guaranteed not to chip, flake, crack or peel. Patented variable line fastening to regulate depth of diving. All hooks in patented "Dowagiac" Sockets—can't foul each other, twist the line or mar the enamel. Durability and workmanship unequalled. Price, either style and any color, **75c**

Art Catalog Free. The most elaborate fishing book ever printed. Shows all Heddon tackle in actual colors—minnows, lines and famous Jim Heddon's Casting Rods. Full of practical "hunches" on expert casting and more successful fishing. It's a book you'll prize—and a postal will bring it to you free.

James Heddon's Sons, Box 4, Dowagiac, Mich. (Pronounce it "Doe-wah'-ji-ac")

CLASS B—For Large Mouth Bass caught between July 1st and Dec. 31st, inc.

FIRST PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $24.00.**

SECOND PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one selection from catalog of Abbey & Imbrie to value of $10.00. **Total value $18.00.**

THIRD PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Meisselbach Automatic Reel, made by A. F. Meisselbach & Bros., value $3.50; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $11.50.**

FOURTH PRIZE: One Style E Sextoblade Razor in leather case with soap and collapsible brush, made by Edward Weck & Son, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

Maryland, Delaware, Virginia and West Virginia Division

For Large Mouth Black Bass Caught during the season within the State laws

FIRST PRIZE: One No. 3 Jeweled Meek Reel, made by B. F. Meek & Sons. **Value $32.00.**

SECOND PRIZE: One No. 041½ Moose Head Brand Knee-length Sporting Boots, made by John Palmer Co., value $10.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $18.00.**

THIRD PRIZE: One selection from catalog of Fred S. Sabey Co. to value of $12.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75; also one Abercrombie Frame Pack, made by David T. Abercrombie Co., value $4.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.95.**

GRAND PRIZE—For largest Large Mouth Bass caught during season: One of H. A. Driscole's famous Bass Paintings—Value $75.00

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates. **Value $4.00.**

SPECIAL HONOR PRIZES—For Large Mouth Bass caught casting a FLY with Fly Fishing Tackle.

FIRST PRIZE: One Navajo Sweater Coat, made by Bradley Knitting Co., value $10.00; also 200 yards Hasting Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $15.00.**

SECOND PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

GREAT NORTHERN PIKE (Esox Lucius) *(See Condition No. 8)*

GRAND PRIZES ONLY—For Pike caught between May 1st and October 31st, inc.

FIRST PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one pair 12-inch height Witch Elk Hunting Boots, made by Witchell-Sheill Co., value $10.00; and 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $25.00.**

SECOND PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one Milburn Combination Campers' Table Lamp and Lantern, made by Alexander Milburn Co., value $6.00. **Total value $16.00.**

THIRD PRIZE: One assortment 22 South Bend Buck Tail Baits and Weedless Hooks, made by South Bend Bait Co., value $7.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $12.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; and one Milburn Acetylene Hand Lamp, made by Alexander Millburn Co., value $1.75. **Total value $8.75.**

MUSCALLONGE (Esox Nobilior)

GRAND PRIZES ONLY—For Muscallonge caught between May 1st and Oct. 31st, inc.

FIRST PRIZE: One 1915 Evinrude Row Boat Motor, with automatic reverse and waterproof built-in magneto, made by Evinrude Motor Co., value $80.00.

SECOND PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00. **Total value $19.00.**

THIRD PRIZE: One Abercrombie Cook Outfit, made by David T. Abercrombie Co., value $10.00; also three "Chippewa" Muscallonge Baits, 5 inches, with revolving spinner in body, made by C. J. Frost, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; and three "Chippewa" Skipper Swimming and Jumping Baits, made by C. J. Frost, value $2.25. **Total value $8.75.**

LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

WALL EYED PIKE—PIKE PERCH *(See Condition No. 8)*

GRAND PRIZES ONLY—For Wall-eyed Pike caught from May 1st to October 31st

FIRST PRIZE: One Joymotor Outboard Motor, with reversing propeller and high tension magneto, made by Joy Engineering Co. Value $75.00.

SECOND PRIZE: One selection from the catalog of James L. Donaly to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $17.50.**

THIRD PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles Co., value $5.00; also one selection of Heddon's Dowagiac Minnows, made by James Heddon & Sons, value $4.50; and three "Chippewa" Pike Baits, 4-inch body, made by C. J. Frost, value $2.70. **Total value $12.20.**

FOURTH PRIZE: One Takapart Reel, made by A. F. Meisselbach & Bros., value $4.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; one year's sub. to FIELD AND STREAM. **Total value $9.50.**

SALT WATER GAME FISH

BLUEFISH (Pometomus Saltatrix)

GRAND PRIZES ONLY—For Bluefish caught between May 1st and October 31st

FIRST PRIZE: One Comfort Sleeping Pocket, made by Metropolitan Air Goods Co. **Value $25.00.**

SECOND PRIZE: One Neptune Reel, made by A. F. Meisselbach & Bros., value $10.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $15.00.**

THIRD PRIZE: One Interchangeable Lens Lamp, Style 2, made by R. C. Kruschke, value $7.00; also one three-years' subscription to FIELD AND STREAM, value $4.50. **Total value $11.50.**

FOURTH PRIZE: One Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $9.00.**

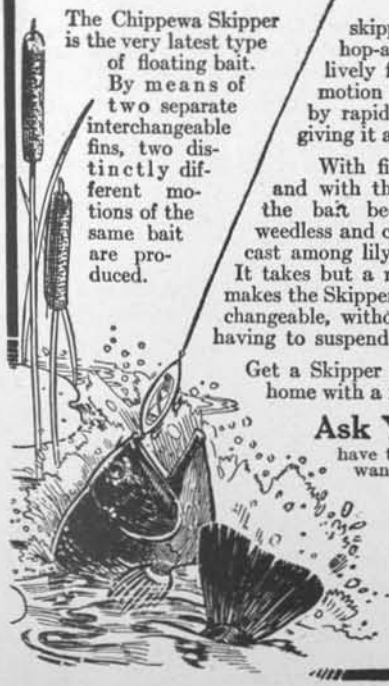
Here's The Bait That Gets 'Em

Be Sure to Have a Chippewa Skipper in Your Bait Box

HERE'S a lure that fishermen who know what's what in bait will appreciate instantly. It has the features that make fish strike quick as a flash. And once they strike, they're yours. The Skipper is designed not only to *attract* the beauties, but to get 'em—every time. The Chippewa Skipper is a **"2-in-1"** bait because by using the two different fins you can produce two distinctly different motions of the same bait. Give the Skipper a fair trial, then you'll understand why all the wise anglers are using them.

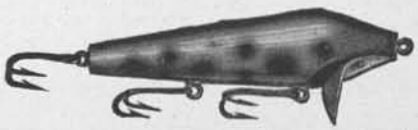
CHIPPEWA
The Bait That Makes Good

The Chippewa Skipper is the very latest type of floating bait. By means of two separate interchangeable fins, two distinctly different motions of the same bait are produced.



The No. 1 fins which come attached to the bait, produce a life-like wiggling effect, much like the wake of a swimming mouse. A bait with this movement has proven one of the most killing ever devised, as witness the thousands of wiggling, darting, wobbling and diving baits now in use. The bait travels with a rocking motion, for all the world like a live swimmer. If given a short, sharp jerk the bait produces a sound like that of the surface strike of a bass—a sound which arouses the curiosity of every game fish within reach.

The No. 2 fins, which come packed loose in the box with every skipper bait, will, when attached, enable the angler to produce the hop-and-skip effect on the surface of the water made by a husky, lively frog making a quick get-away from a dangerous locality. This motion is given the bait by rapidly retrieving it—giving it a long, quick pull.



With fin No. 2 attached and with the hooks reversed, the bait becomes practically weedless and can be successfully cast among lily pads and weeds. It takes but a minute to change fins and reverse the hooks. This feature alone makes the Skipper exceptionally valuable. The fins are quickly and easily interchangeable, without tools, so that changes may be made frequently and without having to suspend operations more than a moment during the day's fishing.

Get a Skipper before you go fishing next time, then you'll be sure to come home with a nice string instead of an "almost-got-'em" story.

Ask Your Dealer for the Skipper and other Chippewa Bait—the bait that makes good. If your dealer does not have them in stock, write us, enclosing price and stating which number you want and we will send you a Skipper by mail postpaid anywhere in U. S.

PRICE 75c EACH

One Size Only—4½ inch body

COLORS: S-76—Fancy Spotted. S-77—Green and White.

Illustrated circular mailed free upon request.

C. J. FROST, 300 Ellis St., Stevens Point, Wis.

GRAND PRIZES ONLY—For Weakfish caught between May 1st and October 31st

FIRST PRIZE: One Improved Ocean King 350-Yard Reel, made by H. J. Frost & Co., value $14.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $16.50.**

SECOND PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one selection from catalog of Abbey & Imbrie to value of $5.00; and two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

THIRD PRIZE: One selection from catalog of New York Sporting Goods Co. to value of $10.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; also one Northwestern Clasp Knife, made by R. C. Kruschke, value $2.50; and one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00. **Total value $8.00.**

SPECIAL PRIZE: For Largest Weakfish caught on 5½-ounce, or less, rod, length not less than 4½ feet, 9 thread, or less, line: One selection from catalog of Marble Arms and Mfg. Co. Value $10.00.

STRIPED BASS (Roccus lineatus)

GRAND PRIZES ONLY—For Striped Bass caught between May 1st and October 31st

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One 10-ounce Army Duck Wall Tent, size 8 x 10, height at center 6½ feet, made by George B. Carpenter Co., value $15.00; also one Parker Press-The-Button Self Filling Fountain Pen, made by Parker Pen Co., value $5.00. **Total value $20.00.**

THIRD PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $11.75.**

FOURTH PRIZE: One pair Russell Neverleak Moccasin Boots, made by W. C. Russell Moccasin Co., value $9.00; also one Western Outing Knife, made by R. C. Kruschke, value $1.50. **Total value $10.50.**

LADIES' PRIZE: One Parker Jack Knife Safety Fountain Pen, made by Parker Pen Co., value $5.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $7.50.**

CHANNEL BASS (Sciaena ocellata)

GRAND PRIZES ONLY—For Channel Bass caught between April 1st and October 31st

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One "Rite Lite" Nifty Balloon Silk Tent, 5x7, with sewed-in floor, made by Indianapolis Tent Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One pair Gokey Boots, selected from catalog to value of $10.00; also two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20; and one Komfort Lantern, made by R. C. Kruschke, value $4.50. **Total value $10.70.**

TARPON (Megalops Atlanticus)

GRAND PRIZES ONLY—For longest Tarpon caught Jan. 1st, 1915 to Jan. 1st, 1916

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AFFIDAVIT

I hereby swear to statement signed by me before two witnesses and a notary public.

Kind of fish.....Weight.....Length .....Girth.....

When caught .....Where.....

Rod used .....Reel.....Line.....

Lure or bait. .....Give Mf'r's names of each and full specifications

Caught by (Signed).....

Street .....

City .....State.....

Witnessed by: (Give names and addresses)

1 .....

2 .....

Sworn to before me this.....day of.....

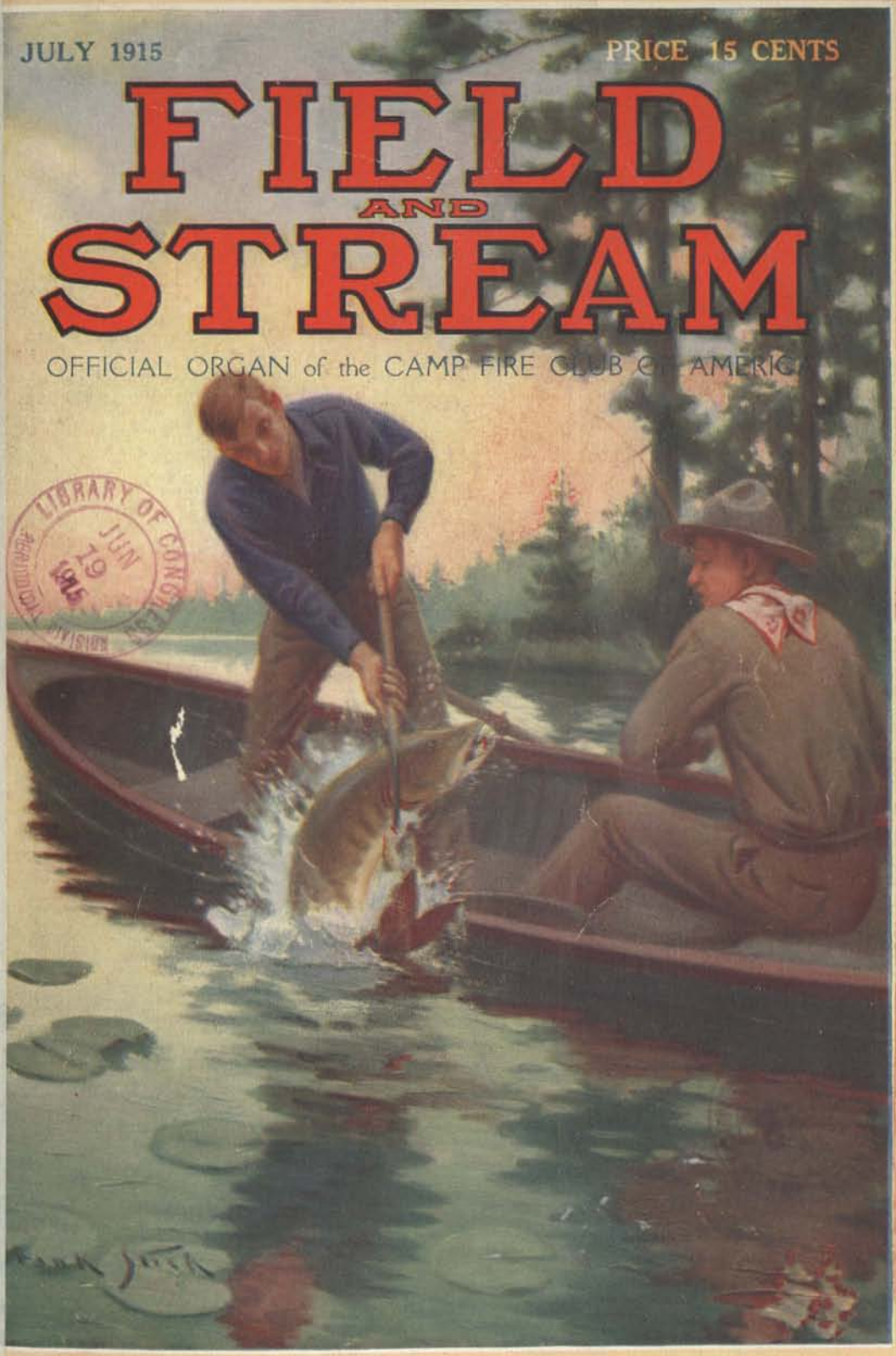
Notary Public .....

(SEAL)

JULY 1915 PRICE 15 CENTS

FIELD AND STREAM

OFFICIAL ORGAN of the CAMP FIRE CLUB OF AMERICA



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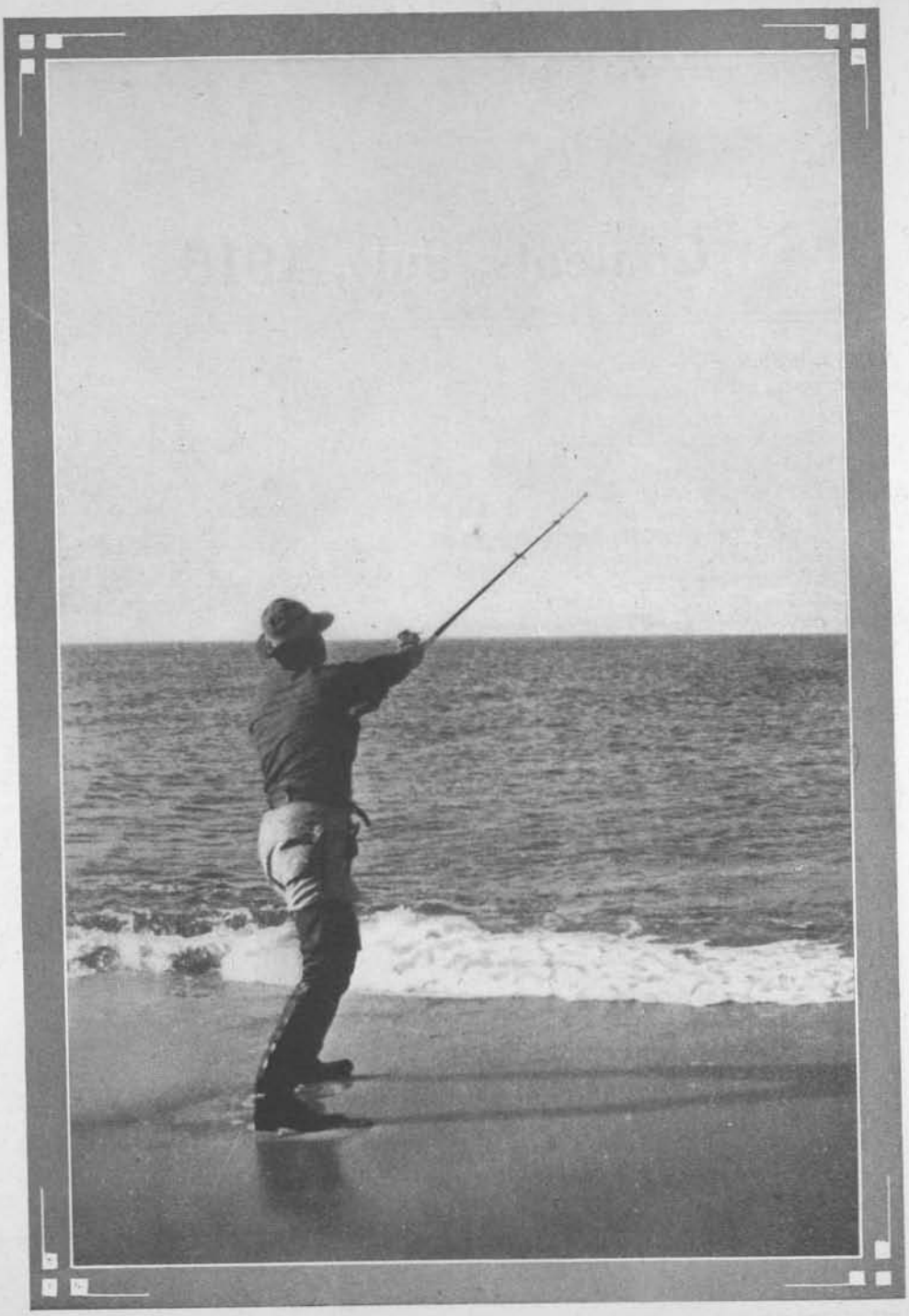

INTO THE GREAT GAMBLE

JUN 17 1915

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FIELD AND STREAM

AMERICA'S MAGAZINE FOR SPORTSMEN

OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR JULY, 1915 NUMBER THREE

SURF FISHING DOWN OFF FIRE ISLAND

By WM. S. MULLER

IT was one of those beautiful golden autumn days when the thoughts of those that follow the great outdoors turns to the woods and fields with their ever-changing hue; to the beach, which only yesterday was radiating the heat of a blistering summer sun, but now bathed in a glowing warmth. The first frost had nipped the northern waters, the fish were gathering in great schools along the coast and heading south. Old Neptune raised his conch and sent forth his call to the surf caster.

It was on such a day that I was asked by a pal, with whom I have tramped and fished for years, "How about a day or two with the 'blues' down off the point at Fire Island? Would I go?"

What a question! Of course I'd go, but just wait until I speak to the "Boss" at home. There'd be no question, I know, but tact and finesse had long since taught me to ask, and has been the secret of many happy days astream that might otherwise have been spoiled by a disgruntled spouse left at home.

It was the work of a few hours to gather grub and duffle and wend our way through the turmoil of a busy city by the folk, poor souls, who have no time nor inclination to think of the outdoors, of fish and of fishing.

A short drive through the town of Bay Shore, one of those south shore Long Island towns which are so monotonously the same. The business street, which re-

FISHING A LIKELY SLEW

minds one of a Western mining town, the summer cottages just beyond and then the bay. I say, a short drive in a vehicle with bulging wheels that sent forth loud and protesting groans and we were at the landing and aboard the *Eladio*.

Down the creek we sailed and out into the Great South Bay, that vast expanse of water that stretches for forty miles along the south shore of Long Island and some six miles across, to the strip of sand called Fire Island. A sportsman's paradise, its waters teeming with fish in the summer time, its sloughs and flats covered with water-fowl of every species in the early fall and winter. Off to the southwest old Fire Island Light could just be made out statue-like in the gathering dusk, its white shaft a landmark by which every bayman shapes his course by day, its beaming light a beacon to those that venture out at night.

We were out now quite some distance and the trip across is of ever-changing interest, particularly to those who have spent any time on these waters. Every lead and bar to me holds some particular interest. Just over yonder to leeward on the point of that flat how well I remember my first day with the broad bills one raw Thanksgiving morning! And further on in the channel that runs under the beach one early Sunday morning with the blues when we took toll to the tune of forty-odd and not one under seven pounds; and then again that morning when it blew so out of the northwest and we could not put out the battery; the birds were "usin'" in the East Channel so we put out on the beach where it was as straight as a city block, with a blind of frozen sea-weed, the last place one would expect to shoot ducks, but we did until our guns were hot and the number—I'm ashamed to say!

I could sit there in the stern-sheets and dream on, but the *Eladio* was now fast to the dock at "Saltaire," a thriving little settlement that just two years ago was a waste of barren dunes, but is now dotted with quaint little cottages, the homes of busy men, who cannot get away except over week-ends, but send their families so that the children may grow fat and brown. Fine that, yes, splendid, but I view it all in sadness; a selfish spirit to be sure. These houses are beautiful, but I love the wind-swept, grass-topped dunes, the golden rod and stunted cedar, with not a house in sight. It means the permanency of the wild things, the fishing and all as of yesterday, but alas! these houses, these works of civilization

spell good-bye to the happy hunting days.

We gathered our traps and hurried up the walk, passing a pleasant word here and there to the neighbors who were still holding out to enjoy these golden autumn days. Our cottage reached, into easy togs and then for supper. This is all great sport, this getting grub; it is part of the game, the satisfaction of self-reliance. We fared well that night on hot biscuits, broiled fish and many other sion of the science of surf casting. To things, far too many in fact for we had to loosen belts!

With grub out of the way and tackle rigged for the morrow, I lighted a pipe and strolled down to the beach to look it over. The night was perfect, not a cloud in the star-studded sky, a beautiful moon lighted up the ocean, just ruffled by a light southerly breeze. Not a sound except the steady pound of the combers as they curled, broke, then spent in spume up the beach. I wondered what those waters held; there must be striped bass out there just under the shelf of beach; the morrow would tell.

It was on just such a night as this that Ed Morgan, who built a house down on the dunes at Montauk in order that he might be near the haunts of these coveted fish, came to a cove along the beach literally packed full of bass; they were so close he could have hooked them with a gaff; but ere he could get a rod and squid they were gone—but not all, for he labored home with one of sixty pounds.

I came to and found my way back to camp with fond hopes for the morrow. Spencer was up and we fell to a discussion of the science of surf casting. To you followers of Izaak Walton whose conception of a surf angler is a man who goes down to the beach with a stout rod and heavy line, let me tell you that this game has been elevated to a science and is worthy of more serious thought, particularly by that contingent of our sportsmen who hold the taking of fish or game a mere incident of a trip. No less an authority than the indomitable La Branche has said, "Next to fly fishing for trout on our Eastern streams I consider surf casting with the squid the highest accomplishment in angling art."

To be sure there is a charm to fresh water angling all its own. The environment of the game appeals to one's poetic fancy. There is a real charm to reward the angler who wades the brook in the spring when the trees are in their first flush of green, when the birds are singing and where each bend in the stream, each nook and pool holds a new enchantment. There is a something that appeals to our æsthetic sense. But this surf game

—AND NOW FOR GRUB!

PLAYING AN 8-LB. "BLUE"

is different in that respect; there's a certain strenuousness about it that appeals to the race-man within us. To go down to the beach when the combers are piling high, when the gulls are screeching and hovering just over the point of the outer bar, that means "blues"; to have tackle that is the perfection of the rod-maker's art; reel and line the best and finest to be had; to make the cast that must be done with all the power one has and yet with that delicacy of touch, accuracy of time and distance that calls for fine skill and a nicety of judgment—there's a satisfaction in the cast itself when well done, to say nothing of the possibility of a strike! That squid must land or rather drop at the point of the bar some two hundred and fifty or three hundred feet out, not ten or fifteen feet this side or you had better not cast at all, for your chances are small. It must be started back at once with a steady speed and then perhaps, if you're lucky—smash! the strike! and a skinned knuckle or two, and nine times out of ten no fish unless you're quick, unless you're sure to get him through that break just right. It's great, and there's a satisfaction in it that will set your blood a-tingling!

I woke up next morning with the room a flood of sunshine. There was no hurry, though, the tide would not be up for hours down at the bar. We slipped down to the beach in nature's garb and in we plunged with a dash. It was great, that water, clear, cold, exhilarating; it was good to be alive! We were hungry for breakfast, grub had been taken on this trip, grub for healthy men; justice was done and more, and so we went forth, the inner man fortified.

Rods were taken down and adjusted, handled with the care that bespeaks the man who loves his hobby. A few sandwiches, etc., a bottle of water, extra squids and tackle, and we were about ready for our trip down the beach.

It's four miles to the inlet, so we hit the beach where the tide had left it hard and the going was easy. On we went in single file and pairs with that blithesome spirit, that buoyancy that marks the advent of a holiday, not of arduous work, mind you, but work of healthy pleasure.

The surf rolled in with a steady rhythm, sparkling in the morning sunshine; up the beach flittered a flock of snipe, like an advance guard they kept just ahead; they seemed to know they were safe for we would come almost upon them, when up the beach they'd go a hundred yards then settle and feed again. Beyond nothing but a clear stretch of beach, and, at the end, that peculiar bank of vaporous mist like a mirage on the desert that beckons one on only to vanish and appear again miles ahead.

We had covered quite a stretch of beach when Spencer remarked, "Here's where I got my first bass. You see it's a splendid bit of water for surf casting. The action of the surf had cut out a piece of beach and formed an immense bowl with slews of water at high tide. I came along, just as we are now, except that the tide was up. I shot out a squid almost to the outer bar and started it in; most of the line had been recovered when I got a smash that most gave me heart failure, but he missed. I was all excitement for it was something big; out went that "Belmar" again, clean to the bar, and in with the steady speed that so nicely imitates the action of a mullet, impeded in its progress as though maimed, and easy prey. I had despaired

of the strike and was just about to lift the squid from the water when a streak shot through the coil of a breaker and he nailed it solid. There was no mistake this time; I could see the flash of sunlight on his red gills as his jaws closed upon it. Off he went over the outer bar, up the beach and down, in again and then out, until at last a favorable break left him on the beach; I came down and slid him up further; he was a beauty, about ten pounds, and just the right weight for lively action. It proved my contention," he concluded, "that there are bass along the beach."

HOW ABOUT SOME MORE BAIT?

We shot out a few casts, but nothing doing for the tide was still falling, so we picked up our truck and moved along to the inlet.

We went on past the lighthouse that stood at the point of the Inlet when it was built some fifty or sixty years ago, but now there is three miles of beach beyond it. The life-saving station now came into view and when we reached it we all voted a rest. Some of the guards came down to see us; they were anxious to talk, and we heard much that was interesting, particularly about the bass for they are ever on the watch. They haul the net and it means money to them. They told us of slews full of bass, of hauls that brought them several hundreds of fish and of dollars. A fish story, you will say; I would that it were, but I know it to be true!

A long, steady gait, and soon the white water of the Inlet could be seen; we struck up the pace and at last were at the big slew. We sat down to rest, to look it over and to contemplate; it was a beautiful stretch of water, the bar made up some three hundred feet out and gradually worked west until it joined the beach proper.

There was little chance for fish as the tide was still falling and the outer bar was almost bare. Repeated casts in the slew were without result so we determined upon heroic measures; trousers were shed, and in our canvas shoes and bathing trunks we waded out waistdeep and further until we could reach deep water beyond the bar. Spencer was the first to score, he shot one out like a rocket, it hardly struck the water when he got a smash, up came Mr. Bluefish three feet in the air, shaking like a bulldog, then a dash and out again on his tail. I was into one now and then Ed.; imprecations were hurled back and forth to get out of the way, but there was no controlling them and so we trudged and floundered back to the beach and each landed his fish more by good fortune than skilful handling. They were all about eight pounds, strong, solid fish that had been living in the surf.

We tried it again, out to the very edge, with the surf spraying over us completely. We stuck to it for a time, but it got to be too strenuous; the tide was making and we could hardly keep our feet so we scrambled for the beach. Spencer stuck to the last and got another fish.

Up he went to the dry sand and the comfort of a newly kindled fire. The sun marked the hour of noon; the hour when those who labor eat, and so we ravaged the commissariat.

Lunch finished, we stretched in the warmth of the early afternoon sun and watched the tide as it gradually covered the outer bars; on it roared, like the sound of a distant waterfall, swirling and churning into a vast expanse of snow-

"HE SHOT ONE OUT LIKE A ROCKET"

white foam. The gulls were gathering in twos and threes, up and down the beach they sailed, but never far—a welcome sign the fish were there and they would gather a meal from the carnage. A venturesome fisherman in his dory chugged along just outside the bar, courting mishap as he rode high upon the crest of an incoming wave, hoping to take toll before the school passed over and into the slew. The small fry were gathering, seeking protection in the shallows as we could see by the peculiar ruffled surface and now and then a school would break in frantic effort to escape from some hidden foe.

We wondered what could be causing the disturbance, repeated casts had failed of a strike and we knew the blue fish were not in close until finally that provincial resident of the rural deep, the plebeian flounder, broke and leaped clean above the surface. Upon closer observation we noted brown patches just under the surface and there before our eyes, to our great interest and astonishment, was being enacted stratagem worthy of our most highly prized game fish. These humble flounders had propelled themselves to a position just a few inches beneath the surface where they would lay absolutely inert like a bunch of seaweed, when along would come a school of mullet; unsuspecting this innocent brown patch would swim directly over it, when with a mighty convulsive leap our flounder would hurl himself among them, then up they'd go like an exploding mine, helter skelter in every direction, wondering what new manner of foe had come in their midst, and alas! when the clan would foregather they'd be minus one!

We had become so absorbed in this tragedy that we'd quite forgotten our fishing, and much to our disgust noted that a stiff breeze had sprung up with the rising tide; the water was already becoming discolored from the incessant pound-

A COUPLE OF 4-LB. BLUEFISH

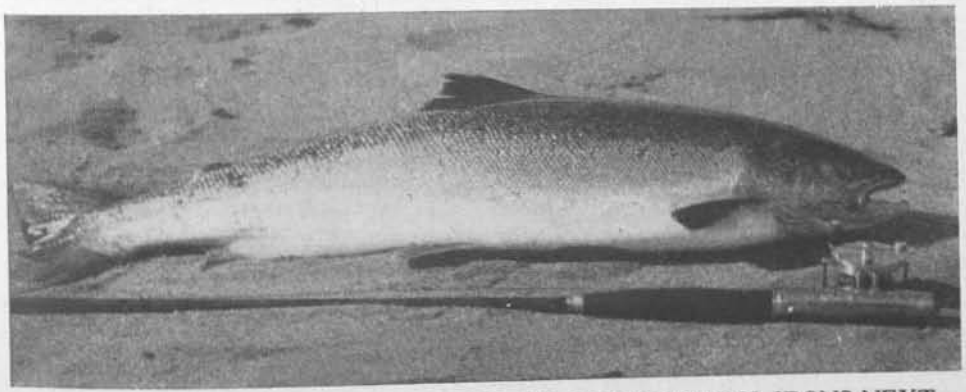
ing and it looked bad for further fishing; however, we cast the slew from one end to the other and added a few more to our catch. The fish were lying off in the clearer water where they could better see and seek their food. They were there in numbers for the gulls were creating a great fuss, screeching and diving; but cast as we would we could not reach them. Occasionally the birds would swing in towards the beach and we knew the school was nearer, when out our squids would go and for a few moments the fight would wax fast and furious. Thus we went up the beach and then down, pell mell in this direction and then in that as a bunch of birds dipped in towards the beach and we made frantic efforts to get there in time.

One incident I can remember distinctly as we stood on the beach watching the gyrations of the birds; a swirl appeared in the back wash as a "blue" took a mullet not twenty feet from us; we almost fell over one another in our efforts to get out a squid; Spencer happened to be in the position of advantage and got his out well ahead; it hardly struck before he had it; out he came on his tail and then in and up the beach, thrashing around like fury, but he was soon dispatched, stranded, flapping and snapping on the hard sand. It reminded me of "casting for the rise."

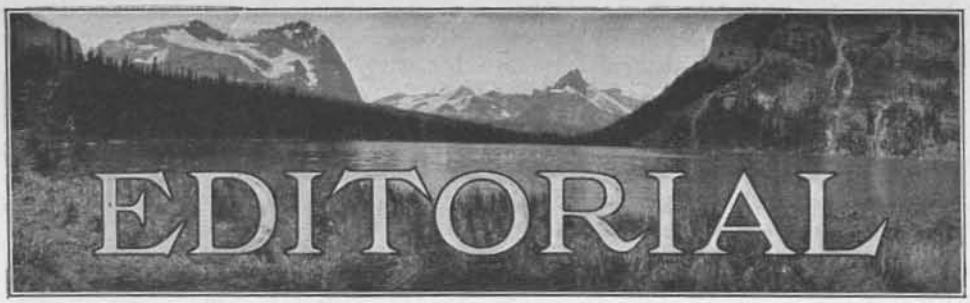
The breeze had been continually freshening until it was now a small gale; fishing was most impossible, so we repaired up the beach. The day was drawing to a close and thoughts of our trip home began to haunt me. I could hardly contemplate it with that buoyancy of the morning, with four miles to go, the tide up and the going heavy in loose sand. This state of mind must have been mutual, for no one advanced the idea of home, even with all it implied.

I chanced to look in the direction of the bay. A figure was advancing in silhouette against the sky; it did not take long to make out the form of Chris., our boatman. The mast of his sloop could be made out just above a break in the dunes. We hailed him with joy, and ere he reached our midst we were ready to accompany him back over the dunes and down into the hollows to the bay. Our good sloop was riding gently in a little cove just a cable length away.

Two trips of the dory and we were all aboard. Chris. gave her a full sheet, and on the still rising tide she scudded along at a merry clip. The sun was now low in the western sky, all nature touched with its golden glow; a flock of coots passed in single file and slowly winged on up the bay. The wind dropped off, and so the majesty of a glorious day slowly ebbed and died like the last chords of an orchestral hymn. We drifted in on the last of the flood and in the gathering dusk made her fast at the dock; then in single file we trudged towards home. Our day was done.



TIME TO THINK ABOUT GROOMING UP THE SHOOTING IRONS NEXT MONTH. WE HAVE TWO ARTICLES ON THE SUBJECT, "SETTING THE SIGHTS," BY C. L. GILMAN AND "KNOW YOUR GUN," BY JOE PURVIANCE THAT NO GUN CRANK CAN AFFORD TO MISS.



Put Back the Little Ones

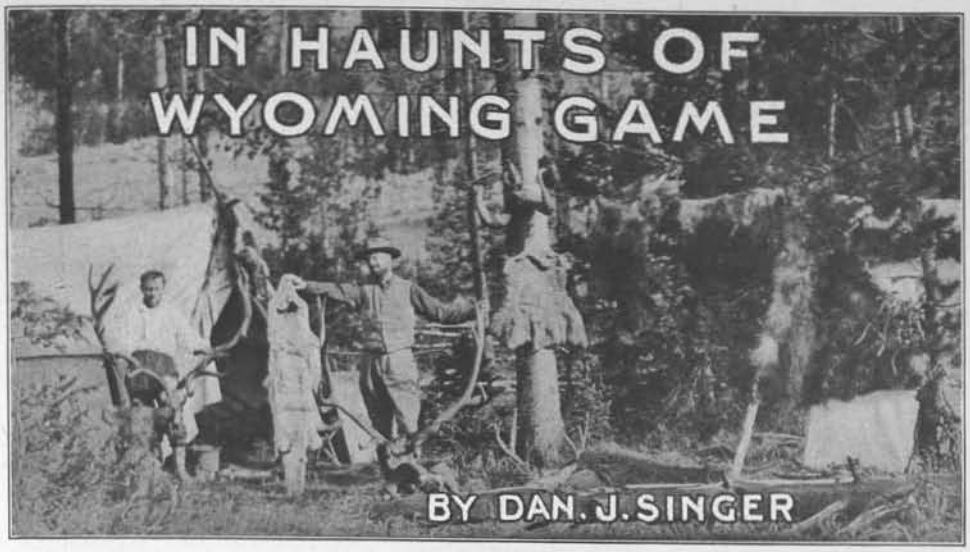
THIS magazine has ever, by precept and example, sought to further the spirit of true conservation in urging the practice of it at the fountainhead of life, among mothers and their young. This is a White Man's World, though some are trying to make it different just now, and the fundamental principle upon which that world is built is: Let the Women and Children live, no matter what else may suffer. "Give up your own life, if need be, in order that your son may have a chance to live his," is a principle as sacred as Life itself. The Spartans made the mistake of all time when they ruthlessly slaughtered all who were not physically up to what they set as a standard; with the result that many a mental giant was stricken down among the "weaklings"—*and*—when the State needed brains it had nothing but brawn to serve it, and Sparta perished before the superior mental attainments of other nations who had not killed off their supposed weaklings. Nature is a dangerous force to tamper with.

This is the season when, among our fishermen, the yearly caution to let the young fish and the spawning mother live is doubly needed, especially the caution to put back the little and the undersized; to put into practice the motto on the Camp-Fire Club's chowder-pot, "Keep the Faith tho' I go empty." You often hear of such and such a lake bearing the reputation that it has not very many bass, but when you do get one he is a big fellow. Such a lake is far on the road to extinction as a bass water. The pickerel and the fishermen, between them, have killed off all the young, never put back or spared any little fellow close to the legal limit, with the result that only the oldest and wariest are left. These will and do spawn, to be sure, but the empty gap of plentiful young fish, half-grown ones, in the population is fatal, for these old fellows cannot be all over the lake at once to look after their young progeny, nor do they attempt it. There is no young, active blood to fight off the corresponding young pickerel, water snakes, and other enemies of the little bass, so they soon get killed out, while the very old ones survive until caught or otherwise made an end of. Soon the lake gets the reputation of being fished out, the resort keepers find business falling off, local anglers give up the sport and cease buying tackle, and the loss of that lake as a bass ground is felt throughout the entire outdoor world.

Now, you never need a small bass for food so badly as to endanger the future fishing in that lake. Nor should a resort-keeper encourage the taking of big strings of small fish just over the legal limit. He can do much towards perpetuating the fishing around his place. A shake of the head, a few deprecatory remarks, uttered good-naturedly so as not to offend his customer, of course, but still showing his disapproval, will soon find an echo among the higher-minded of his angler guests, and then the small fish hog, the man who never thinks of putting anything back over the legal limit, will soon find the sentiment of that camp against him, and may even find that there is something wrong with his point of view, in fact, and come to change his ways.

You as an angler, and you as a resort-keeper, owe it as a duty to the fish life of your favorite lake, and to the future of your place, to voice your disapproval of the catcher of big strings of little fish. It doesn't take much to build up the right

(*Continued on page* 295)



PHOTOGRAPHS BY THE AUTHOR AND NED W. FROST

PART IV

HUNTING THE BIG-HORN, MULE-DEER AND BEAR

AT the very start Ned took the lead. Slowly we commenced to climb the huge mountain at the base of which stood our camp. A few hundred yards gained and we stopped for the first breather. I watched the grey divide go red, and the pallor of dawn grow to gold, which smote the grey billowing mist banks, filling the valley below and turned them to a sea of crimson splendor. On we went again, clambering upward, up, always up; there really seemed no end to the great peak. As we proceeded the rarefied air and steepness compelled us to pause more often. The valley now spread far below.

I was just trying to figure out how far above timber line we were, and if Art was watching us from camp with the glasses, when I spied Ned out of the corner of my eye, worming on upward again.

At last we reached the top. Ned, with hat off, looked carefully over the ridge, then adjusting the glasses commenced to sweep the country round about. Suddenly he looked my way and flashed me an animated grin. I thought Ned was laughing at me on account of my being a bit jaded after the awful climb, but who would not be tired—other than the indomitable Ned. "I see sheep," murmured Ned dreamily. "How many?" I questioned. Ned counted up to eight. "No rams?" I interposed. "All rams," he announced.

"Look here, Ned, if you don't stop jollying me I'll fall off this mountain."

"Look for yourself," was his answer.

They were a grand sight, those rams—even if they were on the next mountain, each one a picture, the perfection of dignity and grace. In a little grassy pocket they were feeding near the foot of a perpetual snow-drift; from this drift trickled a little stream. This made an ideal spot for the sheep as they were not compelled to descend to the valley for water. Between nibbles they would raise their heads, scan the country for a minute, then return to their grazing.

There was one which stood alone—aloof, a sentinel he seemed, for he never appeared to relax his vigilance. Perhaps he was the biggest sheep in all the world, perhaps I was going to outwit him there on his own ground. Again, it might come to pass that I would fail utterly. As he stood he seemed to defy the whole world and all in it to get by the deadline, so to speak, without his knowing of

NED AND THE BIG RAM

the approach long in advance and thus being enabled to foil any possible adversary. I have no doubt he had played and won times innumerable at this very game. So it was with no novice we had to deal—and there were fourteen other eyes to help, to say nothing of their delicate nostrils.

Ned and I stripped for action and mapped out our plans for the long stalk. It was a man's sized job; meant climbing up or down all day, no water until we either bagged or lost the coveted game. Ned judged it would be mid-afternoon before we should be able to crawl up to leeward and within range of the sheep. provided they did not leave the mountainside they were on. A rapid detour to the east we made, then over the mountain and half way down its side, rimming the great basin on a jumble of loose rock which took just four hours of the hardest foot-work I ever experienced. This brought us to an outcropping crest and on the north side of the same mountain the rams were on.

Here the real stalk commenced in dead earnest. Ned, with hat removed, took one more look with the glasses. "They are still in the same spot, wind just right, but there is one thing that may spoil it all," observed Ned. "Little or no cover to work up behind. We've got to crawl the whole distance, about 500 yards; are you ready?" asked Ned.

I was both ready and anxious to get into action, being spurred on with the hope of getting a huge pair of sheep horns, and the bright expectation of completely demolishing that fancy pie of Art's.

On all fours we proceeded, taking advantage of whatever cover could be found. Slowly, foot by foot, we advanced, knowing that the slightest exposure would have been observed. After three hours of this most difficult stalking, as often we would lie prone for minutes waiting for the band to resume feeding, we reached a depression that was less than 200 yards from the sheep. From here we proceeded much after the manner of two reptiles—that is, stomach-wise. Pushing my gun in advance, I would then draw myself up to it much as an angleworm draws up his tail. By keeping perfectly flat, the unevenness of the ground kept us from view, but just the merest lifting of the head would now be quickly detected, for I knew without looking we could not be more than 50 or 60 yards from them.

Then that moment arrived where the real thrill of hunting comes in. There was a succession of muffled thuds and the clinking of loose stones. Ned and I jumped to our feet. It was really a grand sight to see those eight rams bounding along the mountain in great magnificent leaps. They seemed scarcely to touch the ground.

"Get that big one before he turns," said Ned, "he's the one." Echoing back from those ancient frowning ramps came the bark of the rifle. Seven wonderfully nimble rams were making up over the high peak, and one grand prize—the big dark one—lay still at the base. Climbing down to where the ram had lodged, we photo-

graphed, measured and skinned him. His horns measured 17¼ inches in basal circumference, spread 23 inches, and length of horn 34. We judged the age of the ram to be over fourteen years. According to Roland Ward's record of big game this was the fifth largest ram ever killed. "I hope you won't be too tired to eat that pie when you get back to camp to-night!" remarked Ned.

Dawn found us in a world of white that yesterday had been green, for all night it had been snowing. It was bitterly cold and the snow lay inches deep, filling the great forests around with silence and with mystery. Great clogging flakes still sifted down g e n t l y, zig-zagging through the air like feathers drifting and wandering. A deathly h u s h pervaded that mountain vastness and through the veiled grey light of early day loomed the ghostly peaks, monstrous, mute and sullen.

A FINE TEN-POINT MULE-DEER

Ned had not the slightest difficulty in convincing me it was a poor day to move camp, and a most excellent one to complete the unfinished work on the scalps and skulls—and what was more to the point with me, to have a whole day's rest, most welcome after the exertions of the day before.

On the day that followed the sun shone brightly from a clear sky and the snow on the slopes lay like sheets of diamonds under the play of the brilliant sun's rays. The trees, all mantled in white, sparkled and glittered in the intense white light, as if studded with millions of fiery dews. On this delightfully clear morning, crisp with tonic frost, we journeyed with the outfit several miles downstream. We pitched our camp at the edge of one of those open spaces which, be they large or small, are known in the west as parks. The country surrounding appeared to be a most likely section for muledeer, due to the many open parks and glades, with an abundance of feed. From this camp it was our object to hunt the mule-deer.

Most of our eastern sportsmen are familiar with the Virginia or white-tailed deer; but the mule-deer they have not had the same opportunity to observe, owing to the fact that his range is far to the west. It would seem not amiss then, at this point, to cite some of this animal's characteristics and range. Next to the wapiti and moose the mule-deer is the largest of our American Cervidae. Their limbs are larger and coarser than those of the white-tailed deer and they are less agile and elastic in their movements; also less graceful in form. Their large disproportioned ears very probably suggested the name of mule-deer. The most striking difference between the white-tailed deer and the mule-deer is in the antlers.

With the mule-deer the tines from the main beam divide and form a Y, whereas in the white-tailed deer the tines from the main beam are seldom ever found to divide.

The mule-deer was first discovered by Lewis and Clark on September 18, 1804, in latitude 42 degs. on the Missouri River, who then called it the black-tailed deer. On May 31, 1805, they discovered the black-tailed deer—on the Columbia River.

"DAWN FOUND US IN A WORLD OF WHITE"

In the Rocky Mountains, where the true black-tailed deer is not known, it is still referred to as the black-tailed deer. On the Pacific Coast, where it is found on the same range as the Columbia black-tailed deer, it is known by its true name, the mule-deer, by which it is also recognized by naturalists.

The most natural home of the mule-deer is in the mountains, but before the settling up of the country it frequented the great plains. West of the Rocky Mountains this species of deer is met with in many localities. In the Coast Range north of San Francisco it is almost entirely replaced by the Columbia River black-tailed deer. In Oregon, Washington and British Columbia the mule-deer is met with, but they are not as numerous in these localities as in the Rockies further east.

All the wild folk of the night were hurrying home to bed. The pale ruby light in the east said so, and more; it bespoke the advent of another clear, crisp morning. While the sky was still red with sunrise, Ned and I rode out of camp. Our hopes were high, for on the earth's white covering the wild creatures would write plainly their ways—tracks, the silent language of the wilderness.

"Fine tracking snow for deer," remarked Ned as we zigzagged up the mountain. Before reaching the top we found many tracks of our various four-footed friends. We at once came upon numerous deer tracks, but as usual the big buck for which we were searching was not among them. Then there was the track of an ambitious little mink who had evidently surprised and overpowered some small animal less formidable than himself, for there were little dots of scarlet close by his trail, and an indication of something having been dragged along by him.

Well defined in the snow we found the human-like impress where an old black bear had trod the evening before. Looking across a little swale we spied a big doe lying down on the sunny side of a slope, enjoying the warmth of the morning sun, her big ears cocked forward and forming that V shape so familiar to every deer hunter.

Further we came smack upon another track. We reined up while I looked down upon it in silent wonderment mingled with admiration, recalling pleasant days gone by when I had hunted this animal persistently and in the end successfully—one of the real crafty silent and treacherous prowlers of the night, the greatest destroyer of the deer family we have, and most generally referred to as the mountain lion.

"Want to follow the critter?" asked Ned.

"We might take up his trail and see what happens," I suggested.

After following the direction the lion had taken for a quarter of a mile, his trail turned up and disappeared amid a steep slant of rocks where the wind had bared its sides of snow. Here we turned back to take up our original quest.

Gaining the top of the ridge we brought the glasses into play, which failed to reveal any sign of life. Then we descended to the valley and were again swayed from our purpose by taking up the trail of a grizzly made the night before. For three hours we carefully and silently dogged the foot-prints of the bear. When at last late afternoon found us many miles from camp we decided to direct our course back to the tents again.

On the day following we were hard at it again. About mid-afternoon we dismounted to hunt through a likely looking strip of woods on foot. We came upon the fresh tracks of two bucks and had followed them up less than a hundred yards when they broke cover and went bounding over a crest to the right. The rearmost buck carried the best antlers and at him I fired, worked the bolt and tried again as he disappeared over the rise.

"Your fingers are cold, you can't shoot," said Ned. Then he laughed outright. "Don't worry," he added, "that buck has embarked upon a journey from which there is no return." And he had, for we found a fine ten-point buck lying all stark and still on the opposite side of the crest.

"Well, Mr. Lucky Hunter," said Ned,

"THE BIG BROWN BEAR LAY ALL A HEAP AND LIFELESS"

"you've bagged everything now your license allows with the exception of a bear. We must get a bear, it makes a good ending for a story." Then I caught the merest suggestion of a mischievous twinkle in Ned's grey eyes, and there was just a little curl at the corners of his full round lips.

"Ned, I accuse you of having one tied up somewhere around here, or if not, what is it that makes you look so suspiciously wise," I questioned.

"I didn't roll what was left of that last elk you killed under the big spruce tree for nothing," was the reply, "I am figuring," Ned went on, "that by now there is at least one bear getting mighty easy pickings around said elk, and I was figuring we might interrupt his bearship long enough to relieve him of his fur coat."

Leaving Art in charge of the camp and remainder of the horses, Ned and I, with one pack horse loaded with provisions for a couple of days, and my little A tent, set off up the mountainside to the north, intending to camp near where I had brought down the last elk.

We climbed the face of the lofty ridge that arose like a gigantic roof two miles and a half from base to summit. Along the backbone of the ridge we journeyed, then dropped down to a little patch of spruce where we pitched our tent something less than a quarter mile from where we intended to watch the remains of the elk. It was about three o'clock in the afternoon, too early for the evening vigil, so we climbed a lilttle crest, then directed our course down through the slope of woods where we had jumped the elk a week previous and bagged the big stag whose remains now lay a little further on and to one side of the thick woods. Our idea was to look in the snow and see if any fresh bear tracks had been made without going up to the carcass, and thus avoid leaving any scent thereabouts.

To find fresh bear tracks meant that we had good reason to expect success, and we found them—not one track but two—both large, but one was more than large, it was monstrous. Ned put the tape on this big track and it measured just fourteen inches from nail to heel.

"Some grizzly," whispered Ned, "about as big as they grow." We hurried back to camp for an early supper so that we would be in good time for the evening's watch. An hour before dark Ned and I stationed ourselves about a hundred yards from the carcass at the edge of the woods. We silently watched, hoping to see at any moment one of the big dark forms loom above the bait in the wan light of the deep forest gloom. Great clouds banked up, the air grew chill. It was a silent, weird and dismal spot. The thin opaque light, receding and dimming slowly, faded into inky blackness. Night had come. We returned to camp.

About midnight we were awakened by terrific claps of thunder, then the rain poured down and beat with resounding smacks upon the little tent. Between the appalling flashes of lightning followed by a deafening roar of thunder, the gale would sweep screaming and raging down the mountain as if it were bent upon uprooting even the giants of the forest. Then it would drop to a shrill whistle, pause, screech out again—then die away in an unearthly moan only to repeat itself all over again.

"Funny weather," observed Ned, but really I failed to see anything funny about it. I had worked down in my sleeping bag so far I think I would have come through the other end if it had not been laced down. Then came the most terrific crash of all.

"Hear that cute little one?" asked Ned.

"No, I didn't hear anything," I murmured under the blankets. "I'm supposed to be dead."

"Strangest weather I ever saw," Ned cogitated, "we've had hail, snow, rain and wind, all in the last few days. Now we've got a little music for a change."

"If they're playing that music for me, Ned, they can stop," I suggested. The storm finally passed on and we dozed off to sleep again to the mutterings of distant thunder.

Just as the first steel cold glint of dawn touched the scarred tree-trunks Ned and I resumed our post of the evening before. We watched the grey dawn grow to day and the red sun on the mountain burst, igniting the peaks to flame. The early

hours of day were clear but heavy clouds rolling up in the west attested that the storm king had not yet passed. In the dim dawn light we had seen a fox and two coyotes visit the carcass of the elk and depart, but no darksome form resembling a bear had we glimpsed.

There was nothing to do now but return to camp and await the hour to take up the evening watch. Four-thirty arrived and we again started down through that big woods where the huge ancient conifers cast an overpowering windless shadow which lay thick, as if no sound had ever jarred it. Giant trees uprooted showed in dull-colored shape like monstrous snakes uncouth and contorted. We tip-toed carefully and without noise to the spot where the bait could be viewed, to wait and watch.

An ominous pall of gloom seemed to settle over all those vast frowning mountains and a loneliness, still and wistful, with a feeling of death prevailed. In a word it was uncanny. The sky was overcast and laden with big black threatening clouds. The distant mutterings of thunder seemed to be chanting a death song. There was a heavy feeling, heavy as lead, in the air and the least noise could be heard from afar. An owl that had been hooting was still now. Nothing moved, nothing stirred. All the world held its breath and death seemed to hover about, waiting to pounce.

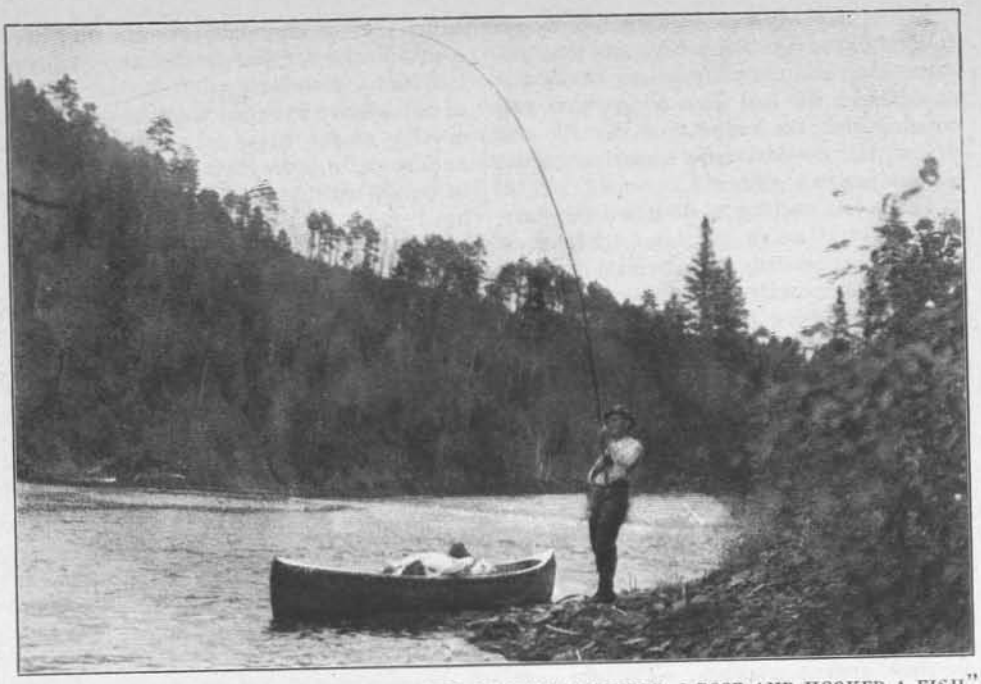
Thus it often is when thunder stalks abroad. An evil tongue of lightning licked across the pall of the northern heavens, and the thunders grumbled again. Suddenly it seemed as if the very spirit of the place had taken substance, and was moving among the inert tangle of trunks and roots. A massive form, dull-brown in color, with heavy shapeless limbs, and head held low, came picking its way stealthily along with a loose-jointed gait. At the carcass he paused—the snick of the safety being released on the Mauser caused him to raise his head. Then the silence of that ancient glen was outraged by the report of the rifle, and the big brown bear, for such he proved to be, lay all a heap and lifeless.

"This bear about fills your license," said Ned, "you can go home now and write that story."

I didn't answer, something in my throat choked off the words. I was watching a big husky sun on the horizon, wallowing deep amid the clouds, all washed in colors of port wine, crimson and gold. Then as day went tiptoeing off and the pallid grey of dusk came creeping over those vast billowing mountains, they seemed to shrink and take form. No longer were they vast, peaceful and mute, but now grim, square blocks of grey stone. Down in their canyons were no babbling streams but in their stead narrow streets swarming with people, trolley cars and autos, and filled with the rush and din of a big city.

I was just a bit sad—that was why I did not answer Ned, for my hunt had terminated with the passing of the day.

THE END



"ESTIMATING BY EXPERIENCE THE LENGTH OF LINE REQUIRED, I ROSE AND HOOKED A FISH"

TAKING SALMON IN UPSALQUITCH WATERS

By DOUGLAS WETMORE CLINCH

IN my nostrils was a composite odor of woodsmoke, pine tar and camphor. My moccasined feet, catlike in their movement, seemed literally to feel their way over the beach. To my rear, crouched by the fire, was the essential companion, while, resting lance-like against the tent, my rod awaited. At the moment a "blue-back" broke water and a hatful of foam, which a moment previous had been riding listlessly, became effervescent. Four seasons had passed and at last the Upsalquitch had been revisited since I had leaned back in a canoe, while scimitar-shaped at my feet had rested half a dozen salmon. If I remember rightly, Jimmie Waters swore, softly, for in our heart had been a great content. About us the waters of the Nor'west Upsalquitch gurgled softly, while out of the intangible, tingling North something had come to greet us. Across two thousand miles of continent I had again felt it, all that afternoon we had poled, five miles from Upsalquitch Station. Earlier still I had left Campbellton on the Intercolonial Railway, a sunrise on Bay Chaleur, and a certain distrust of cities. A transient, disconsolate mosquito hummed by my ear—verily it was good to be back!

Henry "Tena" Arseneau, of sundry hamlets and habits brought me back to earth again—and supper. I had engaged him earlier in the forenoon at the union stipend, and Henry was conscientious. My "How To" stuff had never reached him. Incidentally, Henry was a persuader of a subtle sort. Raw, awkward food became transformed at his touch. Brandy-hued was his tea, satisfying his potatoes, sustaining and to be desired his bacon with its "smoke taste." And I hadn't juggled a tea-spoon in two blessed seasons and thereupon it was my privilege to ponder.

But Henry's mind wandered in the direction of rocks. He coveted one for an anchor. Our Gaspé canoe had adopted a rope and pulley and soon, with said rock on board, we were bobbing in the current. As Henry reclined, after the Roman dining custom which Eastern fishing guides consider essential while a "sport" is casting, he grunted, "Heap loosem anchor—plenty." And, remote as possible from anything resembling leisure, I began to cast.

And it had been two score moons since my forefingers had felt the vibrating thrust of a two-handed rod as the heavy, undulating line straightened out. And Henry was polite. Occasionally he ventured wisdom of an availing, ductile nature and I steadfastly improved. Neither did I require a long line as, in canoe casting for salmon, has been my experience. It was in fact while reeling in that I had my first rise. This fish had come some distance, from some place down stream, where he had been, no doubt, fanning his tail into the current. It was necessary, therefore, to allow him time to return before, with a short line, I began casting again. Gradually unreeling with my left hand, I found that the current swept my fly well out and over where he had moved. A foot short I missed him the second time. In all, inside of a half hour, I bestirred three similar fish from their lairs, hooking only one long enough to arouse a too briefly lingering enthusiasm, as, from the beach, I played him. There were "rising fish" in the pool, however, which served as an essential attraction.

As we beached and drained our canoe it was dark, sufficiently so to arouse Henry's interest as I lit the acetylene lamp and unfolded to his delight, the roof of my "comfort pocket." And we were tired. Above us, swift and noiseless in the night, their white-spotted wings showing, were night hawks. The hum of the brook droned on.

With the afterlight of dawn there was mist. In great fluffy clouds it swept low over the water. At such times we cared not to cast and so casually mastered our breakfast. As Henry hovered over the fire I squatted on the beach to wash. The water, cold and foam-flecked, bleached hands and face an æsthetic white, dispersing as I rinsed my hair the last brain cobwebs. Even the coarse towel felt grateful and as I approached the fire and warmed a plate, good comradeship seemed almost tangible, and, even though a "lad" broke water, to drop back with a careless splash, we only packed our tobacco the tighter. The entire glorious day and all that it might contain in blessings was ahead of us.

For the first dropper I chose a No. 6 Silver Grey. Estimating by experience the length of line required, I rose and hooked a fish. Immediately Henry was all instructions. "Easy, dere, keep you' tip up!" (As if I hadn't.) "That's it; good!" as I stepped ashore to drop the tip while a ten-pounder came clear of the water, well hooked. And for twenty minutes it was on. The old spine-tingling sensation was resurrected, all else forgotten. Even Henry assumed the blasé as, net in hand, he loitered near. Occasionally there were other "smacks" on the pool which, if anything, hastened our landing. Rod up, I crept back; net submerged, Henry stepped into the water. "Splash!" We had him! In a scant half-hour his mate.

We now dropped beyond the nearest bend in the river to deeper water, almost on the edge of the falls through which in the previous evening we had poled. It was gratifying to even contemplate those falls, without question the hardest poling on the river. It seemed that they should pay their toll. Incidentally the strong sunshine clothed them with jubilant attire. Even though past the hour of strictly morning casting, we were dominated by a trespassing spirit, the setting at naught of regulations. Sunshine or not, there was a rebellious eddy on the north bank which it would have been a sacrilege to have missed.

Meanwhile Henry toyed with his canoe pole as part of the day's work. Satisfied, finally, with a suitable dropping spot for his anchor rope, he squatted and puffed wisdom. With a "thunk" the last foot of the anchor rope became taut, as rising in the still veering craft I unreeled. The glamour of the sunshine transformed the gorge until it seemed to

scintillate in a heavy swirl parted recklessly on a boulder. My freshly filled pipe puffed doubly reassuring.

Cast by cast my leader ventured near a rock where the whole force of the current seemed to wreck itself. Bobbing with its sweep the No. 6 was sucked under and the line straightened out. For a few seconds only I remained standing, and then, with a grin nothing short of heathenish, sat down! "I thought so," chuckled Henry, as upstream he pushed that I might have a fair chance. This fish, I thought, was a big one and also at one time that he would run down

"ONLY TWELVE POUNDS, BUT—!"

through the rapids, where, of course, we would have had to follow him. "No fear!" murmured Henry. "Ah—that's the way!" for clear of the water the salmon came, to find my checkmating rod tip dropped at the psychological second. Twice, thrice, four times was there a spray splattering; in all, forty minutes of fight, punctuated by breaks, runs and (from Henry) warwhoops and commands. Without towing through several rapids we could not go ashore, so eventually Henry scapped up all the twelve pounds of that salmon in over the bows of the Gaspé. Only twelve pounds but——!

At the Camp Pool we added a fair grilse, making four fish for the morning's work.

Four miles above was Two Brooks where we intended that night to stop. Therefore, after lunch we packed our rigging and commenced canoe poling. Sore from the previous day's work it was strenuous. My arms and shoulders ached. "Tena," however, spread good humor over the entire scenery. It seemed as if that man knew every pool on that river since its christening and wherever we tarried to try flies Henry addressed the rapids in a manner little short of imperative. And as a result we killed one other salmon at the "Ice House" Pool. Then, through backwater and eddy, darkened beach and ledge, we drove the canoe slowly. Ever and again I, after the Roman fashion aforesaid, relaxed in the bow as Henry sought out an anchorage.

With the next morning the pondering weather passed and its place was taken by rollicking, clear days which lasted for a week. With muscles now suppling we poled that afternoon to the camp at Crooked Rapids, having the whole expanse of stream and shore line to ourselves. Toward evening we turned into an almost lake-like expanse below the Rapids, and it was restful to put aside the poles and throw our shoulders into the Indian stroke of the paddles. I had killed and lost salmon in 1910 at Crooked Rapids and as we approached the lower sweep Henry suggested that I trek along the shore, work up to the head of the pool and cast. It was a crisp evening, dominated by a contented looking sunset, which, despite the fact that the wind had totally died away, filtered through scant swisps of chiffon-like clouds suspended just above the greenwoods. It was good to walk, after the long day in the canoe, and as my moccasins mumbled their way over the gravel my progress seemed prodigal. Below and to my left as I cast Henry turned the canoe into the undulating current which drowned the "click" of the pole. The strong water carried my line well out, making possible the longest cast ever, and the Odgen-Smith

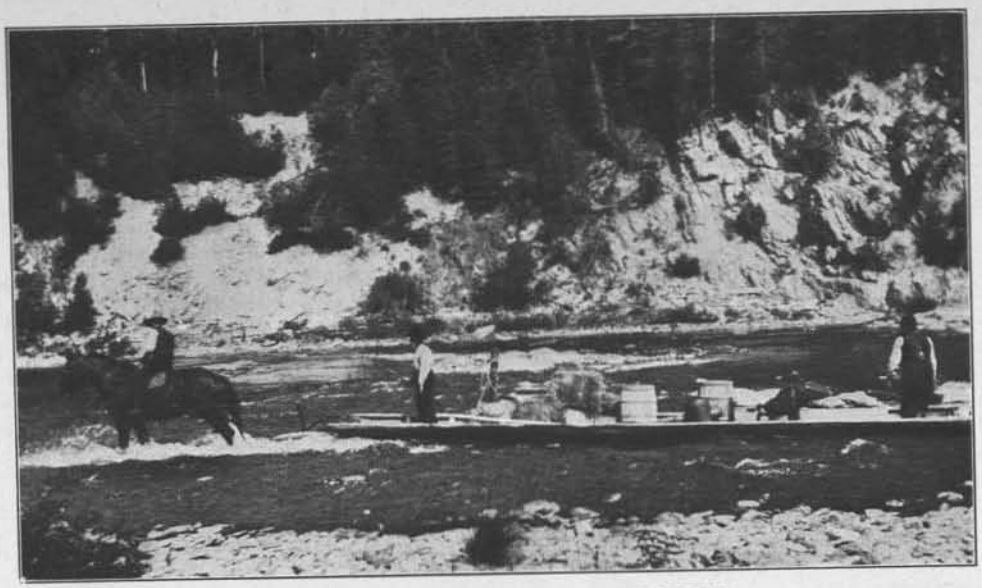
rod seemed a conscious, living thing. And that night we slept again by the rhythm of water.

From the railway we were now 14 miles, with our destination, the Forks, 5 miles above. Therefore, on Friday morning before we passed Cooksie Beach I had hooked after breakfast several salmon, losing them all. At Puncheon Bar, two miles above, we lingered. Here the fishing was after my own heart, as, despite the length of my rod, I had to wade to my hips to reach the further end of the pool. We had up to this time used No. 6 hooks, but I now changed to a Jock Scott No. 8. On the very limit of my cast I hooked a "blue-back," the August-run fish, which, coming up the Restigouche, enter only the Upsalquitch. A number of times he broke beautifully, to require in landing fully twenty-five minutes. With the ledge background, broad expanse of pool and purring rapids, the setting was ideal and incidentally by this time Henry had admitted me to the inner chamber of his particular friends.

The lunch which followed was in no way different from a thousand others where true democracy, flavored with blague and badinage, flourishes. Withal Henry's conscientiousness remained and I, therefore, had no scruples in instantly relaxing as after the last pint of tea he cleaned up. Shortly we would reach the Forks and alas! the pipe seemed particularly mellow! At four o'clock, for the last time, that day the canoe was drained and beached.

At the Forks the Southeast and Northwest Upsalquitch form one long, deep pool, which, ever widening, legend says has no depth. In 1910 we had found that even the reflection of a tent pitched too near would drive the salmon upstream or far out into the deep water. Equally strange, it was imperative to cast from the shore or by wading. You might try from a canoe, retire unrewarded, and yet wade out forthwith and hook fish. The large swing of the river here is one incalculable delight. At your ease you change from left to right hand casting

"TO REQUIRE IN LANDING ALL OF TWENTY-FIVE MINUTES"



TOWING AN OUTFIT ON THE UPSALQUITCH

without any danger of a fouled backcast, and at all times the swirl of the river allows for the essential taut line which the schooled salmon fisherman covets. Below the beach is ideal for playing and landing any sized fish without stirring up the outer water where most of the rest lie.

I had out about fifty feet of line when something happened. Seemingly I had hooked to a thunderbolt. For a while the scream of the reel refused to abate. Keeping my tip up I stumbled, as fast as bare feet would allow, on the sand.

"Zing—smack!" and a golden ball of surcharged energy flung itself clear of the water while I yelled inadequately at Henry, "Gee, man! this is worth the whole trip; come over!" Then out toward the strong water that fish raced again, came clear, found the essential slack which denied him tension, and I grinned as the heathens of fiction are wont. And again, down my spine, a tingling, scintillating something hummed. And for upwards of three-quarters of an hour it was so. And then with a casualness which bespoke confidence in his pupil Henry sauntered forth and in two foot of water the net went under.

Unmindful of other rising fish we unpacked to linger over supper. Meanwhile the air, tempered by the Indian summer, assumed that satisfying hallowness which the moose hunter covets as his own. Strolling back to the beach for the evening fishing I pondered on the glory of it all, to pause as, from below, sounded the never-to-be-forgotten "click" of a setting pole. Bending to its sweep a lean canoe bobbed into view and shortly there grated on the beach the bow of a hand-fashioned poplar dugout, manned by a facsimile of St. Nicholas. In a manner I now know to be the forerunner of good things, Henry smiled as I shook hands with John Harris, seventy-seven come April, who that day, alone, had poled up from the settlements. From beneath the canoe bow came forth a biscuit box, containing one child-sized blanket, one fry pan, a tin pint and "biling" kettle. With some salt pork and pilot biscuit, salt and molasses his "riggin'" was complete. At least the rest of it was smiles; a plain silver ring, which glinted cordially as he sliced his tobacco; one deep chest, and a pair of brown eyes which twinkled.

As the evening seemed to stretch itself out into an intangible stillness I hooked and landed two more salmon. At least Henry hooked one and taxed me with its play but for my part it sufficed just to listen to John Harris chuckle as he be-

gan to reminisce against the fading background of the afterglow. Even with our second fish running out over fifty yards, not feet but *yards* of line, my composure was imperturbable. We might have to run downstream after that fish but John Harris would have had to come along, and, therefore, content was mine. Finally steering him for the bank the next run brought him twice his length clear ashore, where John Harris forthwith pounced upon him and the pride of Henry was a calculable, potent thing.

Saturday was equally satisfying. Losing three salmon I landed three others. The water now showed signs of the fine weather. Numberless salmon rose, but would not take the fly. Only a rain and the consequent raise of water could restore the fishing. To vary things a bit Henry and myself ran down to Cooksie to try, back at a bog of the same name, for some deer and moose pictures. I had along my old Reflex fitted with the Protar and a Dallmeyer telephoto. At the settlement they had assured me the moose were vain to the point of lingering and would undoubtedly pose. Therefore as the sun dried the dew I was nine-tenths anticipation as we hummed merrily along to the "thunk" of Henry's paddle. It was a sombre day as we plunged into the forest, passed hard wood ridges, listless ferns, and rapidly yellowing foliage. On schedule bent, Henry pressed on. At suitable intervals we threw ourselves on our backs, I to recover my wind, Henry to think of a another story.

Cooksie Bog I found to be a small mudhole on the northwest side of a gulch, overgrown with willows and swale and dotted with the skeletons of pines. Through the center a brook trickled, while on either side, covered with greenwoods, were two hills. On the northwest side, by circuitous paths, odd moose and deer drifted in to feed. Hunters from the settlements had erected a blind at the only point where the boghole was visible without the game getting their wind at a range of about two hundred yards.

I endeavored to photograph from a crow-nest, which at considerable risk of limb we erected. In all I photographed some half-dozen deer at this range with the telephoto but only in the afternoon after the sun had topped the further hill.

Monday was the last day of the season we had at the Rapids. Despite the low water I hooked three salmon.

I had No. 6 double hooks, but the combination of strong water and the softness of the fish's mouth at this season—or possibly the percentage of losses which goes with all salmon fishing—prevented my landing any of them. Tuesday at the Forks we poled to the Flying Eddy on the northwest branch. But for a grilse that evening we would have been skunked. But withal the northwest Upsalquitch is satisfying. Its tiny mountains literally abut the river's edge, and to run through its long shadows of mountain-hid sun was something I had coveted. With a seemingly pensive understanding the forest folk assumed an almost tangible presence. I think Henry was conscious of this for at long intervals no words passed between us.

CHAS. ASKINS, ACKNOWLEDGED AMERICAN MASTER OF THE TECHNIQUE OF SHOTGUNS AND WING SHOOTING, HAS WRITTEN US A SERIES ON LEARNING TO BE A WING SHOT. THE FIRST CHAPTER BEGINS IN AUGUST AND NO NOVICE IN WING SHOOTING - NOR VETERAN EITHER FOR THAT MATTER—SHOULD MISS A SINGLE ISSUE.

SHORTY AND SPIKE AND THE PRIZE-WINNING PIKE

OUR CAMPING-TRIP PIKE

BY W. H. SAWYER

Winner First Prize Pike, 1914 Contest

IT was September 5th and raining hard, while three anxious fellows were waiting for the rain to cease so that they could start on a little fishing trip for two whole days.

Well, the rain never stopped until about 5 o'clock the next morning—just the time that we should have been fishing, as we had a hunch that they would strike early; so we finally got our outfit in shape and ready to start about 6 o'clock. The caravan consisted of an old gray horse—one of the kind you seldom see, but often read about—a boat and boat cart, tent, camp stove and box of grub, not to say anything about an incredible amount of fishing tackle.

We now journeyed about 12 miles at a snail's pace—at least, we thought it was that slow—and at last, arriving at the bridge where we were to launch our boat, our troubles really commenced, as we had to pull our boat over an embankment and down a hill which was covered with rocks and old piles where the old bridge used to cross. This is not a very rocky country, only in spots, and, of course, this was one of the spots, as our luck was surely good this morning of all mornings. And here is where our names must be used, as Shorty and I nearly broke our necks before we got the boat to the river, while Spike, the porter, held the horse, for we had to take good care of the only means of getting home, since walking is so lonesome.

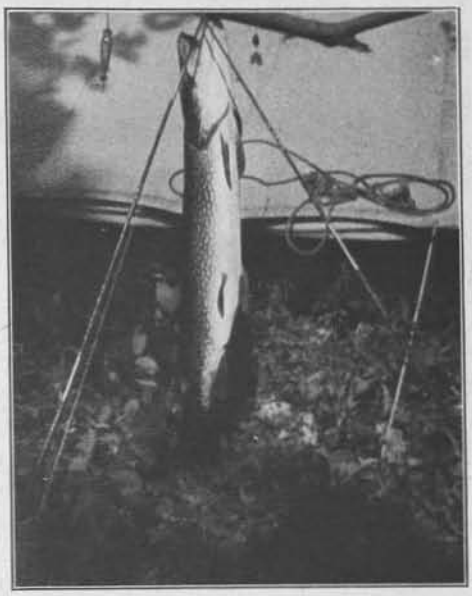
After we had put the horse up at a farmhouse, about one-half mile away, we had the stage all set, we thought; so we loaded everything in the boat and started downstream to Waldron Lake, which is about a quarter of a mile from the bridge. But more trouble was ahead. We hit a sandbar and Shorty unloaded, clad in hip boots, to do the brotherly act and push us over the bar, which was about two inches deep where we hit it. Shorty stepped into the water and yelled: "These damned boots leak like a sieve!" After which I had to get out and do the big push, which made me sweat some, while Shorty to the oars and Spike the pole, and after what seemed like an age we got safely across and started on down the stream, Shorty and I casting and Spike rowing the boat; but never a strike did we get, although the wind was right and it was cloudy and threatening rain.

But we kept steadily on, as the story-book says, and finally reached the lake, where we caught some nice large-mouth bass, and were then sure of something for dinner, as we had decided not to take any meat along and had to catch some fish or go hungry. So Providence smiled at last, and we rowed on farther up the lake, looking for a camping place, which we found in the river after leaving the lake behind us and going farther downstream to what we called Eagle Island, since the first thing we saw when we got to a camp site was an eagle. Shorty was loaded down with blankets, lantern and axe, while Spike had grub-box and stove-pipe, and I brought up the rear with tent and shotgun—of course, the last with the gun when it was needed, as this eagle is the only one that has been seen around here for a long time and was in nice range for my Remington pump.

Shorty and Spike now got busy digging the trench for the stove, while I put up the tent, as neither of the boys had ever done much camping and didn't know how to put the tent up. But at last, after the stove was put up and the tent well staked, we prepared that first meal in camp, with myself as chief cook and Spike as fireman and water-boy, while Shorty set the table, which was the grub-box, bottom up.

After dinner we tried our luck again, with some success, as we caught some more nice bass. It was now getting dark, so we pulled to the camp for supper and bed, but not until after telling each other all the fish stories we ever knew, not omitting descriptions of how we were going to get the big ones in the morning.

With everything quiet except the wild



A 22-POUND FIGHTER FROM THE ELKHART RIVER

life, we were soon asleep—all but Spike, who suddenly awoke Shorty and me, asking in a scared voice: "What is that noise over there by the side wall of this tent?"

Shorty spoke up with: "Aw, go back to sleep. That's nothing but the dog trying to make a bed for himself," as my dog had come along with us, and, being used to this camping stunt, had not tried to get in shelter till she thought we were asleep. The night seemed very short, as this tired fisherman's sleep is always short, especially in camp, and we awoke to grab our tackle and start for the boat, to try our luck early.

Said Shorty: "I'll just try this old aluminum bait," and I replied: "Well, I will just put on this little Hildebrandt spinner." So we put out from shore, with Spike at the oars, and fished till 7 o'clock. And then! Oh, you fish breakfast, with

some hot cakes thrown in! This soon over, we started for a stretch of river that looked good on the way down, and here is how it happened:

We had just got to the mouth of the river, right by a nice bunch of lilypads, when I placed the bait within about an inch of the farthest lily and thought I was going to get fast; so I gave the rod a jerk, which made the bait skip over the water, when—*zip! bang!* the fight was on! Old grandfather pike had the bait, and he proceeded to do business as I suppose he had done with many a man's bait before. But I gave him all the line he wanted, and away he went until I thought he would run all the line off the reel. I yelled to Spike to pull for the middle of the river, while Shorty hollered: "Don't hold him too tight!" And how that good old Shakespeare bamboo did bend! Away he would go, first one way, and then I would get him almost near enough to gaff when away he would go the opposite direction as fast as he could swim. Finally I would snub him until he would give a foot or two of line; then he would see the boat and dive under, trying all the tricks in pikedom. But he at last commenced to yield and act a little tired, as the strain was telling and he was making only small runs now; but, alas! I had him by the side of the boat and told Shorty to strike sure with the gaff, as I was afraid of a quick pull on the line, as it had been used pretty hard and only tested 15 pounds when new. But when he struck at that wily old customer he ran for the bottom—if there is any in that river—and move him I couldn't for almost a day, it seemed. All of a sudden he shot to the surface and almost drowned us, with Spike yelling, "He has got away!" But no, the handle of that reel had just slipped out of my hand for a second and soon I had him back by the boat, and this time Shorty turned the trick with the gaff-hook. But the prize was not landed yet, as the fight had only just begun for that pike. He was not going to yield to man, for he jumped

THE DUFFLE LOADED ABOARD READY FOR THE HOMEWARD TRIP

about a yard and shook the hook, and then the conversation started. Shorty says, "Let's land the boat and drag him to shore." But Spike retorted, "Not that fish!" for he was dragging the boat, which he did for about fifteen yards, with no line on the reel to give him and me expecting him to break it any moment. But again he slowed down and I gained a few yards; then he would take all I gained. But this could not last long, so Mister Pike, slowly fighting every inch of the way, came to his final resting-place in the boat, never to be master of the deep any more.

Talk about sighing! Oh, what a relief! I was all in and about drowned; Shorty was about the same, but still was kept busy holding him in the boat with the gaff, while Spike looked on in a dazed fright, as this was his first experience fishing for whales, as he called them. At last we came to our right senses and found that the boat had drifted to shore and that we had just landed the fish we had been looking for. So we proceeded to give vent to our feelings by telling all about what we should have done and what might have happened. Said Shorty: "I knew we were going to catch the daddy of them all!" while I laid it to luck. But, say, to get that bait out of that fish's mouth was a problem in algebra, as every time we would try to move that bait he would snap those shovel jaws, and some nice-looking fish-bitten fingers we had when we finally did get that prize bait out. Would I sell that bait? No; not for all John D. has! And it was another Shakespeare Honor Built aluminum bait, but it is the only bait for pike for us.

Now to string that old boy so as to keep him alive until we got home and then to shore to weigh him. Shorty averred that he would weigh 20 pounds; I conjectured his weight at 15 pounds; Spike guessed at 30 pounds. But the scales I had would not weigh that fish, and they will go 16 pounds and have been tested, so my guess was off.

So we rowed to camp and ate our last meal of the trip and started to break camp for our journey home. This was made without mishap, and we claim we had *the* trip of this summer. The old pike weighed 22 pounds, and was 42 inches long and measured 23½ inches at girth; was caught with Shakespeare rod, Shakespeare bait and Shakespeare Acme line and Meisselbach Takapart reel.

PRIZE CONTEST CERTIFICATE RECORD, 1914 CONTEST

First Prize, Great Northern Pike

CAUGHT BY W. H. SAWYER, KENDALLVILLE, INDIANA.

Weight—22 pounds.
Length—42 inches.
Girth—23½ inches.
Caught—September 6, 1914.
Where caught—Elkhart River.
Rod—Shakespeare.
Reel—Meisselbach.
Line Shakespeare Acme.
Lure—Shakespeare 44.

MY LUCKY DAY'S CATCH

BY O. K. RICHARDS

Winner First and Second Prizes Small-Mouth Bass, Class B, and the Grand Prize, 1914 Contest.

I HAVE long been opposed to that foolish superstition of Thursday being my Jonah day, and the figures thirteen, and as a reward for my determined stand it was Thursday, August 13th, that the big catch was made, and I don't think I am enlarging upon it at all when I say "big," for almost fourteen pounds of pink eye, small-mouth black bass in two fish is some "big catch." But, then, I am getting ahead of my story. We—and when I say we I mean Edwin A. Lee, one of my best young friends and an acquaintance of the past fifteen years, and who was on his first trip as far North as we were, Tom Morris, as good a guide, cook, and camp man as there is in the North Woods, and myself—left the hunting shack

in very threatening weather, and when only a short way from our starting place it commenced to rain, and it rained very hard, and for about three-quarters of an hour, then clearing up, the sun came out and we were in the midst of a beautiful day, and the home of the *black bass*. About 9:30 a. m. I was awakened from a dream of how I might have to work to spend a million dollars in a week by a strike at my bait which led me to explain "We've got the place all right, boys," and right then and there war was declared, and believe me, there was no quarter asked and none given. For a matter of fifteen minutes I was the busiest man imaginable. What with watching the frantic struggles of my fish (for I already figured him as mine) and listening to the good advice of interested spectators, "Give him a little line," "You've got him hooked right," "No slack," "Play him easy," "Be careful, don't force him," and a thousand and one other suggestions fired in rapid-fire language, then the muscles in my forearm began to twitch and quiver, due to the strain. What with the angry darts of the fish and my hand shaking, the rod was beating a lively tattoo through the air, but finally all things must end and my 6¼-lb. bass lay in the boat, exposed to the admiring gaze of us all, and I know that my chest swelled out more than an inch for each pound the fish weighed, and exclamations and questions poured out thick and fast, such as "What a beauty!" "He mates up fine with the one of three years ago," "Not quite as large," "Gee, but he put up a swell scrap!" Of course I didn't pretend to answer any questions, for I was absolutely lost in fond admiration, and incidentally thinking what a lucky or fortunate fisherman I was, but after a few minutes of dreaming I awoke to the fact that we were out for more fish, and started in again just as though we had to get fish for the pan. Just eight minutes after landing that fish I had a *good* strike, and when I struck the fish it was just like sinking your hook in a water-soaked log, no give, and no action for a fractional part of a second, and then—well, I had twenty-four hours of as lively action as anyone cares to have, crowded into eighteen minutes, and it seemed to me that no tackle could successfully withstand the furious dashes and onslaughts of Mr. Bass. He hugged the bottom of the lake for all the world like a sulking muskallonge, and being in about thirty feet of water he had plenty of opportunity to display the wonderful and almost unbelievable fighting qualities of America's gamey fish. When I first caught a glimpse of him I was sure he was half again as large as the "grandaddy of them all," caught by me in the same place three years ago, and weighing seven pounds and a quarter, and I never expected, even in my most sanguine moments, to ever catch *his* equal, and now to have one larger, if even only a little bit, was too much. When he finally gave up the ghost and lay on his side on the top of the water his seven pounds, eight ounces showed off to great advantage, and he was not one whit more tired than I, and it seems to me, writing at this late date, that I can feel the tug and strain, see the dash and dart of the fish in its frantic efforts to gain release from a little No. 18 bass hook, and I all the time being admonished by my friends to "Give him line," "Don't force him!" "Is he hooked solidly?" and "Play him carefully for he is *some fish!*" but after a few minutes of those exclamations you become calloused to their sounds, and you are intent on your disposal of your fish, whether you will have him baked, or mounted and in your den, or give him to some very dear friend, and finally, when you see him landed in the boat, you are anxious to get him on the stringer and back in his native element, where he can disport in a curbed manner.

PRIZE FISHING CONTEST CERTIFICATE RECORD

First and Second Prizes, Small-Mouth Bass, Class B, 1914 Contest

Weight—7½ lbs. and 6 lbs. 4 oz.
Length—23¼ in. and 22 in.
Girth—17¼ in. and 15¾ in.
Caught—August 13, 1914.
Where caught—Long Lake, Wis.
Rod—Bristol Steel.
Reel—Blue Grass, No. 33.
Line—Von Lengerke and Antoine, No. 6.
Lure—Mud Minnow.

OUR RIVER
This big country of ours is full of available streams for a canoe or boat trip.

A RIVER CAMPING TRIP

By E. P. HULBERT

ALL over the country, within easy distance of nearly every outdoor lover, there are rivers, larger or smaller, down which a summer trip may be taken, with houseboat, rowboat or canoe; any one of which will well repay the trouble and expense of the expedition. And, a very desirable item, the expense may be made very light indeed, if, by a careful selection of route, the railroad travel is made as small as possible.

This story is not for the experienced woodsman. At the feet of such the writer abases himself as one without knowledge or skill; and to such of them as write books he gives thanks for most of the suggestions he has to offer, picked as they are, a few here and a few there, as he has come upon them. But they are all suited to the summer conditions under which they are supposed to be used, and have been tested and found good. To the beginner, therefore, they are offered.

The first attempt at a river trip we ever made ended before it began. We did not at that time see the hand of Providence, but since then it has gradually dawned on both of us that only the carelessness of the railroad company in losing our outfit saved us from a great deal of very hard work. If we had gone on that expedition we would never have gone on another of our own free will.

The trouble was too much stuff. Both of us had experience in the National Guard and we modeled our outfit more or less on National Guard lines. That was a number of years ago, when the Guard was still carrying pretty heavy loads per company, and when a chest that took eight men to carry was not thought unusual. That day is, fortunately, over now. We had a tent about ten

feet square; a wall tent, with poles and a fly. This, please notice, was to be set up each night in a new place by two men. We had folding cots and folding chairs; an axe that Goliath might have used with profit, and, to put it in a very few words, a collection of mixed plunder, nearly every article being either too big or too heavy or entirely unnecessary. All this, with two men, to go down the Delaware in a skiff in August.

But the railroad company sent our stuff, in a through car, somewhere off into the void and it never came back again. So we mourned our lost trip, collected a colossal claim from the company and started all over again.

But before the next season someone let it leak out that people actually took camping trips in canoes, and a light began to dawn on us. For if two men with an outfit such as ours tried to go anywhere in a canoe something, and a good deal of it, would have to get out and walk. Naturally that something would have to be part of the outfit. So we began to boil down, and, after several years of this process, we have arrived at what is to us a reasonable outfit. To the real canoeist it would seem cumbersome, but we are still in the beginner's class; our field of travel down some hundred and fifty miles of inland river—we never went back to the Delaware—and for other beginners, such as we were when we started on that first trip with an equipment adequate for a small circus, it is sufficiently condensed.

We use a boat, not a canoe. This is a sixteen-foot double-ended rowboat, made of steel, and the seats are arranged so that it can be either rowed or paddled. Paddles for a boat of this size and weight seem rather inadequate, but on ordinary river and not against a head wind they are much pleasanter to use than oars. One looks out on the route one is to travel; new vistas open ahead at each bend of the stream, and the pleasure of the looking ahead more than balances the extra labor required, since, ordinarily, speed is no object. But in case of a head wind or of a rush for cover ahead of a storm we carry the oars, four of them. If there were portages they would have to be dispensed with; but, on the other hand, our boat would be entirely unsuitable in that case. But, fortunately, on our river there is not a single carry necessary from the start to the finish of our usual summer trip. Further upstream there are many dams, but the last of these is at the town where we make our start.

For shelter we use a modified army shelter tent of the old pattern. This is simply a tiny khaki wedge tent, made in two halves to button together. There is no ridge pole. Attached to each half, as it was originally made, is a triangular end piece, and these also button together and form, when the tent is set, a sort of bay, which increases the floor space. The tent is modified by the addition of two similar flaps at the opposite end, so that when it is set up it can be closed at both ends or opened for ventilation to any degree. This modification greatly improves the tent without adding much to the weight.

This tent gives a floor space of about seven by six feet, with the two triangular end spaces additional. One cannot more than sit upright in it, and he who dresses in it successfully would find a Pullman upper berth roomy. But it is light, easily pitched by driving ten small pegs, and absolutely waterproof. We have weathered out a two days' storm in it and kept dry. It weighs, complete with two jointed poles and pins, just a shade over ten pounds, and cost, from the State Arsenal, $4.85.

Bedding of some sort is of the first importance. I remember reading Kephart on bough beds before one of our trips, and setting merrily out with visions of spicy delight at night. But the only boughs available at our first camping place were willow. Willow makes very poor beds, or perhaps I should say that we made very poor beds out of willow. So we use this substitute: We carry two sacks of unbleached muslin, dyed dark brown to avoid showing dirt, each about seven feet long and a little less than three feet wide. These are filled loosely with hay at the first convenient place, and are carried thereafter; doubled up and packed in the boat by day; shaken out and aired at every opportunity; and replenished

when the hay gets packed. If hay isn't to be had, a general mixture of odds and ends of weeds and grass and sedge can be used. It will dry itself into shape in about one day of sunshine, and does just as well.

These beds are laid at night on an old style army poncho, by way of floorcloth, rubber side down. This poncho also earns its passage as a baggage hood in wet weather, and with a fair wind, as a sail. With the tent set and ditched, if necessary, the beds are perfectly comfortable and dry. By using a little care in selecting a spot the tent can generally be set on top of some slight rise so that natural drainage saves the trouble of ditching.

We have always carried a pair of army blankets each. Two of these are sewed into long, narrow bags to crawl into and two are left flat. Nights are cold, even in summer, and the writer sleeps but badly when cold. The full-blooded may travel with one light blanket apiece and save weight, but with us two blankets apiece are always considered to pay their freight. It might be better not to sew up the sleeping bags as we do, for in case they were soaked they would be very hard to dry out, and we have often thought that some arrangement of buttons or tapes would be better, but as yet we have not had the misfortune to get our bedding soaked, and in the meantime we go on as before. This completes the items of shelter and bedding.

A point that merits a word is this: Before the tent is set, but after its location is decided on, dig a shallow pit where your hips will come, and another for your shoulders, and then spread the floorcloth. Five minutes work only, but a great increase in comfort. But don't dig if there is any chance of drainage into them, otherwise the spring in your bed will be of the wrong sort.

In packing for the day's travel all four blankets, the tent pegs and the two jointed poles are packed in the tent (which is left buttoned together), roped, and placed in the middle of the boat. This package weighs about thirty pounds and is the heaviest single package we have. They might have been made up into "blanket rolls" of the army style; two blankets, one pole, pins and one shelter half in each roll, and so stowed under the rowing seats; but this we avoided, because, on account of unbuttoning the tent, it was a little more trouble.

The mention of National Guard experience, together with the imposing list of regulation articles in our outfit might suggest that some quartermaster's stores had been skilfully borrowed. Unfortunately, neither of us has been successful as a forager, and all the regulation material was duly purchased through the Adjutant General's department. In our State, and I suppose in others as well, all these things may be had at very reasonable prices in this way, although the purchase is surrounded by some little red tape, and can best be made through an acquaintance in the Guard.

Next in importance to shelter and bedding come tools, which in our method of classification covers everything that is not shelter, clothes, or food. Thus candles are tools, because they are certainly not anything else.

First of all the axe. After various trials, each one lighter than the last, one rejoicing in the trade name of "The Boy Scout" was elected. It is light, about a pound and three-quarters with its leather hood. It has a handle about twelve inches long of real axe shape, is used single-handed, and is kept knife sharp. It will cut anything we have occasion to cut, and for light stuff a single blow is all that is needed.

For trenching the tent and other digging we used to carry a gardeners' trowel, but the best of these are too fragile. What we now use is an entrenching tool that we bought of a dealer in second-hand military goods. This is simply a round-pointed, very broad knife, heavy in the blade, about eight inches long in the blade and five wide, with a handle. It is dully sharp, if such a description is allowable. Used to hack sod or dirt, it answers for a pick, and flatwise it makes a small but efficient shovel. This we find a very handy tool, indeed.

A little cloth bag, labeled "Small Tools," contains a few nails and some twine, a bit of copper wire, a small whetstone of

COOK PAILS AND FOLDING LANTERN

Cooking outfit separated. Folding lantern open for use, with candle in place.

coarse grit—don't forget this—and a three-cornered file.

Light at night we provide for by a folding lantern, that burns candles. This has mica sides, folds very small when not in use and gives a good light that does not blow out easily in a wind. Candles being classified as tools, are packed with the lantern in the large tool bag. Whatever you do, don't take along an oil lantern with a glass chimney.

A dish towel and dish cloth also class as tools, and so does soap which, therefore, travels wrapped up in the aforementioned towel. By the way, boil out these dish cloths frequently lest a worse thing befall you.

Now the balance of tools we make up as follows, all the rest being for cooking and eating purposes. There is first a nest of pails: one large agate pail, holding about eight quarts, with a cover—this for carrying water or for any really large job of boiling—inside of which goes a four-quart tin pail also with a cover; the usual cooking pot of the outfit. See that all the handles are rivetted on and not soldered. Inside of this, again, goes another tin pail for tea or coffee, and again inside, a smaller one, this last without any cover; used mainly as a bowl for mixing or serving. There is room in this pail for four agate cups, with their handles unrivetted so that they will nest. Round-bottomed cups do not nest well; get those with straight, slanting sides.

All this sounds complicated, but a ten-cent store will supply everything but the largest pail, and they are only nested in this way on the way to the starting point. In the boat the water pail full of water is under the forward seat, and the rest of the pails, nested or not as the state of the larder warrants, are conveniently disposed.

Two army mess pans, small oval frying pans, each with a tight-fitting lid and folding handle, supply the fried stuff that is the staple of all amateur campers. The lids make plates. These pans are very handy and cost the large sum of thirty cents each. They can be had from dealers in second-hand military goods or from the State Arsenal. They go into a small canvas bag, to save smut on the other things in the tool bag.

Now to eat of the things cooked with all these aforesaid, two men will want, each, one table knife, fork and dessert spoon. Beside this, the outfit will want one table spoon and one large and sharp knife—keep it so. And right here an aside: whenever you stop to cook make what we call a "devil spoon." "He needs a long spoon who would sup with the devil." Split the end of a light stick about two feet long, insert the tablespoon handle, wind with twine, and stir your soup with unburned fingers. With us the devil spoon is the first rite observed before meals.

Now to the silverware above, which had better not be really anything but the very cheapest stuff, add one combined can opener, bottle opener and corkscrew; put them all into a little cloth bag together and think of food.

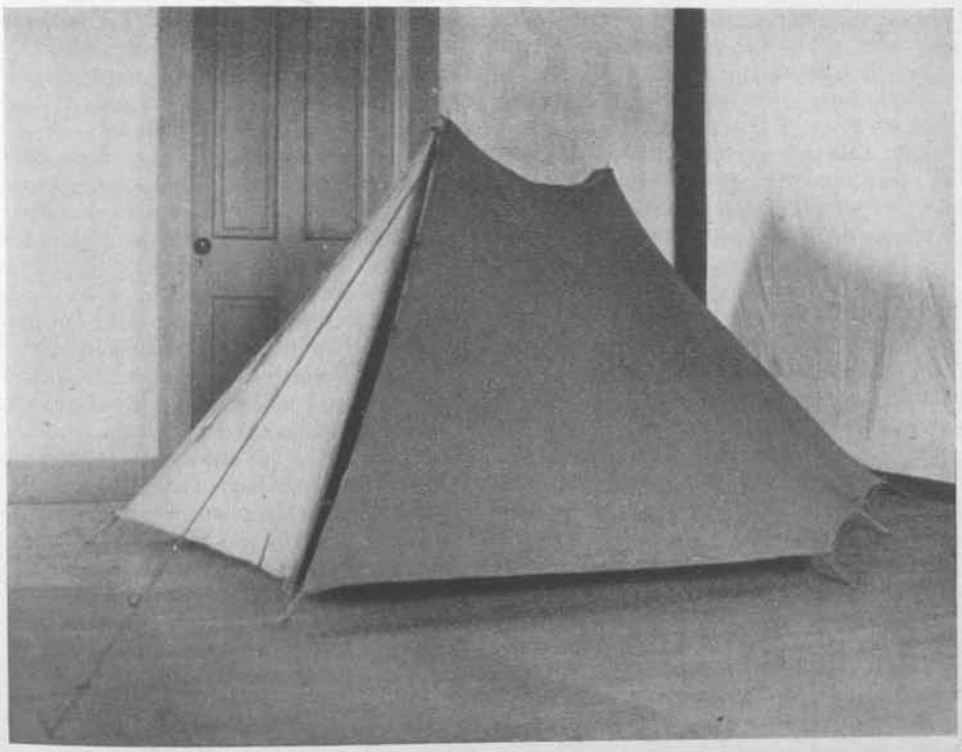
This food problem is one that can be best solved by personal study. I eat with joy things that my partner avoids with loathing. So remembering that on our river, and on almost all such streams through the country, towns come every few miles and farms are always accessible, make up a list of what seems good to you. What we use would perhaps be of very little use to you. But you will

need bacon, smoked and in the slab; eight pounds does us for two weeks. Two pounds of coffee for the same time, and a couple of pounds of sugar, this last in a friction-top tin, are enough. Take a little flour and some frying fat also in tins, and keep the three tins in a separate cloth bag.

Right here I may as well digress from food to bags. The use of millions of little muslin bags is my monomania. About New Years I buy unbleached muslin in quantities, and from then on in all my spare moments I make bags, large, small, and middling. Each has sewed on it a string to tie it up with. And then when once a trip is started, each article is in its appropriate bag, and can be easily found by smelling likely looking bags that feel about right. You will at first open half a dozen bags to find the tea, but after a little while the tea bag gets stepped on, and thereafter you know it from the rest by the footprint, and others accordingly. Nothing breaks adrift, however, systematic habits are encouraged, and the bag habit will pay for itself.

Now, remembering that each food is in its own appropriate bag, let us return to where we took the side trip. Salt you must have, and tea, and a quantity of spare matches which last may be kept dry in a friction-top tin. By the way, if you are a married man, it will pay you to watch the kitchen during the winter, to the end that you may acquire any number of these friction tins without the necessity of buying them. Bread you can buy en route, as you need it, and carry from day to day, but butter is, except occasionally, a delusion and a snare. Anyway, I would rather have bacon gravy on my bread than melted butter spooned on.

Soup tablets and Erbswurst are fine for emergency meals and always arouse the pleasantest anticipation when you order them. However, during the past two years we have carried a stick of Erbswurst from start to finish, and never used a particle of it. But next year we will



OUR SHELTER TENT

Shelter tent set up. End view, flaps closed. Opposite end the same.

TRENCH TOOL AND MESS KIT

1. Entrenching tool. 2. Folding lantern, closed. 3. Mess pan closed for packing. 4. Mess pan open, as frying pan. 5. Mess pan cover, used as plate. 6. Pails for cooking outfit nested.

take some along again, for perhaps some day will arise the exact emergency for which it is designed.

Take some rice with you; it is easily cooked, goes well with anything, and is filling, although perhaps it is not as good as some other things as a stayer. Carry a few potatoes and some onions; don't leave out the onions. Eat them raw or use them in cooking; they are good both ways. A little can of mixed pickling spices comes in very handy for seasoning, particularly for eel soup, a queer-sounding, but most eatable dish.

We have rather cut down the list of canned goods we take to these few items: Spaghetti, salmon, milk, beans and soup. We do not get much at a time, for we can replenish them along the route as we need them. Tomato soup with boiled rice goes splendidly, we find, and so does a sort of croquette made of canned salmon mixed with bread crumbs and egg and fried in bacon fat. Some day I am going to write a book, of which the title will be, "And Fry It in Bacon Fat." And one of the things to fry is cold boiled rice, mixed with egg and salted.

Make your cooking fires small. The smaller the fire the less wood to collect, the nearer to your fire you can get without scorching, and the better your cooking will be. I suppose that everyone should instinctively know that they ought to do their boiling while the wood flames well, and when it is burnt down to ashes or coals, start the frying pan going. But this I discovered as a wonderful fact for myself, in spite of miscellaneous reading. How I missed seeing it in some book or other I don't know, for it must be in one or the other of them, but miss it I did. I hope some one else has, for misery loves company.

Our personal outfits each one suits to his own taste. Khaki trousers and flannel shirts go well for traveling, and so does a good felt hat in case of rain. My partner sticks to a cap, on account of its packability when not in use, but when it rains he is a miserable object, strongly reminiscent of a wet hen. One extra suit of underwear, and an extra pair of socks is enough, for you can wash out soiled things from time to time; not really wash them clean, but well enough for all practical purposes. Be sure that the pair of shoes that you take are waterproof, and beside these have a pair of tennis shoes to wear as waders. Each of us carries a rubber poncho for rain, one of the kind that has snaps at the side to fasten it together into a sort of cape. Each carries what few toilet articles he feels are needed, a towel or two and a few blue handkerchiefs, and one of us sticks in a few simple remedies for the little ills that may come up (cold cream in a tube, for sunburn, is worth remembering). Knives and pipes and tobacco go without saying.

One of us always has a camera along, and each of us his own outfit of fishing tackle. Our artillery consists of a 22-caliber single-shot pistol, really a sort of pocket rifle, for it is a Savage target rifle, with the barrel cut off to ten inches in length, and fitted to a pistol stock. This shoots with a good deal of accuracy, uses long rifle cartridges, and we use it mainly for shooting at empty tin cans on moist days, for when we go there isn't anything much to shoot at of a more ferocious character.

Now in the general scheme of packing,

we divide all our plunder into four main divisions, two of them the personal outfit of the two voyagers, one of grub, and one of tools. We use ordinary grain sacks for packing, instead of the neater duffle bags. This is simply a question of expense with us; we would rather have the regular thing, just as we would rather have an aluminum cooking outfit, instead of our tin pails, but we cannot afford it. If you have the price get the best; if not, go along anyway!

Four of these grain sacks carry the entire outfit to our starting point, where we repack them as above. These we have dyed different colors for convenience in identifying them later, and around the inside of each, at the top, we have a number of pockets made of strong unbleached muslin, sewed in, for the smaller articles, which otherwise would gravitate to the bottom with profane results when searched for. Everything is classed at the start as going in one particular bag and is always kept there. These grain-sack duffle bags can be checked as baggage.

Canned goods we do not try to keep in the food bag, but stack them under the stern seat of the boat out of the way. So when we go ashore for a noon camp we simply take the grub and tool bags, and that particular can marked for the slaughter, and with the water pail we have everything at hand.

If you can obtain, for the route you are to travel, the maps issued by the U. S. Geological Survey, it will be a very good thing to take them along. They will not show much detail of the river itself, but they will keep you located all the time and give correct distances to various points. A great deal of the country is mapped, and you can get the maps by writing to The Director, U. S. Geological Survey, Washington, D. C. Ask first for a key map of your state, which will be sent free, and which will tell you what sections are to be had. The high cost of living has struck the maps as well as everything else, and you must now send ten cents for each section where five used to be the price. A pocket compass will help you in locating yourself on the maps.

Now when you start, if it is a first trip together for your partner and yourself,

SOME ACCESSORIES

The little axe we use, with its hood. .22 caliber pistol, 10-inch barrel, cut down from Savage target rifle and mounted on pistol stock, with its holster.

lay out your work so that each has his own share to do, and let each understand that this must be done by him or not done at all. On our expeditions the writer of this is the cook, and his partner, the scullion. Scullion's duties include getting firewood, and all menial labor in washing dishes. But cook rises in the early daylight and gets breakfast while scullion still snores. In loading and unloading each handles his share, and in putting up camp each takes care of his own side of the tent, including any ditching that is needed.

Mosquitoes may or may not be bothersome. We find a piece of net about six feet square about right, which is disposed over the head of each bed in a canopy. To support this, drive, at the two head corners of each bedsack, a stick about three feet long, each of which has a long side branch left on. This last extends down over the edges of the bed to hold the netting up. Throwing the netting over this rustic frame and tucking it under the top and edges of the bedsack, while it hangs loosely at the lower end, makes a sacred enclosure for one's head and shoulders, and the mosquito who gets any business must do so through the blankets.

HINTS FROM OUR ARMY

By LIEUT. TOWNSEND WHELEN

III. Camp Sewerage

IN settled communities the municipality constructs and keeps up the sewerage system. Boards of health make rules governing the sanitary character of plumbing installed in private and public buildings, and the police inforce these rules. But in the wilderness there is no one to attend to these rules for us, and if we would live healthily for any length of time we must be our own scavengers. Sanitation is of relatively slight importance in camps of short duration. Germs and filth do not accumulate to a dangerous extent, and what is known as the bacteria of nullification are extremely numerous in unpopulated districts causing a still further delay in the multiplication of dangerous germs. A nomad people are invariably healthy for this reason, but disease runs rampant in large settled communities of the uneducated. It is when our camps last in one spot for a week or more, and particularly in warm weather or tropical climates, that camp sewerage becomes an important consideration.

The Army stands at the top of the list in experience in camping large numbers of men for a long time in localities not supplied with sewerage and plumbing. In recent years the methods of sanitation adopted in such circumstances have resulted in our army in a lower disease rate in camps than in posts where every modern convenience is installed. Therefore it will pay the sportsman and all those connected with the management of permanent camps to take notice of the Army's methods.

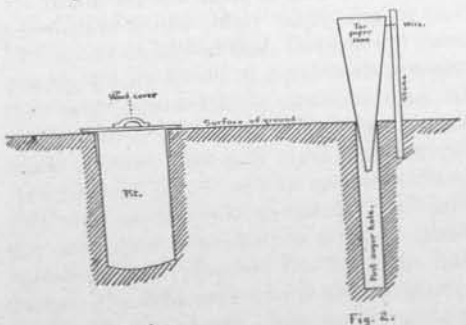


Fig. 1. Fig. 2.

CAMP SINK AND URINAL

Waste caused by food, ablutions and excreta, unless properly disposed of, develop large quantities of germs. The excreta of certain healthy individuals known as disease carriers may contain these germs in large quantities, particularly those of typhoid fever. These germs conveyed to the digestive tract of the human being by the way of the mouth may cause such serious diseases as typhoid fever, dysentery and cholera. Germs may be carried from their source to the individual in many ways. The garbage pile, the latrine, the seemingly innocent deposit of excreta on the ground may contaminate the water supply. Flies and other insects often carry the germs on their feet and contaminate the food, the hands, or even the lips. One's feet may carry them into the tent and so on to the blankets, etc., from whence they find their way to the mouth.

There are three methods of disposal of waste and destruction of germs in camp—chemicals, burying and fire. The chemical method presupposes the presence of a surgeon or some one familiar with the various processes, and, as it is hardly applicable to the sportsman, it will not be discussed here.

The burying method is effective when it surely will not contaminate the water supply. The locality should be down hill or at a long distance from the water. It is never safe on the drainage basin of a lake, nor in an impermeable soil, as heavy clay. Figure I shows a kitchen garbage sink covered with a board or other form of trap door. To make it insect proof cover it with a gunny sack or other cloth, wet to make it lie closely. Figure 2 shows a urinal consisting of a post augur hole and a cone of tar paper. Flies

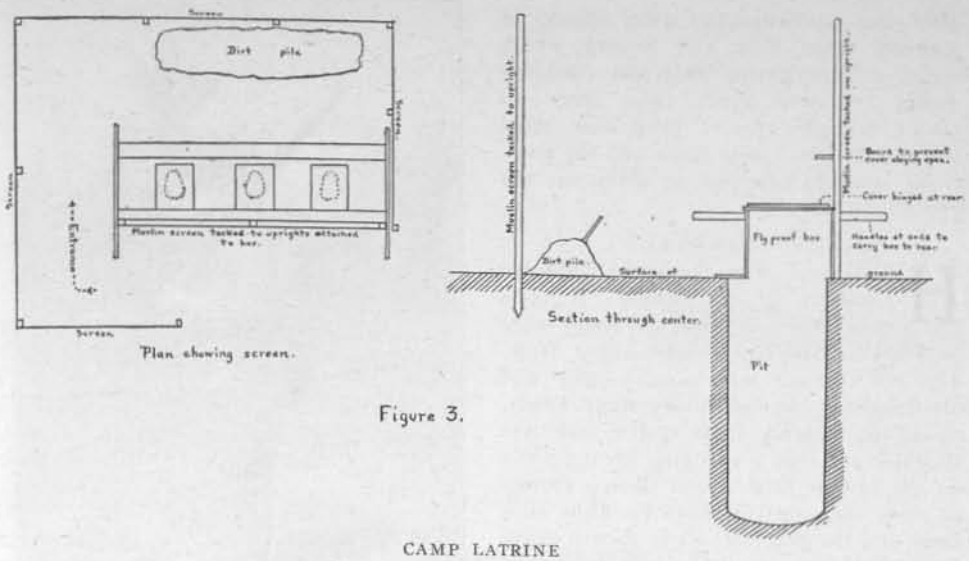


Figure 3.

CAMP LATRINE

and other insects abhor tar paper. Figure 3 shows a latrine consisting of a fly-proof box placed over a deep pit. The covers to the seats are arranged so that they fall shut when the user arises, thus effectually preventing the ingress of flies. A paddle is left in the dirt pile for obvious reasons. The entire box can be lifted and carried to one side or to the rear, when the pit can be filled with straw or leaves and burned out.

Fire is the most effective method of disposing of waste in camp and should be used whenever possible. In small camps of but two or three sportsmen the kitchen waste may be thrown on the friendship fire or on the cook fire after cooking is completed. A small pit may be dug under the fire and filled in with stones, and kitchen and waste water poured therein while the fire is burning briskly. For a large camp a camp incinerator should be built as illustrated in Figure 4. This is a pit 2½ feet wide and 4 feet long, 2 feet deep at one end and 3 feet at the other. It is filled in with stones, large below and small on top. A 6-inch wall of stones and dirt surround it on all sides. A crane and pot hooks for kettles may be arranged above. A big fire is started in the pit on the stones. Use big logs and get up a lot of heat. Slops and other solid matter should be burnt on this fire. Kitchen and wash water should be poured into the rock-filled pit at the shallow end and the fire will soon cause evaporation.

The presence of flies or odors generally indicates an unsanitary camp. If, despite all that can be done, flies still persist, a supply of cheese cloth should be provided for protecting food before and after cooking. Keep the camp neat. There should be a place for everything and everything in its place. Cooking utensils should not only be cleaned immediately

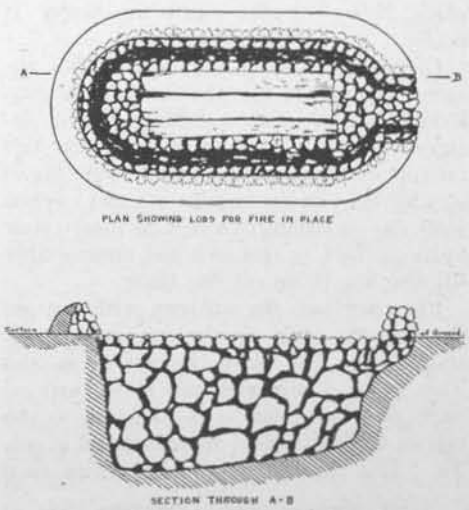


Figure 4.

CAMP INCINERATOR

after use, but when put away should be guarded from flies and insects which might deposit germs thereon. Bedding should be aired every clear day. In camps occupied for a long time tents should often be taken down and the purifying sunlight allowed to shine on the ground all day.

IV. Canteens

HAVE you seen the new "Infantry Canteen, Model 1910"? It is a mile ahead of what the Army used to and the sportsmen still suffer from. The old canteen was usually rusty and often leaked. An unsanitary, dirty, heavy, tin affair, hanging from a strap over the shoulder or from a swinging arrangement on the belt, it bobbed and shifted around at every step until it shook its filthy cork loose and the precious water flowed down your pants and into your boot leg. The only consolation one had was the thought that if the water rotted your boots what might it not have done to your stomach!

The new canteen is a strong but light aluminum bottle, shaped like a fat whisky flask, rounded on the outside, slightly concave on the side towards the body. It has an aluminum screw stopper attached to the neck by a chain. It holds a little less than two quarts of water. When the canteen gets dirty throw it into the camp kettle and boil it, thus sterilizing it. If your water is impure fill the canteen and place it in the fire until the water is boiled.

On the bottom of the canteen fits another happy device—an aluminum cup, kidney shaped, with a folding handle designed to make it stand up or perch well on top of the camp-fire while you use it as a kettle. In the handle is a slot. When your cup is boiling it's best to insert your knife or fork in this slot and comfortably lift the hot thing off the blaze.

For carrying, the canteen with cup on the bottom goes in the canteen cover. snug-fitting bag with fasteners on the This is of wool-lined canvas—a sort of back side by which it is fastened to the belt or the off side of the cantle on a saddle. The canteen on the belt is in such a position that it does not jolt, swing or jump around until it hammers its cork loose, besides being a constant cause of worry as you take each step as the old model still used by sportsmen does. In warm weather you can wet the wool lining of the cover and the evaporation really keeps the water cool. It is the next best thing to a Thermos bottle. If the wool lining is wet the dampness does not come through to the outside of the cover, thus your breeches stay dry.

THE NEW ARMY CANTEEN AND PACK-SACK

To get a drink when the canteen is on your belt turn two little thumb-screw fasteners half a turn and yank out the bottle, take a swig and stick it back, about as much trouble as drawing a revolver from its holster. If you fall on the canteen heavily enough perhaps you might dent it, but you won't make it leak because it is practically indestructible. Turn its bottom towards your countenance and you have a handy shaving mirror. Sad to relate, however, unlike a tabooed institution of the same name, it is not a good place for whiskey.

BY THE SAME AUTHOR—IN AUGUST—"THE OPEN CAMP FIRE"

CLOSE HAULED ON THE STARBOARD TACK

AFLOAT IN "THE VARMINT"

By H. H. BRIMLEY

IT was a happy moment when I dropped *The Varmint* into the crystal clear waters of White Lake and saw that she floated dry and on an even keel. If you have never built a boat yourself you cannot properly appreciate the feeling—but you can console yourself with the thought that it is never too late to mend.

Editor Miller's description of how to build *Waterat III*, published in the February, 1911, issue of FIELD & STREAM, was my inspiration—and my friend. The more I studied the details and the drawings the more convinced I became that I could—and would—build a similar boat. It was some time later, though, that I carried out my good intentions, but I have never regretted the act, and there has been much fun, some thrills, and not a few bass, directly chargeable to Miller's inspiration. And, as the editor has seen fit to tell us about the fourth of the *Waterat* models, in the issue of last March, methought I would hit my typewriter to the tune of some of the good times that have come my way through the medium of *my Waterat*—which is entered in the Custom House of All Outdoors under the name of *The Varmint!*

Thirteen and a half feet long, thirty-two inches beam, and ten inches deep, are her dimensions. She has a twelve-inch bow and stern, and a seven-foot cockpit, the latter having a movable floor. Each strip of the flooring is hinged to the next, so that all roll up into a compact and convenient bundle of shipping, and the possible loss of a strip is avoided. The leeboards are twelve inches wide and deep enough to give a good grip on the water.

I did not follow the Editor's instructions implicitly, as I planked in the decks and washboards solid. And the fourteen-inch bow of the plan—or even the sixteen-

TAKING THE FAMILY ALONG

inch of the later model—would have made her a dryer boat than she is now in a seaway. Were I building again I would hardly change the plan except to heighten the bow from two to four inches.

It was two years ago last June that *The Varmint* felt that "thrill of life along her keel," and I have just finished the slight repairs and the repainting that quite a lot of use had made desirable.

But back to her early days: It was but a short time after her launch, when she had partially found herself, shaken the creases out of her sails, and stretched her running gear, that my two boys and I took a little cruise across the lake. Arthur was captain of the leeboards, Bob acted as shifting ballast, and I was the "Old Man."

It was a dead beat across, and how she did eat into it! "Boys, she's a-chawing of it off," I remarked, quoting a favorite expression of an old sailing partner of mine on Pamlico Sound. "Hang out farther to wind'ard, Bob, and keep your weather leeboard down, Arthur!"

"Aye, aye, Sir!"

And Bob, with toes under the lee washboards, hung 'way over the weather rail until a certain part of his anatomy dragged in the passing water. She stuck her nose into some of the whitecaps that were getting up and took solid water aboard at times—being rather over-canvased—but all the crew could swim pretty well, so we took it as it came. I was afraid at times that her mast would go, so I dropped the peak slightly and gave her a speck of sheet.

Finally, it became so rough that I ordered her put before the wind for the run back. If she had walked before, she fairly jumped now. I got the jigger down snug, dropped the peak a trifle more, and let her go. We were now all sitting in water, which was well above the bottom boards, but there was no time to bail. The wind was over her quarter, and just about strong enough to give the Old Man all he wanted in keeping her before it and holding its course. Sometimes the boom was up in the air parallel with the gaff, and then the top-heaviness of the Canadian Club rig manifested its principal drawback. One of the kids began on that catchy chanty of Connolly's:

"For her name's the Lucy Foster,
She's a seiner out of Gloucester,
She's an able, handsome lady
And she's go-o-ing home.
She's an able, handsome lady
And she's go-o-o-ing ho-o-me!"

It would have taken some little gas boat to have overhauled us on that run in. Wet as terrapins were we all, but happy and carefree as clams at high tide.

Making port was easy. I dropped the peak, hoisted the jigger, and rounded to. "Down mains'l, haul in and belay mainsheet. Down jigger—and all hands overboard!" And there we were, in two feet of June-warm water, with nothing further to do than wade the ship ashore and lift her out; then take out the masts and bottom boards and turn her upside down to drain.

One morning the boys—there were three along that time—thought that they would combine alligator hunting with fishing. Two of them took a small fishing skiff, Arthur went alone in *The Varmint*, while I remained ashore to go over my tackle.

I looked up, and saw Arthur paddling back for dear life, the sails having been left ashore. "Dad," he yelled, as soon as he came within hearing, "we've killed a 'gator, and he's sunk. Come along and help us get him up!" Doubting questions—they only had .22 rifles, which are not usually deadly on alligators—brought out the story that they had come on him swimming, had wounded him enough to daze his limited mentality, and had followed him up, shooting at every opportunity, until they had fairly sunk him. That sounded a good deal like a fairy story to me, as a rather wide and varied experience with our North Carolina alligators had taught me that a high-power, soft-nose bullet is about the only medium through which one can successfully collect them. But the kid was insistent, so I hunted up a long-handled fish gig, with every prong dull as a doorknob and bent into curves and hooks, boarded the boat and headed across the lake to where the other two boys were guarding their game.

"Well, how about it?" I asked, as we ran alongside. "He's down here somewhere, Dad, but we can't feel him now," they replied. "Is it a joke?" I asked. "You don't usually kill alligators with .22 rifles, and I've got to be shown."

"We certainly killed him, and we felt him on the bottom, but it is soft here and we can't feel him now among the grass!"

INTO THE EYES OF A CHOPPY SEA

The water was about eight feet deep there, and it was several minutes before the gig hit anything that felt like 'gator hide. But hit him it finally did, though he was twice brought to the top and slipped back again before the boys could grab him. The third time did it, though, and we got him into the boat at last and paddled back to the landing in triumph.

The 'gator measured just seven feet, and there were three proud boys around about that time. After dinner they skinned him—but I don't think that any of them really enjoyed the job.

Trolling for bass—with the chance of a pike or yellow perch striking the troll—has been indulged in quite extensively with *The Varmint*, but the bait casting that I have done from her has brought the most satisfactory results. Sometimes alone, and sometimes with one chosen companion, there has been a lot of casting done across her coaming. When alone my method has been to select a stretch of water where the breeze was not too strong, padde to the windward edge of the likely places, and let her drift across them, casting as she drifted. And I found the double paddle best for this work. It seemed as if I never could connect with the big ones, though, as the best I ever took aboard *The Varmint* has been under four pounds. Once I hit one close to the boat that struck like a whale, dived under the boat, and had the tip of my rod broken before I knew what was happening—but the fish proved only to be one of those extremely energetic two and a half pounders. And yet a fifteen-year-old boy had yanked an eight-pounder out of the lake a few days before one of my trips there. He caught his on a gang minnow, casting alone from *his* home-made canvas canoe!

In December of that year I went down to White Lake to shoot a few ducks for Christmas. There were several bunches of rather small ducks that seemed to use the lake regularly, and one could hear the black duck and mallard calling across the water after dark. A friend from my home town was with me on that occasion, and he and I laid our plans for a killing. We secured a roomy family boat, and nailed and tied cedar and myrtle boughs all around her sides. Then we towed and rowed her across to where the ducks seemed most to congregate, and there we anchored her. A bushel of

THE BOYS AND THAT 'GATOR

corn was secured, and scattered over the bottom for a hundred or two yards around, being sown thickest close about the floating blind. Then we laid low for two days, so as to give the fowl a chance to become accustomed to our floating island.

Early on the third day after the sowing, *The Varmint* was loaded down with two men, guns, ammunition and decoys, and we prepared to reap the harvest. It was ridiculous almost as we neared the blind to see, through seven or eight feet of perfectly clear water, the white grains of corn lying conspicuously on the bottom, each grain as distinct as if laid out on black velvet.

It fell to my share to take the blind, and to S.'s to paddle around and scare the ducks to me. But the thirteen decoys I had out proved to be bad medicine. Every blessed flock on the lake turned out to be composed—not of little blackheads, as I had taken for granted—but of hooded mergansers—fish ducks! And we had baited them with corn! We saw one redhead, a pair of mallard, and a few wood ducks, and we heard mallard every night, but *all* the bunches were mergansers!

Well, the joke was on us all right, so we took our medicine and made the best we could of it.

Two years *The Varmint* stayed on White Lake, and many a good time she gave the Mate, the boys and me. Last summer I took her over to Lake Waccamaw, a much larger body of water, but with the fishing not nearly so good. The bass were scarce here, the calico bass were not biting, so we had to take it out mostly in trolling for white perch. The Waccamaw method of fishing for white perch is to live-bait for them when "schooling." And when they do school pretty much every boat on the lake gets to work, and they are often caught in large numbers at such times.

As a digression here I wish to note that most of the small boats on Waccamaw are dugouts, a type of boat that I thought to be nearly extinct in this State. And so universal is this boat locally that even some of the gasoline boats are of this type. I had the unique experience of taking a trip in a dugout gas boat, and the boys told me that there were three of this type there. They are carefully fashioned, copper banded and riveted, and very resistive of decay. Cypress is the wood out of which they are cut, of course.

But back to our white perch. The natives have a method of "calling" them, by snapping the fingers on the surface and splashing with the hand. I snapped until my fingers were sore, and splashed until tired, but the fish always seemed deaf! On a calm day, when there seemed any likelihood that the perch would school, one could hear the snapping and splashing going on all over the lake, though I am inclined to think that there was a lot of wasted energy in the proceeding.

But one could always catch a few trolling with a small spoon and light-colored trailer fly on about number two hook. And those caught trolling averaged larger than the fish the school fishermen brought in. Our largest was caught by the Mate—and she was very proud of her fifteen-ounce specimen. The Mate also caught our only bass, and our only grindle (mudfish)—trolling.

But the sailing! That was worth while. One day, as *The Varmint* walked in ahead of a fresh sou'wester, a watcher ashore remarked to one of the boys: "Does that man want to *drown* his wife?" forgetting that anywhere within three-quarters of a mile of shore the water was nowhere more than chest deep. Not that we always kept on "praying bottom" by any means, as we took the little boat about quite a bit, especially on our trolling and sailing trips. Double paddle or single, sailing or drifting, fishing or cruising, a Waterat or a Varmint is a powerful nice thing to possess. And I expect, in the future, to always keep one on hand.

I am sorry to say that I have not been so situated as to be able to go a-cruising in *The Varmint*. With a little modification in her rig she will prove an ideal cruising craft, I know, and perhaps this summer—— But that, I hope, will be another story!

COMMON SENSE IN TWENTY BORES

BY EDWARD C. CROSSMAN

IF the twenty-four-inch barrel is a good thing and will occasionally kill, then isn't the thirty-four-inch barrel still better—and why? If a 5¼-lb. gun is nice to handle, then why isn't still more gun still nicer, and why not carry 7 lbs.? If ⅞ oz. of shot is good, then why isn't 1⅛ oz. still better? This is the sort of thing that puts the wrinkles in the fair face of the sporting-goods dealer, and makes reforestration of his topknot desirable for the sake of his looks.

In nearly any crowd of up-to-date shotgun men there will be found two entirely different schools of thought. One declares for long-barreled, heavy-weight, small-bore guns, 12 gauge in all save the hole through the barrel. In 20-12-bore guns some of the worst bitten and most violent of the cranks shoot 16 and 12-gauge charges, raving violently the while as to the superiority of these loads over all others, whether of 28 or 10-bore variety.

They use Roman candles for shells, crammed, in the case of the 20-bore, with an ounce of shot and three drams of powder. Then some of them fool themselves into thinking that so superior are their loads in velocity and general "git thar" effectiveness that they can tell the difference in the impact when they hit ducks. They enjoy themselves, so why complain. Yet, at this, their example is not the best for the neophyte to follow, any more than he should go to work and buy one of these triple-action, high-speed, four-cylinder Accidental Accelerated Express rifles at one hundred ($100) bucks when he has never shot even a plain .30-30. If, after long experience with the plain, ordinary 20-bore of commerce, he decides on one of those Roman-candle eaters, that is his lookout, and he's doing it with his eyes open.

Cold-blooded pressure guns and chronographs say that shooting 12-gauge charges in 20-gauge guns gives merely the delightful features of very high breech pressures, with a slight increase of velocity out of proportion to the increase in chamber pressures. The use of the big charges in the small gun may earn fifty foot-seconds over the normal, which in actual use would not amount to one whoop so far as cutting down lead and adding to killing power is concerned. Old W. W. Greener, conservative and experienced, not feather-headed and theoretical, says that the ordinary charges now used in game guns develop all the velocity we need, all the velocity the gun will handle, and that pattern, pattern, always, is the desirable thing in the shotgun.

If this is true in the 12 and 16 bore, how much more does it apply in the case of the 20, with its small charge of shot! The great weakness of the little gun is in its sparseness of pattern. If test proves that its pattern is not dense enough for the game sought, then it is far better to use a larger gun than to attempt to make up for its deficiencies by cramming in more shot in a gun already handling a load that is giving more than normal 12-gauge breech pressures.

The solution in the small gun, according to the best English practice, is not to chuck in a lot more powder, but to use larger shot. A big shot holds its speed much longer than does a small shot, and, although starting out with but the same velocity as its smaller brother, it is inclined to punch a much more severe hole through the duck because of its higher speed on arrival and its greater weight.

An ounce of No. 4 shot in a well-bored 20 will give sufficient density for ducks at reasonable duck ranges. Also, it can be shot with no greater pressure on the gun than is developed by ⅞ oz. of 9's. Also, one No. 4 pellet, starting with the same muzzle velocity as a No. 6 pellet, is traveling considerably faster at 50 yards and hits a much harder punch. If this won't work, then a larger gun and more shot are called for. There is little sense in ramming in more powder and still more powder behind ⅞-oz. loads of 6's in the effort to emulate a high-power rifle in velocity.

Let's see about that chucking in more powder. The London *Field*, years ago, proved by their tests that, given one ounce of shot and a certain velocity, the shot were driven at the *same speed* by 38 grains of bulk powder in the 12 bore and 32 grains in the 20 bore.

Thus you can see that with an equal amount of shot the 20 bore, because of the greater friction of the shot charge and the greater force imparted by the powder, drove its load as fast as did the 12 bore, and used 6 grains less powder. Therefore, if you shoot ⅞ oz. of shot in the 20 and an ounce in the 12, your little gun is giving more velocity than the big one unless there is a considerable difference in the powder charge. True, the little gun is giving more chamber pressure, but it exposes less area of metal to the pressure; you cannot get velocity without it.

Your velocity, therefore, is sufficient. It is as high as the normal 12-bore speed, and the only weak point is the small amount of shot and consequent thinness of pattern.

The English believe in overcoming this, in cases of necessity, by adding shot, but you never find them attempting to add 12-bore charges of powder as well. The 2½-dram limit is never exceeded. There is some sense in shooting an ounce of shot in a 20 if ⅞ oz. does not give you enough density, but there is no sense in shooting 3 drams of powder, regardless of what the shot load may be. You can shoot 3 drams in safety if the shot load is low, say around ¾ oz. of 6 size, but you have gained nothing, and lost a lot. Shot, being round, loses velocity quite fast, and the faster you drive it, the faster it loses in proportion. To get penetration where penetration is urgent, weight of pellet, and not initial velocity, is the thing to consider. Also, when you drive shot at high speed, you are quite likely to blow the pattern to the four winds—and you cannot get around the primary principle that regardless of velocity, penetration, or anything else, to kill you first must hit. Also with the shotgun, you must hit with several pellets to ensure knocking out the game, unless you are using poisoned pellets. Pattern is everything.

Therefore, make up your mind that to kill with the 20 bore, particularly with upland game, you need not go above 2½ drams of bulk shotgun smokeless, and that ⅞ oz. is your standard load. If you fancy trying the ounce stunt, get out your patterning paper and shoot ten patterns before you make up your mind. Also it is not good medicine to go to the ounce point with small shot like 9's, and there is no need for it. The great number of pellets in the load keep the pattern dense enough with a full choke 20. If your patterning shows mysterious jagged holes in the paper from lead pencil size up, quit that load. The shot is balling, and there is something wrong.

Now all the load that should go into a 20-bore gun of 20-bore weight, and with 20-bore barrel dimensions, can be gotten into a 2¾-inch casing. You can put the full 2½-dram and ⅞-oz. load into this case and have plenty of room left for wadding to cushion down the shock of starting the shot. Don't fall for the three-inch Roman-candle thing. Some makers recommend using the 2¾-inch casing in their 2½ chambers, and if your choice falls in that direction, then you can get standard 20-bore chamber. If the gun is of other make, then specify 2¾-inch chamber when you get it. If you use only ¾ oz. of shot then fill up the space with wadding.

Then is the vexed question of barrel length.

The size of the gentleman using the gun has something to do with the length of the barrels thereof, but not everything. A 20 bore with 24-inch barrels is none the less a freak in the hands of a small man than it is in the hands of a big one. A 34-inch barrel 20 bore is none the less hungry and lean looking, a veritable Cassius gun, because a six-footer shoots it.

One of our American makers recommends long-barreled 20-bore guns, 30 to 34 inches. But, with the consequent large and heavy frame, and tendency to heavy weights, I presume they feel they might as well go the whole hog. On the other hand, another well-known concern favors short guns and light weights in 20 bore. Still another of our makers favors the heavy size of 6 lbs. and pull for 30 and 32-inch barrels.

The English and the Continental gun-

makers, as a whole, kick about guns longer than 28 inches even in the 12-bore gun. Our 7½ lbs. 30 and 32-inch 12-bore they classify as a pigeon gun, of heavy weight. The German makers run to 26-inch barrels for their 20 bores, and the English like 27 or 28. Seems to be a case of pay your money and take your choice.

Personally, I would never own a 20 bore with 26-inch barrels. I used one, on ducks, for two weeks or so, firing seven or eight hundred shots during the time. At the end of the shoot, I had made up my mind on three things—that I had yet to see anything sweeter working and nicer fitted than that gun; that I would never again go in for a featherweight 5¼-lb. gun, and that I would never again go below 28 inches for barrel length.

We might as well stop here to spear the fallacy of long barrels shooting "harder." In the days of black powder they used to chuck in powder until the unburnt grains would blow out of the muzzle. Smokeless powder is a different animal.

With dense powders the full energy is practically expended in a barrel 20 inches or less and in a 20-inch barrel you would get more velocity than you would in one 30 inches. Bulk smokeless powders are just a bit less hurried in their work, but practically the same holds true of the whole family. In your 25-inch barrel you get more velocity from any smokeless load than you would from your 32-inch Long Tom. The difference is not worth an instant's consideration, being merely a paper one, but as what little there is exists in favor of the short barrels, don't use velocity as an argument in favor of the long ones.

The desirability of long barrels is for the steadiness and swing that we get from the extended tubes. Also the long barrels are more accurate, but I opine that their chief virtue lies in the steadiness which they impart even to a very light gun. A light-weight, long-barreled, properly balanced gun is far more buoyant and sweet handling than a gun of the same weight with short tubes. I am impressed with the difference every time I pick up my 32-inch, and my 28-inch 20 that stands in the same cabinet. If you have handled many rifles, you'll note the difference in handling a long-barreled one, and a short, sawed-off automatic, even though they weigh the same.

The question of stock length, which in turn depends usually upon the size of the chap shooting the gun, limits to some extent the barrel length. As the two extremes, a gun with 14¾-inch stock would look supremely out of proportion with 26-inch barrels, and one with 13-inch stock would look still more ridiculous with 32-inch barrels.

Even with long stock, which means one over 14½ inches, a 20 bore looks a bit lean and hungry with 32-inch barrels, but properly balanced, and around six pounds, what an elegant handling weapon it is! For the looks of the critter the 20 with less than 14½-inch stock should hardly go over 30 inches in barrel length. The 30-inch stretch is a happy medium that I feel constrained to recommend for general consumption. If the stock flops below the 14-inch mark, then the gun can well be a 28-incher. It is a bit hard to balance up a short-stocked gun with 30-inch barrels, and still harder to make 32-inch tubes come out right without loading the stock, which I would not tolerate.

I saw not long ago a 32-inch barreled high-priced gun with the point of balance four inches or more ahead of the standing breech. Needless to say it was muzzle-heavy and bad handling. Balance is partly a matter of personal opinion, but still regulated by the best usage. A six-pound, 32-inch 20 bore, for example, should balance from 2½ to 3 inches ahead of the standing breech, and the barrels and fore-end never should weigh less than the stock and frame. An ill-balanced light-weight gun is a crime.

Another thing bearing on barrel length is the use you have for the gun. In open country, say in a duck blind, the 32-inch barrels are indicated unless the stock is very short, below 14 inches. It should be a very extreme case to drag down the barrels below 30 inches, and said extreme case means either a short stock and a featherweight gun, or else snap-shooting in an overgrown country where the short gun is the handiest to use.

Practice often kicks theory in the eye. I was convinced after using a 32-inch bar-

rel 20 bore for some months that, while it was a bully gun in the open on comparatively level ground, as soon as I started my old game of chasing the quail to their very lairs, which means up steep hills, the short gun would be the handiest.

Then the lady and I, with a 32-inch, and a short, 28-inch 20 bore, respectively, got into the bluebirds, covey broken up, and lying in a cactus patch, where they had to be kicked out. Every shot added to my liking for those long barrels. I rather outshot myself. We left the covey and two hours later ran into another one in a steep gulch in the hills. Promptly the birds flew for the steep hillsides, as is the habit of California quail. We climbed after them.

Then when we got above them they commenced to buzz out, merely gray-blue flashes of quail across the steep gulch. We had traded guns. The lady hit them and I didn't, and I wasn't a bit pleased over the performance. Magnaminously I traded guns with her again to see how the long one acted in such country—and I came to the conclusion that even on a steep hillside, with shots at quail merely half snaps at fast disappearing birds among the scrub oak, the long gun was still the best.

Back at the cactus patch again, into the reunited and rejuvenated and encouraged covey, I missed some more with the short gun, and out-shot myself with the long one. Also it seemed to affect the lady the same way. She hit nothing with the shorter one, although, of course, some peculiarity of stock fit may have affected this, while on the steep gulch side she seemed to have no difficulty in handling the long gun, and hitting the birds.

Then and there, 28-inch barrels went to join the ranks of the has-wasers, so far as we were concerned. Mebbe so we'll trade back again some time, but I misdoubt it if California quail and ducks remain the quarry.

From the standpoint of beauty, a 30-inch gun is prettier than the 32-inch—talking now of 20 bores. A lucky swap has put into my power the right to order a fine English 20—and I'm afraid to do it for the reason that if I specify 32-inch barrels I'll wish I'd made them 30 for looks, and if I say 30, I'll wish for 32 for the sake of efficiency. I presume I'll never get that gun—because I'm afraid to spoil such a paragon as it would be by the wrong barrel length. I shoot a 14⅜-inch stock, so you see I am on the border line of the two-barrel lengths.

I hardly think there is much room for argument along the weight question. I've played with the 20 bore pretty steadily for some years, and regard one extreme in weight as foolish as the other. I would not carry home for my own use such a freak as a 20 bore weighing more than 6½ lbs. An English 12-bore game gun to shoot 1⅛ oz. of shot usually falls at about this weight. I also would not care to shoot a 5¼-lb. 20-bore gun with 2½ drams and ⅞ oz. of shot. My first 20 weighed this, and it proved to be too light for comfort. Even at this it is less of an error than the heavy 6¾-lb. cannon. The main thing is that it was too short. I imagine that a 30- or 32-inch 5½-lb. 20 would be a little dream, could it be made strong to take the punch of the 2½-dram load.

My new gun is going to be from 5¾ to 6 lbs. with long barrels for steadiness—and the choice is to be at the end of firing ten times as many shots fussing about with blue rocks at the range, than the average man fires at game in the same number of years. Game shooting is only part of the test, some people get so rattled over their birds that they don't know whether they're shooting a 32-inch, eight-pound coast-defense article, or a featherweight built on the lines of a carbine.

There's no use in going to the 20 as a matter of sentiment. Make the change for the sake of common sense, said C. S., being to the effect that it is foolish to carry more than you have to. This being the reason, then get 20-bore weight in a 20-bore gun—and this means mighty few ounces in excess of 6 lbs.

And, if ever you find a 20 bore with 32-inch barrels that is said by its owner to shoot right, that fits you, and that is perfectly balanced, kick the owner's feet from under him, seize the gun, and flee the scene.

You'll never regret it, unless you're a poor runner!

AIREDALE, SETTER AND HOUND

By WARREN H. MILLER

VI. Yard Breaking the Setter

WHEN we returned in April to reopen the house in the Interlaken forest, the first creature we laid eyes upon was Pepper—running a rabbit! He was hardly recognizable, so heavy and muscular had he grown from the slim hound pup that we had left behind in December. My good neighbor, Herman Beringer, who had taken care of him during the winter, had evidently been feeding him well and he had got his full growth. All through the winter he had lived and slept out of doors in a kennel, which had done wonders for his general health and robustness. At first he objected strenuously to this treatment, being used to his special mat in my house, and proceeded to sing a solo that would put Tetrazzini to shame. My friend stood it a little while, and then went out quietly to the kennel with a whip behind his back. Pep raised his muzzle to the skies and started again to voice his outraged feelings. Crack! went the whip sharply about his muzzle, and at the same time my friend raised a warning finger. Pep looked about to see what had struck him, soon forgot it, and again returned to the business in hand. Crack! came the whip a second time, and again the finger. Pep looked up inquiringly, and in a few more tries soon connected the whip-lash about his muzzle with his vocal efforts. After that a mere showing of my friend's head at the back door and a warning finger raised sufficed to turn off the music, and he gave no more trouble.

The dog was delighted to see us all back, and was the first to enter the cold house. He looked all over for signs of Blaze, but that fuzzy individual would play with him no more, for Blaze slept under the Interlaken oaks and his master had nothing but a carved shingle to remind him of the stout heart and sterling character that once was my Airedale. Blaze's lion heart, his ferocious bark, and his terrible fangs had been too much for the nigs out in the backwoods beyond the forest, who like to do a little second-story work on our empty houses in the dead of a winter night, and they had succeeded in poisoning him. I did not smile again for a month. With his undoing also departed some forty dollars worth of Orpington chickens, "cooned" a short time afterwards, showing how much better he had been than any human policeman.

However, I did not get another Airedale, much as I admire and like the breed. As an Eastern hunting dog he hardly has a place, for there is nothing that he can do that a good hound cannot do better. For Western work, or bear hunting in the South, he would fill a well-deserved niche in any sportsman's kennel; but my one trip a year to the South for quail hardly warranted taking him along. What you really need is a good setter or pointer, to be used on what quail and pheasants we have in the pine country back of us, and ready to take South in December, for a good bird dog cannot generally be had for love or money during the season down South, all the native dogs being already at work.

Pepper had developed into a most inhumanly smart and able dog. Hunting was his one great passion, and I foresaw trouble with him in the springtime to come. He had a stock rabbit that lived up in the brush back of my garden, and he ran him for exercise every day, to the mutual benefit of himself and bunny. Aside from this, his consuming motive in life was food, and he would go to any lengths to scheme out a way to steal some. Opening the icebox catch with his nose and swiping the family steak, lifting the cover deftly off garbage pails or knocking them over, and raiding the kitchen via the swinging door of the pantry, which he soon learned to open with a push of his nose, all came naturally to him. His grandest undertaking was swallowing a whole tureen of red-hot soup, set outside to cool off. When the cook went for it, Pep was suspiciously bulgy and the tureen was empty; enough for a family of six was inside of him, though how he managed to cool it in transit is still a mystery.

He was still a bit gunshy, as I soon found out when practicing with the rifle and supplementary with .380 Colt automatics, which fit the big .35 Winchester in a Marble-Brayton steel auxiliary cartridge. Even the little .22 made him jump at every shot. Dog biscuits did not help much, for after the first few shots he got the idea that to get a bit of dog biscuit meant the report of the gun, and he preferred not to eat on those terms. So we just tied him and Scout II right alongside the firing stand, and they soon curled up and went to sleep during the target practice.

PEPPER, THE FOXHOUND, FULL GROWN

I bought Scout II a few days after returning to Interlaken, and at the same time purchased a fine pointer puppy for the kennel of Mr. Warner, of the FIELD AND STREAM publications. The setter was a black, white and tan-ticked dog, seven months old; sire, Buccaneer's Mark (Buccaneer—Flavilla's Ruby); dam, Champion Captain Whitestone's Queen (Ch. Captain Whitestone—Tray Dan Gladstone)—a good breeding, less inbred than Scout I, and therefore more able to withstand distemper. For a long while I hesitated between him and an orange and white puppy of the Whitestone stock, a splendid litter, all of whom gave good accounts of themselves; but, while I hesitated, every last one of them was bought!

PEPPER, SCOUT II (EIGHT MONTHS OLD), AND THEIR MASTER

The new puppy was a very handsome dog, marked much the same as Ch. Count Whitestone II, with black head and ears, with white parting line, white body lightly ticked, and black patch on rump and root of tail. Tan, as usual, on chops, inside of ears, tan "eyebrows" over eyes, and a few tan ticks on legs. Like all setter pups, this dog proved exceedingly affectionate and companionable. When he first arrived, the most noticeable thing about him was his speed. He seemed to have lots of it on exhibition, and gave Pep, the fast foxhound, all he could do to catch him. The advantage of having at least two dogs now became very evident as the days went by, for these two played the live-long day when not sunning themselves out in the yard. One or the other would get up after a short sleep and challenge his chum to a race, whereupon the whole yard would be torn up, the vegetable garden mauled unmercifully, and the whole air and sky would seem full of racing black, white and tan streaks. Great work for both of them; kept them in iron-hard condition, and took off some of the fat that Pep had been accumulating during the winter.

For the first month after Scout II's arrival I did nothing in the way of training. He was very nervous and timid, and apparently had little sense or bird nose, for during our walks afield he never pointed small birds as Scout I always did. There was a tremendous difference in character between the two setters, Scout I aggressive and fearless to a degree, Scout II backward, timid and lacking initiative. But I bided my time. Many a puppy who points birds of all sorts when very young gets over it about the fifth month and will then only point large birds or game. This was so with Scout II. My pigeons always roused him to the highest pitch of enthusiasm, and his puppy points on the neighbors' chickens were very laughable and a constant delight to his owner, who began to realize that he had here a real bird dog.

In a few weeks I began to notice that in a quiet way I was being silently adored by my puppy. No matter where I went, within a very few minutes the pup would come trotting up and curl down somewhere near me. If I went out and shut the door between him and me, he would bark and carry on until let out, when he would lie down in the sun just as near me as he could get. That was what I had been waiting for—to have him arrive at that state of mind where he would do anything in the world to please his idol. That was the time to begin training, not before, when his timidity and lack of confidence in his new master would simply make him bolt at any thought of being forced to do anything. A puppy's mentality is much more elementary than even that of a two-year-old child; he simply does not get your meaning in most cases, and, not being able to comprehend what you want, gets frightened at not being able to please you.

There are a number of good booklets on dog training, the best of them being Haberlein's "Amateur Trainer" and Dr. Burette's "Modern Breaking." Then there

is Hammond's "Dog Training," an older work, but full of good ideas. I read and re-read them all carefully while preparing myself for the work of training Scout, and, besides them, had much valuable advice from good dog breakers who have not published their methods. Haberlein's book I should say would be the best manual for the professional breaker who wants to get good and permanent results in the shortest possible time, and his method has the characteristic German thoroughness from the ground up. Much of it the dog owner who loves his pets can hardly agree with, being unnecessarily harsh for a pet dog to undergo; but the actual training method advocated by him is sound and thorough and will get results with the most backward puppy. Dr. Burette takes the opposite view from him in the conduction of the training curriculum, preferring field work before yard work, and publishes a method of pinching the dog's ear to enforce obedience in preference to the force collar. I should say that the force collar would be necessary with a grown dog, but other more humane methods of enforcing obedience will answer for a young puppy under a year old. Hammond's method is the one entirely by persuasion, using no force at all, and, of course, takes a lot of time and patience, obedience being almost entirely dependent upon the personal love of the dog for his master. Pups will be pups, and go their ways with the kindest master if so inclined, so that his method is sure to be long-winded and apt to result in failure in the excitement of actual field work. It is like the play method of teaching a dog to retrieve; if he gets the idea that it is a game he may or may not bring back the object to you, depending upon the caprice of the moment. This method was a partial failure with Blaze, because he always insisted upon a round of play with the ball or pad before making up his mind to bring it to his master.

THE FIRST STEP IN LEARNING "FETCH!"

However, for the amateur breaker I would advise getting and reading both of the first two books, and possibly the last, before devising any system of his own; furthermore, getting all sorts of hints from other men who have broken their own dogs. Tad, my old darkey down South, broke, after a fashion, many a dog, and one of his invariable rules was to "make 'em do something ebery time befo' dey eats." I have seen, with him, the spectacle of three pointers and a setter all "charging down" before four plates of food, not a dog daring to stir before being ordered to "hie on." The strongest impulse of all in a dog is to fill his skin with something edible, so that if you can command obedience in the face of that impulse you will not have much trouble with your dog breaking shot.

I began yard breaking with Scout II when he was eight months old, he having had a month of companionship and romps afield with Pep and myself before attempting any training. I used, in part, Haberlein's method for retrieving, omitting the force collar. Scout II was one of those dogs who would not stir nor pay any attention whatever if you rolled a ball and called "Fetch!" He simply did not get

your idea at all. He had a ball of his own which he would play with by the hour, but if you took it away from him and rolled it ever so little, he was through with that ball for some time. All he could understand was that you had taken the ball away from him, for some unknown reason. But one should be glad rather than otherwise if the dog shows that trait. It means that he has no "play retrieving" to unlearn and will later go and get anything that you want him to without ever a thought of playing with it himself.

My first lesson was "Sit down!" Calling him to me, I commanded, "Sit down!" at the same time firmly pressing down his hind quarters. Care should be taken at this time to intone your command in a kind voice, so that the puppy will not get frightened and get the idea that he has offended you in some way and is being punished. The lessons should be very short, three or four times and then plenty of petting and freedom, after which you go through the same thing again. In one afternoon I had him so that he would sit down with hardly a touch of the hand and would stay there until ordered up. As time went by, in maybe ten days' time, the mere raising of the hand and the command, "Sit down!" would bring him to pose, with his ears fallen and looking at you as if to say, "Here I am, master; anything that you say goes." A little later the mere raising of the hand is sufficient, but it will not come with the first week nor the second either. Meanwhile, at each meal I enforced the order, "Charge down!" pressing his head gently down and holding him there for some time, repeating "Charge!" in a firm, kind voice. In two weeks he got so that he would stay there without the restraining hand and not arise until the order "Hie on!" In order not to let him get this order irrevocably connected with his eating dish only, I used another method of "Charge!" for which I am indebted to Mr. Boyce, who is training Mr. Warner's pointer. A strong cord is attached to the dog's collar and led under your instep between the heel and sole of your shoe. The dog is standing beside you, and at the order "Charge!" given with upraised left hand, you pull firmly on the cord with your right. The dog sees your upraised hand beckoning him down, and feels a concealed impulse from the collar cord drawing him resistlessly downward into the proper position for "Charge!" *i. e.,* with head between outstretched paws. Never mind his hind quarters; he will attempt to roll over, but they will take care of themselves later if the head and paws are right. Under this impulse the dog slowly settles to correct charging position without ever your laying a hand on him, and soon comes to regard that outstretched hand as an order to charge which he *must* obey. Neither of these lessons is at all spectacular, and the dog will not like them much. They give him no chance to show off, and a dog is a veritable child when it comes to that!

Far different is it with retrieving. Here is something that he likes, and he will be as proud of that accomplishment as Punch, once he learns it. I used Haberlein's method, with modifications of my own. When you roll a ball or throw a stick and say "Fetch!" the dog has no idea whatever what you want. "Fetch!" to you means go and get something and bring it to the master—much too complicated for the dog's mentality to grasp. It is easy to you, because you know what "Fetch!" *means.* But to the dog it is just another queer sound, and if you get angry at his apparent stupidity, he sees that and gets unhappy and frightened. Now, a terrier will naturally run after any small object rolling or tumbling on the ground; it's in his blood as an earth dog. Not so a setter, who carries his head high and depends on nose and eyes to locate things. You must begin further back with him. The idea to inculcate is that "Fetch!" means to open his mouth and take something. With Haberlein the force collar is put on, the dog brought to "Sit down!" and the pad presented to the dog's mouth, with the order, "Fetch!" The collar is then pulled, and at the pain the dog opens his mouth to yell and the pad is instantly put in his mouth. Then comes "Hold it!" the dog's lower jaw being held by your hand to prevent it dropping the cob or pad. The dog soon learns to open his mouth promptly to avoid the pain of

the force collar and its spikes or constricting strap, as the case may be. I foresaw that a force collar would ruin a timid, nervous dog like Scout II. While not in the least afraid of other dogs, he had evidently had rough handling from men while in the kennel, and was afraid of all men, even his master. So I substituted for the force collar the direct opening of his mouth with a grip on the lower gums at the order "Fetch!" instead of using the force collar. At the third trial he held it like a lamb, and at the fourth opened his mouth himself and took the pad of his own accord, holding it sitting down while I walked around him. That was all for the first lesson, and after some half hour of play with Pep I called him off and repeated the lesson. Next day he had it down fine, and then I took the next step, which was "Fetch here!" walking away from him backwards and beckoning him on. He followed me about like a chicken, and at the order "Sit down!—Let go!" gave over the pad as nicely as anyone could wish. A few repetitions of this lesson were all for that day. Next day I tried "Fetch!" this time holding the pad a few inches below his mouth, and at the fourth repetition accidentally-on-purpose dropped it on the floor, whereat Scout picked it up and walked around after me with it, proud as a peacock. From that to throwing the pad a few yards away and commanding him, "Dead bird; go fetch!" was an easy step, and my pupil was so proud of this accomplishment that you couldn't try him often enough with it. Never once did the idea of running off with the pad on his own hook and playing with it occur to him.

The next step was to walk around with him at my heels and drop the pad unknown to him. Then "Fetch dead bird! Dead! Dead! Fetch!" and he would hunt for it, pick it up and bring it to me like an old-timer. Proud! Lord, that dog thought more of all this education than any college professor with a million diplomas! You will note that I used the terms and commands that you actually use in field work on quail; important, because if overlooked and a new set of terms used when hunting, the dog will be all at sea again. For this reason I do not like "To-ho!" I never use it in the field, but rather the word "Careful!" to the young puppy making game and drawing up on his birds. "To-ho!" means to stop, and that is just what you don't want the dog to do. When he goes into point he will stop himself, in a cataleptic fit, and you couldn't push him ahead if you tried. Rather, you repeat the order, "Careful!" or "Steady!" and work forward yourself with ready gun. At the rise of the covey you fire, and the next order to your dog will be "Charge!" if he attempts to break point. Then you reload and order the dog on, still repeating "Careful!" so that if any lone birds are still sitting he will point them. Then, if no birds are left, and the covey has been marked down, the next order the dog gets is "Fetch dead bird!" you meanwhile helping him find them and encouraging him to seek with the order "Dead! Dead! Fetch dead bird, Scout!" until all are located.

TEACHING "CHARGE!" WITHOUT TOUCHING THE DOG

Note cord attached to collar and passing under trainer's instep to his right hand.

At present writing this is as far as Scout's lessons have progressed. Aside from daily perfecting him in them and

teaching him implicit obedience to these simple commands at a distance, it is as far as I intend to go for the present, for meanwhile the field lessons are going ahead. At present I am using a pigeon, which has about the same scent as a woodcock and much fainter than quail. The pigeon has his wings clipped and is liberated in a field grown up to tall grass. Scout is brought on the scene and allowed to work over the ground, roading the pigeon's trail and coming to a puppy point when on the bird. Following this I shall buy a pair of quail, keeping them in a shallow box with muslin over it and a large pan of water sunk in the bottom, for quail must have access to lots of water. These will be tied out in the field with long, light cords and the puppy field-broken on them, which ought to put him in good shape for the coming winter's shooting.

Meanwhile, Mr. Warner's puppy, Shot, of the same age as Scout, has been under the care of a professional trainer for the last two months. She is considerably more advanced in her education than Scout, as more time has been put on her. Her trainer has merely to raise his hand at any time and she will charge, even if at full gallop, and in retrieving he can drop any object, walk around with the dog and then command "Fetch!" and she will hunt for it and bring it triumphantly to him. On being tried out on the pigeon scheme described above, she roaded the pigeon like a veteran, held steady on point, though there was a cord attached to her collar for stopping her in case she broke, and, as the pigeon walked away more and more, she went from point to roading and into point again, just like a full-grown dog. She is eight months old and is of typical first-class pointer extraction, being by Riprap's Jack out of Coffman's Lady Fishel.

A final note here—on distemper. I found it practically impossible to get a dog to fill my specifications, "a year old and over distemper." Most litters of good stock get sold quite young, and all are gone before nine months of age. The kennel advised me that they seldom have any trouble with distemper and do not allow the dogs to take it for future immunity, but they *do* protect their dogs against infection by a hypodermic injection of Pasteur's anti-distemper serum. While the immunity given by this is only temporary—about two months—two cubic centimeters of it injected under the skin inside each hind leg of your dog will protect him for that time, say during the critical months of early spring, when distemper is rife in the land. Both Shot and Scout were so treated on arrival. The dose of four cc. of serum costs 75 cents, and the steel hypodermic syringe of 5-cc. capacity costs $2.50. A vet. will charge you $2, plus the cost of the serum, to make the treatment; so I spent the money on a syringe and a tube of serum and did the job myself, knowing well that I would have to repeat it later. There is little pain caused by the operation. Repeated two months later, it gives you four months' immunity, for the months of April, May, June and July, by which time the dog is nearly a year old and much more able to withstand an attack of distemper. After that one injection every six months will carry him on well into maturity, when the danger of a fatal case is much less.

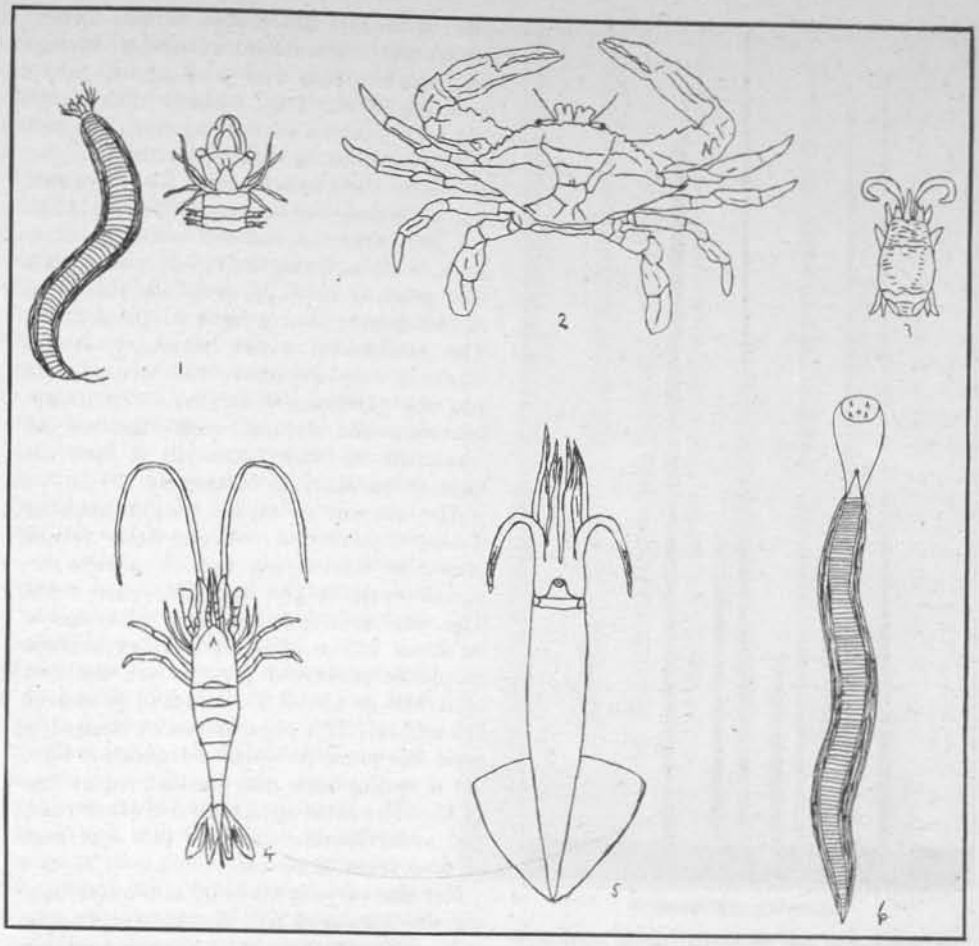
NEXT CHAPTER: FIELD TRAINING

"TO THE FLY"

Little fly, little fly, you are quite a fake,
But for catching rainbow trout you surely take the cake.
Starving creatures of the brooklet take a chance at you,
If at first they don't succeed they try until they do.

Down the river always floating, with your little pointed hook,
Snaring fishlets just for pasttime; are you surely not a crook?
Yet I love you and will have you, long as I can be about,
Little fly I want you badly, when I am in need of trout.

CHARLES A. SINGLER.



SALT-WATER BAITS

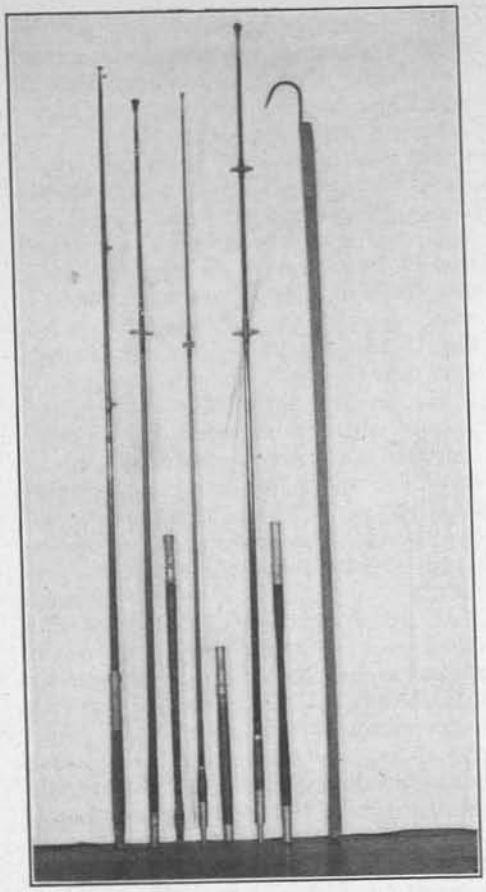
1. Sand worm. 2. Shedder crab. 3. Sand bug. 4. Shrimp. 5. Squid. 6. Blood worm.

SALT-WATER TACKLE AND BAITS

BY HERBERT K. SAVAGE

IF you are a dweller on the Atlantic Coast and have never heard the insistent call of the pounding surf, nor felt the fierce smash of the bluefish strike; if you have never anxiously watched the thinning out of the line on your reel-spool as you vainly tried to stop the rush of a mighty bass, believe me, sir, you have certainly missed something! If you have never been in a boat in the midst of the splashing weakfish which were annihilating a school of wriggling sand-eels, nor set forth in quest of the elusive, leaping tuna, nor attempted to lift the head off an eight-pound flounder or six-pound sea-bass through sixty feet of water, then truly you are letting a chance, and a good one, for midsummer sport in the open get away from you, and it is time to spend some of your money in the further enjoyment of health and happiness.

Many a man who would have liked to have tried this form of sport has been deterred by the initial cost as detailed to



SALT-WATER RODS

Two-piece boat rod; bethabara, spring butt, surf casting rod; 8 oz bay rod; greenheart surf rod, spring butt, 6-foot 3-inch tip; tuna gaff.

him by some surf-fishing enthusiast. The list, as furnished by this "bug," reads something as follows: One throw-off reel, 300 yards capacity, made of German silver and hard rubber, $18; one surf-casting rod, split bamboo, German silver mounted, agate guides and casting top, $20 to $25; two hundred yards of 15-thread line, finest linen, $2.50; hooks, sinkers, swivels, leaders, rod belt, special fish-basket, sand spike, etc., $10. Total cost from $50.50 to $55.50.

The expenditure of this amount of money is not at all necessary. A good, practical outfit may be bought for somewhere near the following prices: A 300-yard nickel and hard rubber throw-off reel for from $6 to $7.50, for a reel without the throw-off attachment further deduct about $2; a lancewood, one-piece, spring-butt surf-casting rod with agate guides and top about $10; without the agates, but with German silver mountings, the cost would be some $3 less. Only the best line should be used and the price for this would be, as stated above, from $2.25 to $2.50 for 200 yards. A rod belt is really necessary, with a spring-butt pole and such a belt costs from $1.50 to $2.50, according to the quality and weight of the leather. The sand-spike is not necessary, except where a very expensive rod is used, and you are particularly careful about its appearance and do not want the butt all scratched up when you jab it into the sand preparatory to baiting up.

The amount of tackle bought, such as hooks, sinkers and swivels, need not be great, as this supply can be always renewed even in the smallest coast town. The total cost for the above outfit would be about $25 at the most. If greenheart should be preferred for the rod, the cost of it will go above $10 and will be nearer $12 or $15. If a cheaper rod be desired, a good one-piece rod with a regulation butt, not a spring butt, may be had for as low as $5. The same applies to two-piece rods, and a serviceable wand of this sort may be had from $2.50 up.

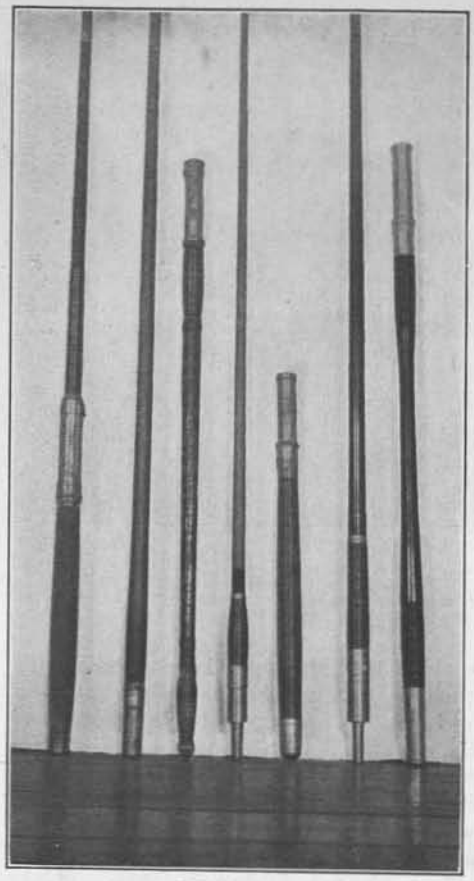
For the various kinds of salt-water fishing the same rod will not answer equally well; different styles of rods are used for boat and surf fishing, both as regards weight and length. For surf fishing a one-piece rod should be used, the tip being between five feet six inches and six feet three inches long. The weight for the former length should be about fourteen ounces and for the latter about sixteen ounces. Rods of this sort are made of several different kinds of wood. Greenheart, bethabara and lancewood are the most popular, although degama and snakewood are also used. A split-bamboo rod is generally admitted to be the best on account of its greater strength, but it requires much more attention than the wood rods on account of the wrappings, which must always be kept tight, otherwise the rod would be liable to buckle. Surf rods are generally equipped with spring butts, either of greenheart, hickory or split bam-

boo. Never buy an ash spring butt; this advice is given from personal experience. These vary in length from 24 to 30 inches, the best length for most people being 28 inches.

In the plain-butt rods, cane-wound, cord-wrapped and cork-covered butts of from 13 to 26 inches are great favorites with many fishermen who do not care for the spring butts on account of the smooth wood, which, they claim, is liable to turn in the hands while casting. The guides and tops should be of agate, but, where the fisherman does not want to pay their extra cost, German silver bell guides and a stirrup casting top of the same material will be found to give very good service. Trumpet guides of German silver are also found on many rods. Guides and casting tops are also made from a composition called adamant, which is a fair substitute for agate, but is liable to crumble and does not give the finished appearance to a rod that an agate guide does.

For deep-sea boat fishing a one-piece rod with tip length of not more than five feet six inches is about right. On account of the rougher usage to which this sort of rod is put, agate guides are not as practical as those made entirely of metal. The best guide for a deep-sea rod is either a bell guide or ring guide, of German silver, as this metal will not tarnish or rust. A stirrup casting top of the same metal will be found to answer all requirements, except where large game fish, such as tuna and tarpon, are in question, and then an agate top is a necessity. The two- or even three-piece rod is very popular for off-shore work, as it can be taken apart and stowed away when not in use, and in a small sea skiff or where there is a large crowd of fishermen this feature will be appreciated after one experience with a cumbersome one-piece tip.

For bay fishing for snappers or weakfish a light rod weighing not more than ten ounces will be found the most sportsmanlike outfit. A lighter rod than, say, five and one-half ounces may be used, but, as there is always more or less tide in the bays, the drag on the light rod will be found to be too heavy, especially where shedder crab is the bait used. Add to this a two- or three-pound fighting fish

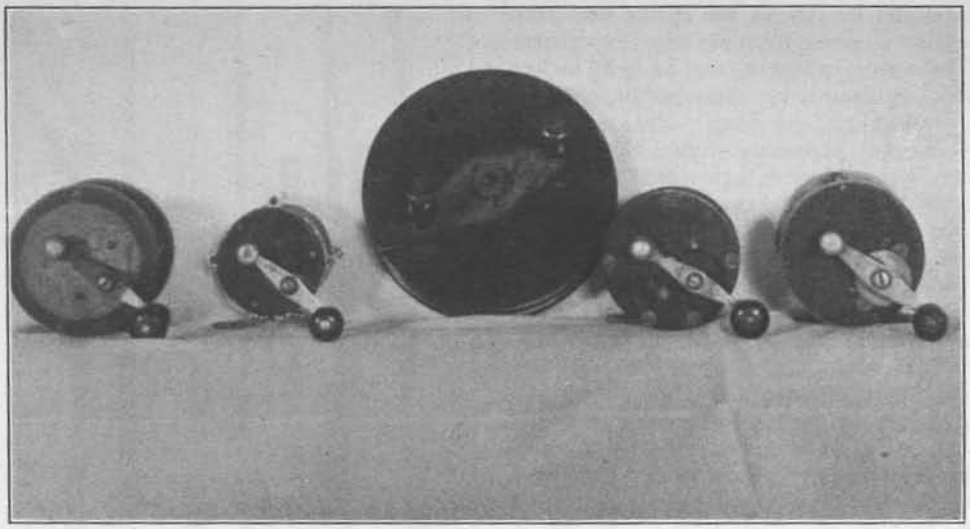


ROD BUTTS

16-inch cord wound; 27-inch split bamboo spring butt; 18-inch cane wound; 28-inch greenheart spring butt.

and you will readily see that the very light rod is not well adapted to this style of angling, strange as it may appear to our fresh-water angling enthusiasts.

The ideal surf-casting reel is one of the 300-yard size, holding about 200 yards of 15-thread line, and having a free spool or throw-off attachment, which allows the spool to run free while the handle remains stationary. This is a great boon in a surf reel, especially when making long casts into the wind's eye, as the head wind will slow up your line in an amazing manner, the slack of the line between reel and first guide being often blown back during the end of a long cast and caught in the rapidly revolving handle, the line being cut in half, as if with a sharp knife. Such a reel,



SALT-WATER BOAT REELS

300-yard German silver and rubber reel with protecting metal bands and facing; 150-yard nickel and rubber reel; rosewood off-shore reel; 250-yard rubber and nickel reel; 300-yard nickel and rubber reel with protecting bands.

with protecting metal bands around the rims of the two hard-rubber side-plates and a metal facing on the handle side of the reel, will be found practically indestructible even with the hardest use. Keep it clear of sand and well oiled or packed with vaseline and it will give you years of service.

For deep-sea fishing the throw-off attachment is not necessary, as there is very little casting to be done. A reel not smaller than the 300-yard size and preferably of the 350- or 400-yard size will give you the best satisfaction. With 15-thread line, a good rod and this reel you are prepared for any fish that comes along, be it mud shark, a 15-pound bluefish, tuna, albacore, or even channel bass, if you are bottom fishing. For bay fishing a reel of 150 yards capacity is plenty large enough, as most of the fishing is surface fishing, and even a giant 10-pound weakfish can be stopped within that distance. German silver is the best material for the metal part of any reel, as it will not rust with salt water and spray and also makes a better-looking reel.

There are four sizes of line much in use for surf casting: the 12-thread, the 15-thread, the 18-thread and the 21-thread special. The 15-thread is the most popular, but many fishermen prefer the 18-thread size, arguing that the sand in the undertow cuts through the 15-thread much more quickly than through the larger line. The 21-thread special is not seen as often as the other three sizes, many people being suspicious of its utility, as it is the same size as the 15-thread, although containing six more strands. The 12-thread is used by many expert fishermen, but, being thin, is soon frayed through, and after each day's fishing several feet of line will have to be cut off the end. One drawback to the 18-thread is that it takes up that much more water than the 15-size. Some prefer 18-thread line for off-shore fishing, but as most of the fish caught are flounders, sea bass, blackfish, croakers, weakfish or bluefish, this seems to me to be taking undue advantage of the fish and giving him no chance for his life. For medium-sized tuna, such as are seen and caught within several miles of the New Jersey coast, a 21-thread line, regular, is the usual size employed. For bay fishing a 6-thread line should be sufficiently large, as there is no heavy casting done, and the fish in the bays do not run as large as those outside in the open sea.

For bluefish, channel and striped bass hand-forged O'Shaugnessy snelled hooks,

sizes 6-0, 7-0 and 8-0 are almost universal. For kingfish a 2-0 or 1-0 snelled hook will be found about right, and for surf fishing for weakfish and flounders a 5-0 snelled hook. In deep-sea fishing for blackfish use the 3-0 size, both snelled and ringed hooks being suitable for this sort of fishing. For sea bass and flounder a slightly larger size, say 4-0, should be used, as these fish have larger mouths than the blackfish. A good method of rigging is to have a 4-0 or 5-0 as bottom hook and a 3-0 attached to the line about eight inches above that, as shown in the illustration on page 267. When jigging for weakfish and croakers, which come in season about the last of September and during October, a metal squid of about four or five ounces weight is the best lure. This squid is of block tin, with the hook at the lower end and a swivel at the upper end. The flash of this metal in the water attracts the fish and they evidently take it for a bait-fish and strike.

HOOKS, SWIVELS AND LEADS

Left to right—Sea bass rig with 4 oz. bank lead; kingfish hook; metal squid, with wire leader and barrel swivel; flounder hook; weakfish hook with pearl fin on leader; three-way adjustable swivel; right angle swivel; hand forged bass hook; 4 oz. pyramid lead; hook disgorger; 3 oz. bank lead; hand forged hook, twisted gut leader, three-way swivel and 3 oz. pyramid lead.

Jigging is hard work and is done as follows: Place the butt of the pole under your arm, let your squid down till you feel it strike bottom and then raise it about six inches from bottom. Sharply raise the tip of the rod about two feet, then allow it to sink downward again, trying to keep a taut line all the time, as the fish often strike on the downward trip, and with a loose line you are in no position to hook them. This alternate raising and lowering of the squid attracts the attention of any passing weakfish or croaker and sometimes that of a channel bass, flounder or skate, and on several occasions I have caught a dogfish while jigging. (Durn the luck!) When your fish is hooked do not try to lift his head off or pull him in half, for a weakfish has a very tender mouth (that is where he gets his misleading name) and the hook tears out very easily. If you wish to be a successful jigger you must be awake every minute of the time if you do not expect to be taken unawares and go home enthusiastic but fishless.

For surf fishing from the beach various baits are used: shedder crab, blood and sand worms, mullet, sand eels, squid bait and clams. Of these the shedder is the most popular, as it is the best all-around bait. Shedder crabs may be bought at most of the fish markets during the fishing season, in stores which regularly supply the angler with fishing outfits and in places in the big cities which make a special business of supplying all the different kinds of live bait, both for fresh- and salt-water fishing. The regular price at which they are sold is ten

cents apiece, three for a quarter. A small crab will make about four bass baits or six small weakfish or kingfish baits, while a large shedder is good for six large baits. Assuming that you have your crab in hand and that the old-timers are watching you for signs of greenness, proceed as follows: First cut or twist off his two claws, being careful that he does not get a strangle hold on your finger; break off all his legs; then break the back shell and the under coating of shell with the handle of your knife, and then peel off both shells. When all the soft part is exposed, lay the crab on its back and cut through the body in a straight line from the mouth to the tail, thus dividing the crab into two parts. Divide this again from side to side, allowing two leg sockets to each piece. This will make four baits from the body of the crab, and the claws, when the shell has been broken and peeled off, make two more. For a large crab, proceed in the same way, only divide the body into six pieces instead of four, allowing at least one leg socket to each piece of bait. Now, still showing no verdure in your eye, bait up your hook by passing the point through as much of the meat as possible, and finish up by bringing the barbed point entirely through the leg socket, which, having a shell rim, will tend to keep the bait from working off the hook during casts. Be sure to leave the barb entirely free and ready for business, and don't omit a businesslike wink at the astonished old-timer, who will have been watching you carefully for breaks the while.

Bloodworms and sandworms should be handled carefully, as they can give one a nasty nip, and, if the bite be neglected, a case of blood poisoning will likely result. Bloodworms are reddish purple in color, and are found on sandy and muddy shores and flats near low-water mark from South Carolina to Cape Cod. The sandworm, another enticing wiggler with a thousand legs a side, has a dark bluish-green color. He is found in mud and sandy bars and under rocks below high-water mark, and is very active and voracious, besides being armed with a strong horny jaw. His "stamping ground" is from New York northward as far as Alaska. The bloodworm grows about eight or nine inches long, and the sandworm (or clamworm) about the same, although he attains a length of about twelve inches in Alaska waters. The best way to hook either one of them is to run the hook down through the body for about two-thirds of their length and then expose the point of the hook, allowing the two ends of the worm to dangle free. For kingfish, one fair-sized worm will do; for bass, at least three.

The spearing—that small transparent minnow with the bright silver stripe along his side—and the mullet are found in the pools around inlets and in the undertow during the Fall months. The best manner of catching them is either with a short seine of very fine mesh, which requires two fellows to work successfully; with a throw-net, which is made circular and has lead weights around the edge and is thrown in such a way that it spreads out, covers the school, and is closed by the weight of the leads and then hauled ashore by the attached rope; or by a long-handled scoop-net, also of very fine mesh (or it may be a crab-net lined inside with strong mosquito netting). The last way is the hardest and wettest manner of catching this sort of bait, but it is also much the cheapest, when initial cost of outfit is considered. The proper way to place these fish baits on a hook is to pass the point of the hook into the mouth, bring it out through the gill, and then hook it into and through the body about half-way down the length of the fish.

Sand eels appear along the shore about the beginning of September and stay until the end of October. They are washed up on the shore by the waves and are speedily pounced upon and eaten by the sand fleas which swarm upon the beach in such numbers. The easiest way to collect them is by gathering up the ones washed upshore, but when enough cannot be secured in that way, scoop-net and a bathing suit are necessary.

Squid bait is the cheapest and most durable of all the salt-water baits, and, when *strictly fresh,* is a good striped-bass bait. The squid is a small cuttlefish, having a long, tubelike body and two fins at the tail shaped like the wings of an arrowhead. The head branches out into arms,

which are equipped on the under side with suckers. The eyes are on either side of the head proper, and underneath the head is a funnel, opening forward, through which the squid expels the water from the tube or mantle cavity which surrounds the bodily organs, and by this means propels itself backward through the water. In color it is purplish-red, changing often, when it is swimming about, to deep blue, purple and other kindred colors. These cuttlefish range in schools and are caught in the pound nets and sold by the fishermen for ten cents a pound. The method of cutting them up is as follows: Cut off the head (and be sure and not throw it away, as this is considered the choice piece for striped-bass fishing), rip open the tube lengthwise, clean out the interior, and cut the white meat remaining into strips about four or five inches long and about an inch or so wide. The two fins in themselves make two good baits. After cutting up into pieces, peel off the reddish outer skin, so that both sides of the bait will be white. This is more easily done after the cutting up than before. Leave one end of the bait to dangle free; this moves in the water something like the tail of a bait fish.

Soft clams are also used for surf fishing, but are considered mostly as a last resort when no other bait is available, because, being very soft, the action of the undertow and sand soon tears the clam from the hook.

For offshore fishing for fluke, sea bass and blackfish, squid bait is the very best bait of all. It has a habit of staying on the hook, and I have caught as many as seven fish on the same bait, and only changed it then, not because it was too badly torn for further use, but because we had a lot of baits already cut up and the sun and heat were drying them out. Often on the Takanassee Banks, off Long Branch, luck came our way while the boats in our immediate vicinity were not having any, just, and only, because they were using clams and we squid bait. This is also a good bait for bottom fishing for weakfish and croakers during October.

For black fishing close to wrecks, pilings, etc., we have found the sand crab, or sand bug, particularly good. These bugs are found in the undertow and in the wet sand below high-water mark, and a large number may be collected in a short time by digging down a short distance. To put them on the hook, run the point in from underneath and bring it out through the hard shell on the back near the middle of the bug. With this bait you will have to hook your fish very quickly, as the blackfish and cunners have a habit of cleaning out all the meat and leaving only the shell on the hook.

Clams are most often used for deep-sea fishing, but as each clam is only good for two baits, the neck making one and the lips and soft stomach the other, we have stopped using them entirely and stick to squid and sand bugs.

When fishing from a boat for bluefish, weakfish or tuna, chumming is often resorted to in order to attract the fish to the vicinity of the boat. A machine like a meat grinder, only much larger, is bolted onto a board, and into this are fed whole herring or menhaden, which, being oily, create a "slick" on the surface of the water when thrown overboard in a hashed-up state. This oil drifts along the surface with the wind and soon a long greasy streak extends to leeward, and any fish striking this path turns and swims along it, feeding on the ground-up pieces as he comes, and by the time he reaches the boat is in a properly receptive mood and will probably be hooked—and *maybe* landed!

For bay fishing, shedder crab and shrimp are most often used as bait. Cut up the crab in the same way as for surf casting, only do not use as large pieces, and hook them in the same way. The best way to bait a shrimp is to hook him through the end of the tail and leave him free to wriggle around and attract the fish. Shrimp are also used for chumming in the bays, but as they cost from seventy cents to one dollar a quart, this makes quite expensive fishing. A hook with a piece of mother-of-pearl on the gut snell will be a great help when bay fishing, and, although these hooks cost a trifle more than the regular kind, they will repay you in the number of fish caught.

(To be concluded)

DESERT GOLD

A NOVEL, BY ZANE GREY

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VII

WHITE HORSES

"A CRIPPLED Yaqui! Why the hell did you saddle yourself with him?" roared Belding, as he laid Gale upon the bed.

Belding had grown hard these late, violent weeks.

"Because I chose," whispered Gale, in reply. "Go after him—he dropped in the trail—across the river—near the first big *saguaro*."

Belding began to swear as he fumbled with matches and the lamp; but as the light flared up he stopped short in the middle of a word.

"You said you weren't hurt?" he demanded, in sharp anxiety, as he bent over Gale.

"I'm only—all in. . . . Will you go—or send some one—for the Yaqui?"

"Sure, Dick, sure," Belding replied, in softer tones. Then he stalked out; his heels rang on the flagstones; he opened a door and called: "Mother—girls, here's Dick back. He's done up. . . . Now—no, no, he's not hurt or in bad shape. You women! . . . Do what you can to make him comfortable. I've got a little job on hand."

There were quick replies that Gale's dulling ears did not distinguish. Then it seemed Mrs. Belding was beside his bed, her very presence so cool and soothing and helpful; and Mercedes and Nell, wide-eyed and white-faced, were fluttering around him. He drank thirstily, but refused food. He wanted rest. And with their faces drifting away in a kind of haze, with the feeling of gentle hands about him, he lost consciousness.

He slept twenty hours. Then he arose, thirsty, hungry, lame, overworn, and presently went in search of Belding and the business of the day.

"Your Yaqui was near dead, but guess we'll pull him through," said Belding. "Dick, the other day that Indian came here by rail and foot and Lord only knows how else, all the way from New Orleans! He spoke English better than most Indians, and I know a little Yaqui. I got some of his story and guessed the rest. The Mexican government is trying to root out the Yaquis. A year ago his tribe was taken in chains to a Mexican port on the Gulf. The fathers, mothers, children, were separated and put in ships bound for Yucatan. There they were made slaves on the great henequen plantations. They were driven, beaten, starved. Each slave had for a day's rations a hunk of sour dough, no more. Yucatan is low, marshy, damp, hot. The Yaquis were bred on the high, dry Sonoran plateau, where the air is like a knife. They dropped dead in the henequen fields, and their places were taken by more. You see, the Mexicans won't kill outright in their war of extermination of the Yaquis. They get use out of them. It's a horrible thing. . . . Well, this Yaqui you brought in escaped from his captors, got aboard ship, and eventually reached New Orleans. Somehow he traveled way out here. I gave him a bag of food, and he went off with a Papago Indian. He was a sick man then.

And he must have fallen foul of some Greasers."

Gale told of his expereince at Papago Well.

"That raider who tried to grind the Yaqui under a horse's hoofs—he was a hyena!" concluded Gale, shuddering. "I've seen some blood spilled and some hard sights, but that inhuman devil took my nerve. Why, as I told you, Belding, I missed a shot at him—not twenty paces!"

"Dick, in cases like that the sooner you clean up the bunch the better," said Belding, grimly. "As for hard sights—wait till you've seen a Yaqui do up a Mexican. Bar none, that is the limit! It's blood lust, a racial hate, deep as life, and terrible. The Spaniards crushed the Aztecs four or five hundred years ago. That hate has had time to grow as deep as a cactus root. The Yaquis are mountain Aztecs. Personally, I think they are noble and intelligent, and if let alone would be peaceable and industrious. I like the few I've known. But they are a doomed race. Have you any idea what ailed this Yaqui before the raider got in his work?"

"No, I haven't. I noticed the Indian seemed in bad shape; but I couldn't tell what was the matter with him."

"Well, my idea is another personal one. Maybe it's off color. I think that Yaqui was, or is, for that matter, dying of a broken heart. All he wanted was to get back to his mountains and die. There are no Yaquis left in that part of Sonora he was bound for."

"He had a strange look in his eyes," said Gale, thoughtfully.

"Yes, I noticed that. But all Yaquis have a wild look. Dick, if I'm not mistaken, this fellow was a chief. It was a waste of strength, a needless risk for you to save him, pack him back here. But, damn the whole Greaser outfit generally, I'm glad you did!"

Gale remembered then to speak of his concern for Ladd.

"Laddy didn't go out to meet you," replied Belding. "I knew you were due in any day, and as there's been trouble between here and Casita, I sent him that way. Since you've been out our friend Carter lost a bunch of horses and a few steers. Did you get a good look at the horses those raiders had at Papago Well?"

Dick had learned, since he had become a ranger, to see everything with keen, sure, photographic eye; and, being put to the test so often required of him, he described the horses as a dark-colored drove, mostly bays and blacks, with one spotted sorrel.

"Some of Carter's — sure as you're born!" exclaimed Belding. "His bunch has been split up, divided among several bands of raiders. He has a grass ranch up here in Three Mile Arroyo. It's a good long ride in U. S. territory from the border."

"Those horses I saw will go home, don't you think?" asked Dick.

"Sure. They can't be caught or stopped."

"Well, what shall I do now?"

"Stay here and rest," bluntly replied Belding. "You need it. Let the women fuss over you—doctor you a little. When Jim gets back from Sonoyta I'll know more about what we ought to do. By Lord! it seems our job now isn't keeping Japs and Chinks out of the U. S. It's keeping our property from going into Mexico."

"Are there any letters for me?" asked Gale.

"Letters! Say, my boy, it 'd take something pretty important to get me or any man here back Casita way. If the town is safe these days the road isn't. It's a month now since any one went to Casita."

Gale had received several letters from his sister Elsie, the last of which he had not answered. There had not been much opportunity for writing on his infrequent returns to Forlorn River; and, besides, Elsie had written that her father had stormed over what he considered Dick's falling into wild and evil ways.

"Time flies," said Dick. "George Thorne will be free before long, and he'll be coming out. I wonder if he'll stay here or try to take Mercedes away?"

"Well, he'll stay right here in Forlorn River, if I have any say," replied Belding. "I'd like to know how he'd ever get that Spanish girl out of the country now, with all the trails overrun by rebels and raiders. It'd be hard to disguise her. Say,

Dick, maybe we can get Thorne to stay here. You know, since you've discovered the possibility of a big water supply, I've had dreams of a future for Forlorn River. . . . If only this war was over! Dick, that's what it is—war—scattered war along the northern border of Mexico from gulf to gulf. What if it isn't our war? We're on the fringe. No, we can't develop Forlorn River until there's peace."

The discovery that Belding alluded to was the one that might very well lead to the making of a wonderful and agricultural district of Altar Valley. While in college Dick Gale had studied engineering, but he had not set the scientific world afire with his brilliance. Nor after leaving college had he been able to satisfy his father that he could hold a job. Nevertheless, his smattering of engineering skill bore fruit in the last place on earth where anything might have been expected of it—in the desert. Gale had always wondered about the source of Forlorn River. No white man or Mexican, or, so far as known, no Indian, had climbed those mighty broken steps of rock called No Name Mountains, from which Forlorn River was supposed to come. Gale had discovered a long, narrow, rock-bottomed and rock-walled gulch that could be dammed at the lower end by the dynamiting of leaning cliffs above. An inexhaustible supply of water could be stored there. Furthermore, he had worked out an irrigation plan to bring the water down for mining uses, and to make a paradise out of that part of Altar Valley which lay in the United States. Belding claimed there was gold in the arroyos, gold in the gulches, not in quantities to make a prospector rejoice, but enough to work for. And the soil on the higher levels of Altar Valley needed only water to make it grow anything the year round. Gale, too, had come to have dreams of a future for Forlorn River.

On the afternoon of the following day Ladd unexpectedly appeared leading a lame and lathered horse into the yard. Belding and Gale, who were at work at the forge, looked up and were surprised out of speech. The legs of the horse were raw and red, and he seemed about to drop. Ladd's sombrero was missing; he wore a bloody scarf round his head; sweat and blood and dust had formed a crust on his face; little streams of powdery dust slid from him; and the lower half of his scarred chaps were full of broken white thorns.

"Howdy, boys," he drawled. "I shore am glad to see you all."

"Where 'n hell's your hat?" demanded Belding, furiously. It was a ridiculous greeting. But Belding's words signified little. The dark shade of worry and solicitude crossing his face told more than his blank amaze.

The ranger stopped unbuckling the saddle girths, and, looking at Belding, broke into his slow, cool laugh.

"Tom, you recollect that whooper of a *saguaro* up here where Carter's trail branches off the main trail to Casita? Well, I climbed it an' left my hat on top for a woodpecker's nest."

"You've been running—fighting?" queried Belding, as if Ladd had not spoken at all.

"I reckon it'll dawn on you after a while," replied Ladd, slipping the saddle.

"Laddy, go in the house to the women," said Belding. "I'll tend to your horse."

"Shore, Tom, in a minute. I've been down the road. An' I found hoss tracks an' steer tracks goin' across the line. But I seen no sign of raiders till this mornin'. Slept at Carter's last night. That raid the other day cleaned him out. He's shootin' mad. Well, this mornin' I rode plumb into a bunch of Carter's horses, runnin' wild for home. Some Greasers were tryin' to head them round an' chase them back across the line. I rode in between an' made matters embarrassin'. Carter's horses got away. Then me an' the Greasers had a little game of hide an' seek in the cactus. I was on the wrong side, an' had to break through their line to head toward home. We run some. But I had a closer call than I'm stuck on havin'."

"Laddy, you wouldn't have any such close calls if you'd ride one of my horses," expostulated Belding. "This broncho of yours can run, and Lord knows he's game. But you want a big, strong horse, Mexican bred, with cactus in his blood. Take one

of the bunch—Bull, White Woman, Blanco José."

"I had a big, fast horse a while back, but I lost him," said Ladd. "This bronch ain't so bad. Shore Bull an' that white devil with his Greaser name—they could run down my bronch, kill him in a mile of cactus. But, somehow, Tom, I can't make up my mind to take one of them grand white horses. Shore I reckon I'm kinda soft. An' mebbe I'd better take one before the raiders clean up Forlorn River."

Belding cursed low and deep in his throat, and the sound resembled muttering thunder. The shade of anxiety on his face changed to one of dark gloom and passion. Next to his wife and daughter there was nothing so dear to him as those white horses. His father and his grandfather—all his progenitors of whom he had trace—had been lovers of horses. It was in Belding's blood.

"Laddy, before it's too late can't I get the whites away from the border?"

"Mebbe it ain't too late; but where can we take them?"

"To San Felipe?"

"No. We've more chance to hold them here."

"To Casita and the railroad?"

"Afraid to risk gettin' there. An' the town's full of rebels who need hosses."

"Then straight north?"

"Shore man, you're crazy. There's no water, no grass for a hundred miles. I'll tell you, Tom, the safest plan would be to take the white bunch south into Sonora, into some wild mountain valley. Keep them there till the raiders have traveled on back east. Pretty soon there won't be any rich pickin' left for these Greasers. An' then they'll ride on to new ranges."

"Laddy, I don't know the trails into Sonora. An' I can't trust a Mexican or a Papago. Between you and me, I'm afraid of this Indian who herds for me."

"I reckon we'd better stick here, Tom. . . . Dick, it's some good to see you again. But you seem kinda quiet. Shore you get quieter all the time. Did you see any sign of Jim out Sonoyta way?"

Then Belding led the lame horse toward the watering-trough, while the two rangers went toward the house. Dick was telling Ladd about the affair at Papago Well when they turned the corner under the porch. Nell was sitting in the door. She rose with a little scream and came flying toward them.

"Now I'll get it," whispered Ladd. "The women'll make a baby of me. An' shore I can't help myself."

"Oh, Laddy, you've been hurt!" cried Nell, as with white cheeks and dilating eyes she ran to him and caught his arm.

"Nell, I only run a thorn in my ear."

"Oh, Laddy, don't lie! You've lied before. I know you're hurt. Come in to mother."

"Shore, Nell, it's only a scratch. My bronch throwed me."

"Laddy, no horse ever threw you." The girl's words and accusing eyes only hurried the ranger on to further duplicity.

"Mebbe I got it when I was ridin' hard under a mesquite, an' a sharp snag—"

"You've been shot! . . . Mama, here's Laddy, and he's been shot! . . . Oh, these dreadful days we're having! I can't bear them! Forlorn River used to be so safe and quiet. Nothing happened. But now! Jim comes home with a bloody hole in him—then Dick—then Laddy! . . . Oh, I'm afraid some day they'll *never* come home."

The morning was bright, still, and clear as crystal. The heat waves had not yet begun to rise from the desert. A soft gray, white, and green tint perfectly blended lay like a mantle over mesquite and sand and cactus. The cañons of distant mountain showed deep and full of lilac haze.

Nell sat perched high upon the topmost bar of the corral gate. Dick leaned beside her, now with his eyes on her face, now gazing out into the alfalfa field where Belding's thoroughbreds grazed and pranced and romped and whistled. Nell watched the horses. She loved them, never tired of watching them. But her gaze was too consciously averted from the yearning eyes that tried to meet hers to be altogether natural.

A great fenced field of dark velvety green alfalfa furnished a rich background for the drove of about twenty white horses. Even without the horses the field

would have presented a striking contrast to the surrounding hot, glaring blaze of rock and sand. Belding had bred a hundred or more horses from the original stock he had brought up from Durango. His particular interest was in the almost unblemished whites, and these he had given especial care. He made a good deal of money selling this strain to friends among the ranchers back in Texas. No mercenary consideration, however, could have made him part with the great, rangy white horses he had gotten from the Durango breeder. He called them Blanco Diablo (White Devil), Blanco Sol (White Sun), Blanca Reina (White Queen), Blanca Mujer (White Woman), and El Gran Toro Blanco (The Big White Bull). Belding had been laughed at by ranchers for preserving the sentimental Durango names, and he had been unmercifully ridiculed by cowboys. But the names had never been changed.

Blanco Diablo was the only horse in the field that was not free to roam and graze where he listed. A stake and a halter held him to one corner, where he was severely let alone by the other horses. He did not like this isolation. Blanco Diablo was not happy unless he was running, or fighting a rival. Of the two he would rather fight. If anything white could resemble a devil, this horse surely did. He had nothing beautiful about him, yet he drew the gaze and held it. The look of him suggested discontent, anger, revolt, viciousness. When he was not grazing or prancing, he held his long, lean head level, pointing his nose and showing his teeth. Belding's favorite was almost all the world to him, and he swore Diablo could stand more heat and thirst and cactus than any other horse he owned, and could run down and kill any horse in the Southwest. The fact that Ladd did not agree with Belding on these salient points was a great disappointment, and also a perpetual source for argument. Ladd and Lash both hated Diablo; and Dick Gale, after one or two narrow escapes from being brained, had inclined to the cowboys' side of the question.

El Gran Toro Blanco upheld his name. He was a huge, massive, thick-flanked stallion, a kingly mate for his full-bodied, glossy consort, Blanca Reina. The other mare, Blanca Mujer, was dazzling white, without a spot, perfectly pointed, racy, graceful, elegant, yet carrying weight and brawn and range that suggested her relation to her forebears.

The cowboys admitted some of Belding's claims for Diablo, but they gave loyal and unshakable allegiance to Blanco Sol. As for Dick, he had to fight himself to keep out of arguments, for he sometimes imagined he was unreasonable about the horse. Though he could not understand himself, he knew he loved Sol as a man loved a friend, a brother. Free of heavy saddle and the clumsy leg shields, Blanco Sol was somehow all-satisfying to the eyes of the rangers. As long and big as Diablo was, Sol was longer and bigger. Also, he was higher, more powerful. He looked more a thing for action—speedier. At a distance the honorable scars and lumps that marred his muscular legs were not visible. He grazed aloof from the others, and did not cavort nor prance; but when he lifted his head to whistle, how wild he appeared, and proud and splendid! The dazzling whiteness of the desert sun shone from his coat; he had the fire and spirit of the desert in his noble head, its strength and power in his gigantic frame.

"Belding swears Sol never beat Diablo," Dick was saying.

"He believes it," replied Nell. "Dad is queer about that horse."

"But Laddy rode Sol once—made him beat Diablo. Jim saw the race."

Nell laughed. "I saw it, too. For that matter, even I have made Sol put his nose before Dad's favorite."

"I'd like to have seen that. Nell, aren't you ever going to ride with me?"

"Some day—when it's safe."

"Safe!"

"I—I mean when the raiders have left the border."

"Oh, I'm glad you mean that," said Dick, laughing. "Well, I've often wondered how Belding ever came to give Blanco Sol to me."

"He was jealous. I think he wanted to get rid of Sol."

"No? Why, Nell, he'd give Laddy or Jim one of the whites any day."

"Would he? Not Devil or Queen or White Woman. Never in this world! But Dad has lots of fast horses the boys could pick from. Dick, I tell you Dad wants Blanco Sol to run himself out—lose his speed on the desert. Dad is just jealous for Diablo."

"Maybe. He surely has strange passion for horses. I think I understand better than I used to. I owned a couple of racers once. They were just animals to me, I guess. But Blanco Sol!"

"Do you love him?" asked Nell; and now a warm, blue flash of eyes swept his face.

"Do I? Well, rather."

"I'm glad. Sol has been finer, a better horse since you owned him. He loves you, Dick. He's always watching for you. See him raise his head. That's for you. I know as much about horses as Dad or Laddy any day. Sol always hated Diablo, and he never had much use for Dad."

Dick looked up at her.

"It'll be—be pretty hard to leave Sol—when I go away."

Nell sat perfectly still.

"Go away?" she asked, presently, with just the faintest tremor in her voice.

"Yes. Sometimes when I get blue—as I am to-day—I think I'll go. But, in sober truth, Nell, it's not likely that I'll spend all my life here."

There was no answer to this. Dick put his hand softly over hers; and, despite her half-hearted struggle to free it, he held on.

"Nell!"

Her color fled. He saw her lips part. Then a heavy step on the gravel, a cheerful, complaining voice interrupted him, and made him release Nell and draw back. Belding strode into view round the adobe shed.

"Hey, Dick, that darned Yaqui Indian can't be driven or hired or coaxed to leave Forlorn River. He's well enough to travel. I offered him horse, gun, blanket, grub. But no go."

"That's funny," replied Gale, with a smile. "Let him stay—put him to work."

"It doesn't strike me funny. But I'll tell you what I think. That poor, homeless, heartbroken Indian has taken a liking to you, Dick. These desert Yaquis are strange folk. I've heard strange stories about them. I'd believe 'most anything. And that's how I figure his case. You saved his life. That sort of thing counts big with any Indian, even with an Apache. With a Yaqui maybe it's of deep significance. I've heard a Yaqui say that with his tribe no debt to friend or foe ever went unpaid. Perhaps that's what ails this fellow."

"Dick, don't laugh," said Nell. "I've noticed the Yaqui. It's pathetic the way his great gloomy eyes follow you."

"You've made a friend," continued Belding. "A Yaqui could be a real friend on this desert. If he gets his strength back he'll be of service to you, don't mistake me. He's welcome here. But you're responsible for him, and you'll have trouble keeping him from massacring all the Greasers in Forlorn River."

The probability of a visit from the raiders, and a dash bolder than usual on the outskirts of a ranch, led Belding to build a new corral. It was not sightly to the eye, but it was high and exceedingly strong. The gate was a massive affair, swinging on huge hinges and fastening with heavy chains and padlocks. On the outside it had been completely covered with barb wire, which would make it a troublesome thing to work on in the dark.

At night Belding locked his white horses in this corral. The Papago herdsman slept in the adobe shed adjoining. Belding did not imagine that any wooden fence, however substantially built, could keep determined raiders from breaking it down. They would have to take time, however, and make considerable noise; and Belding relied on these facts. Belding did not believe a band of night raiders would hold out against a hot rifle fire. So he began to make up some of the sleep he had lost. It was noteworthy, however, that Ladd did not share Belding's sanguine hopes.

Jim Lash rode in, reporting that all was well out along the line toward the Sonoyta Oasis. Days passed, and Belding kept his rangers home. Nothing was heard of raiders at hand. Many of the new comers, both American and Mexican, who came with wagons and pack trains from Casita, stated that property and life

were cheap back in that rebel-infested town.

One January morning Dick Gale was awakened by a shrill, menacing cry. He leaped up bewildered and frightened. He heard Belding's booming voice answering shouts, and rapid steps on flagstones. But these had not awakened him. Heavy breaths, almost sobs, seemed at his very door. In the cold and gray dawn Dick saw something white. Gun in hand, he bounded across the room. Just outside his door stood Blanco Sol.

It was not unusual for Sol to come poking his head in at Dick's door during daylight. But now in the early dawn, when he had been locked in the corral, it meant raiders—no less. Dick called softly to the snorting horse; and, hurriedly getting into clothes and boots, he went out with a gun in each hand. Sol was quivering in every muscle. Like a dog he followed Dick around the house. Hearing shouts in the direction of the corrals, Gale bent swift steps that way.

He caught up with Jim Lash, who was also leading a white horse.

"Hello, Jim! Guess it's all over but the fireworks," said Dick.

"I cain't say just what has come off," replied Lash. "I've got the Bull. Found him runnin' in the yard."

They reached the corral to find Belding shaking, roaring like a madman. The gate was open, the corral was empty. Ladd stooped over the ground, evidently trying to find tracks.

"I reckon we might jest as well cool off an' wait for daylight," suggested Jim.

"Shore. They've flown the coop, you can gamble on that. Tom, where's the Papago?" said Ladd.

"He's gone, Laddy—gone!"

"Double-crossed us, eh? I see here's a crowbar lyin' by the gatepost. That Indian fetched it from the forge. It was used to pry out the bolts an' steeples. Tom, I reckon there wasn't much time lost forcin' that gate."

Belding, in shirt sleeves and barefooted, roared with rage. He said he had heard the horses running as he leaped out of bed.

"What woke you?" asked Laddy.

"Sol. He came whistling for Dick. Didn't you hear him before I called you?"

"Hear him! He came thunderin' right under my window. I jumped up in bed, an' when he let out that blast Jim lit square in the middle of the floor, an' I was scared stiff. Dick, seein' it was your room he blew into, what did you think?"

"I couldn't think. I'm shaking yet, Laddy."

"Boys, I'll bet Sol spilled a few raiders if any got hands on him," said Jim. "Now, let's sit down an' wait for daylight. It's my idea we'll find some of the horses runnin' loose. Tom, you go an' get some clothes on. It's freezin' cold. An' don't forget to tell the women folks we're all right."

Daylight made clear some details of the raid. The cowboys found tracks of eight raiders coming up from the river bed, where their horses had been left. Evidently the Papago had been false to his trust. His few personal belongings were gone. Lash was correct in his idea of finding more horses loose in the fields. The men soon rounded up eleven of the whites, all more or less frightened, and among the number were Queen and Blanca Mujer. The raiders had been unable to handle more than one horse for each man. It was bitter irony of fate that Belding should lose his favorite, the one horse more dear to him than all the others. Somewhere out on the trail a raider was fighting the iron-jawed savage Blanco Diablo.

"I reckon we're some lucky," observed Jim Lash.

"Lucky ain't enough word," replied Ladd. "You see, it was this way. Some of the raiders piled over the fence while the others worked on the gate. Mebbe the Papago went inside to pick out the best horses. But it didn't work except with Diablo, an' how they ever got him I don't know. I'd have gambled it'd take all of eight men to steal him. But Greasers have got us skinned on handlin' hosses."

Belding was unconsolable. He cursed and railed, and finally declared he was going to trail the raiders.

"Tom, you just ain't agoin' to do nothin' of the kind," said Ladd, coolly.

Belding groaned and bowed his head.

"Laddy, you're right," he replied, presently. "I've got to stand it. I can't leave

the women and my property. But it's sure tough. I'm sore way down deep, and nothin' but blood would ever satisfy me."

"Leave that to me an' Jim," said Ladd.

"What do you mean to do?" demanded Belding, starting up.

"Shore I don't know yet. . . . Give me a light for my pipe. An' Dick, go fetch out your Yaqui."

VIII

THE RUNNING OF BLANCO SOL

THE Yaqui's strange dark glance roved over the corral, the swinging gate with its broken fastenings, the tracks in the road, and then rested upon Belding.

"Malo," he said, and his Spanish was clear.

"Shore Yaqui, about eight bad men, an' a traitor Indian," said Ladd.

"I think he means my herder," added Belding. 'If he does, that settles any doubt it might be decent to have—Yaqui—malo Papago—Si?"

The Yaqui spread wide his hands. Then he bent over the tracks in the road. They led everywhither, but gradually he worked out of the thick net to take the trail that the cowboys had followed down to the river. Belding and the rangers kept close at his heels. Occasionally, Dick lent a helping hand to the still feeble Indian. He found a trampled spot where the raiders had left their horses. From this point a deeply defined narrow trail led across the dry river bed.

Belding asked the Yaqui where the raiders would head for in the Sonora Desert. For answer the Indian followed the trail across the stream of sand, through willows and mesquite, up to the level of rock and cactus. At this point he halted. A sand-filled, almost obliterated trail led off to the left, and evidently went round to the east of No Name Mountains. To the right stretched the road toward Papago Well and the Sonoyta Oasis. The trail of the raiders took a southeasterly course over untrodden desert. The Yaqui spoke in his own tongue, then in Spanish.

"Think he means slow march," said Belding. "Laddy, from the looks of that trail the Greasers are having trouble with the horses."

"Tom, shore a boy could see that," replied Laddy. "Ask Yaqui to tell us where the raiders are headin', an' if there's water."

It was wonderful to see the Yaqui point. His dark hand stretched; he sighted over his stretched finger at a low white escarpment in the distance. Then with a stick he traced a line in the sand, and then at the end of that another line at right angles. He made crosses and marks and holes, and as he drew the rude map he talked in Yaqui, in Spanish; with a word here and there in English. Belding translated as best he could. The raiders were heading southeast toward the railroad that ran from Nogales down into Sonora. It was four days' travel, bad trail, good sure waterhole one day out; then water not sure for two days. Raiders traveling slow; bothered by too many horses, not looking for pursuit; were never pursued; could be headed and ambushed that night at the first waterhole, a natural trap in a valley.

The men returned to the ranch. The rangers ate and drank while making hurried preparations for travel. Blanco Sol and the cowboys' horses were fed, watered, and saddled. Ladd again refused to ride one of Belding's whites. He was quick and cold.

"Get me a long-range rifle an' lots of shells. Rustle now," he said.

"Laddy, you don't want to be weighted down?" protested Belding.

"Shore I want a gun that'll outshoot the dinky little carbines an' muskets used by the rebels. Trot one out an' be quick."

"I've got a .405, a long-barreled heavy rifle that'll shoot a mile. I use it for mountain sheep. But, Laddy, it'll break that broncho's back."

"His back won't break so easy. . . . Dick, take plenty of shells for your Remington. An' don't forget your field glass."

In less than an hour after the time of the raid the three rangers, heavily armed and superbly mounted on fresh horses, rode out on the trail. As Gale turned to look back from the far bank of Forlorn River, he saw Nell waving a white scarf. He stood high in his stirrups and waved

his sombrero. Then the mesquites hid the girl's slight figure, and Gale wheeled grim-faced to follow the rangers.

They rode in single file with Ladd in the lead. He did not keep to the trail of the raiders all the time. He made short cuts. The raiders were traveling leisurely, and they evinced a liking for the most level cactus-covered stretches of ground. But the cowboy took a bee-line course for the white escarpment pointed out by the Yaqui; and nothing save deep washes and impassable patches of cactus or rocks made him swerve from it. He kept the broncho at a steady walk over the rougher places and at a swinging Indian canter over the hard and level ground. The sun grew hot and the wind began to blow. Dust clouds rolled along the blue horizon. Whirling columns of sand, like waterspouts at sea, circled up out of white arid basins, and swept away and spread aloft before the wind. The escarpment began to rise, to change color, to show breaks upon its rocky face.

Whenever the rangers rode out on the brow of a knoll or ridge or an eminence, before starting to descend, Ladd required of Gale a long, careful, sweeping survey of the desert ahead through the field glass. There were streams of white dust to be seen, streaks of yellow dust, trailing low clouds of sand over the glistening dunes, but no steadily rising, uniformly shaped puffs that would tell a tale of moving horses on the desert.

At noon the rangers got out of the thick cactus. Moreover, the gravel-bottomed washes, the low weathering, rotting ledges of yellow rock gave place to hard sandy rolls and bare clay knolls. The desert resembled a rounded hummocky sea of color. All light shades of blue and pink and yellow and mauve were there dominated by the glaring white sun. Mirages glistened, wavered, faded in the shimmering waves of heat. Dust as fine as powder whiffed up from under the tireless hoofs.

The rangers rode on and the escarpment began to loom. The desert floor inclined perceptibly upward. When Gale got an unobstructed view of the slope of the escarpment he located the raiders and horses. In another hour's travel the rangers could see with naked eyes a long, faint moving streak of black and white dots.

"They're headin' for that yellow pass," said Ladd, pointing to a break in the eastern end of the escarpment. "When they get out of sight we'll rustle. I'm thinkin' that waterhole the Yaqui spoke of lays in the pass."

The rangers traveled swiftly over the remaining miles of level desert leading to the ascent of the escarpment. When they achieved the gateway of the pass the sun was low in the west. Dwarfed mesquite and greasewood appeared among the rocks. Ladd gave the word to tie up horses and go forward on foot.

The narrow neck of the pass opened and descended into a valley half a mile wide, perhaps twice that in length. It had apparently unscalable slopes of weathered rock leading up to beetling walls. With floor bare and hard and white, except for a patch of green mesquite near the far end, it was a lurid and desolate spot, the barren bottom of a desert bowl.

"Keep down, boys," said Ladd. "There's the waterhole, an' hosses have sharp eyes. Shore the Yaqui figgered this place. I never seen its like for a trap."

Both white and black horses showed against the green, and a thin curling column of blue smoke rose lazily from amid the mesquites.

"I reckon we'd better wait till dark, or mebbe daylight," said Jim Lash.

"Let me figger some. Dick, what do you make of the outlet to this hole? Looks rough to me."

With his glass Gale studied the narrow construction of walls and roughened rising floor.

"Laddy, it's harder to get out at that end than here," he replied.

"Shore that's hard enough. Let me have a look. . . . Well, boys, it don't take no figgerin' for this job. Jim, I'll want you at the other end blockin' the pass when we're ready to start."

"When 'll that be?" inquired Jim.

"Soon as it's light enough in the mornin'. That Greaser outfit will hang till tomorrow. There's no sure water ahead for two days, you remember."

"I reckon I can slip through to the other end after dark," said Lash thought-

fully. "It might get me in bad to go round."

The rangers stole back from the vantage point and returned to their horses, which they untied and left farther round among broken sections of cliff. For the horses it was a dry, hungry camp, but the rangers built a fire and had their short though strengthening meal.

The location was high, and through a break in the jumble of rocks the great colored void of desert could be seen rolling away endlessly to the west. The sun set, and after it had gone down the golden tips of mountains dulled, their lower shadows creeping upward.

Jim Lash rolled in his saddle blanket, his feet near the fire, and went to sleep. Ladd told Gale to do likewise while he kept the fire up and waited until it was late enough for Jim to undertake circling round the raiders. When Gale awakened the night was dark, cold, windy. The stars shone with white brilliancy. Jim was up saddling his horse, and Ladd was talking low. When Gale rose to accompany them both rangers said he need not go. But Gale wanted to go, because that was the thing Ladd or Jim would have done.

With Ladd leading, they moved away into the gloom. Advance was exceedingly slow, careful, silent. Under the walls the blackness seemed impenetrable. The horse was as cautious as his master. Ladd did not lose his way, nevertheless he wound between blocks of stone and clumps of mesquite, and often tried a passage to abandon it. Finally the trail showed pale in the gloom, and eastern stars twinkled between the lofty ramparts of the pass.

The advance here was still as stealthily made as before, but not so difficult or slow. When the dense gloom of the pass lightened, and there was a wide space of sky and stars overhead, Ladd halted and stood silent a moment.

"Luck again!" he whispered. "The wind's in your face, Jim. The horses won't scent you. Go slow. Don't crack a stone. Keep close under the wall. Try to get up as high as this at the other end. Wait till daylight before riskin' a loose slope. I'll be ridin' the job early. That's all."

Ladd's cool, easy speech was scarcely significant of the perilous undertaking. Lash moved very slowly away, leading his horse. The soft pads of hoofs ceased to sound about the time the gray shape merged into the black shadows. Then Ladd touched Dick's arm, and turned back up the trail.

But Dick tarried a moment. He wanted a fuller sense of that ebony-bottomed abyss, with its pale encircling walls reaching up to the dusky blue sky and the brilliant stars. There was absolutely no sound.

He retraced his steps down, soon coming up with Ladd; and together they picked a way back through the winding recesses of cliff. The campfire was smoldering. Ladd replenished it and lay down to get a few hours' sleep, while Gale kept watch. The after part of the night wore on till the paling of stars, the thickening of gloom indicated the dark hour before dawn. The spot was secluded from wind, but the air grew cold as ice. Gale spent the time stripping wood from a dead mesquite, in pacing to and fro, in listening. Blanco Sol stamped occasionally, which sound was all that broke the stillness. Ladd awoke before the faintest gray appeared. The rangers ate and drank. When the black did lighten to gray they saddled the horses and led them out to the pass and down to the point where they had parted with Lash. Here they awaited daylight.

To Gale it seemed long in coming. Such a delay always aggravated the slow fire within him. He had nothing of Ladd's patience. He wanted action. The gray shadow below thinned out, and the patch of mesquite made a blot upon the pale valley. Then day dawned.

Still Ladd waited. He grew more silent, grimmer as the time of action approached. Gale wondered what the plan of attack would be. Yet he did not ask. He waited ready for orders.

The valley grew clear of gray shadow except under leaning walls on the eastern side. Then a straight column of smoke rose from among the mesquites. Manifestly this was what Ladd had been waiting for. He took the long .405 from its sheath and tried the lever. Then he lifted

a cartridge belt from the pommel of his saddle. Every ring held a shell and these shells were four inches long. He buckled the belt round him.

"Come on, Dick."

Ladd led the way down the slope until he reached a position that commanded the rising of the trail from a level. It was the only place a man or horse could leave the valley for the pass.

"Dick, here's your stand. If any raider rides in range, take a crack at him. . . . Now I want the lend of your hoss."

"Blanco Sol!" exclaimed Gale, more in amaze that Ladd should ask for the horse than in reluctance to lend him.

"Will you let me have him?" Ladd repeated, almost curtly.

"Certainly, Laddy."

A smile momentarily chased the dark, cold gloom that had set upon the ranger's lean face.

"Shore I appreciate it, Dick. I know how you care for that hoss. I guess mebbe Charlie Ladd has loved a hoss! An' one not so good as Sol. I was only tryin' your nerve, Dick, askin' you without tellin' my plan. Sol won't get a scratch, you can gamble on that! I'll ride him down into the valley an' pull the Greasers out in the open. They've got short-ranged carbines. They can't keep out of range of the .405, an' I'll be takin' the dust of their lead. Sabe, señor?"

"Laddy! You'll run Sol away from the raiders when they chase you? Run him after them when they try to get away?"

"Shore. I'll run all the time. They can't gain on Sol, an' he'll run them down when I want. Can you beat it?"

"No. It's great! . . . But suppose a raider comes out on Blanco Diablo?"

"I reckon that's the one weak place in my plan. I'm figgerin' they'll never think of that till it's too late. But if they do, well, Sol can outrun Diablo. An' I can always kill the white devil!"

Ladd's strange hate of the horse showed in the passion of his last words, in his hardening jaw and grim, set lips.

Gale's hand went swiftly to the ranger's shoulder.

"Laddy. Don't kill Diablo unless it's to save your life."

"All right. But, by God, if I get a chance I'll make Blanco Sol run him off his legs!"

He spoke no more and set about changing the length of Sol's stirrups. When he had them adjusted to suit he mounted and rode down the trail and out upon the level. He rode leisurely as if merely going to water his horse. The long black rifle lying across his saddle, however, was ominous.

Gale securely tied the other horse to a mesquite at hand, and took a position behind a low rock over which he could easily see and shoot when necessary. He imagined Jim Lash in a similar position at the far end of the valley blocking the outlet. Gale had grown accustomed to danger and the hard and fierce feelings peculiar to it. But the coming drama was so peculiarly different in promise from all he had experienced, that he awaited the moment of action with thrilling intensity. In him stirred long, brooding wrath at these border raiders—affection for Belding, and keen desire to avenge the outrages he had suffered—warm admiration for the cold, implacable Ladd and his absolute fearlessness, and a curious throbbing interest in the old, much-discussed and never-decided argument as to whether Blanco Sol was a fleeter, stronger horse than Blanco Diablo. Gale felt that he was to see a race between these great rivals—the kind of race that made men and horses terrible.

Ladd rode a quarter of a mile out upon the flat before anything happened. Then a whistle rent the still, cold air. A horse had seen or scented Blanco Sol. The whistle was prolonged, faint, but clear. It made the blood thrum in Gale's ears. Sol halted. His head shot up with the old, wild, spirited sweep. Gale leveled his glass at the patch of mesquites. He saw the raiders running to an open place, pointing, gesticulating. The glass brought them so close that he saw the dark faces. Suddenly they broke and fled back among the trees. Then he got only white and dark gleams of moving bodies. Evidently that moment was one of boots, guns, and saddles for the raiders.

Lowering the glass, Gale saw that Blanco Sol had started forward again. His gait was now a canter, and he had covered another quarter of a mile before

horses and raiders appeared upon the outskirts of the mesquites. Then Blanco Sol stopped. His shrill, ringing whistle came distinctly to Gale's ears. The raiders were mounted on dark horses, and they stood abreast in a motionless line. Gale chuckled as he appreciated what a puzzle the situation presented to them. A lone horseman in the middle of the valley did not perhaps seem so menacing himself as the possibilities his presence suggested.

Then Gale saw a raider gallop swiftly from the group toward the farther outlet of the valley. This might have been owing to characteristic cowardice; but it was more likely a move of the raiders to make sure of retreat. Undoubtedly Ladd saw this galloping horseman. A few waiting moments ensued. The galloping horseman reached the slope, began to climb. With naked eyes Gale saw a puff of white smoke spring out of the rocks. Then the raider wheeled his plunging horse back to the level, and went racing wildly down the valley.

The compact bunch of bays and blacks seemed to break apart and spread rapidly from the edge of the mesquites. Puffs of white smoke indicated firing, and showed the nature of the raiders' excitement. They were far out of ordinary range; but they spurred toward Ladd, shooting as they rode. Ladd held his ground; the big white horse stood like a rock in his tracks. Gale saw little spouts of dust rise in front of Blanco Sol and spread swift as sight to his rear. The raiders' bullets, striking low, were skipping along the hard, bare floor of the valley. Then Ladd raised the long rifle. There was no smoke, but three high, spanging reports rang out. A gap opened in the dark line of advancing horsemen; then a riderless steed sheered off to the right. Blanco Sol seemed to turn as on a pivot and charged back toward the lower end of the valley. He circled over to Gale's right and stretched out into his run. There were now five raiders in pursuit, and they came sweeping down, yelling and shooting, evidently sure of their quarry. Ladd reserved his fire. He kept turning from back to front in his saddle.

Gale saw how the space widened between pursuers and pursued, saw distinctly when Ladd eased up Sol's running. Manifestly Ladd intended to try to lead the raiders round in front of Gale's position, and, presently, Gale saw he was going to succeed. The raiders, riding like vaqueros, swept on in a curve, cutting off what distance they could. One fellow, a small, wiry rider, high on his mount's neck like a jockey, led his companions by many yards. He seemed to be getting the range of Ladd, or else he shot high, for his bullets did not strike up the dust behind Sol. Gale was ready to shoot. Blanco Sol pounded by, his rapid, rhythmic hoofbeats plainly to be heard. He was running easily.

Gale tried to still the jump of heart and pulse, and turned his eye again on the nearest pursuer. This raider was crossing in, his carbine held muzzle up in his right hand, and he was coming swiftly. It was a long shot, upward of five hundred yards. Gale had not time to adjust the sights of the Remington, but he knew the gun and, holding coarsely upon the swiftly moving blot, he began to shoot. The first bullet sent up a great splash of dust beneath the horse's nose, making him leap as if to hurdle a fence. The rifle was automatic; Gale needed only to pull the trigger. He saw now that the raiders behind were in line. Swiftly he worked the trigger. Suddenly the leading horse leaped convulsively, not up nor aside, but straight ahead, and then he crashed to the ground, throwing his rider like a catapult, and then slid and rolled. He half got up, fell back, and kicked; but his rider never moved.

The other rangers sawed the reins of plunging steeds and whirled to escape the unseen battery. Gale slipped a fresh clip into the magazine of his rifle. He restrained himself from useless firing and gave eager eye to the duel below. Ladd began to shoot while Sol was running. The .405 rang out sharply—then again. The heavy bullets streaked the dust all the way across the valley. Ladd aimed deliberately and pulled slowly, unmindful of the kicking dust-puffs behind Sol, and to the side. The raiders spurred madly in pursuit, loading and firing. They shot ten times while Ladd shot once, and all in vain; and on Ladd's sixth shot a raider toppled backward, threw his carbine and

fell with his foot catching in a stirrup. The frightened horse plunged away, dragging him in a path of dust.

Gale had set himself to miss nothing of that fighting race, yet the action passed too swiftly for clear sight of all. Ladd had emptied a magazine, and now Blanco Sol quickened and lengthened his running stride. He ran away from his pursuers. Then it was that the ranger's ruse was divined by the raiders. They hauled sharply up and seemed to be conferring. But that was a fatal mistake. Blanco Sol was seen to break his gait and slow down in several jumps, then square away and stand stock-still. Ladd fired at the closely grouped raiders. An instant passed. Then Gale heard the spat of a bullet out in front, saw a puff of dust, then heard the lead strike the rocks and go whining away. And it was after this that one of the raiders fell prone from his saddle. The steel-jacketed .405 had gone through him on its uninterrupted way to hum past Gale's position.

The remaining two raiders frantically spurred their horses and fled up the valley. Ladd sent Sol after them. It seemed to Gale, even though he realized his excitement, that Blanco Sol made those horses seem like snails. The raiders split, one making for the eastern outlet, the other circling back of the mesquites. Ladd kept on after the latter. Then puffs of white smoke and rifle shots faintly crackling told of Jim Lash's hand in the game. However, he succeeded only in driving the raider back into the valley. But Ladd had turned the other horseman, and now it appeared the two raiders were between Lash above on the stony slope and Ladd below on the level. There was desperate riding on the part of the raiders to keep from being hemmed in closer. Only one of them got away, and he came riding for life down under the eastern wall. Blanco Sol settled into his graceful, beautiful swing. He gained steadily, though he was far from extending himself. By Gale's actual count the raider fired eight times in that race down the valley, and all his bullets went low and wide. He pitched the carbine away and lost all control in headlong flight.

Some few hundred rods to the left of Gale the raider put his horse to the weathered slope. He began to climb. The horse was superb, infinitely more courageous than his rider. Zigzag they went up and up, and when Ladd reached the edge of the slope they were high along the cracked and guttered rampart. Once —twice Ladd raised the long rifle, but each time he lowered it. Gale divined that the ranger's restraint was not on account of the Mexican, but for that valiant and faithful horse. Up and up he went, and the yellow dust clouds rose, and an avalanche rolled rattling and cracking down the slope. It was beyond belief that a horse, burdened or unburdened, could find footing and hold it upon that wall of narrow ledges and inverted, slanting gullies. But he climbed on, sure-footed as a mountain goat, and, surmounting the last rough steps, he stood a moment silhouetted against the white sky. Then he disappeared. Ladd sat astride Blanco Sol gazing upward. How the cowboy must have honored that rider's brave steed!

Gale, who had been too dumb to shout the admiration he felt, suddenly leaped up, and his voice came with a shriek:

"Look out, Laddy!"

A big horse, like a white streak, was bearing down to the right of the ranger. Blanco Diablo! A matchless rider swung with the horse's motion. Gale was stunned. Then he remembered the first raider, the one Lash had shot at and driven away from the outlet. This fellow had made for the mesquites and had put a saddle on Belding's favorite. In the heat of the excitement, while Ladd had been intent upon the climbing horse, this last raider had come down with the speed of the wind straight for the western outlet. Perhaps, very probably, he did not know Gale was there to block it; and certainly he hoped to pass Ladd and Blanco Sol.

A touch of the spur made Sol lunge forward to head off the raider. Diablo was in his stride, but the distance and angle favored Sol. The raider had no carbine. He held aloft a gun ready to level it and fire. He sat the saddle as if it were a stationary seat. Gale saw Ladd lean down and drop the .405 in the sand.

He would take no chances of wounding Belding's best-loved horse.

Then Gale sat transfixed with suspended breath watching the horses thundering toward him. Blanco Diablo was speeding low, fleet as an antelope, fierce and terrible in his devilish action, a horse for war and blood and death. He seemed unbeatable. Yet to see the magnificently running Blanco Sol was but to court a doubt. Gale stood spellbound. He might have shot the raider; but he never thought of such a thing. The distance swiftly lessened. Plain it was the raider could not make the opening ahead of Ladd. He saw it and swerved to the left, emptying his six-shooter as he turned. His dark face gleamed as he flashed by Gale.

Blanco Sol thundered across. Then the race became straight away up the valley. Diablo was cold and Sol was hot: therein lay the only handicap and vantage. It was a fleet, beautiful, magnificent race. Gale thrilled and exulted and yelled as his horse settled into a steadily swifter run and began to gain. The dust rolled in a funnel-shaped cloud from the flying hoofs. The raider wheeled with gun puffing white, and Ladd ducked low over the neck of his horse.

The gap between Diablo and Sol narrowed yard by yard. At first it had been a wide one. The raider beat his mount and spurred, beat and spurred, wheeled round to shoot, then bent forward again. In his circle at the upper end of the valley he turned far short of the jumble of rocks.

All the devil that was in Blanco Diablo had its running on the downward stretch. The strange, cruel urge of bit and spur, the crazed rider who stuck like a burr upon him, the shots and smoke added terror to his natural violent temper. He ran himself off his feet. But he could not elude that relentless horse behind him. The running of Blanco Sol was that of a sure, remorseless driving power—steadier—stronger—swifter with every long and wonderful stride.

The raider tried to sheer Diablo off closer under the wall, to make the slope where his companion had escaped. But Diablo was uncontrollable. He was running wild, with breaking gait. Closer and closer crept that white, smoothly gliding, beautiful machine of speed.

Then, like one white flash following another, the two horses gleamed down the bank of a wash and disappeared in clouds of dust.

Gale watched with strained and smarting eyes. The thick throb in his ears was pierced by faint sounds of gunshots. Then he waited in almost unendurable suspense.

Suddenly something whiter than the background of dust appeared above the low roll of valley floor. Gale leveled his glass. In the clear circle shone Blanco Sol's noble head with its long black bar from ears to nose. Sol's head was drooping now. Another second showed Ladd still in the saddle.

The ranger was leading Blanco Diablo—spent—broken—dragging—riderless.

(*To be continued*)

(Continuation of Editorial on Page 230)

sentiment about your camp, and that without engendering hard feelings. The offender may be only a beginner, good-hearted but thoughtless, proud only of his prowess as an angler as shown by the number on his string. A quizzical smile, some such good-natured protest as "That's a shame, brother!—why didn't you keep those six big ones and chuck back all the rest for another time!" will do wonders in starting the right spirit in that man. If he is the other kind, the big, fat, grabby brute who is out for all he can get or steal in this world, you cannot afford to have him about your place at all, even if he is the only customer you have.

Finally, a rap at the legal limit itself. This magazine has been in several fights to raise the legal limit, particularly on trout, from six to at least seven inches, and preferably eight. Of what use is a six-inch minnow, called by courtesy a trout, whose tug you could hardly feel on your line, whose tiny carcass will barely be visible after the frying-pan is through with it? May the good Lord, who looks after all dumb things, punish the man who fills his creel with such a catch!

Where to Go

EDITOR'S NOTE—The aim of this department is to present to our readers reports on desirable localities for fishing and hunting. We have a great many of these coming in by every mail. Only the best have been culled out—not places where the luck was "fair," but where it was "*splendid.*" It is impossible for us, in the limited space available, to print names of hotels, guides, etc., but write us direct for information concerning any locality whatever you are interested in, and be sure to mention in writing, later, to the hotel or guide, that your information came from our "Where to Go" department. This is important, as you will then get the best treatment, both as to terms and accommodation.

The salt water fishing season is now at hand, and the fisherman interested in this form of sport will find in the following pages a list of places where good channel bass, striped bass, bluefish, weakfish, kingfish, fluke, blackfish, sea bass, and tuna fishing may be had. The muscallonge fisherman, also, will find listed here choice localities where the tiger fish waits for your lure, and where pickerel, pike and bass may also be found. Our prizes for the salt water winners this year should interest every devotee of the sport and, if you catch a whopping big fellow, don't neglect to enter him, as he may prove to be one of the winners.

NEW ENGLAND STATES

Springfield, Penobscot County, Maine, reached by the Maine Central Ry. Accommodations at Bay View Camps, Joseph M. Patten, proprietor, for $10.50 a week. Pickerel, perch, salmon and trout in Bottle Lake, Lower and Upper Dobinis, Junior and Grand Lakes.

Belgrade Lakes, Kennebec County, Maine, reached by the Maine Central Ry. Accommodations at the Belgrade Lakes Camp, of which Francis Thwing is the proprietor, for $14 a week. Black bass, perch and lake trout in Big Pond, Long and North Ponds.

Oakland, Kennebec County, Maine, reached by the Bangor & Maine, and Maine Central Rys. Accommodations at East Pont Camps, E. W. Clement, proprietor, for $14 a week. Small-mouth bass, perch and pickerel in East, North, McGraws and Great Ponds.

Norcross, Penobscot County, Maine, reached by the Bangor & Aroostook Ry. Accommodations at Buckhorn Camps, Bert Haynes & Son, proprietors, for $1.50 a day. Pickerel, perch and trout in Jo Mary Lake, Church, Henderson, Rabbit Ponds, and Cooper Brook and Jo Mary Stream.

Heron Island, Lincoln County, Maine, reached by Boston & Maine Ry. Accommodations at The Lodge, W. R. Buckman, proprietor, for $2 a day. Deep-sea fishing for cod, haddock, hake, etc.

St. Albans, Franklin County, Vermont, reached by the Champlain Transportation Co. Bass, pike, pickerel, perch fishing.

Averill, Essex County, Vermont, reached by the Boston & Maine Ry. Accommodations at Cold Spring Camp, Charles M. Quimby, proprietor, for $3 a day. Muscallonge, salmon and trout fishing in Leach Pond, Big Averill and Little Averill Lakes.

Newport, Orleans County, Vermont, reached by the Boston & Maine Ry. Accommodations at Raymond House, D. Tesco & Son, proprietors, for $2 a day. Black bass, pickerel, perch and lake trout in Lake Memphremagog.

Epsom, Merrimack County, New Hampshire, reached by the Boston & Maine Ry. Party camped out. Small-mouth bass fishing in Chestnut Pond.

West Alton, Belknap County, New Hampshire, reached by the Boston & Maine Ry. Accommodations at Broad View House, for $1 a day. Pickerel, perch and bass, also lake trout and salmon in Lake Winnepesaukee.

Rockville, Hartford County, Connecticut, reached by the New York, New Haven & Hartford Ry. Accommodations at Crystal Lake Hotel, J. Bowles, proprietor, for $2.50 a day. Bass, pickerel and perch in Crystal Lake.

New Canaan, Fairfield County, Connecticut, reached by the New York, New Haven & Hartford Ry. Accommodations at house of Mrs. Albert Scofield, for $7 a week. Bass, pickerel, perch, in Trinity Lake.

Cuttyhunk, Dukes County, Massachusetts, reached by Cuttyhunk Steamer from New Bedford. Accommodations at The Poplars, W. H. Allen, proprietor, for $12 a week. Weakfish, sea bass, bluefish and large striped bass. Very fine striped bass locality.

South Westport (Horseneck Beach), Bristol County, Massachusetts, reached by New York,

New Haven & Hartford Ry. Weakfish, bluefish, rock and sea bass, blackfish.

North Scituate, Providence, Rhode Island, reached by the Providence & Danielson Electric Ry. from Providence. Accommodations at Whipp Hotel, for $12 a week. Small-mouth bass and perch in Lake Moswansicut.

MIDDLE ATLANTIC STATES

Old Forge, Herkimer County, New York, reached by the New York Central Ry. Accommodations at the Bay View Camp, O. C. Tuttle, proprietor, for $12.50 a week. Bass and brook trout in Fulton Chain of Lakes and mountain streams.

Long Eddy, Sullivan County, New York, reached by the Erie Ry. Accommodations at house of Mrs. C. A. Schmeidell, for $1.50 a day. Small-mouth bass, native and rainbow trout in Delaware River and Basket Brook.

Cohecton, Sullivan County, New York, reached by the Erie Ry. Accommodations at Erie Hotel, Wm. F. Heuser, proprietor, for $1.50 a day. Black bass, pike, perch, pickerel. Fishing in Delaware River, Swago Lake and Laurel Lake.

Adirondack, Warren County, New York, reached by the Delaware & Hudson Ry. Accommodations at Valentine Farmhouse, Henry B. Hayes, proprietor, for $7 a week. Large- and small-mouth bass, pickerel, lake trout. Fishing in Valentine Pond and Schroon Lake.

Mamakating, Sullivan County, New York. Reached by Ontario & Western Ry. Accommodations at Six Lake House, Brown & Kennedy, proprietors, for $8 a week. Small-mouth bass, perch and pickerel.

Bay Shore, Long Island, New York, reached by the Long Island Ry. from New York. Accommodations at McGowan's Inn, McGowan, proprietor, for $3 to $5 a day. Bluefish, weakfish, fluke and sea bass.

Babylon, Suffolk County, New York. Reached by the Long Island Ry. Accommodations at Bay Shore Hotel. Bluefish, weakfish and fluke in Fire Island Inlet.

Sea Bright, Monmouth County, New Jersey, reached by the Central Ry. of New Jersey, or by the Patten Line Steamboat. Bluefish and tuna. E. I. Johnson is good guide.

Sea Isle City, Cape May County, New Jersey, reached by the Atlantic City Ry. Accommodations at the Stevens Hotel, Robert Stevens, proprietor. Channel-bass fishing.

Corson's Inlet, Cape May, New Jersey, reached by the Pennsylvania Ry. Accommodations at the West Jersey Cottages, George Wittkamp, proprietor, for $12 a week. Striped bass, channel bass, kingfish, bluefish and weakfish.

Seaside Park, Ocean County, New Jersey, reached by the Pennsylvania Ry. Accommodations at various hotels and also good camping on the beach. From here to Barnegat Inlet, a distance of ten miles, good fishing. Channel bass, striped bass, bluefish, weakfish and fluke.

Anglesea, Cape May County, New Jersey, reached by Pennsylvania Ry. Accommodations at Walnut Avenue House, Louis Bishop, proprietor, for $9 a week. Channel bass, black drum, kingfish, bluefish, sea bass, weakfish and fluke.

Allenhurst, Monmouth County, New Jersey, reached by Pennsylvania Ry. or by Central Ry. of New Jersey. Accommodations at various hotels in Asbury Park and Ocean Grove. Weakfish, bluefish, fluke, striped bass, sea bass, blackfish, tuna and croakers. Surf fishing from Deal to Shark River Inlet good. Boats for off-shore fishing may be hired by the day.

Barnegat, Ocean County, New Jersey, reached by the Central Ry. of New Jersey. Accommodations at the Almont, Barret & Kinsey, proprietors, for $3 a day. Channel bass, weakfish, bluefish and striped bass. Fishing in Barnegat Bay and Barnegat Inlet.

Beach Haven, Ocean County, New Jersey, reached by the Pennsylvania Ry. or the Central Ry. of New Jersey. Accommodations at Beach Haven House, for $2 a day.

Lake Hopatcong, Morris County, New Jersey, reached by the Delaware, Lackawanna & Western, and Central Ry. of New Jersey. Accommodations at various hotels, for $2 a day. Anson B. Decker is a good guide. Black bass, Oswego bass, pickerel and perch.

Andover, Sussex County, New Jersey, reached by the Delaware, Lackawanna & Western Ry. Accommodations at Lake Side Hotel, J. A. Maines, proprietor, for $2 a day. Black bass, pickerel, in Slater's Pond.

Green Pond, Morris County, New Jersey, reached by the New York, Susquehanna & Western Ry. to Newfoundland, and Lackawanna Ry. to Wharton, Wharton & Northern Ry. to Green Pond Junction. Accommodations at Lake End Hotel, Shawger & Hartenstine, proprietors, for $12 to $15 a week. Black and Oswego bass, pickerel and perch.

Newton, Sussex County, New Jersey, reached by the Delaware, Lackawanna & Western Ry. Accommodations at Spring Lake Cottage, George D. Budd, proprietor, for $7 to $14 a week. Black bass, pickerel, perch in Hunt's Lake.

Shohola, Pike County, Pennsylvania, reached by the Erie Ry. Accommodations at Walker Lake Hotel, Mr. Feser, proprietor, for $8 to $10 a week. Pike, perch, pickerel and bass in Twin and Walker Lakes.

Fishing Creek Station, Lancaster County, New Jersey, reached by the Pennsylvania Ry. Camping trip. Small-mouth bass, wall-eyed pike, and salmon fishing in Susquehanna River.

Glen Eyre, Pike County, Pennsylvania, reached by the Erie Ry. Accommodations at Rock Bound Camp, Mrs. A. W. LeRoy, proprietress, for $10 a week. Black bass, rock bass, rainbow trout, pike and pickerel fishing in Lackawaxen River, Wescolong Lake and Lake Tudescong.

SOUTHERN STATES

Fayetteville, Cumberland County, North Carolina, reached by the Atlantic Coast Line, Norfolk & Southern. Accommodations at Rosemont and LaFayette Hotels, for $2.50 a day. Bass, perch and pickerel fishing.

Topsail Inlet, Pender County, North Carolina, reached by the Atlantic Coast Line. This is a camping proposition. Channel bass, weakfish, bluefish, flounder and pigfish in Topsail Inlet and the ocean.

Wilmington, New Hanover County, North Carolina, reached by the Atlantic Coast Line. Accommodations in the various Wilmington and Wrightsville hotels, for from $2 to $6 a day. Channel bass, bluefish, sheepshead, in Topsail Inlet, Rich Inlet, Mason's Inlet, Barren and Masenbere Inlets.

Lake Smith, Princess Anne County, Virginia, reached by the Norfolk & Southern Ry., Electric Division. Accommodations in hotels in Norfolk for $1 to $5 a day. Large-mouth bass, pickerel, perch and crappie in Lake Smith and Little Creek.

Charleston, Charleston County, South Carolina, reached by the Atlantic Coast Line. Accommodations at the Charleston Hotel, for $3 a day. Drum, channel bass, weakfish, bluefish in Dewees, Capers Inlets and Bull's Bay.

Coden, Mobile County, Alabama, reached by the Bay Shore Ry. from Mobile. Accommodations at Rolston Hotel, John Rolston, proprietor, for $2 a day, $12.50 a week. Sea bass, redfish, sea trout, black drum, sheepshead, and tarpon fishing, in Mississippi Sound and estuaries.

Fort Myer's, Lee County, Florida, reached by the Atlantic Coast Line Ry. Accommodations at hotel for $2.50 a day. Tarpon, jewfish, kingfish, channel bass, jackfish, Spanish mackerel and other fish.

Boca Grande, Lee County, Florida, reached by the Charlotte Harbor and Northern Ry. Accommodations at Boca Grande Hotel, F. H. Abbott, proprietor, for $18 a week. Mackerel, redfish and tarpon in Charlotte Harbor and Boca Grande Pass.

Pensacola, Escambia County, Florida, reached by the Louisville & Nashville Ry. Accommodations at San Carlos Hotel for $1.50 to $2 a day. Sheepshead, redfish and sea trout in Pensacola and Escambia Bays.

Camp Walton, Santa Rosa County, Florida, reached by boat from Pensacola. Accommodations at Gulf View, Theodore B. Staff, proprietor, for $1.50 a day, $10 a week. Large-mouth bass, sea trout, redfish, bluefish, in Santa Rosa Sound and Gulf of Mexico.

MIDDLE WESTERN STATES

Bellaire, Antrim County, Michigan, reached by the Pere Marquette Ry. Accommodations at The Maples, W. C. Green, proprietor, for $8.50 to $12.50 a week, and at Fisherman's Paradise, D. Smith, proprietor, for $12 a week. Large- and small-mouth bass, pike, pickerel and rainbow and brook trout.

Gogebic, Gogebic County, Michigan, reached by the Chicago & Northwestern Ry. Accommodations at Gogebic Hotel and cot-

tages. Small-mouth bass and pickerel fishing.

Round Lake, Oakland County, Michigan, reached by the Pere Marquette Ry. Accommodations at Long Lake Hotel for $2 a day. Large- and small-mouth bass and pike, in Long, Round and Crooked Lakes.

Roscommon, Roscommon County, Michigan, reached by the Michigan Central Ry. Accommodations at Log Cabin Home, D. Procunier, proprietor, for $2 a day. Pike, bass, pickerel and perch.

Dowagiac, Cass County, Michigan, reached by the Michigan Central Ry. Accommodations at Dewey Lake Hotel, Theo. G. Crane, proprietor, for $10 a week. Bass, bluegills and perch in Dewey Lake.

Fabius, St. Joseph County, Michigan, reached by the Michigan Central Ry. Accommodations at Hotel Lennox, J. Lennox, proprietor, for $8 a week. Large-mouth bass.

Fifield, Price County, Wisconsin, reached by Wisconsin Central Ry. Accommodations at Feely's Pike Lake Resort. Muscallonge, pike, large- and small-mouth bass fishing.

Cable, Bayfield County, Wisconsin, reached by the Canadian Northwestern Ry. Accommodations at the Cavalier, L. E. Cavalier, proprietor, for $9 a week. Muscallonge, large- and small-mouth bass, pike and pickerel in Lake Owen.

Grand View, Bayfield County, Wisconsin, reached by the Northwestern Ry. Accommodations at the Camp-Fire Island Camp, H. A. Scotford, proprietor, for $12 a week. Muscallonge, bass fishing in Upper and Lower Clam Lakes.

Lac Du Flambeau, Vilas County, Wisconsin, reached by the Chicago & Northwestern Ry. Accommodations at cottages of George Goller. Muscallonge, bass and pike fishing in Sand Lake.

Powell, Iron County, Wisconsin, reached by the Chicago & Northwestern Ry. Accommodations at the Flambeau Lodge, W. G. Watrous, proprietor, for $15 a week. Muscallonge, Oswego bass, pike and brook trout.

Hayward, Sawyer County, Wisconsin, reached by the Chicago and Northwestern Ry. Accommodations at the Idlehurst Lodge, C. D. Benack, proprietor, for $12 a week. Large- and small-mouth bass and muscallonge in Round Lake.

Eagle River, Vilas County, Wisconsin, reached by the Chicago & Northwestern Ry. Accommodations at the Red Oak Resort, George Jackson, proprietor, for $12 a week. Muscallonge, pike, pickerel and bass in Lakes Alma, Moon and Little St. Germaine.

Cook, St. Louis County, Minnesota, reached by the Canadian Northern Ry. Accommodations at the Seldom Inn, J. H. Burris, proprietor, for $2 a day. Muscallonge and bass in Elbow and Long Lakes.

Dorset, Hubbard County, Minnesota, reached by the Great Northern Ry. Accommodations at Fisherman's Lodge, A. O. Wambold, proprietor, for $2 a day, $12 a week. Muscallonge and bass fishing in the Man Trap Lakes.

Alexandria, Douglas County, Minnesota, reached by the Great Northern Ry. Accommodations at the Cottage Grove Hotel, Fred Glade, proprietor, for $2 a day, $10 a week. Black bass, crappie, wall-eyed and Great Northern pike.

WESTERN STATES

Mackay, Custer County, Idaho, reached by the Oregon Short Line. Accommodations at the Mackay Hotel, J. Dunstan, proprietor. Rainbow trout in Big Lost River.

Glacier National Park, Montana, reached by the Great Northern Ry. Accommodations at various camps and hotels in the Park. Trout fishing good.

Loon Lake, Stevens County, Washington, reached by the Great Northern Ry. Hotel accommodations for $2 a day. Bass, trout and perch fishing.

Hayden Lake, Kootenai County, Idaho, reached by the Southern Pacific Ry. Accommodations at Bozanta Inn for $2.50 a day. Bass and trout fishing.

Klamath Falls, Klamath County, Oregon, reached by the Southern Pacific Ry. Accommodations at the Rock Point House, C. D. Wilson, proprietor, for $2 a day. Rainbow and brook trout in Klamath Lake streams.

Lone Pine, Inyo County, California, reached by the Southern Pacific Ry. Accommodations at the Bug Hunter Camp, for $2.50 a day. Trout in lakes and streams in vicinity.

CANADA

Kipawa, Quebec, Canada, reached by the Canadian Pacific Ry. Accommodations at Kipawa House, for $12 a week. Pike and trout fishing in Bois Franc Lake.

Raynor Island, Lake of Bays, Ontario, reached by Grand Trunk to Huntsville, Huntsville and Lake of Bays Navigation Co. to Raynor Island. Accommodations at Raynor Island Camp, Miss M. Spaulding, proprietress, for $15 a week, and up. Trout, bass and salmon trout fishing.

Joe Lake, Nipissing County, Ontario, reached by the Grand Trunk Ry. Accommodations at Algonquin Hotel, L. E. Merrell, proprietor, for $18 a week. Small-mouth bass and speckled trout in Crown, Rock and Louise Lakes, in the Algonquin Provincial Park.

Buckskin, Muskoka County, Ontario, reached by the Canadian Pacific Ry. Accommodations at the Waubic, Mrs. E. Niepage, proprietress. Pike, pickerel and bass fishing.

Oak Orchard, Bobcaygeon, Ontario, reached by the New York Central to Toronto, and Canadian Pacific to Bobcaygeon. Accommodations at Oak Orchard Lodge, Perry Alexander, proprietor, for $15 a week. Muscallonge and bass fishing in Kawartha Lakes.

Sault Ste. Marie, Ontario, reached by the Canadian Pacific Ry. Soo Line. Accommodations at Algonquin Hotel, J. W. Moffat, proprietor. Muscallonge, bass and rainbow trout.

Sparrow Lake, Muskoka County, reached by the Canadian Northern Ry. Accommodations at Roehl's Hotel, for $6.50 to $8 a week. Muscallonge, pickerel and bass.

Maguetawan, Ontario, reached by Grand Trunk Ry. and Maguetawan Navigation Co. Accommodations at Lake of May Islands Camps, Fred J. Schmeler, proprietor, for $10.50 a week. Small-mouth bass, lake trout and brook trout.

Temagami, Ontario, reached by the Grand Trunk Ry. Accommodations at Camp Wabi Kon, L. A. Orr, proprietor, for $12 a week. Bass, pickerel, wall eyed pike and lake trout in Lake Temagami.

Wanekewin, Nipissing County, Ontario, reached by the Canadian Pacific Ry. Accommodations at the Wanekewin, Martin Fenton, proprietor, for $10 a week. Bass, pickerel, wall-eyed pike, perch and muscallonge in Pickerel and French Rivers, and Squaw and Ox Lakes.

Georgian Bay, Ontario, reached by the Grand Trunk Ry. Accommodations at hotels for $15 a week. Large- and small-mouth bass, muscallonge and brook trout in the Moon River and Bayfield Channel.

Are you thinking of spending your vacation in the great outdoors — sure you are! Well—was your last trip entirely satisfactory? Perhaps the fishing at your chosen spot was not up to scratch, or the hunting was unusually poor. Do not take the chance of a wasted vacation this year. FIELD AND STREAM long ago realized the importance of reliable, up-to-the-minute information to the sportsman planning a vacation trip. For the past five years we have been gathering reports on the shooting, fishing, camping and canoeing possibilities of the various sections of the United States and Canada. Inquiries are promptly answered by personally dictated letters giving fullest possible information.

Send us a stamped envelope and state as clearly as possible in what region or locality you are most interested, and what sort of fish or game you intend to go after, and we will gladly send you full information covering this place.

Address all letters to the WHERE TO GO SERVICE BUREAU, Field and Stream Publishing Company, 331 4th Avenue, New York City.

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Then get a copy of Camp Craft by Warren H. Miller, Editor of this magazine, the most up-to-date book on modern camping practice and equipment ever published. It tells you all you want to know—and what to avoid—in camping in the different sections, climates and environments in our big country and Canada, the right equipment to get for general big game hunting in the north country, in the Rockies, down a canoe river, or salt water, for mid-summer fishing—anywhere that you propose to go. Order through the Field and Stream Publishing Co., 331 4th Ave., N. Y. City. $1.50 a copy. 282 pp. 32 illustrations.

The SPORTSMAN'S WORLD

HUNTING AND WOODCRAFT

TWO DEER WITH A .22 PISTOL

FIELD & STREAM PUB. CO.:

I recently received a letter which contained a "buck" story which proved so interesting to me in this day of high-power rifles that I am copying the story and sending it to you, thinking it may prove of interest to others. It is from a man over 60 years of age and some hunter.

"I took a trip this fall about 450 miles north of here, not far from Lake Superior, and I have a buck story to tell you, although I did not hunt much; trapped most of the time. I took my shotgun along but did not shoot it while I was there. A year ago I bought a .22 caliber pistol with a 12-inch barrel, and I carried that when I ran my traps. I killed a lot of grouse and rabbits with it.

"One evening I was coming in and had got close to camp when I came by a pasture field. I saw a deer in the field with some cattle. A tree had fallen from the woods into the field and the deer was close to the top, about thirty rods from me. One of the cows went after it and it jumped through the fence into the brush. I stood and watched it and pretty soon I saw another one walk out of the brush and jump into the field; then the other one jumped in. The cow got after them and they trotted up the fence toward me. I watched them about fifteen minutes. I got out my pistol and three extra cartridges and when they got within 40 steps of me I shot at one. He ran in a little circle and stopped with his other side to me, and I shot him again. He jumped the fence and ran a little ways in the woods and stopped. The other one stopped by the fence and I loaded up and took a shot at him. He jumped straight up, then jumped through the fence, went about three rods and fell. Then the first one ran off. I saw the way it went. It would have to cross a hill, so I watched the hill and saw it stop and lay down. I went and cut the first one's throat and waited awhile, and then slipped upon the other one and shot it through the head. I don't think it could have got up anyway, but that put it out of its misery.

"Well, I had two deer down and had to do something with them. I drove stakes in the ground and made a scaffold and then cut the meat off and put it on the scaffold and gathered wood and cooked it till nearly midnight and then carried it to camp. It was so dark I could hardly find my way in. I didn't have enough salt, but when I got home mother salted it and we made gravy with it and it was mighty fine. I wish you could have had some of those backbones. I have carried big guns in the woods but never did as well as with the little pistol.

"I expect if someone in Arkansas told you this story you would sort of doubt it, but this comes from away up north where it's as cold as Greenland. I don't think I will ever have a bigger buck story to tell, though I have killed lots of them. This is my best. SAM."

I have been an interested reader of FIELD & STREAM for several years and am always waiting for the next number. I take great interest in the prize fishing contests, especially for large-mouth black bass, though we are out of competition, as Florida has a mortgage on the southern division, as they don't grow that big elsewhere. I have been fishing for bass here in Arkansas for fifteen years and the largest I have ever known of was 7¼ pounds.

E. A. TURNER.

COON HUNTING IN OLD KENTUCKY

By Wm. J. Lawrence

It was on the fifteenth of November when we decided to accept the kind invitation extended us by Mr. Stanley Blake, manager of the Blue Grass Farm Kennels, Berry, Ky., for a good coon hunt in the hills of old Kentucky. Upon our arrival at the picturesque little town of Berry we were met at the depot by our host, and, after partaking of a good old Southern meal, we prepared for the hunt. It was 8 P. M. when Mr. Blake said, "All ready!" and we shouldered our axe, and, carrying our lantern, we started off with quick steps and light hearts for a good night's sport in the grand out of doors.

It was an ideal night for coon hunting, and, talking of good coon hunts we had had together, as all coon-hunters will do when they get together, we had only gone about half a mile up the creek when Bally opened up on the trail of a ringtailed "critter." He was quickly joined by Queen, Dinah and Ranger, we having only the four dogs with us and they were making the grandest music any coon-hunter ever heard. We hastened our steps and followed as fast as we could, but Mr. Coon evidently thought he could fool the dogs by going out on a log, which was lying at the edge of the water, crawling to the end and swimming across the stream, but he was surely mistaken, for the dogs were onto his tricks and they lost no time in finding out what he had done and were once more upon his trail, and before we could get across the creek, had it treed in an old elm tree upon the cliff. It was then that the ever-ready axe came into play to cut the tree down and get the

coon. The coon put up a good fight, but he had no chance with the dogs. We all had our say as to its weight; one said it weighed 18 pounds and others more or less, it actually weighed 12½ pounds.

We sacked our game and led the dogs away and it was not long before we heard them about a mile ahead of us, which made us quicken our steps in their direction. By the time we got close enough they seemed to burn the trail and must have seen the coon, for they were barking at every breath and jump and seemed to be very much excited, and, sure enough, they had it treed, this time in a larger tree. Thinking it would be a shame to cut down this tree, we decided to climb up and shake the coon off, which was finally done, this time holding two of the dogs so as to give the coon a chance, and both the dogs and the coon put up a good fight, but the dogs were victorious.

The dogs then cast ahead of us and we did not hear or see them for quite a while, but kept listening very intensely, when suddenly we thought we heard them behind the hill, and, sure enough, it was them, and by the time we got there the coon had taken refuge in an old den upon the cliff, and, much to our disgust, we could not get it out. We worked for some time and the dogs were getting very excited, for they were digging, biting and barking and trying as hard as we were to get the coon out. After some time our host consulted his watch and, finding the hour close to 2 A. M., thought it best to wend our way homeward, so catching the dogs we started back, which seemed to be about twice as far as it really was, and we did not realize the distance we had traveled, but at last we were at home, and it was not long before we were in the land of nod, dreaming pleasant dreams. After a bit of sleep and a hearty breakfast, we bid our host goodbye, but not until we had promised Mr. Blake, who is an enthusiastic coon-hunter, that we would soon return for another coon-hunt and in a different direction, where he knew that the coons were plentiful.

NEW JERSEY DEER LAW

Chapter 247. Session of 1915.

An Act to amend an act entitled "An act for the protection of deer," approved March twenty-seventh, nineteen hundred and twelve.

Be it enacted by the Senate and General Assembly of the State of New Jersey:

1. Section one of the act of which this act is amendatory be and the same hereby is amended so as to read as follows:

1. It shall be unlawful for any person to hunt for, pursue, shoot at, take, kill, wound, or attempt to take, kill or wound any wild deer in this State, except on the last three Wednesdays in October and the first Wednesday in November of each year, or to kill in any one year more than one deer, under a penalty of one hundred dollars for each offense. It shall be unlawful at all times hereafter for any person to hunt for, shoot at, take, kill or wound, or attempt to take, kill or wound any fawn under a penalty of one hundred dollars for each offense. For the purpose of this act the word "fawn" shall be taken to mean any deer, buck or doe less than one year old.

2. Section two of the act of which this act is amendatory be and the same is hereby amended so as to read as follows:

2. It shall be unlawful to have in possession in this State any deer, except on the last three Wednesdays in October and the first Wednesday in November of each year, under a penalty of one hundred dollars for each deer so had in possession. It shall be unlawful to have in possession at any time any fawn under a penalty of one hundred dollars for each fawn so had in possession. The having in possession of any wild deer during the times and periods prohibited in this act, or the having in possession at any time of any fawn shall be prima facie evidence in all courts and places of the fact that such wild deer or fawn is in possession unlawfully; *provided*, that this act shall not apply to deer killed on game preserves, the owners or lessees of which are licensed by the Board of Fish and Game Commissioners, or to deer coming from another State, which is properly tagged showing where the same was killed.

3. This act shall take effect immediately.

Approved April 8, 1915.

THE SPORTSMAN AS A POET

By J. Western Warner

There is no doubt that if the sporting magazines could afford space, and would print all the jingle that is hurled at the editor, that nearly every good sportsman would in a short time begin to write rhyme, for during the closed season, and in the long Winter months, while you sit in front of the fireplace, pulling away at your old favorite briar, and dream of various camps, and sweet-scented forests and gurgling brooks, where the same wave of mountain air that brings the tinkle of the horse bell conveys to your nose the aroma of frying bacon and partridge breast, it is then your breast heaves with sentiment, and your mind is like the laughing brook, it seems to follow the lines of the least resistance, and the chances are that if someone would slip a pencil between your trigger finger and thumb, and place a pad on your knee and say write, that it would sound something like this:

Oh call me when breakfast is ready,
When my liver and onions are done,
While the horse-wrangler's cursing old Pedro,
And my socks are all dried by the sun.

In case this happens to be Saturday night, and your little verse sticks to you and keeps interrupting the sermon on Sunday morning, and on the way home a robin or squirrel should happen to chirp just once, I'll bet by the time you reach home and lunch is being served, your thoughts will be far from consomme and olives, and as soon as you can excuse yourself you will be groping unconsciously among the sporting paraphernalia in the closet. Then, while you sit on the lounge, rubbing "the old reliable" with an oiled rag, and the memory of gamboling over the last trophy steals over you, your pulse will quicken, and this is about what is running in your mind:

Up and away at the dawn of day
To the top of some far-off dome,
Then back with the spread of a record head,
To show the poor devils at home.

All the week this last sonnet may stay by you. But if it is about the time of month for the current number of your sporting magazines to come, and you read with deepest interest the experiences of various brother sportsmen, and it runs pretty heavy to angling, along about Thursday or Friday evening, while dressing for lodge meeting, if your collar button could talk and would tell, you are thinking this:

High fly, dry fly, any old fly at all;
Low fly, fluttering fly, no matter where you fall;
I know a stream in the mountains,
Away from the din and the roar,
Where you don't have to dress for evening
To be welcome along its shore.

You work hard the remainder of the week and things aren't moving just right: one of those weeks of business that makes one think, "Oh, what's the use!" Saturday night, as you leave the office, as you step out into the fresh air, the little red devils are on the job again, and while you are hustling along to catch the next car, instead of reviewing the week's business in your mind you are planning on next Fall's hunt, where to go, and who to take; and by the time you enter the car, if you would just cut loose, this is about what the passengers would hear:

Away to a land where I don't give a damn
For doctor, insurance or press;
Where I sleep on the ground
With my things scattered 'round,
And there's no blinds to pull while I dress.

TRAINING A CHESAPEAKE BAY PUPPY

Field & Stream Pub. Co.:

I would appreciate any information you could give me concerning the training of Chesapeake Bay pups for retrieving ducks.

Thanking you for your kind favor, I am, respectfully,

John Winter.

Ans.—Begin getting him accustomed to water this summer. Put him overboard from boat and let him swim after boat until he gets over being frightened at being in deep water. If he does not naturally retrieve sticks, etc., thrown in the water, teach him retrieving on land by method in this month's "Airedale, Setter and Hound" until he will jump in and fetch anything thrown in the water.—Ed.

CONSERVATION

PROTECT THE ADIRONDACK WILDS

Natural American woodland has no more zealous defender than the Camp-Fire Club of America. From the club's Committee on the Conservation of Forests and Wild Life the *Evening World* has received a letter expressing "full approval of a recent editorial on 'The Great North Woods.'"

"The Camp-Fire Club," the committee declares, "is opposed to any commercialization of the Adirondack forests. We are opposed to the leasing of camp sites. We believe that the people of New York State are rich enough to own and appreciate a bit of real wilderness, where they can go and enjoy nature, both tree and animal, in natural surroundings. Central Park to-day has a valuation of fully ten times that of the entire Adirondack forest, both public and private, and yet there is not one who would dare suggest that we lease cottage sites around our Central Park lakes or place roadhouses along our park drives, and yet that is exactly what some people want to do with our Adirondacks.

"We do not believe that any appreciable revenue can be derived from the cutting of timber or leasing of camp sites in the Adirondacks that would not ruin them as a natural wilderness.

"The Camp-Fire Club of America wants to leave the Adirondack wilderness as it is and only suggests such slight amendments in the Constitution as will permit of the forest being better protected from the great fire menace, and as will permit of the building of such through State roads as may be necessary to give to the people easy and comfortable access to their own park.

"As this subject of the amending of the Constitution is discussed this Summer, and as the many proposals for change are considered, we feel sure that the *Evening World* will stand solid against the turning over of this park to private interests in however slight a degree."

The difficulty is this: The majority who love the natural wilds cannot rally to defend them because they do not always know the moment when danger threatens. It is the lumbermen and "land development" interests who watch their chance to bring expert arguments to bear on legislators and Constitution revisers at propitious moments.

The will of the people of this State could be conveyed to the Constitutional Convention at Albany in five words: Let the State forest alone. — N. Y. *Evening World.*

FISH KILLED BY POLLUTION OF STREAM

FIELD & STREAM PUB. CO.:

The Cattaraugus Creek, bordering the southern end of this county (Erie), is a natural spawning creek for small mouth black bass.

In the season a good number of bass are taken, but I fear that this will not continue long if the stream is polluted as much as it is now.

At Gowanda there is a glue factory and also a tannery. Every once in a while, about twice a month, according to my belief, they empty their vats. There is a scum that rises to the creek's surface for miles. The refuse coming from the tannery turns the creek a red that reminds one of the ore-colored harbor of Duluth. I understand that it is principally lime that comes from the glue factory.

I have been informed that there is a law against pollution of streams in this manner. The owners of the industries have been petitioned by the residents of Gowanda and vicinity and promises have been given that plants would be put in so that there would not be a repetition of the offense. This was years ago, and nothing has been done and conditions are worse.

On the 1st inst. I took a canoe trip down the creek from Gowanda to the lake. We first noticed this red water and scum at the top when we were camping about six miles below Gowanda and at about 2 p.m. When we reached the lake, about twenty-five miles away, as the creek winds, the lake fishermen were complaining. They said, "Look at the water. They must be doing something up at Gowanda again. Who can fish in this water?"

I would deeply appreciate your courtesy if you will inform me as to the proper parties before whom a complaint should be laid. I would also like to know what is necessary to put a stop to this pollution at once.

Outside of the mullets, suckers, catfish, etc., that seem to be poisoned by the chemicals turned into the creek and which float, half dazed, on the surface, we are afraid that it is killing off the bass.

As remarked above, this stream is a natural spawning place for black bass, and if it is free from pollution enough bass will be naturally raised here every year to save the State a good many dollars in artificial propagation.

You undoubtedly are in a position to give me the necessary information, and thanking you for same, I am

L. L. LANCASTER.

Ans.—Kindly take this up with the State Board of Health at Albany. We already have several similar cases under consideration by them.—ED.

BIRD REFUGES

Warren B. Bullock

A total of 14,100 acres in Wisconsin are now protected by the State game warden's department as refuges for the wild birds native to this part of the country, according to the report of State Fish and Game Warden John A. Sholts.

Under the laws of 1913, the State game warden was authorized to purchase and distribute game birds and eggs for breeding and propagation purposes. After thoroughly investigating conditions in the State, it was decided that foreign game birds would be a losing proposition, and that native birds should be protected.

With the assistance of many private parties and the Audubon societies the following refuges for game and insectivorous birds were established:

The Madison bird refuge, 6,000 acres.

Ripon bird refuge, 1,000 acres.

Kellog refuge at Janesville, 200 acres.

Oconomowoc refuge, 150 acres.

Green Lake refuge, 1,500 acres.

Marshfield refuge, 5,000 acres.

Fox Lake refuge, 200 acres.

At Green Bay, an incomplete refuge of fifty acres.

Quail and partridges were planted on some of these refuges. All farmers now know the value of insectivorous and seed-eating birds.

Wild mallard ducks and other more common varieties were placed in the hands of competent farmers.

The refuge that has created the most interest in Wisconsin is the game farm on the State forest reservation in Vilas County. This tract of approximately 320 acres lies between Allequash Lake and Trout Lake, two ideal summer resorts. The surface is high and rolling except where the stream that joins the two lakes passes through. This stream never freezes. The hardwood timber and underbrush of hazel and berry bushes shelter several nooks and gullies from the wind, making this beautiful farm ideal for the propagation of birds and animals.

To protect the birds from wolves, foxes and other destructive animals, and in order that

the park might hold deer, it was necesary to enclose it with a nine-foot wire fence.

In the summer time of the last several years numerous fawns were captured by settlers who bought them from the State or turned them over to the game warden's department to be disposed of. This last year twenty-four fawns were seized and nurtured until they were able to take care of themselves, and then placed on the game farms. Eight full-grown deer, presented to the State by the street railway company of Wausau, were also put in the inclosure.

"The partridge is the most beautiful of all our game birds and the most sought after by our sportsmen," says Game Warden Sholts in his report. "At the close of the 1914 season there were more partridges in the woods than at the close of any season for several years. I am pleased to report that through the good work of the wardens and the hearty co-operation of the game clubs the sale and shipments of this bird have been reduced to a minimum.

"Prairie chickens and grouse have increased rapidly in some sections and have decreased accordingly in others. With favorable nesting weather this spring the hunters may expect excellent sport in 1915.

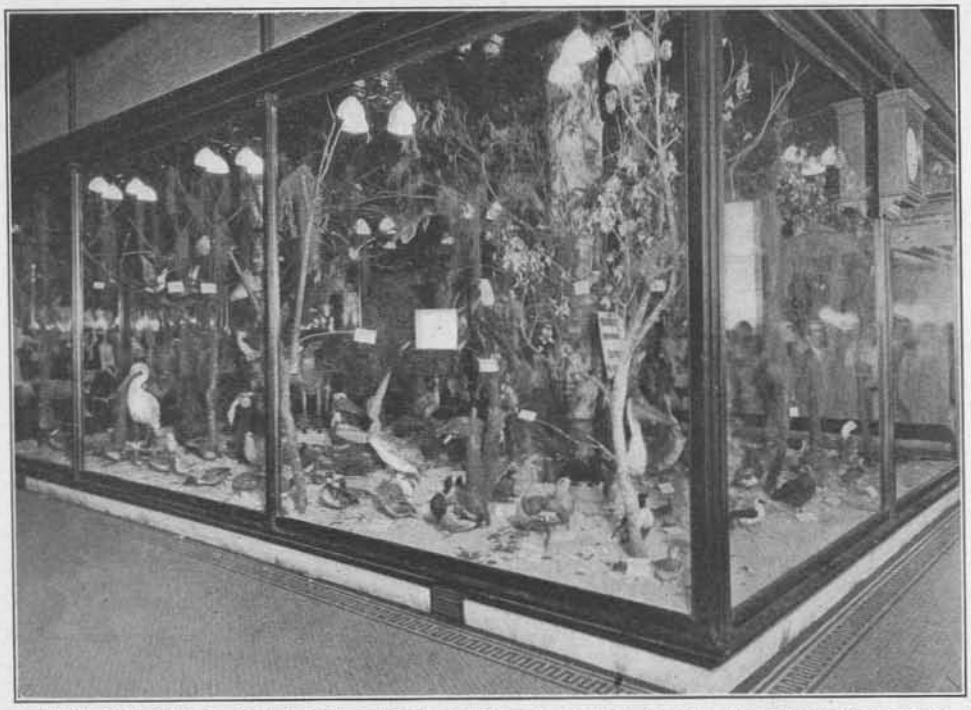
"The farmer's valuable little bird, the quail, that works so faithfully for the protection of his growing crops by killing the May beetle, cinch bug, cutworms, wire worms, army worms, white grubs, weevils, grasshoppers and thousands of noxious weed seeds should have a perpetual closed season for odd services rendered.

"Waterfowl were more plentiful in their northern flight last spring than for many previous years, but owing to the weather conditions the fall flight was scattering and shooting was not as good as formerly. The excellent reports from the south point to a very good season in 1915.

"The snipe and woodcock are two of our game birds shot mostly for sport, as they are too small to provide much food. The snipe is more widely distributed and is found in sufficient numbers to insure sport for many years.

"The woodcock is in danger of extermination and should have a continued closed season for five years."

For the protection of these birds the refuges have been built.



EDUCATIONAL EXHIBIT OF THE WILD LIFE OF LOUISIANA BY THE CONSERVATION COMMISSION OF LOUISIANA

NATIVE LOUISIANA BIRDS SHOWN IN NEW ORLEANS ON "BIRD DAY"

The State of Louisiana observed "Bird Day" this year on the anniversary of the birth of John James Audubon, who was a native of that State, May 4th. Appropriate exercises were held in all of the public schools of the State and the pupils were told of the great naturalist's life work and special pleas were made for the preservation of the birds.

In New Orleans the feature of the bird-day observance was a comprehensive display of the different birds of the State by the Conservation Commission of Louisiana. Over two hundred and fifty mounted specimens of the bird life of the State were mounted in realistic attitudes by expert taxidermists. The largest department store in New Orleans donated a large center show-window, measuring 18 by 33 feet, to the display, and the whole was converted into a typical Louisiana forest scene by the use of actual trees, shrubs, palmetto leaves, and hanging Spanish moss. The mounted birds were installed by the ornithologist of the commission, Stanley Clisby Arthur.

On May 4th, many thousands of public school children attended and their teachers explained the various reasons for bird and other wild life conservation. The Conservation Commission on this day distributed copies of the Bird Day Bulletin to the children, together with Audubon Society leaflets. The newspapers of the city gave great publicity to the display and the department store inserted half-page advertisements in the press, calling attention to the exhibit. The success of this display has been so marked that President M. L. Alexander, of the Conservation Commission, is arranging for a display of the same kind four times a year and will also send one on a tour of the State. The interest this exhibit has aroused will result, it has been predicted, in a better observance of the laws of the State in reference to wild life.

SHOTGUNS AND RIFLES

THE .32-40 H. V. CARTRIDGE

FIELD & STREAM PUB. CO.:

In your reply to an inquiry which appeared on page 82 of your May number as to the value of the .32-40 high power rifle for all-around big game hunting, you gave this excellent rifle such scant justice as to suggest to my mind that there was some mistake on the part of your printer or perhaps some oversight or inadvertence.

Your reply states that the .32-20 is preferable to the .32-40 for deer, being nearly equal in power.

Now the .32-20 throws 115 grains of lead with a velocity of 1325 f. s. and a consequent energy of 448 foot-pounds, while the .32-40 H. P. throws 165 grains of lead with a velocity of 2065 f. s. and an energy of 1558 foot-pounds. If the gas-check bullet weighing 174 grains be used, the energy is 1646 foot-pounds. The two cartridges can hardly be placed in the same class.

Even the .32-20 H. P. has only 686 foot-pounds of energy, considerably less than half the power of the .32-40 H. P.

The .32-40 H. P. with gas-check bullet exceeds in power the .30-30 and the .303 (except when the latter uses the 195-grain bullet). It is very accurate up to 500 yards, but at 600 yards occasionally keyholes at the target.

Bullet .319247-110 grains with 2.5 to 3 grains of Bullseye powder will shoot regularly into the same hole in the target at 50 feet or more. The same bullet with 8.5 grains of Schultze or E. C. shotgun powder develops almost as much speed as the .32-20, with more than 400 foot-pounds of vim, and has made a 4-inch group for me at 200 yards with muzzle and elbow rest and hunting sights.

Mr. Crossman says the .32-40 bullet is no wind-splitter; but that is one of the reasons I selected it for my all-around hunting rifle. With great accuracy and energy at hunting ranges, it peters out promptly beyond its proper range, 500 yards, and does not shoot across the border into foreign countries.

Altogether it is a bully all-around rifle and is powerful enough for anything in North America.

R. R. RAYMOND,
Major, Corps of Engineers,
United States Army.

Ans.—We were comparing the .32-20 H. V. with the old .32-40 black powder of 747 foot lbs. energy, admittedly one of the best deer cartridges ever put out. The .32-20 H. V. excels it in usefulness in that with 689 ft. lbs. of energy it also can shoot the S. & W. .32 shorts for small game shooting.—ED.

SMOKELESS POWDER FOR RIFLES

By Edw. C. Crossman

Part II

Of course, many smokeless-powder rifles kick harder than black-powder rifles, but never is this true when they fire the same weight of bullet, are the same size in bore and have the same muzzle velocity. The smokeless-powder rifle kicks harder only when it is far more powerful, 2,000 feet-seconds for the same weight bullet against, perhaps, 1,200 for the black-powder gun.

Gases that are very hot are more elastic and capable of more work, hence both volume produced and temperature thereof govern the speed of the bullet driven out by them. As an indication of the enormous gas volume produced by a little powder, note that if you fire 15.5 grains of English cordite —similar to many of our American rifle powders—you evolve 1,253 calories of heat and some 500 cubic inches of gas.

In beautiful theory, therefore, the hotter your gases, and the more complete your combustion, the more work you get out of a given weight of your explosive.

Unhappily, when smokeless powder is used in gun barrels, we have to "have a heart" for the steel thereof or else frequently buy gun barrels. The high temperature at which smokeless powder does its work, and the high speed and great pressure of the gases, conspire to present us in high-power rifles with the condition called erosion —the melting or washing away of the steel of the barrel.

Recognizing this, then we have to consider the work done by the components of our modern smokeless powder. Now, smokeless powder is a self-contained furnace. It burns up without any aid from the air, without the oxygen that ordinary, unadorned burning substances demand or go out. Powders contain their own oxygen and burn up completely, regardless of whether there's any air around or not. In turn, we find that the powders that contain enough oxygen completely to burn up evolve much more heat than do the powders that don't contain quite enough chemically. Thus they are more erosive or melting, and they become serious when we use large charges ,such as in army rifles, and when we desire to preserve our barrels for future reference through many thousand shots.

Looking into the matter we find, first, that our nitroglycerine straight gives us a heat unit per cent of 1,652 calories, while guncotton, straight and unadorned, gives us 1,061 calories. If we mix the two in the proportion of some of our own powders—that is, 30 per cent nitroglycerine and 70 per cent guncotton—we find our heat unit to be 1,267.

And as we know that this difference in heat is shown us most graphically when looking through our barrels after a few thousand rounds—sometimes earlier than this—it would seem that the logical powder would be the one containing no nitroglycerine at all, even though it had a trifle less capacity for work—gases cooler and less elastic.

This is precisely what the United States Government did in 1906 in working out the new cartridge for the new Springfield. The taboo was sternly put on any powder containing nitroglycerine—and from then to this writing the powder for the rifles of the United States army, navy, marines and militia is pure guncotton.

The reason for the naughty, hot disposition of nitroglycerine is this: In its chemical makeup it has sufficient oxygen molecules to unite with all the carbon and make up CO_2 or carbon dioxide. There is no part of its gases that could be burned farther.

Guncotton, on the other hand, has not enough oxygen in its make-up to take care of all the hungry carbon, and part of the gas evolved is incomplete in its burning or carbon monoxide, CO. Naturally enough, if this gas can be burned still farther, the barrel has lost something of the heat that might otherwise be present, the gases are cooler, and, joyfully, the erosion is less.

The flarebacks that caused such disastrous explosions in the turrets and handling-rooms of some of our battleships were due to the fact that the powder, a guncotton product, did not burn completely to CO_2, or carbon dioxide, which is the harmless stuff we exhale a few hundred times a day, but formed instead volumes of "fire-damp," carbon monoxide, an explosive gas. When the great breech-blocks were swung open and a current of air rushed into the guns, the gas remaining in the barrel took fire and the blast of flame rushed out the breech and set fire to the powder in the turret.

Now, the breech-block cannot be opened until a great jet of compressed air has been driven through the gun, driving out all the gas sulking inside and waiting for a chance to ignite.

Inasmuch as the hotter the gases are, the more work and the more elasticity they show, our pure guncotton powder does not perform the work in pushing out the bullet that the nitroglycerine product does, breech pressures being alike in both cases. So, if we have a fixed pressure that we cannot exceed, we

get higher velocities from the nitroglycerine powders than we do from the guncotton. Also we get erosion, and this is more serious than a small loss of velocity or work capacity on the part of the cooler-burning powder.

Another great objection to the mixed powders of the old cordite type, still used in the British service and by some of our makers of cartridges for sporting rifles, is their sensitiveness to heat. Makers of cordite cartridges for use in big-game shooting in India or Africa deliberately remove a few grains from the standard charge to compensate for the higher pressures resulting from the hot climates of those countries. This sort of thing would be a pretty kettle of fish were troops sent in there with modern rifles of the Springfield class, with pressures already high as safety would permit in the cooler climate of home. Our own Springfield is on the border line. Little increase in its chamber pressure can be allowed without trouble. Did our troops have to take rifles like these, but using cordite, into a hot climate, they would come to grief.

The British have carried cordite-using rifles into the hottest climates—but these are the old .303 rifles with chamber pressures very low, down below the 40,000-pound mark, and they could stand a rise in pressure without trouble to the rifle and the case.

Luckily our pyro powder not only keeps better than cordite, but it is insensitive to heat so far as any ordinary change in temperature is concerned.

Without any doubt we've the edge on European makers in rifle powders, just as the English have sometimes had the edge on us in shotgun powders. In our tubular powders, and particularly in our pyrocellulose, now prepared for any rifle cartridge in the world, we have a smokeless powder far beyond the best of the European makers.

The tubular grain common to all American rifle powders is one of the triumphs of Yankee powder-making, and something that is thus far avoided by the foreign powder-maker. Our own makers hint that the reason is, perhaps, that to get this tiny hole through the center of the grain requires a powder of the utmost purity, a trouble to which the foreign maker is not prepared to go.

Be that as it may be, when the final stage of a lot of American rifle powder is reached, the pasty mass is driven out of a tiny die under pressure. Set in the center of the hole of this die is a tiny needle, and so when the long tube of powder crawls out, the needle makes a hole right down through the middle of the tube, so it is in reality a powder pipe. Then the tube is cut up into grains of fixed length, the grains are graphited, and the stuff is ready.

The reason for this hole in the finished grain—which is, of course, a piece of a tube—is this: As the grain of powder ordinarily burns, the surface grows smaller. As the burning surface grows smaller, it naturally throws off gas at a slower rate. This happens at a time when just the opposite is needed—when the bullet has moved forward and the room in the chamber has increased and the pressures have fallen.

But, if you start a fire inside a hollow tree, as the burning progresses the burning surface grows larger instead of smaller. So, likewise, the hole in each grain of American powder. The flash sets the grain afire within as well as without, and as the hole burns larger and the surface increases, it offsets the shrinking that takes place on the outside of the grain.

The German gets around this by using a flat grain, like the bits of "Sen-Sen" we used to see. He then coats each grain with a substance that restrains the burning, and so keeps up his pressures by holding back the burning of powder until its gas is urgently needed. But he gets irregular burning and inaccuracy and generally unsatisfactory results with this coated powder grain. Never was there a German high-powder cartridge made that could go on a machine rest and make groups like the best of the Yankee made 1906 or Government new Springfield cartridge.

And, while the German product keeps badly and is sensitive to heat, the pyro of the Yankee maker keeps splendidly and shoots just the same, whether you heat it up first or not. Our Government pyro is a triumph of American powder-making, just as the 1906 cartridge is the finest cartridge for accuracy, reliability and keeping qualities of the world's cartridge list.

The cordite of the British service is apparently the most clumsy powder to load that was ever evolved. It comes in flat strips, cut just the length of the powder chamber of its cartridge. Each cartridge of the service .303 British rifle contains forty or fifty of these strips. Of course, you could no more throw them into the shell from a measure than you could fly; they are not grains but sticks, two inches or so long.

In practice they are loaded into the case before it is necked down—while it is a straight cylinder, like a shotgun shell. When the fagot of sticks has been neatly packed in and a wad set down on the said fagot, then the case is necked down to the proper size for the .303 bullet.

(To be continued.)

SINGLE VS. DOUBLE GUNS

By Paul A. Curtis, Jr.

There have been so many requests from time to time for advice as to which is the better, a single- or double-barrel gun, that I have been led to believe that an article on the subject would be of interest to our readers.

There is undoubtedly not sufficient cause one way or the other to call either type the better, as the advantage lies not so much in the fact that one type has a single barrel and the other type two, but the various methods of construction adopted to acquire the best practical results in both cause a varied difference in the results attained when in use. Consequently each has its advantages and disadvantages. These I shall endeavor to point out and leave it to the purchaser to decide which he believes would best suit his individual tastes.

Undoubtedly a single-barrel gun is the quickest to align on a target, as it is unquestionably easier for the eye to sight down one barrel than between two. This is the reason why they are so popular among trap-shooters. I have had many good pigeon shots tell me that they could shoot from 10 to 20 per cent better with a single-barrel gun than they could with a double, as it is easier to judge accurately the lead necessary to connect with rapidly crossing objects with a single barrel. For instance, most shooters will generally make their allowance of lead with a double gun from the near barrel to the bird. If a bird is rapidly crossing from the left to the right, forty yards from the gun, and you make the proper allowance and hit it with the right barrel, and if you should make the same amount of allowance on another bird, under the same conditions and use the left barrel, you may shoot behind the bird. If the line is carried out forty yards from the muzzle of the gun the difference in allowance will be found to be considerable.

Old sportsmen often acquire the habit of shooting the left barrel at birds passing from the right to the left and vice versa, as they then give a greater lead to their mark.

It is hardly necessary to further consider the single-shot, single-barrel gun, for whereas they are unquestionably the best for the work for which they are intended—trap-shooting—and have all the elegance of proportion and balance of the double gun, few sportsmen care to handicap themselves with the serious disadvantage of not having a second shot to fall back upon when in the field.

A point in favor of the repeating gun is that, due to the receiver or long frame, which is about six inches in length, the sighting plane is much longer than on a double-barrel gun with the same length of barrel.

Most of our best shots generally use long barrels, not because of their supposed greater killing radius (which, in these days of smokeless powder, is to a great extent a fallacy), but because of the tremendous advantage in accuracy of the long sighting plane.

Stephen Grant, one of the greatest gunmakers of the immediate past, always refused to make short-barreled guns for his clients. He would not make 26-inch barrels for the above-mentioned reason, and seldom made 28-inch barrels; always recommending 30-inch length.

A repeater with a 26-inch barrel has a sighting plane as long as a 30-inch barrel double gun, and a repeater with a 34-inch barrel, such as the writer used for a number of years at the trap, has a sighting plane of 38 inches. But, of course, for practical shooting such a long gun is out of the question.

One bad point in the single-

barrel gun usually is that they are extremely light in the muzzle, and the shorter the barrel is the more noticeable is this lightness. For a man who swings rapidly or jerks his gun up quickly on the mark this is a serious disadvantage, as it makes it extremely difficult for him to hold steadily on the mark. The extra amount of metal at the muzzle in a double gun makes it heavier at this point and consequently it can be held much steadier.

Some time ago I had the pleasure to shoot Dr. Carver's old pigeon-gun, which was made specially for him by W. W. Greener. Dr. Carver shot with this gun all over the world and his records are famous.

The barrels of this gun are fully one-thirty-second of an inch thicker at the muzzle than the tubes of any other gun that I ever handled. It certainly seemed to me to be far too muzzle-heavy; but it was remarkable how steady it could be held on a fast-flying bird.

The demand for a gun with a single sighting plane that will allow two shots, together with good balance and appearance, has led some of the foremost makers of England, including Lang, Westly-Richards and Grant, to produce recently a double-barrel gun with superimposed barrels. These guns are commonly called "over and under" guns and have attracted considerable attention in the gun world.

The advantages claimed for such a gun are that the vertical joining of the barrels places the shells in a direct line with the center of the butt-plate and the recoil is carried back on a straight line instead of giving the side thrust, as in a double gun of the ordinary style, thus lessening the recoil. The depth of the fore end necessary on such a gun also keeps the left hand out of sight, and the quick single sighting plane is naturally acquired.

This type of gun presents considerable difficulty in securing a proper locking system, due to the peculiar mechanical construction, and many of them have proved weak in this respect, consequently they have only been made at a cost that is prohibitive to the average sportsman.

I have examined many "over and under" guns and found them all rather wanting in balance and unhandy to carry in the field. Also they have another disadvantage; namely, that they always shoot first the upper and then the lower barrel, which does not give the shooter the choice of his open or choke barrel first if he has them based differently, as most sportsmen would for field shooting. This, to the writer's mind, is one of the greatest drawbacks of a single-barrel gun, as a man must be satisfied to use either a full choke or a cylinder all the time.

Lastly, in regards to the "over and under." All that I have seen have been far too heavy, due to the ponderous breech, to carry around in the field.

In all fairness, however, we must remember that the double-barreled gun has been going through a process of evolution for over a century, whereas the repeater is a comparatively new idea. And undoubtedly in time the repeater will reach a state of perfection close to that of the double.

UNKEL DAVID'S LETTER

Dere Felde and Streme.—

To rite a letter wunst a munth wood not be extry strenyoowus for a man of mi undowted litterrery nollidj. An ower at the tiperiter & abowt foar (4) smawll drinx owt of a bottel, & the job wood be finisht. You ott to see me when inspeerashuns are coming in buntches & I am running the masheen with boath hands, tutch sistim & third spead, & mebby whissling & beeting time with boath fete, while Sar An redes me extrax from the advertissmints of a deepartmint stoar. Whitch, as I sed be4, the meer riting of so menny columns is what the Frentch wood cawl a baggytel. The trubbel is doo hully to the ressyprossity treety betwixt mi self & the Eddytur—whitch stippylates that I shell maik at leest one komplementerry menshun of sed Eddytur per eech letter. Sutch a rewl is a grait help to the immajjynashun, but sum times it gits a felloe in a hoal—bekos there never was a Eddytur hoo you can say knise thingz abowt as offen as wunst a munth. There is sum thing abowt maggyzeen work whitch maiks a man kold bludded, & moar in the noshun of chukking gass bumbs or Jerman hash-brown srapnel shellz, than of distribbiting bokays of Seesul Brooner rozes & swete peez. But the subjikt is too moarnful for further diskushun.

Me & Sar An have just sellybrated owr burthday. She was born in Aprile & me in Jooli ten (10) years befoar, & we splitt the diffrunse & maik one day doo for boath. Sar An yoozyolly speeks a peese & I rite a littel poim, like that whitch folloes:

"Us two (2) are sixty (60), you & me—
Owr aije we doo not show it—
& what's the odds how old we be
If uther fokes dont knoe it?

I meat a thowsand mades eech day
Hooz smyle is swete as hunny,
& Sar An—tho a trifel gray—
Sees pinhed doods with munny;

But eech to eech we're awl in awl,
Tho bawld in spotz & toothless,
& doo not trembel at the cawl
Of old aije, grimm & roothless.

Soe let us kill the fattid kaff,
& see that thoze Eejipshuns
Dig up their dollar & a haff
For Felde & Streme subskripshuns."

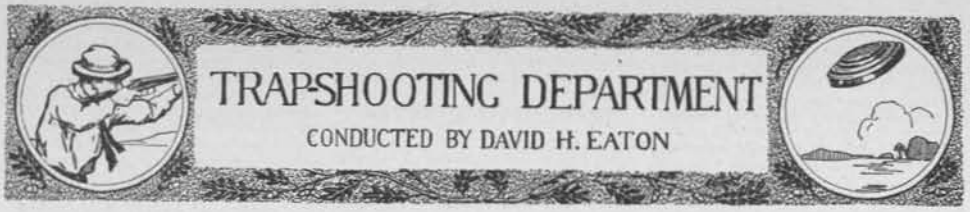
I shood have menshund befoar that we are now lokated in Eejipp, whitch is a subbub of Cheecawgo & as near to Kayro as it is saif for a onnist man to bee if he is ded broak. Kayro is a steembote town with a reppytashun for erly watter melluns & draw poaker, & is hully surrownded by Mizzoory, Illinoy & Kentucky. Evry uther man is a forriner & knoes whitch way to run too when he gits six (6) bitts ahed of the gaim. Moastly they play for wattermelluns & pay when they git down to ten (10) cents per eech. Yore unkel now has abowt haff a karlods to his creddit—soe I will continyoo in klose kommoonyun with theez dere peepul till I can likwydait there on. Meen time I am sirkullating a pettishun to inklood katfish under the Fedderel burd law—the saim beeing insektiverus tho not strikly a song burd, awlsoe mygertory, & shood not be caut indiskriminit like they be at prezzent. The katfish is abowt the soal form of wild life hooze ploomij duzzent appeel to the millinerry traid. Horny on three (3) diffrent expoazyers & reddy to bite if you stik yore finger in its mowth, it is utherwize innersent & withowt gile, & shood be alowd to perpytrait itself in evry krik & puddel.

Its pertekshun is deemanded soe far by me & Sar An & abowt fotty (40) uthers, & shood be ajjytated by the grate reelijus maggyzeen eddytoarially & utherwize. You can attrakt attenshun by yoozing a life-size phottygraff of a hunderd (100) pownd katfish in munthly full-paje installmints—beginning at whitch ever end you pleeze. Awl hale to the jentel katfish, the cheef pervider to owr foarfathers in their erly struggels! The passinjer pijjen perisht; the bull buffalow bellerd & was no moar; but still & ever yet—as the poit sed—an uther katfish was holding the foart underneeth the willers, reddy to be kookt with the dride punkin when the preecher come. Awlwais there was littel kats for the sorrerful yooth hoo coodent go to Sundy Skool but wunst a day.

Kanzaz & Indyanny have the buffalow on their stait seels, but the katfish shood be on awl, with the inskripshun: "When I bite, you've got me grabbed." There ain't no munky bizness abowt a katfish. He ain't pertikler as trowt. A chawk line on a fense rale looks as up-to-dait as a ate (8) ownce rod & fansy takkel, & his appytite is incloosive—saim as yore oan when you hit a free luntch cownter. A fish whitch must be cawt with a artifishel fly is too eetheeryel to fry itself withowt greess.

Sar An & me ekspekt to rekwest bids from spoarting goods howzez for a full kamp owtfit, tent inkooded, whitch we shell yooze in kase of war with sum forrin nayshun. Owr idee is to git rite in the middel of the biggest thikket we can find & stay putt till peess is konkluded. Jest now I am giving instrukshun in war taktiks to a speshul klass, whitch inkloodes stealing chikkens & grabbling potatoze owt of the hill by moonlite. Sum of the best peepul are enthooziastik skollers, & show awlmost profeshunal appytood in owr praktiss manoovers. One poopil of grait promiss was shot in a unyun patch last nite, but is app to rekooperate if we can git him owt of jale. I woodent be undooly optymistik, but this idee of owr nashunal unpreepairedness is awl a mistaik when a simpul plummer & steem-fitter can kwallyfy in the war gaim the sekkund lesson. Ejjykashunal hits along the lines sujjested above, will be welkum from the Eddytur & uther competent instrukters

Yores trulie, UNKEL DAVID.



NEW YORK ATHLETIC CLUB

The tenth annual contest for the amateur championship of America, one of the most important tournaments of the year, was staged at Travers Island, on April 30 and May 1. The attendance was good and included shooters from all parts of the country. On the first day the 114 entrants included the best of the Eastern amateurs, a few Southern crackerjacks, and some from the West. Weather conditions were not of the best, rain and fog making it difficult to see the targets, and a strong wind affecting the flight, and keeping the shooters guessing a good part of the time. Four traps were used, and at each one the contestant was up against a different proposition. Lloyd R. Lewis, of Atglen, Pa., was in charge of arrangements, and in order to equalize conditions as much as possible, he inaugurated a plan somewhat similar to the section system in vogue at the Grand American. The first squad, with W. G. Allen at No. 1 peg, started on trap 1, followed by squads 5, 9, 13, 17 and 21. Squad No. 2, with George D. Porter at the first position, opened on trap 2, with squads 6, 10, 14, 18 and 22 following; E. L. Bartlett, first man in squad 3, started things at trap 3, with squads 7, 11, 15, 19 and 23 following; on trap 4, R. L. Spotts started in squad 4, and squads 8, 12, 16 and 20 followed. Each squad moved on to the next trap when an event was finished. Charles A. North was in charge of the traps and proved a very efficient aid to Manager Lewis. The preliminary event at 200 targets was an interesting contest, the competition being keen for the honors and the five gold watches, with the N. Y. A. Club's emblem, the winged foot, inlaid in enamel, on the case. At the halfway post, George L. Lyon (Chief Bull Durham), of Durham, N. C., was in the lead with 95, and was shooting in fine form. A. B. Richardson, Dover, Del., was tied for second place with R. L. Spots on 93. In the last century, Richardson got busy and smashed 97, going out with an unfinished run of 85. Lyon also improved on his half-way score and nosed Richardson out of first place by a single target, 191 to 190. Richardson fought an uphill race. In the fifth string Lyon was five targets ahead; the end of the sixth round his lead was cut to four, and in the seventh string Richardson gained another target, cutting the margin to three. The last string was Richardson's by two targets, making his total score only one less than Lyon's.

In the last half of the race, R. L. Spotts, winner of last year's preliminary and amateur championship, duplicated his score made in the first century, finishing in third place on 186. J. L. Snow, of the Boston Athletic Association, was fourth with 185, and A. L. Burns, of the N. Y. Athletic Club, fifth with 184. The five gold watches were won by the above in the order named. An extra feature on opening day was the second half of the annual interclub team match between the N. Y. Athletic Club and the Boston Athletic Association. The first leg was shot over the B. A. A. traps at Riverside, and was won by the Bostons, but they failed to repeat here, the New York team winning with a score of 1783 to 1694. Ten men on each team; 200 targets per man. G. L. Lyon was high on the New York team with 191; R. L. Spotts second with 186. J. R. Snow headed the Bean Eaters with 185; Jay Clarke, Jr., next with 183. The second teams of the two organizations also faced the traps, the New Yorkers winning 1649 to 1433. C. J. Stein and A. J. McManus headed the New Yorks with 173 and 172 respectively. E. H. Kidder was at the head of the Bostons with 162, and L. B. Flint second with 159. The weather on the second day was fine. The wind had blown itself out, and although rain was threatened in the morning, before noon the sun was shining. The attendance was increased, 143 amateurs facing the traps. The feature of the day was the amateur target championship event at 200 targets. This was won by George L. Lyon on a score of 192, duplicating the record made by Spotts last year. The race was a hot one. At the close of the second event (50 targets) A. L. Chamberlain, New Haven, Conn., and C. H. Newcomb, the Philadelphia crack, were in the lead with 49 each; G. L. Lyon, Allen Heil, E. A. Staples, S. P. Senior, C. W. Van Stone and J. H. Hendrickson 48 each; E. A. Randall and W. M. Foord 47 each. The end of the third event found Chamberlain and Newcomb dividing first place with Staples and Hendrickson on 73 each; Lyon alone in second place with 72, and Conley, Randall, Snow, Senior and Van Stone 71 each. In the fourth event Lyon went straight and finished with 97; Chamberlain, Newcomb and Conley second with 96 each; Richardson, Snow, Senior and Hendrickson 94 each. Randall was in fourth place with Staples on 93. The end of the fifth round found Lyon and Conley tied for first place on 121; Newcomb second with 120; Chamberlain third with 118; Randall, Richardson, Foord and Senior 117 each; Snow and Staples 116 each, and A. Heil, Van Stone and Hendrickson 115 each. In the sixth round (150 targets) Lyon went to the front with a total of 145, two targets ahead of Newcomb, who was second with 143; Chamberlain, Randall and Richardson 142 each; Conley and Snow 141; Senior 140; A. Heil, Foord and Staples 139; Van Stone 138, and Hendrickson 137. In the seventh string Lyon maintained his lead, going out with 169; Newcomb dropped from second to third place with 166; Chamberlain advanced from third to second place with 167; Conley and Randall 165 each; Richardson, Snow and Heil 154 each; Foord and Senior 162 each; Van Stone 161; Staples and Hendrickson 160 each. The leaders finished the last round in the same order: Lyons first with 192; Chamberlain 190; C. H. Newcomb and A. E. Conley 189; E. A. Randall 188; A. B. Richardson, J. L. Snow, Allen Heil (Allentown, Pa.) 187 each; W. M. Foord, Wilmington, Del, and A. L. Burns, of the Larchmont Yacht Club, who came to the front with 96 out of the last 100 targets, were next with 186 each. Ten prizes were given in this event by the N. Y. Athletic Club, all watch fobs; the first having a large diamond besides the club's emblem studded with diamonds and rubies, and the other nine being set with sapphires. G. L. Lyon won first, A. L. Chamberlain second; A. E. Conley and C. H. Newcmob shot off the tie for third and fourth at 25 targets, the latter winning with a score of 24 to 21; E. A. Randall won fifth; Allen Heil, J. L. Snow and A. B. Richardson shot off for sixth, seventh and eighth prizes, Richardson winning sixth with 25 straight; the others tying again on 24. The second shoot-off gave seventh to Snow and eighth to Heil on scores of 24 and 22; W. Foord and A. L. Burns shot off for ninth and tenth, the former winning with 24 to 22, and taking ninth, Burns getting tenth. Former winners of the championship are: 1905, John H. Hendrickson, Jamaica, L. I., 94 out of 100. 1906, Wm. M. Foord, Wilmington, Del., 94. 1907, Edward F. Gleason, Boston, Mass., 95. 1908 and 1909, George S. McCarthy, Philadelphia, Pa., 96 and 98. 1910, no contest. 1911, Harry W. Kahler, Philadelphia, Pa., 173 out of 200. 1912, B. M. Higginson, Jr., Newburg, N. Y., 185. 1913, C. H. Newcomb, Philadelphia, Pa., 179. 1914, Ralph L. Spotts, New York, 188. The long run trophy, a gold medal, was won by A. B. Richardson, with a run of 131. George L. Lyon won high average with a total score of 383 out of 400 for the two days. The interstate team championship event had six entries, and was

won by the Independent Gun Club, of Philadelphia; C. H. Newcomb, 189; A. B. Richardson, 187; Allen Heil, 187; Wm. M. Foord, 186; Jesse C. Griffith, 178, total 927. The team of the N. Y. Athletic Club was runner-up with a score of 922. Bridgeport (Conn.) Gun Club, 917; Portland (Me.) Gun Club, 884; Maryland Country Club, Baltimore, Md., 873; Smith Gun Club, Newark, N. J., 871. Each member of the winning team received a gold watch fob studded with diamonds, and those of the second team secured gold medals.

OREGON STATE CHAMPIONSHIP

L. Rayburn, of Portland, won the amateur championship of the State on a score of 98 out of 100 at the State tournament given under the auspices of the Portland Gun Club. There were 58 shooters in attendance during the two-days' shoot. P. H. O'Brien, of Portland, and J. A. Dague, of Tacoma, tied for second on 96, the former winning the shoot-off. F. VanAtta 95; A. R. Wilson 93; F. Templeton and Charles Leith 92 each, finishing in the order named. On the entire program of 400 targets, the amateurs were headed by F. W. Troeh 382; J. W. Seavey 378; F. VanAtta 374. Professionals, H. E. Poston 386; L. H. Reid 384; F. C. Riehl 382.

OKLAHOMA STATE TOURNAMENT

The shoot was held on the Fair Grounds at McAlester, the events being run off over three traps. Good weather prevailed, and the sport was witnessed by a large attendance of men and women. J. A. Campbell won the State amateur championship event on a score of 99 out of 100, breaking the first 96 straight. W. M. Homer, of Krebs, was runner-up on a score of 98; W. M. Hite, J. W. Walker, W. H. Wilson 96 each; V. H. Francis and W. Clark 95 each. S. A. Huntley was the star performer of the tournament, dropping but five targets in the two days' program at 400 targets. He went straight in the championship event at 100 targets, was high gun on the first day with 197, and on the second day with 198; he made two runs of 136 and 114, the latter still unfinished at the close of the shoot. J. A. Campbell, W. M. Lambert and Hood were second high amateurs for the two days with 384 each; A. W. Clark 383. The professional class had Ed O'Brien and Spencer at the head with 386 each. The long run of the tournament was made by W. M. Lambert, 142; A. W. Clark broke 106 straight, and runs of 50 and 100 were quite numerous. In the State championship event, Homer and Campbell were tied on 80 straight at the close of the fourth round, the latter dropping his 97th target, and the latter missing two in the last 20. It was a close and interesting race from start to finish.

PENNSYLVANIA STATE TOURNAMENT

The annual tournament of the Pennsylvania State Sportsmen's Association was held at Milton, May 18 to 21. There was an average attendance of 110 shooters on each of the regular days. On Practise Day, in five 20-target events, L. D. Willis was high amateur with 96; F. Billmeyer and E. H. Adams 95 each. L. S. German, who has recovered from the effects of the accident of a few weeks ago, was high professional with 99; J. M. Hawkins 97, and W. B. Darton 96. The program on the first and second days was the same, five 15 and five 20-target events, a total of 175 targets; on the third day five 20-target events, and a merchandise handicap event at 100 targets. C. H. Newcomb was high amateur on opening day with 168; W. H. Behm and A. Heil 167 each; F. S. Bender and W. Miller 166 each. W. B. Darton was high "pro" with 170; Neaj Apgar 169, and L. S. German 166. The State two-men team championship race at 50 singles and 10 pairs of doubles was won by the Harrisburg team No. 1, Martin 60, Worden 66, total 126. The State championship at doubles (25 pairs) was won by W. S. Behm, Esterly, with 44; A. Heil, W. Speiser, J. B. Worden and Johnson, 42 each. In the regular events of the second day F. Billmeyer was high amateur with 171; C. H. Newcomb 170; F. Sidebotham 169. High professionals, L. S. German 170; A. A. Somers 167. In the Interstate Association's Amateur State championship event the seven trophies were won by the following, after shooting off ties, and in the order named. B. Teats, Northumberland (State champion), 97; F. Sidebotham, Philadelphia (runner-up), 97; F. Calhoun 96; E. H. Adams 96; L. A. Miller 96; W. H. Stroh 96; D. W. Baker 96. The three-men team race was won by the Bradford Gun Club team: A. W. Vernon 46; C. D. Hemline 49; R. S. VanNette 47, total 142. On the third day C. H. Newcomb was high in the 100 targets with 99; J. B. Fontaine, W. Miller and A. Hickman 98 each; A. Fink 97. The professionals were headed by L. S. German and W. B. Darton with 99 each; J. M. Hawkins 98. The Independent Gun Club team No. 2, of Philadelphia, won the State four-men team championship: A. Fink 40; H. E. Perry 39; Sidebotham 39; C. H. Newcomb 40, total 158. The merchandise handicap event had a good entry, A. L. Lewis being high amateur with 96 from 18 yards; W. Miller second with 93 from 20 yards.

KANSAS STATE TOURNAMENT

The State tournament held at Pratt was one of the largest shoots ever held in the State. The program called for 200 targets on each of the two days. The Amateur State Championship event was won by H. C. Hood, of Pittsburg, with 95. R. Ainsworth was runner-up, and won the second trophy, after shooting off a tie on 94 with S. C. Arnold, who took third trophy. B. F. Simonds, George Grubb and H. Whitney won fourth, fifth and sixth trophies after shooting off a tie on 93. P. Cairns captured the seventh trophy with 92. High amateurs for the two days were: C. Blount 375; G. Grubb 370; R. Ainsworth 367, and F. Luther 366. The professionals finished with Ed. O'Brien at the top on 379; H. C. Keefe 370; D. W. Bovee 364; H. N. Kirby 363. The 1916 tournament goes to Emporia.

WASHINGTON STATE SHOOT

The annual tournament was held at Seattle under the auspices of the Seattle Trap Shooters Association, and was the most successful State shoot ever held in the State. E. J. Chingren, of Spokane, won the Interstate Association's Amateur State Championship event, after shooting off a tie on 99 with Frank Troeh, of Vancouver. The former broke 40 straight in the two shoot-offs, to Troeh's 39; a close race, and an exciting one. The program was at 150 targets each day, total 300 targets. P. O'Brien and L. Rayburn were high amateurs on the first day with 146 each; L. E. Ovenden and F. Troeh second with 142 each. L. Reid high professional with 145; F. Dryden and H. Poston next with 144 each. On the second day F. Troeh was high amateur with 148, which was also high over all; L. R. Barkley 145; P. O'Brien 144. The professional class was headed by L. Reid and H. Poston with 147 each. F. C. Reihl 146. High amateur general average was won by F. Troeh and P. O'Brien with 290 each; L. Rayburn 288; L. R. Barkley 282. L. Reid was at the top of the professional class with 292; H. Poston 291; F. Reihl and F. Dryden 286 each.

NEBRASKA STATE SHOOT

The 39th annual tournament of the Nebraska State Sportsmen's Association was held at North Platte on May 20 and 21. The program was 200 targets each day. The prevailing bad weather kept the attendance below expectations, and forced the management to carry the finish of the tournament over a day. The places in the Interstate Association's Amateur State Championship event were only decided after ties for each place. S. A. Huntley, Omaha, and H. J. Rebhanson, North Platte, tied for first on 95. The shoot-off was won by the latter, 18 to 17, and he takes the title of State champion and the first trophy; second trophy to Huntley. C. D. Linderman, Lincoln, and C. C. Holzworth, Heartwell, tied for third and fourth trophies on 94. Two shoot-offs were needed to decide, Linderman winning with 18 and 19 to 18 and 18 by Holzworth. For the fifth, sixth and seventh trophies, R. J. Starkey, North Platte; Bert Dixon, Omaha, and Frank Rudat, Columbus, were tied on 93, finishing the shoot-off in the order named. S. A. Huntley won high amateur general average with 372 out of 400; D. D. Bray 370; A. Koyen, E. W. Warner and Franz Bendel 368 each. Ed. O'Brien was at the head of the professionals with 384; A. H. Hardy 365. Grand Island was selected as the place for the 1916 tournament.

FISH AND FISHERMEN

ANNOUNCEMENT OF PACIFIC NORTHWEST TOURNAMENT OF BAIT AND FLY CASTING TO BE HELD AT TACOMA, WASH.

Aug. 26th, 27th, 28th and 29th under the auspices of the Tacoma Bait and Fly Casting Club

The events at present planned, open to all amateur Fly and Bait Casters, are as follows:

Fly Casting—Light tackle accuracy; Heavy tackle accuracy; Delicacy and Accuracy; Dry fly accuracy; Heavy tackle distance; Light tackle distance.

Bait Casting—Accuracy ¼ oz.; Accuracy ½ oz.; Distance ¼ oz.; Distance ½ oz.; Novice, Distance ½ oz.; Accuracy ½ oz.

Trophies will be awarded to winners and valuable prizes to the contestants of these events which will be cast under the rules of the National Association of Scientific Angling Clubs.

The Tacoma Bait and Fly Casting Club plans to entertain visitors in a novel way, possible only at Tacoma and on Puget Sound. There will also be provided fishing trips unequaled in any other part of the country.

A cordial invitation is extended to all members of Casting, Rod or Fishing Clubs, as well as unattached casters to take part in this tournament which is the first of this character ever held in the Pacific Northwest.

R. B. Nason, Secretary, 302 Equitable Bldg.

TOURNAMENT OF THE ANGLERS' CLUB OF NEW YORK

Below are the results of our spring tournament. Considering the abominable weather we had the attendance was very good. In the 4 oz. distance fly casting some remarkable scores were made in the open handicap. Three out of the six contestants cast over 90 feet, and Mr. E. J. Mills made a world's record cast of 98 feet. The average of the lowest man was 85; the highest (scratch 94⅘.

PRIZE WINNERS IN THE ANGLERS' CLUB OF NEW YORK TOURNAMENT

THURSDAY, MAY 20, 1915.

No. 1—Bait Casting for Distance —¼ oz. weight, 120 ft. class: J. S. Pettit 1st, O. T. Mackey 2nd, F. G. Henry 3rd.

Open Handicap: A. J. Neu 1st, J. S. Pettit 2nd.

No. 2—Accuracy Bait Casting, Fishing Outfit: A. J. Marsh 1st, F. G. Henry 2nd.

No. 3—Trout Fly Casting for Distance, 4 oz. rods: 70 ft. class: J. S. Schwinn 1st, J. S. Pettit 2nd; 80 ft. class: J. S. Schwinn 1st, O. T. Mackey 2nd.

Open Handicap: E. J. Mills 1st, A. R. Hanners 2nd.

FRIDAY, MAY 21, 1915.

No. 4—Dry Fly Casting Accuracy: George Rae 1st, C. T. Champion 2nd.

Open Class—97 per cent. not filled.

No. 5—Wet Fly Accuracy: C. T. Champion 1st, J. S. Pettit 2nd.

Open Class—97 per cent. class not filled.

No. 6—Fly Casting for Distance, heavy rod, open handicap: P. D. Frazer 1st, C. T. Champion 2nd.

80 ft. class not filled.

SATURDAY, MAY 22, 1915.

No. 7—Salmon Casting, 100 ft. class: J. S. Pettit 1st, O. T. Mackey 2nd; 115 ft. class: F. C. Raynor st, A J. Marsh 2nd.

Open Handicap: A. R. Hanners 1st, C. H. Higby 2nd.

No. 8—Bait Casting for Distance, ½ oz. weight: 150 ft. class: J. S. Pettit 1st, F. S. Gruver 2nd; 175 ft. class: J. S. Schwinn 1st, O. T. Mackey 2nd.

Open Handicap: J. S. Schwinn 1st, J S. Pettit 2nd.

No. 9—Bait Accuracy, ½ oz. weight: 97 per cent. class: F. G. Henry 1st, J. S. Pettit 2nd.

Open Class: A. J. Neu 1st, C. T. Champion 2nd

No. 10—Fly Casting for Distance, 5 oz rods: 75 ft. class: W. A. Chandler 1st, Chester P. Mills 2nd; 85 ft. class: J. G. Fulton 1st, J. S. Schwinn 2nd.

Open Handicap called off on account of darkness.

PATCHING WADERS

By Ladd Plumley

A leaky wader is far more unsatisfactory than no wader at all. But any one can patch a wader, or a rubber boot, so that the leak will be permanently watertight. On your next fishing trip carry with you a supply of rubber cement. This can be purchased at any automobile supply house. But the best of all cement for the purpose of repairing waders is that sold at hardware stores as "Major's Rubber Cement."

The best material for patches is obtained from an old wader. By using some care, and, if necessary, a pair of pincers, the inner canvas lining can be pulled away from the underlying coat of pure rubber. The outside cloth, "moleskin," as it is called, with the rubber sheathing exposed, gives the most perfect material for patches.

Considerable care should be used, if the patch is to remain securely in place. Dry, sunny weather is to be preferred for the work and the wader and patch must be absolutely dry.

Using a bit of fine sandpaper, carefully clean the portion of the wader that is to be patched. Do not use the sandpaper too long or too roughly. Apply two coats of cement to the wader and one thick coat to the rubber sheathing of the patch. Wait until the gum on both patch and wader seem to be entirely dry. If you hasten the job to a conclusion the result will be unsatisfactory. Allow from fifteen to twenty minutes.

When you are certain that the cement is dry on both patch and wader, you should press the patch firmly in place. Now, with a tack hammer, tap lightly on every portion of the work, and as you tap (very lightly) hold the wader in position with your left hand within. Allow fifteen minutes more. Then go over the edges of the patch with a forefinger which has been dipped in the cement. After the edges appear to be dry, tap gently on every portion of these edges.

By following the directions as given, a patch can be cemented to a wader that for all practical purposes will have the integrity of the wader itself. It so happens that yesterday I fished a stream up in Rockland County—a hard stream on waders. Those I used on the trip are several seasons old and have been patched so frequently that if it were not for the patches they would be sieves. By actual count I find that on the waders there are *fifty-five* patches. Yet the waders, subjected to the hardest of use, kept me as dry as if they had been fresh from a tackle store.

Please let me repeat. In using rubber cement great care should be taken that the cement is apparently perfectly dry before the parts are pressed together. I have known few persons who would rigidly follow the directions that go with the cement, although these directions are stated on every bottle and can. And it is equally important—this has been my experience—that material should be used where rubber comes in actual contact with the outside material of the wader. And a pure rubber patch, while it will adhere strongly, cannot be compared for wearing qualities with a section of the mackintosh itself. I have repeated these things because they are of great importance. Nothing is more disgusting than to repair a wader only to find that in midstream the patch comes off as innocently as if put on with flour paste.

The New Waterman PORTO

Think of Unrestricted Speed Control in a Rowboat Motor!

The real, unalloyed joy of motor boating lies in traveling the water at whatever speed rate you wish, unhampered by any set pace or paces. The **Waterman Porto** Rowboat Motor with its

Sintz Reversing Propeller giving Multiple Speed Control

not only makes any boat a motor boat—but a *motor boat of unrestricted speeds*, both forward and reverse. From the swiftness of 8 to 10 miles an hour, you can slow down to an imperceptible drift and into reverse at any rate you desire, without discomforting jerks and shudders. Think of it! A rowboat motor with the flexibility of a throttle-controlled steam engine!

Here is the original outboard rowboat motor, numbering 30,000 satisfied users in its tenth year of unqualified success. In addition to its two wonderful refinements, the 1915 model carries the essentials which have made the **Waterman Porto** a reliable standby for more than 9 years.

The **Waterman Porto** develops 3 h. p. Weighs 65 lbs. Fits any shape stern. Has automobile carburetor, not a "mixing valve;" removable bearings; solid bronze skeg protecting 10½x 16-inch propeller. Steers by rudder from any part of the boat. Water cooled exhaust manifold; noiseless under-water exhaust; spun copper water jacket. Ignition by high grade tension magneto. And guaranteed for life.

These are not features, but essentials. As such, demand them in your rowboat motor, or you will not be getting full value for your money.

Get in the game at once. Write for Free Marine Engine Book, containing full information on our full line of engines. We ship to you directly from the factory, insuring immediate delivery. Or you can get your motor from the nearest distributor's stock. But get busy at once. Every day you delay you postpone a day's delight in power boating, and the season is right at hand.

WATERMAN MOTOR COMPANY

211 Mt. Elliott Ave. - - - Detroit, Mich.

1915 Model With Reversing Propeller and Multiple Speed Control

Calendar of the Trout Stream Insects

PLATE IV—JULY INSECTS

Herewith we issue the fourth of Mr. Louis Rhead's Nature Fly Charts to enable our readers to fish intelligently according to time, date and rise.

No.	Name	Date of Rise	Time of Day	Weather	Family	Order
1.	Golden drake.....	Early to late	Evening and dull days	Warm afternoons	Drake	Ephemera
2.	Pinktail	15 to end	Evening and dull days	Warm afternoons	Drake	Ephemera
3.	Silver gray.....	Late fly	Evenings	Warm evenings	Drake	Ephemera
4.	Spottail	Early to late	Evenings	Warm evenings	Drake	Ephemera
5.	Little Orange drake..	Early	Evenings	Warm	Drake	Ephemera
6.	Olive drake.....	Early to late	Evenings	Warm	Drake	Ephemera
7.	Orange stone.....	Early	.....	.....	Stone fly	Perlidae
8.	Brown stone.....	Early	.....	.....	Stone fly	Perlidae
9.	Redhead gnat.....	Early to late	All day	Warm days	Two wing fly	Deptera
10A.	White miller.....	Early	Evening and dull days	Any time	Moth	Lepidoptera
11.	Tiger beetle.....	Early	All day	Any time	Beetle	Colesptera
12.	Plume spinner.....	Early	All day	Any time	Spinner	Deptera
13.	Golden spinner.....	Early	All day	Any time	Spinner	Deptera
14.	Green wing stone....	Late	All day	Any time	Stone	Perlidae
15.	Orange spinner.....	Early to late	All day	Any time	Spinner	Deptera
16.	Brown bottle fly.....	.....	All day	.....	Two wing fly	Deptera
10B.	Orange miller.....	Early	Evening and dull days	Evenings	Moth	Lepidoptera

THE CALL OF THE BLUE

A Bluefish Yarn

By Allen Frank Brewer

"Listen, boy; hear that? There she blows again! Say, give this storm just a dozen more hours and this old shack will be as porous as a sponge."

It didn't need much imagination to make me agree with Jack in his prediction, especially as he was sleeping in the bunk above me in our bungalow and had easy access to swing a pillow at my head if I disagreed. Every gust of wind that night seemed to rock the whole building and it felt as if any minute we would be blown bodily off the foundations.

At best the little settlement of Manasquan Beach is lonely enough at night, but, oh, how I shuddered when that wind whistled around us this particular night. Have you ever laid in bed on a bleak winter night, after you'd been sent upstairs, leaving the old folks all gathered around the big parlor fireplace munching roasted chestnuts and swapping ghost stories? This wind gave me that same creepy, ghostly feeling as those winter nights used to.

Jack Glancy and I had come down here to spend a week of our vacation surf-fishing for striped bass and bluefish. We were both the keenest sort of surf fishermen and the minor hardships of a bachelor camp had no terrors for us. We had taken possession of a little bungalow away up at the end of the beach near the Squan Inlet.

We had been camping here now for four days and it had become real homelike—strewn generally with fishing rods, oilskins, surf-boots and a bait net. It was at this point that the equinoctial storms overtook us. During the whole time we had been cooped up in our bungalow we were alternately calking the walls and windows with strips of rags or else bailing the rainwater out of the stove when it insisted on running down the stove pipe. Whenever we did any cooking we had to wait for a lull in the storm in order to get our fire started and even then it was a case of burning newspapers most of the time to get heat enough to fry a fish or boil coffee. Altogether it was one beautiful experience and one not easily forgotten. Of course Jack had brought along a volume of Dan. Beard on how to camp, but we both swore to edit a description of "Practical Camping as She Is Done" if we ever survived.

However, the morning of Saturday, the fifth day, dawned bright and fair. It certainly seemed good to see our last day for fishing turn out to be favorable, and it really seemed as if every hardship was to be made up for by this one beautiful day. We had done a lot of fishing during the storm, but usually the sea had been too rough and our lines washed up on the beach as fast as we cast out. But even so, I had landed two small striped bass and both of us had caught a number of small bluefish. But Manasquan is famous for its surf bluefishing and we were after the biggest of all. On this morning the tide was out and a long, narrow sandbar extended along the mouth of the inlet.

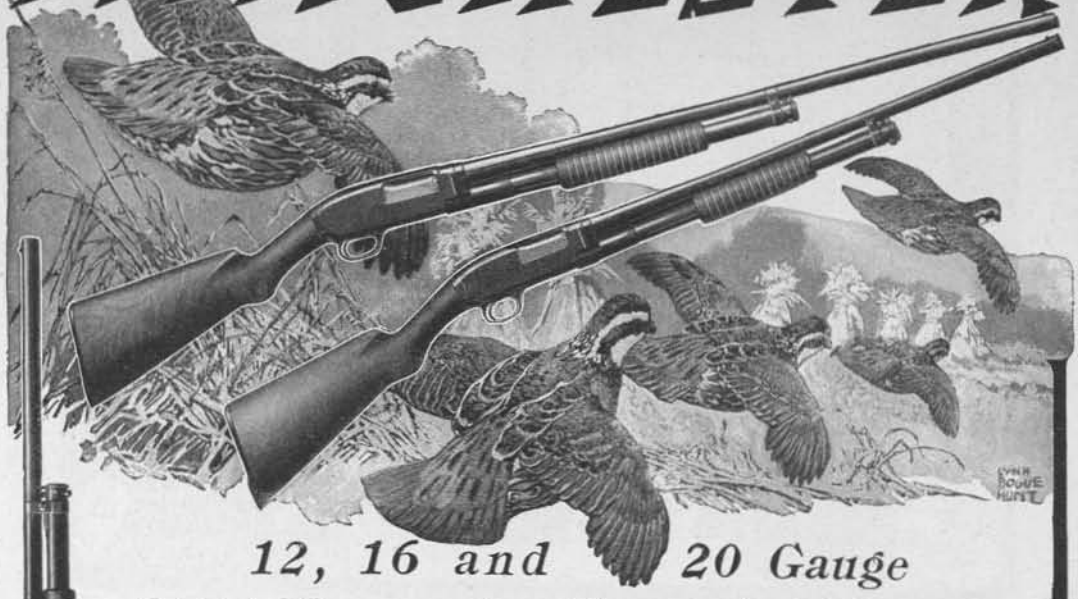
"Well," Jack observed, as we pulled on our hip boots and started to trudge out on this bar, "if the blues don't run round the end of the point to-day, old man, I'm going to quit fishing forever."

He was right. The prospects were the best for trolling I had seen in years, and we lost no time in rigging our tackles with bluefish squids. We were using the regular striped bass surf rods and 3-0 throw-off reels, and oh, what casts we did make. You only who have cast a four-ounce diamond bluefish squid into a school of blues can know the tense feeling of satisfaction as you whip your line out two hundred feet or more at every cast.

This was just what we experienced that morning. We only needed to wade into the surf to our knees when we saw the mullet breaking only a few yards away and the bluefish following them mercilessly. To Jack went the honor of first blood when he hooked into a little three-pounder. It was too small to play very much, and even at best, a small blue is so quick to shake off the hook that it is dangerous to give it the least amount of slack line. I did not have the same luck so early and I had begun to be disgusted that there were so many fish all around and not a one would take my squid. But in a few minutes my turn came, a giant bluefish, and he hit me like a hundred-pound tarpon. The handle of my reel slipped out of my fingers and I just had time to push in the "click" when off he dashed. Oh, how that big split bamboo rod did dip and spring, and it seemed as if my reel would never cease its steady hum. Finally my line got so low that even though I risked its breaking I had to snub the fish and turn him if posible from taking more line. I was successful, for he started on a counter rush diagonally toward the beach, running northward. This gave me ample time to reel in my line as it slackened. By this time I was slouching along in the surf up to my hips, absolutely unaware that my boots were sluiced full of water. Up and down the beach I fillowed that fish. Jack said I must have trudged a mile while the fight was on. But finally my beauty began to tire, and then, through over-confidence, I nearly lost him. For a second only I slackened up on my line, but this gave the bluefish his last chance for life. He broke off in one last mad plunge for an old wreck which laid about two hundred feet off shore. For an instant I lost my head and let him run, but a yell from Jack brought me back to life and I risked my line again with that ever-useful snub. Luck was with me, for my prize was too far gone to fight further, and he turned inshore, rolling in on the waves and just giving a feeble kick now and then as a last resort. In the undertow it was pitiful to see him rise on the crest of a wave and then roll under it exactly like a water-soaked log. It only took Jack a second then to rush down as a wave washed away and drag my captive high and dry. I'll never forget my exultation as I gazed down on him feebly gasping his life out. When we weighed him he swung fifteen pounds exactly, and it had taken me nearly an hour to kill him.

And believe me, I was satisfied. That week of hardship seemed all made up for now, and even old Jack was ready to quit happy.

WINCHESTER



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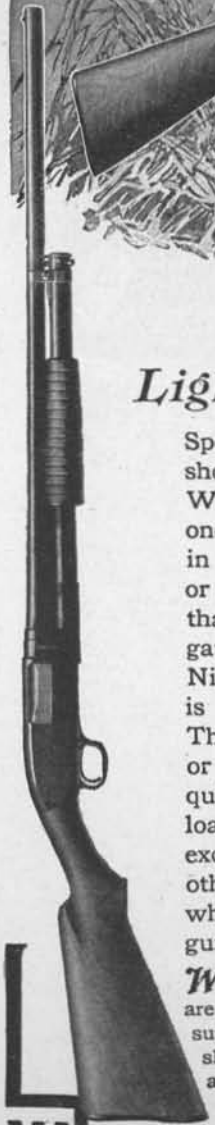
Light, Hammerless Repeating Shotguns

Sportsmen differ as to whether a 12, 16 or 20 Gauge is the best shotgun for field shooting, but the knowing ones agree that the Winchester Model 1912 lightweight, hammerless repeater is the one best bet in the shotgun line. This Winchester being made in 12, 16 and 20 gauges permits an advocate of the big, medium or small bore to indulge his fancy and be sure of getting a gun that is true to its gauge in balance, weight and length. All three gauges of this model are made of specially selected materials. Nickel steel, which is twice as strong as ordinary gun steel, is used throughout for the metal parts in this Winchester. This means a lightweight gun without sacrificing safety or strength. This gun has a cross-bolt trigger lock, a smooth, quick and easy action, and a simple Take-Down system. It loads and unloads easily and its shooting qualities are not excelled by the highest priced double guns. There are many other pleasing and exclusive features of this Winchester which appeal to sportsmen that could be enumerated, but the gun itself is the best evidence of its quality and desirability.



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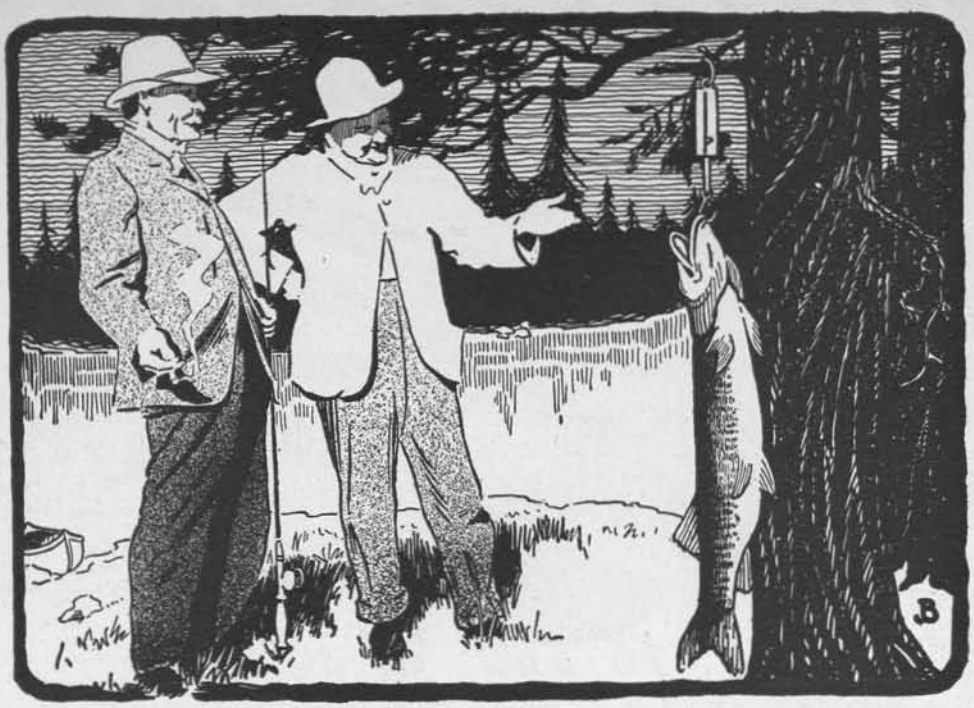


Field&Stream PRIZE FISHING CONTEST

A REAL WEAKFISH FROM RHODE ISLAND

By Edmond H. Guerin, Woonsocket, R. I.

Winner Second Prize, Weakfish, 1914 Contest.

As on many other pleasant occasions, on that beautiful September morning I was the guest of my friends, Frank Speck, Sr., and Jr., on board their power launch, headed for the favorite ledges which we knew the big fellows were in the habit of visiting. We had all been there many times before, and my hosts had already caught what I thought at that time would prove the first and second prize winners, but I still had hopes for the third prize, and with such company of experts, possibly do better.

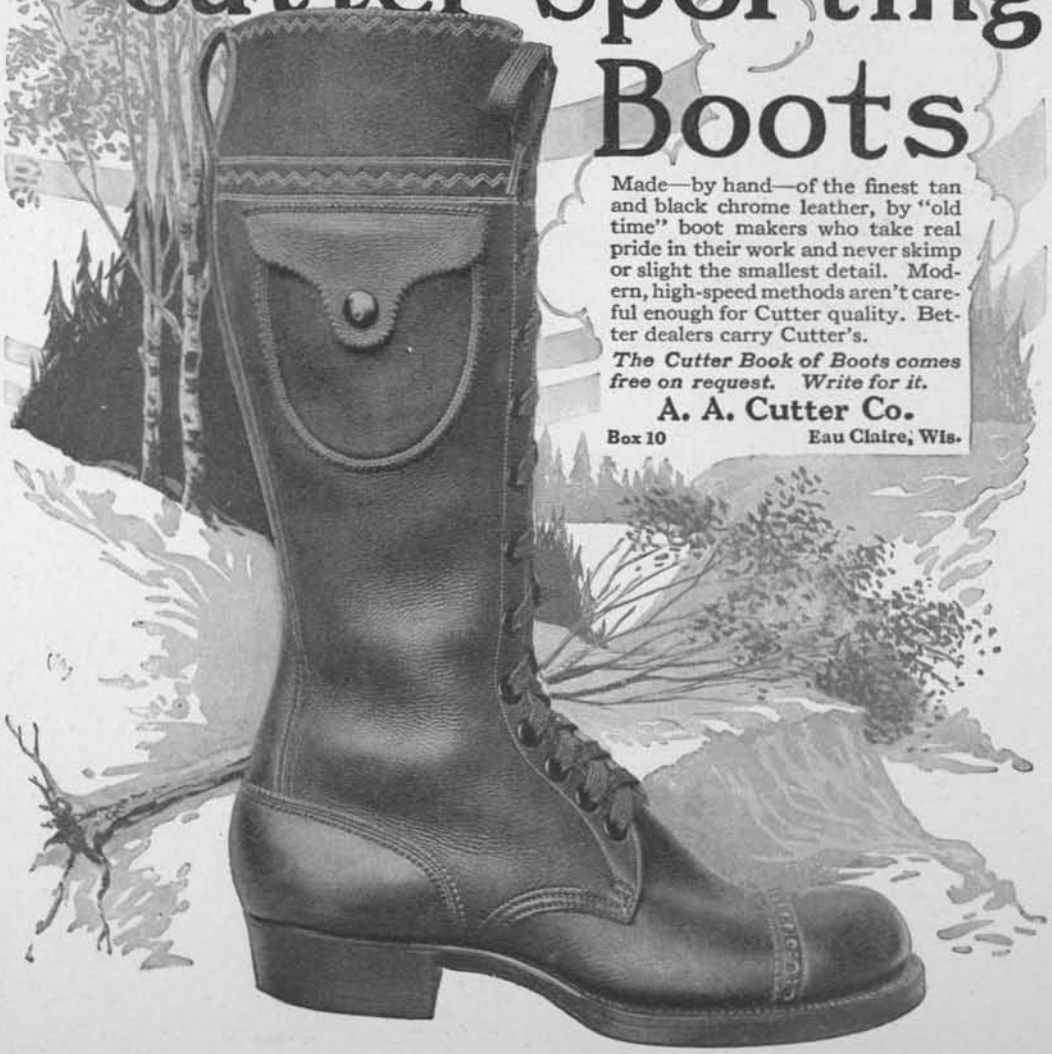
At this point it is only fair on my part to say that Frank Speck, Sr., surely deserves the honors for our wonderful catches of large fish, for it was he who would always be the first in the season to go for days early in the morning, in the afternoon, and even by moonlight, until he would one day come back with several of the beauties, and then we would all go. It was he also who found out just what bait the big ones wanted and landed one day a weakfish of 11 pounds 11 ounces, which we surely thought the king of them all. He was doomed, however, to disappointment, for he lost the third prize by one ounce, but here's hoping that he tops the list this year, for he rightly deserves it. On that morning we had, as usual, anchored at our favorite spot, and while two remained and fished on board the launch, Mr. Speck, Sr., and I took to the tender and anchored one hundred feet or so away. We had been fishing some time with live shrimps, and though we had a good supply and were using same freely in chumming, we had had very little luck. Frank, Jr., who had caught a few small fish from on board the launch, was having a fine time reminding us of the fact that if we wanted fish for breakfast he would gladly accommodate us. Up to that time not a fin in our boat, and things began to look bad for a record catch, and something had to be done. All of a sudden Frank, Sr., got up and requested me to pull in anchor, and, as he put it, "We will go and find these tide runners, for they don't seem inclined to come to us." No sooner said than done, and a few minutes later found us trolling back and forth, using live shiners about four to five inches long, hooked through the lips. My genial host insisted, as usual, in doing all of the hard work, meaning, of course, that he took to the oars while I, comfortably seated, was just waiting for that pleasant sensation that every true fisherman always enjoys when a big one takes hold as though bound to take line and rod on the first rush.

I was using a 9½-ft. 6-oz. bamboo flyrod and light casting reel, with limited capacity of line, and I knew that I had to use good judgment and work quickly if a large one so far forgot himself as to attempt suicide by fooling with my hook and minnow. All of a sudden r-r-r-r-r-r went my reel, and never before had I experienced such a vicious strike and sudden rush as I did that moment. By a quick jerk on the line I drove the hook home and the merry fight was on. "He's on!" I yelled to my companion (a very unnecessary remark, for that reel was fairly humming and the rod bending almost to the breaking point). "Slack up, my line is getting scarce!" And so it was, for that fish seemed to have made up its mind to get out of his uncomfortable position by trying to cover the bay in a few seconds' time, and he certainly made some grand rushes in quick succession.

My reliable little rod, however, was there with the goods every minute, and though it was bent almost in an oval from start to finish, it stood the strain well, and I can recommend to all sportsmen the use of nothing heavier on these fishes than a rod such as I used on this occasion, for the pleasure and sport is much decreased when using the common short, heavy rods so much in use on the bay.

TOUGH and trail-proof as a moosehide moccasin—and much easier on "civilized feet." Heavy enough to stand the stab of snags and the rasp of rocky roads—but not stiff enough to chafe or tire you. Water shedding, too—in Cutter Boots properly cared for, you can slosh all day through swamp or snow, yet come to camp dry footed. What more can you ask of footgear, you who hunt or hike, heeding the Red Gods' call?

Cutter Sporting Boots



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Not a small part of the credit for landing my winner is due to my good friend at the oars, for he certainly did handle that tender in a masterly way and saved the situation more than once when the line was getting dangerously low on my reel. After many long rushes and many shorter ones, and repeated dives under our boat from side to side and circling around, I finally, after twenty minutes, brought the weak alongside, totally exhausted and lying on his side. Having forgotten the landing net, I was compelled to drown my fish to a finish, after which it was an easy matter to land it by taking hold under the gills. The accompanying photograph shows better than I can explain how the fish looked and I surely was delighted with my catch.

EDMOND H. GUERIN AND HIS 12¼ LB. WEAKFISH

After hand-shaking and congratulations, I turned to my host and, thinking of FIELD & STREAM'S second prize, I jokingly remarked, "Well, there goes the tent," but he, like a real sport, was ready with the answer that he preferred the rod anyway, which was the third prize. The same morning we caught a few other weakfish weighing between eight to nine pounds, and it surely was a great welcome we received from the admiring cottagers when we landed our catch. The scales were brought out and my prize winner found to weigh twelve and one-quarter pounds, this after having been out of the water for about two hours.

Prize Contest Certificate Record. Second Prize, Weakfish, 1914 Prize Fishing Contest.

Weight—12¼ lbs.
Length—34 in.
Girth—17¾ in.
Caught—Sept. 5, 1914.
Where caught — Narragansett Bay, R. I.
Rod—Bamboo flyrod.
Reel—Julius Vom Hofe.
Line—Jefferson.
Lure—Live shiner.

THE CATCHING OF MY RECORD KINGFISH

By Roscoe D. Hulit, Long Branch, N. J.

Winner First Prize, Kingfish, 1914 Contest.

Having heard from a friend that there were plenty of kingfish being caught at Allenhurst, I ventured down there one afternoon and arrived about 5:30 P. M. There on the beach sat a couple of fishermen talking, so I went up to them and inquired what luck they were having, and they informed me that they had only one kingfish, and that the crabs were so thick that they had to use corks to keep their bait off the bottom. I studied over the situation and saw that they were fishing on a flat at the foot of Neptune Avenue, so I moved north about a hundred and fifty feet and I was then where the flat sloped off into the hole. The tide was about half in, so I rigged up, using a 30-inch leader and some small sproat hooks, and did not put on any cork, because I knew that kingfish were bottom feeders. I baited up the two hooks with small pieces of shedder crab, small baits being very essential to success in angling for this species, as they have very small mouths and bite quick and snappy, therefore you must make the baits small so they can get it all the first strike. I made a cast of about a hundred and fifty feet, and after my sinker had hit bottom I immediately began to drag it along to keep away the crabs. I suppose I had dragged it about five feet when I suddenly felt the sassy strike I was looking for and brought in a kingfish weighing about a pound and a quarter, while on the other hook was a blowfish. We call them balloon fish, because they can be blown up and look like a toy balloon. After unhooking them I made another shorter cast and was again rewarded with another small kingfish, and after that just as fast as I could get out they would snatch my bait before I could gather in my slack. Sometimes I would get a stronger strike and a stiff fight, which always resulted in the fish being the victor and getting away. I wondered why and finally decided that the thin hooks were the cause, so I removed them and replaced them with No. 1 O'Shaunessy forged hooks, and again tried my luck and they worked wonders. I got every fish I hooked after that, and the fish that had been getting away proved to be large kingfish. Up to the time I changed my hooks I had only six small ones and a half hour later I had eighteen. It was then nearly seven o'clock, and about that time my pal, Stanley, arrived, and the fish stopped biting. Stanley said he didn't think they would bite any more until the tide changed, but anyway he rigged up and got overboard and we sat there talking about the big run of kingfish when I was jarred by a terrific strike and the fish hooked himself and started for the undertow. I pulled up and could not feel my sinker, so stood up and took in the slack and gave a stiff jerk and that started him fighting. I told Stanley I thought I had a croaker by the tussle he was giving me. I brought him ashore and in the dark he looked to me like a big weakfish. I told Stanley I had a weak, but when I took him up to the light I was surprised to find it was a kingfish. He tipped the scales at the 2 lb. 14 oz. mark. He was one of those old rusty-looking fellows who know how to fight.

Prize Contest Certificate Record —First Prize Kingfish, 1914 Prize Fishing Contest.

Weight—2 lbs. 14 ozs.
Length—18 in.
Girth—9½ in.
Caught—August 20, 1914.
Where Caught—Allenhurst, N. J.
Rod—Split bamboo.
Reel—Julius Vom Hofe.
Line—Armstrong, 15-thread.
Lure—Shedder crab.

MY OFFSHORE BLUEFISH

Winner Third Prize Bluefish, 1914 Contest

By Hugh M. West, Keansburg, N. J.

On the evening of July 3rd I went down to Seabright to see Capt. Ed. Johnson, and he told me that there had been a few blues taken, but all small, but if the weather was good we could have a try. So July 4th at 3:30 a.m. found me at Capt. Johnson's home, and after having a cup of coffee we went down to the beach to look at the weather, but the captain did not think much of it as the wind was south, but said we would take a run out to the Elbow, which is off Monmouth Beach, and see if there was anything doing; so we went for the first trip of the year.

Mr. B. C. Finck, who was with us, and I, soon had our rods in shape, and when we were about one-quarter mile off shore we put out our squids but the fish did not seem to like them, so after about two hours' trial we ran inshore and began still-fishing for plaice, and the first thing I knew I had a strike that took my hook, and about that time Mr. Fincke got what later on turned out to be a bluefish, but only a small one of about 4 lbs. weight. We got about twenty, all told, and most of our bait was gone when I got a strike that I thought was a whale, and you can believe me I had some fun with that baby. His first rush was at least 200 feet, and after a good fight I got him in near the boat when away he went for deep water again, and then it was some more fight to get him back, but after about 15 minutes, which I thought was an hour. I had him close enough for Capt. Johnson to get the gaff in him. We got several more, but they were all small, 3½ to 4 lbs.

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fishing trip then I would advise you to go out in a sea skiff with one of the New Jersey coast line fishermen.

Prize Contest Certificate Record. Third Prize, Bluefish, 1914 Prize Fishing Contest.
Weight—10 lbs. 12 oz.
Length—33½ in.
Girth—16¼ in.
Caught—July 4, 1914.
Where Caught—Off Monmouth Beach, N. J.
Rod—Vom Hofe.
Reel—Meisselbach.
Line—Vom Hofe.
Lure—Live killie.

A CHANNEL BASS FROM THE JERSEY COAST

By George W. Long, Philadelphia, Pa.

Winner Second Prize. Channel Bass, 1914 Contest.

It was a beautiful morning, Sunday, Oct. 18th, when I called to my friend and fellow bait-slinger, Ed. Corman—"there he goes!" and you bet he was going; why, if I had hooked onto a Pennsylvania Limited, that good old Vom Hofe reel of mine could not have gone around any faster. But let me say right here, I would not have hooked that fish if it had not been for Ed. After cutting a bunker in half, and baiting it on a 9/0 hook I called to Ed and said, "If there is a fish out there and he don't grab this he is crazy!" I threw out, and scarcely five minutes had passed when Mr. Bass picked it up, and ran about ten feet, and to my surprise and disgust spit it out! Well, I was mad; just think, after all my pains of putting that bait on so nicely, he had fooled me, for I thought he had taken my bait.

Here is where Ed. comes in, for I was about to reel in, when he called out: "Don't touch it—let it lay!" "Oh, he got away with it!" I said. "Wait a little," he replied, so I waited a few minutes, and sure enough, back came the bass. This time I tightened up on the line and, oh, how he did go! And never stopped until two hundred yards were out. There were four of us in a row, and every fellow, it seems, was calling some advice to me. We all knew it was a large fish from its first run, and Ed. kept calling, "Don't hold him, play him, play him, George!" You know what chance I had to horse that fish with an 11-oz. split-bamboo rod and 15-thread special linen line.

I want to tell you what I think about that rod: It is the best rod in the world, not only because it was made by my friend T. Lee Adams, but I had put it to test a few weeks before on a 75-lb. shark and landed him, so now when I sit in my den and look at that little frail stick, and think of what it has done, I feel that neither Adams nor any other rod-maker could duplicate it.

Up the beach I went with my fish, and, my, what beautiful runs he would make. Why, time after time I would turn to my friend, Frank Murray, who had come down to the beach to see if I needed any help, and say, "Get ready, Frank," but out again would go the fish, and every run was over a hundred yards. "He sure is a game fish," said Frank. I hated to keep Frank standing around and tried to get him to give me the gaff, and go back and fish, but he seemed to be enjoying it as much as I, for he kept on saying, "What do you think of that; that is the gamiest fish I have ever seen!" and Frank, who lives in Ocean City, has seen many big fish landed. He told me that out of 94 channel bass caught by members of the Ocean City Fishing Club, he had helped to gaff 20. I had had my fish into the break no less than fifty times; he came in this time—all in—and the breakers rolled him into shallow water, and I yelled to Frank to get him, and as he drew the giant fish up on the beach it was a beautiful sight; such a fine, long-shaped body. "Some fish!" After a rest and lots of talk, for by this time the fish had run me about a mile and a half down the beach and quite a crowd had collected, I asked, "How long did it take me, Frank?" "Well, it was 10:16 by my watch when you yelled 'There he goes!' and it is now 11:35—about one hour and twenty minutes' fight."

Now came the job of taking the fish to Adams—Mr. T. Lee Adams is the official weighing master of the Ocean City Fishing Club—and off we started, and when we hooked that fish on the scales and he said 54 lbs. 5 oz., I sure was proud. Then back to the club house, and after hanging him up very carefully, for I made up my mind that he would be hanging in my den this Winter, I went back to fish, and was surprised to hear Ed. tell me that time after time fish would pick up his bait and then spit it out, and try every trick he knew, he could not hook one. I started to fish again, but the tide soon turned and we quit.

I sure will feel proud next Summer to wear that gold club button, for you know it means a forty-pound channel bass or over. My friend, Chas. Maginnis, and I are the only members in that class—there being dozens in the silver button class (30 lbs. or over)—I feel justly proud of the second prize bass of the 1914 FIELD & STREAM contest, and hope next year to win the first prize in this class.

Prize Contest Certificate Record. Second Prize, Channel Bass, 1914 Prize Fishing Contest.
Weight—54 lbs. 5 oz.
Length—51⅜ in.
Girth—29½ in.
Caught—Oct. 18, 1914.
Where caught—Ocean City, N. J.
Rod—Adams' split bamboo.
Reel—E. Vom Hofe, Universal.
Line—15-thread Special
Lure—Menhaden.

LANDED AFTER MORE THAN AN HOUR'S FIGHT—A 54 LB. 5 OZ. CHANNEL BASS

PHOTOGRAPHIC CONTEST

We have been obliged to omit the Photographic Contest this month through lack of space, but will run it in our August number as usual.

The Story of "JIM-DANDY" FISH BAIT

Photograph of Early Season Catch with "Jim Dandy"

Henry Schillinger
The Inventor

THE early part of last July a party of us decided to spend several weeks *fishing* in lower Michigan. Friends who had been there told us to look up Henry Schillinger, and added that if anyone could get fish he could. So soon after our arrival we set out to find Henry, and we found his cabin right at the edge of the lake. We made arrangements to meet him early the next morning and he promised to point out the choice fishing grounds.

Henry agreed to paddle one of the boats and let us get all the fishing, but every once in a while he would cast out his line in a likely looking spot and *pull in a fine big bass.*

Things went along like this and Henry was getting all the fish. He kept encouraging us all the time by saying' "Never mind boys—you'll get 'em pretty quick, the luck's agin you." But we decided it wasn't all luck. Here we were (five of us)—each one using his own favorite lure—and all we had to show for it was two small bass, while Henry who had been casting only a quarter of the time had seven or eight fine bass.

The next time Henry made his cast I watched him and noticed that he was reeling very slowly and that his *bait* was *wobbling*—actually trying to shake the back hooks off. When I saw that bait wobbling and struggling I said to myself—"There's the secret. That's just what fishermen have been *looking for for years.* There's a bait that really wobbles."

It wasn't any snake fashion wobble either, but it labored and *struggled through the water*—like a crippled minnow.

I asked him to let me see what he was using and, on questioning him further, I learned that he carved it with his pen knife.

I happened to be the lucky one and persuaded Henry to let me use his home-made bait, and say!—if you could have seen that bait wobble and struggle through the water you would have gone crazy, too. It was perfect. And the beauty of the whole thing was that the bait was small enough for even the small mouth bass to swallow the whole thing.

Well, before the week was over Henry had to make a bait for each one of us, and believe me, we had the finest fishing the next 10 days that anyone could hope for, and before we left the boys had christened Henry's bait the "JIM DANDY"—and it sure is a "*JIM DANDY.*"

It's the best little bait that ever lured a bass, and if you take my tip you'll have a "JIM DANDY" or two in your tackle box when you start on your fishing trip. And if you don't outfish the other boys while you're using "JIM DANDY," I'll buy.

"JIM DANDY" FISH BAIT

See that Notch and Concave Face

"JIM DANDY" Fish Bait is on sale at most first class stores, but if you can't find him, send us your dealer's name and 75c and we'll send you one right back by mail.

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SPORTSMAN'S WORKSHOP

BUILDING A SPLIT BAMBOO FLY ROD

By George Parker Holden, M.D.

PART IV.

Exactly the same maneuvers are now repeated with strips 4, 6 and 5, and this second half-joint is placed near the first. Now return to the half-section first glued, and spread glue over its whole uppermost or inside surface, which is two strips wide; lay it down again; apply glue similarly to the second half; bring these two halves together; secure them tightly at the butt with the noosed end of your double thread, take a few spiral turns, *away from you*, around the joint (Fig. 1); turn the joint so that its butt is now directed toward your left hand; lay it down on your workbench, still holding taut on the winding-thread, and proceed to wind tightly in spirals, spaced about three-eighths of an inch, *rolling the joint away from you as you simultaneously pull the thread toward you, and force the strip edges evenly together*, under the combined construction of the progressively encircling winding, the rolling of the joint and the downward pressure against the bench of the palmar surfaces of the fingers of both hands (Fig 2).

You will note, to your delight, first, that, as you wind, the joint is *straightened by being rolled against the unyielding level surface of the bench;* and next, that it *does not twist* when wound in this way, but each of its six flat surfaces holds to its own proper plane.

Having completed its winding, sight along the joint for the more noticeable deflections; correct these by counter-bending, and then submit the whole joint to some more rolling treatment, very vigorously now, to and fro under the palms of the hands (Fif. 3), and bearing on with considerable pressure. Continue rolling until the glue is well set and the joint considerably stiffened up, when it

GLUING UP—STARTING THE WINDING THREAD

may be allowed to lie on the bench for twelve hours.

After that, remove the winding-thread and sandpaper the joint, using No. 0 or No. 1 paper. First, remove the glue by systematically going over each of the six flat surfaces individually; then go over the joint as a whole, just sufficiently for the removal of any remaining glue and the slight rounding of the edges.

Sight along the cleaned joint once more; correct any deflections yet remaining, except a slight even bend extending throughout the whole length of the joint, by heating very carefully over the flame, manipulating between the fingers, and once more subjecting it to rolling, when the pressure concentrated at the particular spot undergoing treatment.

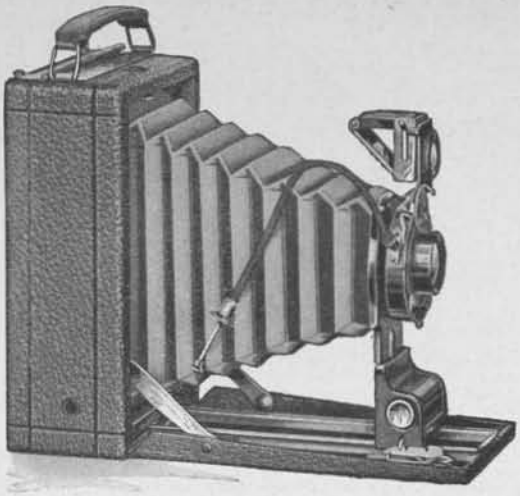
At this stage, the author once again takes note of any unsightly lumpiness still remaining at the knot sites, and where indicated makes a final application of the file, making use, this time, of the small saw file and not the coarse, cross-hatched tool.

Having glued up our joints, they are now ready to be fitted with their respective ferrules. They are straight and rigid, and should remain lying on a flat surface or suspended from their ends while awaiting further attention; do not allow them to stand on end, the ends only being supported, or they will become bowed. And as varnish is an effective preventive against the absorption of dampness and subsequent warping due to this cause, we apply the first coat very soon, but *in variably on a dry day*. Our personal practise also is to invest the joints with their first permanent windings, after the manner described under "Windings and Guides," before they receive this first varnishing.

FERRULES AND THEIR FITTING.

Stock ferrules of German silver are kept by all of the larger tackle dealers, the variety and grade of some being much better than those of others. With the best of these available, the writer deems the hand-made article an unnecessary luxury. Perfectly satisfactory ferrules, carried in stock, may be bought at prices ranging from fifteen to seventy-five cents per pair, according to size and style.

Ferrules come in pairs, consisting of the male, center or inner ferrule, and the female, outer or receiving ferrule; the outside diameter of a male ferrule being identical with



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Rochester Optical Division, Eastman Kodak Co., **Rochester, N. Y.**

the inside measurement of its mating section. Either the male or female ferrules may be purchased separately. This is a convenience, especialy in the case of male ferrules, because of the cus-

GLUING UP—WINDING

tomary duplication of top-joints of rods, for the purpose of having one in reserve against a smash-up. It would seem hardly necessary to state that the male ferrule is attached to the butt or larger end of a rod-joint.

As ferrules constitute a relatively rigid portion of the rod, which is otherwise flexible from butt to tip, it is evident that it is a mistake to have them any longer than is necessary. A union of 1¼"—depth of penetration of male ferrule—is sufficient at the joint between the butt- and middle-sections of the rod, and of one inch between the middle-joint and top. This will give a desirable length over-all of at least about 2½" for the larger female ferrule of a rod running up to ten feet.

The ferrules here recommended have a straight-sided female member and a shouldered male member that is closed at the distal end, "closed end center." They are obtainable from Abbey & Imbrie, 18 Vesey street, New York City, under the name of "bamboo" ferrules. The writer has obtained satisfactory ferrules also from the T. H. Chubb Rod Company, of Post Mills, Vermont, which that firm catalogs as their "special short, straight, welted ferrule, with capped and closed end center." The Abbey & Imbrie ferrules are supplied in the following sizes, the figures denoting in fractions of an inch the outside diameter of the male or inside diameter of the female or outside ferrule: 9/64, 11/64, 3/16, 7/32, 15/64, 1/4, 17/64, 10/64, 11/32, 3/8, 27/64, 15/32, 1/2, 35/64, 19/32, 5/8, 43/64, 23/32, 3/4, 51/64, 55/64, 7/8, 61/64, 63/64, 1 1/32. The Chubb article runs in somewhat different sizes, namely: 5/32, 3/16, 13/64, 15/64, 17/64, 19/64, 21/64, 11/32, 3/8, 13/32, 7/16, 15/32, 17/32, 19/32, 5/8, 11/16, 23/32, 13/16.

The sizes used for the ten- and nine-foot fly rods are respectively: 21/64 and 13/64; 17/64 and 11/64.

Ferrules that are a trifle large should be selected, rather than those a bit undersized for the joint at the place where they are to be fitted, as but a minimum amount of the wood should be cut away, especially in setting the female ferrules. It is much better to wind the wood with linen thread before cementing, to insure a snug fit, than needlessly to weaken the joints by excessive cutting away. The ferrule diameter should on no account be materially less than the rod diameter as measured between *flat surfaces*, at the ends of the meeting rod-joints where the ferrule is to be used; hence calipering these ends in this way will inform you of the ferrule sizes required.

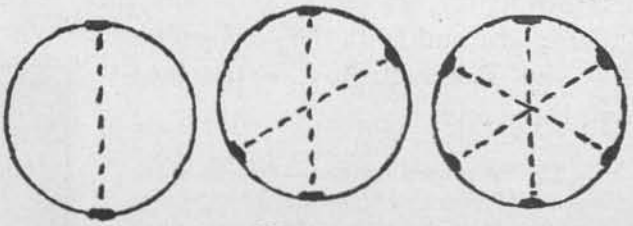
Only ferrules whose parts fit snugly together should be used. If too tight, the male ferrule is easily dressed down by turning it, together with its attached rod-joint, inside of a folded piece of fine emery-paper or cloth, held tightly between the fingers, finishing the process by rubbing it with a mixture of powdered chalk and linseed oil. *Never use a file for this purpose.*

The proximal ends of ferrules should be either split or serrated for a short distance, in order to modify rigidity here. If this be not done there are created abrupt lines of demarkation around the rod, at every point where the flexible bamboo emerges from the rigid metal tubing, and it is at

GLUING UP—ROLLING

one of these places that the rod is most liable to give way under exceptional stress. The amateur rod-tinker need not, however, pay the dealer the very considerable extra cost of such ferrules, but, with the use of either a fine hack-saw or a small triangular saw-file, he may proceed to split or serrate his own ferrules, as the case may be.

In using the file the tool is held in an inclined position, as the diagram depicts. Make short strokes away from you. First,



GUIDING NOTCHES FOR STARTING SERRATIONS

notch the ferrule end in two places, corresponding to its exact middle diameter, by one stroke of the file (Fig. 1). Next, divide each half of the circle, by notches, equally into three arcs, by two additional file-strokes (Figs. 2 and 3). You have now made your six guiding-notches with but three strokes. Deepen these notches a little, and then *be sure to equalize them by directing the side pressure of the file as required, before completing the cutting to the full depth.*

For securing the ferrules in the vise without injury while cutting slits or filing notches, make a holder from two small strips of soft wood by chiseling a V-groove along a side of each.

Several kinds of preparations are in use for cementing the ferrules onto the joints, among them being common thick shellac, sealing-wax and a gutta percha or dental cement. As an excellent and inexpensive article prepared for use may be had in the shops we have never bothered about cement recipes; the author uses Dodge's ferrule cement, which he buys for twenty-five cents a stick.

Whatever else you do in securing the ferrules to the wood, do *not* make use of any metal pins; they weaken the rod, are no efficacious preventative against loosening, and they constitute an annoying obstruction when the recementing of a ferrule is indicated.

In fitting your ferrules be sure that the female section is not thrust too far down over its joint-end, and so *preventing the male ferrule from being seated all the way home; allow for about 1/32" space between the wood end within the female ferrule and the butt end of the male, when the rod is jointed up.* Cut the wood down by careful cross-filing, followed by turning it within a fold of sand-paper, only sufficient for a good snug fit of metal over the wood, and remember that the ferrule will expand a bit when heated.

In applying the cement be careful to avoid getting any upon that inside part of the female ferrule which receives the male. Soften the stick of cement in the flame of an alcohol lamp or a candle; stick a few small gobs on the wood, heat the cement and joint-end *over* the flame carefully, turning the joint to and fro the while, spread the now liquefied cement evenly over the wood by stroking lengthwise with a match, toothpick or a sliver of bamboo.

(*To be Continued*)

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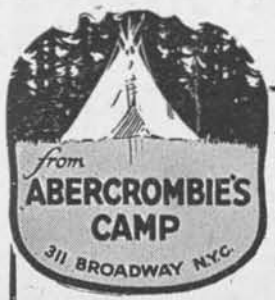

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FIELD AND STREAM'S

Fifth National PRIZE FISHING CONTEST FOR THE RECORD FISH CAUGHT IN 1915

CONDITIONS

First—The fish must be caught with rods and reels as specified,* and in legal season.

Second—The fish must be weighed on tested scales and measured with a tape measure, length to be taken from end of lower jaw with mouth closed, to tip of tail.

Third—The affidavit blank printed on the last page of this announcement, or an exact copy, must be used in applying for a prize and signed by the man who caught the fish, together with two witnesses, and sworn to before a Notary Public and his seal affixed. In case any contestant catches a fish when accompanied by a single guide, the affidavit as signed upon coming out of the woods by himself and guide before a Notary Public stating the circumstances will be duly considered.

Fourth—The weight, length and girth, date, place, and manufacturer's name and full specifications, if possible, of the rod, reel, line and lure (or bait) used in taking the fish must be stated.

Fifth—The winners in each class must send us a short account of how, when and where the fish was taken, and what tackle was used in catching the fish. The account to be published in **Field and Stream.** These accounts will not be asked for until the prizes have been awarded.

Sixth—All affidavits must be sent to the Editor of the Prize Fishing Contest, **Field and Stream,** 331 Fourth Avenue, New York. All affidavits in classes designated by A, B, and C, must be in our hands within 5 days from closing date of class. **In all other classes affidavits must be in within 15 days from closing date.**

Seventh—No fish caught from State or private hatchery will be allowed in this contest.

Eighth—In the Pike and Wall-eyed Pike Classes an outline drawing of the fish must be sent in with affidavit, drawing to be made by placing fish on side on large piece of paper and drawing an outline of fish with pencil on the paper with fins of fish all erect.

Ninth—In event of two fish weighing and measuring exactly the same number of pounds, ounces and fractions, duplicate prizes will be awarded in each case.

The Judges of this contest will be: Robert H. Davis, Editor *Munsey's;* Will H. Dilg, Chicago, Ill.; W. H. Miller, Editor, FIELD AND STREAM; E. F. Warner, Publisher, FIELD AND STREAM; E. M. Gill, Camp Fire Club; W. P. Corbett, Charles Frederick Holder.

In Tarpon Class length of fish is only measurement required. It is not necessary to give weight or girth.

* Where no special kind of tackle is specified, any tackle is allowable, provided it consists of rod, reel, line and lure.

Be sure to get a photograph of yourself with fish, if possible

FRESH WATER GAME FISH

BROOK TROUT (Salvelinus fontinalis)

CLASS A—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between opening of season and July 31st

FIRST PRIZE: One Dirigo Trout Fly Rod, length and weight to suit winner, made by F. E. Thomas, value $15.00; also one No. 200 Cream City Tackle Box, made by Geuder, Paeschke & Frey, value $3.50. **Total value $18.50.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one No. 29 Bristol Fly Rod, made by Horton Mfg. Co., value $6.50. **Total value $16.50.**

THIRD PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and one Frostco Hydrostatic line, 50 yards, made by H. J. Frost & Co., value $3.75. **Total value $11.75.**

Bait and Bait Casting Rods

Everybody admits the absolute superiority of "BRISTOL" Bait and Bait Casting Rods. They hang better in the hand, the line runs more freely, the length is just right, the Bait Rods have a locking device for fastening the reel as have the Bait Casting Rods without finger hook, the guides are an improvement over anything else on the market, the rods are beautifully finished, the material and workmanship are of such a superior quality that the rods are guaranteed for three years.

Go to the country where Bait Casting is the major sport and you will find "BRISTOL" Rods overwhelmingly predominating. Don't make the mistake to think that all steel rods are "BRISTOLS." Unfortunately there are imitations. Look on the handle for the trade mark name as shown above.

No. 33. Light Bait Casting Rod, extremely classy..... $12.00
No. 35. New Telescopic Joint Locking Bait Casting Rod, $4.50 to 5.50
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No. 30. Pocket Bait Casting Rod, new angle agate tip..... 10.00

New Silk Wound De Luxe "BRISTOL" Bait Casting Rod in Washable De Luxe Glove Leather Silk-lined Case, Full Jeweled, with extra tip..... 25.00

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THE HORTON MANUFACTURING CO.

81 Horton Street **Bristol, Conn.**

FOURTH PRIZE: One Pigskin Leather Cooper Fly Book, made by Cooper Fly Book Co., value $6.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $8.00.**

CLASS B—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between July 31st and October 31st

FIRST PRIZE: One Junior Reflex Camera, made by Reflex Camera Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50; and one Justrite No. 95 Camper's Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $15.50.**

THIRD PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one Persian Alligator Cooper Fly Book, made by Cooper Fly Book Co., value $4.50. **Total value $12.50.**

FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

GRAND PRIZE—For largest Brook Trout caught during season 1915 with Fly: Oil Painting of Brook Trout by H. A. Driscole—Value $75.00

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

RAINBOW TROUT (Salmo irideus)

GRAND PRIZES—For Rainbow Trout caught between April 1st and October 15th

FIRST PRIZE: One 9½-foot, 5¼-ounce Fly Rod, made by Edward F. Payne. **Value $25.00.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Kelso Quick-apart Quadruple Reel (80 yard), made by H. J. Frost & Co., value $8.50. **Total value $18.50.**

THIRD PRIZE: One 80-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.50; also one Three Years' Subscription to FIELD AND STREAM, value $4.50. **Total value $12.00.**

FOURTH PRIZE: One Russian Leather Cooper Fly Book, made by Cooper Fly Book Co., value $4.50; also one Frostco Combination Steel Rod, 9½ feet long, made by H. J. Frost & Co., value $3.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

SPECIAL HONOR PRIZES—For Rainbow Trout Caught with Fly on Fly Tackle

FIRST PRIZE: One VesTong Hunting and Fishing Coat, made by VesTong Mfg. Co., value $7.00; also one VesTong Hunting and Fishing Pants, made by VesTong Mfg. Co., value $5.50; and one 60-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.00. **Total value $19.50.**

SECOND PRIZE: One Pfleuger Redifor Anti Back Lash Reel, made by Enterprise Mfg. Co., value $7.50; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $11.00.**

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

BROWN TROUT

GRAND PRIZES ONLY—For Brown Trout caught casting a FLY with Fly Fishing Tackle, between April 15th and October 1st, 1915

FIRST PRIZE: One Vernley Fly Rod, made by Horrocks-Ibbotson Co., value $15.00; also a two years' subscription to FIELD AND STREAM, value $3.00. **Total value $18.00.**

SECOND PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one selection of A. F. Meisselbach & Bros. to value of $10.00. **Total value $15.00.**

THIRD PRIZE: Selection from catalog of Schoverling, Daly & Gales to value of $10.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $12.50.**

FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $8.50.**

LAKE TROUT—TOGUE (Christivomer namaycush)

GRAND PRIZES ONLY—For Lake Trout caught between April 1st and October 1st

FIRST PRIZE: One No. 1 5x7 Film Premo Camera, made by Rochester Optical Co., value $16.00; also one selection from catalog of Abbey & Imbrie, to value of $5.00. **Total value $21.00.**

SECOND PRIZE: One Ecruette Sportsman's Style Compac Tent, made by Compac Tent Co., value $11.50; also a three years' subscription to FIELD AND STREAM, value $4.50. **Total value $15.00.**

THIRD PRIZE: One selection from catalog of A. F. Meisselbach & Bros., to value of $10.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $12.50.**

FOURTH PRIZE: One selection from catalog of Abbey & Imbrie to value of $5.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.20.**

LANDLOCKED SALMON, OR OUNANICHE

GRAND PRIZES ONLY—For Landlocked Salmon caught from April 1st to Oct. 1st

FIRST PRIZE: One Pneumatic Mattress selected from catalog to value of $22.00, made by Pneumatic Mfg. Co.

SECOND PRIZE: One Remington Model 12A .22 caliber repeating rifle, made by Remington Arms-U. M. C. Cartridge Co., value $10.50; also one Utica Automatic Reel, made by Horrocks-Ibbotson Co., value $5.00. **Total value $15.50.**

THIRD PRIZE: One Kelso 50-Yard Automatic Reel, made by H. J. Frost & Co., value $5.00; also one three years' subscription to FIELD AND STREAM, value $4.50; and one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50. **Total value $11.00.**

FOURTH PRIZE: One Yawman & Erbe No. A Reel, made by Horrocks-Ibbotson Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

SMALL MOUTH BLACK BASS (Micropterus dolemieu)

CLASS A—For Small Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One No. 33 Bristol Bait Casting Rod, made by Horton Mfg. Co., value $12.00; also one pair No. 210, 10-inch height, Hunting Boots, made by Mohawk Moccasin Co., value $6.00; and one selection from catalog of Abbey & Imbrie to value of $5. **Total value $23.00.**

SECOND PRIZE: Five Quick Change Bass Baits, made by Skvor & Co., value $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $18.75.**

THIRD PRIZE: One selection from catalog of James L. Donaly to value of $10.00; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one VesTong Automatic Cleaning Rod, for Shotguns, made by VesTong Mfg. Co., value 50c. **Total value $12.00.**

FOURTH PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co., value $6.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $8.00.**

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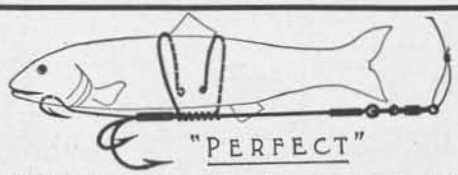

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We fishermen all know the trouble with ordinary tackle and many are the "lakers", bass, salmon, pickerel, etc., that we have lost because "he stole the minny."

Don't give this excuse again, because you will be asked if you used

"THE PERFECT LIVE MINNOW TACKLE"

designed by a man that has pulled in a few of the big ones himself.

It's all in the little annealed wire prongs which will fit any minnow—easily bent.

35c.

THE PIERCE COMPANY - Meriden, Conn.

"EXPERT" Minnows—July and August Offer, 3 for $1.00

Keeling's St. Johns Wiggle was the big Bass success of the winter on the St. Johns River, Florida. It wiggles more like a live minnow than most wigglers. Attach line to the tail end and you have a different wiggle. Add Spinners we furnish and it makes a regular top bait.

PRICE COMPLETE WITH SPINNERS 75 CENTS

We want you to try our baits and for July and August we offer 1 Wiggle and 2 Underwater Minnows for $1.00. Prepaid on receipt of price. If you do not want them we give you your money back. Or you can use them all summer. Return in October and we give your money back less 10c for the use of each bait. We are not afraid to make this offer as we know what our baits will do. Will others make you the same offer to try their baits.

ORDER OFFER F.

KEELING BAIT & TACKLE CO. - - Rockford, Ill.

The *moderate man* is a boon to the community. Being neither narrow minded nor over indulgent he is the balance wheel of American life.

And it is to the moderate man that we direct our best effort in making a remarkably mild and mellow Whiskey *—Wilson—Real Wilson—That's All.*

The Whiskey for which we invented the Non-Refillable Bottle.

FREE CLUB RECIPES—Free booklet of famous club recipes for mixed drinks. Address Wilson, 321 Fifth Ave., N. Y. That's All!

We guarantee advertising on this page provided you mention FIELD AND STREAM

CLASS B—For Small Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Detroit Refrigerator Grip for fish, in shape of traveling bag, made by Detroit Refrigerator Grip Co., value $15.00; also one South Bend Anti Back Lash Casting Reel, value $7.50; one $4.50 selection of Buck Tail Baits and Minnows, made by South Bend Bait Co., total value $12.00. **Total value $27.00.**

SECOND PRIZE: One selection from catalog of Hartung Brothers & Co., to value of $10.00; also Hildebrandt Spinners, made by J. J. Hildebrandt Co. to value of $10.00. **Total value $20.00.**

THIRD PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one two-years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: Four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co. **Value $9.00.**

CLASS C—For Small Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One of H. A. Driscole's Famous Bass Paintings. **Value $75.00.**

SECOND PRIZE: One Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $15.00; also one Tripart Reel, made by A. F. Meisselbach & Bros., value $3.00. **Total value $18.00.**

THIRD PRIZE: One Alaska Hunting Jacket, made by George F. Webber, value $5.00; also one selection from catalog of Buck Tail Baits, Spinner Hooks, Minnows and Spoons, made by South Bend Bait Co., value $7.50. **Total Value $12.50.**

FOURTH PRIZE: One pair 10-inch height Sporting Shoes, hand sewed, two buckles at top, full-length sole, made by M. L. Getchell Co., value $6.00; also one Frostco 120-Yard Reel, made by H. J. Frost & Co., value $3.00. **Total value $9.00.**

GRAND PRIZE—For largest Small Mouth Bass caught during season: One Aerothrust Twin Cylinder Rowboat Motor, gasoline or kerosene operated, made by Aerothrust Engine Co. Value $64.75.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One Maxim Silencer for .22 Rifle, made by Maxim Silencer Co., value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

SPECIAL HONOR PRIZES—For Small Mouth Bass caught on Fly with Fly Tackle

FIRST PRIZE: One Free Spool Takapart De Luxe Reel, made by A. F. Meisselbach & Bros. **Value $13.50.**

SECOND PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co. **Value $6.00.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

NORTHERN DIVISION—North of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One Model 1912 .22 Caliber Savage Repeating Rifle, made by Savage Arms Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $13.00.**

FOURTH PRIZE: One assortment 12 South Bend Minnow Baits, made by South Bend Bait Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

CLASS B—For Large Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Abercrombie Snow Tent, size 7x7, made by David T. Abercrombie Co. **Value $30.00.**

SECOND PRIZE: One pair Gitchee Gamee 15-inch Height Shoes, with strap and buckle at top, No. B 1175, made by Northern Shoe Co., value $10.00; also one assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00. **Total value $20.00.**

THIRD PRIZE: One No. 11 Bristol Bait Rod, agate tip and guides, reversible cork handle, made by Horton Mfg. Co., value $8.50; also one Ecruette Poncho, made by Compac Tent Co., value $4.80. **Total value $13.30.**

FOURTH PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

CLASS C—For Large Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One selection from catalog of Moonlight Bait Co. to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $3.60; and one Style E Sextoblade Razor in leather case with soap and collapsible shaving brush, made by Edward Week & Son, value $5.00. **Total value $18.60.**

THIRD PRIZE: One selection from catalog of W. J. Jamison, to value of $10.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

GRAND PRIZE—For Largest Large Mouth Bass caught between opening of season and October 31st: One Ferro Rowboat Motor, with Kingston Float Feed Carburetor, Bosch High Tension Reversible Magneto and Rudder, made by the Ferro Machine & Foundry Co., value $85.00.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One two-years' subscription to FIELD AND STREAM, value $3.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75; and two cans Michigan Mosquito Dope made by R. C. Kruschke, value $1.20. **Total value $5.95.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

SOUTHERN DIVISION—South of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between January 1st and June 30th, inc.

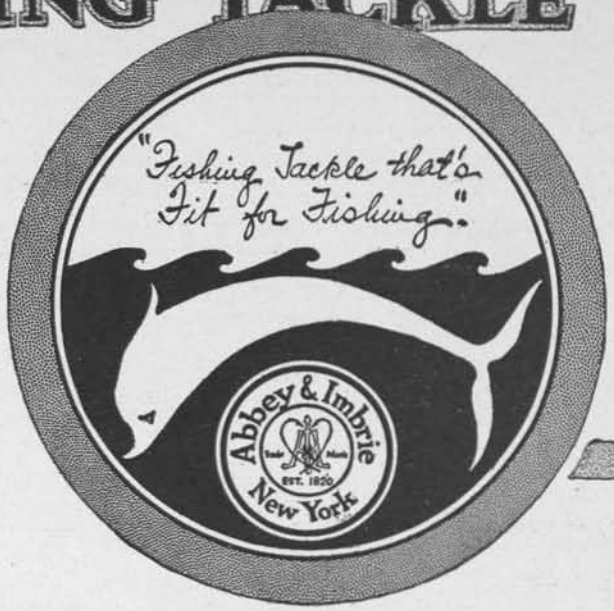
FIRST PRIZE: One No. 33 Talbot Sapphire Jeweled Reel, made by Talbot Reel and Mfg. Co. **Value $28.50.**

SECOND PRIZE: One Meridan Model 15 .22 Caliber Repeating Rifle, made by Sears, Roebuck & Co., value $12.00; also one Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $6.00. **Total value $18.00.**

THIRD PRIZE: Selection of Heddon's Dowagiac Minnows, made by James Heddon Sons, value $4.50; also one Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $12.50.**

FOURTH PRIZE: One Camp Cot, made by the Gold Medal Camp Furniture Co., value $3.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and three "Chippewa" Bass Baits, 3½ inches, revolving spinner in body, made by C. J. Frost, value $2.55. **Total value $8.55.**

Abbey & Imbrie
FISHING TACKLE



Salt Water Fishing

GOING after "finny monsters of the deep" tests your skill—and tests your *tackle*, too. Whether you fish from a boat or wade into white surf, you *must* have tackle that salt water can't hurt and that is strong enough to land your big fish. You never can tell till you're fishing how much you depend on the tackle maker's word.

No use risking your fun—and your money, too—just with anything you find on your dealer's shelves. It's the same whether you frequent mountain lakes, inland streams, or the big salt seas—you must have *"fishing tackle that's fit for fishing."*

To get it, look for the Sign of the "Leaping Dolphin"

—the distinguishing mark on rod and reel, hook and line, in city, town or camp, of quality and reputation;

—the guarantee of a hundred years of intelligent and reliable tackle making;

—the sign of Abbey & Imbrie, makers of *"fishing tackle that's fit for fishing."*

New illustrated catalog "F" (236 pages) sent *on receipt of parcel postage* (10 cents) to any angler *who will give us his tackle dealer's name.*

ABBEY & IMBRIE, 18 Vesey St., N. Y. City

Established 1820

CLASS B—For Large Mouth Bass caught between July 1st and Dec. 31st, inc.

FIRST PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $24.00.**

SECOND PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one selection from catalog of Abbey & Imbrie to value of $10.00. **Total value $18.00.**

THIRD PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Meisselbach Automatic Reel, made by A. F. Meisselbach & Bros., value $3.50; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $11.50.**

FOURTH PRIZE: One Style E Sextoblade Razor in leather case with soap and collapsible brush, made by Edward Weck & Son, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

Maryland, Delaware, Virginia and West Virginia Division

For Large Mouth Black Bass Caught during the season within the State laws

FIRST PRIZE: One No. 3 Jeweled Meek Reel, made by B. F. Meek & Sons. **Value $32.00.**

SECOND PRIZE: One No. 041½ Moose Head Brand Knee-length Sporting Boots, made by John Palmer Co., value $10.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $18.00.**

THIRD PRIZE: One selection from catalog of Fred S. Sabey Co. to value of $12.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75; also one Abercrombie Frame Pack, made by David T. Abercrombie Co., value $4.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.95.**

GRAND PRIZE—For largest Large Mouth Bass caught during season: One of H. A. Driscole's famous Bass Paintings—Value $75.00

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates. **Value $4.00.**

SPECIAL HONOR PRIZES—For Large Mouth Bass caught casting a FLY with Fly Fishing Tackle.

FIRST PRIZE: One Navajo Sweater Coat, made by Bradley Knitting Co., value $10.00; also 200 yards Hasting Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $15.00.**

SECOND PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

GREAT NORTHERN PIKE (Esox Lucius) *(See Condition No. 8)*

GRAND PRIZES ONLY—For Pike caught between May 1st and October 31st, inc.

FIRST PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one pair 12-inch height Witch Elk Hunting Boots, made by Witchell-Sheill Co., value $10.00; and 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $25.00.**

SECOND PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one Milburn Combination Campers' Table Lamp and Lantern, made by Alexander Milburn Co., value $6.00. **Total value $16.00.**

THIRD PRIZE: One assortment 22 South Bend Buck Tail Baits and Weedless Hooks, made by South Bend Bait Co., value $7.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $12.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; and one Milburn Acetylene Hand Lamp, made by Alexander Millburn Co., value $1.75. **Total value $8.75.**

MUSCALLONGE (Esox Nobilior)

GRAND PRIZES ONLY—For Muscallonge caught between May 1st and Oct. 31st, inc.

FIRST PRIZE: One 1915 Evinrude Row Boat Motor, with automatic reverse and waterproof built-in magneto, made by Evinrude Motor Co., value $80.00.

SECOND PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00. **Total value $19.00.**

THIRD PRIZE: One Abercrombie Cook Outfit, made by David T. Abercrombie Co., value $10.00; also three "Chippewa" Muscallonge Baits, 5 inches, with revolving spinner in body, made by C. J. Frost, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; and three "Chippewa" Skipper Swimming and Jumping Baits, made by C. J. Frost, value $2.25. **Total value $8.75.**

LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

WALL EYED PIKE—PIKE PERCH *(See Condition No. 8)*

GRAND PRIZES ONLY—For Wall-eyed Pike caught from May 1st to October 31st

FIRST PRIZE: One Joymotor Outboard Motor, with reversing propeller and high tension magneto, made by Joy Engineering Co. Value $75.00.

SECOND PRIZE: One selection from the catalog of James L. Donaly to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $17.50.**

THIRD PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles Co., value $5.00; also one selection of Heddon's Dowagiac Minnows, made by James Heddon & Sons, value $4.50; and three "Chippewa" Pike Baits, 4-inch body, made by C. J. Frost, value $2.70. **Total value $12.20.**

FOURTH PRIZE: One Takapart Reel, made by A. F. Meisselbach & Bros., value $4.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; one year's sub. to FIELD AND STREAM. **Total value $9.50.**

SALT WATER GAME FISH

BLUEFISH (Pometomus Saltatrix)

GRAND PRIZES ONLY—For Bluefish caught between May 1st and October 31st

FIRST PRIZE: One Comfort Sleeping Pocket, made by Metropolitan Air Goods Co. **Value $25.00.**

SECOND PRIZE: One Neptune Reel, made by A. F. Meisselbach & Bros., value $10.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $15.00.**

THIRD PRIZE: One Interchangeable Lens Lamp, Style 2, made by R. C. Kruschke, value $7.00; also one three-years' subscription to FIELD AND STREAM, value $4.50. **Total value $11.50.**

FOURTH PRIZE: One Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $9.00.**

Make Nights In Camp More Cheerful

Fishing, Boating, Tramping, etc., fully occupy your daylight hours, but what of the hours twixt daylight and bedtime? There's very little satisfaction in trying to read by the aid of a flickering candle or smoky oil lamp and it is hard to become interested in the "after-supper-game," if it's troublesome to see the spots on the cards. Why suffer such discomforts?

Weight 6½ oz.

The Baldwin Carbide Lamp

Makes Night in Camp as Pleasant as Daylight

Can be used as a tent light, carried as a hand lantern or worn on cap or belt, leaving hands free for handling rod, oars or gun.

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It uses carbide. You can buy this at any bicycle or hardware store, two pounds cost 25c and this much will run the lamp for 64 hours. Gives three times as much light as the best electric lantern. No oil, no grease, no smoke, no glass to break, lights without matches.

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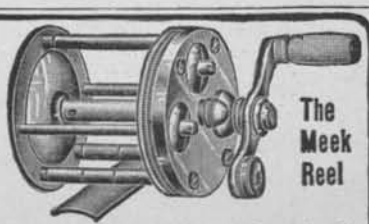

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The real reel is the Meek Reel. Our aim is perfection, not cheapness. Ask any first-class dealer for the "Meek." If he can't supply you, write us direct for catalogue F.

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M'f'r's Meek and Blue Grass Reels
No. 1450 S. 18th St. LOUISVILLE, KY.

GRAND PRIZES ONLY—For Weakfish caught between May 1st and October 31st

FIRST PRIZE: One Improved Ocean King 350-Yard Reel, made by H. J. Frost & Co., value $14.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $16.50.**

SECOND PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one selection from catalog of Abbey & Imbrie to value of $5.00; and two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

THIRD PRIZE: One selection from catalog of New York Sporting Goods Co. to value of $10.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; also one Northwestern Clasp Knife, made by R. C. Kruschke, value $2.50; and one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00. **Total value $8.00.**

SPECIAL PRIZE: For Largest Weakfish caught on 5½-ounce, or less, rod, length not less than 4½ feet, 9 thread, or less, line: One selection from catalog of Marble Arms and Mfg. Co. Value $10.00.

STRIPED BASS (Roccus lineatus)

GRAND PRIZES ONLY—For Striped Bass caught between May 1st and October 31st

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One 10-ounce Army Duck Wall Tent, size 8 x 10, height at center 6½ feet, made by George B. Carpenter Co., value $15.00; also one Parker Press-The-Button Self Filling Fountain Pen, made by Parker Pen Co., value $5.00. **Total value $20.00.**

THIRD PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $11.75.**

FOURTH PRIZE: One pair Russell Neverleak Moccasin Boots, made by W. C. Russell Moccasin Co., value $9.00; also one Western Outing Knife, made by R. C. Kruschke, value $1.50. **Total value $10.50.**

LADIES' PRIZE: One Parker Jack Knife Safety Fountain Pen, made by Parker Pen Co., value $5.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $7.50.**

CHANNEL BASS (Sciaena ocellata)

GRAND PRIZES ONLY—For Channel Bass caught between April 1st and October 31st

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One "Rite Lite" Nifty Balloon Silk Tent, 5x7, with sewed-in floor, made by Indianapolis Tent Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One pair Gokey Boots, selected from catalog to value of $10.00; also two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20; and one Komfort Lantern, made by R. C. Kruschke, value $4.50. **Total value $10.70.**

TARPON (Megalops Atlanticus)

GRAND PRIZES ONLY—For longest Tarpon caught Jan. 1st, 1915, to Jan. 1st, 1916

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One Alamo Motion Picture Camera, made by Simplex Photo Products Co. **Value $25.00.**

THIRD PRIZE: One No. 26 Tarpon Rod, cork handle, made by Horton Mfg. Co. **Value $14.00.**

FOURTH PRIZE: One 300 candle-power Coleman Arc Lantern, complete, made by Coleman Lamp Co. **Value $10.00.**

SPECIAL PRIZES FOR ALL WINNERS

A. F. Meisselbach & Bro. will present to each and every prize winner in the Contest one of their Utility Scales, one "Good Luck" Fish Scraper, and One Drop Oil Can. **Total value 50 cents.**

NOTICE

It is impossible, with the number of prizes and limited space, to give the proper description and illustration of these valuable prizes. By writing the manufacturers represented, a complete catalog will be sent showing full description of any prize in which you are interested.

AFFIDAVIT

I hereby swear to statement signed by me before two witnesses and a notary public.

Kind of fish.....Weight.....Length .....Girth.....

When caught .....Where.....

Rod used .....Reel.....Line.....

Lure or bait.....Give Mf'r's names of each and full specifications

Caught by (Signed).....

Street .....

City .....State.....

Witnessed by: (Give names and addresses)

1 .....

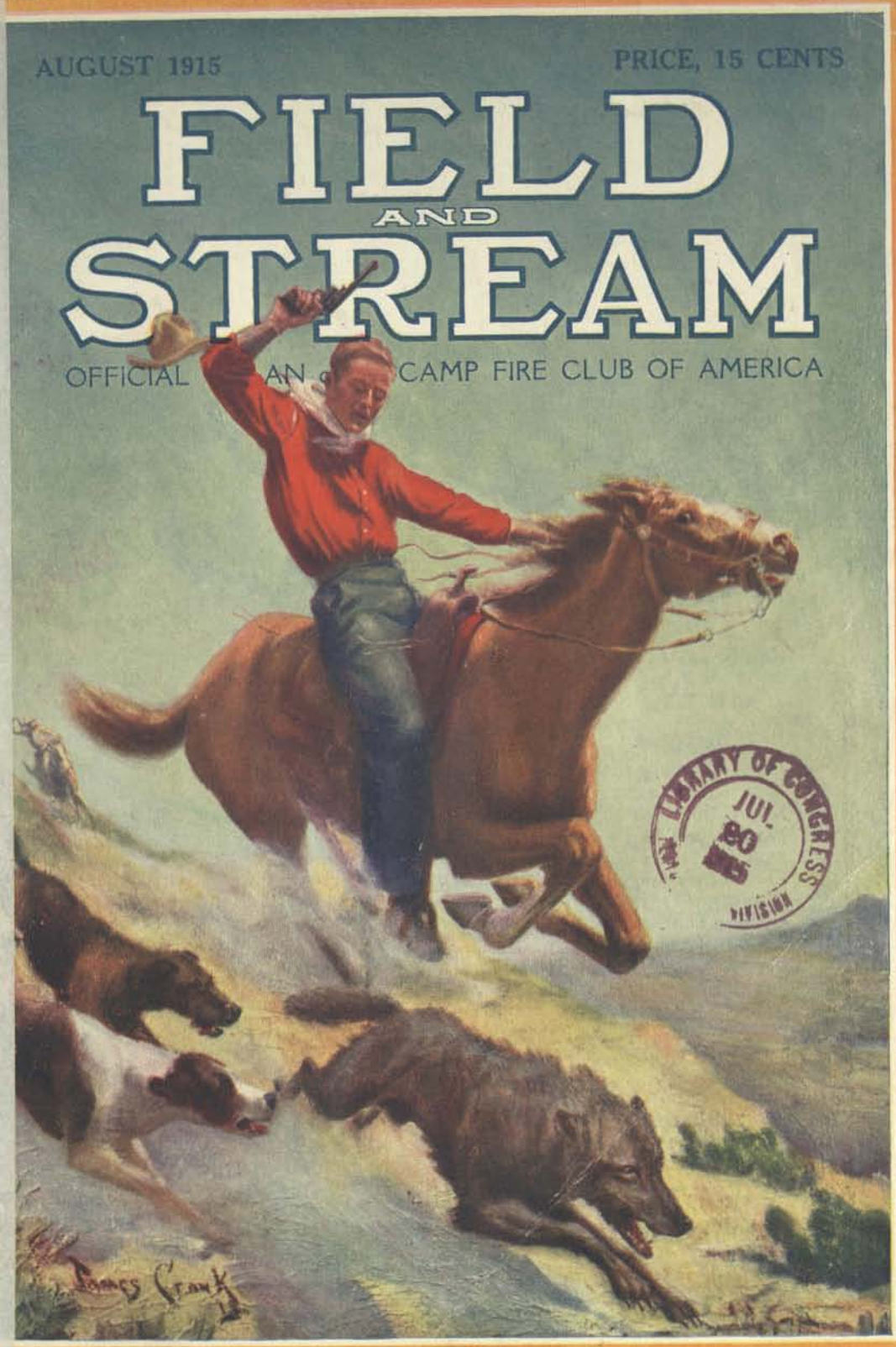
2 .....

Sworn to before me this.....day of.....

Notary Public .....

(SEAL)

...ING THE WINGSHOT — by Charles Askins



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Woolworth Bldg. (233 Broadway) *New York City*

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MEMBERS AT THE 1915 OUTING
Held June 2-6th at Pine Island Camp of David T. Abercrombie, Greenwood Lake, N. Y.

GEO. D. PRATT, PRESIDENT
Shooting at the rising bear.

ARTHUR F. RICE, SEC'Y
Waiting a turn at the rifle events.

JUL 15 1915
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FIELD AND STREAM
AMERICA'S MAGAZINE FOR SPORTSMEN
OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR AUGUST, 1915 NUMBER FOUR

TROLLING FOR BLOCK ISLAND TUNA

BY DR. CHAS. K. STILLMAN

DURING the foggy days of last July and August there were times when the resolute angler must have asked himself if after all the fine art of navigation was not an integral part of tuna fishing. Certainly there was fog and to spare in the vicinity of Block Island; also there was murk, mist, haze and general atmospheric gloom, with now and then a dash of rain for good measure. Good days were a rarity. The enthusiast had no choice but to take his fog and his tuna together; he managed the proceeding, so to speak, with his thumb on the reel and his eye on the compass. His quarry bit very well while the atmosphere continued thick, but became shy and retiring with the arrival of fair weather late in August.

In spite of various handicaps the past season may be said to have seen the real beginnings of rod and reel tuna fishing along the southern New England coast. (The original pioneer, of course, is Dr. Holder, whose early efforts, however, were not successful.)

The horse mackerel, alias the "boo-hoo," alias the tuna, was not especially noted about Block Island until about five years ago, when their increasing numbers suggested to the native fishermen a possible new source of revenue. Success was not immediate, for the time-honored methods that brought results with bluefish failed to interest the tuna; or, if by chance one did take hold, it was good-bye to line, leader and jig. Stronger lines were substituted, some using sash-cord fastened to outriggers coupled up with spiral springs, in order to ease the shock; leaders and jigs were made stouter and the latter were freshly coated with aluminum paint, to make them appear more attractive.

To induce tuna to bite freely, many experiments were tried. Eventually it was discovered that they were not afraid of a boat; that they would rush fearlessly into the roil from the propeller, looking for food or trouble; that, once in that situation, their discretion seemed to vanish and they would snap like wolves at anything and everything, the fins and tails of kindred and relations not excepted. In this peculiar trait the Block Islander saw his opportunity. Boats were speeded up, very short lines were used; the tuna bit frequently and savagely, and the industry was put upon a profitable commercial basis.

As to the extent of the industry, a report from Mr. Andrew V. Willis, Deputy Commissioner, to Mr. Charles W. Willard, President of the Rhode Island Fish Commission, states that "between July 25 and

THE "PLOVER"—BUILT FOR TUNA, OF TUNA AND BY TUNA FISHERMEN

October 20, 1913, 10,000 were caught by hook and line averaging from 15 to 30 lbs. In the same period 500 in traps averaging 500 to 800 lbs., and caught with swordfish irons, around 150 from September 10th to October 10th, averaging 400 to 900 lbs."

The favorite type of jig now in use among the professional fishermen is one especially invented by Mr. N. A. Dickinson for tuna fishing with a 6½-inch lead and cedar body and straight, pointed hook of about 5/32-inch wire, having a distance of 1⅜ inches across the bend. This is attached to a 4-foot leader of No. 14 steel piano wire united by a large brass acorn swivel to about 30 feet of especially hard, twisted, heavy cotton line.

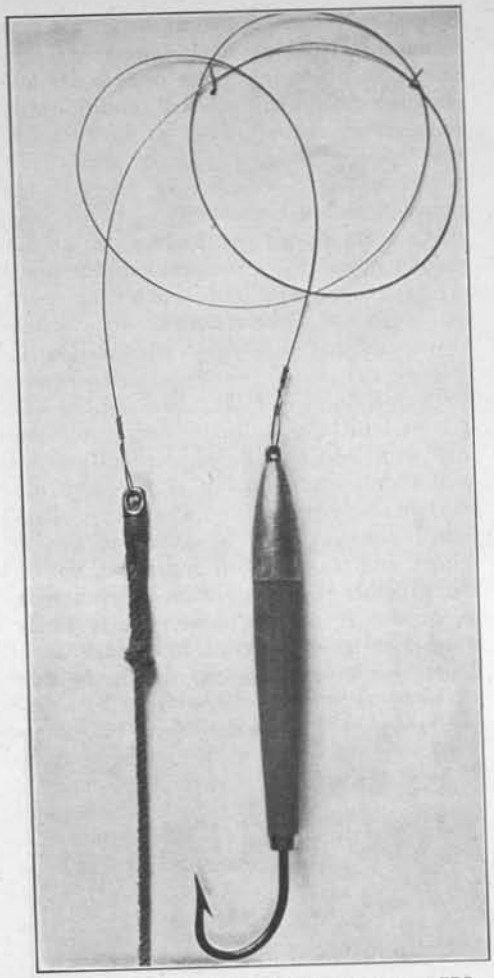
Altogether it is a tremendously strong outfit, and it needs to be: hand-lining for "boo-hoos" is no job for weaklings. Usually three or four such outfits are made fast, two to outriggers and the remainder to ring-bolts or cleats; the boat is sent ahead at considerable speed (generally 7 to 7½ m. p. h.), with the gears trailing some 30 feet astern in the suds and commotion. It is an extraordinary method, but very effective. When the fish bites he brings up all standing; then it appears that he forges ahead slowly in the direction of the boat. Right here the old hand veers his craft to right or left, depending upon the quarter on which the fish struck. He then favors the tuna, partially over-rides him, and gets him to gaff with moderate exertion. The novice usually tries to drag in his victim by main strength, and a gorgeous tussle ensues. It is give and take, a shoulder-wrenching task with lots of excitement, much shortness of breath, and afterward a fine crop of blisters.

Most of the fish caught in this way recently have been from 25 to 40 pounds and measure roughly from 35 to 45 inches, but they vary in size with different seasons—in 1911, for example, the average was from 30 to 90 pounds. The market fisherman counts on this run of fish, but now and then surprises one of the "old he ones" weighing two or three hundred. In such case they consider it good practice to cut the line. The writer came to the rescue of a friend who was hand-lining and who fastened to one of these. We were outclassed. Together we got in a couple of feet of slack, just enough to afford a good grip; then we braced and heaved, and things remained just as they had been, with the fish swaying easily from side to side, but not giving an inch. Finally the hook ripped loose and the jig

came flying in through the air. The smaller specimens gather over the shoals south and southeast of the island during July and August, and here most of the fishing is carried on; but the big fellows seem to frequent the waters to the westward, and there one may cut through schools of these magnificent fish running many hundreds of pounds in weight, but it does not seem to be easy to make them bite. There are also feeding grounds off the shore of the mainland in the vicinity of Quonochontaug and not far from Point Judith, but there also angling has been very unsatisfactory. The fishing ground best of all during most of the summer is undoubtedly that four or five miles south of the island, in the Atlantic Ocean. Later on, as during the month of September, I have had much better success in the shoal water inshore, especially in the vicinity of Southeast Light. It is a man's game, as anyone will admit who has seen Block Island fade from sight and has tried to find it again after hours of "putt-putting" around in circles in the murk with a fine young sea sloshing up out of the southeast. No place for dinky open boats and launches except under ideal conditions. A small trunk-cabin cruiser from 26 to 30 feet in length about fills the bill. If it makes a lot of commotion astern when running, so much the better—the smooth-going boats do not get the best results. It should, however, be understood that there are times and conditions when slow speed and a fairly long line seem to work better. We found this so in September fishing in shallow water, also in trying to get very large fish to take hold. The writer had a boat built especially for the conditions met with and it fulfilled expectations so well that a picture of it is herewith annexed as a suggestion of what is required.

We planned once or twice to tow a tender and play our fish from that, but on the grounds the proposition did not look so good. It can be done, but is likely sooner or later to result in serious accidents and is not necessary with the fish

TROLLING—WAITING FOR THE NEXT VICTIM



CEDAR SQUID AND PIANO-WIRE LEADERS

usually encountered, for they can be managed quite well from a good-sized boat. Whether this will hold for the really big tuna cannot certainly be stated, but judging from what is known regarding their style of play, backed up by some slight personal experience, it seems fairly probable that it would.

That our sportsmen did not immediately wake up to the opportunities presented was perhaps due to the fact that many did not recognize the fish under its Eastern name of horse mackerel, or "boo-hoo"; others doubtless did not like the prospect of pioneering, it being evident that much learned at Santa Catalina could not be applied here.

The writer cannot pretend to name all who have tried for Block Island tuna with rod and reel. Such a list would include Mr. George L. Shepley and Mr. J. E. Dawson, of Providence; Mr. Dana Chapman, of Dame, Stoddard & Kendall, Boston; Mr. C. W. Willard and Dr. Herbert Tetlow, of Westerly, R. I.; Mr. A. J. Crandall, of Ashaway, R. I.; Mr. H. V. Foster, of Oklahoma; Mr. Frank Bindloss, of Mystic, Conn., and the writer.

Generally speaking, the method employed was copied from that so successfully worked out by the market fishermen, except that rod and reel took the place of hand-line, and sometimes a large spoon of one type or another was substituted for the usual cedar jig. There were isolated cases where considerable success was reported, but in the main the pioneers found that misses or lost fish were discouragingly frequent. It was said of spoons that a fish generally struck at them and missed, and it was believed that this was due to the fact that they skipped about in too lively a fashion when towed at high speed.

The big cedar jigs, on the other hand, go steadily through the water, and strikes on them were frequent, but for some reason the fish often did not stay hooked. Our own experience is an illustration. On August 14th (Friday, by the way), Mr. Bindloss and myself were fishing in the favored zone south of the island, using a modified outfit—namely, 14-oz. tip, reel, 24-thread Cuttyhunk line, No. 10 piano-wire leaders, ordinary 3-oz. brass box swivel, and 6½-inch lead and cedar jig, with results as follows:

1st and 2nd fish, off almost as soon as hooked.

3rd fish, played five minutes, broke away on heading for boat.

4th fish, struck him several times vigorously and kept line very taut, but he broke away after 15 minutes' play.

5th fish, on about 20 minutes; line touched washrail; fish off.

6th fish, on about 5 minutes.

7th, 8th and 9th fish, off almost as soon as hooked.

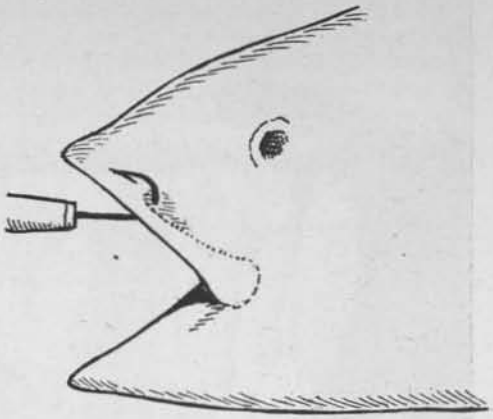
We decided that something was fundamentally wrong with the tackle. Why was it that the hooks did not hold when

there was no difficulty with the same hooks used on a hand-line? Our conclusion was that the striking blow delivered through the rod was not sufficient to set in the very heavy, straight, pointed barb.

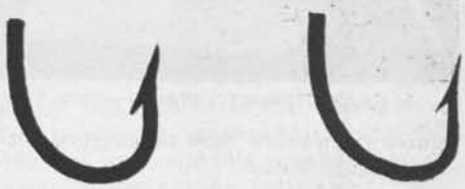
The next question was whether the Cuttyhunk line was strong enough to withstand the force needed to make the striking blow effective. The line (a new 24-thread Cuttyhunk which had tested 56 pounds) was twisted around a gloved forefinger and trailed astern. A tuna arose from the deep and the line parted like a thread; moreover, the shock felt along the wrist and forearm seemed very slight. From this we inferred that in hand-lining excessive force must ordinarily be exerted to set the hook—possibly a hundred pounds or more. A sportsman's equipment is, of course, not expected to resist any such strain. As we did not have with us any jigs with smaller sharp-pointed hooks to experiment with, we got around the difficulty for the time being by fastening the rod-line to the swivel of an ordinary hand-line outfit, which was shortened to 25 feet. A loop in the end of this was held in the hand. By this arrangement it was planned to deliver the striking blow from the wrist instead of the rod-tip, after which the fish could be played on rod and reel.

The hook drove into the next fish with a thud, and in a flash the released hand-leader was whipped overside into the green ocean. When the tuna, a forty pounder, was landed, it took our combined efforts to pry out the hook. Not long afterward another was captured by the same method.

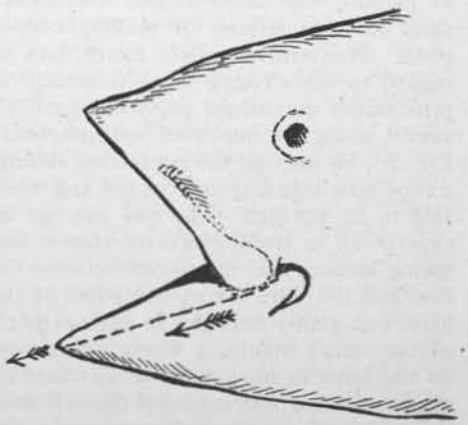
We felt that the cause of our own (if not of others') previous failures was demonstrated; it now remained to work out the remedy. This was obviously a more delicate, sharp-pointed hook than that of the regulation jig. Mr. Dickinson, the manufacturer of the jig, was called in consultation, and it was decided to trim down and hollow-point the barb of the regular outfit rather than to design a new hook of finer wire. It was thought wiser to retain the original hook, because it was possible by tapering it to utilize nearly all its great strength at the bend, while its thickness here (5/32 inch) was also an added safeguard against tearing out. The



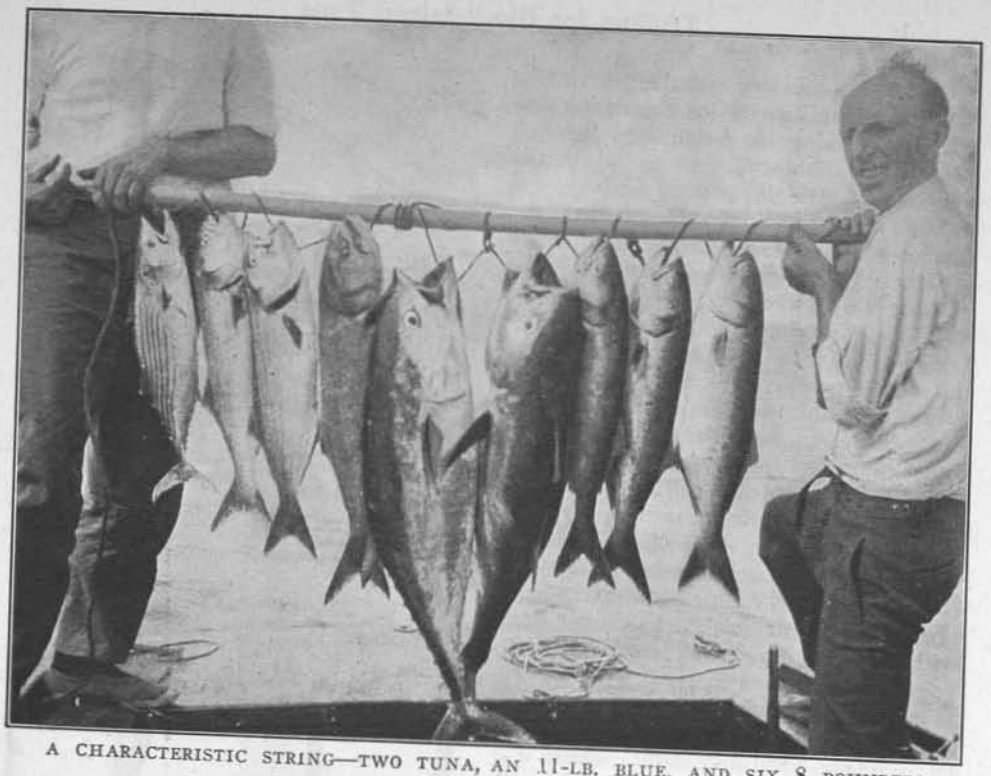
EXP. 3. BARB CAME THROUGH AT 12 LBS., HOOK WOULD NOT PULL OUT AT ANY TENSION THAT COULD BE PUT WITH 65 LBS. SHOWING NO EFFECT



(LEFT) ORIGINAL HOOK AND STRAIGHT BARB (RIGHT) MODIFIED HOOK WITH NEEDLE BARB AND HOLLOW POINT



EXP. 4. BARB WENT THROUGH WITH PULL OF 6 LBS. HOOK GAVE WAY AT 26 LBS. WHEN IT CUT THROUGH ENTIRE LENGTH OF LOWER LIP



A CHARACTERISTIC STRING—TWO TUNA, AN 11-LB. BLUE, AND SIX 8 POUNDERS

figures given below show the original hook and its modification.

The model is a new one, hence its reproduction. It looked like a very wicked instrument. It was tried out on succeeding trips and found to work very satisfactorily. On one occasion two tuna were brought back, and one of them, weighing 35 pounds, was taken to Mr. Dickinson's shop for the purpose of making certain tests. We wished to get exact data in regard to the striking force necessary to penetration in various parts of the fish's mouth, using the improved hook shown in Fig. 2. To prevent the tuna from sliding, a rope was lashed around its tail and made fast to an upright. The rod was set up exactly as in trolling, except that a fine spring balance was interposed between the line and the wire trace; the point of the barb was gently engaged in various parts of the tuna's mouth, a finger being kept on the barb to note when it was buried; steady traction was made on the line with the rod, and as the barb penetrated the pressure exerted in pounds was read from the spring balance. The results proved rather surprising.

Exp. 1. *Through hardest part of roof of mouth.*—Penetration with pull of 47 lbs. Although penetrating at 47 lbs., the barb would back out rather easily. It was found, however, that when thus "set" an added pull of 15 to 25 lbs. (as in playing) buried the barb securely.

Exp. 2. *Through tongue.*—A pull of 26 lbs. buried the barb, but it inclined to tear out with added strain.

Exp. 3. *Through junction of maxillary with snout.*—The barb pulled through at 12 lbs. It showed no sign of ripping loose under any tension that we were able to put on it (a strain of 65 lbs. produced no effect).

Exp. 4. *Through corner of mouth.*—Barb went through with pull of 6 lbs.; held finely until strain of 26 lbs. was reached, when it cut through the entire length of the lower lip (see dotted line).

The tests ended here, for the reason that our subject was in such a mutilated condition that nothing further could be done.

We did, however, attempt to judge the strain ordinarily used in playing tuna by the bend of the rod. Several trials with the spring balance showed a maximum strain of from 16 to 22 lbs.

The lessons learned were many. The tuna is a dainty biter and it appears that he nips at the jig. Many times the barb engages the roof of the mouth, sometimes the cheek, occasionally the junction of maxillary and snout, as in Exp. 3, and most frequently perhaps the angle of the jaw (corner of mouth).

It is plain that to save a fish when the barb has engaged, as in Exp. 1, a very heavy striking force is needed. The 47-lb. blow required is almost, but not quite, equal to the breaking strain of 24-thread Cuttyhunk line. Too much strain breaks the line, too little fails to hook the fish. In practice the result is generally disappointment; the fish remains on for a little, but ultimately the barb drops out. Fish hooked in the roof of the mouth certainly present a knotty problem, especially if the barb lodges on the centrally placed vomer. I am preserving one jig which has the point of the hook badly twisted and bent out of shape from contact with the porous bone in this location. On either side of this hard spot the hook penetrates readily, but strikes hard bones before coming through to the outside. The resistance here will turn soft steel, also, so it is well to have the points of these jigs specially tempered.

Most of the tuna so far landed with rod and reel have been hooked through the corner of the mouth; these fish will likely be lost if the strain exceeds 26 lbs. It seems to be a case of "out of the frying-pan into the fire"—either way one seems likely to lose a fair percentage; the element of uncertainty is thus greater than in bait-fishing and there is an added degree of excitement.

The writer's practice in striking has been to put on as much strain as possible without breaking the line. Once on, the switch is thrown off, the boat is allowed to lose headway, and the fight forced to the limit, for, unlike the tarpon, the tuna will not obligingly play himself out. The gentle angler must do most of the work. We managed to worry through the past season without using any kind of automatic drag, considering the game fairer minus machinery. Where the fish run mainly under 50 lbs. it is perhaps more sportsmanlike for the angler to do his own work, but above that weight the drag certainly seems to be needed for most of us.

As to landing, it is practical and easy to land the smaller sizes without net, and it is much cleaner than gaffing and does not kill the fish. Gaffing does, besides making a very dirty mess in the cockpit. A good tarpon net is suitable and can be obtained from certain of the leading tackle dealers. A long-handled gaff may be handy for record-breakers.

Trolling only has been considered here, because up to the present no other method has been followed to any extent. The market fishermen, after much travail, developed a successful technique and at the outset the rodsters naturally have adapted from their methods. Trolling is favored, also, because there has been much uncertainty as to securing proper live bait. Small mackerel are an uncertain commodity along the Rhode Island and Connecticut shores; sometimes they are to be had in abundance; again, as in the summer just passed, they have not shown up while the tuna were on. Smelt appear rather late for this kind of fishing. Squid have been practically unobtainable after the middle of June, and this year has been an especially poor one for menhaden. Bindloss and I gave small live eels a thorough tryout on one occasion without any success whatever. We have seen the tuna gorging on sand eels, and these might do very well under certain circumstances.

It is more than likely that in the near future some practical method of bait-fishing will be found, especially as much interest in the subject is being shown. Chiefly as a result of the representation of Mr. C. W. Willard, a number of deep-sea anglers have combined to organize the Atlantic Tuna Club, which it is hoped will emulate its famous predecessor at Santa Catalina. The proposed site of the club on Block Island is not unlike that of the earlier organization, and, with a personnel of high rank in sportsmanship, a liberal supply of deep-sea game fish at hand, new problems to be worked out and standards of sportsmanship to be set up, the prospects for this organization seem highly encouraging. Thus for a number of reasons future developments about Block Island ought to be well worth watching.

Preparedness

IN these times we hear a lot about it. The word is on every tongue, principally when used in connection with our national *un*-preparedness—for war. Well; that is—as it may be. This great nation, even in the midst of diplomatic exchanges that may lead to war, shows no feverish haste to rush forts and armies into existence, no day and night shifts are working overtime in our navy yards. We may be unprepared for a job that in any event would be extremely distasteful to us, the business of killing our fellow men, but at that there is no national hysteria; like an unarmed giant, this nation rests secure in the knowledge of its latent strength—and certes, no other nation, not even Germany, who blithely declared war on ten nations within the year, seems anxious to pick a fight with unarmed America, with her powerful fleet, her unlimited wealth and resources, and her hundred millions of population.

But with the ever-varying seasons of the great outdoors, the question of the Sportsman's preparedness is more immediate; it isn't a case of allowing the enemy to take the first trick or two while a mighty army is being put in the field, it's a case of having your own equipment ready when Opening Day comes 'round, for the season will not wait while you get together this and that, and before you know it vacation time comes and you have some forty things that need fixing up or buying anew. Especially is this true of camping equipment. How many times a year do we overhaul it, only to find the tent needing patches and tapes; the cook kit shy a bale here, a pan there, a cover somewhere else; the food bags maybe attacked by mice or maybe needing cleaning from the last camp; the gas lamp wanting cleaning or its burner bored out; axe and knife dull and nicked; straps and handles in need of repairs among the pack-sacks and tump-bags; and footgear and clothes minus buttons, laces, hooks, eyes, patches—gee whizz! all this cannot be attended to overnight nor yet at the last minute neither! Now, in midsummer, is the time to attend to all this; to buy that tent or that sleeping rig that you promised yourself, and to test them out on some short camp near home before you take them on the big trip of the year, for you surely do not want your precious vacation marred or ruined by equipment that will not make good in the pinch.

And now is the time to go over the rifle, the shotgun; to put on those new sights and test them out at all ranges; to have the shotgun bored and then pattern it. Messrs. Gilman and Purviance, in those excellent articles, "Setting the Sights" and "Know Your Gun," in this issue, have covered these subjects very completely. Only—don't put it off! Go over your own shooting irons and have done whatever you feel may be advisable after reading their articles, for later everyone will be in the repair shops with guns in need of new sights, reboring, recoil pads, straightened stocks, and all the rest of it, and you will simply have to wait your turn or let another hunting season go by with inadequate weapons.

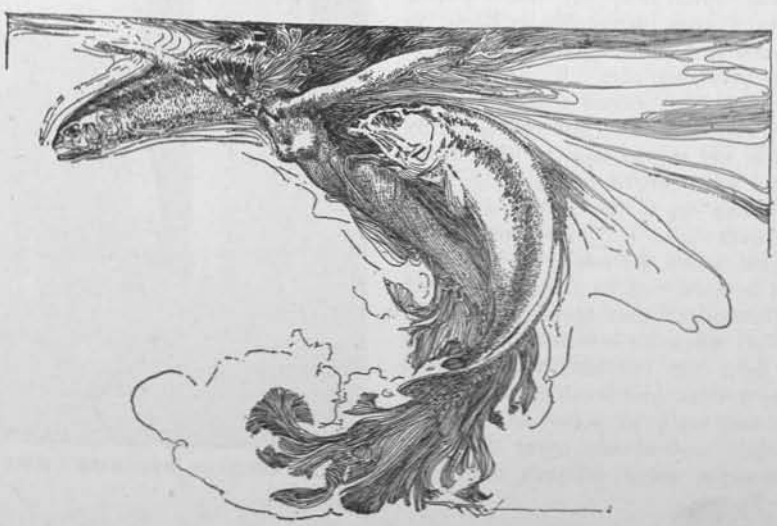
And then for fishing tackle: part of the season has already gone, and by the same token, now that the lull in biting is upon us, isn't it wonderful how war-worn that same tackle has become! Here's a guide with frayed winding; there's a bent tip; yon is a gummed reel needing cleaning,

and on it is a lot of line that got wet several times and was put away without drying—and is therefore rotten and needs replacing. The salt-water tackle is still more "on the fritz"; reel plate out of whack, a loose agate guide, several windings in shouting need of repairs—well, now's the time to make them, for late August and September will be here before you know it and once again you won't be ready.

And then your stock of lures! How many memories do you hold of the season's mishaps, when some favorite plug went adrift, soaring into the underbrush never to be found again; of other wigglers and pork minnows that snagged on root or lilypad stem, lost beyond hope; of still others, let us hope, that are even yet anchored in the maw of some leviathan with whom you got too rough, so that you and the fish divided the line between you! How many casts of sinker, leader, swivel and hooks have you seen vanishing into the briny when some mishap to your cast snapped the line or some leviathan went out to sea with the whole works! All these denizens of your tackle-box that fail to report at the muster-roll must be replaced, or you will fare forth in September minus many essentials for a good catch.

And then, how about the furry members of your hunting outfit? Are you going South again on the chance of getting a good native dog, or are you forehanded this year with a likely pup; and in what state of training does he find himself as the hunting season draws nigh? It's all part of preparedness, and a small-game hunter or wing shot without a dog is handicapped indeed. One or two wasted days afield in which every thicket was combed for rabbit and all the hillsides searched unsuccessfully for quail ought to convince any sportsman that without the dog he has small chance.

The real "bug," who is always prepared, is apt to do a deal of thinking and fussing about his equipment. He is the fellow who is always planning ahead, and who never buys an article without turning over all its possible uses again and again in his mind before sinking any precious dollars in a purchase. Many an evening he spends in his den, overhauling the beloved war tackle while the wife pokes fun amusedly at his enthusiasm over the mere sight of these reminders of good times gone by. It is a good habit, and it will save much going on trail with this and that out of kilter, if the devotee of the outdoors will give a few nights a month to a census of the outdoor stock in hand and the efficient condition of what he already has. Better a little, and that good and in fine repair, than a whole lot of more or less misfit stuff, none of which is in good shape for the rigors of a rough-and-tumble campaign with rod and gun. And midsummer is the time to inaugurate this custom of going over your rig of a summer evening, so that everything will be on deck when wanted.



THE BOSS BASS OF HANCOCK'S SHOAL

BY E. H. COULTAS, New Bedford, Conn.

Winner Third Prize, Small Mouth Bass, Class C, 1914 Contest.

THE morning of the twenty-second of August found me at Weirs, N. H., several miles from Jolly Island, purchasing a goodly supply of helgramites. With bait box replenished, I had started for the wharf, where my launch was moored, when I remembered that FIELD AND STREAM came out upon the twentieth, so back I turned to secure a copy. Dead ahead of me loomed up an immense black cat, and he was coming my way. Perhaps within ten feet of me he cut straight across my path, jumped gracefully to a neighborly looking fence, only to disappear in the tall unkept grass of somebody's back yard. Take it with as big a grain of salt as you wish, any old time a jet black cat crosses my path I begin to sit up and take notice, for I am in for a streak of good luck.

Therefore, no time was lost, one o'clock finding me off Hancock's shoal, right in the teeth of a terrific northwest gale, endeavoring to make my anchor hold upon the sandy bottom. In the end, however, I had to drop my anchor right into an immense submerged brush pile, and the result was such that my boat swung around in a very dangerous position to play a bass, and with startling results as you shall presently see.

The current was indeed strong, the water mean and dark, and one could hardly stand up in my roomy launch. The three bass that I soon caught struck my heavily weighted "bug" as if they were mad. Say, did you ever land a "pour-pounder" in such a gale, when the sea is so high that rowboats remain tied to their moorings? A "four-pounder" that almost took reel, rod and all when he struck? And, during his fight for freedom, to have him raise, way yonder, and break clean through a white cap, only to come down again landing fair and square upon the crest of an immense wave! That's what happened to me that afternoon, enough to stiffen the hair on the back of Nimrod's neck.

Towards five o'clock the gale had tired itself out, and sneaked back and hid itself somewhere behind the Presidential Range, miles and miles from the shores of Winnipesaukee. Other fishermen could be seen putting out for the shoal. I decided it was high time for me to "get busy" with my favorite plugs. As I hung my battle-scarred Moonlight bait over the tangent of my engine, that it might absorb some sun rays before using, my mind drifted back to the black cat of the morning because that streak of luck had not come to hand yet. "No wonder," I smiled to myself as I selected my favorite under-

E. H. COULTAS AND THE "BOSS BASS"

water for a fresh attack upon the "Boss Bass of Hancock's Shoal."

Let me tell you of the "Boss." He was a whopper a score or more of us had seen loafing about the brush pile in which I was anchored. This bass had displayed more curiosity than a barrel of monkeys, but bite; verily I believe he was on a forty-day fast! But, worst of all, he kept every school of bass moving that came strolling about the premises. Previous to this they would congregate at this brush pile, often in lots of a dozen or more. But since the boss had arrived all you could catch were a few stragglers of some small school that happened to pass by as you were casting. Honest, on a clear day and calm water you could almost imagine that you saw great grooves on the sandy bottom below, made by ambitious worms, fine healthy frogs and husky helgramites as they passed by the boss in review. I had heard it remarked, only a few days past, that the waters of Winnipesaukee at this particular point had become bruised and battered with "plugs" and various other styles of lures until its surface had become real tender! Once I lost all patience and hurled my fifteen-pound anchor at him, only to have him appear in a moment on the opposite side of my boat a few inches from the surface investigating, and I could have almost sworn that he winked at me. Sufficient; for weeks the boss had us all more or less "up in the air," and, of course, furnished the main topic of conversation in fishing circles on Jolly and adjacent islands.

Anyway I settled down to try my underwater. It failed, and several other lures met the same fate. Not a sign of a strike amongst any of the Waltons now anchored about my launch, and I knew every effort was being put forth because that rascal of a bass was getting to be a serious proposition. Figure it out for yourself, when it was "a sure bet" the boss was within fifty feet of any of us!

"ANCHORED OFF HANCOCK'S SHOAL IN THE FACE OF NORTHEAST GALE"

It was getting late and I had about decided to pull anchor and start for camp, when, glancing at the sun, now in the West, I noticed he was about to play a game of hide and seek with a bunch of clouds now on the horizon. I jumped for my moonlight plug, watched my chance, and, when the water resembled ink, sent the lure soaring some seventy-five feet inland. As I began to retrieve the bait I could almost see that big black cat of the morning following in its wake. The lure was right at the side of my boat, not three feet away, when a mighty splash rent the waters. When the smoke cleared away I found myself propped up on the stern deck of the good ship *Carol*, my reel singing a merry tune. That bass had thrown in "high speed" and was headed for Center Harbor, some six miles away, at a terrific clip. An easy hundred feet away he came up. Not to break clean out of the water—far be it from such—but to thrust his magnificent head and shoulders into sight and plough and churn the lake in that position for some fifteen feet! All I could do was to try to stick the tip of my five-foot Bristol into a passing cloud and keep that line taut. At last, when that fish dove and my rod again began to show

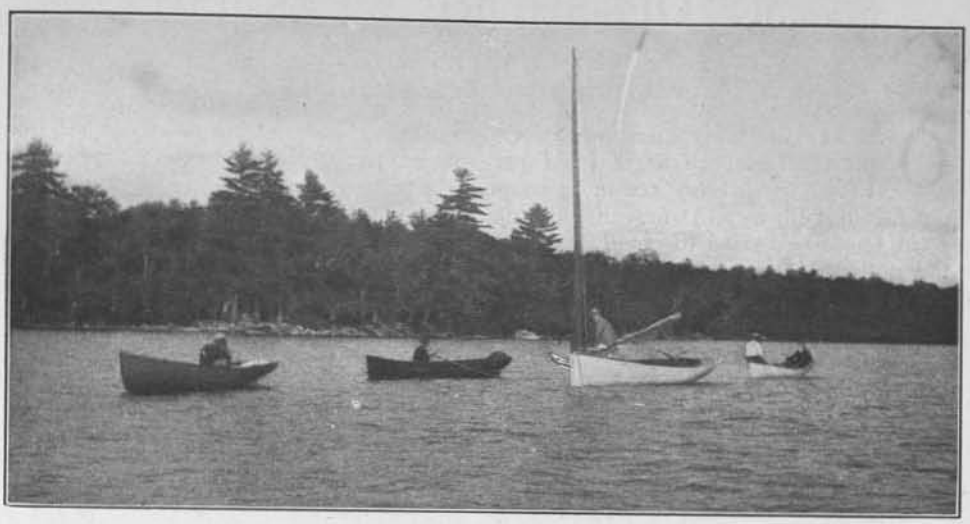
THE KIND WE CATCH AT LAKE WINNIPESAUKEE

the strain I honestly believe I murmured, "Nice—black——kitty!"

Did you ever snag your lure in a sunken branch of a tree thoroughly water logged, and, after repeated efforts to shake the hook loose, begin to coax the whole business to the side of your boat, using every effort to save your tackle? If so—you've rehearsed the second act of this catch perfectly! That bass, after he dove, simply put a crook in his tail, and decided to stay out there a while, now over a hundred feet from my launch. This would not do at all, so slowly I coaxed him in, the only impediment being a vicious shake of his body two or three times, and his actual bulk.

Out came the sun, and now I could see that bass, now only about ten feet astern. I shouted—(let's not mention the words)—that boss bass of Hancock's Shoal was right cut there on the other end of my line, and not paying any more attention to that plug of mine slapped up against the side of his face than the very waters in which he was swimming! And if ever a fish had his gears in neutral that one certainly did. I tried and tried to get him aroused so that he would fight into deep water, knowing the close range, and what a lunge to the surface might bring me. All the time about a dozen fish fans were shouting carloads of advice and knowledge on how to land the boss that I would not even dare compare to my eighteen years' experience. I must have been standing there like a statue; any way I heard about the expression on my face afterwards, when the boss made one beautiful lunge for the brush pile. To my surprise he dove deep, instead of coming to the surface as expected. I gave him the butt and we both held hard. I had to do something at once; any second he might tear loose from his shackles, by mere force of weight, and his nose was almost into that brush pile. I grabbed a twelve-foot boat hook with the intention of actually driving the boss away from the brush, willing to risk a rise to the surface even, but the boat hook was too cumbersome. In despair I grabbed a landing net, got on my knees and shoved the net up and down between the fish and the brush. It didn't feaze him a bit; all he cared for was the safety of those old sunken branches of trees, piled in one great mess of terror to the angler. Something whispered in my ear to take a chance, and I drove the net down so that its opening was right in front of the boss; he did not budge an inch out of his chosen course. I gave him an inch of line, then two, even three, the entire reel in fact, full speed ahead he went, drove his head hard into the net and was trying to push through to the other side. I dropped my rod (it nearly rolled overboard), took both hands and hoisted the boss of Hancock's Shoal 'board ship!

The second that bass hit the boat he started to fight "sur' 'nuf." He flopped



ANCHORED OVER THE BRUSH PILE WHICH THE BIG BOY RULED

lose from the "plug" and hurled the net to the other side of the boat, but it was too late for him to wake up and get mean, because I was there with a monkey wrench, and after I had tapped him a few times he was ready for the scales.

Several boats crowded about my launch to see the prize. There was laughter and praise over the luckiest catch I had ever made, but somehow through it all my thoughts went back to that big black tomcat and the neighborly looking fence of the morning only just passed.

PRIZE CONTEST CERTIFICATE RECORD

Third Prize, Small Mouth Bass, Class C, 1914

Weight—6 lbs., 8 oz.
Length—22⅝ in.
Girth—17 in.
Caught—August 22, 1914.
Where caught—Lake Winnipesaukee, N. H.
Rod—Bristol.
Reel—Imbrie compensating.
Line—Kingfisher, No. 55.
Lure—Moonlight bait, No. 1.

"IN THE UPPER PENINSULA FOR DEER" IS THE TITLE OF AS FINE A MICHIGAN DEER STORY AS YOU EVER READ—BY A. L. KERN—IN SEPTEMBER ISSUE!

MY OFF-SHORE WEAKFISH

BY CHARLES WHITE

Winner Third Prize, Weakfish, 1914 Contest.

ONE fine Saturday afternoon in October, after much argument I persuaded two of my comrades to go out fishing with me. At first they did not want to go and tried to coax me out of the notion of going, but somehow I felt as if there were a big one waiting out there for me, and finally they agreed to accompany me. We ran out through the surf and our first stop was a little ways back of the bar. Fishing was not very good there, so my friends began to get discouraged, but I was very anxious to keep on fishing, as I had a hunch there was a prize winner waiting for me. Luck not being in our favor here, we went farther out. We threw anchor and jigged, but things looked very dull for us here also. Several other boats came to where we were and cast anchor, and their crews began fishing. One of the men had not been fishing very long when he landed a nice-sized fish. Then we all woke up, for we each began to think it would surely be his turn next. I for my part began to fish in earnest, and in a very short time we had landed a half dozen or more small weakfish. At last what I had been looking for all the season happened. I felt an awful tug at the end of my line and the greatest battle of the season was on for me. My comrades looked on and at last one of them exclaimed: "For Heaven's sake, Charlie, what have you got—a whale?" The way my rod was bending I began to think to myself that they were about right, for that fish was surely giving me some fight. He made the first run for his life with about two hundred feet of my line. I finally turned him and recovered a few feet of my line. He then made another desperate run, and this time I did not know whether I was going to stop him or not; but after a hard tussle I finally did. For about twenty minutes it was hard to tell which one was going to gain the battle. By carefully handling him, to my joy I finally got him to the top of the water, where I could see him. One of my companions said, "Charlie, you've got a weakfish, and he sure is a beauty. Don't lose him!" Now came my time to land the fish. Brit took the gaff and was ready for the final scene. The next few moments were very trying to me as I worked him up to the side of the boat. My partner was standing ready to land him. In the meantime my other comrade, in the excitement, forgot himself and, leaning too far over on one side of the boat, nearly upset it. Straightening ourselves up again, we soon landed the big fellow. They then patted me on the back and said, "I guess you are good for a prize with a fish like that!"

We fished for about half an hour longer and added only a few more smaller ones to our catch. It being late in the afternoon, we decided to go ashore, and as we landed on the beach there were several people gathered around the boat. The first question asked was: "How, when and where did you catch that big fish?" Then I had to tell the whole story and show them the rig I caught it on, which same was a surf-casting Greenheart rod, Seger's make; a 21-thread regular surf line, 2/0 surf-fishing reel, and a 3-ounce squid. Then, as it is the rule among fishermen, they all commenced to guess the weight of the fish. We all started for the Life Saving Station, which was close by, to get a pair of scales. When we put him on the scales, to my surprise he weighed 11¾ pounds good weight. They all congratulated me on landing such a fine fish, which was the largest weakfish they had ever seen.

PRIZE CONTEST CERTIFICATE RECORD

Third Prize, Weakfish, 1914 Prize Fishing Contest

Weight—11 lbs., 12 ozs.
Length—33½ in.
Girth—17 in.
Caught—October 3, 1914.
Where caught—Allenhurst, N. J.
Rod—Greenheart surf-casting.
Reel—300-yard surf-casting.
Line—21-thread.
Lure—Metal squid.

MOSTLY MOOSE

BY WILLIAM J. YOUNG

OUR final letter to one of our guides, Gabrial Polehies, of Oldtown, Me., said: "You and your brother Bill meet us at Cork, New Brunswick, Saturday morning, October 17th," and I am glad to say that our connections were perfect and that we reached our permanent camp, about six miles back in the woods, by noon.

Before I go further let me put in a good word for our Indian guides, for fear that the reader thinks the same as I did before I met these two—that is, that Indians in general are lazy and unreliable. I will admit that some may be, but I know that there are two who are as clean, as congenial and as above-board as any white man that I have ever hunted with, and these two are the guides we had. My guide was all that I could wish for as a companion and guide. My friend has the same opinion of his, and we both hope to spend another vacation in their company.

My guide and myself still-hunted Saturday afternoon in a heavy rain, and I was well pleased with the plentiful signs of moose and deer. About three o'clock we tried calling, at the edge of an open place, without success. While waiting for an answer to our calls my guide told me of instances where his party had asked him to help shoot the moose, and I took this opportunity to explain to him that I did not travel all that distance to see him shoot and that I intended to do all the shooting or lose my moose. After that Bill never took his gun along. I also gave him to understand that I would much rather get my moose still-hunting than by calling, and he said he would try his best to get him this way, but remarked that we had come too early for good still-hunting. I realized later on that we had come at a very poor time, because it was too late for good calling and too early for good still-hunting; but it was the only time we could go, so we tried to be contented with the difficult hunting.

We hunted faithfully for five days, buoyed up by the numerous signs of moose, but somehow could not get a shot. We complained to our guides that the neighborhood was too hard to hunt and asked them to take us to a more open country. They willingly packed a small tent, etc., and took us into what I would call an ideal still-hunting ground. It consisted mainly of long ridges which had been burned over about eight years ago, with occasional thick cover in the hollows. We hunted here about as hard as I would ever care to hunt again. At night we slept on a balsam bed on the ground and had to wear all our clothing to keep warm. Balsam beds may be good to read about, but to give a city man a good night's rest they are a poor substitute for a mattress and

"IT CERTAINLY LOOKED 'NICE' TO ME—BEING MY FIRST"

springs. Three days and nights of this and we were again losing some of our

"I MEASURED HIS SPREAD WITH MY RIFLE"

enthusiasm, and I did not hesitate to say that I would be satisfied to get a moose either still-hunting or calling.

The fourth morning found Bill and me about two miles from camp shortly after daybreak. We were on the side of a ridge and below us there was a nice cover in a long hollow, which extended for miles back between the ridges. Bill took his horn from under his sweater and gave a low call. Shortly after Bill said he heard a bull's horns rasping on the bushes in the thicket. He said he thought he was going down the hollow away from us. This was very disappointing to me and I jokingly accused Bill of scaring him away with his calling. He explained that if the bull had a cow with him he would leave in this manner. We found this to be true upon taking up their trail. We spent some time tracking them and by carefully working around tried to get a shot, but it was so hard to go quietly that we finally gave it up. We spent the rest of the day still-hunting and that night went back to the same spot.

About half an hour before dark Bill gave a call, but not very loud. In about five minutes he gave another, but a trifle louder than the first. After a few minutes Bill said, "I hear him!" I did not pay

much attention to this, because I had but little confidence in calling so late in the season. However, I tried my best to hear him, but could hear nothing. Bill then gave a low, short call, and after a few minutes' listening again whispered that he was coming. Still I had not heard a sound, but this time I believed there might be one coming and started to slip off my gloves, when Bill whispered, "See him?" I turned my head slowly, so as to look in the direction he was facing, and got a glimpse of a pair of antlers and large ears through some bushes, but could not see his body. I immediately lost sight of them, but Bill could see him from where he sat and whispered to keep quiet. The moose had walked up to about a hundred yards of us and stopped where I could not see him without moving my body, and I did not dare do this. By this time I had dropped my gloves to the ground and carefully slid the safety off my .35 Remington automatic, and had a good grip on my receiver and trigger. Just about that time my heart was thumping up against my shoulder so that I feared the moose might hear it too. This is no exaggeration. I do not know why I cannot overcome this anxiety, but I have had it every time I have shot a deer and have even had it in a mild form when waiting for ducks to swim into my decoys. After the first shot it immediately passes away, overcome by the excitement, I guess. It is plain buck fever, anyway, and I hope some day to overcome it. The moose stood perfectly still in plain sight of Bill for fully a minute, but try as I might I could not locate him from where I sat without moving.

Bill whispered, "Get ready; he'll wind us." This added to my anxiety; but, needless to say, I was ready. Bill had scarcely whispered when the moose started out diagonally to my right, and for a moment I had a clear view of him—that is, the upper part of his body. I shot once, aiming at what I saw of his front shoulder and he fell as though all four legs had been knocked out from under him. I had shot from a sitting position, and when he fell I jumped to my feet, as he had again disappeared from my view. By stepping a few feet to one side I could see

BILL WHISPERED: "GET READY; HE'LL WIND US!"

part of his body as he lay on the ground, and fired two shots at what I saw of him. Said Bill, "That's enough; load up." So I pumped the two good remaining cartridges out of my rifle and slipped in five from a clip. I also handed Bill my last loaded clip and we each picked up one of the good cartridges from the ground. I was handing mine to him when the moose jumped to his feet. At the same time he gave an awful bellow and again started off diagonally to my right at what I should call a very fast pace, especially for a wounded animal. Right here let me say that I had a tinge of fear when he started in our direction, in avoiding a

fallen tree; but he quickly resumed his diagonal course away from us. I then saw that his only thought was to get away. It was certainly a great satisfaction to me to see that he wanted to part company with us, because we were in a place where it was impossible for a man to run because of the fallen trees and small bushes, and there was nothing to climb but bare tree-trunks about six inches in diameter and some fifteen feet high and as smooth as flagpoles. Furthermore, I am not desirous of figuring in any hero stunt, especially in a New Brunswick woods with darkness rapidly approaching and an animal the size of a moose looking for me. When the moose started to run I shot at him whenever I got a good clear glimpse of him. At my fourth shot he fell with a crash. Bill handed me my last loaded clip and said, "Load up." I guess I did this about as fast as I ever did anything in my life. Bill scarcely waited for me to load when he started for the moose. This was more than I dared do, and I showed a white streak by taking him by the arm and asking him to wait a minute. He laughed and said, "He's dead." Perhaps he was, but I'll admit that I walked over to him rather slowly, to give him time to die in case he was not. I will not very soon forget the speed at which that bulky, wounded animal crashed over the ground, and though I do not believe that they are likely to attack a man, I did not propose to take any chances. I dare say that half of the cases we hear of moose charging hunters are simply due to the fact that the wounded animal rushes blindly in any direction. He probably does not know where the shots come from and simply happens to go in the hunter's direction, not knowing that he is there. But, even believing this, I should not care to have him happen to come in my direction. When we reached my moose, Bill in the lead, we found him stone dead. Bill quickly "gutted him," while I measured his spread with my rifle. It was as wide from tip to tip as the total length of my rifle—forty-three inches—with nice, wide palms. Bill proclaimed it a nice head, and it certainly looked nice to me, being my first. When Bill had finished we hurried out of the woods to find the trail, and stumbled on it almost in total darkness. We had rather rough walking in to camp, two miles in the dark, as the ground was very stony. While walking in Bill asked me how many shots I had fired, but I could not possibly recall the exact number. When we reached camp we counted what good cartridges we had left and found that I had fired seven shots. In skinning the moose the next day we found that I had hit him five times. Two had gone through his back just below the bone, one through the paunch, one through the neck close to the shoulder, and one had entered his side near the rear ham and cut through his body to the lungs and front shoulder. This was probably the last shot, because when I fired the last time he was turning to go straight away from us. One of my misses cut through the hair on the lower end of his bell and also cut through the hair on his breast. I do not know where the other miss went. I was sorely disappointed to find that not one shot had hit him in the front shoulder. I aimed at this every chance I had, and the front shoulder of a bull moose is certainly a large mark, even when moving. But I suppose I should be satisfied; hitting him any place is better than clean misses.

COACHING THE WINGSHOT

BY CHAS. ASKINS

A NEW SERIES ON WING SHOOTING BY THE OLD MASTER OF THE SHOTGUN

I. Introducing the Victim

YES, I have done my share of coaching in my day; also, I have been coached—sometimes by those who knew how to shoot and more often by people who didn't. But the nearest I ever came to having a set job of teaching a youngster how to shoot was when my old shooting friend, John Brown, persuaded me to take charge of his son. My work, he insisted, must be both mechanical and psychological; that is, I must not only teach J. Clyde Brown the skilful use of the tool known as a gun, but I must, if possible, implant a lasting fondness for wing-shooting. I undertook the task with some reluctance, for your marksman is born first and made afterward. I had my misgivings about J. Clyde being born right, and so, I might add, had his father.

It doesn't seem to me very long since it all happened, but according to the census and some gray which has been added to my hair, when I have a personal preference for black, it must have been twenty years ago. Twenty years is a lifetime to a kid nineteen years and eleven months old, and he is liable to conclude that people didn't know very much even about shooting in those ancient times, when there was no wireless, no automobile worth mentioning, no airship, no tango, and women wore petticoats. However, I wish to assure him that men knew how to shoot twenty years ago—yes, forty years ago—sixty years ago—in fact, as far back as I can remember. This is not saying that people were as wise then as they are now, or as good athletes, as ripe scholars, as patient golf players, as keen at tennis; but they had considerable human nature about them for all that, and were able to do a thing very well if they did it often enough.

Shooting was the thing which the wingshot practiced pretty faithfully about thirty years ago. I am aware of no class with which the old-time shooting man so aptly compares as our present trap-shooters. Like the man of the traps today, the game-shooter of thirty or forty years ago fired thousands of shots in a season—sometimes two, three, or four hundred in a day. The duck shot of thirty years ago was the best that the world has ever known or ever will know, for we will never again have the same amount of wildfowl to practice on.

In 1915 we have birds made of clay and we can hit 'em, while thirty years ago we had birds with feathers on and could hit them; the whole difference between the modern wingshot and the old-timer lies right there. It is true that sporting ethics have changed. The gunner of a quarter of a century ago thought that the first principle of sportsmanship required him to become a first-rate shot, and he proved that he had learned to shoot by the content of his game-bag.

It was about this time, or a little earlier, that some Louisiana planter killed seven hundred snipe in a day; a sporting companion of mine, now an old man living in St. Louis, bagged 340 ducks in a morning's shoot; an Ohio man, a market shooter, asserted that he had often killed a hundred woodcock in one day, and that he could bag 90 per cent of the birds shot

at. I have myself killed sixty-two quail in an afternoon in a match, and lost the match at that. Of course we all know now that that kind of thing was wrong, but the point I am trying to make is that those old game-hogs must have known how to shoot.

Not only was our old-timer a good shot, but he had a good gun. It is my deliberate opinion that in shooting qualities our shotguns have not improved appreciably in twenty years. The general output is better—a good gun can be purchased for much less money than it would have cost twenty-five years ago—but just as sound and just as effective double guns were made then as can be had to-day. Indeed, I believe that in those times more really fine guns were to be seen in the hands of field shooters than a like number of men could have displayed last November. Those old Parker, Westley-Richards, Purdy, Smith, and Diamond Daly guns were as fine weapons, as strong, as durable, as good shooters, as have ever been made since. I am quite willing to admit that modern guns can be bought for less than the older weapons cost, guns which will last as long and shoot as well—shoot as well and no better. Skill in gun-boring is more an exact science, more a common knowledge, than it was a quarter of a century ago, but the best boring skill of to-day shows no finer results than the best boring skill of twenty years ago. In shotgun boring, we have practically been at a standstill for twenty years.

Let us hark back to my friend John Brown. He had a boy, a well-built, athletic youngster, fond of baseball, tennis, skating—any kind of sport except shooting. Shooting took him away from his mates and bored him; he was social in his instincts, gregarious; wouldn't stand trotting about with a small herd consisting of a couple of old bucks like his father and myself. John had his own theory of wherein the trouble lay, blaming the youth's maternal ancestry both remote and near.

I had heard of the boy every now and then, of course—of his progress through school and college, of his social triumphs, when his mother happened to get hold of me, and finally that he had been sent to Europe for two years to finish his education. At last, while located in North Mississippi for the winter, I got this letter from John Brown, capitalist, with a place in the business world which he had to fill—just had to stay on the job:

"My dear Boy:

"The older I get and the less I feel like work the more fool things I have to do. I can't get down for a shoot with you until the week before Christmas. John is home, though, and will be there shortly after this letter.

"If you get a note from J. Clyde-Brown—note on scented paper with his name and coat-of-arms on the back of it—that's him. What do you know about that? I'd swear, but hate to offend the stenographer—nice little girl. Told Janet at the time that some fool thing would come of putting Clyde in his name—her father's name, you know; told her to be satisfied with plain John, but hated to argue with her at the time. Had it to do over again, would give the minister a hundred to handily forget that name in the christening. You see, he learned on the other side that the Clydes came over with William the Conqueror, which accounts for the coat-of-arms. The Browns and the *Mayflower*—hell! That's too recent for a full pedigree! I suspect that he would have left the Brown off altogether except that he needed the hyphen—couldn't have used it nohow without the Brown.

"One thing the rascal did pick up which I couldn't drive into his head with a maul and wedge: he learned that it is supposed to be the right thing for a young scamp to know how to shoot. He thinks he knows how now, but cuts loose, blim-blam, in the English style, and never hits anything except by accident. I think you will be able to unlearn him, though, and that's what I want you to do—first unlearn him and then learn him. I don't begrudge the whole trip across the water, and it cost a-plenty, if he only sticks to the shooting. I haven't time or patience enough to teach him, but he still has a lot of confidence in you—believes that you can shoot as well as anybody except the Earl of Craven, the Maharajah of Timbuctu, and a few other cracks he met in England.

I thought it best not to tell him that I could beat you more often than not. A good deal depends on the faith he has in you, understand.

"He doesn't know a thing about our shooting—not a thing on earth—and he don't know any more about guns than he does how to use them. He picked up a stick of a piece in England, pretty but worthless; cost a hundred and twenty-five pounds sterling, weighs 5—14, 12-gauge, full-cylinder game-gun. You couldn't kill a quail with that gun at thirty yards if you had it tied and the gun in a machine rest. It is straight enough for a pigeon gun, 2 inches at butt, 1¼ at comb, cast off or cast in, or some fool thing—understand they fitted him out by the use of a try-gun, whatever that is.

"He has the English style down pat: whips up his gun, lets off—bang-bang—and then says, 'Jove! The rascal dodged me.' Dodged him, hell! He never aimed within four foot of it. He hasn't any other shooting faults—just don't know how to shoot at all. Of course, he might learn by himself after a while if he didn't get disgusted and quit—never was a Brown who couldn't make some out of doing a thing if he really tried. But he ain't all Brown, not by a devil of a sight—there is that hyphen and that Clyde. But he must have *some* Brown in him, anyhow.

"That reminds me: hope you haven't anything of what he calls society down there—hope he hasn't a soul to show his fine English clothes to—hope you get him to wearing brogans and nigger overalls. Keep him away from girls if you can. A man ought to be forty years old before he selects a wife, anyhow. If I had waited until I was forty there wouldn't be any of this Clyde hyphen foolishness now. But he must be half Brown, anyhow, and maybe the Brown half will show up stronger from now on. Say, don't mention this in your reply; the madam sometimes gets hold of my letters before I do. Janet never did care a cuss about shooting or anything worth while, but I never once thought of that at the time. Give me a chance to choose a wife for John and I'd remedy that—see that there was another cross of the real old American shooting stock on the family tree, you understand.

"I am sending a good, honest Parker gun along with him (he just grins at it), but it weighs a good seven pounds, sixteen gauge and pretty well choked. He can shoot it if he can ever shoot anything, and it will do for all sorts of game. Suppose you have quail, woodcock, snipe, and ducks, the same as we used to find. Walk him hard—walk him so demned hard that he'll sleep nights. He thinks it is English to be a good walker, and, as the lad has a good deal of Brown pluck, think he'll stay with you.

"Captain Byas didn't have any girls that I remember, except a couple of tow-headed little things. They won't count, for he seems to take to full-fledged old ducks about ten years older than he is—or they take to him, damned if I know which. I'd give a million to be with you right now, but some fool would wire for me. Don't let expense stand in the way; draw on me.

"JOHN."

The next day J. Clyde got in with all his luggage.

"Hello, Coach!" he greeted me heartily, with a handshake that reminded me of Old John; "I must say you are looking fit. Thought you'd be trotting in dad's class by this time."

"Gone some to legs and shoulders yourself, J-C, since I saw you last. Good for forty miles on hoof right now, aren't you?"

"Safe bet. What say we get right out in the pines after lunch. Old Jack is as keen as a terrier; put up three bevies on the way from the station. Had my gun packed; no getting at it. Mighty small birds compared with ours, you know, but, my word, fast. Expect I'll fall off a good 10 per cent from my record in Somerset—wouldn't surprise me, eh."

"Such a thing has happened to Englishmen. What do you say to targeting our guns first. If I am to get a line on your work, I must know whether misses are due to you or your gun. Suppose you have a full stock of ammunition?"

"Ten cases straight from Ely Brothers, London; load, three drams of Schultze and

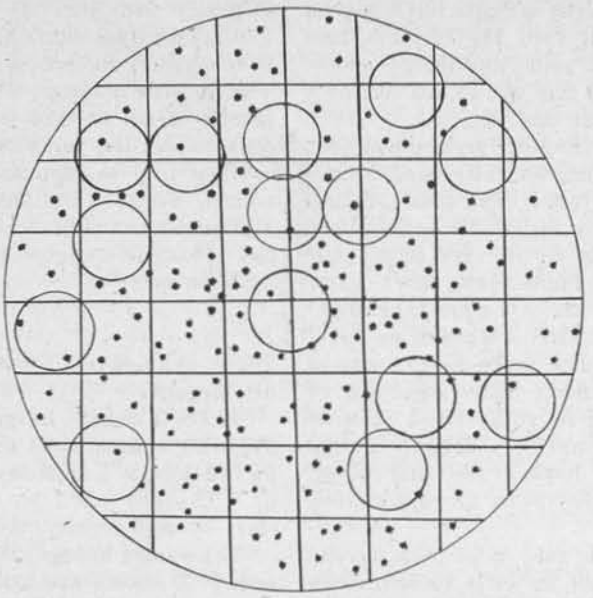
an ounce and a sixteenth of sixes. They'll stop grouse, pheasant, or partridge, believe me."

"English sixes are the same size as our sevens, but maybe they will do. We can tell better when we see the targets."

After lunch, when I had admired the two guns—a handsome, highly ornamented Grant and the two-hundred-dollar-grade Parker—we went out back of the great old plantation barn to what J. Clyde called "plate 'em."

"Long way, isn't it?" J-C commented when I had tacked up the three-foot square of heavy white paper and paced off forty yards. "Never recall dropping a partridge at such a distance as that."

"Yes; it's long range for quail, too. But it is the customary distance for testing guns, and, as compared one with another, or with factory-standard results, we can get a better line on them at forty yards than any other range. Anyhow, even a special quail gun ought to kill with the second barrel at pretty close to forty yards. Later we will try 'em at twenty-five yards, which is the proper distance to pattern the first barrel of a quail gun. Think you can hit the center of that paper, J-C?"



ENGLISH CYLINDER BORE PATTERN AT 40 YARDS

Pattern that J. Clyde didn't like. English game gun, bored cylinder, distance 25 yards, 24-inch circle, load three drams, 1 1/16 oz.: English sixes. Smaller circles show where the bird might have gone through missed or crippled. The gun spread over a 30-inch circle at the distance.

"By George, first time I ever tried, don't ye know. Looks easy, don't it?"

"Not so easy as it looks. Now, hold for the center; I wish to see how your gun fits you."

I watched my pupil closely to see whether he would flinch or jerk the trigger, but he held steadily and pulled off evenly. At the sharp crack of the nitro, the featherweight jumped smartly, leaving a red mark on the smooth cheek of the boy. The quick return sound from the barn showed me that the load had gone home with considerable velocity.

Walking up to inspect the target, J-C gave an exclamation of dismay. The major portion of his pattern had gone above the paper.

"Rotten holding, eh! Thought I was dead on the center, too."

"Gun shoots high, J-C. I knew it would, but I didn't know how much. Now I'll try it myself. Very few men can shoot to center with a gun having a 2-inch drop and high comb, even when it has a cast-off, which gives you more drop. These straight-stocked guns are not intended to shoot where you hold, but to throw the pattern high. Some men can shoot well with them and some can't. In overhead shooting and birds passing high, the gun that patterns above the point of aim is an advantage; gives you lead automatically. But if the mark is crossing low to the ground, care must be taken to keep from over-shooting. A high-shooting gun is an advantage in quail shooting, too, for the birds are generally rising; but too much elevation is worse than none. I like my quail guns to center the pattern six inches above the point of aim at twenty-five yards. A gun used mostly for snap-

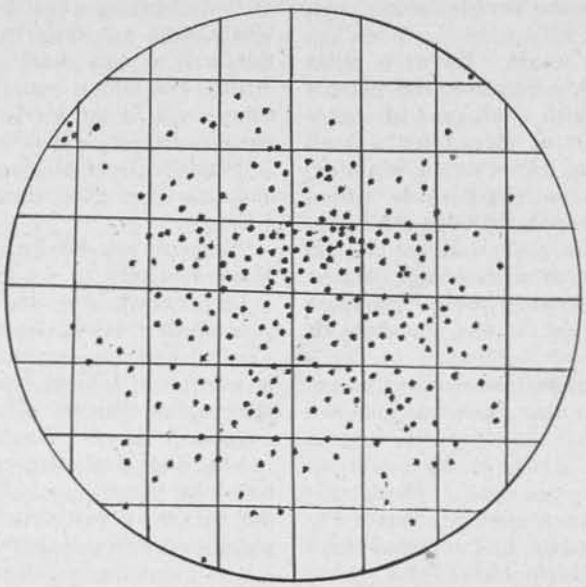
shooting might well throw its charge high, for your snapshot pulls quickly, with his mark in plain sight above the barrels, instinctively expecting his pellets to rise to the bird."

Calculating that J. Clyde's gun shot at least a foot high, I held within four inches of the bottom of the paper, getting the pattern well on the target. As I fully expected, the cylinder barrels, with the shot quite too large for quail, gave a pretty open pattern. By way of getting the average, J-C and I fired about a dozen cartridges, striking the target very regularly after we had learned that the weapon shot about 15 inches high at the distance.

Marking and counting the patterns, which required a good hour of steady work, we learned that the right barrel averaged 120, left 134. Suspicion and dismay had been growing on J-C's face all the time he was counting up shot-marks.

"Gad!" he broke out at last; "this don't look good to me. First time I ever saw a gun tried like this, and it's got me in air—I'll say that. Here the confounded thing shoots so high I'd be liable to miss a bird on the ground, and look at that pattern! You tell me that a straightaway quail can be covered by a three-inch circle. Why, blast the thing, I could take a dozen quail and throw 'em through that pattern and half of 'em would never touch a shot!"

"True enough as far as you go, son. This gun would be next to worthless at forty yards when loaded with English sixes. But—all quail are not killed at forty yards—far from it—and all shot are not English sixes. Here we have a pattern of over 40 per cent with the right barrel and better than 45 per cent with the left. That means with No. 8 shot, 1⅛ ounces to the charge, patterns of 185 right and over 200 left. I have learned that it demands a pattern of at least 275 pellets, evenly distributed, to kill quail regularly at forty yards, but a 200-pellet pattern will account for most of the birds at thirty-five yards, and a pattern of 175 is good for thirty yards or more. As to the high shooting, that may be partly due to the jump of the gun, caused by recoil—pretty light gun, you know, and it will jump like an over-loaded revolver. It may be that in wing-shooting you will hold with a stiffer grip and it won't shoot so high; I will be able to tell more about that when I see you at work. If we have to, we'll cut down the comb until the elevation is right. I can do that without marring the stock, but I don't like to touch a fine gun like this if it can be avoided. One thing it strikes me we could do with advantage all 'round: this gun, with its 30-inch barrels and light stock, is a trifle muzzle heavy, so it feels to me, and the stock is only 14 inches long. A lathy, long-armed youngster like you can shoot a stock 14½ inches long. We will send the gun in to a good gunsmith I know in Memphis and have a



24-INCH CIRCLE: TOO CLOSE A PATTERN FOR QUAIL AT 25 YARDS

Pattern that J. Clyde liked. Parker 16-gauge, 24-inch circle, 25 yards. Squares are three-inch, supposed to be the size of a quail, driving straight away.

Silver's recoil pad attached. This will lengthen the stock, add three ounces to the weight of the arm, bringing it above six pounds, and the increased length will throw your face farther back on the stock where the comb is lower, thus dropping the pattern nearer your line of sight.

"Now we will target the gun at twenty-five yards, which is the distance all quail guns should be tested for the first barrel."

An exclamation of pleasure came from J-C when he had inspected the target shot at the shorter range.

"This looks more like it," he declared. "That would touch 'em up some, now wouldn't it?"

"Looks like it would. But it is a bit too open at that. You see, the pattern covers a full 30-inch circle, and 24 inches is about the limit of spread for a quail gun at 25 yards. However, a beginner, J-C, is liable to do better work with a 30-inch spread than he is with a 24. Of course, you are a good shot on English game, son, but you are strange to our cantankerous little bob-whites. Suppose we put the Parker sixteen through its paces now.

J-C let out a whoop the moment he got a glance at what the American gun had done.

"Great Scott! Look at that, will ye! The governor was right! That's the gun for me! No throwing a quart cup through that pattern, and the gun don't shoot much too high, either—don't kick, neither. Now I've got what I want!"

The pattern was indeed a beauty as compared with that of the English gun—not over 18 inches across, dense, round, and even.

"Don't be so sure of that, John, Jr. Not one quail shot in ten has skill enough to make the best use of that pattern, though plenty are attempting it."

"Your fine gun will be worthless on quail with those English cartridges, but you can use my cartridges to-morrow and I will shoot yours. My gun has enough choke in either barrel to handle that size of pellet pretty effectively. Anyhow, it won't make any difference whether I hit the birds or not. Later, when you get to hitting everything you shoot at, you can change off to the Parker and let it take the conceit out of you."

"Suppose I get to blaming every miss I make on that gun; then what?" queried J-C.

"Suppose you hit 'em all; then what?" I asked in turn.

J-C grinned. He didn't tell me a single yarn about English shooting that evening. The lad had wisdom enough to know that it was up to him to show me something now, rather than tell of what he had done on driven game. We cleaned the guns, fed the dogs, and I copied in my shooting-book the targets made by the Grant and the Parker at twenty-five yards. The patterns are presented herewith.

(*To be continued*)

SETTING THE SIGHTS

SOME SHORT CUTS TO TUNING UP THE NEW RIFLE, OR TAKING THE CURSE OFF THE OLD

BY C. L. GILMAN

TAKE it by and large, the rifle which shoots where it is pointed—and is pointed right—will gather in the largest bag in the long run.

Given, to begin with, a rifle of first-class accuracy and sights permitting genuinely uniform alignment, and it is possible for any man to have just such a shooting engine. That is, if he is willing to take the trouble of "sighting it in"—and knows how to do the job.

The stub over which many men trip, fall down and skin their faces when they try to adjust the sights of any rifle is an inherent inability to regard the operation as anything but a test of their marksmanship. Instead of trying to eliminate, as far as possible, the "human factor" and

find out what the gun can do, they persist in trying to place every shot in the bull's-eye to their greater glory among the bone-headed bystanders. So strong is this taint of vanity that not a few men will even fudge on themselves when shooting alone. And, verily, I believe there must be a large remission of punishment in the hereafter for the man who has endured the jeers bestowed on his "misses" by the novice for whom he has rashly undertaken to "tune up" a new arm.

In outline, "sighting-in" consists of firing the rifle at a definite mark over the desired range, noting where the shots strike and shifting the sights until, without holding off the mark, the bullets strike it fair in the center.

As the man who can shoot as well offhand as with a rest is always either a dead demi-god or a living liar, the first consideration in sighting-in is some aid to a uniformly steady hold.

Of all that offer, the simple, prone position used in the bulk of military target shooting is the most convenient. But to repeatedly assume this position and maintain it without a tremor is an acrobatic feat beyond the muscles of the man unpracticed in it. He will do better with some sort of a rest.

A rest, to give results the same as would follow a perfect offhand hold, must not be a rest for the rifle, but a rest for the body of the man shooting it. By sitting in a chair and resting the elbows on an ordinary table such steadiness can be obtained. Tables and chairs are frequently lacking at extempore ranges, but the suggestion is one which can, with infinite variations, be worked out with such material as is at hand.

The vital point is to secure some sort of solid, steadying support for the body, and then, as nearly as is humanly possible, align the sights upon the target exactly the same for each shot and squeeze off the trigger as tenderly as for the most difficult offhand shot.

Getting a clear, sure aim on a bull's-eye target with the prevailing type of modern front sight, which is usually either of ivory or gold and always a "bead," is something of a problem. If one essays to "hold at six o'clock" on a circular bull's-eye, as in target shooting, he will find that the bull shows a provoking tendency to roll off the rounded top of his front sight. If he attempts to hold "dead on," a frequent game-shooting method, he will find the bull covered up and blotted out completely.

Squaring the bull's-eye will obviate this difficulty. Holding at six o'clock—that is, squarely under the bull, with the top of the front sight barely not-touching the black—the military shooter will discover that he has the familiar ball and pedestal figure of the range, only inverted. Holding dead on, the corners of the square bull show and permit the bead to be accurately centered.

A little experimenting will be necessary to determine the size of bull demanded by the particular sight in use. I cut mine from tar-paper. For a 1/16-inch gold bead I have found four and eight inches square for 100 and 200 yards satisfactory if a six o'clock hold is used. With a dead-on hold, five and ten inches are better.

Having given, then, a bull's-eye to which he can fit his sight with uniform accuracy, backed by enough plain paper to insure the recording of his shots, and a rest from which he can shoot steadily, it next devolves upon the shooter to hold clean and steady on the bull and let his shots group where they will.

For it is the group, not a single adventitious shot, which tells where the rifle shoots. While the practiced target shot may safely content himself with pulling strings of three in the rough, preliminary work, and five when arriving at the dead center, the average man can profitably double the number and then arrive at his verdict by the good old American rule that the majority are most generally right.

In order that no ammunition may be wasted on shots which do not register on the target, it is the part of wisdom to first roughly line the sights with the rifle by setting it in a vise or some similarly firm support, aiming through the bore at some nearby mark and then moving the sights to align with the same point.

Generally, however, the man gifted with ordinary human intelligence can "guess the sights onto a rifle" close enough to insure its registering on a newspaper page

at fifty yards without this fussing. And fifty yards is a pretty good range at which to begin work with any rifle.

Once sighted to group around the center of a two-inch bull's-eye at fifty yards, any professed big-game rifle which will not shoot into a newspaper page at 200 belongs in the museum with the other relics of antiquity.

The group, the close-knit group clearly registered on the target, is the main requisite of targeting in the rifle.

After that is once obtained, all that is left is to shift the sights until the group shows where you want it.

There are two ways of doing this sight shifting. By far the most common is to shoot a group, move 'em a ways by guess, shoot another group, guess 'em back again, and so on until your ammunition is spent.

The modern sight of the modern short rifle—namely, the peep sight—offers a much surer and shorter method—or rather an adaptation of a method—universally employed by military target shooters.

The prevalent type of this sight has a stem which moves up or down as the threaded sleeve surrounding it is rotated. On this stem are marks. One complete revolution of the sleeve will move the stem up or down just the distance between two of these marks.

Otherwise, they mean nothing—just yet.

But, now we have our rifle lined in to register on the target at fifty yards, we can proceed to make these marks, on this particular sight attached to this very rifle, mean a whole lot.

First, we'll screw the sight up or down until the nearest mark on the stem stands flush with the top of the sleeve. Next we'll take a fine file and cut a groove, plain alike to eye or finger-nail, vertically the whole length of the surface of the sleeve farthest from us. This mark we'll leave, for future reference, glimmering raw and exactly matched with a continuing file-nick in the base of the sight.

Now, shoot as carefully as you can, five shots.

Closely bunched, they make a ragged hole near the bottom of the target. Let 'em stay there.

Screw the sight up one notch and take notice—

The sleeve has made one complete rotation and our file-mark again stands flush with the nick in the base.

Give her five more—and hold on that bull just exactly as you did before.

Now is the time to find out something true only of this rifle and these sights—and no other in the world.

Measure the distance between the centers of these two last groups. It is, in this case, with this rifle and these sights *only*, two inches.

One complete rotation of the sleeve of this sight on this rifle moves the stem the distance between two of the stem graduations—and varies the elevation of the point of impact on the target at fifty yards two inches.

That last group is seven and one-half inches below the center of the bull's-eye.

Here is a problem which even primitive man, guiltless of arithmetic, might solve.

Getting up the first six inches is easy indeed. If screwing up the stem the distance between two of the division marks will raise the point at which the bullet strikes two inches, raising it three divisions will put the point of impact up six inches, if three times two is six—and it generally is; at least, it is at present writing.

And six from seven and a half leaves one and a half.

Since a complete revolution of the sleeve will put the stem up one division (two inches on the target), a half revolution will put it up half a division (one inch on the target).

By this time you've doubtless tumbled that a quarter revolution more will yield the remaining half inch. Thanks to that bright, clear groove filed in the sleeve, you have already made this adjustment with ease and accuracy.

And the next five-shot group, cutting the heart out of the bull, shows that we were right.

What's more, since your eye can gauge with reasonable accuracy an eighth of a revolution of the sleeve, you can, if you need to, make an adjustment to a quarter of an inch with this sight and rifle at fifty yards.

But fifty yards is not the range at which you want this gun sighted in. Judging

from the price you paid it's a 200-yard rifle. And this five-inch group centering eight inches below the center of the bull on the 200-yard target shows that it is just about that.

There is no need of guessing when you can figure.

If one division on the stem of the sight means a correction of two inches at fifty yards, common arithmetic shows that it will give a correction of four inches at one hundred yards. And if it is good for four inches at a hundred it's——

You're on! You've given the sleeve one more revolution—upped her one division—and it's a safe bet those shots you're pulling are pulverizing the center.

You have a rifle now which will drive center at 200 and, unless the maker has trifled with you, will hit only about three inches high at 100. Better try it, though; some of these paper trajectories fail to show up in shooting. But that's another matter.

You not only have a rifle, but you have a system by which you can quickly target in that rifle at any range you care to shoot.

What's more, you have learned how you can turn a similar trick with any other rifle—though the data you've just secured are good for this rifle and sight only.

It was fortunate that the sights went on true to the line in this case, or we'd have had to correct them, by guess and by gosh, tapping the front sight back and forth until we got it right or slipping paper shims under the rear sight to cant it right or left, as was required.

Thanks mostly to the military and target shooters, who also hunt, the sight-makers are beginning to incorporate screw lateral—or windage—adjustment in their rear sights. Practically all receiver sights have it, though too many of them must be shifted "by hand" from one elevation mark to another. And windage adjustment is now being built into some tang-peep sights.

If we'd had such a sight on this rifle, and needed to correct the lateral error, we'd have gone after it just as we did the error in elevation. First, we'd have shot two groups, to show the value on the target of "one point" of windage, and then applied the rules used in making the elevation adjustments.

Even if you were determined to remain in the flint-lock age and shoot a 20-inch, high-power repeating rifle with the open sights, which lost their usefulness with the passing of the 48-inch barrel and standing shots at big game, this same system could have been used.

We could have found the "value" of one "step" on the stairs under the buckhorn and gotten a sighting approximately correct—one perfect laterally and a lot more nearly correct as to elevation than you could find time to use when contending with buck ague for a shot at running game.

Sighting in a rifle is worth while if you really intend to aim at your game instead of pointing, shotgun fashion, in its general direction and trusting to luck and rapid fire to get it "in the pattern."

Moreover, it's simple if you play a system.

Using a little common sense and simple arithmetic, it can be done in one afternoon, with twenty cartridges. Without these, a man may fire 200 rounds and, after many weeks, still wonder where in Sam Hill his blamed old smokestick shoots, anyhow.

BOYS, THE HUNTER'S MOON WILL SOON BE SHINING! LOOK FOR OUR BIG FEATHERED GAME ISSUE—SEPTEMBER—CHOCKFULL OF UPLAND AND MARSH SHOOTING STORIES BY ASKINS, CARD, BUCKINGHAM, MILLER, MACKLIN AND YOUR OTHER OLD FAVORITES—EVERYTHING FROM GROUSE TO DUCKS. AND BIG GAME WILL BE LOOKING UP, TOO—VIRGINIA DEER AND MOOSE FOR A STARTER. DON'T MISS THAT ISSUE—YOU CAN'T AFFORD TO—NOT FOR FIFTEEN CENTS

Bat Sullivan's Escape

By Geo. R. Varney

WOMEN were a scarce article in Rawhide.

Beautiful ones were scarcer.

Good ones were scarcer still.

Alvida was both—all three, in fact.

The other kind of men were as plentiful as the other kind of women—and then some. The camp was woefully lacking in good men, and Bat didn't go very far toward filling the vacuum. In fact, Bat didn't fill much of anything except himself—with booze.

Yet Bat held the place of honor. Almost always it was his hand that turned the music for her, as she played and sang for the miners after supper and Sundays.

One December evening, about a month after she came to work in Rawhide, a bunch of men, while waiting for her to get through her work in the dining-room and sing for them, were tanking up a little in the Last Chance saloon.

"All wimmin is alike, in minin' camps," Big Ben started the ball rolling. "Bat's stuck on her, but she ain't no better than the rest of 'em. I hears that she ust to live with a man over in Arizony somewheres. It's my private opinion thet——"

A kindly disposed neighbor punched him in the ribs, at the same time jerking his thumb over his shoulder toward Bat, who had entered the saloon unnoticed and now stood warming himself at the huge stove. But Big Ben had already done some tanking up before filling to the neck at the Last Chance, and was therefore lacking in that prudence which Bat's big fists and ugly disposition had taught the camp.

"Aw, h——l!" he blustered. "I'm sayin' what I'm a damned mind to. Bat knows she's a ——."

The vile epithet was still trembling on his greedy lips when Bat was upon him. Furiously he hurled his victim across the room, and, as he attempted to rise, towered over him, his face black with anger.

"Damn your dirty tongue," he ground out between his teeth. "Take that back or I'll make mincemeat of your ugly mug an' chuck it down your rotten throat.

"Eat it," he threatened, as Big Ben hesitated.

If the latter had been sober he would have tried to eat his head if Bat had ordered him to in that frame of mind; but, drunk, he staggered to his feet and reached his hand toward his hip pocket. He got hold of his gun, but not before he had got a bullet through his body; and, as he fell, firing a shot toward the ceiling, he received another one.

Bat backed through the door, singled out the best horse from those that stood in front of the saloon, sprang into the saddle, and was at his own cabin door before the crowd had fairly awakened from its stupor. Deliberately he slipped another gun into his pocket, stowed away all the ammunition he could hold, seized his Winchester, remounted and loped toward the hills. Several shots followed him, but he paid no attention to them, and in five minutes had rounded the brow of the hill and disappeared.

For years he had been a cowpuncher, having turned miner only from the lure

of gold, and now the feel of the bounding horse, the rush of the stinging air, the smell of the night set fire to his blood, and from mere exuberance of feeling he rose in his stirrups and let out a cowboy yell. As the startling sound rang out into the darkness of the night and was echoed back from the hills, there came, as if in answer to his call, the weird howl of a coyote from the desert. Again Bat yelled. A third time the echoes hurled back his yell. Bat thumped the sides of his mount crazily with his heels and yelled again. The sorrel caught his spirit and outran the night wind that was rushing down the draw.

In a few minutes Bat drew his horse down to an easy gait, and, crossing the creek at a safe ford, took the left-hand road that led to the cañon, where he planned on entering the mountains and making his escape across the divide into Arizona. The road he had chosen was longer than the right-hand one, but it took higher and more open country, and so made a surprise less likely. Moreover, the shorter road led past several cabins farther up the creek, and one of them he knew had a 'phone, which he felt confident his pursuers would use in their efforts to cut off his escape.

In this he was not mistaken, for as he drew near the first place, two miles up the creek, he saw a lantern flashing crazily off to his right, and he knew that Jed and Dan Barkman, his old-time enemies, were hurrying to reach the cañon's mouth ahead of him.

"They'll make it," he mumbled to himself. "This road's further an' their horses is fresher than mine, an' Jed's Tornado is the best critter that runs in these parts. Jest what I want," he chuckled grimly. "I'll show 'em a trick or two."

They were there, and at a hundred yards they began shooting, but the range was too great for their six-shooters. The full moon threw the two men into sharp relief against the white background of snow, while Bat was still moving over the snowless ground. Dropping the reins across the horn of the saddle, Bat dashed at them, swerving his horse from side to side by leg pressure. Dan's horse went down before his first shot, and his rider lay motionless, stunned by the fall, and a moment later Jed toppled to the ground with two bullets through his shoulder. Slackening his speed not at all, Bat seized the rein of Jed's horse as he swung past his fallen enemies and swept into the cañon.

Half a mile up the trail he stopped long enough to slip the saddle from Tornado and put a lariat around his neck, and then went on at a rapid gait, leading the captured horse behind.

"Good work," he grinned. "Jed an' Dan ain't hurt much, an' I c'n make it now sure. Thar ain't no sheriff ner nobody c'n git a smell o' my heels now."

"Easy, you fellers," he cautioned, a few minutes later, as Tornado shook his head and challenged the sorrel to a race. "Save your legs an' wind fer the climb thet's comin'. Believe *me*, you'll need 'em."

They did. It was thirty-five miles to the divide, all uphill and six miles of it hard mountain climbing. A light snow made the footing hard for the horses, and the sorrel was nearly blown by the time they reached the foot of the mountain. But Bat stuck to him until the hard work began, when he turned him loose and mounted Tornado.

His own discomfort had long since turned into keen suffering, for the cold at that elevation was intense, and he was not clad for a long ride. His feet had warned him long ago by their numbness that they were freezing, but he dared not take time to walk, for he knew well the indomitable will that always drove the sheriff's thoroughbred to the limit.

Suddenly he was aroused from his increasing stupor by the faint sound of a shoe striking on a rock far back down the cañon. A moment he listened, and then climbed stiffly down and hobbled painfully back down the trail, trying to stamp life into his sleeping feet and make ready for the encounter that had come sooner than he anticipated.

Choosing his ground, he waited.

Fortunately he did not have to wait long.

"Han's up!" he commanded, as the sheriff came around a bend in the trail. "Han's up!" he repeated sharply, as the other hesitated.

Their guns seemed to bark together.

"Too bad, Sam," apologized Bat in shame, as he hobbled to the side of the sheriff. "I didn't aim to hit your knee; I meant to git your horse. I'm too damned cold to shoot."

"It's all right, Bat," groaned the sheriff, helpless from pain. "Hike! The posse'll be along pretty *pronto,* an' I don't want no more shooting. I thought you'd quit an' wan't goin' to give me any more trouble."

"You'd a-done the same, Sam," protested Bat. "Wal, so-long. Sure you're all right?" he hesitated.

"Sure! 'Tain't bleedin' much, an' they'll be here mighty quick. Hike!"

"Wal, so-long," waved Bat, as he hobbled painfully toward his horse.

When the posse overtook him, at daybreak, they found him carefully entrenched behind a wall of rocks that he had piled up, and they were compelled to see their horses shot down one after another and several of their men put out of commission before they could get to cover, while not a shot of theirs seemed to do anything more serious than to draw a yell of defiance from the jubilant outlaw. It was bitterer than death, but they were forced at length to withdraw and turn back down the slippery trail toward Rawhide, carrying their crippled comrades and the helpless sheriff with them.

But Fate was not through with her spinning. On the other side of the divide Bat encountered a snowstorm that seemed to freeze the very marrow in his bones. In vain his benumbed fingers sought for a match with which to light a fire, and the best he could do was to dismount and hobble doggedly in front of his weary horse toward the shelter and food that he hoped to find for them both down in the valley below.

Late that afternoon a small sheep-owner, miles down the valley, attracted by the barking of the dogs, discovered in his yard a dejected-looking horse with a half-frozen man slumped down in the saddle, and played the part of good Samaritan to both man and beast.

Several times during the night that followed, Bat was dimly conscious of the fretting of a child, but it was not until morning that he came back to the world of reality sufficiently to realize what a dirty trick Fate had played on her wayward child.

"She's got pneumony," he declared positively to the father, after a hasty examination of the sick child. "She's got to have a doctor *pronto.* You'd better send to Rawhide fer Stanton."

"Nobody to send," was the gloomy answer.

"Ain't thar nobody here with you?" urged Bat in surprise.

His host shook his head in silence.

"Whar's her mother?"

"D-d-dead. Aw, I might's well tell you. She left me."

"Left you?" incredulously.

"We quarreled."

Bat whistled.

"Thet's bad. The baby o u g h t to hev her mother right now, an' a doctor."

Bat swore under his breath as the full realization of his dilemma began to dawn on him.

"Reckon it'll hev to be did," he growled savagely.

"Sorry to trouble you," apologized the other. "Your frozen feet——"

"Aw, h——l!" was the profane protest. "Frozen feet nothin'. Got a couple o' good horses?"

"Two that will make it all right, I reckon."

"Mine's all in, I reckon. Fact is, 'twouldn't be right prudent fer me to be seen in Rawhide with him jest at present. He's Jed Barkman's Tornado."

"Wal, they don't hang a feller for that nowadays," encouraged the other.

"But they do fer some others," was the grim reply.

A searching look was the only reply.

As they passed through another room, on their way to saddle up, Bat stopped in his tracks before a large crayon portrait that hung on the wall.

"My wife," explained the other, noticing his look of anger and amazement. "Know her?"

"God!" muttered Bat.

"God!" he muttered an hour later, as he drove the spurs into his horse.

"God!" he cried, as his steaming horses

"'HELL!' HE PRAYED HAPPILY, AS THE THREE LOPED TOWARDS THE DIVIDE"

drew near to the flickering lights of Rawhide that night.

"You back?" ejaculated Doctor Stanton in amazement, peering keenly into the face of his caller.

"You bet! Bill Jenkins' baby—t'other side the divide, you know—is sick with pneumony. He wants you. I'll be back in half an hour. I'm goin' to git the baby's mother."

"Is she here?"

"Alvida Ocarriz, she calls herself," was the grim reply.

The doctor whistled.

"I didn't dream of such a thing."

"No more did some others I could mention," scowled Bat. "I'll be back soon's I c'n git her—'f they don't nab me."

"They won't touch you. Haven't you heard?"

"What?"

"Big Ben'll live. You didn't hit a vital spot."

"No!" cried Bat, amazement and disgust commingled.

"Not very flattering to your marksmanship," laughed the Doctor, "but better for your health."

"H——l!" exploded Bat disgustedly, as he rode away to bring Alvida.

"Your baby's sick with pneumony," he announced almost savagely, when she answered his vigorous knock. "I've come to git you. Doctor's waitin'. Git ready quick. Hike!"

"My baby?"

"Your baby," he shouted angrily. "A fine mother you are," he stormed, his eyes blazing, "runnin' off an' leavin' your baby an' husband an' lettin' honest folks think you ain't married! I wisht to God I'd let Big Ben talk."

Her face was a study.

"Have you been over the divide?" she pondered.

"Sure," was the angry retort.

"To Bill Jenkins'?"

"Sure," still more hotly.

"Is baby really sick?" she queried anxiously.

"She's goin' to die," he shouted fiercely, "'f you an' the Doctor don't git thar mighty *pronto*. She's got pneumony. She needs her mother. Don't stand thar like a fool, talkin'," he snarled, "but git your duds on an' come."

"Poor baby!" she cried pityingly. "I'll be ready in a few minutes. Have you got a horse for me to ride?"

"Everything's ready," he growled impatiently.

"Are you very angry, Bat?" she asked softly, as they waited on horseback at the doctor's door.

"Are you—Bat?" she persisted, as he remained silent.

"'Tain't exactly soothin'—to fall in love with another man's wife," he snapped angrily.

"Did you do that, Bat?" she asked, still more softly.

"I sure did."

She laughed softly.

Bat swore.

"Did Bill tell you I was his wife?"

"Saw your picture," he growled savagely.

Again he caught the sound of her subdued laugh.

"Bat?" she cooed.

"Wal?" he snapped.

"She's my twin sister. I ain't married."

"*Hell!*" ejaculated Bat, reaching for her hand.

"Hell!" he prayed happily, as the three loped toward the divide.

And Fate smiled good-naturedly at the trick she had played him.

WHAT'S FISHING

I used to place upon the hook
  The wiggly worm, to fish the brook,
But through much study, learning, I
  Now only use the dainty fly.

Yet there are those, who tell me, still
  I've only started up the hill,
The only way the art to ply
  Exclusive use of the dry fly.

Cannot argue, for, I'm sure
  Learning much, leaves more to know
And even, tho' one wiser be
  There're surely those, more wise than he.

I once did think to fish the stream
  Meant all to fish and naught to dream,
But now, I find, that in the pools
  Are lovelier things than fish in schools.

Reflected colors from the sky,
  Lovely flowers, soon to die,
The music of the birds that sing,
  The dainty swallows on the wing.

So if not now, when you older grow
  You will agree, yes, more and more,
Far more than fishing, 'tis to dream
  While wandering on the favorite stream.

W. A. Smith.

"WITH A LOG WINDBREAK AND RAISED HEARTH THE SMOKE NUISANCE WAS BEAUTIFULLY CURED"

THE OPEN CAMP FIRE

BY LIEUT. TOWNSEND WHELEN

THIS is written by what was one of the smokiest, rottenest, most custus camp fires I ever bunked in front of. Every way I turned the smoke followed. You sour-doughs have been there many times, and know the smarting of the eyes and the running of the nose until you cannot stand it any longer, and you make a break into the open only to be forced back by the stinging cold into the smoke. I think that the open camp fire is the most cussed at and blessed thing in the outdoor man's world.

This particular fire was in front of my little Forester tent, pitched 3,000 feet up in the Alleghenies in the dead of winter. An efficient fire was most necessary. Three days before I packed my outfit into the mountains there had been a big sleet and hailstorm, coating the limbs of all the trees with ice an inch thick. All the limbs had broken off and fallen in an awful tangle, until the forest of chestnut and oak exactly resembled the burnt-over thickets of lodge-pole pines one often sees in British Columbia and Montana. There was lots of good firewood everywhere for the picking up, but every single stick was covered with an inch of ice, and this condition prevailed for miles around.

Wind usually blows up or down a valley; therefore, as usual, I pitched the tent facing the stream on ground sloping gently to the front, as we always like to have it, when our beds are made on the ground. The camp fire was some six inches below and four feet in front of the tent. I calculated that the wind would blow the smoke either to the right or left past the tent door, and that I would be very comfortable. But the wind fooled me. There was scarcely any of it and what there was eddied around so that the tent was full of smoke and ashes all the time. I stood it for two days. Stood is a good word, for I spent most of the time standing around outside the tent. Then I noticed that apparently all the smoke came in just under the hood, and a happy thought struck me. I went to work and built a stone fireplace with a stone floor raised a foot and a half above the ground. Eu-

"THE ONLY TIME I DARED MONKEY HERE WAS WHEN THE FIRE WAS OUT"

reka! This solved it. The smoke which formerly came in below the hood now blew over the tent; and, moreover, much more heat came inside. I now had a good, comfortable wilderness home where before I had an old-fashioned Southern smoke-house. Also, this makes the fire much easier to work over, and the ashes do not float around so much. You want to fill the cracks between the stones with dirt, so as to get a good bed of ashes, otherwise the wood burns up too quickly. I added a two-foot stone wall back of the fireplace to reflect the heat into the tent, and when through cooking in the evening piled four logs, one on top of the other, against this wall and had a fine friendship fire. To get rid of the ice, I stacked up the firewood around the fire, where the ice gradually melted off. Each night I dried and split enough kindling wood to start the fire in the morning.

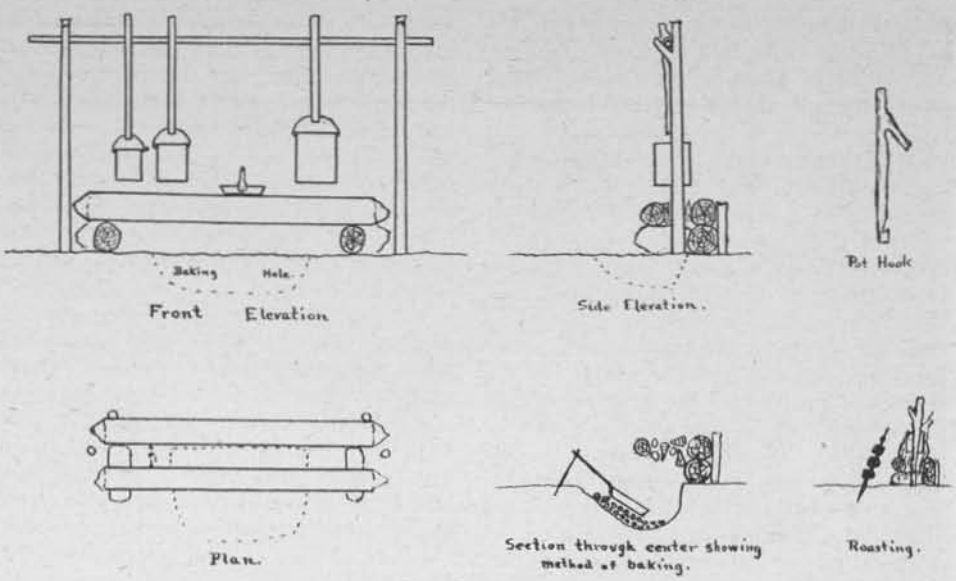
All this worked lovely until one day there came another storm of sleet and hail right into the door of the tent, and with it came my old enemy the smoke again. So I got to work and built a windbreak of logs and sticks six feet high back of the fireplace, and then sat inside and thought of the old song that Dan Beard sang at the Camp-Fire Club outing: "And the smoke went up the chimney just the same!"

You have all been in camps where a cold wind blew in one side of the tent door and you wished you had brought along a canvas sheet or tarpaulin to shut out just such cold drafts. A happy idea struck me this day from picking up a dish-rag outside and finding it like a thick sheet of ice where the hail and sleet had frozen on it. I had in the tent an old newspaper I picked up on the trail one day and, being plumb afoot for reading matter, had brought it home. I took that newspaper and spread it out on the ground. Two hours later I had six slabs of ice half an inch thick and the size of a newspaper. Handling these gingerly, I propped them up on either side of the tent door, and they cut out the draft as well as one would have wished. This is one more use for our old friend the newspaper—original this time, I think.

At the end of this storm the camp resembled a teepee more than anything else. It was closed in everywhere except a hole below for a door and a hole above for the smoke to get out. Gradually the ice had made it pretty nearly air-tight all around.

Speaking of camp fires reminds me that I have never seen described the cooking fire such as is invariably employed by the old-timers in the Northwest. It is by all odds the best arrangement for the outdoor fire that I have ever used. There are lots of imitations of it seen everywhere nowadays, but I have never seen the real thing correctly used southeast of Montana.

First, you dig a round hole where your camp fire is to be. Make it about two feet in diameter and about ten inches deep. Then cut three green logs, about four feet long and six to eight inches in diameter. Prop two of these logs, one on top of the other, at the edge of the hole farthest from the tent. Place two andirons at



THE CHINOOK COOKING FIRE.

either end of these logs. These andirons may be rocks or sections of log about a foot long. On top of these andirons place the third green log so that the top back log and the third log are about six inches apart. Drive crotches sticks in the ground at either end, and erect the usual crane and make the necessary pothooks. The sketch illustrates clearly, the dotted line being the baking hole. For firewood use split dry wood, about 3 feet long, piling it between the logs. The three green logs should be renewed every day to keep the fireplace intact and working rightly.

To bake bread before this fire, build the fire up with some kind of wood which will burn down quickly into enduring coals (hickory, chestnut oak, oak, maple, locust, aspen, birch). Split up some dry, soft wood and get a log of dry wood about 3 inches in diameter and 4 feet long. Then wash your hands and mix your dough. Mold the dough into a bannock a little smaller than your frying-pan and with a small hole in the center, something like an overgrown doughnut. Grease the frying-pan slightly and lay the dough in. In the meantime the fire has burnt down to good coals. Build the fire up again, using the 3-inch log of dry wood instead of the green log on the top and front of the fire. Lay the split wood in between this log and the back logs, so as to get a good blaze. Then rake the coals evenly into a good bed in the front of the baking hole. Hold the frypan over the fire for a minute or two, until the bannock gets a firm crust on the under side. Then shift your pan down into the hole, as shown in the sketch, and let her bake. Occasionally rotate the bannock on the pan, and when done on one side turn it with other side up. It takes about ten minutes to bake a bannock this way. It's the real old-timer method—older than Dutch ovens or flipping pancakes. By the way, the best frypan is the one you usually find in your kitchen at home, the Acme cool handle. It has a hole in the handle, so you can prop it up with a small stick, and the handle is almost always cool enough to handle comfortably. The folding-handle pans usually sold by outfitters are an abomination. The handles come loose at just the wrong time. They are always hot, and if you insert a stick handle in the ferrule as per sporting-goods catalogue it makes the handle so heavy that it over-balances the pan, and you can't make it stand level to save your gizzard. Last time I used one of these

pans I dumped about a pound of hot baked beans right into my partner's hair. As old Steve Camp expresses it, "Them patent frypans ain't worth hell-room."

The best way to roast meat before such a fire is the old Chinook method, also from the Northwest. Cut a stick about three feet long and half an inch in diameter. Sharpen it at both ends, making it taper gradually from a point about 8 inches from one end. Cut your meat in chunks about the size of your fist. Cut also a piece of fat about the size of a golf ball. Run the stick through the middle of the chunks of meat from the long taper end. Topmost chunk is the piece of fat or bacon. Stick the short taper end of this laden stick into the ground about ten inches in front of the fire. Instead of inclining it over the fire, incline it to the right or left at an angle of about 45 degrees, so that each piece of meat will be about 6 to 10 inches from the blaze of the fire. Occasionally turn the stick or incline it the other way. Put it very near the flame at first, so as to sear the outside and keep the juices in, and afterwards move just far enough away so that the meat will roast in about 20 minutes without burning. It's the best and easiest way of roasting that I know of. You just ought to taste the tenderloin of a ram roasted this way.

At night, after you are through your cooking, you can turn this Chinook fire into a fine, warm blaze by driving a couple of long stakes at the back and piling up with about 20 small, dry logs. By the light and warmth you wash the dishes, smoke your pipe, put a pair of new half-soles on your moccasins, split the kindling wood and make the shavings for to-morrow morning's fire, and then turn in.

A FOOTNOTE ON THE ARMY SHOE

BY LIEUT. TOWNSEND WHELEN

THE principle of the Army shoe is not new, quite the contrary, it is as old as that of the sandal. It is simply made to fit the undeformed foot and to allow such a foot its full natural function on all kinds of ground, and, if necessary, with a pack on the back. Is it not time that sportsmen demanded that this principle be adhered to in the construction of all their footwear? The buckskin footwear of those Amerind's who have not yet succumbed to commercialism is a far different affair from some of those leather tubs with rounded bows which we see advertised as moccasins. The front is not rounded. It is straight on the side of the great toe, straight almost from the heel forward, rounded on the other side to conform to the natural curve of the tips of the toes. The great toe can reach straight forward in the step, can plant itself firmly, cling to the ground, and press vigorously at the end of the step. The Indian moccasin is not laced, the uppers are bound around the ankle, making the fit around the heel and instep snug, but the toe portion is loose—very loose—to allow the toes to spread, grip and press as nature intended them to. It differs in no respect other than material and the absence of a heel from the Army shoe. This principle should be applied to all sportsman's footwear. In general in buying boots the tyro will do well to stick to the Army last. Two pairs, one hob-nailed, the other with rubber sole and heel, will answer every requirement of the sportsman.

FIELD TAXIDERMY FOR SPORTSMEN BY R. S. LEMMON IS A GOOD SERIES BEGINNING IN THE SEPTEMBER ISSUE. HOW MANY HEADS HAVE YOU SPOILED AND HOW MANY FINE BIRDS LET GO, JUST THROUGH NOT KNOWING HOW TO GO AT THE JOB OF SAVING THEM FOR THE TAXIDERMIST. GET POSTED,—THIS YEAR!

KERRY—"ALL IRISH"—ON CHICKENS

TRAINING THE BIRD-DOG PUP

BY CHARLES FULTON OURSLER

PHOTOS BY DR. BURETTE AND OTHERS

MOST persons send their bird-dogs to a professional trainer to be broken. To those who have the time, however, and who know how, there are few delights keener or more fascinating than doing the training at home. Nor, if an old Maryland hunter, too feeble now to shoulder a bird-gun, is to be believed, is it so very difficult. His advice sums up about as follows:

Get the pup when he is from three to six months old, and if he is well bred he will be easy to train. As to the preliminaries, you can suit yourself. Some advocate the use of the whip, while others advise pinching the dog's ears to obtain obedience, which is essential to the proper training of both young and old dogs. There are still others who pin their faith to the cord and choke, or spiked collar, to teach the dog to mind. As no two dogs are of the same disposition, there is no fixed rule to be laid down to secure obedience. Some dogs are headstrong, stubborn and self-willed, so that at times it is necessary to apply the whip, while others are so timid that to use the whip would make them absolutely good for nothing. First of all, the trainer must become thoroughly acquainted with the habits and disposition of the animal. It will generally be found that in the long run gentleness will accomplish far more than punishment.

Charge!

First, teach him to charge or drop at command by putting him in that position and holding him for a while, at the same time commanding him to drop or charge. This lesson should be repeated four or five times a day until the animal obeys promptly.

Toho!

This accomplished, the dog is ready for his second lesson. Place a morsel of food

THE PROPER HOLD FOR BIRD IN RETRIEVING—WELL IN DOG'S MOUTH

on the ground at some distance from him. He will struggle to get to the food, but you must hold him and command him to "Whoa!" After holding him for a few moments, release him, at the same time ordering him to "Take it!" Repeat these exercises until he executes the orders with dispatch.

Fetch!

This is the opportunity for you to teach him how to "fetch" or retrieve, and it is one of the hardest lessons a dog has to learn. When you see that he begins to realize his duty to obey you, throw a stick or a bone some distance from you, and order him to "Hie on!" or "Fetch!" Retrieving, I believe, is largely a matter of instinct. Some dogs grasp it intuitively. They will run to the bone or stick, pick it up and come trotting to you with it. Others will go up to it and sniff around, then walk serenely away. But all dogs can be taught to fetch. Only unlimited patience and perseverance are required.

If ordering him to go get the stick does not suffice to awaken his instinct, and if leading him to it and then leading him back fails, there is still a device which I have never known to fail. Perhaps a little personal experience will make it clear.

I bought a dog; paid a pretty good price for him, as he was a good bird-dog; but I took him with the understanding that he would not fetch. I made up my mind I would teach him to retrieve, although he wasn't a puppy any more. I did it by arousing in him a very human passion—jealousy.

I took him to field with a friend of mine who had an old, experienced retriever with him. After a while I knocked down a partridge. I ordered my dog to hie on and fetch it, but he didn't move. I didn't argue. I simply asked my friend to order his dog to bring the bird and he did it in fine shape. I patted him on the head and encouraged him and gave him some meat out of my lunch. My own dog, at this, came nosing around, jealous as he could be. But I pushed him off and kept up the game until he learned that the only way to be friends with me was to retrieve. In a very short time he learned. Now he's one of my best retrievers, and I've tried that scheme since with 20 dogs or more. I don't believe it will ever fail.

Heel.

Next will come teaching him to follow. Put a chain on him and take him for a walk around the yard or room. He will

pull and tug on the chain in his efforts to get ahead of you, or to one side of you, but shorten up on the chain and if he tries to go ahead of you, tap him on the nose with a switch, ordering him to "Heel!" He will soon learn that the only safe place for him is to follow close behind you. The choke collar may be substituted for the regular collar in teaching this lesson, but in most cases this will not be necessary. As soon as he will "charge," "stop," or "heel" he is ready for the more advanced work, the finishing touches of his education. That is to say, he is ready to go afield.

Field Work.

For the first few weeks I would advise that he be put on the chain and made to follow, to "heel," until he gets to the field you desire him to run over. Then he may be unchained and ordered to "Whoa!" After a few minutes let him "Hie on!" He will probably run a few yards and then return to you, because it is all new and strange to him. Pay no attention to him, allowing him to roam at will, and give no orders. You want him to range wide and fast. Should you attempt to force him to hunt, after releasing him, there is a likelihood of spoiling him altogether.

When the puppy is from six months to a year old, and has, after a few trips afield, gained confidence in himself and looks upon these trips as a grand holiday, he may point small birds or chickens by sight, or he may chase them. If so, all the better. Don't stop him, but rather encourage him to do so. It will arouse his interest and he will hunt with more spirit and energy. Let him play this way afield, until he learns to hunt and range away from you. Up to this time he has never been given an order afield, hence he has never disobeyed. This has saved him many a licking and yourself much perturbation of spirit. Never give an order you are not able to enforce, should he refuse to obey, or not understand it. This is one of the cardinal points of training.

For instance, when he starts to chase rabbits or small birds, or finds a covey of partridges and flushes them, and you order him to "Whoa!" he will pay no attention to you, because his thoughts are all bent on catching what he has discovered. If he hears you and disobeys you, you have no means to correct him until he has finished his chase and returned to you. If you whip him then, he'll probably think you punished him for coming to you and may become whip-shy. In order to avoid such troubles, put the choke collar on him, and to the collar attach about 25

CH. LA BESITA—A TYPICAL BENCH SHOW TYPE OF SETTER

TWO FAMOUS POINTERS—MANITOBA RAP (LEFT) AND ALFORD'S JOHN (RIGHT)

or 50 yards of strong, light cord. Grasp the end of the check cord in your hand and let him run; just before he gets to the end of the cord, command him to "Whoa!" and pull sharply on the check cord. Unless he is extraordinarily hard-headed, he will soon learn that "Whoa!" means stop immediately, no matter what business he has on hand. This is especially the case if a spike collar is used instead of a choke collar.

Next, let him run at large, dragging the check cord along the ground. It won't hurt him if you step on this cord occasionally, commanding him to "Whoa!" but will teach him that you always have the means at hand to enforce your orders. When he has learned this lesson, you will have no trouble in making him stop anywhere and at any time.

Pointing

Then take him out with an old, stanch dog, but keep the pup on the chain to "heel" until the old dog finds and points game. Let your pup notice the old dog and he may back-stand at once. If he does not, when you are sure he sees the old dog on point, command him to "Whoa!" Then make the end of his check cord fast to a tree-stump, or, if nothing else is handy, clutch it yourself. By throwing stones in front of the old dog, flush the partridges. If your pup remains still when the birds take wing, well and good. Should he start to chase them, however, check him smartly and command him to "Whoa!" again. After you have thus succeeded in making him "back" or "honor" the other dog's point, you are ready for the final lesson.

Find out, with the aid of the old dog, where a covey of partridges are located or feeding. Then take the old dog away and start the pup in hunting in that vicinity, with the check cord dragging on the ground. When he scents the birds and begins to draw up to them, coach him to be careful or steady. He will now probably point them of his own accord. Should he now be so unfortunate as to flush them, command him to "Whoa!" sharply, and chide him for the error. Don't beat him, but pull sharply on the check cord, if you can get hold of it in time; but, whatever you do, don't beat him. Remember, he is excited and inexperienced, and you are probably as excited as he, and that adds greatly to his nervousness. Then, too, the ground may be so dry that it is very diffi-

cult for him to scent the birds before they are flushed. Repeat this lesson several times, or until your pup finds and points stanchly, and you will be amply rewarded for your pains.

Breaking Point

Your dog is almost ready to shoot birds over. In nine cases out of ten you will have no further trouble. In the odd case, however, it may be that when you shoot into a covey that you have flushed in front of him, and he sees a bird fall, he will dash after it. This is a grave fault.

To guard against such a performance, I would advise you to give him several days' or several weeks' work, if necessary, by shooting only blank cartridges over his points and commanding him to "Whoa!" or "Drop!" when the gun is fired. If you have followed the plan outlined, you should now have a well-trained shooting dog of which you need not be ashamed in any company.

SALT-WATER TACKLE AND BAITS

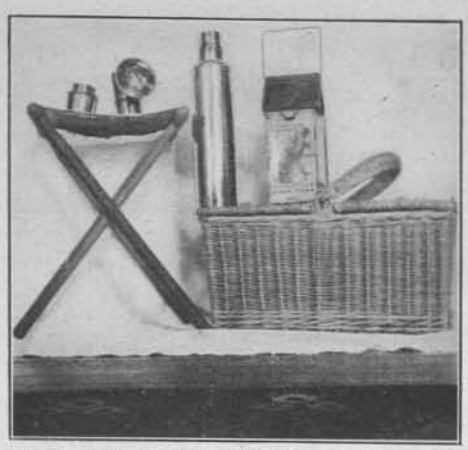
BY HERBERT K. SAVAGE

PART II

IN surf casting there are two ways of handling your rod when casting: the straight overhand cast and the "side swipe." The straight overhand is the safest for your companions, especially when there is a big run of fish in a certain hole, or when casting from a pier, and your nearest neighbor is not more than three feet away. Extend the rod straight back over your right shoulder, grasping the extreme end of the butt with your left hand. Your right hand will be around the butt just below the reel-seat and your thumb will be lightly resting on the reel-spool in a position to govern the speed of the reel when the cast is made. Pull down sharply on the butt with your left hand, at the same time shoving the right hand forward until straight out in front of you on a level with your chest. Follow the direction of your lead with the tip of your rod and when you see the line begin to slow down, brake gently on the spool, to keep the reel from overrunning and creating a backlash. The other way, the "side swipe," is really dangerous. The caster rests his lead on the sand in back of him, with the butt of the rod pointed toward the sky at an angle of about 20 degrees. He then slashes out and up with his rod and the lead whistles by at the height of your shoulder and hungry for a chance to wallop you below the ear. Needless to say the side-swiper is not especially popular in a crowded place.

In surf fishing a three-way swivel is used, one loop of the swivel being for the line, one for the sinker leader, and the other for the twisted gut leader to which the hook is attached. These leaders should be from 24 to 30 inches in length and of the best quality gut. Their purpose is to allow the hook to swing free of the sinker and line while washing around in the surf. Right-angled swivels are also used, but they are not as practical for surf work as the regulation three-way model. For deep-sea fishing no swivel should be used on account of the liaiblity of its catching on the rocks, and the manner of rigging the line is as follows: Attach the sinker, known as a bank lead, to the end of the line; about eight inches above the lead make a loop in the line, through which run your snelled hook, and about six inches above that again make another loop and attach another hook in the same manner. The same method of rigging is used when fishing for blackfish around wrecks or rocks.

When squidding for bluefish or weakfish a piano-wire leader is a necessity, for the reason that a bluefish would bite through a gut leader and get away; the wire leader he cannot injure. To one end of this leader attach a barrel swivel, which keeps the line from becoming snarled when the squid twists and turns in the water; to the other end attach the squid, running



OUTFIT FOR NIGHT FISHING—CAMP STOOL, CARBIDE LAMP AND EXTRA CONTAINER, VACUUM BOTTLE, FOLDING CANDLE LANTERN, WILLOW PACK BASKET

the wire through the swivel in the upper end of the squid. Pull the wire through the swivels for about two inches; then with a pair of pliers wind the short end of wire around the rest of the leader, making as neat a winding as possible. Some use copper wire for the leaders, but there are several serious objections to its use. In the first place it is too soft and kinks easily, breaking with any sudden strain; in the second place, a piece of copper wire thick enough to keep from kinking would be too heavy and would be noticed by the fish.

For bay fishing the swivel may be used or not, according to whether you are fishing top or bottom—if top, without swivel; if on bottom, with swivel. With a swivel the same method of rigging is used as for surf fishing, but as much of the bay fishing is surface fishing for weakfish and bluefish, no lead, or at most a small split shot, is used. Cast the bait as far as you are able and allow it to float away with the tide, and by the time it is seventy-five or eighty feet away from the boat, the bait will be down some fifteen or twenty inches below the surface, which is the right depth. A cork, or float, is used when surface fishing, as there is bound to be some slack line when no sinker is used, and your bait will be stolen before you really know that you have had a strike.

One of the principal pleasures of salt-water fishing is the uncertainty as to what species of fish will fall to your lot. If you are after striped bass it may be that a giant blue will accept your bait, or a strapping weak, or maybe a big husky fluke, or again one of these worthless dog-sharks or skates will take hold. If you are busy in an office all day long, that is no reason why you should not get in a few hours' surf fishing at night after dinner. As many, if not more, fish are caught at night as during the day. Pick out a likely hole, and if the current be running from the south, fish near the southern edge of the hole, as near under the slope of the sandbar extending out to sea as you are able to cast. If the current be from the north, the opposite edge of the hole is the better. The reason for this is that the feed—broken clams, bait fish, sandworms, small crabs, or other succulent dainties on the fish menu—which drifts along through the shallow waters of the bar and settles into the hole along its edges, where the fish are pursuing their fixed policy of watchful waiting.

If the crabs are out in force and are continually stealing your bait, do not keep feeding them, but search around the beach until you find a cork, split it lengthwise half-way through, and clip it over your leader a foot or so above the bait. In

THE FINISH OF THE STRAIGHT OVERHAND CAST

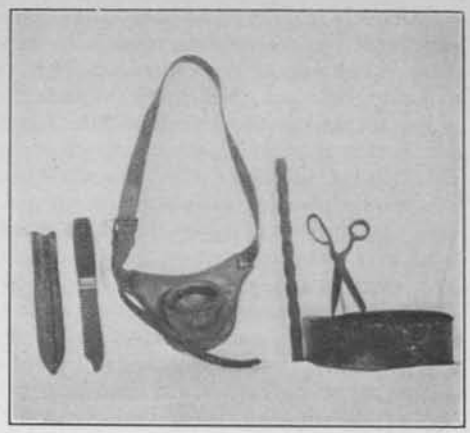
order to insure its not being lost when casting, tie a piece of line tightly around the cork; then it cannot slip from the leader or slide further down toward the hook. This cork will keep the bait off bottom and so above the crab zone.

The best tides for fishing are the first half of the ebb, or outgoing tide, and the last half of the flood, or incoming tide, although many good-sized fish have been caught on dead low water; also, a west wind is generally conceded to make better fishing than an easterly wind.

Kingfish, the first real fish to come in the Spring, make their appearance between the fifteenth of May and the first of June; striped bass appear between the first and the fifteenth of June, and fluke appear about the same time. Weakfish and bluefish appear in the bays sometimes as early as the middle of May, but stay for only a week or so and then disappear, to return again about the first of July. They may be caught in the surf in the middle of July and stay until around the first of October. Channel bass do not run until nearly the middle of July, but they remain until the middle of October.

The offshore fish have still different dates for their appearance. Blackfish and sea bass are first found on the banks about the first of May and stay until nearly the middle of October, when the frost fish and

THE START OF THE "SIDE-SWIPE"



SHEATH KNIFE WITH SCRAPER BACK, LEATHER ROD BELT, TWISTED METAL USED AS KILLER, SCISSORS FOR CUTTING UP BAIT, CRESCENT-SHAPED BAIT TIN

ling appear on the scene. Bluefish and weakfish are caught in the nets of the pound fishermen as early as the middle of June, but in order to catch them on rod and line one must head off to sea for six or seven miles, as they never come inshore until the bait fish appear in the surf. Tuna are first seen along about the first of July, but hang 'way offshore until the beginning of August, when they appear sometimes within a half mile of shore, and in September they sometimes come in almost to the outer surf line in search for schools of sand eels. When they have once found a school of this bait it is generally useless to try to hook into one of them until the school has been dispersed, for they have eyes for nothing but sand eel, and metal squid, moss bunker or other bait has no charm for them.

When fishing it is well to know what fish are top-feeders and what fish are bottom-feeders. Striped bass, channel bass, kingfish and fluke feed on bottom, the bass rooting in the sand after clams and small crabs, while the fluke slide along, eating whatever they may find that is palatable. Weakfish and bluefish are top-feeders, swimming along nearer to the surface than the other three fish just mentioned. The croaker, which appears along with the weakfish, is a bottom-feeder, and takes the same baits as the weak.

Sea bass and blackfish are strictly bot-

tom-feeders, while tuna, bonita and albacore are surface-feeders, generally ranging in schools of from three or four to a hundred strong. When off to sea after blues, weaks, tuna or kindred fish, watch for flocks of gulls circling and swooping down to the surface of the water. When you see them acting in this manner it generally means that there is a school of game fish there, smashing into a school of bait, and that is the place you want to be. Many a time have we followed such a school for miles, only to have them drop out of sight as we approached; but when we finally connected with them and got the squids working, then we were amply repaid for the tiresome chase which they had led us.

In September and October, when the weakfish are mostly in deep water, they will be found on mud bottom and are caught by jigging, which method of fishing has been described in Part I. Blackfish and sea bass are caught on rocky bottom, while flounders seem to have a preference for mud and sand, although they are frequently caught along with the bass and blackies. Needless to say, doggies and skates are caught on both mud and rock bottoms.

In the bays, weakfish and snappers feed over sand and shell bottoms, while the flounder, true to his nature, seeks the mud.

Two necessities of off-to-sea fishing and one luxury are the gaff and the killer, and the disgorger. The gaff-hook which we now use is made of forged steel and was made for us by a blacksmith, and we lashed it on an ash handle about five feet long. The first gaff we had was all metal, and I once hooked a forty-pound mud shark and after about twenty minutes' fight brought him to the side of the boat. Four times he was gaffed and his struggles straightened out the hook and bent the handle, and he was finally stabbed with a sheath knife and killed. We lost three large fluke, which often run as large as nine pounds, on account of the warped gaff, and the next day we had the new gaff-hook made. The killer is a piece of twisted metal such as is used for concrete reinforcement, and is about 15 inches long. When a bluefish is landed in the boat, or a large fluke or sea bass, and bare feet are in the majority, instead of keeping your eyes on his teeth and fins, he is gently quieted with several soothing pats on the top of the head and drifts off into sweet oblivion, thus saving much profane language and splashing about of bloody water. The disgorger saves much cutting of fish which have greedily swallowed the hook, line and sinker, and consequently the boat has not so much the appearance of a slaughter-house as it would otherwise have.

Two things I have thoroughly learned by several years of off-to-sea fishing: always string your fish before running the surf if it is breaking on the bar (this will keep your *largest* fish from washing overboard when the wave finally catches you), and always take along some sort of a camera. Three times we have missed wonderful pictures through having left the picture-box at home. Once we got into a school of tuna; they were breaking all around the boat, and it was a wonderful sight to see a big fellow who must have weighed all of two hundred pounds come straight out of water, curve in the air and slap down into the water with a mighty splash. We lost three squids—all we had with us—the light lines we were using parting like pack-thread. The other times weakfish took the place of the tuna, and we had the most wonderful fishing we had ever experienced. Out of one of these schools my brother snaked the Third Prize Weakfish in the 1913 Contest.

For beach fishing in Summer, the best outfit is a good all-wool bathing suit; but if you are not partial to getting burned and tanned, an old pair of woolen trousers, an old flannel shirt, and a pair of rubber-soled canvas shoes and woolen socks are the thing. You can wade right out into the surf and stay in water up to your waist for an hour and not feel cold. For cooler weather, rubber boots or waders are a necessity, for no matter how careful you may be a wave will fool you at last and soak you pretty well to your knees. When fishing for weakfish and croakers in late September, when there is a chill in the air, a canvas coat is very comfortable, backed up by a light sweater. If you care to try your hand at frost fishing in late November or early

December, a reversible leather and corduroy coat will not be a bit too warm, and, while a little stiff for casting, it is windproof, and standing on the cold sand on a fall night is not warm work. A pair of leather gloves which will not harden—or, better still, a pair of light woolen gloves—will be found to be the thing.

When fishing at night a carbide lamp or good candle lantern is a handy thing to have around, especially when it comes to cutting up bait, or picking out a backlash, or when a fish has to be operated on for the removal of your hook. If you are going to spend most of the night on the beach, a vacuum bottle filled with hot tea or coffee will help keep you awake and keep out the chill. A camp stool will repay you for the trouble of lugging it with you, as the sand at night is damp and cold, especially after an easterly wind, and standing up hour after hour is more or less tiresome. A fire will take the place of the lamp, but where wood is hard to find, or is wet, a fire is out of the question. A convenient box will take the place of the camp stool, but a box is not always handy.

If you do not care to buy a salt-water outfit without first having tried out this form of fishing, borrow a cheap outfit from one of your fishermen friends; or, if you have none such, hire a rod and reel from one of the stores which rent them in the larger coast towns, and try your luck. After you have caught several fish, have been badly bitten by the fishing bug, and have learned the knack of casting, you will regret the years which have slipped by in which you might have indulged in this sport had you but known its fascination.

DAWN

I come when bird-songs break the calm
  That folds a silent world,
O'er hills that raise through the purple haze
  Of fog-wreaths wide unfurled.

I bring a breath of new-born flowers,
  Of fern leaves wet with dew,
From woods and lake, where the soft lights break
  Upon a world made new.

So man shall rise when I have passed,
  And bless me on my way,
For hope born bright in the song and light,
  That knows no yesterday.

VERN ELROY.

KNOW YOUR GUN

BY JOE PURVIANCE

AS the writer of this treatise feels in duty bound to mention specific guns in discussing the process of getting acquainted with them, he had best creep behind a nom-de-plume to escape the wrath of the Editor, who is averse to overmuch mention of any special gun and maintains a taboo on comparing one gun adversely with another. With this off his chest, the writer will unfold his argument, which is based on the much-observed fact that the old-timer, who gets meat every time he goes afield, is invariably a man of one gun—one rifle, one shotgun, one revolver. But he *knows* them; knows every trick that they possess, and knows how to get the most out of each gun of which it is capable. Compared to him, the modern sport, with his cabinet crowded with fine guns, none of which he really knows anything about, is handicapped to such an extent that it is a wonder that he comes homes with any game at all, not shot by his guide. For no two rifles shoot alike nor act alike, and shotguns are even more temperamental, so that a few boxes of shells a year expended in practice can scarcely suffice to scrape even a bowing acquaintance with them, let alone a real familiarity with what the weapon is capable of.

In common with many another sport, I too rejoiced in a large cabinet of fine guns. They were great—to admire, and take out of the cabinet to show to friends—great for almost anything, in fact, but actual shooting! For the latter, but two of them could be depended upon to bring back the meat—an old Belgian double 12 and a model '92 .32-20 rifle. I was raised with those two and knew to a dot what they could do. For the rest, there were two fine German doubles, a 12 and a 20; a fine choke-bored repeater 12 ga.; a German bolt rifle 7.65 mm.; a popular single-barreled 12-ga. trap gun; a couple of 22 rifles; a 20 single and a 28 single shotgun. Right now the cabinet holds just three guns, a .35-cal. model '95 rifle, an American high-grade 12-ga. shotgun, and an officers' model .38-cal. revolver. To these may be added the .32-20 for Eastern deer and small furred-game shooting; the Belgian 12, saved for the Kid when he gets old enough to shoot it; and the 28 single shotgun, which he is using now. I made a clean sweep of all the rest, and am now humbly trying to learn *all* about the three remaining guns which I am using constantly.

Perhaps a brief explanation of the reasons for cleaning out the rest may be of interest to shooters, after which we can look over some of the progress made in knowing the guns that I have settled down with for the rest of my shooting days. To begin with the bolt rifle. A fine, accurate weapon. Made a perfectly rotten score with it the first match I ever went into, missing a bear as big as a cow three times out of five at 100 yards—a feat that I couldn't duplicate with the .32-20 with my eyes shut. Front sight loose, making the rifle shoot two feet high and a foot to the right. Sighted her in, and in the next match at the same bear tied Jack Hessian on a score of 33x50 and won the match against 70 other shooters. So far so good. On real game in heavy timber she proved far too slow and clumsy to operate, besides jamming more than once. How can you jam a bolt gun? Easiest thing in the world! Just fail to drive the bolt home, so that the extractor does not catch, run her back until she has a new cartridge out of the clip, and you have the prettiest jam in the world—one loaded shell in the chamber and another in front of your bolt, and mighty easy to get such a one, too, in the excitement of reloading a bolt gun with the game in plain sight galloping away from you. And slow—Lord! So I kissed her good-bye.

The two German double guns were

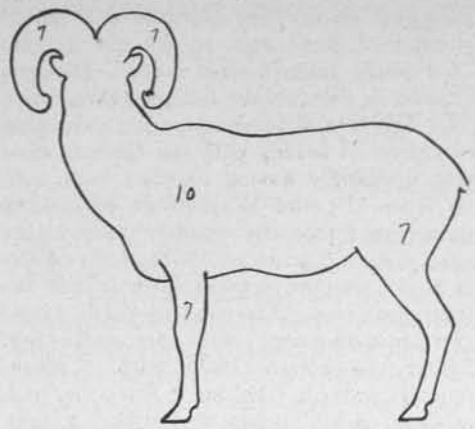
beauties and made like a watch—made so fine, in fact, that the first breath of salt air in the locks gummed their safeties and it cost three dollars a throw to get them fixed. You didn't have to get the guns wet; just take them down to Great South Bay or Barnegat and the salt wrack would do the rest. Impossible to get at the dumned safeties to oil them, too. Moreover, neither the 12 nor the 20 fitted me, and I couldn't hit a little bit with them. Try as I would, by no possible scheme could I drive my trap score above 13 or 14 with the 12, while with the 20 I did just 3x25 with it the first time, and then, after three solid years of practice with the 12, I thought of taking the 20 with me on an upland game-shooting trip and gave her another tryout. Result—3x25! Try as I would, hold high, hold low, shoot fast, shoot slow, she refused to hit the clays. Needless to say that gun did not go with me on the upland game trip. Finally, after a particularly exasperating day afield with the 12, when I missed seven easy chances at quail and missed a rabbit coming right at me—both shots—I decided that we must part. It was no fault of the guns; another man whom they fit is making good scores with them now. But they didn't fit *me* and one of our experts at the club, a 25-straight man, made just 8 with the 12 the only time he tried it. Both of these guns had 3¼-in. drop at the heel and were fitted to me according to the best German dope on the subject. I bought an American gun that did fit me, and my scores jumped at once to 21 and 22.

The trap single went because I do not care to own two guns, one for trap and one for field. One gets little enough practice as it is, and that very expensive, so that the gun that you *must* know like an open book is your field gun, using its left full choked for the traps. Otherwise it was a fine little gun; made a 20 with it; a trifle muzzle-heavy for me personally, but very good for a beginner at trap-shooting who takes it up for its own sake rather than as an accessory to field shooting. The repeater was something of a surprise. Three times I had had it out afield, always missing abominably with it, until finally, when I had scored twelve straight misses on black-bellied plover with it, I went back to the old Belgian and peace reigned once more. The gun stayed in the cabinet for six years, when one day, in a fit of exasperation at making a couple of sevens with the German double, seemingly having dropped back with it from 11's and 13's instead of making progress, I took the repeater down to the gun club. A score of 13x15, followed by a 21x25, was the pleasant surprise that this gun gave me. She was specially bored for trap-shooting, with an extra-tight choke, as patterns made with it subsequently proved. Besides, it fitted me, with a drop of 2½ inches, and it had a light, easy-swinging barrel. I sold it only when sure that my new double could do quite as well with its left as the repeater with its single barrel.

The single-barreled 20 was sold because it was an abortion as a fit. With a 3½-inch rifle stock it would fit neither the Kid nor me. It cut up his face at the third shot he fired with it, and as far as I was concerned I never could hit a pigeon with it, no matter how I held.

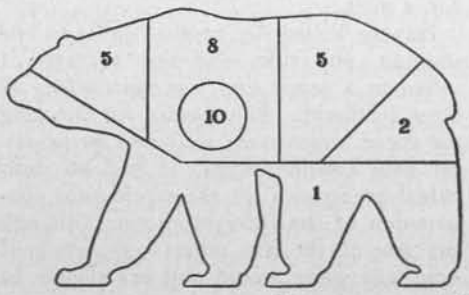
The mystery of why the cheap old Belgian of my boyhood days was sure to come home with the meat soon came out when I patterned it. A mild, open pattern, very evenly distributed and covering about a 40-inch circle at forty yards, explained why, with even indifferent holding, she would score. At the traps she showed up badly with 7x25, but most of the game of twenty years ago was shot at around 25 yards, which was just about right for the Belgian's pattern. The repeater shot so tight that at twenty-five yards her whole pattern could come inside a 24-inch circle, giving you only 12 inches of leeway for a miss.

Having boiled my arsenal down to one shotgun, one rifle, and one revolver, I called in a priest and was married to all three forthwith. My reasons for choosing the three brides were all based on practical field considerations. I had an individual preference for the mechanical construction of the shotgun chosen, although any one of the five other best makes of American guns would suit me nearly as well, provided that they fitted me and were bored so as to give a first-class pattern.



MOUNTAIN SHEEP TARGET—A STANDING SHOT AT 300 YARDS

Also, for the .35-cal. rifle, because of its power and the fact that its supplementary cartridge takes the .38 short, which also fits my revolver. I have seen much big game that required a whole lot of killing with the .30 Gov't '06, but as a rule one shot from the .35 model '95 tells the story, and it doesn't make much difference where you place it either. As to weight, all modern rifles weigh about alike; a half a pound more or less one way or the other is inappreciable on the trail; nor is the alleged kick noticeable when really firing at big game. Tell me the hunter who even remembers whether his rifle kicked or not when the moose went down! As a matter of fact, twenty shots from the .35 kick one about the same as 20 shots with the 12-ga.—which is certainly no great matter! All this talk about a man carrying a "cannon" just because he prefers a large bore is based more on theory than fact. The .405 is, in fact, quarter of a pound



RISING BEAR—IN SIGHT 3 SECONDS AT 100 YARDS. "HEART" RING ABOUT 8 INCHES

lighter than the .35, because bored out of the same barrel, and both of them are but a trifle heavier than the .30; while the .44-40, .33, etc., all large-bore rifles, are exceedingly light — much lighter than small-bore guns purporting to be in every way superior. Give me a good punch, and the ability to land that punch, at any range up to 300 yards and any speed up to full gallop—and you can keep all the other rifle advantages for military range consumption! The real thing to do is to *know* the one rifle that you *do* settle upon, instead of theorizing around with a new rifle every year.

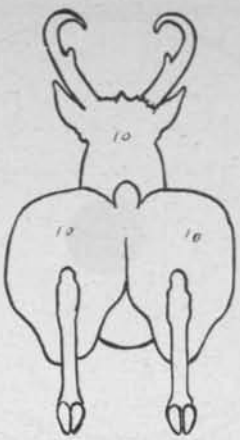
As for the .38 officers' model revolver, I preferred it to any form of automatic for the reason that the revolver is an intensely practical institution with me, its value being measured more by its meat-in-the-pot producing capacities than by any theoretical quick-fire, offensive-defensive qualities. Where can you find a revolver that will pick out the bull at fifty to one hundred yards or snake a grouse out of a tree any more neatly than the .38 officers' model with long 7½-inch barrel? And, if you get to close quarters unexpectedly with a grizzly, you will not make him peevish with your revolver fire, as you most certainly would with the .32-20, the supplemental cartridge for the .30 Gov't '06. On the trail you cannot go loaded down with *both* revolver and rifle —it just isn't done by practical people— since also a belt-axe is essential as part of your equipment. But, in the Rockies, one shouldn't be without either one or the other weapon, no matter what the season. One experience of running into a flock of grizzlies when armed with nothing but a trout-rod, as happened once to a friend of mine, will go far towards curing the disarmament theory in wild country. And, as the .38 met all the above conditions, I chose it for my revolver.

There was a lot to do with those three weapons before the next hunting season set in. I had to get acquainted with all three of them, and *know* what they would do in the various propositions supposed to be good medicine for various conditions afield. The rifle came first. Raw and un-Christian, just as she was, with the factory sights on her, I took her up to

camp and—made three disgraceful scores with her: a wild 21x50 offhand on the military target at 100 yards, an 18 on the disappearing bear, which animal is in sight three seconds at unexpected intervals, and a 17 on the running deer, which means I hit him once in the shoulder and once in the loin, missing him three times. Didn't know my gun; didn't know a thing about her. Besides, she was smooth and unchecked, so that one's sweaty fingers slipped on the fore-end and tang; she had no strap; and her sights were a joke.

First, the sights. I wanted a tang peep, not a receiver peep, because the latter is so far from your eye that in dark or dismal light your eye cannot see through it. The folding tang peep, usually sold for this model rifle, is so placed by its base on the tang as to just avoid the bolt end when the lever throws it back. Very nice—for the bolt. But no thought seems to have been expended upon the shooter's eye, into which the peep is sure to kick and put the optic out. Result, the salesman assures you wisely that "we do not recommand a tang peep on our model '95s," and does his best to sell you a receiver peep. But Lieut. Whelen had told me of the tang peep on his .405, which he had ferreted out from among the sight-makers' products, so I gently but firmly led that young salesman down into the cellar and made him go over with me their full stock of flexible peeps. We found what we wanted; a peep set well up on the tang, the model '94 type, if I remember correctly. The salesman shook his head. "Bolt will run into it," he declared sagely. "What if it does?" I retorted, "that's what the flexible feature is for, man!" So we put it on and returned the one usually sold for the model '95's. Even at that the .35 kicks back far enough to just touch my eye socket with the rim of the peep, and the one sold for that gun would surely come back into the eye itself, for it sets fully ¾ inch further back on the tang.

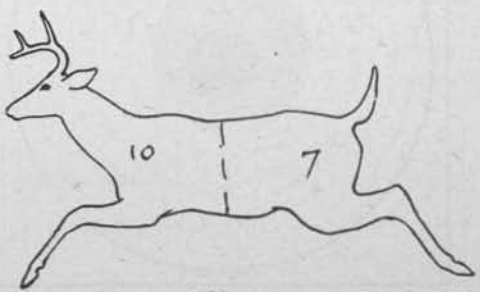
The front sight will do very well as sent from the factory. It is a small silver bead, securely set in a pyramid front sight. All it wants is a 45-degree flat filed on it with a fine file, so as to throw the skylight back into your eyes at early dawn



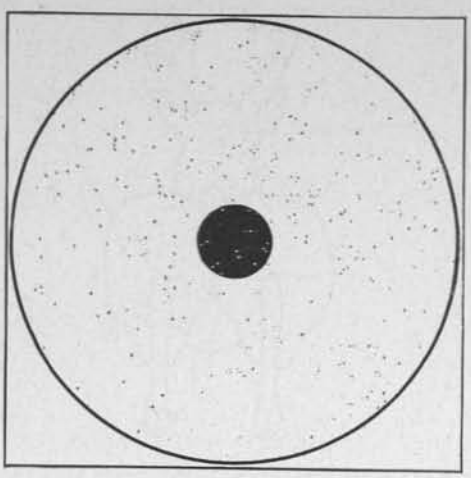
BOUNDING ANTELOPE TARGET—IN SIGHT AT UNEXPECTED INTERVALS AND UNKNOWN LENGTHS OF TIME

and dusk and also prevent shooting off the light in broad sunlight, as the round bead sight is always making you do.

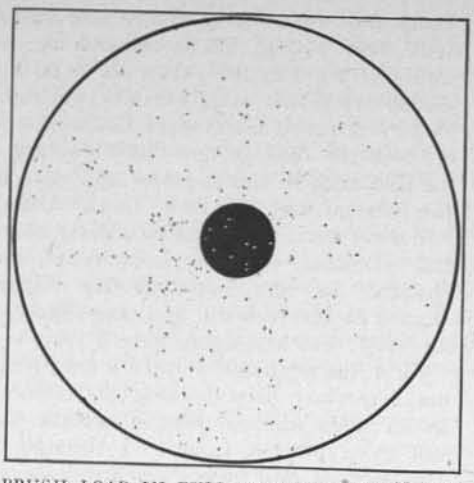
For the supplementary sights I put on a double folding leaf sight with white pearl triangle on one leaf and V on the other. Both of these folded flat when the rifle was being used with big-game cartridges. For a strap I chose a bronze swivel buckle secured to the fore-end by a plate inside the wood, into which machine screws lead from the base of the buckle. I do not care for a rigid buckle secured by a pin and collar to the barrel itself. It is not comfortable nor flexible enough. This rigid buckle will answer well enough at the butt end of the strap, where no tendency to twist ever comes on the strap, but at the shoulder end you want the swivel feature. The strap itself was



RUNNING DEER—100 YARDS—SPEED ABOUT 100 FT. IN 6 SECONDS OR 8½ MILES AN HOUR



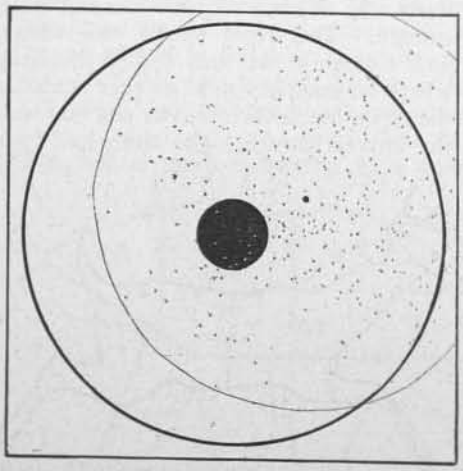
BRUSH LOAD IN FULL CHOKED LEFT 30 YDS. 257 PELLETS 1⅛ OZ. 8's 3 DRS. DUPONT



BRUSH LOAD IN FULL CHOKED LEFT 40 YDS. 187 PELLETS 1⅛ OZ. 8's 3 DRS. DUPONT

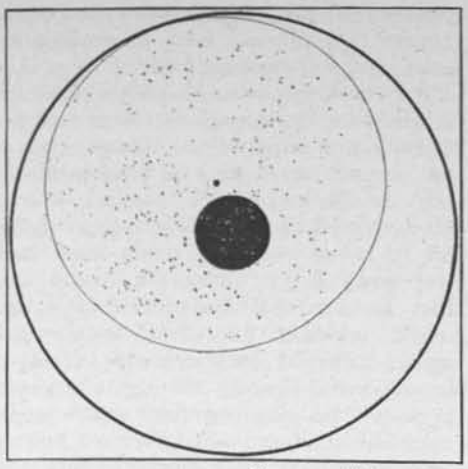
of soft, broad leather, 1½ inches over the shoulder, tapering to ⅞ in. at the buckles. It was just long enough so that one's elbow could be slipped into the loop when raising the rifle to fire. I find that such a strap is a great aid to steady holding, particularly in a cross wind, as it enables you to "freeze" your muscles against the tension of the strap and the compression of the gun butt.

With the rifle so equipped but not yet checked on tang and fore-end, I went into another match of four events, winning the bear with a score of 44x50, making a 34

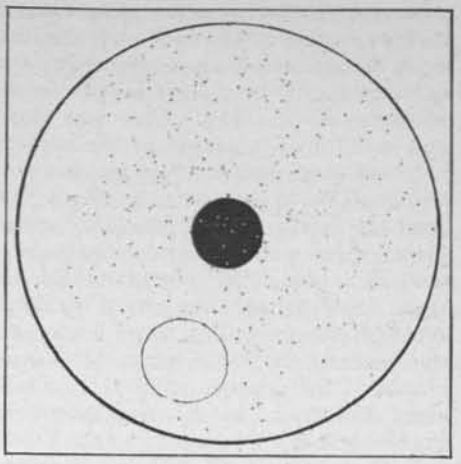


MEDIUM CHOKED RIGHT AT 30 YDS. 353 PELLETS, 6 IN. OFF—CENTER HOLDING. 1¼ OZ. 7½'s 3 DRS. MULLERITE

with the running deer (two hits in shoulder, two in lungs, one clean miss in front). and a 30 with the bounding antelope, which means three hits and two misses. This beast is some hard to hit, for his rump is only about eighteen inches in diameter and he bobs up and down at unexpected intervals, and you can fire your five shots at will, taking as many cracks at him at a time as possible—for you may not see him again! With the same rifle I lost out on the Mountain Sheep event at 300 yards, because I was still apt to hold as in military shooting—*i. e.*, with the bull's-eye showing above the sight. Hunting rifles are sighted to hit where held on big game, and if you lift the sights into the ram's body you blot him out almost entirely at that range. I chose to hold under him, firing at the last instant as the sights rose on his body, with the result of putting the whole group under the animal's belly. However, I was beginning to feel somewhat acquainted with my rifle, and now started in on the supposition of unknown ranges, drawing coarse or fine, as the case might be, and targeting the peep so as to learn just what one of its divisions meant in inches of elevation at various ranges. Of course, there is no time to do this sight changing in the game fields, but an accurate knowledge of it is useful when, say, you have completed a stalk on sheep or goat, are still out of sight, and have plenty of time to set sights



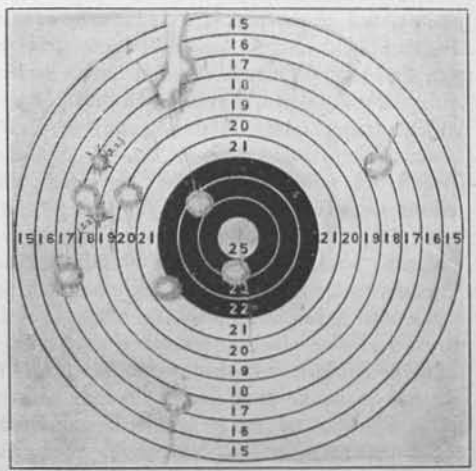
FULL CHOKED LEFT AT 30 YDS. 369 PELLETS IN 24-IN. CIRCLE. 3 IN. OFF—CENTER HOLDING. 1¼ OZ. 7½ CHILLED 3 DRS. MULLERITE



FULL CHOKED LEFT AT 40 YDS. 337 PELLETS. 1¼ OZ. 7½ CHILLED 3 DRS. MULLERITE

for an estimated range of from three hundred to three hundred and fifty yards. Beyond that sheep are not shot, as a rule—at least, you've got to show me!—for the simple reason that the front sight is then a good deal larger than the animal. Up to that range the old-timer simply draws a "leetle coarse," as he knows by experience just what his rifle will do with varying coarseness of sight.

The next study was the supplementary. There are two of them made for the .35, the brass-chamber supplementary, shooting the .38 long, and the steel supplemental with a clip up near the top end, which holds the .38 automatic. I tried out the first, because its cartridges would go in my revolver without necessitating taking along another breed of ammunition. The groups were fine—four inches at 40 yards offhand shooting—and I won a grouse shoot with it against good old John Dietz, of Olympic fame. Along about the third box of cartridges the extractor came out, bringing with it the *head* of the supplementary cartridge! Now, then, you're out in Wyoming, eighty miles from a railroad, and have just shot a grouse with the supplementary. Its head coming off has put the big-game rifle out of commission and you are to get out the rest of that headless shell with such tools only as are found about camp. I confess to having a fairly complete assortment of small tools with me on the trail and I tried them all. At the end of two hours that supplementary was stuck tighter than ever and I was all in, with the rifle ruined for the rest of the trip—Know your gun! A friend of mine had this very thing happen, also, and it cost him four dollars at a gunsmith's to get the barrel off and the shell removed by heating the barrel. As for me I simply said, "Moral: bring along a steel shell extractor," for that is what solved the difficulty in a jiffy. Never again will I go into the mountains without one



SCORE, 197x250; .38 AUTOMATICS IN SUPPLEMENTAL CARTRIDGE OF .35 CAL. RIFLE, DISTANCE, 40 YDS.

after that lesson! At the same time the makers sent me their steel supplementary, since the .38 long brass supplementary has been taken off the market because of the weakness of its head. This was strong and sure, the whole body of the shell being hard steel with a firing pin down the center. The .38 automatic cartridges (rimless) fit in the end of this shell, which places them well into the rifle lands of the .35. Using the pearl triangle leaf sight, I got group after group with it at 40 yards not exceeding three inches, and the noise of the cartridge is quite insignificant. For grouse, rabbits and ducks along the trails in the Rockies it will be first class. On my last trip I used the .38 revolver and armory cartridges in the bolt rifle for this work, both of which were rather noisy though accurate enough.

Turning to the American shotgun, a few tries at the traps with standard loads showed that I was on the right track, for my scores at once jumped to 17, 19, 20 and once a 22, which was an unheard-of feat for me. I had one day afield with her up North, when everything went lovely, and then I took her down to South Carolina on a quail and woodcock shoot. Before going I made one experiment with her. As sold over the counter both barrels were tight choked, as revealed by trying a ten-cent piece on them. It looked bad for my right barrel on the rise of the covey, but there was no time to have the right bored out to medium choke, so I decided to try "brush" loaded shells in the full-choked right. Trying out these shells at the traps, I missed twenty-five straight —an unheard-of feat—at least, I never heard of even a beginner missing the whole twenty-five! I tried snapping them the instant they showed over the trap-house; holding near and holding far ahead; under and over—every conceivable trick that I knew to produce a hit, but all in vain. The rise is at sixteen yards, and before the quickest shot can find the bird he has gone at least twenty yards more; total, 36—out of range of the brush load. And yet the patterns exhibited herewith do not show very much scatter, about 40 per cent choke. I tried those shells on quail on that trip, but gave them up at the end of the second day. For rising coveys they did not seem to produce results, probably because I am no snap shot. But I invariably missed with my right and killed with my left, if the birds had not already got into cover. About noon of the second day I shot a quail with the left at 40 yards who pitched into a vine-covered dead tree just after being hit. I went into the swamp after him, and when I got under the tree I saw that he was still very much alive and would probably get away unless shot again. Then I bethought me of those brush shells. Pacing off eighteen yards, I raised the gun and fired one. Down came the quail and when I picked him up there were just three pellets in him, one of which must have been the original pellet which had wounded him. A standard shell in the full-choked barrel would have minced him at that range.

This explained the mystery of the brush shells—too open a pattern for more than eighteen to twenty yards in thick brush—and the patterns herewith of 8's at 30 and 40 yards made with brush shells bear this contention out. During the rest of the shoot I used standard loads in both left and right barrels, often missing with the right because the covey bird would be too near. The pattern of 369 No. 7½ pellets in a 24-inch circle at thirty yards, made with the full-choked left (85%), explains this. The gun shot far closer than I could hold at this distance, and thirty-two pellets in the 5-inch bull showed that I would have minced the bird, anyhow. So, on my return to the city, I proceeded to get still further acquainted with my shotgun by having her right barrel bored out to medium choke. As roughly measured by a 10-cent piece, this widened the barrel to a scant 1/32 inch more than the diameter of the coin—just about the same as both barrels of the old Belgian double. Patterning it, I got 353 No. 7½ pellets in a 30-inch circle at 30 yards (82%), twelve of which found the 5-inch bull's-eye. Stepping off to 40 yards, I gave her the full-choked left, with the result of 337 pellets in the 30-inch circle (78%), fourteen of which found the bull's-eye. Incidentally, I might point out that the brush shells gave 257 pellets (57%) in the 30-

inch circle at thirty yards and 187 (41%) at forty.

Would that medium-bored right be good medicine with doubles at the traps? The answer to that came at the next tournament I went into, where I scored 22x25 at the main event (highest score of my life, so far) and 17x25 at doubles. Also, 11x24 at the quail shoot and 8x15 at the hand trap. This last event is lots of fun and quite difficult. The hand-trap man stands behind the shooters and calls "Mark!" as he throws the birds. Where in blazes the bird may be is up to the shooter to find out, and many a ludicrous miss and many a difficult hit shows up during the event. The medium choke was just right for this sort of work, provided that you found the birds quickly and put it right on them with fast gun. Slow fire always lost the bird.

The next question was what that left could be depended upon for ducks at 30 and 40 yards, and what the right could do for ducks hovering over the stools at 18 yards or jumping up from them at 30 yards to top of rise. Patterns at 30 and 40 yards with the medium right and full-choked left, shooting 4's, were made. Both gave about the same results, the right putting in 112 pellets at 30 yards and the left 115 pellets at 40 yards, either good medicine for a duck who would himself half fill the 30-inch circle. Some of these patterns dropped as low as 80 pellets, showing that 5's would give a more uniform pattern in this particular gun. Tests on shooting true to sights and hitting a stationary blue rock with swinging gun brought some more facts into the ring of Know Your Gun. Some of those old relics put their patterns from six inches to a foot off center; the new gun put hers dead on if you could hold with a rifle sight. But, as some of the patterns here show, it is the easiest thing in the world to shoot off center from three to six inches at a stationary object with a shotgun, making an astonishing difference in the pattern as regards pellets in the bull's-eye, and this is, I believe, at the bottom of the beginner's many misses with the shotgun. Unless naturally expert, he has a good many hundred practice shells to fire before arriving consistently in the twenty squad. To swing with the bird accurately, to lead him accurately, and to still center your pattern on him is a fine art not to be learned in a day, and certainly not with a gun that does not fit. And, in the game field, this fit is even more essential, for in the excitement of shooting at wild game you go right back to first principles and point the gun naturally, with no time for the eye or brain to correct faults in alignment. And the result is that your gun does not point where you think you are aiming it, and a clean miss is scored. In the present state of our game, particularly in the North, the chances at game are so few that not many misses can be permitted without the hunter coming home with an empty bag.

As to the revolver, there is little to say about her. I once made a fine score, 45x50, with a cheap revolver at the 15-yard range. Next morning I went out with a standard target for the 50-yard range, confidently expecting to repeat the performance. The score showed, with the very same holding, an inclination on the part of the revolver to miss the target altogether, nor did fifty cartridges bring to light any further details except that the cheap revolver would sling its bullets two feet or more off your holding at 50 yards and was absolutely unreliable. After going over what I wanted my revolver to do for me on the hunting trail, I bought the .38 officers' model and proceeded to get acquainted with it. We have been stanch friends ever since. She had no sight changes to make nor trigger adjustments, nor any monkey business whatever. All you had to do was to get to work and learn how to shoot her. What can be done with that revolver let the Kentucky plate-shooters at 100 yards attest. During the three years that I have been shooting her my scores have climbed steadily until they now run between 65 and 68x100, on the standard American 50-yard match target with 4-inch bull ring. Out West she kept a camp supplied with fresh grouse for three weeks, and occasionally produced a rabbit, shot on the run. At the man-killing target she has twice scored 17x25. Only once have I doubted her and that was this year at a match where I made what appeared from

the holding to be three successive bulls, but which were each greeted by a waving of the score stick indicating a total miss of the target. At the third of these I lost faith in my old friend and proceeded to sight coarse and high, with the result of two fours above the bull. An examination of the target found all the rest of the shots in the bull, which was evidently the last place the score-boy thought of looking for them, so I protested the score and demanded a second shoot. But that is not all of that yarn: while waiting for my turn to come around again, at the tail of the procession, I entered a quail shoot at the traps, tied my opponent and had to shoot off. Coming back to the revolver range, I took up the good old six-gun and started after some more bulls'-eyes, but, alas! the ice-cold arm that was once so steady was now hot and quivering, shot to a frazzle with fifty shells in the 12-ga., and, try as I would, I could hardly score on the target at all! In addition to Know Your Gun—Know Yourself!

In match-shooting, never perform any violent exercise with one set of muscles if you're going to use another in shooting. Never pull the trap's lever for the squad if you are just going into an important event yourself in the next squad; never shoot rifle or shotgun just before attempting a revolver score; never run a race or indulge in violent exercise just before going into a difficult rifle match. You simply cannot get your body quiet, and it is a still body that makes possible a fine rifle score. A strap helps a lot, and, as many a big-game shot is offered after a violent race or climb, the only way to avoid misses due to pounding heart and bursting lungs is to have a quickly set strap and train yourself to a style of rifle-shooting that co-ordinates eye and trigger finger to let off with quick aim at the precise instant that the bead is on the animal. The military style of firing, with gun on top of thumb and forefinger and trigger "wished" off while holding dead under the bull, explains why so many world-renowned military shots will miss a bear as big as a cow at 60 yards after a chase over mountain slopes and down timber that would tax the lungs of an elephant.

Know your gun! One rifle, one shotgun, one side arm, if you will, but know what they *can* do over the whole range of their capacity and how to get results with them. It's the secret of the old-timer's "git thar" meat gun that comes home with the game and lets mighty few fighting chances get away!

DESERT GOLD

A NOVEL, BY ZANE GREY

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IX

AN INTERRUPTED SIESTA

NO man ever had a more eloquent and beautiful pleader for his cause than had Dick Gale in Mercedes Castañeda. He peeped through the green, shining twigs of the *palo verde* that shaded his door. The hour was high noon, and the patio was sultry. The only sounds were the hum of bees in the flowers and the low murmur of the Spanish girl's melodious

voice. Nell lay in the hammock, her hands behind her head, with rosy cheeks and arch eyes. Indeed, she looked rebellious. Certain it was, Dick reflected, that the young lady had fully recovered the wilful personality which had lain dormant for a while. Equally certain it seemed that Mercedes's earnestness was not apparently having the effect it should have had.

Dick was inclined to be rebellious himself. Belding had kept the rangers in off the line, and therefore Dick had been idle most of the time, and, though he tried hard, he had been unable to stay far from Nell's vicinity. He believed she cared for him; but he could not catch her alone long enough to verify his tormenting hope. When alone she was as illusive as a shadow, as quick as a flash, as mysterious as a Yaqui. When he tried to catch her in the garden or fields, or corner her in the patio, she eluded him, and left behind a memory of dark-blue, haunting eyes. It was that look in her eyes which lent him hope. At other times, when it might have been possible for Dick to speak, Nell clung closely to Mercedes. He had long before enlisted the loyal Mercedes in his cause; but in spite of this Nell had been more than a match for them both.

Gale pondered over an idea he had long revolved in mind, and which now suddenly gave place to a decision that made his heart swell and his cheek burn. He peeped again through the green branches to see Nell laughing at the fiery Mercedes.

"Quién sabe?" he called, mockingly, and was delighted with Nell's quick, amazed start.

Then he went in search of Mrs. Belding and found her busy in the kitchen.

The relation between Gale and Mrs. Belding had subtly and incomprehensively changed. He understood her less than when at first he divined an antagonism in her. If such a thing were possible, she had retained the antagonism while seeming to yield to some influence that must have been fondness for him. Gale was in no wise sure of her affection, and he had long imagined she was afraid of him, or of something that he represented. He had gone on, openly and fairly, though discreetly, with his rather one-sided love affair; and as time passed he had grown less conscious of what had seemed her unspoken opposition. Gale had come to care greatly for Nell's mother. Not only was she the comfort and strength of her home, but also of the inhabitants of Forlorn River. Indian, Mexican, American were all the same to her in trouble or illness; and then she was nurse, doctor, peacemaker, helper. She was good and noble, and there was not a child or grown-up in Forlorn River who did not love and bless her. But Mrs. Belding did not seem happy. She was brooding, intense, deep, strong, eager for the happiness and welfare of others; and she was dominated by a worship of her daughter that was as strange as it was pathetic. Mrs. Belding seldom smiled, and never laughed. There was always a soft, sad, hurt look in her eyes. Gale often wondered if there had been other tragedy in her life than the supposed loss of her father in the desert. Perhaps it was the very unsolved nature of that loss which made it haunting.

Mrs. Belding heard Dick's step as he entered the kitchen, and, looking up, greeted him.

"Mother," began Dick, earnestly. Belding called her that, and so did Ladd and Lash, but it was the first time for Dick. "Mother—I want to speak to you."

The only indication Mrs. Belding gave of being startled was in her eyes, which darkened, shadowed with multiplying thought.

"I love Nell," went on Dick, simply, "and I want you to let me ask her to be my wife."

Mrs. Belding's face blanched to a deathly white. Gale, thinking with surprise and concern that she was going to faint, moved quickly toward her, took her arm.

"Forgive me. I was blunt. . . . But I thought you knew."

"I've known for a long time," replied Mrs. Belding. Her voice was steady, and there was no evidence of agitation except in her pallor. "Then you—you haven't spoken to Nell?"

Dick laughed. "I've been trying to get a chance to tell her. I haven't had it yet. But she knows. There are other ways besides speech. And Mercedes has told her.

I hope, I almost believe Nell cares a little for me."

"I've known that, too, for a long time," said Mrs. Belding, low almost as a whisper.

"You know!" cried Dick, with a glow and rush of feeling.

"Dick, you must be very blind not to see what has been plain to all of us. . . . I guess—it couldn't have been helped. You're a splendid fellow. No wonder she loves you."

"Mother! You'll give her to me?"

She drew him to the light and looked with strange, piercing intentness into his face. Gale had never dreamed a woman's eyes could hold such a world of thought and feeling. It seemed all the sweetness of life was there, and all the pain.

"Do you love her?" she asked.

"With all my heart."

"You want to marry her?"

"Ah, I want to! As much as I want to live and work for her."

"*When* would you marry her?"

"Why! . . . Just as soon as she will do it. To-morrow!" Dick gave a wild, exultant little laugh.

"Dick Gale, you want my Nell? You love her just as she is—her sweetness—her goodness? Just herself, body and soul? . . . There's nothing could change you—nothing?"

"Dear Mrs. Belding, I love Nell for herself. If she loves me I'll be the happiest of men. There's absolutely nothing that could make any difference in me."

"But your people? Oh, Dick, you come of a proud family. I can tell. I—I once knew a young man like you. A few months can't change pride—blood. Years can't change them. You've become a ranger. You love the adventure—the wild life. That won't last. Perhaps you'll settle down to ranching. I know you love the West. But, Dick, there's your family—"

"If you want to know anything about my family, I'll tell you," interrupted Dick, with strong feeling. "I've no secrets about them or myself. My future and happiness are Nell's to make. No one else shall count with me."

"Then, Dick—you may have her. God—bless—you—both."

Mrs. Belding's strained face underwent a swift and mobile relaxation, and suddenly she was weeping in strangely mingled happiness and bitterness.

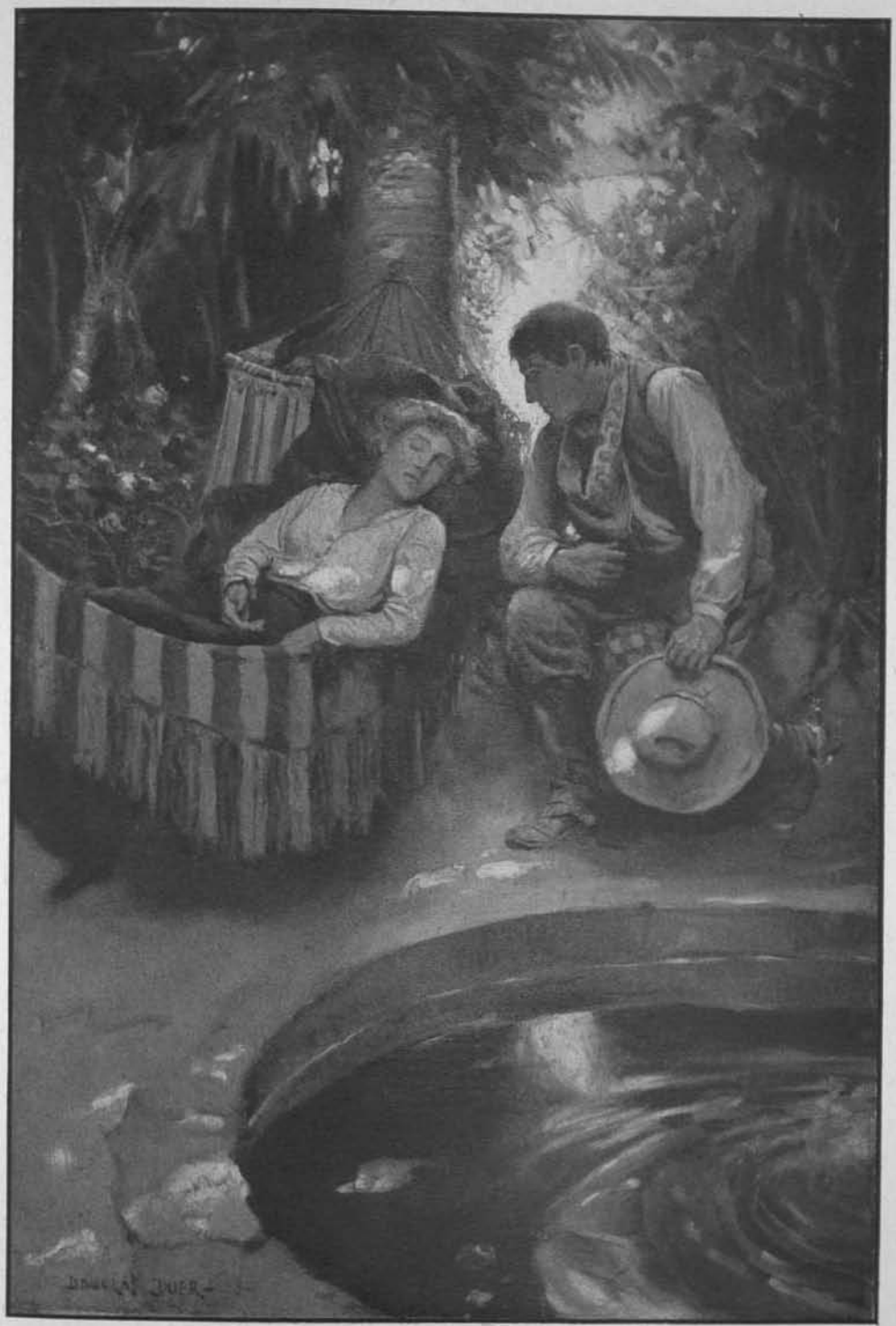
"Why, mother!" Gale could say no more. He did not comprehend a mood seemingly so utterly at variance with Mrs. Belding's habitual temperament. But he put his arm around her. In another moment she had gained command over herself, and, kissing him, she pushed him out of the door.

"There! Go tell her, Dick. . . . And have some spunk about it!"

Gale went thoughtfully back to his room. He vowed that he would answer for Nell's happiness, if he had the wonderful good fortune to win her. Then remembering the hope Mrs. Belding had given him, Dick lost his gravity in a flash, and something began to dance and ring within him. He simply could not keep his steps turned from the patio. Every path led there. His blood was throbbing, his hopes mounting, his spirit soaring. He knew he had never before entered the patio with that inspirited presence.

"Now for some spunk!" he said, under his breath.

Plainly he meant his merry whistle and his buoyant step to interrupt this first languorous stage of the siesta which the girls always took during the hot hours. Nell had acquired the habit long before Mercedes came to show how fixed a thing it was in the life of the tropics. But neither girl heard him. Mercedes lay under the *palo verde*, her beautiful head dark and still upon a cushion. Nell was asleep in the hammock. There was an abandonment in her deep repose, and a faint smile upon her face. Her sweet, red lips, with the soft, perfect curve, had always fascinated Dick, and now drew him irresistibly. He had always been consumed with a desire to kiss her, and now he was overwhelmed with his opportunity. It would be a terrible thing to do, but if she did not awaken at once— No, he would fight the temptation. That would be more than spunk. It would— Suddenly an ugly green fly sailed low over Nell, appeared about to alight on her. Noiselessly Dick stepped close to the hammock bent under the tree, and with a sweep of his hand



"HE DIVINED SHE WAS FEIGNING SLEEP"

chased the intruding fly away. But he found himself powerless to straighten up. He was close to her—bending over her face—near the sweet lips. The insolent, dreaming smile just parted them. Then he thought he was lost. But she stirred—he feared she would awaken.

He had stepped back erect when she opened her eyes. They were sleepy, yet surprised until she saw him. Then she was wide awake in a second, bewildered, uncertain.

"Why—you here?" she asked, slowly.

"Large as life!" replied Dick, with unusual gaiety.

"How long have you been here?"

"Just got here this fraction of a second," he replied, lying shamelessly.

It was evident that she did not know whether or not to believe him, and as she studied him a slow blush dyed her cheek.

"You are absolutely truthful when you say you just stepped there?"

"Why, of course," answered Dick, right glad he did not have to lie about that.

"I thought—I was—dreaming," she said, and evidently the sound of her voice reassured her.

"Yes, you looked as if you were having pleasant dreams," replied Dick. "So sorry to wake you. I can't see how I came to do it, I was so quiet. Mercedes didn't wake. Well, I'll go and let you have your siesta and dreams."

But he did not move to go. Nell regarded him with curious, speculative eyes.

"Isn't it a lovely day?" queried Dick.

"I think it's hot."

"Only ninety in the shade. And you've told me the mercury goes to one hundred and thirty in midsummer. This is just a glorious golden day."

"Yesterday was finer, but you didn't notice it."

"Oh, yesterday was somewhere back in the past—the inconsequential past."

Nell's sleepy blue eyes opened a little wider. She did not know what to make of this changed young man. Dick felt gleeful and tried hard to keep the fact from becoming manifest.

"What's the inconsequential past? You seem remarkably happy to-day."

"I certainly am happy. *Adios.* Pleasant dreams."

Dick turned away then and left the patio by the opening into the yard. Nell was really sleepy, and when she had fallen asleep again he would return. He walked around for a while. Belding and the rangers were shoeing a broncho. Yaqui was in the field with the horses. Blanco Sol grazed contentedly, and now and then lifted his head to watch. His long ears went up at sight of his master, and he whistled. Presently Dick, as if magnet-drawn, retraced his steps to the patio and entered noiselessly.

Nell was now deep in her siesta. She was inert, relaxed, untroubled by dreams. Her hair was damp on her brow.

Again Nell stirred, and gradually awakened. They rested upon Dick for a moment before they became clear and comprehensive. He stood back fully ten feet from her, and to all outside appearances regarded her calmly.

"I've interrupted your siesta again," he said. "Please forgive me. I'll take myself off."

He wandered away, and when it became impossible for him to stay away any longer he returned to the patio.

The instant his glance rested upon Nell's face he divined she was feigning sleep. The faint rose-blush had paled. The warm, rich, golden tint of her skin had fled. Dick dropped upon his knees and bent over her. Though his blood was churning in his veins, his breast laboring, his mind whirling with the wonder of that moment and its promise, he made himself deliberate. He wanted more than anything he had ever wanted in his life to see if she would keep up that pretense of sleep and let him kiss her. She must have felt his breath, for her hair waved off her brow. Her cheeks were now white. Her breast swelled and sank. He bent down closer—closer. But he must have been maddeningly slow, for as he bent still closer Nell's eyes opened, and he caught a swift purple gaze of eyes as she whirled her head. Then, with a little cry, she rose and fled.

X

ROJAS

No word from George Thorne had come to Forlorn River in weeks. Gale grew concerned over the fact, and began to wonder if anything serious could have happened to him. Mercedes showed a slow, wearing strain.

Thorne's commission expired the end of January, and if he could not get his discharge immediately, he surely could obtain leave of absence. Therefore, Gale waited, not without growing anxiety, and did his best to cheer Mercedes. The first of February came bringing news of rebel activities and bandit operations in and around Casita, but not a word from the cavalryman.

Mercedes became silent, mournful. Her eyes were great black windows of tragedy. Nell devoted herself entirely to the unfortunate girl; Dick exerted himself to persuade her that all would yet come well; in fact, the whole household could not have been kinder to a sister or a daughter. But their united efforts were unavailing. Mercedes seemed to accept with fatalistic hopelessness a last and crowning misfortune.

A dozen times Gale declared he would ride in to Casita and find out why they did not hear from Thorne; however, older and wiser heads prevailed over his impetuosity. Belding was not sanguine over the safety of the Casita trail. Refugees from there arrived every day in Forlorn River, and if the tales they told were true, real war would have been preferable to what was going on along the border. Belding and the rangers and the Yaqui held a consultation. Not only had the Indian become a faithful servant to Gale, but he was also of value to Belding. Yaqui had all the craft of his class, and superior intelligence. His knowledge of Mexicans was second only to his hate for them. And Yaqui, who had been scouting on all the trails, gave information that made Belding decide to wait some days before sending any one to Casita. He required promises from his rangers, particularly Gale, not to leave without his consent.

It was upon Gale's coming from this conference that he encountered Nell. Since the interrupted siesta episode she had been more than ordinarily elusive, and about all he had received from her was a tantalizing smile from a distance. He got the impression now, however, that she had awaited him. When he drew close to her he was certain of it, and he experienced more than surprise.

"Dick," she began, hurriedly. "Dad's not going to send any one to see about Thorne?"

"No, not yet. He thinks it best not to. We all think so. I'm sorry. Poor Mercedes!"

"I knew it. I tried to coax him to send Laddy or even Yaqui. He wouldn't listen to me. Dick, Mercedes is dying by inches. Can't you see what ails her? It's more than love or fear. It's uncertainty—suspense. Oh, can't we find out for her?"

"Nell, I feel as badly as you about her. I wanted to ride in to Casita. Belding shut me up quick, the last time."

Nell came close to Gale, clasped his arm. There was no color in her face. Her eyes held a dark, eager excitement.

"Dick, will you slip off without Dad's consent? Risk it! Go to Casita and find out what's happened to Thorne—at least if he ever started for Forlorn River?"

"No, Nell, I won't do that."

She drew away from him with passionate suddenness.

"Are you afraid?"

This certainly was not the Nell Burton that Gale knew.

"No, I'm not afraid," Gale replied, a little nettled.

"Will you go—for my sake?" Like lightning her mood changed and she was close to him again, hands on his, her face white, her whole presence sweetly alluring.

"Nell, I won't disobey Belding," protested Gale. "I won't break my word."

"Dick, it'll not be so bad as that. But—what if it is? . . . Go, Dick, if not for poor Mercedes's sake, then for mine—to please me. I'll—I'll . . . you won't lose anything by going. I think I know how Mercedes feels. Just a word from Thorne or about him would save her. Take Blanco Sol and go, Dick. What rebel

outfit could ever ride you down on that horse? Why, Dick, if I was up on Sol I wouldn't be afraid of the whole rebel army."

"My dear girl, it's not a question of being afraid. It's my word—my duty to Belding."

"You said you loved me. If you do love me you will go. . . . You don't love me!"

Gale could only stare at this transformed girl.

"Dick, listen! . . . If you go—if you fetch some word of Thorne to comfort Mercedes, you—well, you will have your reward."

"Nell!"

Her dangerous sweetness was as amazing as this newly revealed character.

"Dick, will you go?"

"No—no!" cried Gale, in violence, struggling with himself. "Nell Burton, I'll tell you this. To have the reward I want would mean pretty near heaven for me. But not even for that will I break my word to your father."

She seemed the incarnation of girlish scorn and wilful passion.

"Gracias, señor," she replied, mockingly. *"Adios."* Then she flashed out of his sight.

Gale went to his room at once, disturbed and thrilling, and did not soon recover from that encounter.

The following morning at the breakfast table Nell was not present. Mrs. Belding evidently considered the fact somewhat unusual, for she called out into the patio and then into the yard. Then she went to Mercedes's room. But Nell was not there, either.

"She's in one of her tantrums lately," said Belding. "Wouldn't speak to me this morning. Let her alone, mother. She's spoiled enough, without running after her. She's always hungry. She'll be on hand presently, don't mistake me."

Notwithstanding Belding's conviction, which Gale shared, Nell did not appear at all during the hour. When Belding and the rangers went outside, Yaqui was eating his meal on the bench where he always sat.

"Yaqui—*Lluvia d' oro, si?*" asked Belding, waving his hand toward the corrals. The Indian's beautiful name for Nell meant "shower of gold," and Belding used it in asking Yaqui if he had seen her. He received a negative reply.

Perhaps half an hour afterward, as Gale was leaving his room, he saw the Yaqui running up the path from the fields. It was markedly out of the ordinary to see the Indian run. Gale wondered what was the matter. Yaqui ran straight to Belding, who was at work at his bench under the wagon shed. In less than a moment Belding was bellowing for his rangers. Gale got to him first, but Ladd and Lash were not far behind.

"Blanco Sol gone!" yelled Belding, in a rage.

"Gone? In broad daylight, with the Indian a-watchin'?" queried Ladd.

"It happened while Yaqui was at breakfast. That's sure. He'd just watered Sol."

"Raiders!" exclaimed Jim Lash.

"Lord only knows. Yaqui says it wasn't raiders."

"Mebbe Sol's just walked off somewheres."

"He was haltered in the corral."

"Send Yaqui to find the hoss's trail, an' let's figger," said Ladd. "Shore this 's no raider job."

In the swift search that ensued Gale did not have anything to say; but his mind was forming a conclusion. When he found his old saddle and bridle missing from the peg in the barn his conclusion became a positive conviction, and it made him, for the moment, cold and sick and speechless.

"Hey, Dick, don't take it so much to heart," said Belding. "We'll likely find Sol, and if we don't, there's other good horses."

"I'm not thinking of Sol," replied Gale.

Ladd cast a sharp glance at Gale, snapped his fingers, and said:

"Damn me if I ain't guessed it, too!"

"What's wrong with you locoed gents?" bluntly demanded Belding.

"Nell has slipped away on Sol," answered Dick.

There was a blank pause, which presently Belding broke.

"Well, that's all right, if Nell's on him. I was afraid we'd lost the horse."

"Belding, you're trackin' bad," said Ladd, wagging his head.

"Nell has started for Casita," burst out Gale. "She has gone to fetch Mercedes some word about Thorne. Oh, Belding, you needn't shake your head. I know she's gone. She tried to persuade me to go, and was furious when I wouldn't."

"I don't believe it," replied Belding, hoarsely. "Nell may have her temper. She's a little devil at times, but she always had good sense."

"Tom, you can gamble she's gone," said Ladd.

"Aw, hell, no! Jim, what do you think?" implored Belding.

"I reckon Sol's white head is pointed level an' straight down the Casita trail. An' Nell can ride. We're losin' time."

That roused Belding to action.

"I say you're all wrong," he yelled, starting for the corrals. "She's only taking a little ride, same as she's done often. But rustle now. Find out. Dick, you ride cross the valley. Jim, you hunt up and down the river. I'll head up San Felipe way. And you, Laddy, take Diablo and hit the Casita trail. If she really has gone after Thorne you can catch her in an hour or so."

"Shore I'll go," replied Ladd. "But, Beldin', if you're not plumb crazy you're close to it. That big white devil can't catch Sol. Not in an hour or a day or a week! What's more, at the end of any runnin' time, with an even start, Sol will be farther in the lead. An' now Sol's got an hour's start."

"Laddy, you mean to say Sol is a faster horse than Diablo?" thundered Belding, his face purple.

"Shore. I mean to tell you just that there," replied the ranger.

"I'll—I'll bet a—"

"We're wastin' time," curtly interrupted Ladd. "You can gamble on this if you want to. I'll ride your Blanco Devil as he never was rid before, 'cept once when a damn sight better hossman than I am couldn't make him outrun Sol."

Without more words the men saddled and were off, not waiting for the Yaqui to come in with possible information as to what trail Blanco Sol had taken. It certainly did not show in the clear sand of the level valley where Gale rode to and fro. When Gale returned to the house he found Belding and Lash awaiting him. They did not mention their own search, but stated that Yaqui had found Blanco Sol's tracks in the Casita trail. After some consultation Belding decided to send Lash along after Ladd.

The interminable time that followed contained for Gale about as much suspense as he could well bear. What astonished him and helped him greatly to fight off actual distress was the endurance of Nell's mother.

Early on the morning of the second day, Gale, who had acquired an unbreakable habit of watching, saw three white horses and a bay come wearily stepping down the road. He heard Blanco Sol's familiar whistle, and he leaped up wild with joy. The horse was riderless. Gale's sudden joy received a violent check, then resurged when he saw a limp white form in Jim Lash's arms. Ladd was supporting a horseman who wore a military uniform.

Gale shouted with joy and ran into the house to tell the good news. It was the ever-thoughtful Mrs. Belding who prevented him from rushing in to tell Mercedes. Then he hurried out into the yard, closely followed by the Beldings.

Lash handed down a ragged, travel-stained, wan girl into Belding's arms.

"Dad! Mama!"

It was indeed a repentant Nell, but there was spirit yet in the tired blue eyes. Then she caught sight of Gale and gave him a faint smile.

"Hello—Dick."

"Nell!" Gale reached for her hand, held it tightly, and found speech difficult.

"You needn't worry—about your old horse," she said, as Belding carried her toward the door. "Oh, Dick! Blanco Sol is—glorious!"

Gale turned to greet his friend. Indeed, it was but a haggard ghost of the cavalryman. Thorne looked ill or wounded. Gale's greeting was also a question full of fear.

Thorne's answer was a faint smile. He seemed ready to drop from the saddle. Gale helped Ladd hold Thorne upon the horse until they reached the house. Belding came out again. His welcome was

checked as he saw the condition of the cavalryman. Thorne reeled into Dick's arms. But he was able to stand and walk.

"I'm not—hurt. Only weak—starved," he said. "Is Mercedes— Take me to her."

"She'll be well the minute she sees him," averred Belding, as he and Gale led the cavalryman to Mercedes's room. There they left him; and Gale, at least, felt his ears ringing with the girl's broken cry of joy.

When Belding and Gale hurried forth again the rangers were tending the tired horses. Upon returning to the house Jim Lash calmly lit his pipe, and Ladd declared that, hungry as he was, he had to tell his story.

"Shore, Beldin'," began Ladd, "that was funny about Diablo catchin' Blanco Sol. Funny ain't the word. I nearly laughed myself to death. Well, I rode in Sol's tracks all the way to Casita. Never seen a rebel or a raider till I got to town. Figgered Nell made the trip in five hours. I went straight to the camp of the cavalrymen, an' found them just coolin' off an' dressin' down their hosses after what looked to me like a big ride. I got there too late for the fireworks.

"Some soldier took me to an officer's tent. Nell was there, some white an' all in. She just said, "Laddy!" Thorne was there, too, an' he was bein' worked over by the camp doctor. I didn't ask no questions, because I seen quiet was needed round that tent. After satisfying myself that Nell was all right, an' Thorne in no danger, I went out.

"Shore there was so darn many fellers who wanted to an' tried to tell me what'd come off, I thought I'd never find out. But I got the story piece by piece. An' here's what happened.

"Nell rode Blanco Sol a-tearin' into camp, an' had a crowd round her in a jiffy. She told who she was, where she'd come from, an' what she wanted. Well, it seemed a day or so before Nell got there the cavalrymen had heard word of Thorne. You see, Thorne had left the camp on leave of absence some time before. He was shore mysterious, they said, an' told nobody where he was goin'. A week or so after he left camp some Greaser give it away that Rojas had a prisoner in a dobe shack near his camp. Nobody paid much attention to what the Greaser said. He wanted money for mescal. An' it was usual for Rojas to have prisoners. But in a few more days it turned out pretty sure that for some reason Rojas was holdin' Thorne.

"Now it happened when this news came Colonel Weede was in Nogales with his staff, an' the officer left in charge didn't know how to proceed. Rojas's camp was across the line in Mexico, an' riding over there was serious business. It meant a whole lot more than just scatterin' one Greaser camp. It was what had been botherin' more'n one colonel along the line. Thorne's feller soldiers was anxious to get him out of a bad fix, but they had to wait for orders.

"When Nell found out Thorne was bein' starved an' beat in a dobe shack no more'n two miles across the line, she shore stirred up that cavalry camp. Shore! She told them soldiers Rojas was holdin' Thorne—torturin' him to make him tell where Mercedes was. She told about Mercedes—how sweet an' beautiful she was—how her father had been murdered by Rojas—how she had been hounded by the bandit—how ill an' miserable she was, waitin' for her lover. An' she begged the cavalrymen to rescue Thorne.

"From the way it was told to me I reckon them cavalrymen went up in the air. Fine, fiery lot of young bloods, I thought, achin' for a scrap. But the officer in charge, bein' in a ticklish place, still held out for higher orders.

"Then Nell broke loose. You-all know Nell's tongue is sometimes like a *choya* thorn. I'd have given somethin' to see her work up that soldier outfit. Nell's never so pretty as when she's mad. An' this last stunt of hers was no girly tantrum, as Beldin' calls it. She musta been ragin' with all the hell there's in a woman. . . . Can't you fellers see her on Blanco Sol with her eyes turnin' black?"

Ladd mopped his sweaty face with his dusty scarf. He was beaming. He was growing excited, hurried in his narrative.

"Right out then Nell *swore* she'd go after Thorne. If them cavalrymen couldn't ride with a Western girl to save a brother

American—let them hang back! One feller, under orders, tried to stop Blanco Sol. An' that feller invited himself to the hospital. Then the cavalrymen went flyin' for their hosses. Mebbe Nell's move was just foxy—woman's cunnin'. But I'm thinkin' as she felt then she'd have sent Blanco Sol straight into Rojas's camp, which, I'd forgot to say, was in plain sight.

"It didn't take long for every cavalryman in that camp to get wind of what was comin' off. Shore they musta been wild. They strung out after Nell in a thunderin' troop.

"Say, I wish you fellers could see the lane that bunch of hosses left in the greasewood an' cactus. Looks like there'd been a cattle stampede on the desert. . . . Blanco Sol stayed out in front, you can gamble on that. Right into Rojas's camp. *Sabe,* you señors? Gawd Almighty! I never had a grief that'd hold a candle to this one of bein' too late to see Nell an' Sol in their one best race.

"Rojas an' his men vamoosed without a shot. That ain't surprisin'. There wasn't a shot fired by anybody. The cavalrymen soon found Thorne an' hurried with him back on Uncle Sam's land. Thorne was half naked, black an' blue all over, thin as a rail. He looked mighty sick when I seen him first. That was a little after midday. He was given food an' drink. Shore he seemed a starved man. But he picked up wonderful, an' by the time Jim came along he was wantin' to start for Forlorn River. So was Nell. By main strength as much as persuasion we kept the two of them quiet till next evenin' at dark.

"Well, we made as sneaky a start in the dark as Jim an' me could manage, an' never hit the trail till we was miles from town. Thorne's nerve held him up for a while. Then all at once he tumbled out of his saddle. We got him back, an' Lash held him on. Nell didn't give out till daybreak."

As Ladd paused in his story Belding began to stutter, and finally he exploded. His mighty utterances were incoherent. But plainly the wrath he had felt toward the wilful girl was forgotten. Gale remained gripped by silence.

"I reckon you'll all be some surprised when you see Casita," went on Ladd. "It's half burned an' half tore down. An' the rebels are livin' fat. There was rumors of another federal force on the road from Casa Grandes. I seen a good many Americans from interior Mexico, an' the stories they told would make your hair stand up. They all packed guns, was fightin' mad at Greasers, an' sore on the good old U. S. But shore glad to get over the line! Some were waitin' for trains, which don't run reg'lar no more, an' others were ready to hit the trails north."

"Laddy, what knocks me is Rojas holding Thorne prisoner, trying to make him tell where Mercedes had been hidden," said Belding.

"Shore. It'd knock anybody."

"The bandit's crazy over her. That's the Spanish of it," replied Belding, his voice rolling. "Rojas is a peon. He's been a slave to the proud Castilian. He loves Mercedes as he hates her. When I was down in Durango I saw something of these peons' insane passions. Rojas wants this girl only to have her, then kill her. It's damn strange, boys, and even with Thorne here our troubles have just begun."

"Tom, you spoke correct," said Jim Ladd, in his cool drawl.

"Shore I'm not sayin' what I think," added Ladd. But the look of him was not indicative of a tranquil optimism.

Thorne was put to bed in Gale's room. He was very weak, yet he would keep Mercedes's hand and gaze at her with unbelieving eyes. Mercedes's failing hold on hope and strength seemed to have been a fantasy; she was again vivid, magnetic, beautiful, shot through and through with intense and throbbing life. She induced him to take food and drink. Then, fighting sleep with what little strength he had left, at last he succumbed.

(To be continued)

THE ANNUAL ENCAMPMENT OF THE CAMP-FIRE CLUB

Held at Pine Island, Greenwood Lake, N. Y., June 2nd to 6th, 1915

By WARREN H. MILLER

ONCE a year from 100 to 150 of the members of the Camp-Fire Club get together and camp out for a number of days. It is a good example for other similar organizations to follow, for in no way are friendships so firmly cemented and the solidarity of an organization so strongly established as under the spell of the wilderness camp-fire. To add interest and excitement to such an outing the method pursued by the club is very simple. A number of events are scheduled, all proving the members' skill with the tools and weapons of the outdoors; prizes are awarded the winners, and a system of points rewards all-around proficiency by determining the holders of the Dickerson Rod and Gun Trophies and the Camp-Fire Club's all-around championship prizes. Such a program is sure to provide plenty of interest to all the members, besides giving them a chance to practice with big-game rifles, shotguns and fishing rods of various kinds, so that any member who thinks himself wedded to just one form of outdoor sport will soon find himself a learner and then an enthusiast in some new branch of the great game. The program of events used this year is here given in full, so that some idea of the scope of them can be had by others who may be interested. With the exception of surf casting, the list of events is fairly complete. In former years only two scores counted—first and second prizes. This year the five first scores counted for the Club Championship and the Dickerson Trophy, giving everybody a chance for a representation on the club records. It is a tribute to the all-around rifle excellence of the club members that in neither this year nor for the last three years hardly ever do the same names appear on the Rifle Plate Team, representing the ten best scores for that particular year.

The outing this year was one of the "campiest," by which is meant that the camp-fire spirit was more in evidence than ever before; there was more tendency in the separate camps to kindle the home camp-fire and have visitors drop in for a chat, also visiting at other camps where a similar fire would be burning. At the same time the big Council Fire was not neglected and the song and story nights around the Big Fire were more than usually successful. At one of these Member David T. Abercrombie received the Indian name of Nebogama, or Master Camper, appropriately conferred with Indian ceremonials by Ernest Thompson Seton. At another a lantern-slide exhibition was held which produced a number of interesting series by members competing for the E. H. Morse prize for the best set. Won by Dan J. Singer.

List of events and winners follows:

SPECIAL PRIZES

John S. Dickerson offered three trophies to be awarded those gaining the highest number of points in Rifle Shooting, Trap Shooting, Revolver Shooting, Fly Casting, and Bait Casting, provided the contestant has entered all four events in both Rifle and Trap Events, all three in Revolver, and all four in Bait and Fly Events, and scored in one gun and one fishing.

1. John Hessian 2. Eugene Du Pont
3. Warren Miller

The Club offered the usual all-around-championship prize, a gold bar, to the one scoring the highest number of points, provided the contestant has scored in one of the gun events, one of the rod events and one of the woodcraft events. W. S. Bogart offers a second prize, same contests and conditions. Won by:

1. Wilbur Newsome 2. Warren Miller
3. David Abercrombie

Ed. H. Morse offered a special prize to the one showing the best lantern slides (not more than six to be entered) on hunting, fishing, and camping subjects. Slides to be uncolored.

Won by Dan J. Singer

Dr. Godfrey R. Pisek offered a special prize to the one showing the best tent and equipment.

Won by David Abercrombie

SCORING

Ed. H. Morse, Chairman

In all events (excepting rifle events and Shotgun Event No. 4) first position counts 5; second, 4; third, 3; fourth, 2; and fifth, 1. Rifle events: First position counts 7; second, 6; third, 5; fourth, 4; fifth, 3; sixth, 2; seventh, 1. Shotgun Event No. 4: First position counts 8; second, 7; third, 6; fourth, 5; fifth, 4; sixth, 3; seventh, 2; eighth, 1.

FLY AND BAIT CASTING

W. S. Bogart, Chairman

Fly Casting—Accuracy

Three rings, 30 inches in diameter, will be placed 25, 35 and 45 feet from the platform, respectively. Five casts will be made at each ring. A cast inside the ring, or touching the ring, shall be considered perfect. One demerit shall be given for each foot, or fraction of a foot, that the fly falls away from the target. In lengthening the line in going from one target to another, the contestants may make as many casts in the air, or false casts, as they choose; but each time that the fly touches the water, a cast shall be counted. The winner shall be the one having the least number of demerits. Entrance fee, 25 cents.

1. Wilbur Newsome
2. Howard Hadden
3. Lloyd Taylor
4. David Abercrombie
5. Geo. Hubbel

Fly Casting—Distance

The only restriction on the rod is that it must be a single-handed fly rod, weighing not more than six ounces. To it must be attached the reel. The leader must be of single-gut, not more than 9 feet long and not less than 6. Each contestant shall cast from the platform provided, and may have eight minutes to cast. Time will be taken when the contestant says "ready." Longest cast wins. Entrance fee, 25 cents.

1. David Abercrombie
2. Howard Hadden
3. George Hubbel
4. Wilbur Newsome
5. W. S. Bogart

Bait Casting—Distance

Any standard bait-casting rod allowed, length not to exceed 6 feet; any reel; any bait-casting line of no less than eight pounds breaking strength; lure—any lure not to exceed one ounce in weight and to have hooks removed. Highest average of five casts to count. Committee to pass on all tackle. Entrance fee, 25 cents.

1. Warren Miller
2. Eugene Dupont
3. W. S. Bogart
4. Howard Hadden
5. Wilbur Newsome

Bait Casting—Accuracy

Same tackle as above, each contestant to make five casts at 50 feet, 65 feet and 80 feet distances from platform, casts to be made in rotation by contestants at the three distances respectively. Each foot from rim of target to count one demerit; total demerits to be divided by 15 and subtracted from 100 to get percentage. Highest wins. Entrance fee, 15 cents.

1. John Hessian
2. Wilbur Newsome
3. Warren Miller
4. Kenneth Fowler
5. David Abercrombie

WATER BOILING

Beverly S. King, Chairman

One Event:—Each contestant will be furnished with one match, a stick of wood and an axe.

A pail holding one quart of water will be placed a short distance from him, and at the word "Go" he will make his preparations, then take the pail of water and boil same.

No matches or other materials will be used except those furnished by the Committee, but jack-knives and hunting knives may be used in preparation of wood for fire.

The contestant wins when water reaches boiling point, according to thermometers supplied by judges.

Spilling any material amount of water from pail, or failure to put out fire will disqualify contestant. Entrance fee, 25 cents.

First prize, silver medal; second, bronze.

1. Julius Seymour
2. W. B. Greely
3. J. S. Dickerson
4. Warren Miller
5. Alex. Walker

A LINE OF TENTS IN THE ENCAMPMENT

All these camps competed for the Pisek Prize. Human in background is not scenery but Carl Rungius.

CANOE AND TARPAULIN CAMP

David Abercrombie and the winning outfit, Pisek Prize for best all-around tent and outfit.

FLY-CASTING FOR ACCURACY
Warren Miller up. Won by Wilbur Newsome, Howard Hadden, second.

EDMUND SEYMOUR, TREASURER
At the archery match, Ernest Seton, winner, at right.

AT THE HAND TRAP EVENTS
Eltinge Warner, winner, up, Jack Fanning manipulating the trap.

SHOOTING FOR CHAMPIONSHIP AT THE TRAP STANDS
Left to right, Warner, Hessian, Morse, Dupont and Dickerson.

THE RIFLE TOURNAMENT BOOTH
Jack Hessian winning the running deer event.

"'TIS A VE-ERY PRETTY MARNIN'"

Warren Miller and Eltinge Warner in their salt water cruising canoe outfit.

THE CAMP OF THE SOURDOUGHS

Joe Root and Charles Hodgson with their jerky fire, stone cache, log bowl and woodcraft outfit.

REVOLVER

T. Chas. Farrelly, Chairman

Rules of U. S. Revolver Association to govern contest.

No specifications as to type or caliber of revolver or pistol, except open sight. Revolver and ammunition for those who are without. A charge for ammunition is made.

First Event.—One round, deliberate shooting at 50 yards, standard target. Entrance fee, 50 cents.

1. John Hessian
2. Louis Sexton
3. Joe Root
4. Parker Syms
5. H. C. Cornwall

Second Event.—One round, rapid fire, 30 yards, standard target. Entrance fee, 50 cents.

1. Louis Sexton
2. David Abercrombie
3. John Hessian
4. Eugene Dupont
5. Joe Root

Third Event.—Start shooting once at a life-size figure at 50 yards; advance and shoot once at 40 yards, once at 30 yards, and once at 20 yards, within a time limit. Entrance fee, 50 cents.

Prizes in each event: First, silver; second, bronze.

1. Eugene Dupont
2. Harlow Brooks
3. Geo. Pratt
4. Warren Miller
5. H. C. Cornwall

TOMAHAWK

Godfrey R. Pisek, Chairman

Three throws shall be made at a target; the axe must stick to score; one preliminary throw allowed. Highest score wins. Entrance fee, 25 cents.

First prize, silver medal; second, bronze.

1. H. C. Cornwall
2. Warren Miller
3. David Abercrombie
4. Julius Seymour
5. Geo. Burleigh

FIRE MAKING

Geo. L. Hubbell, Chairman

One Event.—Rule 1. A spark must be secured as a result of the friction of two pieces of wood, and flame follow by the use of only such tinder as can be found in the woods.

Rule 2. Contestants may furnish their own implements and materials.

Rule 3. Time will be counted from signal of starting by to the production of flame.

Rule 4. Contestant producing flame first wins the contest.

Entrance fee, 25 cents.

First prize, silver medal; second, bronze.

1. Joe Root
2. Ernest Seton
3. Alex Walker
4. Otto Van Norden
5. David Abercrombie

RIFLE CONTEST

John W. Hessian, Chairman

All rifle competitions at this outing will be shot at 100 yards and, unless otherwise specified in the conditions of the match, will be shot with big-game rifles, offhand, using full-charge, factory-loaded ammunition. No full metal-jacketed bullets to be used.

Event No. 1.—Rising Bear Match.

Figure and count as in diagram. Range, 100 yards.

Time of exposure, three seconds.

Position—offhand, with gun below elbow until bear begins to show.

Arm—any hunting rifle with any sights, not telescopic, full-charge ammunition.

The bear will be exposed in position not over three seconds; butt of gun to be held below elbow, one shot to be taken at each exposure.

There will be no signal that target is about to be raised, after the shooter once takes position at the firing stand, and says he is ready. No allowance will be made for failure on the part of the shooter thereafter.

Perfect shot in the 8-in. circle, over the shoulder, will score 10, and with other hits valued in proportion as shown by the diagram cards. Maximum possible score, 50 points. Entrance fee, 50 cents.

1. Louis Sexton
2. H. C. Cornwall
3. Ralston Rice
4. Clifford Cairns
5. John Hessian
6. Robert Boyd
7. W. B. Greely

SPECIAL RISING BEAR MATCH

Prizes donated by D. T. Abercrombie, Joe McAleenan and H. C. Cornwall.

1. Warren Miller
2. Ed. Morse
3. Wilbur Newsome

Event No. 2.—Running Deer Match.

The deer will run across 20 to 25 yards for this match. The shooter may have his rifle at the ready, firing offhand. He may call for the deer when ready, and it will run soon thereafter, crossing the space of 25 yards. A shot in the forward half

of body, not including head or neck, will score 10; a hit elsewhere on the deer will score 7; total possible score, 50. Entrance fee, 50 cents.

1. John Hessian
2. Wilbur Newsome
3. Eugene Dupont
4. E. W. Deming
5. Alex Walker
6. Ralston Rice
7. Parker Syms

Event No. 3.—Disappearing Antelope Match.

The target will be a rear view of an antelope running away from the shooter and will appear five times at short and rapid intervals by being raised and lowered quickly from the pit. The competitor will endeavor to fire five shots. He is not restricted in his choice of when to shoot, and could, if possible and so desired, shoot his five shots at any one or more of the five exposures of the target. A hit in any part of the figure counts 10 points; a miss, nothing. Entrance fee, 50 cents.

1. E. C. Delafield
2. Howard Hadden
3. C. W. Hodgson
4. Louis Sexton
5. H. C. Cornwall
6. Carl Rungius
7. David Abercrombie

Event No. 4.—Rocky Mountain Sheep Match.

Target is a figure of a sheep one-third natural size, being the equivalent of a shot at a sheep at 300 yards distance.

Time limit of five minutes for the five shots.

Position—any; standing, kneeling, sitting or prone.

Rifle—any; the rifle, however, must be powerful enough to be suitable for this kind of shooting and effective at distances of 300 yards at least. Any sights, including telescopic, may be used. Entrance fee, 50 cents.

Ammunition—full charge, factory loaded.

Scoring.—A hit in the forward part of the body, including the head and shoulders, counting 10 points. The rest of the body, including the legs, counting 7 points for each hit.

1. Julius Seymour
2. John Hessian
3. Albert Tilt
4. Geo. Hubbell
5. Louis Sexton
6. Wilbur Newsome
7. David Abercrombie

SHOTGUN EVENTS

Eugene du Pont, Chairman

Event No. 1.—Preliminary of twenty-five targets. Highest five scores made in the last two days to count. First place, five points; fifth, one. To qualify for the Championship Event on Saturday, a man must be among the fifteen high guns in this preliminary shoot.

1. Eugene Dupont
2. John Dickerson
3. Edward Morse
4. Wilbur Newsome
5. John Hessian

Event No. 2, Quail Shoot.—Starting at 16 yards, shooter will walk toward the trap with gun below elbow and fire twice at any two targets. Five highest scores made in two days (twenty-four shots) to count. No re-entries.

1. Eugene Dupont
2. W. S. Bogart
3. John Hessian
4. Eltinge F. Warner
5. Warren Miller

Event No. 3, Hand Trap.—Ten targets thrown from hand trap. Five highest scores count. No re-entries.

1. Eltinge F. Warner
2. Henry G. Brown
3. Eugene Dupont
4. Geo. Pratt
5. Clayton Old

Event No. 4, Camp-Fire Club Championship.—Twenty-five targets. The fifteen high guns of Event No. 1 (the preliminary shoot) are the only contestants eligible.

1. Wilbur Newsome
2. John Hessian
3. Eugene Dupont
4. John Dickerson
5. Warren Miller
6. Edward Morse
7. W. S. Bogart
8. David Abercrombie

A silver medal for first place and a bronze medal for second place in each of the four events.

ARCHERY CONTEST

Ernest T. Seton, Chairman

One Event.—If there are more than ten they shall shoot off—that is, each has six shots at the 4-foot target at 30 yards distance. The ten best scorers may enter for the final. This is the Standard Columbia Round. Entrance fee, 25 cents.

The Club supplies bows, arrows and target.

1. Ernest Seton
2. W. B. Greeley
3. Wilbur Newsome
4. Alex Walker
5. Clifford Cairns

SWIMMING RACE

Dan J. Singer, Chairman

One Event.—Seventy-five-yard obstacle race. Entrance fee, 25 cents.

First prize, silver medal; second prize, bronze medal.

1. J. S. Dickerson
2. Jas. L. Clark

Where to Go

EDITOR'S NOTE—The aim of this department is to present to our readers reports on desirable localities for fishing and hunting. We have a great many of these coming in by every mail. Only the best have been culled out—not places where the luck was "fair," but where it was *"splendid."* It is impossible for us, in the limited space available, to print names of hotels, guides, etc., but write us direct for information concerning any locality whatever you are interested in, and be sure to mention in writing, later, to the hotel or guide, that your information came from our "Where to Go" department. This is important, as you will then get the best treatment, both as to terms and accommodation.

Many sportsmen are now making their plans for the Fall feathered-game shooting, and so we have gathered together information on the very best places where duck and goose shooting, and quail, woodcock, grouse, partridge and shorebird shooting may be found. If you desire any further information we should be very glad to hear from you and will answer you by return mail and try in every way to help you plan a successful trip.

NEW ENGLAND STATES

Masardis, Aroostook County, Maine, reached by the Bangor & Maine Ry. Accommodations at house of Billy Soule, at Oxbow, for $2 a day. Partridge and duck shooting, also big game, deer and bear. Guides charge $2.50 a day.

Jackman, Somerset County, Maine, reached by the Canadian Pacific from Moosehead Lake. Accommodations at the Attean Camp, Ruel E. Holden, proprietor, for $14 a week. Partridge shooting, also deer and bear.

Lake Parlin, Somerset County, Maine, reached by the Maine, Ontario & Somerset Ry., also by the Canadian Pacific. Accommodations at Lake Parlin House, H. P. McKenney, proprietor, for $17.50 a week. Partridge and small game, also deer hunting.

Oakland, Kennebec County, Maine, is reached by the Bangor & Maine Ry., and by the Maine Central Ry. Accommodations at East Pond Camps, E. W. Clements, proprietor, for $14 a week. Small game plentiful.

Norcross, Penobscot County, Maine, reached by the Boston & Maine and Aroostook Ry. Accommodations at Kidney Pond Camps, I. O. Hunt, proprietor, for $10.50 a week. Partridge and ducks, also deer and bear.

Springfield, Penobscot County, Maine, reached by the Maine Central Ry. Accommodations at Bay View Camps, Joseph M. Patton, proprietor, for $10.50 a week. Partridge and duck shooting. Deer hunting.

Sourdnahunk Lake, Aroostook County, Maine, reached by the Bangor & Aroostook Ry. to Norcross, by boat to Sourdnahunk Stream and then by carriage. Accommodations at the Antlers, Charles Daisey, proprietor, for $14 a week. Partridge, deer and bear.

Carratunk, Somerset County, Maine, reached by the Maine Central Ry. Accommodations at Spalding's, C. A. Spalding, proprietor, for $19 a week. Feathered game and deer.

Ashland, Aroostook County, Maine, reached by the Bangor & Aroostook Ry. Accommodations at house of Will McNally, for $3 a day. Partridge shooting, also deer.

Bigelow, Franklin County, Maine, reached by the New York, New Haven & Hartford Ry. and the Maine Central Ry. Accommodations at the Round Mt. Lake Camps, Davis Blackwell, proprietor, for $14 a week. Partridges, deer and bear.

Norcross, Penobscot County, Maine, reached by the Bangor & Aroostook Ry. Accommodations at Buckhorn Camp, Bert Haynes, proprietor, for $1.50 a day. Small game, deer and bear. Guides $3 a day.

Grand Lake Stream, Washington County, Maine, reached by the Maine Central and Boston & Maine Ry. Accommodations at Ouananiche Lodge, W. G. Rose, proprietor, for $2.50 a day. Ducks, partridge, deer and bear.

Warner, Merrimack County, New Hampshire, reached by the Boston & Maine Ry. Accommodations at farmhouse of Mr. White, for $7 a week. Partridge shooting and some deer.

Errol, Coos County, New Hampshire, reached by the Boston & Maine Ry. Party camped out. Feathered game shooting. Also some deer.

Colebrook, Coos County, New Hampshire, reached by Boston & Maine Ry. Accommodations at Monadnock House, for $2 a day. Deer, partridge and rabbits.

Deep River, Middlesex County, Connecticut, reached by the Shore Line to Saybrook Valley and then New York New Haven & Hartford to Deep River. Herbert F. Ban-

ning, Brockway's Landing, said to be good guide. Rail-bird shooting.

Beecher Falls, Essex County, Vermont, reached by the New York, New Haven & Hartford to Falyan, N. H., and the Maine Central to Beecher Falls. Accommodations at Metallak Lodge, W. M. Buck, proprietor, for $40 a week. Partridge shooting, some deer

Bridgewater, Windsor County, Vermont, reached by the Rutland Ry. Accommodations at Tanner's boarding house. Small game and ducks reported plentiful.

East Otis, Berkshire County, Massachusetts, reached by the Boston & Albany Ry. to Russell, from there by stagecoach. Party camped out. Duck, quail, partridge and small game reported plentiful.

MIDDLE ATLANTIC STATES

Wanakena, St Lawrence County, New York, reached by the New York Central Ry. Accommodations at Bear Mountain Camp, J. M. Balderson, proprietor, for $2 a day. Deer, partridge and small game.

Big Otter Lake, Glenfield, Lewis County, New York, reached by the New York Central Ry. Accommodations at Big Otter Lake House, W. D. Crandall, proprietor, for $12 a week. Rabbits and partridge, also deer.

Unadilla, Otsego County, New York, reached by the Delaware & Hudson Ry. Accommodations at Bishop House, Charles Bishop, proprietor, for $10 a week. Rabbits, grouse and fox reported plentiful.

Crown Point, Essex County, New York, reached by the New York Central Ry. to Albany and thence by Delaware & Hartford. Accommodations at Lake House, M. Gilligan, proprietor, for $2 a day. Ducks, partridge, shore birds.

Lakeport, Madison County, New York, reached by the New York Central Ry. to Chiftenango. Accommodations at house of J. W. Phillips, for $1.50 a day. Ducks and rabbits.

Cambridge, Washington County, New York, reached by the Delaware & Hartford Ry. Accommodations at Cambridge Hotel, for $10 a week. Woodcock, partridge and deer.

Onchiota, Franklin County, New York, reached by the New York Central Ry. Accommodations at house of William Skiff, for $1 a day. Deer, partridge, bear.

Minerva, Essex County, New York, reached by the Delaware & Hudson Ry. to North Creek, then by stage to Minerva. Party camped out. Deer, bear, rabbits, partridge and squirrels, and other small game.

Rock Hill, Sullivan County, New York, reached by the New York, Ontario & Western Ry. Accommodations at Six Lake Farmhouse, Brown & Kennedy, proprietors, for $8 a week. Partridge, rabbits and birds.

Racquette Lake, Hamilton Lake, New York, reached by the New York Central Ry. Accommodations at Antlers, Charles Bennett, proprietor, for $4 a day. Grouse, rabbits and deer.

Lime, Livingston County, New York, reached by the Lehigh Valley Ry. from Rochester. Accommodations may be secured for $8 a week. Pheasants, rabbits and partridge shooting.

Stormville, Dutchess County, New York, reached by the Harlem River Branch of the New York Central to Patterson, thence by coach. Party camped out. Rabbit and duck.

Skenshowane, Herkimer County, New York, reached by the New York Central Ry. Accommodations at Camp Mohawk. Mrs. Longstaff, proprietress, for $16 a week. Deer and partridge.

Rio, Orange County, New York, reached by the Erie Ry. to Port Jervis. Accommodations at camp of F. Muller, for $7 a week. Deer and grouse.

Forked River, Ocean County, New Jersey, reached by the Central Ry. of New Jersey. Accommodations at Forked River House, Fred Gowdy, proprietor, for $2 a day. Shorebirds, ducks, geese in season. Also rabbits, quail and pheasants.

Barnegat, Ocean County, New Jersey, reached by the Central Ry. of New Jersey. Accommodations at the Bay Ridge Gunning House, George H. Cranmer, proprietor, for $6 a day, including guide, boat and decoys. Geese and ducks in season.

Cedar Creek Life Saving Station, Barnegat Bay, New Jersey, reached by way of Seaside Park, from there to the station by boat, or walking along the beach. Party camped out on strip of land between the bay and the ocean. Good snipe shooting and fishing.

Upper Macopen, Passaic County, New Jersey, reached by the Erie Ry. Accommodations at house of Charles B. Rhinesmith for $2.50 a day. Small game shooting.

Middle Valley, Morris County, New Jersey, reached by the Central Ry. of New Jersey. Accommodations at the house of Mrs. Fisher for $12 a week. Partridge, rabbit and a few woodcock.

Elkgrove, Columbia County, Pennsylvania, reached by the Delaware, Lackawanna and Western Ry. Accommodations at the Elkgrove Hotel, J. W. Perry, proprietor for $1.50 a day. Rabbits, pheasants, coon and black bear.

Richfield, Juanita County, Pennsylvania, reached by the Pennsylvania Ry. to Thompsontown, then drive about 12 miles. Accommodations at the Monroe House, George Ehrenzeller, proprietor, for $7 a week. Rabbit, squirrel and grouse shooting.

Canadensis, Monroe County, Pennsylvania, reached by the Delaware, Lackawanna and Western Ry. Accommodations at Spruce Cabin Inn, W. J. Price, proprietor, for $2.50 a day. Grouse and small game plentiful.

Glen Mawr, Lycoming County, Pennsylvania, reached by the Philadelphia and Reading Ry. Accommodations at Glen Mawr House, D. Temple, proprietor. Pheasants, rabbits and squirrels.

Tylersville, Clinton County, Pennsylvania, reached by the New York Central Ry. Accommodations at house of Mrs. Vance. Pheasants and plenty of small game, also deer and bear.

Ocean City, Worcester County, Maryland, reached by the Baltimore, Chesapeake and Atlantic Ry. Accommodations at The Breakers, M. E. Newton, proprietor, for $2 to $3 a day. Yellowlegs, plover, willett, curlew, robin, snipe and other birds.

SOUTHERN STATES

Camp Walton, Santa Rosa County, Florida, reached by the Louisville and Nashville Ry. to Pensacola, then by boat to Camp Walton. Accommodations at Gulf View, Theodore Staff, proprietor, for $10 a week. Deer, quail, turkey and duck shooting.

Crystal River, Citrus County, Florida, reached by the Atlantic Coast Line. Accommodations at Crystal River Inn, Willis & Fox, proprietors, for $12 a week. Quail plentiful, also some deer, bear and wild turkey.

Floral City, Citrus County, Florida, reached by the Atlantic Coast Line. Party camped out. Wild turkey, deer, snipe and squirrel.

New Smyrna, Volusia County, Florida, reached by the Florida East Coast Ry. Accommodations at Rose Villa, H. D. Smith, proprietor, for $12 a week. (Opens in December.) Deer, quail, turkey and ducks.

Panacea, Wakulla County, Florida, reached by the Georgia, Florida and Alabama Ry. Hotel accommodations $2 a day. Guides with launch and decoys, $6 a day. Ducks, geese and quail.

Udall, Ozark County, Missouri, reached by a 35-mile drive from the railroad. Accommodations at White Oak Farm. Rabbits, quail, turkey and other small game.

Noel, McDonald County, Missouri, reached by the Kansas Southern Ry. Accommodations at house of B. W. Warner. Quail in season.

Tuscarora, Craven County, North Carolina, reached by the Norfolk and Southern Ry. Accommodations at hotel of Thomas A. Dielion for $10 a week. Quail, duck and turkey reported plentiful.

Crawells, Halifax County, North Carolina, reached by the Atlantic Coast Line. Accommodations at Crowells Farm Lodge, A. E. Babbitt, proprietor, for $2 a day. Party reports good success on quail, turkey and woodcock.

Pine Bluff, Moore County, North Carolina, reached by the Seaboard Air Line. Accommodations at E. G. Gay's, Pine Bluff. Turkey, quail, ducks, geese, deer and wild hogs.

Enfield, Halifax County, North Carolina, reached by the Atlantic Coast Line. Accommodations at the Pine Top Lodge, C. and L. P. Blow, proprietors, for $15 a week. Quail, turkey and small game.

Oriental, Pamlico County, North Carolina, reached by the Norfolk and Southern Ry. Accommodations at Neuse River Inn, S. W. Everitt, proprietor, for $9 a week. Quail, woodcock, ducks, geese and turkey.

Georgetown, South Carolina, reached by the Atlantic Coast Line. Accommodations at plantation of Frank Johnston. Quail, turkey, woodcock, ducks, geese and snipe abundant. Guide, $2 a day.

Bayside, Refugio County, Texas, reached by the San Antonio and

Aransas Pass Ry. Accommodations of Bayside Hotel, Jack Brightman, proprietor, for $8 a week. Ducks, geese and deer.

Rock Port, Aransas County, Texas, reached by the San Antonio and Aransas Pass Ry. Accommodations at the house of Andrew Sorenson for $5 a day. Duck and goose shooting.

Corpus Christi, Neuces County, Texas, reached by the San Antonio and Aransas Pass Ry. Accommodations at Driscoll's for $1 a day. Ducks, snipe, rabbits, quail and other small game.

MIDDLE WESTERN STATES

Wolstock, Wright County, Iowa, reached by the Chicago and Northwestern Ry. Accommodations at the house of A. J. Myers for $1 a day. Ducks, brant and geese.

Grayling, Crawford County, Michigan, reached by the Michigan Central Ry. Accommodations at Wakely's Bridge, S. B. Wakely, proprietor, for $1.50 a day. Partridge, rabbits, deer and bear.

Cloverdale, Barry County, Michigan, reached by the Chicago, Kalamazoo and Saginaw Ry. Accommodations at house of Mr. Fox for $7 a week. Quail, rabbits, partridge shooting.

Lincoln, Alcona County, Michigan, reached by the Detroit and Mackinac Ry. Accommodations at Uncle Tom's Cabin, A. Backus, proprietor, for $14 a week. Good partridge and duck shooting reported, also deer.

Hackensack, Cass County, Minnesota, reached by the Northern Pacific Ry. Accommodations at Spain House, W. J. Spain, proprietor, for $7 a week. Grouse, duck, small game, also deer and bear.

Marcell, Itasca County, Minnesota, reached by the Great Northern Ry. Accommodations at Camp Idlewild, Walter Stickler, proprietor, for $12 a week. Good partridge shooting reported, also big game.

Boy River, Cass County, Minnesota, reached by the Minneapolis, St. Paul and Sault Ste. Marie Ry. Accommodations at the Hotel Boy River, George H. Glandon, proprietor. Ducks, partridges, also deer, bear and wolves.

Dorset, Hubbard County, Minnesota, reached by the Great Northern Ry. Accommodations at Fisherman's Lodge, A. O. Wambold, proprietor, for $2 a day. Partridge, ducks and small game. Guides $2.50 a day.

Hayward, Sawyer County, Wisconsin, reached by the Chicago and Northwestern Ry. Accommodations at Idlehurst Lodge, C. D. Benack, proprietor, for $12 a week. Partridge, ducks and small game.

Eagle River, Vilas County, Wisconsin, reached by the Chicago and Northwestern Ry. Accommodations at Red Oak Resort, George Jackson, proprietor, for $10 to $12 a week. Partridge shooting, also deer.

Minocqua, Oneida County, Wisconsin, reached by the Chicago, Milwaukee and St. Paul Ry. Accommodations at Mercer Lake Resort, Mrs. M. J. Bishton, proprietress, for $8 a week. Grouse and deer.

Fifield, Price County, Wisconsin, reached by the Minneapolis, St. Paul and Sault Ste. Marie Ry. Accommodations at Feely's Pike Lake Resort, J. E. Feely, proprietor. Small game plentiful, also deer.

Grand View, Bayfield County, Wisconsin, reached by the Northwestern Ry. Accommodations at the Camp Fire Island Camp, H. A. Scotford, proprietor, for $2 a day. Partridge and small game, also deer.

Sarles, Cavalier County, North Dakota, reached by the Great Northern Ry. Accommodations at Mrs. Chase's Hotel for $9 a week. Ducks, geese and prairie chicken.

Forman, Sargent County, North Dakota, reached by the Minnesota, St. Paul and Sault Ste. Marie Ry. Accommodations at Forman Hotel for $2 a day. Good duck and goose shooting reported.

WESTERN STATES

Redlands, San Bernadino County, California, reached by the Southern Pacific Ry. Accommodations at Pine Knot Lodge, $3 a day. Ducks, small game, also deer.

San Fernando, Los Angeles County, reached by the Southern Pacific Ry. Party camped out. Guides charge $2.75 a day. Quail, doves, rabbits, wildcat, deer and mountain lion.

Pieta, Mendocina County, reached by the Northwestern Ry. Party camped out. Good quail and rabbit shooting reported, also deer.

Indian Falls, Plumes County, California, reached by the Western Pacific Ry. to Keddie, and stage from there. Accommodations at Farrar's, E. S. Farrar, proprietor, for $2 a day. Grouse, quail, doves, also deer and bear.

Azusa, Los Angeles County, California, reached by the Southern Pacific Ry. Accommodations at the Cold Brook Camp for $12 a week. Quail, rabbits, and deer.

Basalt, Eagle County, Colorado, reached by the Colorado Midland Railway Co. Accommodations at the Basalt Hotel, E. P. Mattingly, proprietor, for $2.50 a day. Grouse, sage hen, deer, bear and other big game.

Steamboat Springs, Routt County, Colorado, reached by the steam boat *Moffile Creg.* Party camped out. Good shooting reported for grouse, small game and deer.

Grand Lake, Grand County, Colorado, reached by the Denver and St. Lake Ry. and stage for 16 miles. Accommodations at King's Hotel, C. S King, proprietor, for $2 a day. Grouse, small game and bear.

McAlister, Madison County, Montana, reached by the Northern Pacific Ry. Accommodations at the house of Mrs. Wilson for $12 a week. Duck shooting, also deer and elk.

Toston, Broadwater County, Montana, reached by the Northern Pacific Ry. Accommodations at Spring Lake Creek, T. B. Plunkett, proprietor, for $3 a day, including boat. Ducks reported plentiful.

CANADA

Oxbow, Victoria County, New Brunswick, reached by the Canadian Pacific Ry. to Plaster Rock. Accommodations at Ogilvie Bros.' Camps. Ducks, partridge, deer, caribou and moose

Sparkle, New Brunswick, reached by the Canadian Pacific Ry. Accommodations at camps of Murdock Mackenzie on Southwest Miramichi River. Partridge and small game plentiful, also moose, caribou and deer.

North View, Victoria County, New Brunswick, reached by the Canadian Pacific Ry. to Plaster Rock. Accommodations at camp of George E. Gough. Partridge, small game, deer, bear and moose.

Candiac, Saskatchewan, Canada, reached by the Canadian Pacific Ry. Party camped out. Guides $4 a day. Prairie chicken and duck shooting reported good.

Minadi, Ontario, reached by the Grand Trunk Ry. Accommodations at Holst Point Hotel, L. Holst, proprietor, for $2.50 a day. Ducks and partridges, also deer, bear and moose.

NEW OUTDOOR BOOKS

Dan J. Singer's "Big Game Fields of America, North and South" (Geo. H. Doran Co.) is breezing along with undiminished sales and continued popularity. Every outdoorsman likes to read well-told hunting tales, and this big volume of personal hunting reminiscences, extending over two continents, will always find a home spot on the library shelf of the ardent hunter. "Camp Craft," an up-to-date volume on camping and hitting the trail in all the various sections of our broad country, has lately been published by Chas. Scribners Sons. The author, Warren H. Miller, as editor of FIELD AND STREAM, has had exceptional facilities for giving the subject practical experiment and study, and the work contains all that is accepted by modern outdoorsmen as constituting modern practise and equipment. In dog books, "Dog Breeding," by Williams Hans Haynes, the well-known dog authority, comes to hand from the Outing Publishing Co. A very meritorious and useful work for the amateur kennel owner or the sportsman who wishes to raise his own kennel of hunting dogs. From the same company we are in receipt of "Fishing with Floating Flies," by Samuel G. Camp. While not having quite the weight of the well-known classic by E. M. Gill on the same subject, nor the artistic quality of the similar volume by George La Branche, this book will appeal to the beginner. For the nature lover we recommend two new books, "The Butterfly Guide," a pocket work by Dr. W. J. Holland (Doubleday, Page & Co.), and "Western Wild Flowers," by Margaret Armstrong (G. P. Putnam's Sons). Both of these are arranged for complete and handy identification of the interesting and beautiful wild life encountered by the sportsman in his trips after fish and game.

The SPORTSMAN'S WORLD

HUNTING AND WOODCRAFT

HUNTING AND FISHING IN THE CANAL ZONE

By Lieut. Townsend Whelen

DEAR MILLER:

As you know we arrived here on March 26th. The regiment was assigned to the abandoned town of Culebra for station. Culebra is situated on the west (North American) side of Culebra Cut, on top of the hill forming the west side of the Cut. For quarters I drew a house on the very brink of the Cut. From my porch I can look right down into the Cut and through it almost to the Pacific Ocean. To the east also the view is fine, embracing a big vista of mountains and jungle across the canal almost down into South America. I am in a two-family house and have the upstairs portion, consisting of two large rooms, two very small rooms, a small kitchen and bathroom, and a dining porch. A screened-in porch surrounds it on two sides. Pretty small quarters, especially for this climate. The servants are all Jamaican negroes.

The climate here during the month of April was fine. It was hot in the middle of the day, but there was always a cool breeze blowing. At night it was always cool enough to sleep under a sheet. But the last three weeks have been simply hell. The weather has just been like a Turkish bath all the time. A little rain every day to keep up the humidity, hot sun, and no wind. I am drenched all the time. But this is the worst month of the year here when the winds are changing from the dry season wind to the wet season wind. Already the wet season is starting and will keep up until next December. It rains from 1 to 3 p.m. and every evening just like clockwork.

There is lots of game here but it is very hard to get on account of the impenetrable quality of the jungle. We have deer, javelin, tapir, alligator, jaguar, ocelot, sloth, squirrels, and perhaps wild turkeys. I want to try to establish the presence of wild turkeys here if I can as I believe that it will make a new record for the southern limit. The whole country is covered with the thickest jungle that I have ever seen. That in the Philippines cannot hold a candle to it. With the assistance of a bolo one might be able to cut 100 yards through it in half an hour, but even that rapid rate of progression is doubtful. All hunting is confined to the trails, which are not numerous, and which are being rapidly overgrown now that the Zone has been depopulated of all natives. Most of the deer here are killed by hounding, and the rest of the game by chance. I have scruples against hounding deer and don't think that I shall try it except as a last resort. Some few deer are occasionally caught in the trails, where they come to feed on the young grass that grows there, and I shall continue to try for them by still hunting.

The finest fishing in the world, bar none, is to be found just below the Gatun spillway, where the waters of Gatun Lake empty into the Chagres River. This spot is simply jammed with tarpon, great big fellows that can be seen swimming around there at any time. I was there for only about ten minutes one day and saw literally hundreds of big tarpon. There is room at this spot for about twenty fishermen. The tactics are to wade on the apron of the dam and cast into the rapid water below. Days when the fish are biting well a man will get a strike almost at once. The record, I believe, is nine tarpon landed in one day, which is going some. There are also many other tropical fish which I do not know the names of. The reason for the prevalence of the fish there is that little fish somewhat like perch are swept by the hundreds into the spillway coming from Gatun Lake and are killed by the drop and spewed out below the apron. These live perch-like fish are used for bait. The spillway is getting famous, and you, no doubt, will hear of it from other sources soon. You are perfectly safe on going ahead and recommending it as the best tarpon fishing in the world. People wishing to enjoy it can stay at the Washington Hotel, at Colon, but it is pretty expensive work for the tourist as that hotel, which is the only one possible, charges New York rates. The best fishing is in the dry season, as during the rainy season one or more gates of the spillway are open most of the time, and while a gate is open it is impossible to stand on the apron on account of the wash of the water. I have sent to the States for a tarpon outfit and will be right in it in about a month. There is also good fishing in the canal for a large fish which is very good eating. They run up to about ten pounds.

I have been out hunting four times. The only thing that I got was a little, unknown animal. It is 26 inches from nose to tip of tail. The tail is black, hairless, and about one inch long. Hair very like that of a woodchuck. Three toes. Would you mind sending this to some of your naturalist friends and asking them to identify it. The hind legs, by the way, were much longer than the forelegs. It was very good eating.

The hunting here is pretty

strenuous. It is awfully hot, and you have to carry large quantities of water. The trails are so overgrown that you often have to cut your way long distances. Ticks are very numerous. There is also a small invisible insect here which goes up your sleeves and down your neck and burrows in the skin, making a very sore and itching bite. I have literally hundreds of these bites now and they persist in their infernal itching for about ten days and interfere greatly with sleep. I am beginning to wonder if the hunting is worth the torture.

By far the most interesting things here are the plants and the birds. The bird life is wonderful. I never heard anything like the chorus of song that comes from the jungle all day long. The birds all are strange to me, all brilliantly plumaged. There is one bird here that looks very like the scarlet tanager, but smaller, also a black one with ivory beak that in shape, tail and flight is very like the magpie, but it feeds on fruit. The trees here are magnificent, great big ones 150 to 200 feet tall. Many of them have about a dozen roots, which do not unite in a common trunk until they are 30 feet from the ground. Others send shoots down into the ground from branches a hundred feet up. Trailing and hanging creepers are everywhere. The smaller growth is largely comprised of many varieties of palm and banana. There are also many flowering bushes with beautiful flowers.

General Goethals has set aside a portion of the Zone on the west side of the canal between the Mandinga and the Cocoli Rivers in which no hunting is allowed. I believe that this was done on account of the various water supply basins being in this tract, and it was desirable that all tresspassers be kept off the water sheds and also that no game be wounded to die in the reservoirs. This tract comprises about 50 square miles, and if the present regulations are kept in force will make a splendid game refuge. However, the killing of all herons and other plumaged birds is now prohibited, and the jungle is a pretty adequate protection to other living creatures except the alligators. The killing of alligators should be restricted or prohibited, or else they will soon be exterminated here. As far as I can learn they do no harm at all.

Camp Gaillard, Culebra, Canal Zone, Panama.

A SAIL FOR YOUR FISHING SKIFF

FIELD & STREAM PUB. CO.:

I have a flat-bottom fishing boat or skiff, length 17 feet 6 inches, beam 52 inches, depth 16 inches, which I use on a large lake of fresh water, such as are found here in Florida.

What I want to know is: can I fit a sail to the boat for use in windy weather; also can I make same myself?

If it is practicable, can you give me some idea of what the dimensions should be for a boat of that size?

H. B. DICKINS.

Ans.—This boat is too narrow for a single sail. Would suggest a leg of mutton mainsail stepped well forward, of 10 feet boom and 15 feet hoist, foot topped up about 18 inches. Mizzen or jigger sail of 7 feet boom and 10 feet 6 inches hoist. Put one set of reef points on each sail for heavy breezes.—ED.

THE ADIRONDACK GIRL

There's the kiss of the sun on her face;
The brush of the wind in her hair.
She is lissome yet strong in her grace;
She is manly yet womanly fair—
The Adirondack Girl!
There's the blue of the lakes in her eyes,
And she laughs like the mountain rills;
And deep in the heart of her lies
The mystery of the hills—
The Adirondack Girl!

—STEPHEN CHALMERS.

—Courtesy *Saranac Lake News.*

ANOTHER PLACE FOR YOUR 1915 VACATION

Did you ever hear of the Chesapeake Bay? I expect you have. Did you ever hear of the Elk River? Possibly, but you never thought a great deal about it. Well, the Elk River is the headwater of the Chesapeake Bay, and the boats plying between Philadelphia and Baltimore run down the Delaware River to Delaware City, where they enter the Chesapeake & Delaware Canal, which carries them to Chesapeake City, where they leave the canal and enter Back Creek, which is followed four miles to West Point, where the Elk River is met; then seven miles to Turkey Point, the head of the Chesapeake Bay. Turkey Point is well known to the sportsmen who frequent the Susquehanna Flats every Fall in pursuit of the elusive duck. As a ducking ground, the Flats are too well known to need any recommendation or description, so we shall pass to other places not so familiar.

In the Spring the fishermen put out pound nets to catch the herring which run up the rivers at that time of year, and the Menhaden boats which frequent the Jersey coast during the Summer months lay around and buy these herring for about a dollar per thousand. When they have a load they take them to the factories in Virginia, where the oil is extracted and fertilizer made from the residue.

The shooting is always good; rabbits and squirrels are plentiful, an occasional woodcock is found and any number of plover, which are hunted with the aid of a horse and carriage. In the Fall the reed and rail birds arrive, then the ducks, and finally the geese and swan.

If you happen to be a motorboat enthusiast, the Chesapeake and its tributaries offers one of the finest of cruising grounds, with any number of interesting rivers to explore. And to the motorboatist with a touch of the wanderlust comes the oysters and the rock and sea trout fishing, which are found in large numbers in the Chester River.

Every year canoeists explore these waters, camping out without the annoyance of mosquitoes and enjoy the good things to eat found along this wonderful shore. There are any number of good camp sites for any one wishing to camp out. Aside from the features which appeal to the sportsman are to be found some very attractive residences scattered along the shore of the Elk. Bohemia Hall, the old Manor House, still stands not far from the shore of the Bohemia River, one of the tributaries of the Elk.

The Chesapeake & Delaware Canal played an important part during the war with the South when the bridges were burned, and no way of getting the troops to Washington. The canal solved the problem and carried the troops to Baltimore, from where they were carried by train to Washington in time to prevent its threatened capture by the Confederates.

All this, and more, is only fifty-five miles from Philadelphia City Hall by automobile, over excellent roads; hard macadam all the way, if you wish; a trip I made a dozen or more times during the last year, and yet if you mention the Chesapeake Bay and Maryland to the average New Yorker or Philadelphian he immediately gives you the eye and thinks of Maryland as being somewhere this side of Florida.

Now, fellow sportsmen, forget Maryland as being "way down South" below the Mason and Dixon line, and forget your mountains and sand dunes, and take a chance on the headwaters of the Chesapeake Bay.

A SUBSCRIBER.

CONSERVATION

HOOK AND LINE FISHING ALL YEAR AND ALL SIZES

Senator Dailey Procures Adoption of Amendment Removing Restrictions on Angling in Illinois

SPRINGFIELD, ILL., June 1.—Senator Dailey won a fight in the Senate to-day in behalf of the pleasure fishermen when he procured the adoption of an amendment to the fish and game bill permitting fishing with hook and line at all times with no limit upon the size of the fish that may be caught in this manner. The senator made an appeal for the adoption of the amendment on the ground that most of the fish hooked in this manner would die if thrown back into the water, and as a conservation proposition the limiting of the size of fish caught on hooks and lines was a joke.

FIELD & STREAM PUB. CO.:

I am enclosing the above clipping from the Chicago *Tribune*, of even date.

I have been a reader of your esteemed publication for a good many years, and will be interested in hearing your opinion of this article. I know what my personal opinion is.

V. A. GWYER.

Ans.—Your ideas on this matter and mine are probably first cousins. It certainly is a shame that with so much being done for conservation of fish and game that a law like this could be passed.—ED.

BOOKS ON UPLAND GAME-BIRD AND WILD FOWL PROPAGATION

The National Association of Audubon Societies, with offices at 1974 Broadway, New York City, has 10,000 copies of the booklets "Propagation of Upland Game-Birds" and "Propagation of Wild Water-Fowl" for free distribution to sportsmen and others who are interested in the conservation of our game birds and water fowl. Mr. Herbert K. Job, an expert in this line, is the author of these two bulletins, and writes in an interesting and authoritative manner on these subjects.

REFORESTATION BEGUN BY A NEW YORK LAWYER

Richard James Donovan, lawyer, of the Woolworth Building, New York City, has just completed the planting of 430,000 pine trees at Pine Park, Franklin County New York. Seventy thousand of these pine trees were planted this spring, and the entire planting has been completed in three years. The work, which is known as underplanting, is located about Pine Lake, Lily Pad Lake, Rainbow Lake and Clear Pond, in the townships of Franklin and Brighton in the Adirondack Mountains between Loon Lake and Lake Placid.

Mr. Donovan says: "The trees are thriving and the loss has not been more than 2 per cent of the entire planting. These trees were all purchased from the State Conservation Commission at prices ranging from $1.50 per thousand to $4.00 per thousand, depending upon the age of the tree. The cost of planting is only from $3.00 to $5.00 per acre and from 600 to 1,000 trees are planted. A good man will plant 1,000 seedling trees in a day."

He finds from experiences of tree planting that guides and all natives living in the vicinity have become intensely interested in the protection and care of newly planted forest from fires. There have been no fires in the vicinity since tree planting began, and the burning of oil on the locomotives by the New York Central and Delaware & Hudson Railroads and the patrol which follows each train from station to station during the dry season, and the lookout signal stations established by the State on Loon Lake Mountain and St. Regis Mountain appears to give complete protection to the forests.

Mr. Donovan further says: "Tree planting is a splendid investment because it rapidly enhances the value of the land, makes it more salable and in a few years will develop a fine timber and lumber forest and adds to the scenery in that charming mountain and lake region and gives protection to the birds and wild game and improves the watersheds. It makes better shooting and fishing. Every owner of land and every native Adirondacker ought to become an enthusiastic tree planter. The interest that it stimulates and the outdoor life that it cultivates is a fine asset to people both for health as well as for financial gain. The Adirondacks, with its 1,800 lakes and numerous pure streams and lofty mountains, ought to become nature's greatest playground and health resort on the earth, and it will be if people plant trees and maintain the existing forest by protection from fires. The Adirondack region is truly America's Killarney."

NEW FISH FOR JERSEY WATERS

Chinook Salmon to Be Introduced by Game Commission

Working out plans that will make it possible for a Jerseyman to catch in the streams and lakes of his own State many varieties of the great game fishes of America, the New Jersey Fish and Game Commission is arranging for the introduction of the famous Chinook salmon into New Jersey waters.

This kingly inhabitant of Pacific coast rivers, the Federal Bureau of Fisheries has demonstrated, can be transplanted into deep water interior lakes, and within the last few years remarkable success has been attained in stocking New England ponds with the Chinook, with the result that Yankee anglers this season are catching many of these big fish.

That New Jersey has many lakes in which the salmon would flourish is the belief of the State Commission, and President Ernest Napier is arranging with Commissioner W. L. Finley, of Oregon, for the first shipment of 500,000 Chinook eggs to the New Jersey hatchery at Hackettstown. The young salmon will be reared at the big hatchery until they are large enough to care for themselves and then will be liberated in public waters.

The acme of all angling is salmon fishing, but is a sport heretofore enjoyed only by the few with the big pocketbook and the time necessary to seek out the eastern streams where the big fish run. In the very near future this royal sport will be within the reach of every holder of a New Jersey fishing license.

Other fish, new to this region, which the New Jersey Commission plans to rear this season for restocking purposes, are the celebrated Loch Levin trout, of Scotland, and the giant steelheads—the sea-running varieties of the rainbow trout. It is the policy of the New Jersey Commissions to make every available stream and lake a source, not only of sport but of food supply for the average citizen.

The results attained with the big hatchery at Hackettstown, in operation only two years, have made a New Jersey fishing license, costing residents only $1.15 and non-residents $2.15, a permit to enjoy some of the finest fishing to be had in America.

Rainbow trout, brook trout, brown trout, land-locked salmon, various kinds of bass, white perch, yellow perch, crappie, pike and pickerel are the chief of New Jersey's game fishes that now offer the angler a choice to suit any whim of the fisherman. And so great is the output of fish that can be produced at the new hatchery that within a few years the State will be able to boast of waters that teem with fish like the streams of an untapped wilderness.

—Courtesy *The Warren Tidings.*

SHOTGUNS AND RIFLES

N. R. A. NOTES

The National Rifle Association of America announces the result of the first inter-club competition at short outdoor ranges with .22 caliber rifles, the first national competition of this kind ever held in the United States. Each club is represented by a team of 5, each man firing 10 shots prone at 100 yards on the bull's-eye military target reduced and 10 shots rapid fire at 50 yards on a miniature silhouette target, the possible for a team being 1000 points. Thirty-five of the leading rifle clubs of the country are entered in the competition and all teams are to shoot ten times, the grand aggregate score to count for the championship.

The first match was shot during the week ended June 5, and the following are the scores of the teams:

Order.	Club.	Slow Fire.	Rapid Fire.	Aggregate.
1.	Peters Rifle & Revolver Club, Kings Mills, O.	566	484	950
2.	Auburn, N. Y., Rifle Club	466	415	941
3.	Bucyrus, Ohio, Rifle Assn	459	453	912
4.	Pittsburgh, Pa., Rifle and Rev. Club	444	461	905
5.	Massachusetts Rifle Assn., Boston	444	459	903
6.	New York City Rifle and Rev. Club, Inc	...	...	900
7.	Meeker, Colo., Rifle Club	432	455	887
8.	Fort Harrison Rifle Club, Indianapolis, Ind.	426	460	886
9.	St. Louis, Mo., Colonial Revolver Club	430	454	884
10.	Cypress Hills R. & R. Assn., Brooklyn, N. Y.	426	441	867
11.	Fremont, Ohio, Civilian R. & R. Club	429	428	857
12.	Dallas, Tex., R. & R. Club	422	434	856
13.	Ashburnham, Mass., Rifle Club	423	432	855
14.	Portsmouth-Norfolk, Va., Rifle Club	425	423	848
15.	Canton, Ohio, Rifle Club	443	392	835
16.	Hydraulic Pressed Steel Co. Rifle Club, Cleveland, Ohio	426	407	833
17.	Toledo, Ohio, Yacht Club R. & P. Assn	391	433	824
18.	Shawnee R. & R. Club, Lima, Ohio	398	406	804
19.	Citizens R. & R. Club, Rochester, N. Y.	401	399	800
20.	Kiowa Shooting Club, Des Moines, Iowa	349	408	757
21.	San Simon, Arizona, Rifle Club	325	430	755
22.	Kansas City, Mo., Rifle Club	313	435	748
23.	Nogales, Arizona Rifle Club	345	398	743
24.	Niskayuna Rifle Club, Schenectady, N. Y.	344	397	741
25.	Quincy, Ill., Rifle Club	316	414	730
26.	Black Hawk, Utah, Rifle Club	303	409	712
27.	Ephrata, Wash., Rifle Club	293	372	665
28.	South Chicago, Ill., Rifle Club	278	382	660
29.	Interwoven Rifle Club, New Brunswick N. J.	261	311	572
30.	Ithaca, N. Y., Rifle Club	252	284	536
31.	Chicago, Ill., Rifle Club	71	318	389
32.	Fort Worth, Texas, Rifle Assn	99	217	316
33.	Milwaukee, Wis., Rifle and Pistol Club	93	98	191
34.	Liberty Rifle Club, Pittsburgh, sent no targets in.			
35.	Lewiston-Clarkston Rifle Club, Lewiston, Idaho, sent no targets in.			

The highest individual score was made by C. E. Shapley, of the Auburn Club, 195, being 95 at slow fire and 100 rapid fire. J. W. Stebbins, of the same club, also made 100 at rapid fire. The best individual score for slow fire was 97, by two members of the Peters Club, John Beedle and A. D. Rothreck.

THE ALL-AROUND REVOLVER

FIELD & STREAM PUB. CO.:

Through your most excellent magazine I have learned some valuable ideas and would like to ask your opinion as to whether the .32-20 Colt or the .45 Colt is the best all around revolver for an outdoors man.

Most of the opinions I have heard are for the .45, while some say the .45 is too heavy and that the .32-20 is the best and most accurate.

Your opinion on this subject would be a great help to me, for I put great confidence in FIELD & STREAM. M. W. BELL.

Ans.—The .45 is a better all around revolver than the .32-20, but in our opinion the .38 Colt is better than either of them. The .38 has a good punch, and a large variety of loads may be used in it, from the short range to the .38 Smith & Wesson Special and Colt Special cartridges.—ED.

SMOKELESS POWDER FOR RIFLES

By E. C. Crossman

Part III

Smokeless powders used in war may be divided into two distinct classes—the propellants or the powders used in gun barrels to drive shells and bullets—and the high explosives used to burst the shells or to use in torpedoes. Yet they are so startlingly similar in makeup that one is surprised that they behave so differently.

High explosives—pure guncotton, nitroglycerine, dynamite, lyddite, melinite and similar substances—are properly exploded by detonation—meaning that they are set off by a jar or explosion wave, as opposed to a straight burning, like powder in a gun barrel.

When a powder detonates it evolves gas so instantaneously and so furiously that it wrecks anything opposing it. The action of dynamite on hard rock is an example. As example of a powder of the other type take the powder used in the army rifle, which burns, not detonates, and which burns at a comparatively slow rate, doing work instead of wrecking.

The powder in the gun barrel is fired by a flame, dynamite and kindred substances are fired by the terrific *shock* of a dynamite cap, which itself is fired by heat. However, opposed to the common belief, the powder in the shells of the field guns—commonly shrapnel, is not a high explosive wrecking the shell into fragments of iron. In the shrapnel the powder is a slow burning propellant, driving out the 250 round balls ahead of it from the steel shell but NOT wrecking the shell itself any more than Schultze wrecks a shotgun barrel in driving out the load of shot. Shrapnel is merely a short shotgun barrel, timed to fire its charge and drive out its bullets when curving down toward its target.

Yet, while we know that pure guncotton and nitroglycerine, either alone or combined, make a violent and uncontrollable high explosive, we find the same things in our rifle powder. The difference lies merely in the slight amount of added substance used as a "deterrent" or regulator. In cordite 5 per cent of vaseline is used, this serving to slow down the rate of burning and make the powder work instead of wreck. In American guncotton another deterrent is used, with graphite, with which the grains are coated, to aid in slowing down the rate of ignition and to lubricate the gun barrel. Yet as pointed out, the constituents of rifle powders, and violent, dangerous high explosives are startlingly alike. Blasting gelatine and cordite are nearly the same thing.

Smokeless powder grains in American usage are accurately proportioned to the chambers in which they are to be used. Here again is a refinement of ballistics that we do not find in foreign powders.

Our own powders, for example, range from the huge grain of Ross cut pyrocellulose—a powder adapted to a high velocity, small bore rifle—to the small grains of sharpshooter intended to use in

straight, large bore rifle shells originally intended for black powder.

In one extreme we have a large powder chamber tapering down to a very small rifle barrel of .280-inch diameter. As our powder starts to burn, the bullet is moved forward, increasing the chamber space. But, when the bullet is moved forward, say a half inch, our powder room is increased by just ½ by .28 inch. To this is added the friction of a relatively very long bullet. So we have to use a powder grain that won't get in any unseemly hurry, lest our pressures go up frightfully, and then quit work when the bullet is only fairly started up the barrel. Naturally small kindling burns up more quickly than large lots, and small powder grains burn up more quickly than large ones. So the largest grains are used in the rifles with small-bore barrels and large powder chambers, and in this we find the Ross .280, the 1906, the 7 and 8 mm. Mausers and such cartridges.

But if we make over, say the old 45-90 into a smokeless powder rifle, we find a relatively short bullet, and a bore that is as large as the shell itself, with no bottle neck. The slightest move forward of the big bullet increases our powder space far more in proportion than did the move of the .280 bullet. There is no tapering shell and bottle neck to compel the gases to crowd through as sheep crowd through a gate.

So our difficulty is in getting enough resistance to make our powder do its work and not burn harmlessly after the bullet is well up the barrel. We must have continued high pressures to burn any smokeless powder—no pressure against it, no work from the powder. Some powders such as Ross cut pyro will not do any work under 40,000 lbs. pressure per square inch.

So with all our straight shells, and big-bore rifles we use such powder as Sharpshooter, burning completely at the comparatively low pressures of these made-over cartridges, and burning quickly because of the very small grains. Also this powder contains about 35 per cent nitroglycerine and the gas evolved is very hot and very elastic.

And so we have a powder—either of the older nitroglycerine type like Sharpshooter and W. A. or of the newer pyro produced by the DuPont Co.—accurately proportioned in web and cut of grain to do its best work in the rifle for which it is intended. To use Ross cut in the 25-20 would be laughable because this cartridge is not a high pressure cartridge, in the nature of the rifle in which it is fired and the powder would not even burn up. It would act the same way in low pressure smokeless rifles of the 45-90 class. To use Sharpshooter, intended for low pressure cartridges, in the Ross or '06 in full charges would be disastrous, because it works too fast and too violently. Our pressures with 45 grains of Sharpshooter in the Ross go up to 75,000 lbs. per square inch, with a muzzle velocity lower than the standard, whereas 57 grains of Ross cut pyro give but 52,000 lbs. pressure, and the standard velocity of 3,100 ft. secs.

In the revolver we get the quickest burning of any of our powders, because first, the powder chamber was originally intended for black powder, the amount of our smokeless is limited through considerations of pressure, and the four or five grains of Bullseye or R. S. Q. has enough room for a country dance. Then again the barrel is very short, and the gas escapes freely between cylinder and barrel, reducing pressures when we need them the most. So Bullseye is made in very thin small grains, to burn up instantly—a cut that would wreck a rifle, if used grain for grain with the ordinary rifle charge.

Practically all American sporting smokeless cartridges are loaded with powders of the older nitroglycerine type. Erosion is hardly a consideration in a rifle used only for big game shooting unless a man happened to run foul of one of the buffalo herds of the days of the first trans-continental railroad.

At the same time the largest powder company in this country is endeavoring to substitute its pyro of varying cuts and web of grain for the older type of powder in all sporting cartridges. The change would be a good one—because once in a while reports seep in of trouble in the climatic extremes of Alaska and South America of nitroglycerine powder giving abnormal pressures. Pyro will not do this. The choice of our Government was not based on a fairy story. The .25-.3000 cartridge is loaded with pyro, the .22 HiPower cartridge of at least one company is also loaded with pyro—which you'll remember is pure guncotton with a chemical of the nature of ammonia—diphenalimine—added to make it keep for years. Modern cartridges are characterized by two things—pyrocellulose and non-mercuric primers.

I list the commonly known and used types of the old nitroglycerine powders, with the cartridges in which they are intended to be used.

W. A., formerly the powder of the army, used in the Krag-Jorgenson for ten years. For this cartridge 36.2 grains. 1903 Springfield—no longer made by the Government, 45 grain. .33 WCF 36.7 grains, .35 WCF 45 grains, .405 WCF 45 grains.

Lightning—the same chemical basis as the W. A., but cut finer in grain, intended for the 7 m.m. Mauser, the entire list of the 30-30, .303 Savage, 32-40 High Power, 35 Rem. autoloader, and kindred cartridges, practically the whole list of medium powder American game cartridges.

Sharpshooter, a powder with a high percentage of nitroglycerine, very hot and quick burning, intended for use in black powder rifles and in both low velocity and high velocity cartridges for these arms. List includes all these from the 22-15-60 Stevens up to 50-110 high velocity, which uses up 47 grains of this violent stuff. An idea of its power is gained by noting that in the 38-55 high velocity cartridge 20 grains is the charge, while in the 38-55 High Power, but little different in velocity and the same in bullet, 26 grains of lightning is used. Unique, a very quick burning Sharpshooter cut fine, used up to 10 grains for reduced loads or for cartridges of low power using very short bullets. Marksman, Schuetzen and DuPont Rifle No. 1 are "bulk" powders similar to the bulk shotgun powders, and occupy much more room, weight for weight, than the "dense" powders we have listed.

Our Ideal friends have compiled a table showing the bullet weight, and the powder load for every modern American cartridge. As this information is not commonly made public, I print this table with this article. The table shows only the older type of powder, still universally used, and I omit the list of pyro powders because the DuPont Co. have changed these around so that the table is probably not correct in this department. That is, pyro powders have since been evolved more suitable to the cartridges listed than the powders shown. "Hivel," mentioned in this

"IDEAL" TABLE OF FACTORY POWDER AND BULLET LOADS

Cartridge	Bullet Weight	Name of Powder	Powder Weight
6 m.m. Navy	112 gr.	W. A.	32.5 grs.
6.5 Mannlicher	160	Lightning	32
7 m.m. Mauser	175	Lightning	34
7 m.m. Mauser Spitzer	139	Lightning	38.8
7.65 m.m. Mauser	219	Lightning	34
8 m.m. Mauser	227	Lightning	37
.22 Sav. HiPower	70	Hivel	26
25-35 W. C. F.	117	Lightning	18
.25 Rem. Auto-L.	117	Lightning	22
.25-36 Marlin	117	Lightning	16.5
.280 Ross	142	Hivel	58
.280 Ross	180	Hivel	49
.30-30	160	Lightning	23
30-40 U. S. A.	220	W. A.	36.2
.30-40 U. S. A. Spitzer	150	W. A.	42
30-45 1903	220	W. A.	45
.30-1906 (Springfield)	150	Hivel	47
.30-1906 (Springfield)	180	Hivel	46
.303 Savage	180	Lightning	26
.303 British	215	Lightning	28
.303 British Spitzer	174	Lightning	32
.33 W. C. F.	200	W. A.	36
.35 W. C. F.	250	W. A.	45
.405 W. C. F.	300	W. A.	45

table is a 15 per cent nitroglycerine powder.

The factory loads for some of these cartridges is *not* the nitroglycerine powder listed, but pyrocellulose—otherwise known as DuPont powders Nos. 20, 19, 10, etc. The .280 Ross 142-gr. bullet is loaded with 57 grains pyro—No. 10. The 1906-30 cal. is loaded regularly for 150-gr. bullet, with 46 grains pyro—No. 20. These pyro powders are adapted particularly for every cartridge on the list, but the loading, as before stated is not given because of the appearance of new forms of pyro, and doubtless changes in the recommended loads thereof. All powders listed are the older type of nitroglycerine, used for years in all these cartridges with the exceptions noted.

THE ANGLE OF DEPARTURE AS APPLIED TO RIFLES

FIELD & STREAM PUB. CO.:

Will you please tell me, through the "Shot-guns and Rifles" department of your most excellent magazine, of which I have been a reader, from cover to cover, for a long time, and prize above all my outdoor magazines (six in all), the meaning of the term "Angle of departure," as regards rifles, especially in reference to the .303 Savage with 26-inch barrel.

This term may also have a dense or vague meaning to other sportsmen who, perhaps, are as ignorant as I.

CLYDE GEORGE BLISS.

Ans.—The angle of departure of a firearm for a certain range is the angle that the axis of the bore makes with the horizontal in order to have the trajectory curve of the bullet fired from it intersect the same horizontal line produced to that point at the range mentioned.

Of course the line of sight is, for all practical purposes, horizontal, and so the difference between the actual horizontal line and the line of sight is entirely negligible.

In other words, the flight of a rifle bullet is always a curve downward. In order to place the bullet accurately at any range the barrel has to be pointed up a little bit so as to allow the bullet to raise at the middle of its curve and then to drop accurately at the point desired to hit.

When the rifle is aligned correctly so that it will do this, the angle that the axis of the bore forms with the horizontal line drawn from the muzzle of the rifle to the point intended to be hit is the angle of departure.

SAVAGE ARMS CO.

ANNUAL OUTING OF SOUTHWESTERN OHIO FISH AND GAME PROTECTIVE ASSOCIATION

The annual contest was held on May 21st at Madison Park, Oakley, and was a great success.

A feature of the first event, the trapshooting contest, was that three presidents finished first, second and third. This contest consisted of 20 targets at unknown angles from the 16-yard line. J. E. Klimper, of Covington, president of the Northern Kentucky Fish and Game Association, won, breaking 18 targets; H. R. Irwin, Ft. Thomas, president of the Southwestern Ohio Field Trials Association, was second, with 15 targets; Dr. J. W. Kirgan, of Cincinnati, president of the Southwestern Ohio Fish and Game Protective Association, third, with 14 targets.

Revolver Contest—L. B. Cornish, Cincinnati, first 9 hits at 40 yards; G. E. Pugh, Pleasant Ridge, second, 9 hits at 35 yards; Ed. Womacks, Cincinnati traffic patrolman, third, 12 hits at 35 yards.

Rifle Contest—A. H. Kenan, Cincinnati, at 75 yards in 13 hits, first; Frank Cist, Cincinnati, at 70 yards, 18 shots, second; James Klimper, Covington, at 65 yards, 13 shots, third.

The dueling contest, in which two marksmen with revolvers took positions five yards apart on a firing line six yards from two clay pigeons, was won by Elliott Pugh, 4128 Forest avenue, with Manly Phillips, Dayton, Ky., second.

Accurate Fly-Casting Contest, at 50, 55 and 60 feet—James Klimper, first, score 97 5/15 per cent; M. L. Bangham, second, 97 1/15 per cent; J. W. Kirgan, third, 97 per cent. Novice Accurate Fly-Casting at 40, 45 and 50 feet—Harry Hutchins, first, 97 2/15 per cent; George Welsh, second, 96 3/15 per cent; John Daniel, third, 94 10/15 per cent. Accurate Bait Cast, ¼ Oz.—A. E. Fogel, Columbus, first, 97 6-10 per cent; Mr. Runyan, Columbus, second, 97 4/10 per cent; Charles E. Jones, Jr., Price Hill, third, 97 3/10 per cent. Distance Fly Cast—M. L. Bangham, first, 78 feet; J. W. Kirgan, second, 74 feet; James Klimper, third, 69 feet. Accuracy Bait Cast, ½ Oz.—C. E. Jones, Jr., 98 2–10 per cent, first; Frank Hannaford, second; A. E. Fogel, third. Jones and Hannaford tied. Jones won the cast off. Fogel and Runyan also tied and Fogel won the cast off. Jones' percentage was 98 3/10 and Fogel's 98 2/10. Accuracy Bait Cast, 1 Oz., Novice—Mr. Munster, first, 93 per cent; George Bangham, second, 90 1/10 per cent; D. C. Crane, third, 84 7/10 per cent. Distance Bait, ½ Oz.—John Daniel won; M. L. Bangham, second; Frank Hannaford, third. Distance Bait, 1 Oz., Novice—Mr. Randolph, first; Mr. Munster, second; D. C. Crane, third.

THE FIT OF SHOTGUN STOCKS

Paul A. Curtis, Jr.

There is nothing about a shotgun of as much importance or that is disregarded to such a degree by the average sportsman as the fit of the stock.

To the occasional discerning hunter the acquirement of a perfect fit is like Sir Galahad's search for the Holy Grail. This may not be a good simile, but it is no exaggeration to say that out of 100 average sportsmen 75 have poorly-fitting guns; 20 will have fair fits and out of the other five there may be one that is perfect in every respect. Exaggerated as this may seem it is a really conservative estimate. To begin with, only a limited few can afford to experiment with guns until they find one that suits—and very few men can tell without the help of an expert gunfitter, and a practical test under actual conditions in the field, the various little adjustments that may be needed to make the gun right.

If the writer were about to purchase a new field gun and were allowed his choice in only one detail of its construction, he would forget barrels, locks, weight, boring and everything else and say, "Let me pick out the stock." For the most perfectly constructed gun in the world would not be as effective as a cheap pot-metal scatter-gun that cost $10.00 but fitted correctly.

Yet the average city man walks into a gun shop, throws a few guns to his shoulder, picks out one that he believes is the best—and the salesman advises him to take—and walks off with it. While the country man either goes to town and does the same thing, or worse, orders it by mail from the factory or through a local dealer.

Now an expert that knows the exact length and drop necessary for his requirements could not do this with any degree of accuracy in ordering a new kind of gun, because the manufacturer might use a flat, hollow rib or a raised one; he might use a thick stock or a thin one; or balance his gun from a different point. Any one of which would make all the difference in the world to the user.

No one can tell how a gun will act in the field by throwing it up on objects in a gun store, for he is bound to be self-conscious and try to point it to the best advantage. But in the eagerness stimulated by a shot afield he would unconsciously use the same gun differently.

For this reason you will see a man go on year after year making unaccountable misses because he thoroughly believes that his ill-fitting gun fits him perfectly. Tell him that it does not fit and he won't believe you, because, for years, every time that he picked it up he threw it to his shoulder a few times and has unconsciously adapted himself to the gun.

In England the greatest care is taken in properly fitting the prospective purchaser of a new gun. And the measurements are taken with as much care as a high-class tailor would show in fitting a new suit of clothes. Many of the gunmakers conduct shooting schools where the buyer shoots with a try-gun under the observation of an expert gunfitter until the proper adjustment is secured; then his gun is stocked accordingly.

The shooting is done at clay pigeons thrown from a tower 50 to 90 feet high to give practise at driven pheasants, and from traps sprung without warning from cover in fields, where they are placed to give shots such as would be afforded by birds walked up with a dog

In this way a gun can be fitted perfectly, the results obtained being almost impossible by fitting yourself.

Another cause of people falling down in their shooting is that a gun that fits perfectly this year may not fit at all well five years from now. As an illustration, the writer had a beautiful gun built to order some years ago that was a perfect fit, and naturally he swore by the gun and claimed that nothing could ever make him part with it. Gradually his score in the field began to fall off after three or four years' use—and, finally becoming disgusted, he had a new gun built with radical changes in the bend of the stock and the length, and immediately he was back in form. The answer to this is simple—he had lost a great deal of nervousness and as a result did not shoot as fast—also he had taken on considerable more weight. And this is often the case. As a man changes, both physically and mentally, the change is so gradual that he doesn't notice it and in time he may be shooting a gun that he has adapted himself to little by little, but which doesn't suit him at all.

Of course a good shot can shoot fairly well with almost any gun handed to him, and a novice can adapt himself to an ill-fitting gun so that he can do moderately well with it. This is the general state of affairs, but he will never do himself justice with a gun that is not a correct fit.

The average gun is not stocked on the best principles. For some reason American sportsmen, as a rule, use guns that are entirely too crooked for them, and the tendency towards straighter stocks at the present time is entirely due to the fact that trap shooting is educating the people up to the advantages of the high shooting gun.

Seventy-five per cent of the game shot at is going away from the gunner and rising. So the logical thing to do is to use a gun that throws its charge high. It thus makes an allowance on the game and it has not got to be led so far, and also, as the game is never covered with a high-shooting gun, it is always in sight, so that you can get on the bird much quicker for the second shot and tell exactly how far you are leading it. This is a great advantage, as one seldom allows too much; in fact, it seems to be impossible to do so on fast flying game.

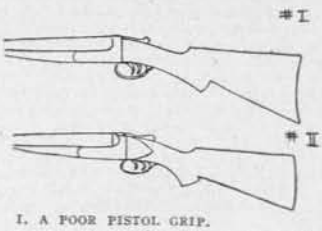
With a crooked stocked gun the game has to be covered up with the muzzle of the gun if rising and going away, or in coming, and it is for this reason that so many sportsmen call these the hardest shots when they should be the easiest.

Another disadvantage of the crooked stock is that the recoil is a great deal more severe on the shooter as it does not come back on a straight line against the shoulder. Due to the bend of the stock there is a leverage on the barrels that forces the comb of the stock against the face and bruises the cheek.

Therefore the comb should be as thick as possible, as a sharp, thin comb will bruise the face most and also, if the comb is too thin, it may cause the marksman to crossfire by sighting too far over on the gun instead of down the center of the rib.

If the heavy comb is not enough to prevent crossfire, as it may not be in the case of a very thin-faced man, the gun should be cast off or on, as the case needs, but this, to the writer's mind, should not be done if it can be avoided.

One thing that the writer has never been able to account for is the almost universal use of the pistol grip in this country. And despite the fact that almost all of our guns have them, except trap guns, there is not a manufacturer in the country that turns out a correctly constructed pistol grip. The so-called full pistol grip as made here is nothing more than a half-pistol grip—and the so-called half-pistol grip is nothing but an abomination. If a pistol was made with a grip like its namesake that our American shotguns are afflicted with you could not hit a barn door with it at 20 paces. Invariably they are made as in sketch No. 1,



I. A POOR PISTOL GRIP.
II. THE AUTHOR'S IDEAL OF A PISTOL GRIP.

entirely too long to be of any service such as they are intended for: that is, to fill the hand snugly and give a firmer grip and better control over the gun. For this reason a good pistol grip is an advantage on a heavy ducking gun in which heavy charges are fired—if it is constructed properly, as shown in sketch No. 2.

But for the field the pistol grip is a disadvantage as the hand can not be shifted as quickly or smoothly from one trigger to the other, as instantaneous photographs show that it is in the act of firing the second barrel.

There is, however, a greater disadvantage in the pistol grip that few sportsmen are aware of. That is that due to the pressure of the under side of the hand against the end of the pistol grip there is a leverage exerted in quickly putting the gun to the shoulder that turns the gun sideways and throws the alignment of the barrels off of the true horizontal plane.

This is serious, as it will deflect the charge from the intended point of aim to a considerable extent and causes many unaccountable misses.

British sportsmen have never favored the pistol grip, and it is fortunate that American sportsmen are learning to avoid it also. For the tendency in pulling back the hand to reach the rear trigger of a gun with a pistol grip is to deflect the muzzle, whereas the same operation on a straight grip gun is to elevate the muzzle, which is, of course, a great advantage.

This argument is in no way derogatory to the use of a pistol grip on rifles, where it is of advantage to hold the arm as steady as possible, and a pistol grip gives a more direct pull on the trigger; also, the shooting is more deliberate.

Of course a perfect fit is not an absolute necessity to all sportsmen, for they may be divided into two great classes: the slow, deliberate shots and the quick, instinctive ones. The first-mentioned class can adapt themselves to moderately well-fitting guns, but to the instinctive shot, who shoots with both eyes open, makes a mental allowance for his game, throwing the muzzle of his gun ahead and lets go when the butt hits the shoulder. To such a shot a perfect fit is indispensable.

Almost all of our best shots are in this last-mentioned class, and if you ask one of them how they shoot or how much lead to give a bird, invariably they cannot tell you. For they don't know.

And this is one of the secrets of their success: their whole attention is concentrated on the game; their guns fit so perfectly that the shooting is done automatically without distracting their attention from the flight of the game to properly align the gun.

GEORGETOWN GUN CLUB SHOOTS FOR FIELD & STREAM TROPHY CUP

FIELD & STREAM PUB. CO.:

Following are the names of the members who shot for the Field & Stream Trophy Cup, together with their scores:

H. Kaminski, 93; W. H. Thomas, 91; E. Plowden, 91; T. D. Forbes, 86; H. W. Fraser, 92; J. R. Siau, 92; E. W. Durant, 90; C. G. Barr, 91; W. E. Hutson, 89; W. S. Fitzsimmons, 88; W. H. McDonald, 90; B. F. McLeod, 90; Isaac McG. Carraway, 94 (winner); E. E. Fraser, 84; J. R. Powell, 93.

We had four 25-target events under the added handicap system and the above score includes the handicap. Our grounds are so situated that the sun is always at your back after 12 o'clock.

Mr. Isaac McG. Carraway made the best score and is the winner of this trophy cup.

Yours respectfully,
F. L. SIAU, Field Captain,
Georgetown Gun Club.

Would you like to have one of the Field and Stream Cups for your Gun or Fishing Club? This makes a dandy prize for one of your big events. Write us for the full particulars.

A 20-BORE BOOSTER

FIELD & STREAM PUB. CO.:

I have been reading with much interest the various articles appearing at different times in your magazine and others on the efficiency of the small-bore shotgun, and while I do not lay any claim to being in the expert class, I have decided to write my personal experience. My first shooting was done with an old muzzle-loading Kentucky squirrel rifle, and many a squirrel have I laid low with it. For years it seemed to me a crime for any person to go squirrel hunting with a shotgun, and it was several years before I ever used one myself and then, to tell the truth, I felt ashamed of myself and do yet when I hunt squirrels with a shotgun. Game finally became so scarce and was hunted so much that conditions were such that in order to get a squirrel occasionally I had to use a shotgun. When I decided to buy one, seventeen years ago, I ordered a 16-gauge, partly because I wanted a lightweight gun and partly because I thought I would be giving the game more of a chance. I do not believe in ruthless slaughter and I do believe in giving the game some chance. I feel as much disappointed as does any brother sportsman when I have to wander homeward with an empty bag, and those occasions are very rare. For seventeen years what shooting I have done has been with a 16-gauge, and while I do not do a great deal of hunting I have had as good results and more frequently better than did the fellows with me who used the 12-gauges.

I have done quite a bit of shooting at the trap with the 16-gauge and always at the regulation distance specified for a 12-gauge gun, and when in practise my average for three years' shooting was 21 out of every 25 birds (clay) that I shot at. My experience proves to me that it is the man and not the gun. If you hold the gun in the right place when you pull the trigger you will make a killing shot. This last fall I used a 20-gauge, and with satisfactory results; so much so, in fact, that were I to get a new gun it would be a 20-gauge.

I recently came into possession of a table of patterns and found the study of it very interesting. Experts concede that velocity and penetration in a 20-gauge is equally as good as in the 12-gauge; in fact, some claim it is better. Now look at a pattern table and make a few comparisons. In a 30-inch circle at 40 yards the number of pellets, size 7½ shot, ⅞ of an ounce, from a 20-gauge gun, full choke, will be 227. Now look at the 12-gauge loaded with 1⅛ ounces of shot at the same size circle and the same distance, cylinder bore, which is the bore of a great many right barrels, and you will see that there is a pattern of only 154 pellets. Does not your 20-gauge have it on your first shot, supposing your other barrel to be modified choke? Note the result, 232, or five more pellets than your second shot from the 20-gauge. Supposing your left barrel of the 12-gauge was full choke; note that you will pattern 290; then add the number of pellets you get from both barrels of your 20-gauge full-choke and you find 454. Now add the number of pellets you get from both barrels of your 12-gauge, one barrel cylinder and the other one full choke, and you find 444. Note which the difference is in favor of. For hunters who are financially able to travel to the various States and shooting places at different times of the year and for different kinds of game it may be well enough for him to have several different styles of guns. For the workman or man of moderate means who gets just an occasional day's hunting, or perhaps a few days each season, and several times a year a few shots at the trap for pleasure, practise or sport, as it may look to him, I think the 20-gauge gun by far the best. I have refrained from mentioning any make of gun. I know what my own is, also know what make I would get if I were to get a new one. Any good grade gun will do good work, and the various makes, for minor reasons, appeal to different people for different reasons and, justly speaking, I do not think the average man capable of being a good judge, for we have not had sufficient experience with the various makes to gain sufficient knowledge of the points of superiority of the different mechanisms.

H. S. CAMPBELL,

NATIONAL RIFLE ASSOCIATION INDIVIDUAL GALLERY COMPETITION 1915

Ohio again adds more scalps to its already long list of shooting victories, a member of the Peters Rifle and Revolver Club of Kings Mills, Ohio, A. D. Rothrock, having won the individual gallery championship of the United States for 1915. In winning the championship Mr. Rothrock succeeded in placing 49 of his 50 shots in the bull's-eye, which is about the size of a ten-cent piece. His only shot out was a nine at eleven o'clock, and it missed the bull by a hair. The second highest competitor was L. S. Chilcott, of the Bangor, Maine, Rifle Association, probably one of the oldest competitors in the shoot, and his score was 497. This score was tied by A. B. Gully, of the Park Club, of Bridgeport, Conn., but his score was outranked as he went out for a nine on his 47th shot, whereas Mr. Chilcott went out for a nine on his 31st shot.

Three men tied with 496, but Harrell Crane, of the Peters Club, outranked the others by finishing with 31 bulls. B. F. Spicer, of the Bucyrus Rifle Association, of Ohio, came next, ending his score with 18 bulls. L. S. Chilcott, Jr., of Bangor, made a nine on his 49th shot. In the two 495s John Wilson, of the Peters Club, outranked as he wound up his string with 21 bulls, as against J. Williams, of the Park Club, who made a nine on his last shot. The struggle for tenth place and last prize was between James Crawford, of the Peters Club, and Capt. Frank Alderman, of the District of Columbia Rifle Association. Crawford wound up with ten bulls as against three for Alderman and won the place. The 1914 winner, Fred B. Spooner, of the Newport, R. I., Rifle Club, was 41st in the order of scores. Sixty-nine of the finest small-bore shooters in the country took part in the competition.

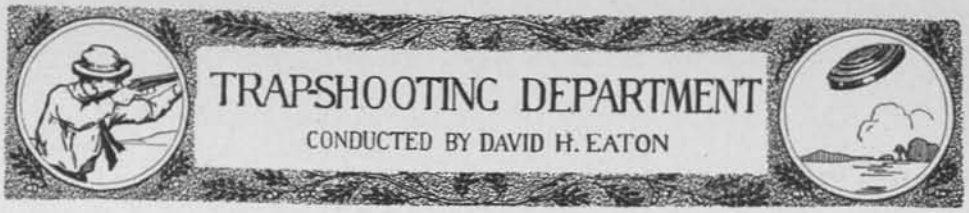
Mr. Rothrock, the winner, is well known to those riflemen who have been attending the Camp Perry shoots, as he has been a member of the Ohio State Team and has always been a competitor in the big matches. In describing the methods he used in winning the championship, he says that the whole matter resolves itself into the question of hard, intelligent practise. He states that he must exercise and go through a course of training and use the same care and practise that he uses in a match. He further says: "My success is partially due to the fact that our range is very conveniently situated, making it possible to get in a practise score every night. I used three 100-watt amber-colored lights placed about three feet from the target and also used a pair of King's shooting glasses, which combination seemed to do away with all eye strain." The conditions of the match called for fifty shots at 75 feet with .22-caliber rifle and ammunition, the target having ten rings one-quarter inch apart, the counting bull one-half inch in diameter, counting ten, and the sighting bull being two inches in diameter, total possible score 500.

A list of the 14 highest competitors and their scores follow:

Order	Name	Club	Score
1.	A. D. Rothrock,	Peters Rifle and Revolver Club	499
2.	L. S. Chilcott,	Bangor, Me., Rifle Assn.....	497
3.	A. B. Gully,	Park Club, Bridgeport, Conn.....	497
4.	Harrel Crane,	Peters Rifle and Revolver Club....	496
5.	B. F. Spicer,	Bucyrus, Ohio, Rifle Assn.....	496
6.	L. S. Chilcott, Jr.,	Bangor Rifle Assn. ....!.....	496
7.	John Wilson,	Peters Rifle and Revolver Club....	495
8.	J. Williams,	Park Club..	495
9.	M. E. Carroll,	Marion, Ohio, Rifle Club.....	494
10.	Jas. Crawford,	Peters Rifle and Revolver Club....	493
11.	Capt. Frank Alderman,	Dist. of Col. Rifle Assn.	493
12.	Lewis Burns,	Peters Rifle and Revolver Club....	492
13.	W. R. Richard,	Quinnipiac R. & R. Club, New Haven	492
14.	J. Albright,	Park Club...	492

Official from the National Rifle Association, Washington, D. C.

If you are interested in guns and there is some point which is not clear to you, just drop us a line; we will be glad to send you complete dope on the subject. That's what we are here for.



TENNESSEE STATE TOURNAMENT

The third annual tournament was held at Nashville, June 4 and 5, under the auspices of the State Fair Gun Club. The Interstate Association's Amateur State Championship event was won by Tom Hale, of Mt. Pleasant, with 99; John H. Noel, Nashville, runner-up, with 98. The remaining five trophies in the event were won by Walter Williams, Howard Cochrane, John B. Duncan, P. M. Shelton and Howard VanGilder, in the order named. Hale was last year's State champion. W. Henderson won high general average, breaking 197 on the first day and 199 on the second, a total of 396. John Noel was a close second with 196 and 198, total 394. The professionals were outclassed by the amateurs, Homer Clark breaking a total of 395, getting 195 on the first day and 200 straight on the second. C. E. Goodrich was second with 392. The State Challenge cup was won by John Noel after two shoot-offs of a tie on 98 with Dr. W. L. Henderson, of Lucy, the former having one target the better. The championship race was shot in the last 100 targets of the second day. Noel was in an early squad and went out with 98. Tom Hale was in next to the last squad, and had broken the first 50 targets straight when Noel finished; with 50 more to go he began to be considered as a possible winner, or at least with an excellent chance of getting in a tie. The next 15 targets were broken, as were the 15 of the next event. With only 20 more to shoot at, and a straight score of 80, it seemed like all was over but the shouting, and when Hale dropped one target near the end of the event, no comment was made, for he finished with 99, winning the race. C. O. LeCompte, the professional of Asheville, N. C., was the star performer of the tournament. Starting in on the second day with a run from the day before, he continued breaking them until, when he finally let one get away, he had accumulated a run of 225 straight, which was the long run of the shoot. There were 61 entries during the tournament, and 44 contestants shot through the entire program, turning in some remarkably high scores.

INDIANA STATE TOURNAMENT

The tenth annual tournament of the Trapshooters' League of Indiana was held at Indianapolis, on June 8, 9 and 10, under the auspices of the Indianapolis Gun Club. Good weather prevailed during the shoot, and there was an average of 75 shooters on the firing line. The places in the main event, the Interstate Association's contest for the Amateur State championship, were only decided after a shoot-off for each, the final results giving the championship and first trophy to Roy H. Bruns, Brookville, 98; E. H. Bindley, Jr., Terre Haute, runner-up, 98; the five remaining trophies to the following in the order named: R. H. Arvin, Indianapolis, 97; Edgar Apperson, Kokomo, 97; C. H. Peck, Remington, 97; R. E. Probert, Claypool, 96, and W. Kivitts, Terre Haute, 96. On the first day there were 71 shooters facing the traps in the ten 15-target events of the regular program. A special event at 50 targets was also shot for a trophy donated by Claypool Hotel. This was something in the way of a novelty, as 25 targets were shot by daylight and the other 25 after dark, under artificial light. The trophy was won by D. C. Rogers, of Logansport, after shooting off a tie with C. A. Edmonson, of Clayton. High amateurs for the day were: W. Roach, Terre Haute, 148, winning the first of the seven cups offered for high average; W. N. Wise and C. H. Peck tied on 147, Peck winning the toss-up for second cup, and Wise taking third; W. Kivitts was next with 146; then came J. C. Dixon, of Indianapolis, and R. E. Probert, of Claypool, with 144; the toss-up for fifth was won by the former, and Probert took sixth. R. H. Bruns, of Brookville, and D. C. Rogers tied on 143, and the seventh cup was won by the former with a straight score in the 20-target shoot-off. C. A. Young, of Springfield, Ohio, was high professional with 147; W. D. Stannard, Chicago, and F. K. Eastman, Indianapolis, 144 each; O. J. Holaday, Indianapolis, 141. The program was repeated on the second day, with the exception of the special. The total of the first two days constituted the race for the league's amateur State championship and the Parry cup. This was won by W. E. Roach, of Terre Haute, with scores of 148 and 145, total 293 out of 300. C. H. Peck, second, with 291, and R. E. Probert, third, with 290. On the day's program, Edgar Apperson and C. A. Edmonson headed the amateurs with 147 each; R. E. Probert 146; W. E. Roach and C. C. Hickman 145 each. C. A. Young was high in the professional class with 149, Ed Banks 145 and W. D. Stannard 144. At the beginning of the last event Edmonson and Probert were tied on 132 out of 135, but Probert dropped his first target, while Edmonson went straight and nosed the former out of the first place tie by one target. The two-men team contest was also decided on the scores of the two days. There were a number of teams entered, the leaders being Roach and Kivitts, of Terre Haute, and Probert and Apperson, of Logansport. When Apperson stepped to the score for his last event, a single target lost meant a tie between the two teams, but he broke them all, and his team won by a score of 579 to 578. The program for the last day consisted of four 25-target events in the morning, the first and third, 50 targets, being for the President's cup, and the second and fourth for the Secretary's cup. Over seventy shooters faced the traps. The President's cup was won by B. F. Failey, of Terre Haute, with a score of 50. He broke 49 in the Secretary's cup events, a total of 99 out of the 100. C. H. Peck, of Remington, also broke 99, but lost in the first race on 49, and won the Secretary's cup race with 50. R. H. Brun was second with 49 and 48 in President's and Secretary's events, total 97; Arvin 47 and 49, and Apperson 47 and 49, total 96 each. The contest for the Interstate's Amateur State championship was exciting, and several shoot-offs were required to decide the winners of the several places. At the end of the fourth round R. H. Bruns was only one down out of 80. Apperson and Bindley each had a score of 78. Apperson, in the eighth squad, had a fighting chance if he could get his last 20 straight, but he failed to do so, and went out with 97. Bruns, in the ninth squad, was a sure winner if he went straight, and could drop one and still be sure of being in a tie for first; this is just what he did, finishing with 98. Then came E. H. Bindley, Jr., with 78 out of 80, and a chance to tie with Bruns, if he could account for his last 20 targets. He turned the trick, displaying the nerve and coolness of a veteran, going out with 98. In the shoot-off for first place, Bindley let up a little, losing his fifth and nineteenth targets, while Bruns dropped only his nineteenth, and won first trophy, Bindley being runner-up. In the shoot-off for the next three trophies, Arvin and Apperson broke 20 straight; Peck dropped one, which gave him fifth trophy. The next shoot-off was a tie on 19 between Arvin and Peck, and in the next time up Arvin broke straight, taking third trophy, and Apperson took fourth on 18. Probert won the tie on 96, and the sixth trophy with a score of 20 in the shoot-off, seventh trophy

going to Kivitts, who broke 18. High amateurs for the day were: C. H. Peck 196; R. H. Bruns 195; Edgar Apperson 193, and E. H. Bindley 192. The professionals were headed by C. A. Young with 197; G. H. Ford 191; Ed Banks and W. D. Stannard 188 each. Several long runs were made, C. A. Young heading the list with 167-103-99-51, and an unfinished run of 45 at the close; C. H. Peck 145; R. H. Bruns 103; B. F. Fairly 100; Mrs. Vogel, of Detroit, 73. The tournament in 1916 will be held at Indianapolis.

WESTERN HANDICAP

The Interstate Association's tenth Western Handicap was held at St. Louis, Mo., on June 15 to 16, under the auspices of the Missouri Athletic Association, on the grounds of the St. Louis Trap Shooters Association. Good weather prevailed throughout the tournament, which was, in every way, the most successful in the history of the handicap. The attendance on the last day was a record breaker, 230 entries being received for the main event, the Western Handicap, exceeding the record made at Denver in 1906, the first year the tournament was held. The Preliminary Handicap, on the second day, was won by J. B. Goodbar, of Memphis, Tenn., with a score of 97 from 19 yards. Ferd. I. Knittel, of St. Louis, was runner-up with 96, from 16 yards. J. S. Frink, Worthington, Minn., won third trophy, after shooting off a tie on 95. The Western Handicap, shot on the last day, was won by W. Raup, of Portage, Wis., after shooting off a tie on 97 with T. A. Snell, of Staunton, Ills., and George Grubb, of Wetmore, Kan. Second and third trophies were won by Snell and Grubb, in the order named, Raup and Grubb shot from 20 yards, and Snell from 18 yards. On Practise day, G. W. Akard, of Humansville, Mo., was high in a field of 58 shooters, with a perfect score of 100; following him in the amateur ranks came J. B. Goodbar, Memphis, Tenn., Woolfolk Henderson, Lexington, Ky., J. H. Noel, Nashville, Tenn., F. J. Reppenhagen, St. Louis, W. S. Spencer, St. Louis, and S. A. Huntley, Omaha, Neb., with 98 each. Guy Dering, Columbus, Wis., G. T. Hall, Laomi, Ills., J. W. Bell, St. Louis, C. B. Eaton, Fayette, Mo., and C. H. Ditteau, Keithsburg, Ills., were in third place with 97 each. J. R. Graham, Ingleside, Ills., and C. G. Spencer, St. Louis, were high professionals with 99 each; Bart Lewis, Auburn, Ills., and J. R. Taylor, Columbus, Ohio, second with 98 each. R. W. Clancey, Chicago, E. D. O'Brien, Florence, Kan., H. Kennicott, St. Louis, F. G. Bills, Chicago, and T. A. Marshall, Chicago, third with 97 each. The opening day of the tournament brought out 115 shooters, all shooting through the regular program of 150 targets, and 44 facing the traps in the special event at 25 pairs of doubles. The contest for amateur honors was a hot one, C. C. Plummer, of Swan River, Manitoba, Canada; G. W. Ball, of Bridgeport, Ills.; E. S. Winbigler, of Alexis, Ills., and A. M. Burr, of Rockford, Ills., tying for first on 148; A. C. Buckles, of Lake Fork, Ills., A. C. Connor, of Springfield, Ills., and George K. Mackie, of Lawrence, Kan., second with 147 each. Ed O'Brien, Florence, Kan., and Art Killam, St. Louis, tied for high professional honors on 149; J. R. Taylor and F. G. Bills, second with 148 each, and J. R. Graham, Ingleside, Ills., 147. In the double target event, John H. Noel, of Nashville, Tenn., won high amateurs honors with 46; Guy Dering, of Columbus, Wis., was second with 44; W. Henderson, Lexington, Ky., J. W. Bell, St. Louis, D. J. Holland, Springfield, Mo., and S. A. Huntley, Omaha, Neb., third with 43 each. D. D. Gross, Kansas City, Mo., was high professional, as well as high over all, with 48; Ed. O'Brien, Florence, Kan., 46; J. R. Taylor, Columbus, Ohio, 45. On the second day 124 shooters faced the traps in the five 20-target events of the morning, and 130 entered for the preliminary handicap in the afternoon. C. C. Plummer was high amateur in the morning events with 99; D. J. Holland, Springfield, Mo., P. Baggerman, St. Louis, C. P. Ray, Rosewell, Ills., and G. K. Mackie, Lawrence, Kan., 98 each; W. E. Byrn, Marion, Ills., G. L. Dearing, Shelbyville, Ills., C. B. Eaton, Fayette, Mo., W. Henderson, Lexington, Ky., and J. S. Frink, Worthington, Minn., 97 each. Ed. Banks, Wilmington, Del., Art Killam, St. Louis, and R. W. Clancey, Chicago, headed the professionals with 99 each; O. R. Dickey, Boston, Mass., Ed. O'Brien, Florence, Kan., and J. R. Taylor, Columbus, Ohio, 98 each; T. H. Fox, Lynchburg, Va., Bart Lewis, Auburn, Ills., and H. D. Gibbs, Union City, Tenn., 97 each. In the Preliminary Handicap the race was a hot one between J. B. Goodbar, 19 yards, and F. Knittell, 16 yards. At the close of the first string Knittell had a lead of 1 target, with 20 to 19; in the second string Goodbar went straight and Knittell dropped 2 targets, giving the former a lead of 1 target; Knittell gained a target in the third round, going straight to Goodbar's 19, and tied the score 58 out of 60; the fourth round found the score still tied, each contestant going straight, and finishing with 78; in the last round Goodbar dropped one target, and Knittell let two slip through his pattern, the total standing, Goodbar, 97, and winning first trophy, Knittell, 96, winning second trophy. Seven shooters were tied for third place and trophy; A. M. Burr, Chicago; S. L. McGeehon, O'Fallon, Ills.; G. W. Ball, Bridgeport, Ills.; T. M. Ehler, Slater, Mo.; W. Henderson, Lexington, Ky.; J. S. Frink, Worthington, Minn., and B. A. Ehrlich, Terre Haute, Ind., with 95 each. Ball and Henderson withdrew, and the other five shot-off for the trophy. Frink, from 20 yards, won with 19; Burr and Ehler, from 19 yards, broke 18 each; McGeehon, 19 yards, 17, and Ehrlich, 18 yards, 15. The professionals were headed by C. G. Spencer, with 95 from 23 yards; W. R. Crosby, O'Fallon, Ill., 23 yards, and L. Ebert, St. Louis, 20 yards, 94 each; H. Kennicott, St. Louis, 22 yards, 92. The winner received $82.80 in addition to the trophy; the runner-up, $71.75; third money, $38.65; fourth money, to score of 94, $22.10; five 93's paid $14.35 each; twelve 92's paid $2.75 each. Squad No. 18, Huntley, Akard, Henderson, Killam and Graham, made a perfect score of 100 in event 4 of the morning program. The program for the last day was the same as that of the previous day, the Western Handicap being shot in the afternoon. In the morning's events, D. J. Holland was high amateur with 100 straight; J. W. Akard, S. A. Huntley, C. Funderburk and A. H. Campbell, 99 each; J. W. Bell, C. F. Linde, L. Seidner, W. J. Raup, J. B. Goodbar and P. Baggerman, 98 each. The professionals also turned in some high scores, J. R. Graham being at the top with 100 straight: Art Killam, W. R. Crosby, Ed. O'Brien and F. G. Bills, 99 each. The Western Handicap resulted in a tie for first place on 97 between T. A. Snell (18 yards), Staunton, Ills., W. J. Raup (20 yards), Portage, Wisc., and George Grubb (20 yards), Wetmore, Kan. Several shoot-offs were necessary to decide the winners of first, second and third trophies, the three men agreeing to divide the first three moneys. The first shoot-off was a tie on 18; in the second time up, Raup broke 19, and won first trophy, the others tying again on 18; in the next two shoot-offs Snell and Grubb tied on scores of 18 and 20; going to the score for the fifth time, Snell still kept up his pace and won the second trophy with 19, Grubb taking third on 16. Following these three shooters came G. T. Hall (20 yards), J. H. Noel (20 yards), C. C. Plummer (20 yards), and A. C. Connor (20 yards), with 96 each; M. L. Barr (16 yards), and J. W. Bell (19 yards), with 95 each. The professionals finished with G. H. Ford (16 yards), Nashville, Tenn., Ed. Banks (20 yards), and J. R. Graham (23 yards), dividing first place honors on 95 each; H. D. Gibbs (22 yards), 94; O. R. Dickey (18 yards), B. Lewis (21 yards), and J. R. Taylor (22 yards), 93 each. High amateurs for the three days on 350 targets were: D. J. Holland and C. C. Plummer, 344 each; P. Baggerman, 342; J. S. Frink and S. A. Huntley, 341 each; A. H. Campbell, W. Henderson and J. W. Akard, 340 each. High professionals, Art Killam, 347; Ed. O'Brien, 346. Long runs of 50 or better were numerous, a few of the best ones follow: J. R. Graham, 177; D. J. Holland, 73-82-119; D. D. Gross, 106-79; A. C. Buckles, 115; C. Funderburk, 104; H. W. Cadwalader, 115; W. S. Spencer, 106-61; J. W. Akard, 105-59-62-54-62-101; C. G. Spencer, 51, from 23 yards, 77-67-106; A. Killam, 109-136-109; E. Winbigler, 95.

DOG SHOWS AND FIELD TRIALS

August 14—Rhode Island Kennel Club, Newport, R. I. Charles Biesel, secretary.

August 26—Lynn Kennel Club second show, Nahant, Mass. Charles O'Connor, secretary.

September 6-9—Minnesota State Agricultural Society, Hamline, Minn. J. C. Simpson, secretary.

September 13-16—Spokane Kennel Club, Spokane, Wash. George P. Larsen, secretary.

September 14—Lenox Dog Show Association, Lenox, Mass. F. S. Delafield, secretary.

October 5—Orange County Field Trial Club, Middletown, N. Y. C. C. Haines, secretary.

October 6-8—Danbury Agricultural Society, Danbury, Conn. James Mortimer, secretary.

October 25—New Jersey Beagle Club field trials. Gordon B. Phillips, secretary.

October 27-28—Boston Terrier Club specialty show, Boston, Mass. C. N. Grey, secretary.

November 2—Bulldog Club of America specialty show, New York City. J. Harry Rushton, secretary.

November 3-6—Duquesne Kennel Club of Western Pennsylvania, Pittsburgh, Pa. R. W. Kenney, secretary.

November 10-11—French Bulldog Club of New England, Boston, Mass. Walter Burgess, secretary.

November 18-20—Pacific Coast Boston Terrier Club, Los Angeles, Cal. Mrs. J. E. Brown, secretary.

November 16-18—Open to all breeds show, Panama-Pacific International Exposition, San Francisco, Cal. D. D. Dively, secretary.

November 23-26—Eastern Dog Club, Boston, Mass. Alfred Dorr, secretary.

November 30 to December 2—Fort Orange Kennel, Poultry and Pet Stock Association, Albany, N. Y. J. W. Stott, chairman.

December 3-4—Central New York Kennel Association, Utica, N. Y. George W. Dygert, secretary.

December 8—Toy Spaniel Club of America, New York City. Mrs. H. S. Morris, secretary.

April 19, 1916—Toy Dog Club of New England, Cambridge, Mass. Mrs. J. T. Schaffner, secretary.

RABBIT AND BIRD DOGS

FIELD & STREAM PUB. CO.:

Can a dog be taught to hunt birds and rabbits both? What is the best breed of bird dog? For a rabbit dog?

NORMAN MITTELSTAEDT.

Ans.—No. Best breed for rabbits, beagle hound. For birds either pointer or setter. To allow the latter two to hunt rabbits is to ruin them for birds.—ED.

DOG KENNELS

FIELD & STREAM PUB. CO.:

I am contemplating building a good, warm, well-ventilated kennel for about twenty dogs—some greyhounds, collies and Spitz dogs. Have you or can you recommend to me some publication which will give me full information as to the proper way to build it?

John T. Bachman.

"The Foxhound," by General Roger D. Williams, contains the best kennel building dope that I know of. This book may be bought through FIELD AND STREAM for 70 cents.—ED.

IMPORTANT NOTICE

On and after January 1, 1916, no AMERICAN-BRED dog will be eligible to registration unless its parents (both sire and dam) have been previously registered. Owners of STUD DOGS and BROOD BITCHES are afforded an entire year (between January 1, 1915, and December 31, 1915) to register their breeding stock.

A. P. VREDENBURGH,
Secretary American Kennel Club.

PUPPIES AND PIGS

FIELD & STREAM PUB. CO.:

I am enclosing a photo which may be interesting to your readers. The photo is not the best, as it was made under very trying circumstances.

"Bessie" is a pure-bred canine owned by Mr. Nelson Listenfelt, of near Pennville, Ind., a prolific breeder, having raised twenty five puppies in three years and a freak mother, as shown in the picture.

"Bessie" took charge of the two pigs and raised them along with a litter of puppies, seemingly as proud of them as her own offspring.

She is an excellent rat dog, although too large to tunnel under buildings, but nevertheless is highly prized by her owner for this characteristic. RAYMOND TOURNEY.

THE ORIGIN OF THE POINTER

In reply to letter of inquiry concerning the origins of the pointer, we would answer as follows:

The origin is wrapped in obscurity; probably developed from the pointing-hound types of the Middle Ages. First appears in print in English sporting articles in the early part of the eighteenth century.

Dash, the first field-trial pointer we have record of, was produced by crossing a foxhound on a highly bred pointer hound bitch of the early crouching type.

American pointers begin with Sensation and Don, a fine bench dog, but not up to modern standards as a field dog. Consolation, owned by General Williams, was the first representative of modern field standards.

Other good ones among early importations were Bow, Bang, Sleaford, Croxteth, Robert Le Diable, Meteor, Graphic and King of Kent. Later were bred in America Hal Pointer, Jingo, Mainspring, Hops, Queen 3d, etc., all representative of the best American field pointers. Alford's John, Fishel's Frank, Riprap, Hard Cash, Manitoba Rap, etc., are representative modern winners.—Ed.

FIELD & STREAM PUB. CO.:

Please permit me to thank you for those most interesting articles from your pen on hunting dogs that are appearing in FIELD AND STREAM.

I have a promising setter pup, six months old; has been spayed; is lean and thin, and rather small but healthy. Am wondering if starting her on pheasants will spoil her for partridges. What do you think? H. B. CALLENDER.

Ans.—We would be entirely against using a partridge dog in your state and New York on pheasants, for the reason that your partridges are wild and the dog must come upon them softly, like a cat, and at that you are likely to flush the partridge when you walk in. The pheasant, on the other hand, is a running bird, and will get a partridge dog crazy on him, for when the scent is strong he goes into point, meanwhile the partridge is running, forcing the dog to road him yet more. At that, he will seldom catch up with him, and will be in such a state of mind that he will be rough with the next partridge he scents, and most likely flush him. Down in my country in south Jersey we get good results using beagles on pheasants, especially the small packet beagle, which is slow enough not to flush him before the hunters arrive on the scene.—ED.

FISH AND FISHERMEN

MARINETTE COUNTY ROD & GUN CLUB CASTING TOURNAMENT

FIELD & STREAM PUB. CO.:

The bait casting tournament under the auspices of the Marinette County Rod and Gun Club was a complete success, and I want to thank you for your kindness in sending me a copy of your magazine containing rules for such events.

All the members of our club were advised that this contest was held under rules furnished by your magazine.

The ½ oz. distance event was won by C. H. Bartick, of the Marinette County Rod and Gun Club, his average distance being 103.2 feet.

The ¼ oz. distance event was won by D. T. Dixon, of the Cleveland Casting Club, his average distance being 80 feet for five casts.

The ½ oz. accuracy event was won by Prof. W. E. Morton, of the Marinette County Rod and Gun Club, his percentage being 95.2.

The ¼ oz. accuracy event was won by Denton Smith, of the local club, with a percentage of 80.

J. H. RACE,
President.

A CURE FOR FRAYED LEADERS

By Ladd Plumley

After a leader begins to "grow hair," as I have heard it called, it becomes a very conspicuous object to the eyes of a fish, and, as the ravelings have a tendency to split into the gut, the strength of a frayed leader is much impaired. When leaders are used over streams where there are many up-jutting rocks, they will become ragged long before they should be thrown away and a new leader bent on. And nowadays, fine, round gut is getting more and more expensive. So many anglers, whose pockets are not over-heavy, will use shaggy leaders long after their visibility may prevent a good fish from rising.

In whipping the line back and forth in the air, as is necessary in dry-fly work, so that the moisture shall be flicked from the feathers, a leader will soon develop a raggedness akin to disreputability. And no fisherman, casting over clear waters, and more particularly in casting a dry fly, should hitch his chances to a raveled leader. Indeed, for any fishing, the use of smooth, transparent gut will bring the best results, not only in numbers, but in the largest fish of the water.

Various methods for removing the unsightly ravelings from leaders have been suggested, but there is one which is comparatively unknown and which will restore even a much-raveled leader to almost its pristine condition.

I always carry in the pocket of my fishing coat a small piece of sheet rubber. When the lunching hour comes I hitch my fly to the stout branch of a low-hanging tree, and, folding the bit of rubber over the leader, I rub each link free of its ravelings. A little chunk of soft rubber will serve, but I have found that more care has to be used with solid rubber than with rubber in sheet form. Then, too, you can fold the bit of the pliable rubber around the leader, thus preventing the tendency of making the gut flat, as is the case where block rubber is used. If you don't happen to have any sheet rubber at hand, an ordinary, broad rubber band will do the work perfectly.

It is surprising to see how a little care and a scrap of rubber will relieve the most disreputable of leaders of its rags and restore its appearance so that it will look almost like new. But do not continue the process with too heavy a hand or for too long a time. The initial effect of the friction of rubber on a leader is to remove the ragged portions of the gut and smooth down the surface; but you could easily continue the process until you had much weakened the links. And when bunches of the ravelings gather on the knots of the leader, push them to the middle of a strand and remove them by snapping them away or picking them free.

LEFT-HAND BAIT CASTING

FIELD & STREAM PUB. CO.:

Pardon me, but I would like to cast a pebble into the millpond of "Fish and Fishermen" relative to bait casting. While I am not an expert with the rod and reel, I feel that I can get my share when I go out after the black beauties of the cypress lakes around in this section of the country. Now while I have never read in your magazine of the man who cast left handed, I will say that I do most all the time, even though I am right handed. I found soon after I began bait casting that I lost some fish that struck about the time I was changing hands with the rod or before I had the reel under control, so I could deliver the strike to hook my fish. Since I have been casting left handed I find that as the bait lights on the water I can use a little pull and dash that is very successful on getting a rise. This little spurt of speed when the bait is sinking or as it alights on the water I find very essential for good work and results.

I am a constant reader of FIELD AND STREAM and would like to hear from other sons of the Walton family on this style of the sport they all love so well.

W. H. HENSON.

LEADERS IN THE 1915 PRIZE FISHING CONTEST

This list was compiled from affidavits received up to July 1 only.

Brook Trout, Class A.

E. S. Mills.
E. R. McDonald.
No other entries.

Rainbow Trout.

Dr. A. Vanderstolp.
E. N. Gardner.
No other entries.

Brown Trout.

Dr. Ronald W. Butterworth.
No other entries.

Lake Trout.

Charles S. Slater.
Dr. Karl Christofferson.
Cornelius H. Evans, 2nd.
Abram Preiskel.

Landlocked Salmon

No entries.

Small Mouth Bass, Class A.

Arthur Lowe.
M. D. Seldomridge.
U. S. Jarrett.
No other entries.

Large Mouth Bass, Class A, North.

Dr. Murray Waxman.
Lloyd Hendershot.
Earl Border.
W. O. Crow.

Large Mouth Bass, Class A, South.

J. Morton Clark.
Davis Moon.
J. F. Mayer.
W. E. Gray.

Large Mouth Bass, South. Caught on Fly.

T. D. Howard.
No other entry.

Large Mouth Bass, Maryland, Delaware, Virginia, West Virginia.

James T. Robertson.
Aaron Clarke.
H. S. Newman.
No other entries.

Great Northern Pike.

Frost S. Smith.
No other entries.

Muscallonge.

No entries.

Wall-Eyed Pike.

No entries.

Bluefish.

Peter S. Post.
No other entries.

Weakfish.

No entries.

Striped Bass.

George Kennedy.

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THE "big game" that every mother's son of us must play all day and every day is "*Beat-The-Heat.*" B.V. D. Underwear not only makes summer endurable, but pleasurable. Its cool, clean, soft feel soothes your body when you put it on. Its freedom of arm, leg, all over, smooths your temper while you have it on. The heat isn't less, but you feel it less.

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On every B.V. D. *Undergarment is sewed This Red Woven Label*

B.V. D. Union Suits (Pat. U.S.A. 4-30-07) $1.00, $1.50, $2.00, $3.00 and $5.00 the Suit.

MADE FOR THE B.V.D. BEST RETAIL TRADE

B.V. D. Coat Cut Undershirts and Knee Length Drawers, 50c., 75c., $1.00 and $1.50 the Garment.

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Firmly insist upon seeing this label and *firmly refuse* to take any Athletic Underwear without it.

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London Selling Agency: 66, Aldermanbury, E. C.

Channel Bass.

No entries.

Tarpon.

T. W. Magill.
Mrs. T. W. Magill.
T. W. Magill.
T. W. Magill.

The above list of entries shows that the fishermen are busy and doing their best to land the big fellows. It is probably due to the cool weather that there have not been more fish entered up to date. Do not hesitate to send in your affidavit for fear that your fish is too small to be in the running, as many of the fish already entered are medium-sized and your chance to win a prize is just as good as that of the other fellow.

The salt water fish have begun to appear in the surf and in the bays and we already have fair-sized fish entered in the bluefish and striped bass and tarpon classes.

When you make out your affidavit don't fail to give the length, weight and girth of the fish as these are absolutely essential for the entering of your fish in the contest. Also give full information about the tackle which you used to land the beauty, giving the name of the rod, the manufacturer's name, and the same with the reel, line and lure.

We would rather see a picture of your fish taken with a kodak or hand camera at the time the catch was made, as the scenery and spirit of the outdoors lends more to the picture than will be found in one taken in photograph gallery.

HAVE YOU EVER TAKEN BLUE-GILLS WITH A FLY?

By J. E. Pflueger

The blue-gill is one of the gamiest fish that swim, and is found in most of the fresh waters of the United States and Canada. In some sections they are known as the bream, but they are both of the one and same family. They grow to a weight of one pound, and inch for inch and ounce for ounce, will match any fish of their size, not excepting trout or bass, for a fight on the fly rod.

In the early springtime when they are inshore is the best time to take them on the fly. In the late spring, summer and fall months they are more successfully taken with live bait in deep water, with worm, mill roach, cricket or maggot. I prefer the mill roach.

When a friend of mine first called my attention to the fact that a blue-gill would take a fly, I will admit I was skeptical, and informed him I had to be shown. He called me, and we retired to one of the many lakes near Akron fully equipped with the necessary tackle to give them a try. I found every word my friend had said was true, and I never enjoyed a more agreeable afternoon in all my fishing days, and they have been many. They bit fully as readily and viciously as does either the trout or bass, and put up equally as good a fight. If perchance they missed the first cast, they showed their gaminess by coming right back the next cast, and I know of an instance when a fish came back four times in succession and was finally landed.

I contend the taking of the blue-gill with the fly requires as much skill as does the taking of either trout or bass. They are as quick as a cat, and unless you set the hook the instant you see or feel them, you will miss and then you will probably forget your "fetchin' up" and say where that fish can go providing he is so inclined or not.

While they can be taken with either wet or dry fly, I much prefer the dry, for the reason you can see the fish hit and it is consequently more exciting.

For the benefit of those who have never had any experience, I will explain how best to proceed. For dry fly fishing I prefer a split bamboo fly rod about ten feet long and weighing from five to seven ounces; double tapered silk fly line No. 3; nine-foot tapered single gut leader *without* dropper (use a tail fly only); Grey Palmer fly extra heavily feathered and tied on a hollow point Pennell Sneck hook, size 10, and a good single-action reel of a capacity as will conveniently hold your line; bottle of oil as is sold by tackle dealers under the name of Dry Fly Compound, "Dryfly" oil, and other various names, and a small box of deer fat.

Dip your fly in the oil, after which press it up between two pieces of felt or blotting paper to remove the surplus oil. Take a piece of thick felt or chamois leather about four inches long by two inches wide and fold in the middle. If you prefer, you can purchase a grease pad from your dealer. Now take a liberal amount of the deer fat and spread it evenly in the crotch of your grease pad and rub it on your line for at least forty feet and do it well, as much will depend on this operation whether your line will float properly. Attach the leader and fly, and you are now ready to proceed against Mister Blue-Gill. Cast your fly under overhanging trees and brush, among lily pads, black heads and other likely places until you get a strike, when immediately anchor your boat and fish it out. Where there is one, there is generally more, and I have taken the full limit in one setting as provided by law, which in Ohio is forty fish.

Your fly should fall on the water in a fluffy condition and be allowed to remain stationary only for a few seconds, when it should be *slowly* drawn towards you, all the time watching for a strike. The fish will hit your fly much the same as does a trout or bass, and all depends upon your striking the instant the fish hits, otherwise the fish discovers the deception and will spit the fly.

Should your fly become water soaked and not ride bushy and fluffy on the water, you can dry it out by making several casts in the air, thereby switching the water out of it. If, however, you find after this operation the fly does not remain dry, then re-oil the same as first instructed.

In fishing with a wet fly, you cut out the oiling of fly and greasing of line. I prefer Wickham's Fancy, Professor, Cow Dung or Black June on Sneck hook, size 10, for wet fly fishing. After making your cast, await sufficient time for the fly to sink to the proper depth and then draw slowly toward you by stripping the line with left hand (not reeling), and the instant you feel the fish hit, set the hook with a smart blow of the rod and a short pull of the line with the left hand.

In dry fly fishing, you strike the fish by sight, and in wet fly fishing you strike by feel.

It is the practice among our local fishermen to put back all females.

If you have never fly fished for blue-gills, try it and be convinced and converted same as was I.

BREAKS ALL RECORDS IN SURF-CASTING CONTEST

Dr. Carleton Simon Throws Lead 354 Ft. 9 In. at Midland Beach Tournament

The fifth casting tournament of the Midland Beach Fishing Club, held June 27, on the Staten Island Fair Grounds, at Dongan Hills, was signalized by the establishment of a new world's record, made by Dr. Carleton Simon with a cast of 354 feet 9 inches. Dr. Simon, who is a resident of this city, made the previous record of 349 feet 6 inches last autumn.

In practice this spring he made a cast of 375 feet, with the benefit of a fair wind. This day, however, the wind was blowing diagonally across the field. A four-ounce lead was used.

Dr. Simon has now broken the world's record three times in succession and thereby he won the Finch hammer, which now becomes the property of the Midland Beach Fishing Club.

The tournament embraced six events, three for club members and three open to all comers.

First event, class C, for club members who have never cast more than 235 feet. The best average of three casts: First, Commodore B. M. Kurtz; second, F. M. Mayer; third, W. W. Wells; fourth, C. Le Clercq; fifth, Ed Merrill; sixth, Dr. Raynor.

Second event, class B, for club members who have cast over 235 feet, but not more than 275; best average of four events: First, Fred Fech; second, Henry Adrian; third, Carl Durand; fourth, A. H. Neuberger; fifth, John Missall; sixth, George Foote.

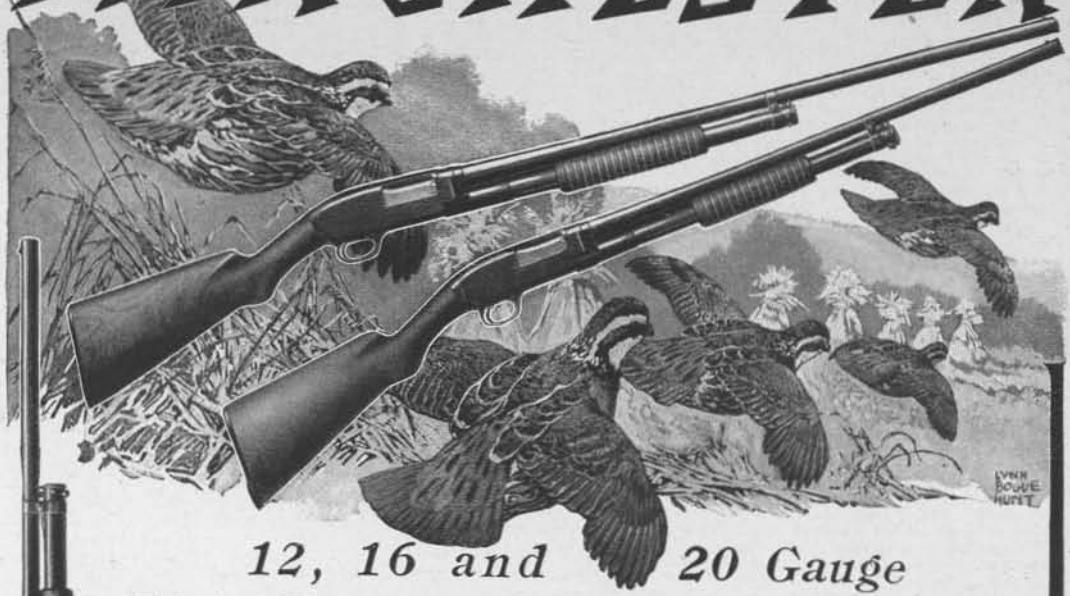
Third event, class A, for club members who have cast over 275 feet; best average of five casts: First, Dr. Carleton Simon; second, William Paul; third, E. E. Davis; fourth, Le Roy Kurtz.

Fourth event, open, best average of five casts: First, C. Simon, Jr.; second, Le Roy Kurtz; third, Fred Fech; fourth, Robert Corson, Asbury Park Fishing Club.

It was in this event that Dr. Simon made his record cast, though he was beaten by his son on the average.

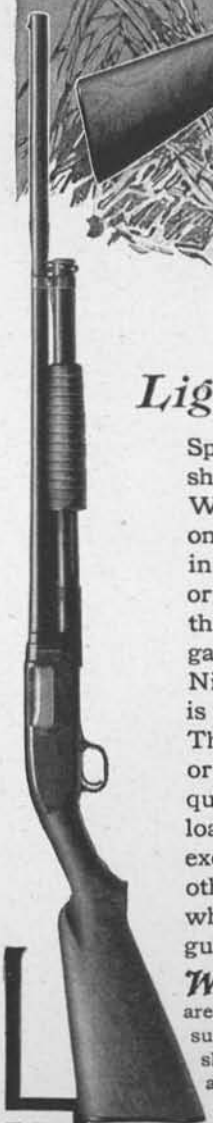
Fifth event, open, longest cast of five: First, E. E. Davis, Asbury Park Fishing Club; second, Dr. Carleton Simon; third, Jack Clayton; fourth, C. Simon, Jr.

WINCHESTER



12, 16 and 20 Gauge
Light, Hammerless Repeating Shotguns

Sportsmen differ as to whether a 12, 16 or 20 Gauge is the best shotgun for field shooting, but the knowing ones agree that the Winchester Model 1912 lightweight, hammerless repeater is the one best bet in the shotgun line. This Winchester being made in 12, 16 and 20 gauges permits an advocate of the big, medium or small bore to indulge his fancy and be sure of getting a gun that is true to its gauge in balance, weight and length. All three gauges of this model are made of specially selected materials. Nickel steel, which is twice as strong as ordinary gun steel, is used throughout for the metal parts in this Winchester. This means a lightweight gun without sacrificing safety or strength. This gun has a cross-bolt trigger lock, a smooth, quick and easy action, and a simple Take-Down system. It loads and unloads easily and its shooting qualities are not excelled by the highest priced double guns. There are many other pleasing and exclusive features of this Winchester which appeal to sportsmen that could be enumerated, but the gun itself is the best evidence of its quality and desirability.



WINCHESTER LOADED SHELLS "LEADER" and "REPEATER," are made with the Winchester patented Corrugated Head which is a far superior method of construction to metal lining, once used in Winchester shells, but discarded years ago. Winchester "Leader" and "Repeater" shells are loaded with all desirable combinations of powder and shot and give the fullest measure of shooting satisfaction in any make of gun.

W FOR A RED LETTER DAY AFIELD, USE WINCHESTER GUNS & SHELLS **W**

Sixth event, open, best average of three casts at a stake 140 feet distant: First, C. Simon, Jr., second, C. Le Clercq; third, A. J. Sahdola; fourth, E. E. Davis; fifth, William Paul.—Courtesy *N. Y. World*.

THE USE OF LIGHT-WEIGHT LINES

FIELD & STREAM PUB. CO.:

The subject of light-weight lines is one which I have seldom seen discussed in the sporting magazines, wherefore I take advantage of this occasion, the landing of my 4 lb. 4 oz. small-mouth bass on an 8-lb. line—to rise and air my views along this line.

Anyone who has fished around Cleveland, or who has fished any place where there is so little fishing worthy of the name as we have here, will probably agree with most of my brother anglers in their opinion that I am the craziest of all the cranks in the fraternity.

We have so little good fishing here that when we do strike a day when the bass are striking, we consider it an event, and my brother fishermen feel that when such times do come, to take any possible chance of losing fish through the use of a light line is little short of madness.

But at that I believe I am entitled to the benefit of a doubt. And I believe that any fisherman who has ever used a light line, and caught and landed fish on it, will agree with me.

During the spring and fall of the year the white bass come in close to the shore of Lake Erie, and even up into the rivers a short distance. Then is when we have our sport. Previous to four or five years ago we hardly heard of white bass around here—and at that time they ran quite small. I believe a law was passed some years ago prohibiting the fish houses from keeping white bass caught in their nets under six inches, and last year and this we have been getting them from one-half to one pound. We at first used minnows, and still-fished, but for the past three years we have been casting or trolling a small spoon-fly, or fly-fished with either a small fly or small spoon-fly. Just imagine getting on the edge of a school of several hundred of these fellows, with a five or six ounce fly-rod. Some sport, eh?

A year ago this spring, while casting with a small spoon for these white bass, my pard and I conceived the idea of using a very light line for this work. At first we tried a five-pound linen laid line, but we found that this kinked horribly after a few casts. I then got a No. 6 silk line from the Kingfisher people, supposed to test 8 lbs. This line worked perfectly—one could use a light sinker ahead of the spoon and still cast it out just as far as a heavier sinker on a heavier line. This is quite a consideration in Rocky River, which is rocky and the water very shallow, and snagging is so common as to be the rule rather than the exception.

I have used this 8-lb. line practically two seasons. Last fall I didn't get any fish over two pounds, but this spring, while trolling for white bass with a Hildebrant trout-size tandem spinner, I caught and landed a blue catfish weighing 6 lbs. 9 oz. It took some time and required considerable care in playing, but the enjoyment and pride I took in landing so large a fish on a light line made me forget the possible chances of losing him.

But the real test of the 8-lb. line came on Sept. 7th. While trolling just off Jack Day's Bay View House, at Put-in-Bay, Lake Erie, with a size B Hildebrant Standard spinner, I struck and landed a small-mouth black bass weighing 4 lbs. 4 oz. This fellow broke water four times, and required some ten minutes' playing before I could lead him over the landing net. He was so tuckered out that I rowed back to the hotel and put him in the live car, and he was then still unable to keep himself right side up.

The day I got this big fellow (and six more, the next largest 2½ lbs.) I was told by one of the "old-timers" that there was no use going out, as the wind was in the East. However, I had come to fish, and even though the wind was blowing a pretty good sea, I started out alone. I had not gone more than a thousand feet from the hotel, and had just passed over a weed bed onto a shoal spot of small stones, near the shore of Gibraltar Island, when this big fellow struck. He was evidently in this shallow water looking for craw-fish. I was rowing the boat, and had my 5-ft. split-bamboo casting rod propped up over the minnow bucket, and when he struck, he hooked himself. He immediately came out of the water, at least a foot, and then started toward the weed bed. A slight pressure brought him around toward open water, and luckily the strong wind drifted the boat into deeper water. Then it was simply a game of "give and take"—one minute I would have him in sight of the boat, and the next he would be fifteen or twenty yards away. During his rushes I let him have all the line he wanted, simply keeping the line taut. He broke water four times, and each time I felt as though my shoes were trying to come up through my throat. However, he finally got so tuckered that he permitted himself to be led over the net, and in an instant he was panting on the bottom of the boat. I put him in my fish bag, and tied the bag securely to the boat floor (I was taking no chances, now) and made for the live car.

I am going back to the Bay some time in October (which is considered the next best month for bass, the best time being early May), Mr. Day having promised to advise me when the bass commence running. The Bay View House is the "angler's paradise" of South Bass Island, without a doubt. There are always experienced fishermen around (veritable "bugs"), safe, easy-rowing boats, plenty of bait, and a big launch to tow you around to the best fishing beds, Middle Bass Island, Ballast, Starvation, North Bass and Rattle Snake Islands, and if there is anything Jack Day can do to make your stay and fishing more comfortable and enjoyable, he's always on the job.

And I'm going to take my 8-lb. line along, and whether I get any big fish or not, I am sure I will have as much enjoyment with a 2-lb. bass on my light line as my brothers would with a four-pounder on a 16-lb. line.

R. J. MEINBURG.

WHY FISH FOLLOW CERTAIN STREAMS

FIELD & STREAM PUB. CO.:

Being a subscriber and one that is interested in the things that FIELD & STREAM stand for, I would appreciate it very much if some of our fellow fishermen will answer a question that has been asked by many fishermen, but never authoritatively answered. Why do certain fish follow certain streams and refuse to go into others that are apparently of the same nature? I have lived practically all my life in North Carolina, on Black River, near the mouth of South. Black River is a tributary of Cape Fear, and South River a tributary of Black.

Black and South Rivers are noted for game fish. The fish in both rivers are the same, so far as fresh water fish are concerned, but in Black River, in the spring, we find shad, herring and striped bass. These fish are seldom, if ever, seen in South River, and if at all, they are near the mouth of the river.

Fellow fishermen, can you solve the riddle? GEO. S. BEATTY.

Ivanhoe, N. C.

Ans.—A question of either food supply or bar conditions at the mouth of the river.—ED.

THE LIFE OF THE SALMON SHOWN AT PANAMA-PACIFIC EXPOSITION

The silver salmon is the most ambitious fish alive. He is born with the instinct for making his way up-stream. He lives for that instinct. He dies with it. Frequently, on account of the ingenuity of man, he dies because of it.

In the Palace of Food at the Panama-Pacific International Exposition, at San Francisco, is a hatchery operated by the United States bureau of fisheries, in which various stages of the life of the silver salmon are revealed. In all, he is about nine months reaching the maximum size shown in this exhibit.

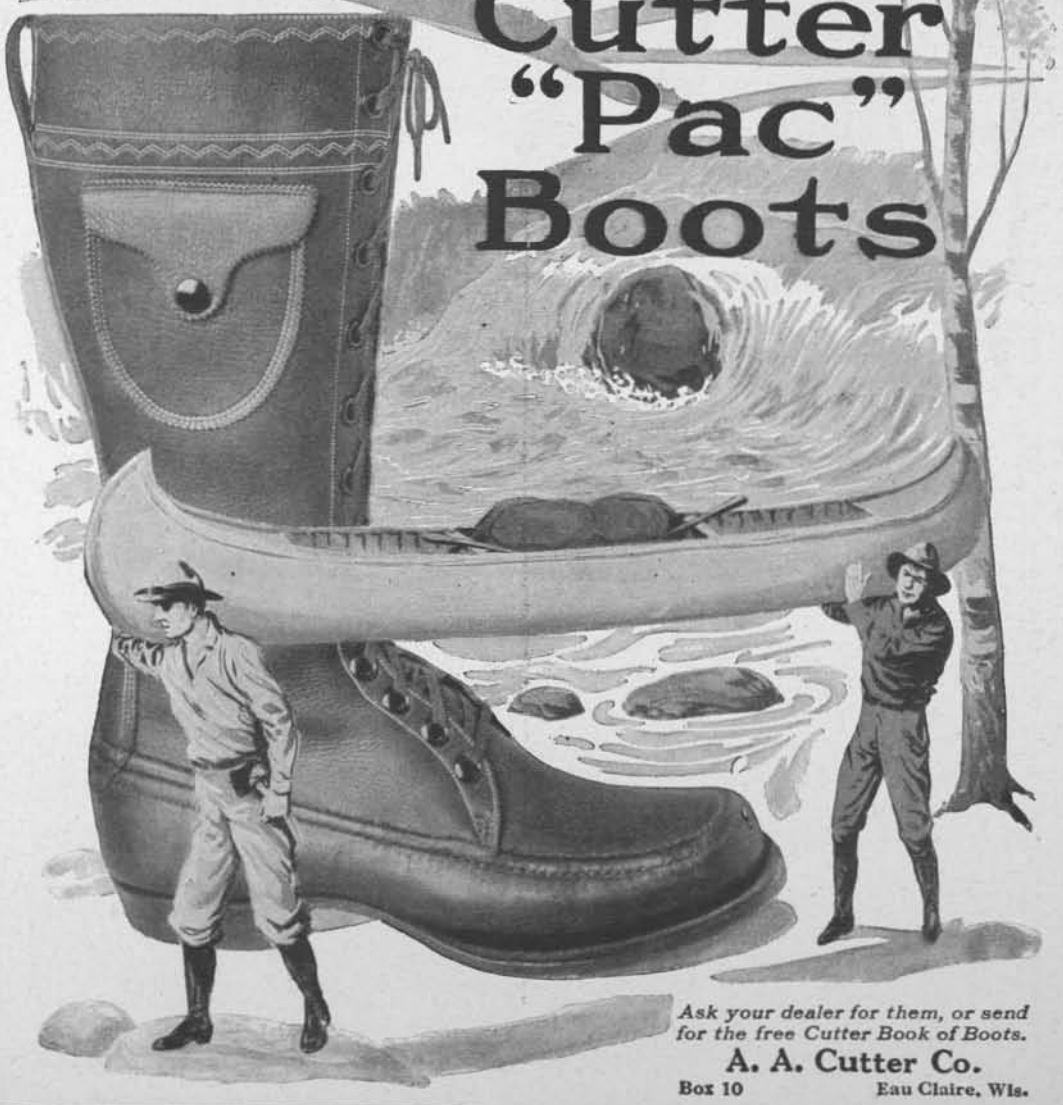
The exhibit contains a "fish ladder," with six steps. These steps are little basins of water, each higher than its predecessor, and with a strong current leaping down from top to bottom. As the salmon grow, they hurl themselves up this ladder, and so into the top basin.

In the Columbia River there are many water-wheels which the current turns, and into which the fish work their way, to be scooped up into barges and hauled to the canneries. At this exhibit is a small water-wheel. The salmon flounder into this, but merely take a ride. It is a sort of "squirrel cage," which lands them safely back in the water.

YOUR footgear is the most important part of your outing rig. When you are well shod—Cutter Booted—you find the miles are shorter and the going less rough. With your feet always dry—Cutter Booted—you forget there are such things as chilblains, scalds and blisters.

Only the centers of the best hides are good enough for Cutter Boots—and only masterworkmen, men who have grown up with cobblers' needles in their hands, are skilled and careful enough to make them. Cutter "Pac" Boots, made to be worn over heavy wool socks, combine moccasin comfort with boot protection. Probably your dealer carries them.

Cutter "Pac" Boots



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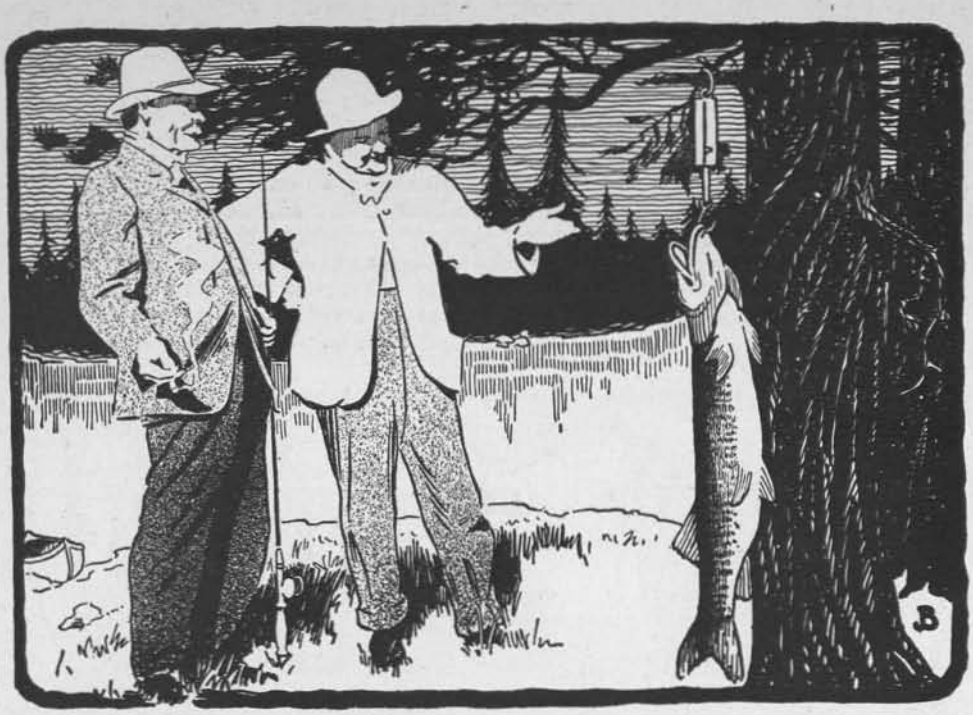

Field & Stream PRIZE FISHING CONTEST

MY RAINY DAY STRIPER

By Frank Henes, New York City, Winner Fourth Prize, Striped Bass, 1914 Contest

It was on the night of July 1, 1914, that I caught my prize-winning fish. The weather was very bad; it was raining and the wind blowing hard, but that did not stop my friend and me from going fishing, as we are like all fishermen: don't care about the weather as long as there are fish to catch. After two hours of this inconvenient fishing we began to get discouraged and were thinking of giving it up but knowing there had been a great number of bass taken, finally decided to stick it out longer.

As we were standing there on the beach at Allenhurst, N. J. and waiting patiently for a strike, my friend and I got talking about fish we had caught and different experiences, when all at once I got a terrible strike and knew I had hooked a bass. I yelled to my friend, "Nick, I got a good one!" By the time I got set for the fight the fish was darting in all directions, and believe me, I had some time with that fellow. It was very dark and I was much handicapped by the bathing ropes and poles. I thought I would lose him but kept the line taut, letting him go gradually when he would fight too hard. He certainly fought like a Trojan until I had him exhausted. Just then I realized the fish was right near the bathing ropes and thinking he might dart for them, I took no chances but walked right out in the water up to my neck reeling in at the same time, so as not to give him any slack, and it was lucky for me that I did, or I surely would have lost him, as he started to fight as I got near. I soon got hold of him by the gills and brought him ashore, and when my friend saw the fish he said, "Well, Frank, you certainly earned that fellow all right!" I was too winded to speak. It took just about three-quarters of an hour to land the fish.

I was using a 12-thread Ashaway line and a 6-0 Matt Stratton hook and had a squid for bait. The rod was a greenheart, which I made myself, and had the Meisselbach New Model free spool which I won last year. Well, after fishing a couple of hours more, thinking we might catch the mate to the one I had just landed, as bass, from what I know, usually run in pairs, we gathered up our outfits and carried the fish to Seger's and weighed it in. I certainly was proud to get a good size one as they were not running very large up to that time, but it did not compare with the 55-pound bass I caught in 1913, which is mounted and hanging up in the Asbury Park Fishing Club.

Prize Contest Certificate Record —Fourth Prize, Striped Bass, 1914 Prize Fishing Contest.

Weight—33 lbs. 10 oz.
Length—45¼ in.
Girth—36¾ in.
Caught—July 1, 1914.
Where Caught—Allenhurst N. J.
Rod—Home-made.
Reel—Meisselbach.
Line—Ashaway, 12-thread.
Lure—Squid bait.

A PRIZE SMALL MOUTH FROM THE SOUTH

By H. C. Carter, Richmond, Va.
Winner Fourth Prize, Small Mouth Bass, Class C, 1914 Contest.

About seven miles west of Richmond, Va., is a beautiful fresh water pond fed by a bold creek formed from numerous springs of clear, cold water. Upon this pond, which is something over three-quarters of a mile in length, and from six to twelve feet in depth, was situated, in ante bellum days, an old-fashioned country corn mill. It was used by all the country boys of the vicinity for fishing and swimming, and was known as Green's mill pond.

Some thirteen or more years ago this property was purchased by the Virginia Passenger & Power Company, a street railway corporation. This corporation extended its trolley line there and established a very handsome park known as Westhampton Park, of which the lake is a very attractive feature. It was stocked with fish of various knids, procured from

SCENE OF 1914 GRAND AMERICAN HANDICAP AT DAYTON, OHIO

GO TO THE
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STATE CHAMPIONS WHO COMPETED FOR NATIONAL AMATEUR CHAMPIONSHIP AT DAYTON

the Department of Fisheries at Washington, D. C.

Vague rumors had been flitting around amongst the fishing fraternity for quite a while that there was "something doing" at Westhampton Lake, but nothing definite could be learned.

On the morning of the 4th of September last I met on the street Jim Howell, my true and tried companion in many excursions in pursuit of the finny tribe inhabiting the waters in the neighborhood of Richmond. He led me a little way aside and in a very mysterious but earnest manner informed me that it was his settled belief, from reliable information, that there was a show for some sport at Westhampton and that the hour had struck for us to "get a move on" in that direction. We separated, Jim to get his tackle and a bucket of minnows from our convenient live box, and I to get my tackle, which consisted of an 8½ oz. split bamboo three-jointed rod, equipped with an ordinary small reel, Kelso silk line and sproat hook. Within an hour we boarded the trolley car, after having been stopped on the way several times and compelled to answer the bromidic questions propounded to us, such as "Where you goin'?" "Goin' fishin'?" etc., with the usual cheerful prophecy, "Bet 'cher don't catch nothin'."

Half an hour later we were standing on the margin of beautiful Westhampton Lake and were soon prepared to "wet a line."

THE 6½ POUND BASS CAUGHT IN WESTHAMPTON LAKE

The hours sped swiftly by; lunch was eaten and the shadows of the trees began to lengthen on the pond. Jim had chosen a stand on the brink of the lake some thirty yards above me, and had taken several small bass of a pound or so in weight, but tiring of this, had changed his hook for a smaller one and baited with a small minnow, in the hope that he could entice the silver perch to bite. I had chosen a stand where an old stump grew close to the water's edge.

At last the stentorian voice of Jim rang out, "Look out, Major! I've just hung a 'snorter.' Like a fool I put on too small a hook, and he got away from me." I took my pole from the stump and stood expectant, in the hope the escaped one would come my way.

In a few minutes my float disappeared like a flash; so suddenly, indeed, that for a second I thought my eyes had deceived me, but the line slipping rapidly straight away told the story plainly that I had a strike. As soon as I was satisfied the fish had taken the bait properly I gave a vigorous yank and knew at once that I had a "big one" on my line and that he was securely hooked.

Straight away he went with a rush. Knowing I could not manage him with the light reel I had, I caught the line with my left hand and checked him way out beyond the lily pads. Quickly turning he made back towards the lily pads. Pulling the line quickly through the guides I halted him before he could reach them. Turning again, he made a vigorous dash off to the right for deep water, pulling the line so rapidly through my fingers that I thought it had cut into the flesh. Again I succeeded in checking him, and commenced to bring him to land.

My friend Jim, seeing the time I was having, came down to see the sport. At this moment the fish made a deep dive in the direction of the lily pads, but I checked him with ease now, and Jim said, "Bring him to the bank in the grass and weeds, where the water is shallow. This I quickly did, and Jim stepped into the water and in less time than it takes to tell about it, he had dexterously caught him in the mouth and pitched him safely on the bank.

Prize Contest Certificate Record —Fourth Prize Small Mouth Bass, Class C, 1914 Prize Fishing Contest.

Weight— 6 lbs. 8 oz.
Length—21 in.
Girth—17 in.
Caught—Sept. 4, 1914.
Where Caught—Westhampton Lake, Va.
Rod—Split bamboo.
Reel—Anchor, No. 453.
Line—Kelso, silk braided.
Lure—Bull minnow.

PHOTOGRAPHIC CONTEST

FIELD AND STREAM offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submitted. The prizes for next month will be: First Prize—Three years' subscription to FIELD AND STREAM. Second Prize—Two years' subscription to FIELD AND STREAM. Third Prize—One year's subscription to FIELD AND STREAM. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, FIELD AND STREAM, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO

Made by Wm. P. Banning. 3A Eastman F. P. K., 1/25th second exposure, late afternoon. Subject—Black Bass Taking Lure.

SECOND PRIZE PHOTO

Made by Walter Uken. 4x5 Pony Premo, 1 second exposure, stop 32. Bright light. Subject—Wild Mallard on Nest.

THIRD PRIZE PHOTO

Made by Herbert N. Hatzel, Eastman Kodak, Zeiss lens, 1/50th second exposure. Subject — Wild Partridge.

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SPORTSMAN'S WORKSHOP

BUILDING A SPLIT BAMBOO FLY ROD

By George Parker Holden, M.D.

PART V.

In your filing of the wood in fitting the ferrules, endeavor to remove the wood equally upon all sides, in order that the ferrules *will be centered,* and thus bring the whole rod into true alignment when its sections are jointed together.

As a final touch, you may file down paper-thin the extreme ends of the teeth made in serrating, as the silk-winding is to extend up over them to the solid metal. One of these teeth should lie against each flat surface of the rod-joint.

When applying the cement to the joint, spread a smooth coating *over the rod-ends to which you are fitting female ferrules,* as a protection against dampness. These ends should also have been varnished previously. As a further protective measure, when going over the rod preparatory for use after a season of long idleness, melt a little paraffine, and with a glass medicine-dropper introduced within the female ferrule, place a few drops down against the wood. Mr. W. L. Aylesworth states that paraffine is much more penetrating than either varnish, shellac or any other of the coating compounds, and that if the paraffine be melted, the ferrule heated, and the paraffine poured into the ferrule on the bare wood, it will penetrate for a considerable distance and render it absolutely waterproof.

WINDINGS

The writer applies his silk windings differently from the usual method of a series of individual narrow circular wrappings, in the form of a continuous braided or diamond-patterned whipping, which extends the whole length of the joints, underneath the solid circular guide and ferrule-wrappings. And he whips with unwaxed silk, just as obtained from the drygoods or the dressgoods store. For this method he claims the following very practical advantages:

It makes a good holding-ground for the varnish; it stiffens the rod to a vastly greater degree than do the closest practical individual circular bands; it materially assists in preventing set, and it reduces to a minimum the number of invisible-end fastenings necessitated in the complete winding of the rod.

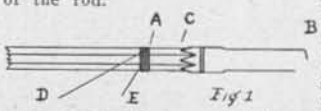

Fig 1

Unwaxed silk is preferred as offering the varnish a better chance to penetrate, shrink it and glue it down on the wood. And we do not use the more brittle shellac, French lacquer or thin glue as a preliminary coating for the windings, to prevent a darkening of the silk, which we do not regard as at all objectionable. On the other hand, if the proper shades and colors of silk be selected, our personal taste approves this increased depth of color as imparting a less flashy, richer and altogether more elegant appearance. If you do not want the underlying diamond-whipping to contrast with the color of the bamboo, select a yellow shade and it will be almost invisible, except on close inspection.

The most satisfactory colors for windings are black, a bright green and red, a good brown and purple, neither of these latter of too dark a shade. We employ the size A, commonly used in millinery and dressmaking, and thus readily obtained at any drygoods "emporium." This is about the thickness of what the tackle-dealers grade as medium or coarse; for the finer silk thread you must apply to them, as you will not find it on sale generally. To be sure you can split the A silk and make use of only part of its strands, but hardly without waxing. But if your ideal in rods is represented by a good serviceable article, not under five ounces in weight, the A size is none too heavy.

Start the continuous winding at the butt end of the joint, by making a few circular turns of the silk away from you; the end is caught beneath these initial turns (Fig. 1), and wetting the end of the silk will prevent it from slipping when you commence. You are now holding the joint in your left hand, and its butt- or male ferrule-end is directed to the right. To ascertain the exact point of starting, A, you must measure off from the joint-end, B, a sufficient distance to clear the other end of the ferrule, at C, as the ferrule-winding is a separate affair.

Fig. 2

Next, turn the joint butt-end to your left, hold the circular turns with your left thumb while cutting off short the silk-end D, with a *sharp* knife, and start to wind a spiral toward the smaller end, rotating the joint away from you between the fingers of the left hand, while you hold the silk taut between the thumb and forefinger of the right hand, pulling toward you and to your right (Fig. 2). The spool-end E is rendering from the spool as the latter stands con-

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"Tuxedo has been of great help to me as a means of conserving nervous energy. A pipe full of this tobacco and life is worth while."

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A "Tin of Tux" Answers Every Pipe-smoke Desire

Night time, day time, work-time, play-time—home, office, street, golf-links—*whenever* and *wherever* you want to smoke, TUXEDO fills the bill exactly. You can work better, rest better and recreate better under the kindly companionship of this mild, wholesome, pleasant tobacco.

When thousands of famous men all reach the same conclusion about TUXEDO—that it's the one best pipe tobacco—TUXEDO *must* be all right and *always* right.

Tuxedo

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You can smoke TUXEDO all day long the year 'round, and never feel the slightest scorch or sting, because TUXEDO *cannot bite* even the most sensitive throat or tongue. The original "TUXEDO Process" refines the mildest, ripest, Kentucky Burley tobacco—and develops a delightful *fragrance* and *flavor* that have never been successfully imitated.

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Convenient, glassine-wrapped, moisture-proof pouch - - - - **5c**

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veniently near, and on end to guard against its rolling away.

The symmetrically graduated spacing of this first spiral winding is guided entirely by the eye. For butt-joints, the writer starts the turns spaced from 5/8 to 3/4 of an inch, and gradually running down to 1/2 inch at the smaller end; on middle-joints, the turns are spaced from 1/2 inch at butt, diminishing to 1/4 inch, and for the top-joint they run from 1/4 inch to 1/8 inch at the rod's tip. On the butt-joint, *he lays up three courses of windings to each spiral, side by side, two courses on the middle* and a single course on the top-joint.

To know where to terminate the spiral winding at the female ferrule end of the joint, you must previously have noted the spot (A, Fig. 3) by a pencil-mark, after measuring from the ferrule-end, B, a sufficient distance both to

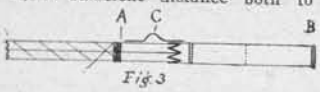


Fig. 3

clear that ferrule and to allow space for the guide, D, which is to be located here. End the spiral by a few close turns at A; then turn the joint so that the end, B, is again directed to your left, and start the return spiral. For all spiral windings *returning over the same course* you must reverse your thread by looping it and catching the loop under a few circular turns that are cast over it, as illustrated in Fig. 4. The loop is later cut off short, as in the case with the starting-end of the silk. This maneuver is necessitated in laying the second and third courses of each spiral winding on butt-joints, and for the second course on middle-joints. To produce the diamond-whipping on the top-joints, in single-thread spirals, it is not necessary; the *winding* then continues ahead, without reversing, till the four spirals are completed, by simply crossing a thread at the end of the first circular turn terminating each spiral course and *reversing the joint*, which starts you back all right when a succeeding spiral is to be wound in a direction *around*—not lengthwise—of the joint *opposite* to that taken by its immediate predecessor.

Fig. 4

In order to have the spacing of the second spiral conform to that of the one first wound, it is necessary only to see that the threads of the two spirals cross at an *angular* surface of the rod-joint, which you select in preference to a flat surface, for accurate guidance (A, Fig. 5). Two additional spirals are needed to produce the closer diamond or braided effect sought, and these are laid so as to halve the space (as shown by the dotted lines in the illustration) between the spirals previously wound, the eye alone readily serving as an efficient guide here.

The reader now understands,

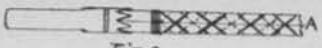


Fig. 5

intricate as the process may appear from the ultimate result, that it is only the first spiral over each joint which must be wound with a great deliberation and care as to symmetrically graduated spacing. That does determine the outcome, but the subsequent spirals are wound with increasing rapidity. Attention is also directed to the fact that even the most serious mishap to any part of this continuous winding, after the rod is completed, *in no case necessitates re-winding of a whole joint*, but only of the short interval between two consecutive solid guide- or ferrule-windings.

(To be continued)

CENTERBOARDS FOR CANVAS SAILING CANOES

By Warren H. Miller

Mr. Brimley's article in July not only fills me with satisfaction as being the story of one of many canvas sailing canoes built after the plans and descriptions of the *Waterat IV*, but it also moves me to add a foot-note on centerboards which has been several years in coming into being. Leeboards I have always objected to as being clumsy and landlubberly; I have always preferred a fixed keel. This latter will, however, not do much towards minimizing your leeward drift when sailing closehauled, so I have longed and schemed for some sort of centerboard for—well, over twenty years since the first *Waterat* hit the pickle!

Of course the first thing to be investigated was the folding metal fan centerboard, used on wooden sailing canoes. These run from 24 to 40 inches long and, even in galvanized iron cost $8, or more than the cost of the canoe; but that is not its worst defect. The width of three or more inches required by the base of the folding centerboard trunk puts it out of the question for attaching to a 7/8-inch keelson. If I were building a larger *Waterat* of, say, 17 ft. L. W. L., intended mainly for sailing purposes, I would make the keel of 5-inch stock, fining down to 1-inch at stem and stern and riveting my ribs across it inside. With this keel there would be plenty of room to screw down the trunk of the folding board, and I am sure that such a cruiser for two men in salt water or lake country would be nearly ideal, for she could carry a lot of sail, would be much lighter than the wooden cruising canoe, and therefore paddle more easily, and it was the bugbear of this tedious and laborious paddling that eventually led to the downfall of the popularity of the wooden sailing canoe.

My cogitations on a centerboard for the *Waterats*, as built, led to the design of a thin wooden trunk of shape to take a 12x36x1/8-inch brass dagger centerboard. This board was to be lined inside with canvas, the lips of which were to be brought out and tacked over the canvas on the keel, thus making a watertight canvas surface inside the trunk, for it is obvious that a plain wooden trunk would surely leak because of the joint between keelson and keel which cannot be got at to calk. By lining the trunk with canvas this difficulty is obviated. To construct such a board, cut a slot through keel, keelson and ridge timber of upper forward deck 3/8x12 inches. Let in two uprights of 1/2x1-inch oak, necked down to 3/8-inch where they pass through keel and upper ridge timber, and screw these into place at each end of the slots, setting the joint in white lead paste. Now screw to each side of these uprights the sideboards of the trunk, with their canvas inside facings already stuck fast on them by painting down with several coats of paint. These facings should have about three inches of free canvas along their lower edges, which canvas is pulled down through the slot in keel and keelson and brought around outside the canoe, where they are pulled smooth and flat and tacked outside the main canvas skin of the canoe with copper tacks set close together and liberally doped with white lead paste. This construction will give you a watertight, canvas-lined centerboard trunk suitable for a narrow dagger-type centerboard of 1/8-inch brass with a wooden stop or top, which board is to be shoved down through the slot in the upper forward deck, which is the upper end of your trunk.

The above design is easily put in while build.ng the canoe, and, even for a built one, simply involves taking off the forward upper deck so as to get at the work. As *Waterat IV* was wanted up at the June encampment of the Camp Fire Club and I was too busy to attempt any extensive work on the canoe this year, I put my brains to work again and devised Scheme Three, so simple that I wonder no one has ever thought of it all these years: Why not have a detachable keelboard, put on and taken off with wing nuts like a set of leeboards. Well,—why not! Simple as swallowing your left foot; all you needed was a piece of 8x3/8-inch yellow pine about three feet long, and two 1/4-inch carriage bolts 2 1/2 inches long with wing nuts. It did not take half an hour to put this scheme into execution. I sawed a slant fore and aft on the keelboard, so that in running aground or striking anything submerged I would not be brought up all standing and have something ripped loose. Two carriage bolts were driven through, about eight inches from either end of the keelboard; the holes for them were marked on the 2 1/2-inch keel (which, you will remember, is permanently secured to the bottom of the *Waterat* models), and, before putting her overboard, the carriage bolts of the keelboard were shoved through these holes in my keel and secured fast with the two wing nuts. Other sailors had leeboards; I had a keelboard! and, for a long time, they were mystified as to what kept the *Waterat* so well up into the eye of the wind with no visible lee-board gear.

"FRAMERS OF THE CONSTITUTION OF THE U.S.A." NO. 6

John Hancock—"Father of the Revolution"

UPON the Declaration of Independence his name may be read without spectacles. His signature was the first subscribed to the world's most famous State document. In the most realistic sense John Hancock pledged his life and his fortune to the cause of the Revolution. He was one of the richest men in the colonies, holding investments in banks, breweries, stores, hotels, and also owning a fleet of vessels. The seizure of one of these precipitated the Boston massacre. In Revolutionary days and until his death he was a popular idol. When it was proposed to bombard Boston, though it would have resulted in greater personal loss to him than to any other property owner, he begged that no regard be paid to him because of his financial interests. While Hancock did not sign the Constitution of the United States, he used his great influence in its behalf, which awakened the gratitude of Washington. "He was prepossessing in manner, and passionately fond of the elegant pleasures of life, of dancing, music, concerts, routs, assemblies, card parties, rich wines, social dinners and festivities." Until the end of his life the people of Massachusetts delighted to honor him. In the stirring events preceding the Revolution he was one of the most active and influential members of the Sons of Liberty. To this tireless worker for American Independence Liberty was the very breath of life. He would have frowned upon any legislation which would restrict the natural rights of man, and would have voted NO to prohibition enactments. It was upon the tenets of our National Spoken Word that Anheuser-Busch 58 years ago founded their great institution. To-day throughout the length and breadth of the Free Republic their honest brews are famed for quality, purity, mildness and exquisite flavor. Their brand BUDWEISER has daily grown in popularity until 7500 people are daily required to meet the public demand. Its sales exceed any other beer by millions of bottles.

ANHEUSER-BUSCH · ST. LOUIS, U.S.A.

Visitors to St. Louis are courteously invited to inspect our plant — covers 142 acres.

Budweiser
Means Moderation

FIELD AND STREAM'S Fifth National PRIZE FISHING CONTEST FOR THE RECORD FISH CAUGHT IN 1915

CONDITIONS

First—The fish must be caught with rods and reels as specified,* and in legal season.

Second—The fish must be weighed on tested scales and measured with a tape measure, length to be taken from end of lower jaw with mouth closed, to tip of tail.

Third—The affidavit blank printed on the last page of this announcement, or an exact copy, must be used in applying for a prize and signed by the man who caught the fish, together with two witnesses, and sworn to before a Notary Public and his seal affixed. In case any contestant catches a fish when accompanied by a single guide, the affidavit as signed upon coming out of the woods by himself and guide before a Notary Public stating the circumstances will be duly considered.

Fourth—The weight, length and girth, date, place, and manufacturer's name and full specifications, if possible, of the rod, reel, line and lure (or bait) used in taking the fish must be stated.

Fifth—The winners in each class must send us a short account of how, when and where the fish was taken, and what tackle was used in catching the fish. The account to be published in **Field and Stream.** These accounts will not be asked for until the prizes have been awarded.

Sixth—All affidavits must be sent to the Editor of the Prize Fishing Contest, **Field and Stream,** 331 Fourth Avenue, New York. All affidavits in classes designated by A, B, and C, must be in our hands within 5 days from closing date of class. **In all other classes affidavits must be in within 15 days from closing date.**

Seventh—No fish caught from State or private hatchery will be allowed in this contest.

Eighth—In the Pike and Wall-eyed Pike Classes an outline drawing of the fish must be sent in with affidavit, drawing to be made by placing fish on side on large piece of paper and drawing an outline of fish with pencil on the paper with fins of fish all erect.

Ninth—In event of two fish weighing and measuring exactly the same number of pounds, ounces and fractions, duplicate prizes will be awarded in each case.

The Judges of this contest will be: Robert H. Davis, Editor *Munsey's;* Will H. Dilg, Chicago, Ill.; W. H. Miller, Editor, FIELD AND STREAM; E. F. Warner, Publisher, FIELD AND STREAM; E. M. Gill, Camp Fire Club; W. P. Corbett, Charles Frederick Holder.

In Tarpon Class length of fish is only measurement required. It is not necessary to give weight or girth.

* Where no special kind of tackle is specified, any tackle is allowable, provided it consists of rod, reel, line and lure.

Be sure to get a photograph of yourself with fish, if possible

FRESH WATER GAME FISH

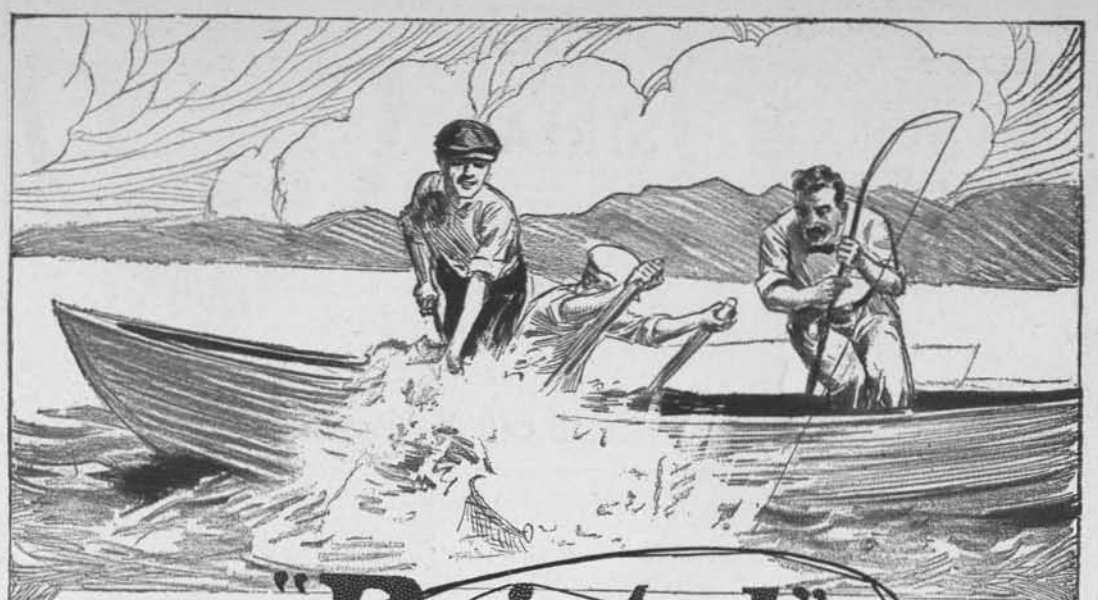
BROOK TROUT (Salvelinus fontinalis)

CLASS A—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between opening of season and July 31st

FIRST PRIZE: One Dirigo Trout Fly Rod, length and weight to suit winner, made by F. E. Thomas, value $15.00; also one No. 200 Cream City Tackle Box, made by Geuder, Paeschke & Frey, value $3.50. **Total value $18.50.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one No. 29 Bristol Fly Rod, made by Horton Mfg. Co., value $6.50. **Total value $16.50.**

THIRD PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and one Frostco Hydrostatic line, 50 yards, made by H. J. Frost & Co., value $3.75. **Total value $11.75.**



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TRADE MARK REG. U.S. PAT. OFF.

"In all the World no sport like this"

Loafing won't do any good. That isn't a vacation. Action is what you want. Go out with a "BRISTOL" and fight gamey old "Laker" or "Lunge" or pickerel to the finish and beat him. That is sport—that is what rests you, sends you home a new man. That is what makes a real vacation you can talk about until next year.

In addition to your Trolling "BRISTOL" No. 11 for $5.00, take along a Telescopic Adjustable Bait Casting "BRISTOL" No. 35—also $5.00, and a light 5½ oz. Fly "BRISTOL" No. 29, $6.50. For week-end fishing, the traveling bag "BRISTOL" No. 23, $7.50—or the DE LUXE Silk Wound "BRISTOL" in Washable Glove Leather Case, $25.00.

If you haven't seen the full beautiful "BRISTOL" line of 30 or more different kinds of rods, go to your dealer, or write for

FREE CATALOGUE

All "BRISTOL" Steel Fishing Rods are guaranteed 3 years

THE HORTON MFG. COMPANY

81 HORTON STREET **BRISTOL, CONN.**

FOURTH PRIZE: One Pigskin Leather Cooper Fly Book, made by Cooper Fly Book Co., value **$6.00**; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $8.00.**

CLASS B—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between July 31st and October 31st

FIRST PRIZE: One Junior Reflex Camera, made by Reflex Camera Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**
SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50; and one Justrite No. 95 Camper's Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $15.50.**
THIRD PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one Persian Alligator Cooper Fly Book, made by Cooper Fly Book Co., value $4.50. **Total value $12.50.**
FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

GRAND PRIZE—For largest Brook Trout caught during season 1915 with Fly: Oil Painting of Brook Trout by H. A. Driscole—Value $75.00

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

RAINBOW TROUT (Salmo irideus)

GRAND PRIZES—For Rainbow Trout caught between April 1st and October 15th

FIRST PRIZE: One 9½-foot, 5¼-ounce Fly Rod, made by Edward F. Payne. **Value $25.00.**
SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Kelso Quick-apart Quadruple Reel (80 yard), made by H. J. Frost & Co., value $8.50. **Total value $18.50.**
THIRD PRIZE: One 80-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.50; also one Three Years' Subscription to FIELD AND STREAM, value $4.50. **Total value $12.00.**
FOURTH PRIZE: One Russian Leather Cooper Fly Book, made by Cooper Fly Book Co., value $4.50; also one Frostco Combination Steel Rod, 9½ feet long, made by H. J. Frost & Co., value $3.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

SPECIAL HONOR PRIZES—For Rainbow Trout Caught with Fly on Fly Tackle

FIRST PRIZE: One VesTong Hunting and Fishing Coat, made by VesTong Mfg. Co., value $7.00; also one VesTong Hunting and Fishing Pants, made by VesTong Mfg. Co., value $5.50; and one 60-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.00. **Total value $19.50.**
SECOND PRIZE: One Pfleuger Redifor Anti Back Lash Reel, made by Enterprise Mfg. Co., value $7.50; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $11.00.**
LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

BROWN TROUT

GRAND PRIZES ONLY—For Brown Trout caught casting a FLY with Fly Fishing Tackle, between April 15th and October 1st, 1915

FIRST PRIZE: One Vernley Fly Rod, made by Horrocks-Ibbotson Co., value $15.00; also a two years' subscription to FIELD AND STREAM, value $3.00. **Total value $18.00.**
SECOND PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one selection of A. F. Meisselbach & Bros. to value of $10.00. **Total value $15.00.**
THIRD PRIZE: Selection from catalog of Schoverling, Daly & Gales to value of $10.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $12.50.**
FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $8.50.**

LAKE TROUT—TOGUE (Christivomer namaycush)

GRAND PRIZES ONLY—For Lake Trout caught between April 1st and October 1st

FIRST PRIZE: One No. 1 5x7 Film Premo Camera, made by Rochester Optical Co., value $16.00; also one selection from catalog of Abbey & Imbrie, to value of $5.00. **Total value $21.00.**
SECOND PRIZE: One Ecruette Sportsman's Style Compac Tent, made by Compac Tent Co., value $11.50; also a three years' subscription to FIELD AND STREAM, value $4.50. **Total value $15.00.**
THIRD PRIZE: One selection from catalog of A. F. Meisselbach & Bros., to value of $10.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $12.50.**
FOURTH PRIZE: One selection from catalog of Abbey & Imbrie to value of $5.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.20.**

LANDLOCKED SALMON, OR OUNANICHE

GRAND PRIZES ONLY—For Landlocked Salmon caught from April 1st to Oct. 1st

FIRST PRIZE: One Pneumatic Mattress selected from catalog to value of $22.00, made by Pneumatic Mfg. Co.
SECOND PRIZE: One Remington Model 12A .22 caliber repeating rifle, made by Remington Arms-U. M. C. Cartridge Co., value $10.50; also one Utica Automatic Reel, made by Horrocks-Ibbotson Co., value $5.00. **Total value $15.50.**
THIRD PRIZE: One Kelso 50-Yard Automatic Reel, made by H. J. Frost & Co., value $5.00; also one three years' subscription to FIELD AND STREAM, value $4.50; and one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50. **Total value $11.00.**
FOURTH PRIZE: One Yawman & Erbe No. A Reel, made by Horrocks-Ibbotson Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

SMALL MOUTH BLACK BASS (Micropterus dolemieu)

CLASS A—For Small Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One No. 33 Bristol Bait Casting Rod, made by Horton Mfg. Co., value $12.00; also one pair No. 210, 10-inch height, Hunting Boots, made by Mohawk Moccasin Co., value $6.00; and one selection from catalog of Abbey & Imbrie to value of $5. **Total value $23.00.**
SECOND PRIZE: Five Quick Change Bass Baits, made by Skvor & Co., value $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $18.75.**
THIRD PRIZE: One selection from catalog of James L. Donaly to value of $10.00; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one VesTong Automatic Cleaning Rod, for Shotguns, made by VesTong Mfg. Co., value 50c. **Total value $12.00.**
FOURTH PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co., value $6.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $8.00.**

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The No. 1 Autographic KODAK, Junior

Now fitted with the new Kodak Anastigmat Lens, *f.* 7.7 and the Kodak Ball Bearing Shutter.

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Here are efficiency *and* economy.

THE LENS. The Kodak Anastigmat *f.* 7.7 lenses are slightly faster than the best Rapid Rectilinears. But their marked superiority lies in the perfect definition (sharpness) which they give up to the very corners of the picture. They are not as fast as the most expensive anastigmats, but they are fast enough for the usual hand camera work and no lens gives *sharper results.* Made exclusively for use on hand cameras, they meet the hand camera requirements.

THE SHUTTER. The No. 1 Kodak Ball Bearing Shutter furnished with the anastigmat equipped No. 1 Autographic Kodak, Junior, has variable speeds of 1/25, 1/50 and 1/100 of a second, and the usual time and "bulb" actions. It is accurate, reliable and remarkably free from jerk or jar.

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THE PRICE.

No. 1 Autographic Kodak, *Junior*, with No. 1 Kodak Ball Bearing shutter and Kodak Anastigmat lens, *f.* 7.7,	$15.00
Do., with No. 0 Kodak Ball Bearing shutter and Rapid Rectilinear lens,	10.50
Do., with meniscus achromatic lens,	9.00
Autographic Film Cartridge, 6 exposures, 2¼ x 3¼,	.20

All Kodak dealers'.

EASTMAN KODAK CO., ROCHESTER, N. Y., *The Kodak City.*

CLASS B—For Small Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Detroit Refrigerator Grip for fish, in shape of traveling bag, made by Detroit Refrigerator Grip Co., value $15.00; also one South Bend Anti Back Lash Casting Reel, value $7.50; one $4.50 selection of Buck Tail Baits and Minnows, made by South Bend Bait Co., total value $12.00. **Total value $27.00.**

SECOND PRIZE: One selection from catalog of Hartung Brothers & Co., to value of $10.00; also Hildebrandt Spinners, made by J. J. Hildebrandt Co. to value of $10.00. **Total value $20.00.**

THIRD PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one two-years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: Four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co. **Value $9.00.**

CLASS C—For Small Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One of H. A. Driscole's Famous Bass Paintings. **Value $75.00.**

SECOND PRIZE: One Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $15.00; also one Tripart Reel, made by A. F. Meisselbach & Bros., value $3.00. **Total value $18.00.**

THIRD PRIZE: One Alaska Hunting Jacket, made by George F. Webber, value $5.00; also one selection from catalog of Buck Tail Baits, Spinner Hooks, Minnows and Spoons, made by South Bend Bait Co., value $7.50. **Total Value $12.50.**

FOURTH PRIZE: One pair 10-inch height Sporting Shoes, hand sewed, two buckles at top, full-length sole, made by M. L. Getchell Co., value $6.00; also one Frostco 120-Yard Reel, made by H. J. Frost & Co., value $3.00. **Total value $9.00.**

GRAND PRIZE—For largest Small Mouth Bass caught during season: One Aerothrust Twin Cylinder Rowboat Motor, gasoline or kerosene operated, made by Aerothrust Engine Co. Value $64.75.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One Maxim Silencer for .22 Rifle, made by Maxim Silencer Co., value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

SPECIAL HONOR PRIZES—For Small Mouth Bass caught on Fly with Fly Tackle

FIRST PRIZE: One Free Spool Takapart De Luxe Reel, made by A. F. Meisselbach & Bros. **Value $13.50.**

SECOND PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co. **Value $6.00.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

NORTHERN DIVISION—North of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One Model 1912 .22 Caliber Savage Repeating Rifle, made by Savage Arms Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $13.00.**

FOURTH PRIZE: One assortment 12 South Bend Minnow Baits, made by South Bend Bait Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

CLASS B—For Large Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Abercrombie Snow Tent, size 7x7, made by David T. Abercrombie Co. **Value $30.00.**

SECOND PRIZE: One pair Gitchee Gamee 15-inch Height Shoes, with strap and buckle at top, No. B 1175, made by Northern Shoe Co., value $10.00; also one assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00. **Total value $20.00.**

THIRD PRIZE: One No. 11 Bristol Bait Rod, agate tip and guides, reversible cork handle, made by Horton Mfg. Co., value $8.50; also one Ecruette Poncho, made by Compac Tent Co., value $4.80. **Total value $13.30.**

FOURTH PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

CLASS C—For Large Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One selection from catalog of Moonlight Bait Co. to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $3.60; and one Style E Sextoblade Razor in leather case with soap and collapsible shaving brush, made by Edward Week & Son, value $5.00. **Total value $18.60.**

THIRD PRIZE: One selection from catalog of W. J. Jamison, to value of $10.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

GRAND PRIZE—For Largest Large Mouth Bass caught between opening of season and October 31st: One Ferro Rowboat Motor, with Kingston Float Feed Carburetor, Bosch High Tension Reversible Magneto and Rudder, made by the Ferro Machine & Foundry Co., value $85.00.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One two-years' subscription to FIELD AND STREAM, value $3.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $5.95.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

SOUTHERN DIVISION—South of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between January 1st and June 30th, inc.

FIRST PRIZE: One No. 33 Talbot Sapphire Jeweled Reel, made by Talbot Reel and Mfg. Co. **Value $28.50.**

SECOND PRIZE: One Meridan Model 15 .22 Caliber Repeating Rifle, made by Sears, Roebuck & Co., value $12.00; also one Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $6.00. **Total value $18.00.**

THIRD PRIZE: Selection of Heddon's Dowagiac Minnows, made by James Heddon Sons, value $4.50; also one Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $12.50.**

FOURTH PRIZE: One Camp Cot, made by the Gold Medal Camp Furniture Co., value $3.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and three "Chippewa" Bass Baits, 3½ inches, revolving spinner in body, made by C. J. Frost, value $2.55. **Total value $8.55.**

Look about you for the man who is *happiest* in his success. You will find him of *moderate habit.*

He is neither prudishly narrow nor is he excessive.

And it is the moderate man whom we most value as a customer for a wonderfully mild and mellow Whiskey—*Wilson—Real Wilson—That's All!*

The Whiskey for which we invented the Non-Refillable Bottle.

FREE CLUB RECIPES—Free booklet of famous club recipes for mixed drinks. Address, Wilson, 321 Fifth Ave., N. Y. That's All!

Fishermen, Ho!

Price **75c**

Here is the **New Small Size Fluted Wobbler**

For expert fishermen who like a lighter bait than the standard size Wobblers to use with light rod. Has only two hooks, so there is no chance of tangling. Under hook is in center of "belly" of the bait. Get acquainted with the

Wobbler Family

and other

Hastings Lucky Tackle

Wilson's Wobblers are now made in these six styles: Cupped Wobbler, surface, new this year; Fluted Wobbler, semi-surface; Winged Wobbler, deep water; Luminous Wobbler, Weedless Wobbler, Small Fluted Wobbler. Each style in six different colors.

With Wilson's Wobblers use Hastings Lucky Tackle—the Hastings Double-Handle Reel and the Hastings Senterbrade Silk Casting Lines. Sold by dealers. Write for Bait Casting Booklet and Tackle Folder. Free.

HASTINGS SPORTING GOODS WORKS
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"Never-Leak" Russell's Famous BOOT FOR SPORTSMEN

Designed for general outdoor wear. Sturdy and staunch, for heavy service on the trail, yet light and yielding to the feet. The tough, double sole insures extreme durability, no matter how rough the ground. Soles hob-nailed or smooth. Toe pieces and vamp joined by our special never-rip "watershed" seam (patent applied for) which holds tight and keeps the water out. Made of (black) chrome, flexible cowhide. Built for business and guaranteed to fill the bill, or your money back. $6.00 to $15.00 per pair.

Worn by experienced campers, fishermen, hunters, canoeists, "hikers," trappers, skiers, surveyors, etc.

In any height. Made to your measure.

Send for book showing our complete line. ***Free on request.***

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Meek Reels have, in ten years, won four to one International Trophies over ANY other reel and two to one over ALL other reels combined. By giving years of satisfactory service

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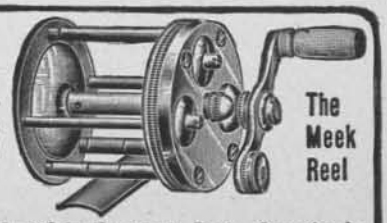

The Meek Reel

New Tackle Box $3.00

have earned their reputation for superiority and prove that a good article is worth its price.

New Pocket Screw Driver and Oiler 50c

The real reel is the Meek Reel. Our aim is perfection, not cheapness. Ask any first-class dealer for the "Meek." If he can't supply you, write us direct for catalogue F.

B. F. Meek & Sons, Inc.
M'f'r's Meek and Blue Grass Reels
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We guarantee advertising on this page provided you mention FIELD AND STREAM

CLASS B—For Large Mouth Bass caught between July 1st and Dec. 31st, inc.

FIRST PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $24.00.**

SECOND PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one selection from catalog of Abbey & Imbrie to value of $10.00. **Total value $18.00.**

THIRD PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Meisselbach Automatic Reel, made by A. F. Meisselbach & Bros., value $3.50; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $11.50.**

FOURTH PRIZE: One Style E Sextoblade Razor in leather case with soap and collapsible brush, made by Edward Weck & Son, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

Maryland, Delaware, Virginia and West Virginia Division

For Large Mouth Black Bass Caught during the season within the State laws

FIRST PRIZE: One No. 3 Jeweled Meek Reel, made by B. F. Meek & Sons. **Value $32.00.**

SECOND PRIZE: One No. 041½ Moose Head Brand Knee-length Sporting Boots, made by John Palmer Co., value $10.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $18.00.**

THIRD PRIZE: One selection from catalog of Fred S. Sabey Co. to value of $12.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75; also one Abercrombie Frame Pack, made by David T. Abercrombie Co., value $4.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.95.**

GRAND PRIZE—For largest Large Mouth Bass caught during season: One of H. A. Driscole's famous Bass Paintings—Value $75.00

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates. **Value $4.00.**

SPECIAL HONOR PRIZES—For Large Mouth Bass caught casting a FLY with Fly Fishing Tackle.

FIRST PRIZE: One Navajo Sweater Coat, made by Bradley Knitting Co., value $10.00; also 200 yards Hasting Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $15.00.**

SECOND PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

GREAT NORTHERN PIKE (Esox Lucius) *(See Condition No. 8)*

GRAND PRIZES ONLY—For Pike caught between May 1st and October 31st, inc.

FIRST PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one pair 12-inch height Witch Elk Hunting Boots, made by Witchell-Sheill Co., value $10.00; and 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $25.00.**

SECOND PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one Milburn Combination Campers' Table Lamp and Lantern, made by Alexander Milburn Co., value $6.00. **Total value $16.00.**

THIRD PRIZE: One assortment 22 South Bend Buck Tail Baits and Weedless Hooks, made by South Bend Bait Co., value $7.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $12.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; and one Milburn Acetylene Hand Lamp, made by Alexander Millburn Co., value $1.75. **Total value $8.75.**

MUSCALLONGE (Esox Nobilior)

GRAND PRIZES ONLY—For Muscallonge caught between May 1st and Oct. 31st, inc.

FIRST PRIZE: One 1915 Evinrude Row Boat Motor, with automatic reverse and waterproof built-in magneto, made by Evinrude Motor Co., value $80.00.

SECOND PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00. **Total value $19.00.**

THIRD PRIZE: One Abercrombie Cook Outfit, made by David T. Abercrombie Co., value $10.00; also three "Chippewa" Muscallonge Baits, 5 inches, with revolving spinner in body, made by C. J. Frost, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; and three "Chippewa" Skipper Swimming and Jumping Baits, made by C. J. Frost, value $2.25. **Total value $8.75.**

LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

WALL EYED PIKE—PIKE PERCH *(See Condition No. 8)*

GRAND PRIZES ONLY—For Wall-eyed Pike caught from May 1st to October 31st

FIRST PRIZE: One Joymotor Outboard Motor, with reversing propeller and high tension magneto, made by Joy Engineering Co. Value $75.00.

SECOND PRIZE: One selection from the catalog of James L. Donaly to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $17.50.**

THIRD PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles Co., value $5.00; also one selection of Heddon's Dowagiac Minnows, made by James Heddon & Sons, value $4.50; and three "Chippewa" Pike Baits, 4-inch body, made by C. J. Frost, value $2.70. **Total value $12.20.**

FOURTH PRIZE: One Takapart Reel, made by A. F. Meisselbach & Bros., value $4.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; one year's sub. to FIELD AND STREAM. **Total value $9.50.**

SALT WATER GAME FISH

BLUEFISH (Pometomus Saltatrix)

GRAND PRIZES ONLY—For Bluefish caught between May 1st and October 31st

FIRST PRIZE: One Comfort Sleeping Pocket, made by Metropolitan Air Goods Co. **Value $25.00.**

SECOND PRIZE: One Neptune Reel, made by A. F. Meisselbach & Bros., value $10.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $15.00.**

THIRD PRIZE: One Interchangeable Lens Lamp, Style 2, made by R. C. Kruschke, value $7.00; also one three-years' subscription to FIELD AND STREAM, value $4.50. **Total value $11.50.**

FOURTH PRIZE: One Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $9.00.**

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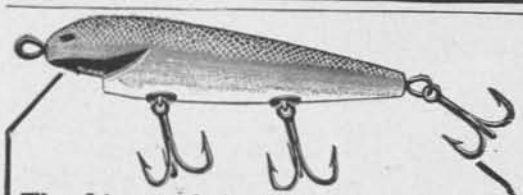

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No. 3916 White Enamel Belly—Rainbow Back, Red Throat
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No. 3918 White Enamel Belly—Green and Red Spots, Red Throat
No. 3919 White Enamel Belly—Green Back, Red Throat
No. 3920 Yellow Perch—Red Throat

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GRAND PRIZES ONLY—For Weakfish caught between May 1st and October 31st

FIRST PRIZE: One Improved Ocean King 350-Yard Reel, made by H. J. Frost & Co., value $14.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $16.50.**

SECOND PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one selection from catalog of Abbey & Imbrie to value of $5.00; and two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

THIRD PRIZE: One selection from catalog of New York Sporting Goods Co. to value of $10.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; also one Northwestern Clasp Knife, made by R. C. Kruschke, value $2.50; and one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00. **Total value $8.00.**

SPECIAL PRIZE: For Largest Weakfish caught on 5½-ounce, or less, rod, length not less than 4½ feet, 9 thread, or less, line: One selection from catalog of Marble Arms and Mfg. Co. Value $10.00.

STRIPED BASS (Roccus lineatus)

GRAND PRIZES ONLY—For Striped Bass caught between May 1st and October 31st

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One 10-ounce Army Duck Wall Tent, size 8 x 10, height at center 6½ feet, made by George B. Carpenter Co., value $15.00; also one Parker Press-The-Button Self Filling Fountain Pen, made by Parker Pen Co., value $5.00. **Total value $20.00.**

THIRD PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $11.75.**

FOURTH PRIZE: One pair Russell Neverleak Moccasin Boots, made by W. C. Russell Moccasin Co., value $9.00; also one Western Outing Knife, made by R. C. Kruschke, value $1.50. **Total value $10.50.**

LADIES' PRIZE: One Parker Jack Knife Safety Fountain Pen, made by Parker Pen Co., value $5.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $7.50.**

CHANNEL BASS (Sciaena ocellata)

GRAND PRIZES ONLY—For Channel Bass caught between April 1st and October 31st

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One "Rite Lite" Nifty Balloon Silk Tent, 5x7, with sewed-in floor, made by Indianapolis Tent Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One pair Gokey Boots, selected from catalog to value of $10.00; also two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20; and one Komfort Lantern, made by R. C. Kruschke, value $4.50. **Total value $10.70.**

TARPON (Megalops Atlanticus)

GRAND PRIZES ONLY—For longest Tarpon caught Jan. 1st, 1915, to Jan. 1st, 1916

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One Alamo Motion Picture Camera, made by Simplex Photo Products Co. **Value $25.00.**

THIRD PRIZE: One No. 26 Tarpon Rod, cork handle, made by Horton Mfg. Co. **Value $14.00.**

FOURTH PRIZE: One 300 candle-power Coleman Arc Lantern, complete, made by Coleman Lamp Co. **Value $10.00.**

SPECIAL PRIZES FOR ALL WINNERS

A. F. Meisselbach & Bro. will present to each and every prize winner in the Contest one of their Utility Scales, one "Good Luck" Fish Scraper, and One Drop Oil Can. **Total value 50 cents.**

NOTICE

It is impossible, with the number of prizes and limited space, to give the proper description and illustration of these valuable prizes. By writing the manufacturers represented, a complete catalog will be sent showing full description of any prize in which you are interested.

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I hereby swear to statement signed by me before two witnesses and a notary public.

Kind of fish.....Weight.....Length .....Girth.....

When caught .....Where.....

Rod used .....Reel.....Line.....

Lure or bait.....Give Mf'r's names of each and full specifications

Caught by (Signed).....

Street .....

City .....State.....

Witnessed by: (Give names and addresses)

1 .....

2 .....

Sworn to before me this.....day of.....

Notary Public .....

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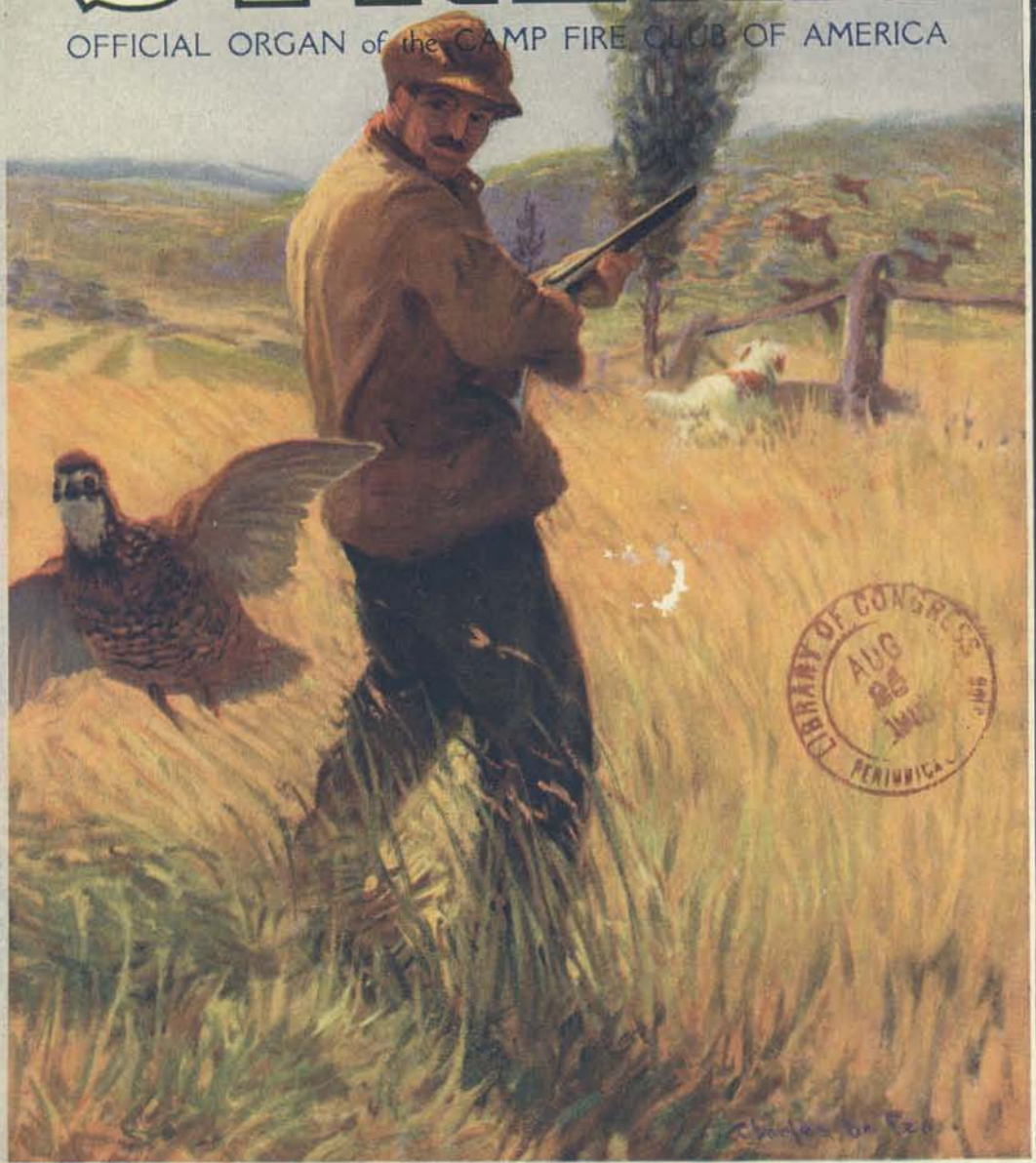

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To watch a Potter thumping his wet Clay"

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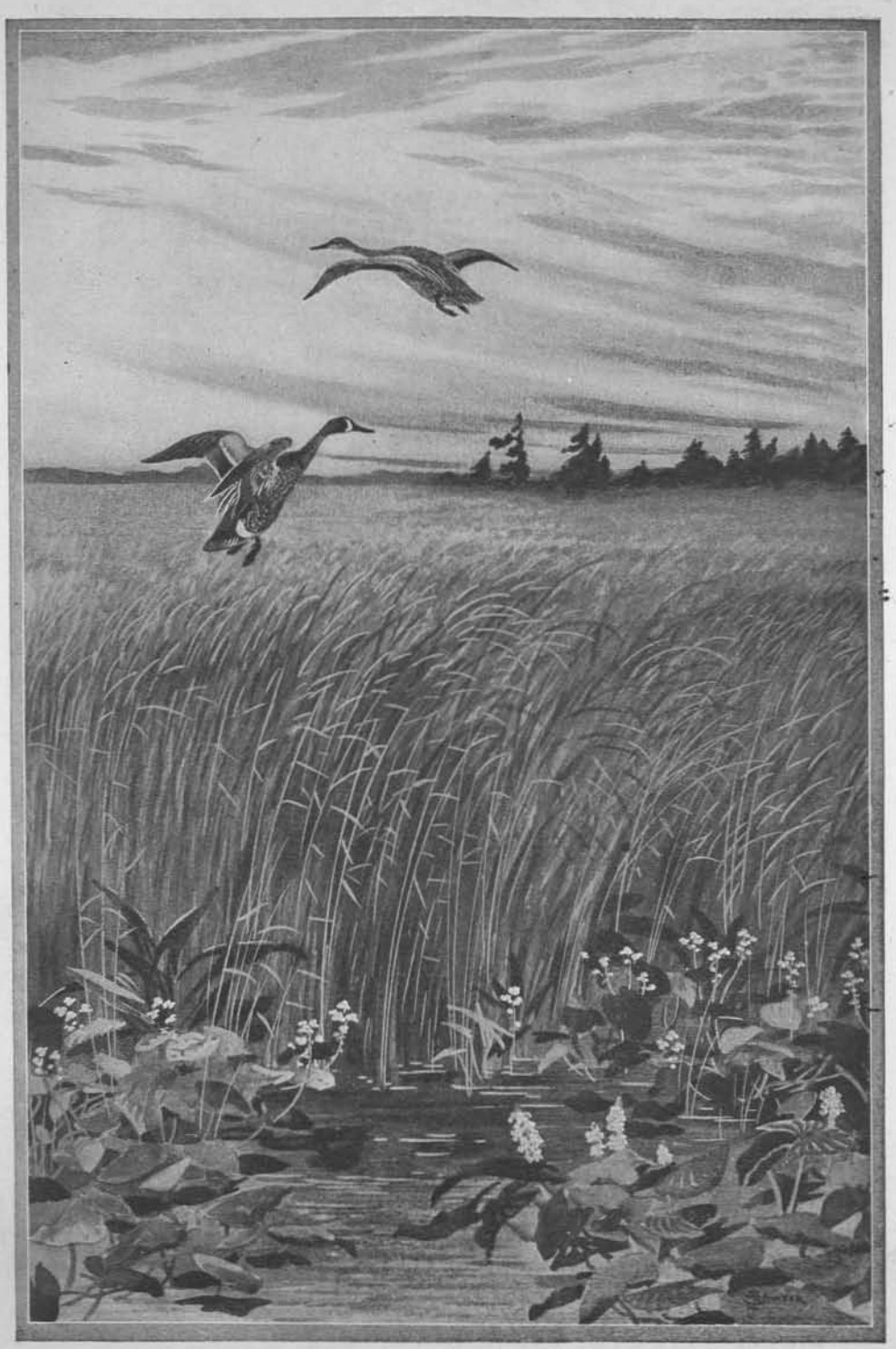

OPENING DAY IN THE WILD RICE

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FIELD AND STREAM
AMERICA'S MAGAZINE FOR SPORTSMEN
OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR SEPTEMBER, 1915 NUMBER FIVE

AFTER WHITE-TAILS ON THE NORTHERN PENINSULA

By A. S. KERN

IT has always been a question in my mind whether or not the hunting fever is contagious. The peculiarities of the symptoms and their perpetual return annually seem to bear out this impression. It seems to have that everlasting clinging effect, much like malaria. Yours truly has been a victim of these germs for many years, and they seem to put in their appearance about November 1st of each and every year, and the only temporary relief that I have been able to find is to go to my den, take down my old trusty .33, work the action a few times, look through the sights and aim at some neighbor's cat or dog trotting about the backyard, at the same time imagining it to be a fierce grizzly making ready for a desperate charge.

The next step is to write a few letters to game wardens in various sections of the hunting country, making inquiry as to the prospects for good deer hunting in certain localities. When you get a half-dozen letters from that many different places, telling you of the miraculous escapes effected by some of the natives from being gored to death by a ten-pointed buck, or chased for dear life by a ferocious bear or porcupine, you will be so completely worked up that your hunting enthusiasm will have you hypnotized and you are a goner. The spell cannot be broken until you have promised yourself a trip to the happy hunting-ground and have fully decided when and where to go.

Never having had an opportunity to hunt in the State of Michigan before last season, I decided to try the Upper Peninsula and at once opened up correspondence with Mr. Pequette, at Sidnaw, who is a timber cruiser in that section and well posted as to the haunts of the game. With his kind assistance, I was able to secure the services of Mr. Fred Bennett, as guide, who lives about seven miles from Sidnaw, right in the heart of the hunting-grounds.

After all satisfactory arrangements had been made, I took the Grand Trunk System train November 6th, to South Bend, Indiana, where I visited friends and relatives Saturday and Sunday until 1:30 p. m., at which time I took the Lake Shore train for Chicago, arriving at 4 p. m. At 5:00 p. m. I was aboard the C. M. & St. P. sleeper for the final run to Sidnaw.

After being shown my allotted sleeping quarters by the porter, I noticed two gen-

"I DRESSED THE DEER AND HUNG HIM UP"

tlemen across the aisle from my berth, and from what I could learn from scraps of conversation, as well as actions, etc., concluded that they were suffering from the same ailment as the writer, for such words as "automatics," "soft-nose bullets," "peep sights," "killed one at 400 yards," etc., kept drifting across to me. Their wearing apparel, as well as their equipment, resembled that of my own, so consequently my curiosity got the better of good manners, and I flatly asked them if they were going after the white tails. They politely assured me that such was their full intention, and from that on the rest of the evening was devoted to the relating of each others' hunting experiences in the past. Our acquaintance revealed the fact that they were both from Detroit and bound for Oncanogan, Michigan, for their sport. We all turned in about 10:30, bidding each other good-bye and wishing each other the usual good luck.

At 4:40 the next morning the porter came along and gave me a nudge, informing me that Sidnaw was the next stop. In a short time the train pulled into a small station, nestled in a forest country, with very little clearing in sight. Myself and baggage were dropped off in the dark. No lights in sight, except a dim lamp burning in the station, as well as one across the tracks in a little hotel. I carried my paraphernalia over to the hotel, and finding no one but a couple of hunters sitting about the big heating stove, I made inquiry for the proprietor, who, after some delay, appeared on the scene in his stocking feet and wanted to know if anyone cared to go to bed. I engaged a room—not to go to bed, but to change my traveling clothes for that attire which makes one feel so free and comfortable when living in camp. This accomplished, the tinkle of the breakfast bell was the signal for a forward march to the dining-room, where hot biscuit, fried eggs and good coffee were served.

After breakfast I located Mr. Pequette and introduced myself as the party from Detroit, the hunter whom he had recently corresponded with. I found Mr. Pequette to be a good timber cruiser and a professional deer hunter as well, and after a short acquaintance he suggested that we take a little stroll around in the bush to see how the prospects for game were looking.

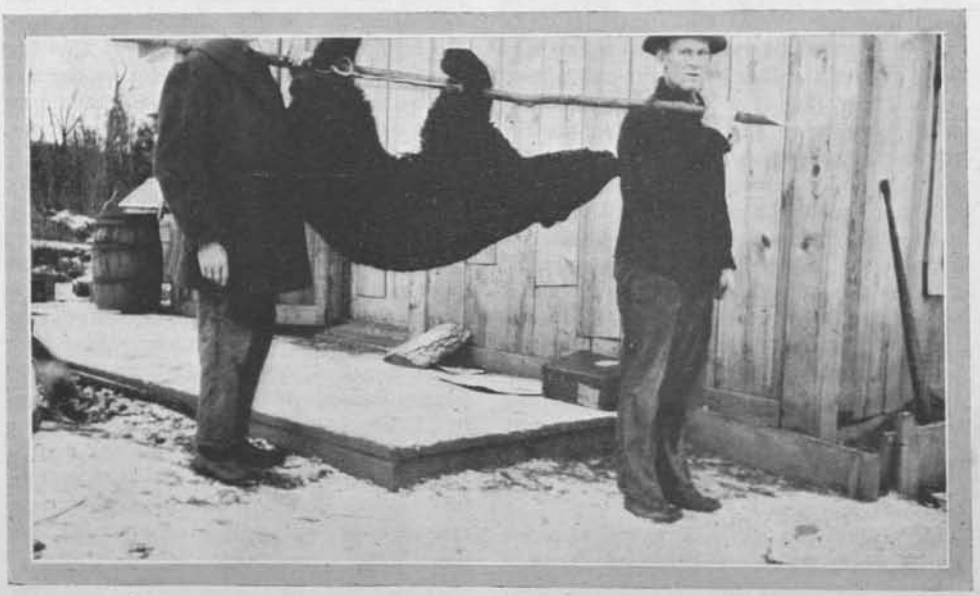
It was snowing quite briskly when we left the town, which made the conditions

ideal. We did not get more than two miles from the little hamlet, and during this short trip I am safe in saying that we tracked twenty-five deer and jumped three. As the season had not opened and would not open until the following day, November 10th, we were prevented from using our guns.

By this time my hunting temperature was about 104 in the shade and was inviting immediate action. We returned to the little village about 4:30 p. m. and were disappointed in not finding Mr. Bennett there to meet me. It was up to the writer to find someone in town who had a team and would drive me out to the Bennett Ranch, so I could get into the hunting ground early next morning. I finally secured the services of a teamster, a team and a buckboard. By the time all duffle was loaded and ready for the start, it was getting dusk and I made inquiry as to a lantern, but the driver informed me that there was no need of a light and consequently drove off with me wondering if I would ever see the Bennett ranch alive. When about three miles out in the country it became so dod-blasted dark that you could have handled it with a scoop-shovel. By this time the teamster seemed to be suffering from a malady characteristic among many of the Northwoods settlers, and insisted on singing songs with little or no audible words, attended with a couple of big hiccoughs at the end of each stanza, as a sort of chorus, caused by over-indulgence.

At this point I balked and refused to go any farther without a light. We held a council of war and decided to borrow a lantern from a homesteader living near the road at this point. We made the rest of the trip without any mishap, but I am confident that if we had not succeeded in getting the lantern we would have remained in some windfall or taken a plunge down one of those high embankments. As it was, we reached the Bennett ranch about 10 p. m. I introduced myself as the Detroit Sportsman and was in turn introduced to the Bennett family by Mr. Bennett, which consisted of Mrs. Bennett, seven children, and the district school-ma'am. Mrs. Bennett soon had a good hot supper ready, and oh, what I did to it would be a disgrace to tell, for I had had nothing since breakfast, sixteen hours' time!

After supper I was escorted to a small but comfortable shanty just below the house, in the bush, which was provided with a good stove and four good bunks



"THAT BEAR WAS SOME CARRY THROUGH THE THICK UNDERBRUSH"

"RAISED WITH A BENT-OVER SAPLING"

filled with hay. I was informed that this would be my sleeping quarters while in the North. I soon had a roaring fire going and with a number of good, heavy blankets (such as I always carry) made a very comfortable bed for the night. The next morning, bright and early (November 10th), Fred and I had breakfast and were off for the hunting grounds. A short walk from the house revealed the fact that there were plenty of deer, as the tracks ran in all directions in the sandy spots in the roads and trails.

We crossed the Sturgeon River and hunted the burned ridges and sink-holes. In crossing between two sinks we jumped a doe and two fawns. We ran around the top of the hill in time to see them disappearing across the slashings. It was a beautiful sight, as we could see them running for about a mile, their white flag bobbing up and down at every jump. Fred made several drives for me during the rest of the day, but only saw two deer.

We came to a log, where we sat down for a short rest; at the same time I scanned the ridges and burnings with my field-glasses for game. There was nothing in sight, but Fred pointed out a high knob, or hill, from where we were sitting, and said it was an elegant runway. He advised me just about where and what stump to sit on when I got there. After a long, tiresome jaunt across the valley and river, I climbed the other ridge and took my stand with gun in hand, ready for any emergency that might be suddenly thrust upon me. After about a half hour's wait I heard Fred's gun crack down at the edge of the swamp, and at once I was all alert, expecting every moment to see a large pair of antlers emerge from the underbrush. After being held in suspense for at least three minutes, another shot rang out. Then my hopes dropped like a snow-slide from a house-roof, as all hunters know what that usually means. After swallowing down a big lump of something that had come up in my throat (my heart, I guess), the third shot was fired, and on top of that a sort of an Indian warwhoop echoed from the hollow below. This I answered and started for the scene of action. On arriving I found Fred straddling around over a large fallen tree-stump with his sleeves rolled up and panting like a beagle hound that had just holed up a rabbit. I glanced around the end of the stump, and there laid as fine a young bear as one would wish to look at. The usual proceeding took place, dressing the bear; at the same time Fred told the story—how he found Mr. Bear in the end of the log, and how he had to shoot him three times before he would risk reaching in after him.

Fred suggested that he would carry the bear if I would carry the guns; so we got him onto his back and, believe me, that was some carry for about three-quarters of a mile through the thick underbrush, over large logs and across the river to an old logging road. The bear weighed about one hundred and twenty-five pounds dressed, and certainly had a fine black, glossy coat of fur. We left Mr. Bear by the roadside and struck a bee-line for home, as it was then getting late. After supper Fred and Andy took a lantern and went after the bear, getting back about 11 p. m.

Wednesday and Thursday, November 11th and 12th, we put in scouring the hills

and hollows, in which we jumped a number of deer but did not get a shot. On reaching home Thursday evening Fred received word that three hunters would arrive in Sidnaw that evening from Houghton, Mich. After a hearty supper, of which Mr. Bear's hind quarters formed part of the menu, Fred hitched up his two driving steeds and went to town to meet the three hunters.

The writer went to the little cabin down in the bush, laid in a good supply of firewood, and turned in to his blankets for the night. About 3 a. m. I was awakened by a rumbling noise and jumped out of my bunk to peer out of the window to learn particulars. I could see a lantern coming down the old logging road ahead of the wagon, so I busied myself getting a good fire started, and in a few minutes the tired but happy crowd were at the cabin, introducing each other and making themselves at home, as hunters usually do. These three gentlemen I will call Jack, Tommy and Homer. After a short acquaintance, a cheese-sandwich lunch with a bit of Blue Label to rinse it down was served, which is unusual for such an early hour in the morning. With the inner man satisfied, we all turned in for a few hours' sleep. At 6 a. m. I jumped out and made a fire, got things astir about the camp, and in a few minutes we heard the breakfast horn toot the mess call.

After dinner Fred, Tommy, Homer and I went up into the hardwood ridges and Fred placed each one of us on runways, then took to the brush and made a drive. After about an hour and a half wait, Fred came back, saying he had jumped several deer. It was getting late by this time, and we all decided to work toward camp. There was about two inches of snow, affording good tracking, and I did not follow the tracks of a deer more than about a quarter of a mile until I saw him standing just at the top of a little rise, about a hundred yards distant. My gun went to my face and he went over the hill just as quickly, not giving me a shot. Another quarter of a mile stalk and there he stood under a large hemlock in the shadows of the late evening. Another quick action on my part and the deer seconded the motion. My

"FRED TOTED HIM INTO CAMP"

.33 rang out, but that was all, as the jumps he made and no blood-stained snow left behind assured me that he was on his way rejoicing. This put the crimps into me a little, as it was my first shot and I felt that the result should have been different. It was then getting dark and my steps were turned campward. On reaching camp I found that one of the other boys had secured a nice "spike" for meat, which broke the spell and gave us plenty of fine venison for camp.

After the usual evening camp-fire gossip and a few good pipes of Durham, we all turned into our blankets to wait for the morrow. Next morning we were all off bright and early for the hardwood timber, where we began to find plenty of fresh sign, and we were not long getting located on runways. Fred made a drive and was not gone long until we heard his old .30-30 bark two times. In a few minutes Homer got busy with his .45-70 on a four-point buck, which had been wounded by Fred a short time before. This gave Homer his first score for the season.

Fred then changed me to a point on a high bluff and gave me strict orders not to move from that position if I wanted

"GOT A NICE DEER THAT FILLED MY LICENSE"

to get a deer. The afternoon was cold, cloudy and windy, and after standing there for an hour I became chilled to the bone and began to stir around to keep from freezing. The interest I had absorbed for killing deer had partly vanished and I had set my gun against a small ironwood sapling and started to walk up the bank when I happened to look down through the big timber and saw a four-point buck coming along in a hurry, at the same time watching in all directions for danger. You may gamble that it was not many seconds until my .33 was at my shoulder with a bead on Mr. Buck! When he was within about eighty yards I gave a whistle. He stopped. At that instant my rifle rang out and the deer plunged forward, fell, got up and started to run down the ridge toward the swamp. I fired the second shot at him and saw him fall, flounder around over a log and disappear. I could readily see that it was my meat, and went down to see what had happened. He had fallen in between two logs and was stone dead. I got hold of his horns and pulled him out, and found one front leg and one hind leg shot off; one bullet entered his left ham and came out on the point of the right shoulder, going through him diagonally. It is no wonder that he was dead when I reached him, for when a 200-grain soft-nose bullet from a .33 Winchester strikes anything there is awful execution. I dressed the deer and hung him up, then returned to my post to wait for the return of Fred. After a short wait he came up from the swamp below, and we then decided to pull for camp and come out the next day for the deer.

The next two days were put in hunting the swamps, in which I secured another nice deer that filled my license for the season.

As Jack and I had our licenses filled, we decided to leave camp, and Sunday, November 15th, at 8 p. m., found us loading the wagon with four nice deer to start for Sidnaw. It surely was a dark, cold drive, but we drove the seven miles without any noticeable incident.

I wish to say that the country surrounding Sidnaw is the finest territory to hunt in that it has been my good fortune to find. One has a variety of conditions to hunt under. You have the hardwood ridges, the old slashings and burnings, and the almost impenetrable hemlock and cedar swamps, if you so desire. There are a great many old logging trails and roads that help in getting around over the hunting grounds.

Do Your Share

Once more the hunting season looms up ahead, and this issue, taking the times by the forelock, leads the way in preparing for days afield to come. Not only is it full of timely fishing stories, each one of which is not a mere inspirational effusion but rather the tale of a master about taking some record game fish, but the magazine is crammed with hunting stories dealing with all the species of feathered game which will come in season shortly. Grouse, chickens, snipe, quail,—all are represented, and later will follow ducks and geese, with more grouse and quail stories. Taking the issue as a whole, the reader will find it alive with the spirit of the great outdoors.

These stories will be read with the keenest enjoyment by the man who is planning his own fall campaign; by the angler in salt and fresh waters who intends to put in some great September days on stream, lake, or tidewater, and by those who have already had their trip or, alas! are tied down so that no trip will be possible this year.

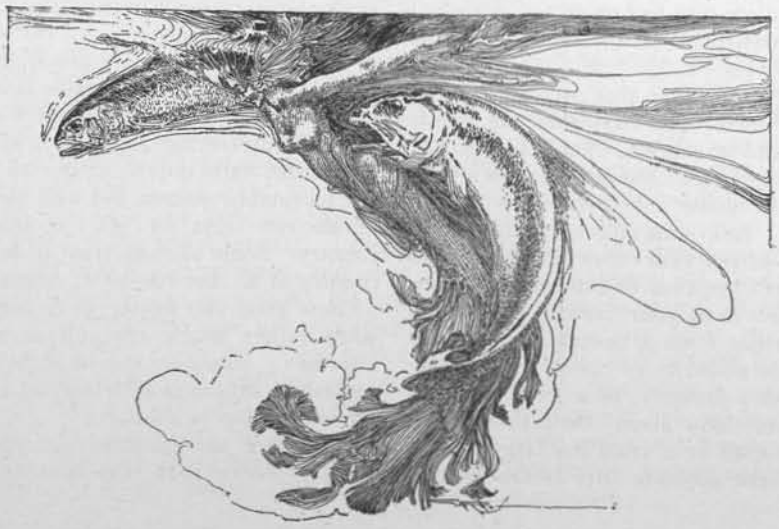
It is the pleasure that you all get out of such stories that furnishes the theme for the above caption, "Do your share." We all like to hear the other fellow's yarn of how he made a notable catch or ran into great luck with rifle or shotgun, and the way to tell your story for the benefit of tens of thousands of brother sportsmen is to send it to your favorite magazine. Some do not form a mistaken sense that such a tale would verge closely upon boasting of one's prowess; in a word, they do not care to "blow about" their adventures. Why not look at it from the larger viewpoint of the pleasure that fellow sportsmen will derive from reading the story of your hunt? Why not forget the self-conscious assumption that lesser men might accuse you of boastfulness and stand on the higher ground that a good hunting story, well and simply told, with the author not too much in the foreground, his guides and companions all on the "stage" and doing their part in his narrative, constitutes a human document of the most absorbing interest to all who love the sports of the greater outdoors. The charm of those FIELD AND STREAM hunting and fishing stories that you read each month with so much enjoyment lies in just this feature: the sheer manly interest to red-blooded men of a well-told hunting or fishing narrative.

Why cannot you do likewise? "Oh, I can't write!" is the usual bashful rejoinder that the would-be author makes to himself when the thought comes to him of writing up his hunting or fishing experience for his favorite magazine. Quite true; most outdoorsmen cannot write; they are not trained in the technique of the art; but, by observing a few main principles, there is no reason why an acceptable story could not be turned in, provided that one has had an interesting trip to write about. We return daily dozens of stories that are not acceptably written, not well illustrated, or do not treat of new or interesting country. Some of them treat of no special country at all, but consist of reminiscences of how good the fishing or shooting was when father was a boy—all of which is interesting solely to the local reader—or consist of rambling dissertations on hunting and fishing in general.

But there are hundreds of sportsmen who go every year into new and great

game fields, who have a fine trip and come back with a splendid set of pictures, yet never feel any obligation to repay in some measure the joy they have had in reading the stories of other sportsmen by contributing something on their own account. It explains in part why a staff of trained and paid writers must be depended upon for the bulk of the contributions to a great out-door magazine such as FIELD AND STREAM. We are always unearthing new men, indeed to run over the author list of FIELD AND STREAM for the last few years is to discover the name of many an outdoorsman whose work never appeared in print before. Why not yours? Every year sees some new "find" whose stories are hailed and read with delight by thousands of enthusiastic outers, and, while the old standbys continue to afford us entertainment and instruction year after year, new men constantly take space on the monthly contents list. All it needs is a busy and efficient camera, a reasonable sense of values in presenting the points of interest of your story, and a thorough knowledge of what you are talking about, to get by the Editor, nay, to be welcomed by him, with a yarn that rings true in every detail and is a valuable contribution to the sum of knowledge that the outdoor world possesses in common through its magazines. The contributions that do not "get by" are those dull narratives of butchery illustrated with cheap, fuzzy camera prints, containing no human being that lives and breathes excepting the author's own ego, replete with the ethics of the game hog and the spirit that would cheat the game warden. Such stories often come in, too many of them in fact, but so far as this magazine is concerned they never see the light of day. There is no reason in the world why *your* story should contain any of these faults. Good camera pictures are not beyond the reach of any man with a good picture box and an eye to proper light effects; the narrative will breeze along of its own accord if you but let the people that were with you take their share in the action and do not waste too much space over irrevelant details of getting on the hunting or fishing grounds; and, as far as the ethics of your story are concerned, any man whose heart is in the right place and who is conversant with the game laws of his State will be guilty of no act that is distasteful to all right-thinking sportsmen who may read his story.

And, it goes without saying that a well-illustrated, well-told hunting or fishing story published in this magazine will be paid for according to its value to us and our readers. We are not looking for something for nothing, and we believe that a story even if written solely to give pleasure to the army of fellow sportsmen who read outdoor publications is worthy of reward if it is worthy of publication. Good stories do not get by us, they get bought.



"THERE THEY WENT! TWO BEAUTIES! STRAIGHT INTO THE WOODS!"

MR. RUFFED GROUSE OF WISCONSIN

BY THEO. MACKLIN

THERE is a germ that floats on the breeze of autumn days, when the leaves are turning to shades of gold and brown. The symptoms of the attack are delirious spells, apparently so-called, when the victim is wandering off in beautiful painted woods, amidst pine stumps and hardwood thickets, across tamarack bogs where fallen logs are Nature's own bridges and into open parkings where the clover grows rank and tender. The remedy is all found in one prescription. Any number of other doses have failed to bring a cure. In fact, the dose prescribed is guaranteed for the period of one year only. Once infected, the patient is subject to annual relapses, occurring usually from the first of October on until a complete dose has been administered.

It is all an incident—that story of a rush call for a sleeper berth North, and the hurry-up slamming of togs into a grip, the tinkering of "old reliable," and the hasty 'phone message for a double order of "sixes." That always seems commonplace. It has been done. But—would that that morning were come and all the rest!—that is the supreme wish of—of yourself, of course!

"H-m-m-m! My! Morning? Gracious, it's dark!" The stove was roaring away warmly in the center of the bunk-room—a room with groups of double-deckers about the wall. Did you ever lie down so weary between the coarse, heavy lumber-camp blankets, that the tickle of the wool never bothered all night? You have? Well, I knew that that was just what I had done when I awoke and caught sight of Ben sitting bolt upright, rubbing his eyes. Around the room figures were moving about deliberately. The reason was not far off. The bell which rang a loud good morning a few minutes before, while I was still asleep, was the five-minute call before breakfast.

"THE LOGGING SPUR WAS OUR FIRST CHOICE"

Have you ever wondered why the cook shanty of a logging camp was so inviting, so warm and welcome, and so enticing? Mostly because at that particular shanty there was a cook who knew his job, and with it combined the rare qualities of geniality, friendliness, and good nature. The long row of boards, called the table, because it was covered with oilcloth and set with dishes, never looked good unless the cook decided that you were one of the elect, that is to say that in spite of being a stranger, permission had come from the "boss" that you might be seated and secure meals. And meals they were, such as one would not have desired to be better. Of course it was headquarters camp—and that accounts for something.

The moon shone bright in the mid-western sky. The thick, heavy dew looked gray in the silvery light. It was still early, but that is rare fortune in a partridge hunt. We were in new territory. Just where to go first always puzzles the newcomer. The lumber-jacks at the table had mapped a dozen courses that we might follow. But now, should we stroll up the tracks to the deep cut this side of the high bridge, or should it be to follow the old logging spur towards camp No. 12? Then, too, there was a chance to follow the old tote-road across the river, and one had even suggested hunting the roadsides towards town. Which was it to be? How were we to decide? At last it seemed certain that the logging spur was our first choice. Indeed, had we not heard that the lumber-train crew flushed birds every day up near the "Big Hill," as they called it?

We passed through the shadows of the switch yards with their bulky, lumber-loaded flat-cars. Soon the single track led away from the open country into deep, dense woods. Daylight was near. In the east, up over the jagged pines, came the orange color of the first advance guards of sunrise. In a few moments we should be able to see clearly enough to shoot. At any time birds might fly up from the right-of-way. So we stole along as noiselessly as possible.

Have you stood out there in the vastness of a superb morning in the autumn woods? It is wonderful. The rustling, breathing, life-likeness of the woods, the

crispness of the air, the cool, moist freshness of the dew, the murmuring, trickling sound of the stream, all enlivened with a keenness for the chance vision of some moving object or the picture of a grouse standing motionless in the path ahead, is an experience that thrills long after the day is past.

In a region where grouse are apt to step out into view on the roadway or track at any moment, and then dart back into the woods as rapidly as they appear, the excitement makes one's heart seem to throb in one's mouth. The faintest noise in the brush, the quick jump of a chipmunk up onto a rail and down across the open into cover, the fall of a maple leaf, all bring one to a dead stand, in full readiness to do something and to do it quickly.

To say that we were all eyes and ears is but a weak attempt at expressing the alert watchfulness and painstaking quietness of a person while trying such hunting. The need for silence is most noticeable when constant reminders are found necessary to muffle your comrade's attempts at conversation. And then, between his persistence and the failure to see game, you succumb to the temptation yourself. And how often does it happen just that way! Wh-r-r!—Wh-r-r-r! The roar of wings stops us short in the vain hope of seeing the vanishing ball of feathers.

And that shot was a beauty! The partridge had flushed some twenty yards ahead from the patch of clover on the right-hand bank of the railroad grade. It darted across the tracks in front and made for a clump of trees and tangled brush beyond a swampy depression. It was a straightaway chance and Ben was quick to line it up. But where it was now was more than we could tell. A dog could have routed it out of the tangle of fallen logs without a moment's delay. It surely had fallen dead! No bird ever crumples up like that one did without being dead. And, sure enough, there it was between two logs, its brown mottled back up and half hidden in the leaves and grass. "Bully for you, Ben," I shouted and held it up for his delighted glance.

We followed on. The logging road ran in a winding trail between two great walls of forest. The view was always changing. Here a little brook babbled over rocks worn smooth with ages of its patient trickling. Broken places in the woods let in the brilliant, glowing colored maple leaves. It was too beautiful to be overlooked. And that is the pleasure of the woods. There is always something new, something vast and stately and grand. You feel small and insignificant, lost, if you like the term, in its giant size and awe-inspiring quietude.

Whr-r-r-r! Whr-r-r-r! Wh-r-r-r! "No use to shoot at that bunch. Hold on! There are more." We stole along on tiptoe with our eyes scanning the whole foreground. Whr-r-r! "There he goes!" And I knew it. The game old bird was bent on putting a tall yellow birch between himself and trouble, but trouble overtook him just a moment too soon. If you ever learn to swear by a dog it will be when you go partridge shooting in the north woods without one. Eyes are no match for scent in the task of locating a brush-colored grouse fallen in a thicket of raspberry brambles, dry grass and fallen moss-covered logs. The search always seems to take too long. You feel sure that the time taken in hunting for more birds to shoot at would bring greater success. But don't worry. The same luck always seems to befall one at just such times. After all it is part of the fun. You never feel half so grateful as you do after finding a bird, the search for which you have almost given up a dozen times as a hopeless task. Who cares for a few thorns and some lost time? It's the bird that counts. I'd warrant you have grinned just as long and feelingly as the next one when the long-sought grouse found its way into the security of your game pocket —now, be honest!

A hundred yards ahead was the old gravel pit where the loggers had secured ballast for the track. Banked about it were the great, majestic walls of trees. We had met with the grouse which the loggers warned us were certain to be found near this pit. Some of them had darted across it into the dark depths of the timber. We separated and followed in after them, knowing that before long

something would be calling us from the direction of the camp.

Have you a picture of those wonderful autumn woods? The great black trunks loomed far up above to heights where dense networks of branches and leaves shut out the sky as does the roof of one's tent. Deep shadows seemed almost mystic. The leaves were dry and brown. Looking off down the slopes between the tall, straight trunks, the golden-tinted maple leaves seemed spread in fanciful layers floating like veils of chiffon in a motionless atmosphere. It was all like a huge dream. Into this haven of quiet and refuge the birds had come. Beyond, at the bottom of the slope, were acres of fallen logs, half buried in the soft, wet ground. The damp moss and leaves covering all hushed the noisy movements which are prone to be associated with even the most careful hunters. Each step might be the alarm. Any pause might disclose the pursued object proudly but motionlessly standing on some shattered stump or beside some fallen tree.

It was a wonderfully hopeful place for partridges. Indeed, they had flown in this direction. Maybe "still-hunting" would be the thing. In such a surrounding, where the eyes can always find something unexplored, shadows a little more uncanny than usual, silence a bit more engulfing, motions of leaves or what not excitingly suggestive, one wearies not for hours. Something moved! Down in that clump of birches! A shiver of expectation coursed over me. What was it? Could it be the partridge? All was motionless, all silence again. I dared not disturb it. Sure enough! A beautiful bird stepped from back of a tree and kept walking on up the sloping, half-wasted log. But that was enough. The bird saw trouble and darted away in a roar. It, too, had its course mapped out in the usual way, but something interfered. And there, on the open forest floor, quivering among the leaves, was a second beauty.

But there is something more in "still-hunting" than the mere waiting for sight of game. The fondest remembrances of the woods travel across the mind. They fill in the quiet silence with glimpses from the past. We had parted just after the cook shanty melted into the dim shadows of the moonlight. The air was crisp. Morning was soon to battle with the moon for its turn. I crossed the river flowing darkly and swiftly out of sight around the bend. Then the road—the north woods sort of one—led into the wilderness. Far away it was, from farmhouses or civilization.

I crossed the river again and turned toward the brightening east at the four corners. In that "edge-of-the-world" sort of country where the woods are uncut and the roads are long, straight strips slashed out of the forest, one may wander on for miles and miles without a glimpse of a log hut or hearing the rattle of a buckboard. It was all new and clean and fresh. And daylight was back again, refreshed after its night away. The haze that covered the foreground disappeared with the vanished moonlight. It was time to watch the edges of the road, to catch every movement in the clover patches here and there, or to scan the long, slender path ahead, leading up and down ever between two great walls of trees. Any moment some wild life might step into view and paint a picture that never fades on memory's canvas.

Here and there on the sand were footprints where some proud grouse had stepped out of the woods to view the sky, look up and down the road and then start feeding on the tender clover leaves. I have stood motionless for whole minutes, wondering whether or not the black object in the gray morning light was a bird or merely a stone rolled out of place. Often a sudden roar of wings, a darting object across the skyline between the trees —and the story was told. Another partridge had been disturbed in the course of his morning meal.

The sun was still painting colors on its canvas of clouds. Ever changing, always gorgeous, the pictures still hang in my mind. Just ahead rose a long, steep hill, guarded faithfully by its avenues of autumn trees. Looking up, with the rosy sky in the background, I saw the leaves, brown and tinted by the early frosts, settling from the trees. Tall yellow birches, golden colored maples and reddish oaks all contributed to the drifts by the road. And,

"SOMETHING MADE THE WORLD SEEM BRIGHTER AND THE DISTANCE TO MY NEXT GROUSE A LITTLE SHORTER"

as I idly gazed up at that picture ahead, something moved, strutted out into view, stood bolt upright, proud, cautious and wild. Delicious, such a sight! Your nerves tingle. You dare not move. The distance, too far for a shot if the bird flies, too close to be sure that your presence has not scared it, makes one thrill with hopes.

Like a statue it stood silhouetted against the sky on the brow of the hill. I gazed all in vain, it seemed. A rustle on the pile of vine-covered rocks to one side caught my ears and then my eyes. It was only a saucy, chippering squirrel—a tiny red fellow at that—but when I glanced back at the road the partridge was gone. Had it flown? I had heard no whirring of wings. Maybe it—— I was just at the brow of the hill. Ahead was a wonderful sweep of country shut in by another ridge of hills. And over all was to be seen the wavy top of the forest. *Wh-r-r-r! Wh-r-r-r!* There they went. Two beauties! Straight into the woods! It is funny, indeed, how rapidly they make for the shelter of a tree, back of which they can fly to safety out of sight of trouble. Sometimes one has reason for disappearing into the woods after them. At other times he may only think that he has a good reason. Yet, when I reached the road again, something made the world seem brighter and the distance to my next grouse a little shorter. Can you guess?

I peeped over the top of the next hill into a narrow valley. The road led over a stream issuing out of a cranberry-grown tamarack swamp, and up a steep, stony hill. The sun was just sparkling up through the treetops and glittering on the many-colored leaves. What a glorious thing Nature is in its unspoiled beauty! It breathes a world of hope and pleasure to those who learn its charms. And, as I drank in that scene, a movement on the brow of the hill caught my eye. Deliberately and perfectly unsuspicious of its surroundings an animal came sauntering down the hill. Could it be a dog? But it sniffed of the road in a manner far more delicate than the dogs of my knowledge. Besides, where would a dog live up in this

"WITH THE DYING OF ANOTHER AFTERNOON I TURNED HOMEWARD"

far-off, quiet country? All at once, not satisfied with walking, it started into a trot and came lightly and rapidly to the bottom of the hill. Near the bridge it shot a rapid glance upward and stopped perfectly still. I had not moved once. But something was wrong. My observer sat back on his haunches and studied my surroundings intently, doubtless wondering why he had come so close without having seen me before. And then, as if satisfied with his investigation, he turned a right angle and in a beautiful leap cleared some logs and disappeared into the cranberry marsh, waving a nervous good-bye with a huge, bushy tail. Whether it was a fox or a coyote never was certain to me, but the picture has ever been a vivid remembrance. The surprise of it all—more for that pointed little doggy face than one would think them capable of, made me just a bit more than ever fond of the wilds and its little people, if such a thing were possible.

Evening came. Just as the day was melting into twilight and the clouds brightened up with the dying of another afternoon, I turned homeward. Within the next few minutes were to be the best chances of a whole day. And as I moved along, intent on the road ahead, a bird silently flew up over the clump of bushes beside the road. That was a favorite feeding-ground, for clover grew there, sweet and tender. And even as I paused to watch, a second bird walked out into sight, silhouetted against the western sky, and then disappeared over the rise. All athrill with eagerness, I hastened along, thinking the birds were out of sight. *Whr-r-r-r!* came the signal. Hardly had the shot echoed when several birds flushed from the same clover patch. They were difficult shots in that dim evening light, but, thanks to the opening of the road, two birds more were soon tucked safely away in my coat.

And so the time passed until the cheerful call of your comrade wakes you up with a warning that dinner back at the logging camp is long past due. And when the new experiences and those of the past have been reviewed through several rapturous days and the trip home is over, one has a renewed supply of energy for another year of pleasant work.

"THE REGULARS GOT OUT EARLY AND WERE SOON AT WORK"

A TWO-HANDED BASS OF THE JERSEY COAST

By SWITCH REEL

BUDDY hit the beach one Sunday morning at half-flood tide, with a strong southeast wind sending in quartering seas that swept everything before them. It was raining, too, but that didn't matter. Mrs. Buddy was with him and Bob took them down toward the Life Saving Station, away from the madding crowd.

This Buddy had all the courage and persistence that was necessary for a surf fisherman, as he spent two hours trying to hit the ocean with his bait and sinker and only gave up out of politeness when Mrs. Buddy thought she was wet enough to return to the hotel.

As a matter of fact he hit the ocean only twice during his efforts, but that was because he achieved two wonderful backlashes and his line parted at each. And it was a good sign that he just swore softly to himself and put on another rig. Any ordinary mortal would have given up in despair, while one with the makings of a real "bug" concealed within him will come again.

The next morning dawned clear and fine, with a gentle west wind and a fine beach. The regulars got out early and were soon at work. Along about ten o'clock Buddy came to the front with the ladies. Stopping about 100 feet from the first man in the line, he baited his little 6-0 hook and laid out a short cast. Soon after a school of channel bass came over the bar down to the south and started in search of Buddy. One of them banged Win a quarter of a mile away, but finding his mistake in time, dropped the bait. They dodged old sport Hoff by a hair, but John was hiding under a straw hat and he hung one before the bass realized that it wasn't Buddy's bait.

John's activities drew the gallery of ladies to the fight, and they saw the veteran put a 27-pounder on the beach with all his well-known grace and gusto.

Up the channel came the swaggering

"DODGED OLD SPORT HOFF BY A HAIR"

bunch of bullies. Crabs ducked into the sand and mullet ran up into the wash of the breakers as they swung insolently north. They passed Jim without ceremony, and Bob, with his rod stuck up in the sand spike, was busy baiting up, when three of them espied Buddy's bait! *Kersmash!* The rush was won by a long, slim 32-pounder and Buddy's heart nearly jumped out of his mouth at the strike he received. Now, if anything happens on the beach that Jim doesn't see it's a very dark night, and as this happened in broad daylight it took Jim about a sixty-fourth of a second to yell "Hey, Bob!" with such emphatic insistence that Bob actually paid attention and saw, in the direction of Jim's outstretched arm, the wild-eyed Buddy being dragged almost into the breakers by the submarine torpedo boat into which his hook was fastened.

Then did the lust of battle surge in Bob's veins, and he dropped his hook to rush to the firing line, yelling above the roar of the breakers, "Let 'im go! Let 'im go!" But Buddy was already letting him go mainly just because he couldn't hold him.

His teeth were set and he was valiantly struggling to get his heart swallowed back into place, when Bob arrived and slopped down into the undertow to get an early view of the fish and make sure he wasn't a shark or stingaree.

You may be sure, too, that it was some privilege for Bob to repay the debt incurred at about the same spot five years before, when four of the ablest elocutionists on the beach, Matt, Win, Fred and the Counsellor coached him through his first fight.

Buddy's past experience with trout, black bass, pickerel and such one-handed fish stood him in good stead and in spite of the fact that his hand shook like an aspen every time he was due to grab the handle of the reel, he kept the slack out of the line and gave the fish play whenever he got his tail toward the beach.

"Keep your rod up straight so he'll get the spring of it when he heads out to sea. Understand?" Buddy gave a wild-eyed

"THEY PASSED JIM WITHOUT CEREMONY"

nod. He couldn't speak, for he'd only got his heart about half-way down and it interfered with speech. The ladies had arrived on a run by this time, and formed an excited group in the background.

The perpendicular rod finally brought the gorgeous copper-pink warrior to the surface and a flirt of his tail disclosed the fact that it was a channel bass and brought little screeches of excitement from the three ladies. He ran to the north and Buddy followed, giving line when necessary and taking it back when possible. There was a little gully full of water that had washed up and he went over his shoe-tops without knowing it. His hat was gone and his brown locks were tossing in the breeze. The fish came to the surface a hundred and fifty feet or more out, swirling and lashing about. Then he circled in toward the beach, but continued the circle on reaching the combers and swerved madly for the bar, catching Buddy reeling and stopping the reel with a smash that almost took the rod out of his shaking hands.

"SOME PROUD OF HER HUBBY, TOO!"

"BUDDY LUGGED HIS FISH OVER"

After some fifteen strenuous minutes he let up a little and was brought in—but not for long.

Whoop! How fine he looked as he dove through an incoming sea! How we trembled as he went head down to grind his jaws into the sand to rub that little hook out!

How frantically Buddy reeled when he got him into the tumbling front of a comber and kept him coming toward safety! And what suspense as he slipped back in the receding undertow. "Here comes another wave! Now reel! Now! Now!" And, as it went back, there he lay, glistening in the bright September sun, a man's-sized prize, fit to be proud of!

And Mrs. Buddy was some proud of her hubby, too! At least we thought she was from the things she did to him right there before us all. About the time he'd used up all the atmosphere on the coast telling us all about it, the beach cart came along and Buddy lugged his fish over and put him in, and, finding a lack of air at the sea level, he went up and sat on the edge of a cloud for the remainder of the day.

A QUIET STRETCH ALONG THE FLATHEAD

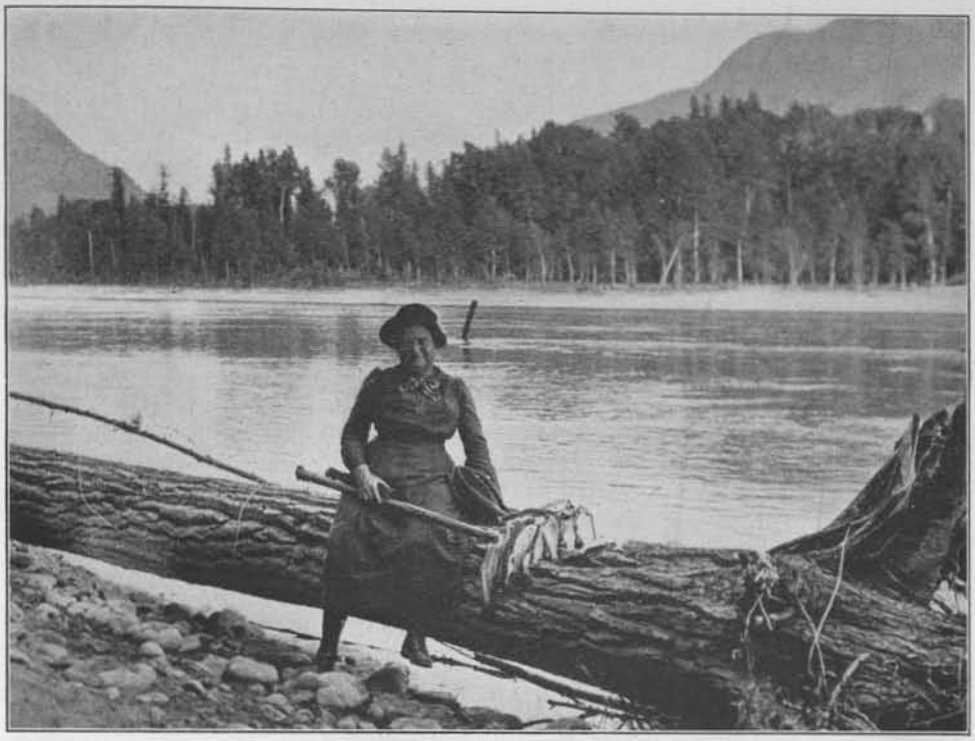
THE ONE BEST DAY

By B. W. MITCHELL

THERE stands forth conspicuous in your thought, I am sure, my brothers and sisters in the Gentle Art, one supreme day of pleasure, the memory of which you would not barter for a king's ransom. It may be a day of full creel and of savage strikes; it may be a day of pure delight in sunlit wood, in rippling water, in cloud-flecked sky of azure, with never a rise to wean you from the silent worship of the Red Gods . . . but One Best Day there is; and of our own my story runs.

It was quite by chance that we enjoyed this One Best Day of trout-fishing . . . or instead of chance, the devout angler might call it special providence. Anyway, all the powers that watch over anglers pulled together for once in our favor; even the coyest of them all, the Power (with a capital P) that makes big trout crazy enough to lunge hungrily at a mere bunch of feathers. And it came about in this way.

Bent upon a scramble through the Glacier National Park, and hungering and thirsting for trout and waters troutful, we had landed at the little station of Belton among the foothills of the great Rocky Mountains that have given their name to Belton's State. We were in that condition of delightful aimlessness which is really the only way to travel and enjoy traveling. No schedule itinerary held us back or drove us forward. True, we had plans; but plans are made to break, and the freedom to break them adds to the happiness of the breakers . . . it is rumored that it is thus also with the Commandments, but we have never tried! We



TO THE VICTOR BELONG THE SPOILS

loafed about the pretty chalet, looked at the purple lights on the great timbered foothills, and were real glad to be alive.

Just then somebody asked somebody else if he were going to run the river for trout on the morrow. Nip wasn't eavesdropping . . . really, no! but she took the goods the gods provided and came in haste to announce:

"The Flathead River's swarming with trout!"

A few inquiries and the answers to them set us tingling with anticipation of sport royal. Hurriedly canceling arrangements for a plunge into the mountains next day, we set earnestly to the task of finding boat and boatman. But guides are at a premium on the Flathead; and one failure after another, as we found each man engaged, lowered our spirit-thermometers to the zero mark. There remained one last resort. We resorted. He was the sole remaining human being in Belton who owned a boat . . . there are few human beings there, and fewer boats.

"Can you take us down the river tomorrow?"

To only one other question that ever I asked was the answer more breathlessly awaited. Praised be the shades of Izaak and Juliana! the answer to both of them was "Yes."

The Flathead can only be fished from a boat, and the water is of that delectable character that the novice had better let it alone. Free from all trace of the stain of glacial silt, pure as though distilled from the retort of some Titan chemist, it is yet a typical mountain river of great volume and of tremendous power. The stretch of it that is run by the boatmen is about thirty-five miles in length, from Belton to Columbia Falls, and fully thirty miles of this is made up of a staircase-like succession of white rapids and of swirling eddies and pools. Even if there were not a trout in it, the ride itself would be an exhilarating delight. And that ride requires at the oars a man who knows the water, who knows the channels through

the tossing rapids and the eddies where the big trout lie. And maybe they don't lie there! And maybe they don't dart like tigers from their lairs upon the feathery tidbits that prove so costly a bite! But that is anticipating.

The weather man was good to us. When we woke, the sun was just beginning to break up the mountain mists through which the huge rounded hills rose like green swelling islands from the still surface of a lake. You may guess that toilet and breakfast saw no loitering. It takes a fisherwoman to make a hasty toilet—she has learned how . . . and besides, she has a motive. We breathed deep draughts of the ozone-laden air, a tonic to the lungs; and as we jointed together the delicate little flyrods, we watched our genial guide stow away the precious lunches in the locker of his safe and roomy boat and launch her on the clear, swift current. We looped to the six-foot leaders a royal coachman and a gray hackle each, tied on No. 8 hooks. Then we clambered aboard, and with the first oar-stroke the boat shot away on the current as though she were headed for the Pacific Ocean on a hurry call down the Flathead to the Columbia.

The bright morning, the glorious mountains, the clear, dashing river were the choicest offerings of the Outdoor World to her votaries. On we swept to the music of the wild water, rippling over the shallows, swelling to a roar in the battling rapids, or hissing softly in the eddies.

"No use casting here," counsels the guide; "save your wrists for further down."

But somehow that alluring water simply demands a fly: it must have one to preserve the eternal fitness of things. Besides, she wanted to cast. Just at that moment she would have cast her gray hackle into a washtub and looked for results. Fine thing to be sanguine! Back flew the enameled line to its limit, and, answering the spring of the light rod, the flies leaped forward and settled in the white and green smother as softly as a night moth. Again . . . again . . . with eager eyes and parted lips.

"Not much . . ." began the guide.

But before he could say "use" there came a swirl of silver and a delightful shriek:

"I've got him! I've got . . ."

Another broken sentence. I half believe it was buck fever, though when I suggested that solution, she denied it with a pained expression. I didn't insist; it isn't always wise; sometimes it is even dangerous. The next few casts seemed to have a bit less vim in them and to be executed in a fit of retrospective and regretful abstraction, if there be such a thing in the psychologists' repertory of big words. Like all half-hearted casts into the troubled waters of life, they went unrewarded. But as the boat swept past a splendid spray-beaten boulder up the rearward slope of which the crested waves were trying to climb, Nip sat up and took notice, waving the flies skilfully into the bubbling circles below the rock. As the feathery traitors settled down, a silvery being leaped to meet them with all the fierce energy that broken bubbles of cold oxygen can inspire in a trout. Clear over the flies he arched and buried the dropper in his splash.

"Strike!" I yelled involuntarily.

It was a wholly unnecessary yell, and it was received in a fashion befitting superfluous advice. The lady sniffed scornfully as she struck and sank the hook in him.

"Tell your grandmother how to milk geese," she retorted; and the battle was on. Back and forth rushed the fish, always keeping well down, the line cutting the bright water like a blade. The delicate rod bent to the strain and returned it with interest. Minute after minute the fight went on with no sign of weakening on the part of either combatant. Little telephonic messages of defiance ran up the vibrant line, and many remarks, disconcerting, threatening, insulting, were hurled back; such, for instance, as that all the piscine cunning at his command would avail naught; and with this was mingled much salutary advice to "come in out of the wet." (Confidentially here, why must even the best of women anglers carry on a lively conversation *at* a hooked fish? I'll wager that even Dame Juliana herself apostrophized them.) Slowly the brave and beautiful trout weakened; his rushes became spasmodic, and at last he turned

helplessly on his side, beating his broad tail weakly and showing clearly the iridescent rainbow stripe with dark transverse bars that told his species. And then the secret of the long struggle was revealed; in his leap upon the fly he had hooked himself just above the tail, so that he had enjoyed the advantage of holding his jaws and gills exactly as he wanted them all through the fray. He had been conquered by sheer exhaustion, not by drowning.

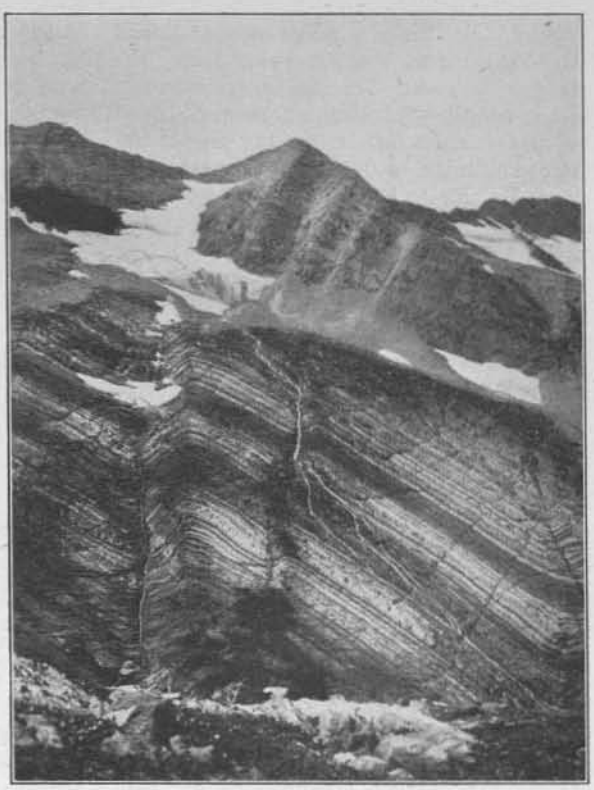
Danced then the boat like a cork down a splendid rapid, to be pulled skilfully and powerfully into a swirling eddy at its foot.

"Good place here," was the laconic statement.

My first cast drew a fine double. Then a victim fell to Her Majesty. Altogether that eddy was shy eleven trout when we swept out again into the current.

I do not believe that any banqueter ever enjoyed a Lucullan feast, as we enjoyed those sandwiches and hard-boiled eggs, while we perched like castaways on a great flat rock. It was pure joy just to be alive. The ripple and dash of the water was silver music in our ears, the ozone-laden air was very wine of life, and the brilliant, beautiful sunlight set us a-tingle, burning to death in us every malignant germ that Dr. Wiley ever dreamed of in his wildest nightmares. We were kids again: we descended even to launching eggshell boats and making bets as to when and where they would be swamped. I know of nothing that can so lift the burden of the years from one's shoulders as the sparkling, bubbling, literally effervescent water that rushes and gleams and gives back the bright sunshine in the rock-strewn channel of the Flathead.

Our guide had dropped some mysterious hints anent a certain box canyon through which we were to pass farther down, and finally he came plump out with the idea he had been nursing.



THE CLIFF OF THE ROMAN SASH

"Say," he volunteered.

We didn't, but we looked expectant and waited for him to say.

"This is pretty good water along here."

It was. The truth of the remark was self-evident, almost axiomatic. We had been murdering a two-pounder every once in a while for several miles, so neither one of us made any attempt at contradiction.

Then the cat came out of the bag.

"Most folks are satisfied with this water and use up all their time here. I want the lady to have some real sport. Sha'n't I run you right on down to the box canyon and fish there? It's worth it—you bet!"

"You're the doctor," we replied in choice Montana slang.

On we shot; rapid after rapid, pool after pool, that it seemed a crime to leave unwhipped. But it was doing evil that good might come. The banks drew closer together; they became steeper, rockier,

wilder. Suddenly a gorge opened ahead with sheer rock walls burying their feet deep in the river. The canyon ran east and west, and the afternoon sun poured a flood of illumination into it, making one of the most charming scenes it has ever been our good fortune to look upon. The water, as it were, held its breath, reluctant to disturb the quiet loveliness. It slipped along smoothly in oily whirls and spirals in the mid-channel, smoothing further still to slowly revolving eddies along shore, and deep, deep—so deep that it seemed a pale peridot green and yet so exquisitely clear that every pebble could be seen twenty feet below the surface. And there, too, were stones and rocks and giant boulders heaped in confusion like the old ruined castles of some enormous aquarium. And the trout! Let the unbeliever believe. Here too the aquarium metaphor holds. They literally crowded the water—schools of them lazily feeding, playing, chasing each other in endless mazes and with exquisite grace, fins and tails waving in the very poetry of motion. Seldom and to few is it given to see the trout in his home life. We have all seen the evening leap at the first winged creatures of the twilight. We have all seen the panicky dart when our shadow fell across his lair in the mountain brook. But here was the daily life, the vivid, ever-hungry activity of the prince of fishes.

The boat drew slowly to the cliff wall and was held there. The beautiful fish feared it as little as a floating leaf. It seemed cruel and sinful to abuse such quiet confidence. A silver form floated out from beneath a boulder on the very bottom. With slowly quivering pectorals it drifted upward softly as a bubble. The lesser fry scattered and fled. A gray hackle lightly settled on the water while the great trout was still far from the surface. Instantly that dignified ascent became a tiger's rush. The fish at the sight of the fly fairly exploded into motion like powder at the touch of a spark. Seizing the fly he bowed into an arc, then flashed headlong for his lair. We could see him through the ever-widening circles of his strike. A swift turn of the rod, and at the sting of the hook he darted like a rocket for the open air, sending a whirl and splash of drops as he savagely shook his head and tried to throw himself sidewise across the line. We could see then his fierce rush to the bottom again for the protection of his home rock. But the strain of the delicate rod told, and with a vicious tug he sought the swifter water of the main channel. Now in frenzied terror he leaped again and again, only to be turned by the skilled hand of Dame Juliana's own disciple. Now he sulked and sawed and tugged till the taut line quivered like a bowstring. Weaker grew the resistance he was so gamely offering, till at last he was swimming feebly at the surface, guided in a wide arc at a good radius of safety from the boat. Now he feebly floated, and the broad band of prismatic colors gleamed down his silvery side.

"Poor old fellow," she said; "I hate to kill you. I've a notion to set you free."

"George," I remarked casually to the guide, "they say that Chink at the Chalet has a wizard's skill in cooking a big trout."

George grinned. I caught the flash of a pair of eyes, and a net was deftly passed beneath the victim.

The declining sun poured its rays almost level through the gorge, and reluctantly we gave over the glorious sport. Transcontinental trains don't wait for fishermen and Columbia Falls was still miles away. The country opened up as we passed out from the foothills. Pebble beaches bordered the lovely river now flowing bright and smooth, the wild rapids far behind. On these pebbly bars great ravens croaked and quarreled noisily over the scant flotsam of the stream. Appeared now along the bank the twin steel threads of the railway. We thanked it for making accessible this superbly beautiful wilderness. We reviled it in thinking what this same scene might be in fifty years, with roaring, grimy cities bordering a polluted flood. That is American history. Why must progress spell destruction?

And then we heartily thanked our stars that on the upper reaches, at least, of this delightful river our Uncle Samuel has laid his protecting hand to preserve it forever for those who believe that it isn't man's first duty to destroy the work of God.

"DROPPED DOWN TO AN OASIS IN THE DESERT"

OPENING DAY WITH THE SAGE-HENS

By OTTO M. JONES

JULY fifteenth is the great day of the year for the Idaho bird-shooters, for on this date the season opens for the shooting of sage-hens and turtle-doves. The doves are forgotten, almost, in the hunter's wild rush for the larger birds; and every lover of the scatter-gun, who can take the time off, makes preparations for this opening day and for miles the roads are lined with autos "beating it" for the flat, rolling haunts of the big black-breasted birds.

July fourteenth of the 1914 season, found Harry Dietrich, Del (my younger brother), and myself enveloped in a cloud of dust, just in the outskirts of Boise, as the big car purred healthily along the winding road. The clock on the dash

In a little over an hour's traveling time, we dropped down into Canyon Creek, thirty-seven miles from Boise, and a real oasis in the desert. Here we stopped to drain our radiator and refill it with the cold mountain waters of the Creek.

Another thirty-seven miles found us at Castle Rocks, where nature has fashioned curiously shaped pyramids and piles of rocks, which border on Castle Creek, (another oasis in this desert).

Our next stop was on Wild Horse Creek, where we drove into the friendly shade of a clump of willows, and soon had the car unpacked and supper going. After supper, we were soon in our blankets to let old Morpheus take us on all kinds of imaginary bird-shooting trips as we slept soundly on our hard beds.

We were out of our blankets before sun-up in the morning and Harry appointed himself breakfast cook, while Del and I took Nibs and made a scouting tour of the water-holes at the head of Wild Horse to ascertain if there were any sage-hens in that part of the country or not. After making the rounds of five or six of these springs or water-holes with no luck whatever, we decided there were no birds to be found there and returned to our

"WHO CAN BLAME A SAGE-HEN HUNTER FOR SMILING?"

camp to do justice to Harry's well-cooked breakfast. And, as we hurriedly put that said breakfast where it would do the most good, we planned our campaign for the day's hunt, and were prompted to action by the distant booming of shotguns as the hunters began getting in the field around us.

Breakfast over, we were soon in the car and traveling for Big Camas Prairie for all we were worth, and in practically no time at all were at the edge of this large, flat stretch of country where we all piled out to skirt the stream there and circle the small reservoir fed by it. This stop proved more successful than the Wild Horse camp, for we had gone but a few hundred yards, and were beating around a rim of lava rock, when Harry and I heard Del open up in rapid fire on top of the lava table, and hurried up there to find that he had raised a flock of about ten or twelve birds and had three to his credit. He had found two, but so far had been unable to pick up the third. Nibs was put into action and soon had the hiding bird located, where it had flattened out beside a small sage-brush and Del had passed within ten feet of it several times in his search, but these birds' coloring, or lack of it one might say, is certainly in their favor when it comes to flattening out on a piece of level ground and becoming almost invisible to a passer-by. Their mottled-gray backs and wings harmonize perfectly with the gray leaves and branches of the sage-brush and the parched vegetation of the plains.

We followed this flock until we had nine of them checked in, and then swung around the reservoir and headed for a shack, towards the head of the creek, which we reached just before noon. This shack proved to be headquarters for the Catlin Cattle Company and Lee Barber was in charge as foreman. We were greeted heartily by Lee and immediately invited to stay for dinner, which we did without being urged further.

When the call for "chuck" came, we gathered around the kitchen to find Del missing, but a short still-hunt found him with about four feet and some odd of his

"SNAPPED HIM AND NIBS WITH HIS LIMIT OF CHICKENS"

"HARRY AND DEL COUNTED 'EM OVER"

six feet and more of anatomy drawn up in the shade of the shack, while the remaining foot or so of his frame was at the mercy of the July sun. His figure resembled the "Eternal Question," but hardly of the C. D. Gibson type. A dipper of spring water soon brought him out of this jack-knife position and dinner was on. And Lee proved to be a most hospitable foreman as well as a good cook, and to say that his dinner just hit the spot with we bird-shooters after our morning's hike is putting it mildly.

After dinner we followed one of the rider's directions and went over to some water-holes and springs near the shack and in line with our car. Here we separated and each took a draw or coulee and followed them down in the direction where we had left the car. I could hear Harry and Del warm up on either side of me, as they ran into a few flocks along their streams, and I struck two bunches, so I figured we would have a good showing of the birds by the time we reached the point of our meeting. Finally I heard a shout from the ridge to my right, and turning, was hailed by Harry. He was literally loaded with sage-hens, and shouted as he approached that he had his limit of twelve birds. I had only ten, so we followed on down the watercourse to the car, where we found Del waiting for us. Harry and I had failed to fill my limit in the remaining distance of our hike, so we cleaned the birds and began packing up for the trip home. I got out the kodak, at Harry's request, and snapped him and Nibs with his limit of birds, showing, in the background, the water-holes and waterways which always afford likely places for good sage-hen shooting on a hot day.

It was a tired and footsore bunch that finally loaded themselves into the car and began burning up the miles of road that led us homeward, but we had had a very successful and pleasant trip of it. I say pleasant—it was pleasant, as sage-hen shooting goes, for it is far from pleasant in the true sense of the word at its best. For it is generally accompanied by grilling heat, warm murky drinking-water, and long hikes, so who can blame a sage-hen hunter for smiling when presented with a cold bottle upon his return to camp after one of these burning hikes, loaded with birds and perhaps alkali water? I, for one, can never have the heart to criticize in such a case, for, being lured by the sport, I have been there too many times myself and have always welcomed the brew, collar and all, whether passed by the National Board of Censorship or not. The pleasure of this trip rested in our success,

"MARK SOUTHWEST!"

GOLDEN PLOVER

BY WARREN H. MILLER

ILLUSTRATIONS BY WM. NESBIT

"MARK south, papa!"

Everyone froze in the blind, for when the Kid called "Mark!" it always meant that his bright blue eyes had seen game coming. Rigidly we crouched in our circle of sage, not daring to move a muscle, looking cornerwise out through every vista available while thrills of anticipation raced through our nerves. Up, out of the south, they came, suddenly being visible in the vast greenness of the marsh, a shimmering of white underwings and a wheel of gray pinions as they circled the decoys down-wind. The safeties clicked and I heard the hammer sear of the Kid's 28-ga. clink home as every bird cupped his wings and hovered over the stools.

"Now!" gritted Walter through his teeth. *Crack!* spoke the little 28, and *Blam-blam! Bluie-bluie-bluie!* roared the double and the pump. Birds crumpled and fell right and left as the flock flashed into lightning action, bursting in every direction like a feathered bombshell.

"Down! Everyone!" barked Walter, grabbing the Kid's shoulder and forcing him to earth as he fumbled for the bone snipe whistle dangling at his neck. We crouched motionless while the shrill *Dzree-u-ee!* of the black-bellied plover call floated out over the marsh. But the flock would have none of us, and would not return for any snipe calls, however seductive.

"Seven down!" called Walter, wading out to pick them up. "Say, these are the queerest black-bellies I ever saw! One-year birds, maybe; I dunno." He brought in the bunch of large black and white plover, their wings dangling all awry, and tossed them on the tarpaulin floor-cloth of the blind.

"Where's the hind toe?" I demanded, examining the legs of one of them. "Black-bellied plover, nothin'!—these are young Golden Plover, man! Glory be! the first I've seen on these marshes in many a weary year!"

Walter grunted incredulously.

"In the first place, the herring-bone on their backs is too yellow for black-bellies, even first-year birds," I argued. "In the second place, where are your black feathers under the wings nearest the body? And, in the third place, the hind toe is wanting, and that settles it!"

"I believe you, my boy!" said Walter with rising exultation in his voice. "Who says the game is not coming back! This is only the third year of that no-sale-of-game law that you fellows put through, but I tell you I never saw such an increase in all kinds of snipe, duck, and geese in this bay as has come this year and last. Those are the first golden plover that I've seen in—let's see—well, sixteen years anyway."

Thus Walter the Mighty, by the grace of God, King over all the great open marshes and seaways that do lie to the west end of Great South Bay; the only man that I know of who lives within forty miles of New York and pays neither rent, nor butcher, nor grocer, yet is a gentleman born and raised, with one of the best-kept places along the Merrick Road. How does he do it? Well, there's a garden; and there's a rod, hight Betsey Jane; and there's a twelve-gauge that Von Lengerke used to own that can reach out and get 'em at unheard-of ranges; and Walter makes all three of them feed him, while salt-water anglers and duck shooters come down for a week's end and go out with him aboard the *Ladybird*. If you are as good a shot and as keen an angler as he is, fine and dandy; if not, my word for it, he will damn some sort of efficiency into you before the *Ladybird* docks again at her home port!

We three were out for just such a cruise—a week's end from Friday to Tuesday, in September—shooting snipe on the marshes, fishing the hole at Jones' Inlet for big tide-runner weakfish—the kind that run six to eight pounds—and tackling the surf at night for kingfish and blues.

This morning we lay in the balmy sunlight with a comfortable black oilcloth spread under us on the marsh and nothing to do but talk and keep a bright lookout through the interstices of the blind for passing flocks over the rim of the far horizon, shimmering green and lovely in the mild heat of autumn. Every fifteen or twenty minutes the tense call, "Mark southeast!" would arrest all movement and send one's fingers sliding ever so gently along the tang of the shotgun to where the knurled ridge of the safety jutted up. Millions of peeps and sanderlings hovered about or played among our decoys unmolested, and now and then a flock of big birds would visit us; one time three incoming willet, that flew high overhead, presenting the hardest kind of a shot; another time half a dozen summer yellowlegs, who wheeled in to our cheerful *hu-hu-hu's;* again, a couple of creakers, who flashed in unperceived until right over the blind, and then were handily picked out of the air by a left quartering double made by the writer, and causing him a four-inch expansion of chest measure!

But these golden plover were "something else again," the finest eating and rarest of all plover in the East, and there seemed to be quite a few of them using here and there in the marsh. When you realize that that marsh is some twenty miles long and ten wide, it meant that our chances of being visited were so infrequent as to cause a bright lookout for the least sign of a fluttering wing on the horizon and a sharp ear for the faintest suspicion of a snipe call floating over the marsh.

The morning wore on with varying thrills and now and then a long sunny spell with nothing to do but loll in the blind and enjoy the salt tang of the southeast breeze blowing in from the open ocean. Finally Walter went out of the blind—fatal mistake, for something always happens when you are not attending strictly to business—and in less than five minutes a sudden "Hist! Mark southeast, papa! Look who's here!" in the Kid's clear treble, made us both bow flat to the earth, for this time a big flock of black-bellied plover were approaching, as we could tell by their white rump-patches as they wheeled up-wind. They didn't like Walter's huddled, motionless form and alighted, just out of range, across our pond.

"Kid, if you dare bat an eyelash I'll massage your dinner basket with the butt

"FOR ANSWER WALTER WADED OUT AND GATHERED IN THE DECOYS."

of this shotgun!" I whispered to the excited boy, who was cautiously edging the blue barrel of his little weapon out through the scrub. The flock played, gambled, pecked at each other and chivied one another about, occasionally dipping their bills in deep in search of small crustaceans; but they kept off about forty-five yards and seemed to be working gradually away from our dumb decoys. Out of the corner of my eye I saw Walter executing an incredible flank movement in the face of the enemy; humping along flat on the wet marsh a yard at a time, he was working into a position where the birds would go towards our stools by preference, giving his strange and unusual shape a wide berth as always. Gradually they played and fed over until they were fairly among our wooden effigies, and one of them even pecked peevishly at a toothpick bill.

"Ready, Bo," called Walter out of his left ear. "Let the Kid fire first, and you take those two on your end—Now!"

Like a flash the Kid was on his knees, and *Spank!* went the 28, dropping the bird nearest, while Walter and I crashed into the main flock. Five crumpled up, while Walter knocked over another as the flock was whirling out of range, passing him up-wind, as is their invariable instinct.

"Fine teamwork, old top! Eh, what!" I called as Walter waded out to gather in the slain. "Six down, or I'm a Jew!"

"Wait till they've hung a day or so and I get a chance to make you a *beccassine a la risotto* out of them," grinned Walter, stumbling in with the dangling birds. "You'll wish the whole earth was plover and you had to eat your way from the center out!"

Back in the blind again, while quiet settled over the whole vast marsh, with its thousand ponds basking placidly in the sunlight. Now and then the querulous call of a gull would raise all the heads in the hide expectantly, only to drop again when a glance at the wing motion assured us it was *not* a willet. Walter sniffed the air uneasily. "Man," said he at length, "I've never yet seen conditions so exactly right to fish the Hole as they are this morning. The tide is just starting to ebb and the wind is making up strong out of the southeast. The birds are about done

for the day, so what do you say to an hour's fishing the Hole and then get grub for——"

"Mark southwest!"—thus the humble historian of these events, who owns the longest ears on any animal save a donkey, and had heard the liquid notes of a tattler or greater yellowlegs abroad in the marsh while listening to the above exhortation with the other ear. Now a quick flash of wings on the far horizon caught our eyes and everybody crouched.

"He's at least a mile off, but I'll try calling him," muttered Walter, raising the bone whistle to his lips. *Hu-hu-hu-hu!* drooled the call, and presently the answer sounded, nearer, and we saw the foolish bird, still nearly a mile away, turn from his course and rush to his doom to the tune of our seductive blandishments. Walter redoubled his efforts. "Wouldn't sell this old pipe for a million," he ejaculated between calls; "made her myself, and the tone is just right. Here he comes —down! you beggars!"

The big fellow cupped his wings and craned his long neck down over the decoys. *"Tsearp!"* chirped Walter, coaxingly. "Come on in, the feedin's fine!"

But either the Kid or I must have wiggled a fin or flickered an eyelash, for suddenly, with a suspicious swoop, the big bird put on a raft of power and whirled by us like an express train.

"Shoot!" barked Walter. I blundered to my knees, fumbled the gun to my shoulder, took a long, careful aim, and scored—a clean miss!

"Je-*hos*-o-phat!" exploded Walter, "but you were slower than running mo-*lasses* with that bird! You hung over that aim so long I thought you would finally decide to take it home with you and petrify the pose for a keepsake!"

"I wanted to make sure of him," answered I meekly enough. "He certainly went by like a bat out of—well, let's go fish the Hole!"

For answer Walter waded out and gathered up the decoys, stepping over his boot-tops in a hidden marsh hole and adding much to the hilarity of the occasion thereby. I picked up the slain—five golden plover, seven blackbellies, two creakers, seven yellowlegs, one willet—and put them and the shells in the tarp, while Walter and the Kid followed me to the boat with armfuls of decoys and guns. We apprehended the duckboat and pushed off to the *Ladybird*. There was a strong sea on, rolling up Jones' Inlet, and I foresaw squalls ahead for the Kid, who was addicted to seasickness.

The guns were laid on the cabin roof, so as to be handy for passing shots, and Walter went below for the basket of shedder crabs for bait.

The tackle rig is a stout three-way swivel with a 4-ounce pyramid sinker on a 9-inch line at the lower end of it, the 18-strand main line at the upper end, and a strong twisted gut leader a yard long attached to the middle loop of the swivel. This leader may have one or two hooks, as preferred. It is imperative to cast at least a hundred feet from the boat if you want big fish, and the water in the Hole is 27 feet deep, with the tide scouring into it like a mill-race; so light tackle is out of the question. I once tried a standard black-bass bait-casting line in the Hole, but—never again! You had to "play" even an ordinary sea crab harder than a two-pound bass to land him, and every big salt-water fish that took hold broke the 12-pound bass line I was using.

Be that as it may, we three rigged our surf-casting outfits and baited up as soon as possible. Walter and I cast two hundred feet from the boat, while the Kid, with a light boat rod, fished directly under the *Ladybird* for flounders. He also was the first to report a bite. An unmistakable yank on a rod that refused to budge told us that he was anchored into a big fish —and then a prodigious "hurrah's-nest" broke out below! The Kid could not turn the reel handle during the fish's rushes, but he *could* thumb the reel spool, and he stuck to it like a puppy to a root, with the rod butt under his armpit and some of it sticking out beyond his shoulder-blades.

"Gee, papa, how he pulls!" would come the perspiring bulletins as the red-faced 11-year-old cranked away at his reel during the intervals when the fish wasn't bent on taking soundings to the bottom of Jones' Hole. Finally he came to the surface and Walter netted him deftly, a big

flounder a yard long that went five pounds flat.

The Kid swelled with pride as he beheld his vanquished foe flopping about in the cockpit. "Gee, papa!" he burbled, "that's the very biggest fish I ever caught in my life!"

"I'll grab his grandfather for you in a jiffy," chirped Walter, despatching the flounder with a club, and he picked up his rod, took a feel of the tide-strain on sinker to assure himself that there were no crabs chewing his bait, and resumed his attitude of tense expectancy on the engine hatch in the stern of the *Ladybird*.

Presently, "Whoa, there, you Betsey Jane!" We all watched him and distinctly saw the second faint tug which denotes a big tide-runner weakfish taking hold.

"Now, you Betsey Jane! you behave yourself!" said Walter *sotto voce*, scolding his rod as if it were a pet dog. *Yink!!* The Kid's fish was as nothing to this baby! Nearly two hundred feet from the boat and twenty-seven feet under the waves, he slashed the line through the water like a ripsaw, circling and summersaulting about, while the master-fisherman at the other end of the debate gave him line when he got too fierce, and reeled him in, inflexible as Destiny, the rest of the time. As he neared the boat the action became swifter and swifter; he circled the duck-boat, forcing Walter to pass his rod under the painter of the latter; he had to be held back by main strength from taking a turn about our anchor rope; he dove under the power-boat, wrapping the stout Betsey Jane around the *Ladybird's* bottom; he bored straight down for the depths of the Hole, tugging the line foot by foot and yard by yard from under Walter's reluctant thumb; and pandemonium broke loose by the yellful as I finally scapped him and Walter beat his brains out in the cockpit with the oaken billy.

"Eight and one-half pounds and as long as an oar," announced he, holding up the scales, while the Kid stood around with popping eyes and openly adored him. It was a big ocean weakfish—thirty-one inches of iridescent silveriness, gorgeous with red and pearl and opal scales flashing in the sunlight; the sea trout, one of the most beautiful fish that swims in the ocean and as unlike the little quarter-grown bay weakfish in his fighting powers as bass is unlike perch.

All this time my line had received no more attention than a flea on a pig, and Walter had more than once broadly hinted that it was about time that I began catching something else besides sea-crabs and festoons of seaweed. The Kid had added two more flounders to the mess—where was his dad coming in on this as a meat man, he would like to know! They were just about promulgating a rule that no one should eat any fish except those he personally caught, when something pounced vigorously on my line and began flirting about the Hole with it.

"Kingfish!" pronounced Walter. "I can tell by the way he took hold of you. Don't lose him—that's our supper you've got there, man!" Assuming this tremendous responsibility, I played him in without incident, considerably disappointed at the meager fight he put up. But Walter was overjoyed as he weighed up the 3½ pounds of barred brown and lavender kingfish that we lifted from the net. "Now we'll have the finest feed you ever flapped your lips over!" quoth he. "If there is any better eating fish than the kingie, I have not yet come up with it. This bet takes in all trout and bass, as well as the whole salt-water tribes!"

Unaccountably the fishing went flat in the Hole after my kingfish came aboard. Walter could not understand it, as minute after minute went by with three idle lines going. "Never in my life were conditions better for good fishing, and I sure can't make this out!" he averred. "With the ebbing tide all the big fish come off the flats and make for this hole to get the tide scourings, and with the wind as it is we ought to get some good fish. I sure want to see that kid of yours fast to a big fish!" But still they refused to bite, and an hour went by, while a state of somnolence crept over us. "Better start dinner, Walter," said I. "There's nothing doing here——"

"There isn't, hey? Look at my line, will you! Look at *that!*—whoa, there, you Betsey Jane!" Walter's line was creeping steadily out, a yard at a time, and now he struck savagely. "Get your

camera, quick! I've got the whole U-nited States on the other end of this here!"

I dove below and soon brought up the camera, cocked and primed. Four times during the fell fight that ensued Walter was almost yanked from his feet into the sea, and as many times I tackled him around the waist from the cockpit and held him on for dear life. At the end of fifteen minutes the big fellow was still going strong, in huge circles about the boat, while the reel steadily worked him in. "Get the gaff, fellah!" gasped Walter—"for'd—under the—starboard—bow deck!"

I heard squeals of excitement from the Kid as I hurriedly ferreted out the gaff from the mass of decoys, crab-nets and fishing "props" under the bow, and rushed on deck in time to see a fish five feet long swimming alongside. A swift strike of the gaff and we had him impaled, and the two of us hauled him aboard, biting and striking, a big shark with malignant green eyes and teeth like a wolf. The gaff was our only control over him, but to that I held with an iron grip while Walter stabbed him with a hunting knife and the Kid clubbed him with the billy. Then Walter got a toe-hold on his tail and I withdrew the gaff as he swung him aloft with a giant swing and brought him down full force on the cockpit coaming. Then we returned him to his relatives in the fishy deep.

"And that's the reason why there has been no fishing for the last hour!" declared Walter, as soon as he could get his breath. "That 'sooner' scared every fish out of the Hole and there won't be any more until the next tide." He reeled in as he spoke and went below, whence sundry savory odors and inviting sizzlings soon spread a ferocious appetite about the cockpit. We became too feeble to fish and, in fact, used up the very last of our strength in staggering down into the cabin, where, sitting face to face with a great pot of coffee, a pail of creamed spuds and two square feet of fried kingfish, soon brought us to again. The cabin pitched and rocked like a Coney Island tumbler. Walter and I, having cast-iron digestive apparatus, warranted not to hop,

"—AND THAT'S WHY THE FISHING STOPPED"

did not notice the reeling and tossing in the least, but the Kid turned yellow about the gills and the cabin was all moving walls to him. Presently he left hurriedly for the outer ramparts.

"'Smatter, Kid? What's coming off out there?" I called with paternal solicitude.

"Chummin' (hic) for weakfish, papa," chirped the game youngster, who *would* have his joke, even in the throes of death!

"Guess we'd better up anchor and make for the Shack," vouchsafed Walter, "or we'll have him down with a bad headache. It's past three now and we have ten miles to go."

Without losing any further time I snubbed up the mudhook while Walter groomed the engine, and presently we were under way, speeding up this channel and down that, through the endless labyrinth made by the green islands of the marsh. Our objective was a little board shack put up by Walter some years before near the Pass, a famous duck wingway leading in from the ocean-front dunes to the marshes. Only those who have been there can realize the vastness of this great archipelago of marsh islands, the whole

"OUR OBJECTIVE WAS A LITTLE BOARD SHACK."

forming one green expanse, with the channels out of sight between them, so that ships and boats seem to be cutting their way through the solid marsh. At first our shack was a mere black tooth jutting up on the far horizon, but as we spun along down the intricate map of waterways, known like an open book to Walter, keeping all the while a sharp lookout for snipe flocks, we gradually brought it nearer to us until it was only about a mile off in a direct line.

Suddenly, "Holy Mike! Mark north!" I yelled, pointing across the marsh. "Only look at them, man, dear! They were as big as gulls, but their wings fluttered like winnowing machines and there must have been at least fifty of them in the flock.

"Jack curlew!" barked Walter excitedly, shutting off the engine. "Mark where they light."

"There they go down—in line with that brush-stake and that church over on the mainland," I called.

"Hold it!" cried Walter, starting up again, and he swung the *Ladybird* towards the marsh-bank following my bearing. We shoved her nose on the bank and got the anchor out on the marsh. Then Walter and I crept on all fours over the grass a hundred yards apart, raising up cautiously now and then to look.

Suddenly Walter changed his plan and began a set of maneuvers that were to me inexplicable. First he stood up, in plain view of all the birds in the marsh; but when I essayed to do likewise he waved me down so energetically that he could not be disobeyed. Then he strolled unconcernedly back to the boat, but when I attempted to follow I got a furious signal to keep down. Then he and the Kid got into the duck-boat, and soon their heads began to move along just above the marsh, while I began to sense glimmerings of a game of strategy that should have been obvious to the intelligence of a frog in the first place. Evidently there was some obstruction in the marsh, like a deep wide creek, and the birds were beyond it, so Walter had taken the duck-boat up the main channel to get on the other side of them and thus give us all a shot.

This plan went swiftly to completion. Soon the heads had reached a point directly opposite to me, a quarter of a mile away, and presently two humpy figures crept little by little across the marsh towards me. Nearer and nearer they came, in short creeping runs; suddenly the flock rose out of the marsh pond and *Pank!* went the Kid's 28, bringing one to earth. Then Walter arose and opened up like a tornado, his old scatter-gun dealing out swift death like a vast invisible flail that struck down bird after bird with every discharge. One cripple fled shrieking across the marsh, only to be overtaken by the same swift death as Walter's fourth report rang out.

The flock came directly down-wind in a bunch towards me. I squatted, a motionless hump in the marsh, as inert as the log I sat on. *"Tsearp!"* I whistled coaxingly. "Don't mind all that noise back there, friends, but come on in and settle here." Those fool birds actually cupped their wings and started to alight on my very hat! This would never do; they would get blown all to bits! Up, guards, and at them! The flock wheeled sharply as my gun flew to shoulder, and at a neat 22 yards I opened up and dropped the first curlew stone dead across the creek. Then that old full-choked, hard-hitting trap left on my double reached out and grabbed two more at about 40 yards, and my part

of the program was over. Walter's little game of strategy had been completely successful and we had seven curlew to show for his knowledge of their flight and habits.

By the time the spoils of conquest had been gathered and the *Ladybird* gotten under way again, the sun had set over the green-and-gold marshes. As we sped along we passed the shack again at, maybe, five hundred yards, but still a wide stretch of marsh and channel lay between us and it. Then a wide turn around a final point, and we were headed down a broad channel towards the open ocean, with the white lines of surf breaking on the bar at the lower end of it. The heavens were still filled with roseate splendor as we zigzagged our way through tortuous channels across the shoals to the shack; but down over the Pass was a sight to make any gunner's pulse beat the faster, for moving over it like a vast cloud was a queer shape of tiny black stipplings, constantly altering, now a long, attenuated serpentine figure, now bunched up like a pear, now with a lower lip hanging down, and then drawn up again as a curtain.

Walter far-sighted it, his sunburned face puckered up in a wuzzle. "Black-bellied plover going through the Pass," pronounced he with bated breath; "there must be at least a thousand in that flock!"

Presently we made the shack and unlocked its weather-beaten door. The incessant wind howled about its corners and wailed through every crack and crevice in its walls. There was a large marsh-pond behind the shack, with three great blue herons feeding in it—suitable fowl for our back-door yard! Walter and I busied ourselves about the little rusty stove, while the Kid stripped and went in for a swim in the clear salt water of the channel. For supper we had *beccasine sautée a la Creole,* which, in good United States, is golden plover and onions, steamed and basted in the frypan with a squeeze of lemon; weakfish steaks from that big one who got too argumentative with Betsey Jane; creamed potatoes; a bucket of tea; and a pailful of stewed apricots and prunes mixed. The Kid tucked away some three or four assorted plates of this sturdy grub and was then himself tucked away to bed, for he had had a busy day.

"FOR HE HAD HAD A BUSY DAY."

Walter and I lit our pipes, grabbed our surf-rods and started along the strand for the beach, to fish the ocean on a flooding tide by moonlight. The surf was high, as often on this coast, but by walking along the beach a mile or so we at length found a hole that could be fished, and landed two kingfish, a blue, and a couple of flounders in about an hour's fishing. I was more interested in the stage setting, however; fascinating to me were the moonlight on the restless ocean, the ceaseless whistle and whine of the wind, the continuous roar and wash of the angry surf, the ghostly white dunes with their inky shadows in the moonbeams, the litter of wreckage on the lonely beach, and the flash and stare of the distant lighthouses, sole reminders that the world was still inhabited. It was a wild place, and it was good to feel oneself again a mere infinitesimal atom in the vast scheme of Nature's world.

THE BIG OUANANICHE OF HOLLOW LAKE

BY C. F. SHANK

Winner First Prize, Land-locked Salmon, 1914 Contest.

THE late lamented Eugene Field, somewhere in his poems, has spoken of the "biggest fish we ever caught, which somehow got away." I am not a poet and so cannot follow the style in which Field wrote his classic, but I want to tell about the "biggest fish I ever caught, that nearly got away."

As this is a strictly personal narrative, and as the personal pronoun "I" is played up all the way through, it may be forgiven if I say that for many years I have been a fisherman, but never until July 18, 1914, did I ever know what a real scrap was.

So, on July 16, I left Koshee Lake and went to the little Canadian town of Huntsville. From there I went to Dorset, the trip to the latter place being made on a small steamer that plied the waters of the beautiful Lake of Bays.

At Dorset I stayed all night, and the next morning I employed a stage driver named Clayton to take me across the portage to Hollow Lake, which is about six miles, as near as I can judge, from Dorset.

When we were safely arrived at Hollow Lake we were met by a gasoline boat that took me to the boarding-house of "Jim" Russell. This is a two-story building erected on a tiny peninsula that juts out into the lake. At a distance the house looks as if it were built on an island, but on nearer approach it is found that a tiny isthmus connects it with the mainland.

"Jim" Russell and his worthy wife have a large and interesting family, but this story concerns only one of the boys—Bennie. Bennie is tall and lank, with dark hair and the most constant and all-pervading yawn I have ever encountered, and be it known that I have traveled a little in my time.

To Bennie was assigned the task of seeing that I did not get lost, and immediately thereafter he began to tell me the fishing lore of this wonderful lake. At the boarding-house when I arrived was O. G. Roy, of Toronto, Can., who had been there for some weeks and was ready to confirm everything wonderful and unbelievable told me by Bennie.

That was July 17th, and though the wind was blowing hard, an Indian named Sam Beaver took me out in a canoe for a while. The water was too rough, however, for comfort and for fishing, but I got one promising strike that made me offer up supplications to the Wind God to settle down and go to sleep.

The next day, July 18th—that date is written in red on my calendar—dawned bright and the wind had died down to a little zephyr that just ruffled the water.

As soon as breakfast was over, Bennie gathered up his cooking utensils, I got my fishing tackle, and we started out. Mr. Roy decided to go along. Bennie rowed me, while Mr. Roy went in a boat by himself.

We went down to a section of the lake called Fletcher Bay and there began the day's sport. I had not been fishing very long before I began to realize that all I had heard of Hollow Lake was at least partially true. That morning I caught upwards of a dozen salmon trout, with Mr. Roy also enjoying fine sport, incidentally hauling in one that weighed over seven pounds, the biggest he had caught during the stay at the lake.

At noon we went ashore and Bennie planked a couple of those salmon trout. That was some dinner that he cooked that day, and after it was over we "lazied" around in the shade for an hour or more. We were too comfortable to rush out on the lake for a while at least.

It was about 2 o'clock, as near as I remember, that we started out. Bennie and I gathered up the dishes and cooking paraphernalia, while Mr. Roy rowed out some distance. He began fishing and had

been at it only a few minutes before he got a beauty.

"How much line have you got out?" I shouted to him.

"About 225 feet," was his reply.

Then Bennie and I started. We were offshore a little more than 100 yards when I threw out my line.

Bennie rowed along, yawning as he swung at the oars, and I watched the line sink down into the water.

"There, Bennie," I said; "that's 225 feet. That ought to be enough for a starter."

I leaned over and struck a match on the side of the boat and lighted my pipe. As I threw away the match, there came a strike that was as savage as if I had hooked a bull calf in the middle of a ten-acre lot.

The fish took out the line like an ocean greyhound and kept boring down toward the bottom of the lake.

Bennie began to row madly toward mid-lake and I kept all the strain possible on the fish, which was by this time doing a fox-trot on the end of the line and at each tug showed me that I had no ordinary critter to conquer.

It is the common practice of Hollow Lake fish to get among the rocks on the bottom as soon as they feel the barbs, and, by rubbing their noses against the stones, get free from the hook. Bennie knew this and took me out to the very middle of the lake, where he began to row in a circle.

"You've got one of the big ones," was Bennie's diagnosis of the whole affair. And I want to say, in all justice, that he was not yawning now.

There was a moment's let-up in the struggles of the big fish and I took stock of the situation. I knew that on the other end of the line was the biggest, fightingest fish I had ever hooked. On my end of the line I had an ordinary Bristol bass rod, equipped with a single-action Meisselbach reel about four inches in diameter. On this reel was about 300 feet of fine copper wire, instead of the usual silk line. The lure was an ordinary pearl wobbler and the hook was a triple No. 2.

The rod is a good one, but not designed to go to the mat with a land-locked salmon, so I placed my utmost faith in the reel, and at every rush of the saurian at the other end of the line I gave him just enough line to keep him somewhere inside of the Dominion of Canada.

MR. C. F. SHANK AND 26-LB. OUANANICHE, CAUGHT IN HOLLOW LAKE, ONTARIO

If fish hand down tricks from generation to generation and if the direct ancestor of the one I had hooked had been the big fellow who took Jonah as bait, he had taken every degree. He would suddenly tear down toward the bottom with a rush, regaining most of the line I had worked so hard to gain from him; and then he would turn and come for the boat like a shoat coming to supper. When this last maneuver was tried, Bennie would row like a Hanlon or Courtney, and I would reel in as if my life depended on it. Even at that I could hardly keep the line taut.

Then Mr. Fish would lean back in the harness and shake his head like a bull pup worrying the meaning out of a lady's best Sunday-go-to-meeting hat.

Pretty soon he rushed to the top of the lake, breaking the water about 75 feet astern.

It is strange to consider the workings of the human mind in a moment when it should be very busy with something else, but right here there flashed through my mind something that was entirely foreign to the situation.

Years ago I heard a vaudeville singer squall a ragtime air, one line of which ran:

"There's just as good fish in the sea as ever yet were caught."

It seemed at that moment that the singer and composer were both wrong, and that the Hollow Lake land-locked salmon was absolutely the biggest and best fish that had ever come out of the water. As he flashed into sight, his iridescent sides gleaming in the sun, my excited eyes saw him in a monster guise. He looked as big as any white shark that ever swam the seven seas and as powerful as a submarine.

But fish nature and fish cunning and fish strength cannot last forever, and he at last began to tire. His furious rushes grew shorter and I began to reel in. Foot by foot that long-taxed line came in and foot by foot the fish nearer to the surface.

At last he lay on the water about fifteen feet astern of the boat. He turned over on his side, his huge gills slowly opening and shutting, and his tail weakly flapping the water. Then I realized that, having got the fish to the surface, I did not by any means have him in the boat.

We had left behind the gaff, and as for a landing net, it was absolutely useless with such a fish.

Bennie gave the boat a shove backwards and ran past me to the stern. Then an appalling disaster occurred.

The hook pulled out.

It had caught on one of the tough cartilages on the upper jaw, and as soon as the strain eased away it came out.

"Bennie, he's a goner!" was my cry to my companion, and there was more emotion in my voice than Minnie Maddern Fiske, Sarah Bernhardt, and Edwin Booth ever showed in their combined lives.

Bennie leaned over the stern of the boat, but his shove on the oars had been too strong, and the boat slid over the fish. Then Bennie charged to the other end of the boat, leaned over the prow and, grasping the fish by the gills, hoisted him into the boat!

Then I sat down. More from habit than anything else, I looked at my watch. It was 4:10 o'clock. For two hours that fish had been keeping me busy.

Then I noticed that my hat was off and that I was wet with sweat. The pipe I had lighted just as the fish struck was still in my mouth, but had gone out. Examination showed that it had died almost as soon as the fire had touched the tobacco. I did not have time to pull at any old pipe while that fish was cutting up his didoes.

Bennie, in the meantime, was rowing slowly back toward Fletcher Bay.

"Where are you going?" was my rather shaken query.

"Back where this one struck. His mate must be around there," was Bennie's professional reply.

"No, Bennie, this one's enough for one day," was all I could say, and we rowed back to the Russell boarding-house.

There the fish was weighed and measured. It tipped the scales at 26¼ pounds, measured 40 inches from tip to tip, and around the belly the tape showed 31½ inches.

PRIZE CONTEST CERTIFICATE RECORD, 1914 CONTEST

First Prize, Landlocked Salmon, Caught by C. F. Shank

Weight—26¼ lbs.
Length—40 in.
Girth—31½ in.
Caught—July 18, 1914.
Where caught—Hollow Lake, Ontario.
Rod—Bristol.
Reel—A. F. Meisselbach.
Line—Copper wire.
Lure—Pearl Wobbler.

FIELD TAXIDERMY FOR SPORTSMEN

I. Skinning Birds and Preparing Them for Subsequent Mounting

By ROBERT S. LEMMON

ILLUSTRATIONS BY THE AUTHOR

OF all the so-called side lines with which the out-and-out gunman is prone to surround himself in connection with his favorite sport, I doubt if there is any which proves more satisfactory in the long run, more genuinely worth while, than a practical knowledge of taxidermy. No matter whether the particular individual's hobby be following a good dog after grouse, quail or snipe, stopping mallards and teal from blind or point, or trekking North and West for big game; no matter whether he be a rifle crank or shotgun enthusiast, a little taxidermic know-how will some day come in mighty handy. It is the object of this and following articles to supply such knowledge adapted to the sportsman's needs, basing it on practical experience and omitting those innumerable specialized details which, though they are essential to the success of the all-round professional, will comparatively seldom enter into the experience of the average amateur. In a word, the purpose is to show the sportsman how to care for skin, and mount those furred and feathered trophies which he wishes to preserve as reminders of his days afield.

Taxidermy as applied to game birds and big-game heads may be divided into two parts: collecting and skinning, or field work and subsequent mounting in permanent form. The necessary equipment for field work on birds is simple and inexpensive, that for mounting only slightly more complicated. For the former a sharp penknife, a bit of salt, and some cotton will do in a pinch, if they are backed by considerable skill, though much better results will be attained if the kit includes the following articles:

A pair of straight-bladed, sharp-pointed surgeon's scissors about five inches long; a pair of heavier shears an inch or two longer; a small all-steel scalpel; a pair of straight-pointed, five-inch forceps; a small screw-top tin box filled with powdered arsenic and alum in equal parts; another similar box containing corn meal; and, where it is not expected to preserve more than two or three ruffed grouse or birds of similar size, a half-pound roll of absorbent cotton. It will not be necessary to carry these in the field during the day, and they may be left in camp or wherever it is expected the actual skinning will be done. In a pocket of the hunting coat there should be, however, several two-foot squares of stout wrapping paper, folded up for the sake of convenience, and a small bunch of cotton.

As soon as a bird intended for mounting is shot its care begins. Handle it carefully to avoid ruffling or soiling the plumage, and take particular pains not to let the feathers get blood-stained. If in spite of everything there is much blood on them, wash it off gently with clean water and dry with some of the absorbent cotton. In the event of water not being available, use the cotton alone as a swab. In either case lift the affected feathers away from the others while cleaning them, to avoid unnecessary spreading of the blood. If you can find the shot holes from which it came, plug them with wads of cotton.

Plug the throat, nostrils and vent of the bird with plenty of cotton, and if an eye is "leaking" by reason of a pellet having punctured it, place a wad of cotton over that also.

Now take one of the squares of paper and roll it into a cornucopia large enough

QUAIL SKIN READY FOR SUBSEQUENT MOUNTING

to hold the bird, tail and all. Crease and fold the tip of the cone so that it will not unroll, smooth the bird out and slip him into it head first. Be careful in doing this that the bird's bill does not double over on its throat, which would result in badly ruffled feathers at a critical place; it should point forward in the line of the neck. The wings also should be snugly in place at the sides, and the legs be in a natural position close to the under side of the tail.

When the bird is well shaken down into the cone, fold in the latter's large end so as to protect the tail, and stow the whole thing in the back of the hunting coat, or wherever it will be most easily carried and least in the way. A bird so wrapped will stand a good deal of knocking around without serious damage, as long as the paper is kept dry.

Upon arriving in camp, or wherever your base of operations may be, at once unwrap the bird, smooth and straighten it out, and lay it aside until you are ready to skin it. In cool weather a bird may be safely left unskinned for two or three days, but it will be just as well to get busy on it within twenty-four hours. Do not, however, attempt to skin the specimen before it is cold. A very freshly killed bird is apt to bleed badly when you begin to work on it.

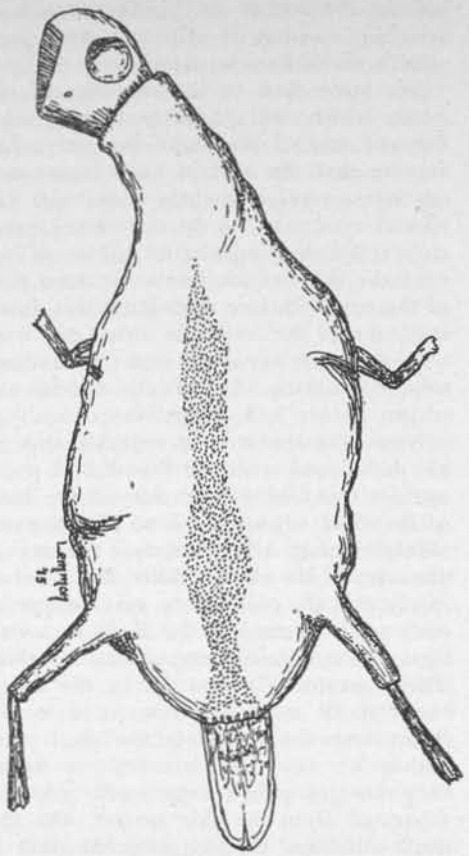
A bird may be mounted as soon as its skin has been removed and treated with preservative, or it may be prepared as what the museum man calls a "skin"—unwired and laid out straight for convenience in transportation—allowed to dry, and when a subsequent opportunity for mounting arises, relaxed by means of damp cloths. In both cases the actual skinning operations are identical, so for present purposes I shall assume that you are off on a trip, or for some other reason are not ready to mount your bird immediately. The "skin" method is consequently the only possible one to employ. So prepared, the bird will keep in good condition indefinitely, as is proved by the fact that nearly all of the beautifully mounted specimens in our big museums to-day have been prepared after perhaps months of lying as "skins" in their collector's field trunks or in the museum's storage cases.

So now, with scissors, forceps, scalpel, cotton, corn meal, and the arsenic and alum mixture at hand, we are ready to begin.

Lay the bird on its back on the table, board or other flat surface, head toward your right. Remove all the cotton pdugs from throat, nostrils, vent and shot holes, and replace them with fresh. Take each wing near the body and bend it slowly toward the head so as to relax the stiffened muscles and get the wings somewhat out of your way. If the bird is large and the wings consequently very stiff, break the bone close to the body by a sharp rap with a smooth, round stick. Then part the feathers in a straight line from a point a little forward of the breastbone to the vent, and hold them apart with the left hand.

Now take the sharp pointed scissors and cut the skin down the center of this bared space, beginning about a quarter of an inch forward of the point of the breast and continuing toward the left, over the abdomen and to and into the vent. There are really two layers of skin here, the inner one quite distinct from the outer and serving to cover the entrails. This inner layer must not be cut, else you will be bothered with exposed intestines, a surplus of juices, and such things, which are not conducive to clean feathers. If the scissors should go too deep, however, at once apply some of the corn meal to absorb the intestinal fluids as they ooze out. It will be a good idea, in any case, to

DOTTED LINES SHOW WHERE TO MAKE CUTS ON CARCASS OF QUAIL



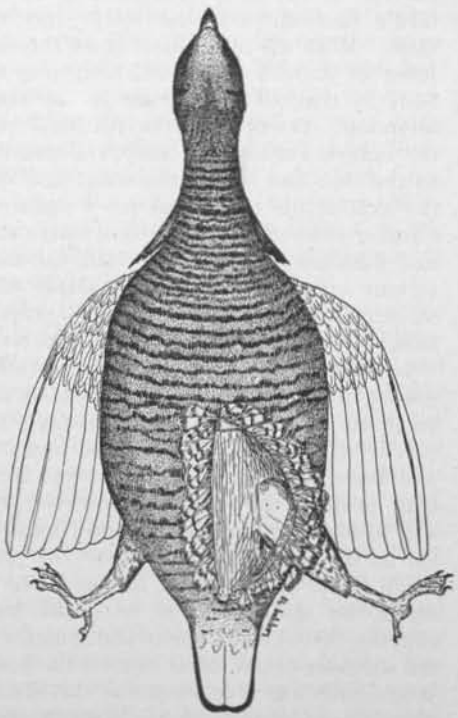
GROUSE SKIN, INSIDE OUT, CLEANED AND READY FOR POISONING

sprinkle meal the full length of the opening cut, and wherever in the subsequent steps there develops a tendency for fluids to work out on the feathers, soak them up at once with meal.

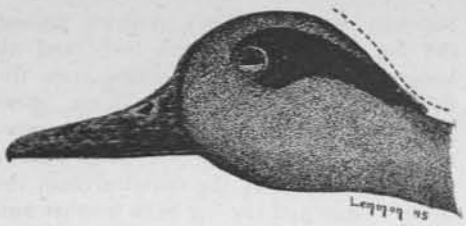
With the opening incision made, catch one edge of the skin at the breastbone in the forceps and lift it away from the body, using the tip of a finger or the scalpel handle to separate skin from flesh. Work thus along one side as far as the vent, gradually loosening the skin down over the bird's flank until the thigh joint is exposed. Continue the separating on both sides of this joint until, by taking hold of the shank on the outside, you can push inward and toward the line of the opening cut in such a way as to protrude nearly the whole thigh between the skin and the body. This accomplished, snip through at the joint with the heavy scissors, freeing the leg entirely from the body and allowing you to separate the skin from the flesh almost as far as the backbone. Peel the skin down the thigh to where the muscles turn into tendons, cut these sinews and strip them and the muscles from the bone. Then pull the leg back into its natural position in the skin. Treat the other side of the bird in the same way, and you will be ready to cut the tail loose from the body.

Place the left hand, palm up, under the rear part of the bird as it lies on its back, and with the thumb over the tail feathers very near their base, bend the tail backward over the forefinger. This will protrude the ventral parts somewhat and allow you to see more clearly just where the tail cut is to be made.

The tail is to be severed inside the skin, just where the "pope's nose" joins the body. Work in carefully with the scissors, cutting through the viscera around the vent until you come to the muscles and bone of the back. Poke around there



OPENING CUT FOR SKINNING GROUSE



DOTTED LINE SHOWS WHERE INCISION MUST BE MADE ON DUCK'S HEAD

until you locate the butts of the tail quills, and cut through to the skin of the back just forward of them. Do not on any account snip off even the extreme ends of the tail quills; they must be left intact and attached to the skin by their natural membranes. And do not cut through the skin of the back. If you are cautious there will be no danger of this.

Legs and tail are now detached from the body proper and connected only by the skin. The next step is to turn the skin inside out toward the bird's head.

Take the end of the backbone in the forceps or the fingers, depending on the bird's size, and lift the body from the table. With the other hand work the skin loose as you did on the sides, turning the body so that all parts come in for equal attention. Do not pull the feathers from the outside; remember, they are attached to the skin and not to the body, and that the skin is the thing that must come off. Confine your efforts to the line where skin and flesh meet, and thus avoid the very serious error most beginners make—that of stretching the skin out of all proportion.

If the bird is larger than, say, a ruffed grouse, it will be found convenient at this stage to pass a wire hook through the pelvis, so that the body can be hung up and leave both hands free for the skinning proper. In any case, however, you will probably get the skin peeled loose as far as the wings almost before you realize it. The wings must be cut loose in much the same way as were the legs, clipping through the bones and muscles at the shoulder joints, close against the body. When both are free, continue the inside-out process down the neck to the base of the skull, keeping the already loosened part of the skin in the hands as much as possible, so that it will not hang and stretch under its own weight.

We come now to the skinning of the head, which will probably be the least easy of any of the steps thus far. Assuming that the bird in hand is not one of the waterfowl (whose cases call for special treatment, to be considered presently), the skin is to be turned inside out over the skull as far as the forward part of the eyes. Before attempting this, however, renew the cotton in throat and nostrils, and dust cornmeal into the feathers around the eyes. Use plenty of both absorbents, for "leaks" must not occur.

Now take the already exposed neck in one hand, and with the thumb nail press against the fold of the skin at the base of the skull, working at it on all sides and slowly coaxing it forward over the largest diameter of the skull. When this point is safely past the rest will be easy, and presently you will come to the bird's ears, two ligatures connecting the skull and skin. These are to be pulled out by the roots, so to speak, using the forceps to loosen them from their seats in the skull. Do not under any circumstances cut them; they must be pulled loose intact and not separated from the skin proper, else the skull will show through after the skin is right side out.

Just forward of and a little above the ears are the bird's eyes. Work the skin forward over these until about three-fourths of their circumference is visible. The eyes will be covered with a slightly milky-colored film, thicker in the center, where you will see that an opaque membrane connects it with the skin. This membrane is a sort of inner lid, and it must be cut loose with the fine-pointed scissors before the eye can be removed. The best way to effect this is to pull the skin lightly forward until the membrane draws tight and you can see the exact position of the eye-ball (the part which is visible in life). Then cautiously cut through the membrane well back of the eye center, taking great care not to puncture the eye itself, which is filled with liquid which must not be allowed to escape onto the feathers. A snip or two with the scissors will expose the eye-ball proper.

easily recognizable by its bright, unfilmed appearance, and also show you clearly the relation between it and the lid. The latter must now be cut loose all the way round, taking care not to clip or mar its edges. When both eyes have been cleared in this way, work the skin forward toward the bill until the eye-sockets are entirely exposed.

The skin at this stage is completely inside out almost as far as the bill, and the skull, neck and body are still attached to it in the order named. The two last are now to be removed by making a triangular cut through the base of the skull, one point of it being in the center of the throat and the three sides enclosing the neck. This will free the neck from the skull and expose the base of the brain. Remove the brains through this opening, using the forceps or the scalpel handle; pull out the tongue from the inside, and scoop out the eyes. Do not break the latter; work around the edges of the sockets until you can get behind and under the eyes, lifting them out intact and leaving the sockets practically clear of flesh and tissue. Cut and pull away all surplus flesh from the skull and turn your attention to cleaning the wing bones and the base of the tail.

Take the wings first. Get hold of the end of the severed humerus bone and work the skin back over it until the next joint (the "elbow," where the radius and ulna bones unite) is reached. Loosen the skin toward the wing-tip as far as you can without disturbing the feathers which are anchored to the larger of the two bones (the ulna), and cut away the flesh. If the feathers mentioned are separated from the bone it will be difficult to make them lie smoothly later on. After the skin is right side out again, an incision should be made along the under side of this double-boned joint, the rest of the flesh removed through it, arsenic and alum inserted, and the feathers smoothed back over the cut.

In cleaning the flesh from the base of the tail, be sure to remove the two oil-sacks which lie immediately above the ends of the quills. As mentioned before, do not disturb the connection of these quills with each other or with the skin itself.

When all this cleaning has been done and the skin itself freed of any bits of flesh which may have adhered to it, we are ready to apply the arsenic and alum poison, which serves the triple purposes of aiding in the subsequent drying, curing the skin, and making it practically immune to the attacks of insect pests which might otherwise destroy it. Dust the powdered mixture over the entire inner surface of the skin with a fluff of cotton held in the forceps, not omitting the leg and wing bones, base of the tail, and skull. When the poison has reached every last nook and cranny, roll up a couple of cotton balls to fill the empty eye-sockets, wrap a little cotton around the leg bones and pull them back into place, and turn the entire skin right side out. Take it by the bill and shake it, so as to rearrange the feathers, but do not stretch it by lifting it clear of the table and letting it hang. Finish cleaning the wing bones from the outside, as already described.

If the foregoing work has been well done, the skin now looks far more natural than would be expected after its complete reversal of form. If, in spite of everything, the eyes, throat or nostrils have leaked while the skin was inside out, thereby wetting the feathers of the head, the latter should be dried at once with cornmeal, fluffing them back and forth while the meal is dusted into them. Let us hope this will not be necessary, however, for I might remark that it is far easier to prevent such leakage than to remedy its evil effects.

The next step is to fill out the empty skin, so that it will dry in natural shape and size. Take a bunch of cotton and form it into a rough imitation of the bird's body, drawing out one end to make the neck. This filling should be quite soft and fluffy, and very slightly larger than the original body. Do not make it into a hard, compact bunch; it should be somewhat springy and yielding, so as not to force the skin out of shape. When it is ready, take the tip of its neck in the forceps and work it up into the bird's mouth, shaking the feathers into place as you do so. This insertion, of course, is to be made through the opening cut in the bird's abdomen, through which essential opening the cot-

ton body is to follow until all is snugly in place inside. Then take the forceps and pull the cotton eyes until they fill out the lids naturally, close the beak and the cut in the abdomen, cross the feet and tie them together with a bit of thread, and snuggle the wings into place at the sides. If the latter refuse to set smoothly at the shoulders, reach inside the skin with the forceps and pull the ends of the wing bones toward each other.

The skin now looks like a dead bird neatly laid out on its back. The next step is to fix it so it will dry in an equally natural posture. For this we must again have recourse to cotton, making of it a winding sheet two inches longer than the skin overall, and wide enough to go around one and a half times when the bird is rolled up in it. This sheet should not be too heavy—just enough so that a dark object cannot be seen through a single thickness of it.

After arranging the skin as smoothly as possible, lay it breast down on the edge of the cotton sheet nearest you, with the bill pointing forward in a natural position. With the forceps arrange the feathers of the back, neck and wings so that they lie perfectly naturally, then take the near edge of the cotton and by raising it roll the bird gently over on its back. Now arrange the breast and throat feathers, the feet and tail, see that the wings are in place at the sides, and carefully roll the bird on over, tucking in the cotton as you go and wrapping him up completely and quite firmly in it. Twist a few fibres of the cotton together, so that the bundle will not come apart, and put it aside where it will lie on its back on a flat surface until dry, which will be in five days or a week, perhaps, depending on the weather and the size of the bird.

When fully dry a bird-skin in its cotton wrapping will stand almost any rough treatment short of actual crushing. It should not, of course, be allowed to get wet, and equally, of course, unnecessary banging around is to be avoided on general principles.

It will be found a help in subsequent mounting if rough measurements of the body are made before disposing of it. These measurements should include girth at shoulders; girth at thighs; length from tail to base of neck; and length of neck. Note also the general contour of the body, and if you doubt your ability to carry this in mind, make a couple of outline drawings to clinch it. This, of course, is assuming that the original body cannot be retained until opportunity for making the permanent artificial one arises. It is easier to make the artificial body with the original as a model, but in default of this the measurements suggested should give excellent results.

Such is the making of the average "skin," and in general it is the method used for birds of all sizes from hummingbirds to condors. The sportsman, however, is apt to come across cases which to a certain extent require special treatment.

Chief among these birds which demand variations from the ordinary skinning methods are the waterfowl, endowed as they are with large heads in comparison to the size of their necks, and extremely fat, oily skins. The neck skin of a goose or duck is so small that it cannot be turned inside out over the head in the ordinary way. It should be worked down as far as the base of the skull, the neck severed there, and the skin turned right side out. An incision—later to be sewed up—is then made through the skin at the back of the head, large enough to admit of the skull being bared and cleaned through it. The process of ear, eye, tongue and brain removal is then precisely as has already been described. Incidentally, it might be added that parrots, owls and a few other less-known species have this same peculiarity of relatively large heads.

The careful scraping of a waterfowl's skin, to remove the ingrain fat, should never be neglected. If the grease is not taken out while the skin is fresh it will eventually soak through and stain the feathers a most unsightly yellow which is very difficult to remove. Much of the fat can be peeled off with the fingers, after which the whole skin should be scraped with an old, dull knife blade. Scrape right down until the butts of the feathers are exposed, and use plenty of corn meal to

soak up the fat as it comes out. Keep the fat from the feathers, at all costs, to avoid gumming them.

On a bird the size of a mallard or larger the scalpel will come in handy for cutting the skin from the body. These big fellows have their hides anchored down in places by decidedly tough ligatures which really call for cutting. Hold the scalpel penwise and work slowly until you get the hang of it.

For convenience in carrying it is often desirable to make up a large bird skin with just enough cotton filling to keep its breast and back from touching. The skin is then laid out on its back in the ordinary way, making a flat rather than a cylindrical specimen. It need not be wrapped in cotton; a few laps of string to hold the wings in place will suffice, though care should be taken not to draw them unduly tight.

Finally, there are the skins of really long-necked birds such as geese, swans, cranes, etc. A duck's neck will take care of itself fairly well if it is laid out in the line of the body and a slender stick is run through its inside to prevent bending. But a swan's neck so placed would reach over into the next State and make the man who shot it liable for a non-resident gunning license. Hence it should be folded back, after filling with cotton, and laid along the side of the body out of the way.

(*To be continued*)

COACHING THE WING SHOT

By CHAS. ASKINS

Chapter II

First Lessons Afield

THE great plantation was cultivated in the haphazard fashion characteristic of the Southern negro and, perhaps in little less degree, of its old-time white owner. Along the draws and branches and in the fertile bottom-fields, corn would be grown, the fields crazily designed, without top, bottom, sides, or ends, beginning anywhere and stopping where the darkey got tired of plowing. The richest of the higher ground—lands quite above any possibility of overflow—would certainly be seeded to cotton; while here and there, in places expected and unexpected, would be found patches of sorghum and field peas.

In the fall the cotton fields would be white as snow, dotted with black, kinky heads—all ages, sexes and sizes represented by these cotton-pickers, from Uncle Ben, whose mind still dwelt in slavery times, down to his great-grandchild of six. Perhaps half of the cane would be left standing, frost-killed and spoiled for anything except bird food, its black owner having discovered that he had made up all the molasses he would need that winter. Possibly the bulk of the field peas would be gathered and placed in the tobacco barn, though it rarely happened that half of them were, the remainder of them affording the finest quail forage in the world.

Every foot of the land neglected by the plow grew rankly with sedge, locally called sage, or broom-sage, dotted with thickets of plum bushes and blackberry briars. The plantation no longer had the force of blacks which it boasted before the war, and many of the fields had been turned out, going back to their native pines. Some of the "new pine" woods of older growth consisted of tall, straight trees a foot in diameter and a hundred feet high, as thick as they could stand, the ground beneath heavily carpeted with pine needles, which effectively kept down both grass and underbrush. Again there were clumps, reaches and knolls covered with younger pine, much of it dwarfed, the thickets from ten to forty feet high, and too dense for eye to penetrate. In spots the pine seemed to be killed out by the rank growth of

sedge, or possibly something in the soil was not adapted to pine timber, and here there would be hidden "pockets," loved places of refuge for the quail.

About over the plantation—anywhere, everywhere, maybe in the middle of the best-cultivated field—were the peculiar round Mississippi swamp ponds—ponds with a bit of water in the center, sometimes quite deep, surrounded by sweet gum, black gum, water oak, sassafras and dogwood, the trees seemingly not growing out of the ground, but springing from the switch cane. The cane confined itself to its shield of timber, but since our black farmer had no idea of plowing close to the roots of a tree, timber and cane were sure to be bordered by some rods of sedge.

Nobody could foretell what varieties of game might be found about these ponds—possibly deer, more likely wild turkey, surely quail and woodcock, with very likely mallards and snipe. Yes, the shooting was generally pretty hard except for the man who knew the "bird passes" and stayed on the outside to catch the game as it emerged, leaving his companions to do the "beating." At the far south limits of the plantation a large creek cut through magnificent fish-pole cane on its way to the river. Hard by the creek was plenty of good quail cover, as well as occasional snipe marshes, but every bevy of quail that arose within three hundred yards went straight into that big cane and there they stayed. Once the gunner ventured into that cane, his gun was useless except possibly on a towering mallard. I have sent the dogs into the heavy cover, though, and by waiting along the edge caught a fair bag of cock as they came out, circled and went back in.

In all human probability we can never again have such quail shooting as we used to have on those old Mississippi plantations. A few years previous to the time of which I write our shooting grounds were a part of the field-trial territory over which the old Southern Field Trial Club held its annual competition for bird-dogs, and I well remember that these dogs found sixty bevies of quail in one day. The shooting opportunities of the marksman were limited only by the ammunition he cared to expend or by the disposition he could make of his birds. The one thing the generous planters required was that the birds be consumed at home, never shipped out, even as a gift to friends. Neither must quail be given to a black—that rule was imperative. The negroes were neither allowed to shoot quail themselves nor to receive them as gifts from white hunters.

Such were the grounds over which I was to give J-C lessons in shooting quail, snipe and woodcock, with fair duck and goose shooting within reach. Beyond question he would have ample shooting opportunities, thereby much lightening my task, for, after all, game to shoot at is the great essential in teaching the use of a shotgun.

At supper our host, Captain Byas, announced his intention of accompanying us in the morning, and, of course, J-C expressed his pleasure at the prospect of congenial shooting company. Locally, the master of the house was not called Captain Byas, except when well within hearing, but was generally termed Old Man Cut-Bias. As usual, the nickname fitted.

The Captain didn't care particularly to shoot with me; in fact, he didn't care particularly about shooting anyhow, though he could handle a shotgun very well. But if President Cleveland had happened along, or the Prince of Wales, he would have ridden his old gray mare to a finish or been afield every day. I very much feared he might consider a millionaire's son worth cultivating, and so make a confounded nuisance of himself by interfering with the seasoning I had planned for J-C. If necessary I would lay the case before Aunt Jane, the Captain's wife; she knew how to manage him.

"The Captain is bound to go with us," I grumbled after we had gone upstairs to our own big room, where Jim had a fine fire of hickory and pine going in the open fireplace. "I don't like to shoot with him, and I don't like three guns shooting together at best. He is a quick shot, nervous, irritable, scolds the dogs, cusses the birds, and he is a 'claimer.' He thinks that every bird that gets up in range is his bird, and every bird that falls must have been to his gun as a matter of

course. He'll break you all up, like as not."

"Don't worry, Coach. I'll cut loose, and whether I hit anything or not, what's the odds? Between you and me, I shoot like a Dutchman anyhow. Some doubts if I ever do any better, either. Made the governor believe I was getting the hang of it and mean to see the thing through. Saw he had his heart set on it—good sort, isn't he, the old man? If he wants me to learn to shoot, I've got to learn to shoot a little, enough to satisfy him. Couldn't hardly spare the time, you know. Promised to be in Florida, January—a live gang down there. Agreed to be in California the next month, polo—and, except for dad, would now be in the North woods after moose—shoot a rifle rather better than a shotgun. Sorry, knowing the way you and dad feel about it; but I don't seem to take to it, not born for it; so many other games are more to my taste—faster, more scientific, more sociable. The best we can do is to satisfy the governor that I honestly tried to learn."

"The best way to satisfy John Brown, if I know anything about him, is not only to try to learn, but to learn, son. As to the scientific side of wing-shooting, it is as scientific as billiards, with a thousand times the action. For the social side of it, a wise dog, a straight-shooting gun, the whir of quail, the whistle of cock, the winter's sunshine on the cotton, the wind in the pines—good Lord, boy, you'll never have better company in this world."

Lying east of the house was the big plantation garden, or truck patch, several acres in extent. Our lane into the wide fields lying between house and creek skirted the garden on the north and east, with a great border of wild plum bushes between the road and the truck patch. Aunt Jane's pet bevy of quail used among these scrubby, matted plums. She had carefully protected them; not a black boy dared to shy a rock at them. They were hatched in the winter turnips of the garden, frequently passed through the yard, and often fed among the tame poultry. We all had strict orders from the lady of the house not to molest that covey, and heretofore her injunctions had been obeyed. J-C hadn't been told anything as yet about pet bevies—quail were quail to him.

As we rode down the lane the young setter, Sport, had cast far away into the depths of the plantation, but old Jack, after his methodical fashion, began to investigate the fence-row. Working down the bushes to the corner, he turned, drew a short distance south on the side opposite us, and came to a stanch point.

"Good boy!" shouted J-C; "stay with 'em, old man!" He was off his horse in a twinkling, yanked his gun from its scabbard, throwing the reins to our black follower, Jim. Taking a couple of shells from his pocket, he placed them in the gun and tried to snap it to, but the action refused to close. I had loaned him some of my cartridges, neither of us happening to think that the English gun was chambered for a 2½-inch shell, while mine were a quarter of an inch longer.

"Too bad, J-C. We will ride back and change shells. Good thing you tried 'em before we got any farther out. You couldn't have shot those birds anyhow—Aunt Jane's pet bevy—forbidden fruit—flush them and bring old Jack out." I was on the point of sending Jim back for the English shells when the Captain interfered. He was in great spirits this morning, generously inclined, and anxious to do all he could for the son of his old friend Brown. He had carefully scanned the house; nobody was in sight. Aunt Jane would never know a thing about it—the green lad would never touch a feather nohow. Hadn't I told him so? Why balk the boy at his first chance?

"Go on, Clyde," he said; "a couple of shots can't hurt 'em much. Take my gun—it's the best quail gun that ever was owned in Mississippi, suh—and show us how they do it in England."

Now, the Captain had a regular bell-muzzled old hammer gun, which I used to tell him would cover a five-foot circle at twenty yards, and his shells were filled with No. 10 shot. I was afraid of results, but resolved to say no more. But Jim's eyes were rolling toward the house in vivid apprehension.

"Bettuh be keerful, Cap'n," he advised. "If Miss Jane see you, da'll be ructions shoah!"

"Keep still, you fool; she'll think we are shootin' at a rabbit in the tu'nips."

Those birds usually sprang above the hedge, dashing into the adjacent pines, making the shooting hard; but, as luck would have it, they behaved as they never had before. Just as J-C reached his dog they broke out in a compact mass hardly larger than the bottom of a barrel and went off straight down the fence-row at the level of a man's head. It didn't look possible to miss them, and it wasn't.

At the crack of the Captain's quail gun, the whole center of the bevy seemed to drop out, the center and the sides too. It fairly rained quail, and the feathers fogged. With the bang of the second barrel, two more birds fell—a bare half dozen of Aunt Jane's pet bevy winged on to safety.

"Good Lord! Now he's played hell!" breathed the Captain, glancing fearfully toward the house. As I live, the bulky form of Aunt Jane stood on the front porch. "By Jack! You knowed he'd do it, suh, when you tole me he couldn't shoot." And the old gentleman turned on me with deep reproach.

"Dah now! What'd I done tole ye?" voiced Jim. "I gwine eat dinnuh wid ole Unc. Ben dis day—tell ye dat right now. Hain't goin' gib Miss Jane no chancet at me!"

"Shut your head, you confounded black imp, or I'll take a gad to ye! Pick 'em up, Brown. We bettuh git right out of heah now."

Boy-like, J-C was elated with his very effective work "Bring 'em in, Jack; seek dead, boy. More of them—dashed if I know how many—seven—believe there are two more—guess that's all—good old dog! Best gun I ever had in my hands, Captain, my word!"

"Ya-a-s. Little too damned good that time! Bring up Mr. Clyde's hoss there, Jim; you are as slow as a possum hound. Canter up, boys; canter up!"

When we were well hidden from the house by a turn in the lane and a group of pines, the Captain's equanimity returned. Since J-C continued to express his admiration for the planter's quail gun, it was arranged that my pupil should continue to shoot it, while the Captain used the new 16-gauge Parker which I had brought along in place of my own, through a gunman's hankering to try out a new weapon. This left me gunless, since the English piece could not be fired; but this pleased me, because it permitted me to more closely observe J-C and his style of shooting.

Working through the end of a cotton field, we skirted some second-growth pines and rode directly into a big bevy, which towered and alighted in the middle of a pine thicket, where the Captain and I knew there was an open spot of half an acre or so. Old Jack had entered the cover ahead of us, and we found him on point. He was almost in the center of the little irregular opening, and I had little doubt but the birds would be found scattered on every side of him. We called it an opening, but it was not altogether clear shooting, for an odd pine grew here and there—in just the right place for a bird to whip behind it. Some of those quail would surely have to be snapped with lightning quickness, while others would give the gun a fair opportunity.

"Now, J-C," I warned him, "take your bird as soon as he tops the grass, for you will have that one opportunity to shoot and no other. Don't wait for the Captain; he is a naturally quick shot and will hold up his end. I will act as referee and call dead bird to the gun that landed it. All ready."

Captain Byas had been tossing up his gun after the fashion made familiar by the behavior of every shooter who has had a strange weapon placed in his hands. The stock was a trifle long for him, and the drop was but two and a half inches compared with three and a quarter for his own piece. I noted a dubious look come over his face as he tried his best to get an aim flat down on the rib. It wasn't to be done and I knew it. I anticipated some fun when the Captain got to shooting that straight-stocked gun, with its pattern in a 12-inch circle at 20 yards.

Hardly had we entered the grassy space when a bird broke cover in front of the old gentleman, and J-C downed it with as pretty a snap as ever was seen.

"Ha-a, h'm! Should have been my bu'd, suh! Confound this pokin' stick; it

balked me. Good shot, boy; good shot!"

Before we reached the standing pointer two more birds flushed. J-C killed and the Captain missed. To Jack's point three quail were put out, and the planter missed while J-C killed with both barrels. On his way to retrieve, the dog was forced to point by other birds still lying in the cover. Half the bevy appeared to arise this time, and J-C smothered a bird with his first charge, while the Captain missed with both of his. He stopped still in his tracks and looked at his gun with deliberate and utter condemnation.

"I have always had a kindly feelin' foh a Pa'kuh gun, suh, but now I wouldn't have one as a gift. It don't shoot wheah you hold. I held right squaiah and faiah on that bu'd—ought to a shot hell out o' him, suh, and he went a-floppin' right on."

I was now convulsed with unholy mirth, and, though I tried to hide it under the guise of commiserating with him, he detected me.

"Aha! I see! By Jack, another of your fool Yankee tricks! Did you take the shot out of these shells, suh?" He took a cartridge out of his pocket and shook it hard, listening for the shot to rattle. The shot evidently rattled, but he was still suspicious, perhaps suspecting buckshot in place of eights. The opened shell showed the shot.

"H'm! Mistaken again. It's nothing but the infernal, wuthless gun. You are shootin' fai'ly well, Brown; fai'ly well fo' a green man. But then, as I told you, suh, you've got a real gun."

The veteran now began beating off to one side by himself, probably thinking he might do better if relieved of that lightning snap from his companion, which had hurried him out of correct time. He flushed a bird and missed with both barrels, flushed another and missed with both barrels. Just then a third towered high above his head and J-C killed it, the plump little fowl falling so close to the provoked gunner's head that he had to dodge.

The Captain stood in a silent rage until I walked up.

"Clever shot, that last," I remarked.

"Clever, hell! I hu'd them shot whistle past my head, suh! That kind of snap shootin' is dang'rous, suh. Now what is that black imp of Satan yowlin' about? I hope Clyde has sprinkled him from top to toe."

Jim was calling us loudly. Reaching him, we found that Aunt Jane had sent the housemaid, Ella, to tell the Captain to come home. It seemed that the larder lacked certain essentials, necessitating a trip to town by the head of the house.

"I'm not a-goin'!" the Captain declared violently. "Things are comin' to a pretty pass when a man can't go out fo' a little spo't without havin' to go to town fo' eatables."

"I wouldn't cross Aunt Jane, Captain; it takes her so long to forget."

"And you encou'age her, suh! I know it. Git along theah, you black wench! You interrupt me again when I'm shootin' and I'll whale ye all the way home."

Despite his vigorous protests, the Captain mounted his horse ready to return, for Aunt Jane's requests were equivalent to commands.

"Here, Captain, take your own gun. I wish J-C to shoot a sure-enough shotgun the remainder of the day and not an old pot-bellied, pot-metaled garden sprinkler. How can I tell whether he can shoot or not? Haven't I always held that if a man had a six-pound gun that would throw half a pound of No. 10 shot in a ten-foot circle at twenty yards, nothing could be missed that wasn't behind a stone wall. Please do not exchange guns with my pupil again. I want him to learn to shoot."

"Lea'un to shoot! He can shoot bettuh than you ever could in your life right now, suh! But I nevuh make a fool of myself twice in the same way. Say, take those bu'ds over and give 'em to Doctor Briggs—Jane might recognize 'em. It wouldn't surprise me if it's pet pa'tri'ges troublin' her right now instead of eatables."

A quarter of a mile farther on, in an open, fallow field grown up with weeds, we found Sport, sitting on his haunches, grimly holding a bevy that he had been on throughout all the previous shooting. No heavy cover was near—nothing but ragweed with a sprinkling of sedge—and the shooting must prove of the easiest description.

We found a total of three bevies in precisely that kind of cover within the next hour, all the birds scattering in the open. All told, J-C secured twenty-five to thirty shots, and of these he killed just two birds. My pupil took his misses more serenely than I liked. His temperament pleased me, but his indifference did not.

"Now how did I miss that last one, Coach? Had him right over the muzzle, just rocking himself along on his wings. How am I to kill if that shot didn't land? Must be in the gun, as the Captain said."

"Sure thing—it's partly in the gun. This gun throws a foot pattern compared with a four-foot pattern for the Captain's old fusee. You can kill birds with the old gun, but you would never learn to shoot in forty years; never would know whether you held right or not, even when you killed."

"What's the odds, so long as I git 'em?"

"Well, the odds to me are that I am bent on seeing that you learn where to hold and how to hold, neither of which you know now. You are shooting high, and that is partly the fault of the gun; that is, it could be temporarily remedied by a gun that was crooked enough to shoot low. I say temporarily remedied, because as you learned to pull the trigger on time you would surely begin to shoot low. You are not timing your trigger pull at all, but are on the mark and off of it again before you can press the trigger. Quail shooting generally, and all snap shooting, is accomplished with the tubes rising, and if you fail to time your pull to the upward movement of the barrels you are bound to carry the aim above the bird while pulling trigger—do it quite unconsciously more likely than not. You have done some sprinting, haven't you? You know that fatal pause after the pistol cracks before you can get under way—about a twentieth of a second. It takes all of that time to pull the trigger if you are not trained to it, or have not timed it by the line of aim closing on the mark."

"So I get on and then it takes me the twentieth of a second to pull the trigger, and during that time the aim is drifting off the mark and I don't know it—is that it?"

"That's about it. And then you have other faults. You are so quick in getting your gun up that you never pause to properly balance the body or place your feet. While you are raising the gun your unbalanced body is swaying to this side or that, carrying your sight where you never meant it to go, and you can't help yourself. You will have to learn to acquire perfect balance on the instant.

"Another thing: you are handling your gun entirely with your arms, and that is dead wrong. Arm movements are too rapid, too irregular and too uncertain to be fully controlled. When the piece is once up and leveled, the relative position of arms, face, and gun do not change again; from then on the aim is carried to the mark by the sway, poise, swing, and bend of the body, which is a far more even movement.

"Something else I noticed: when you fire the first barrel, the jump of your gun throws your cheek away from the stock, and then when you see the bird above the muzzle your line of vision is really an inch or so high at the breech, you shoot like a man would at fifty yards with a rifle sighted for a thousand yards—shoot away above the mark, which looked to be right over the front sight."

"Man alive! Anything else?"

"Plenty. We'll tackle some of your problems to-morrow."

(To be continued)

BIG GAME ISSUE NEXT MONTH. MOOSE, BEAR, DEER, AND CARIBOU; ALSO QUAIL, DUCKS AND GEESE FOR THE FEATHERED-GAME GUNNER. ALL YOUR FAVORITE AUTHORS: BUCKINGHAM, CLINCH, CARD, MILLER, MACKLIN,—SOME GOOD NEW ONES, TOO—ALL CORKING HUNTING YARNS!

AT THE FIRING STAND

RUNNING DEER, AND OTHER TARGETS

BY EDWARD C. CROSSMAN

A PAPER target *is* a monotonous form of mark, when you come right down to facts. Indispensable for primary instruction and for record of comparative skill in holding, it has to play second fiddle to a whole lot of other marks in point of charm. Consider the shooting-gallery. For every citizen who gravely stands and plunks away at the blank and unresponding paper dangling at either side of the gallery, there are twenty others who joyfully knock over white ducks or shoot fiery eyes out of clowns' heads or whang away at balls that bob upon real water fountains. Said twenty want quick results, they want to see their bullets do something, they retain the keen joy of their youth in seeing things break. You know yourself that the highest form of pure and holy joy was the sight of a skilfully-aimed dornick sailing through the window of a vacant house.

To the bystander, watching another man shoot at a paper target has all the heart-breaking thrills that attend watching a game of chess. Unless competition and lots of it enters into the computation, paper-target work quickly palls upon the worst bitten gunatic. Failure to recognize this is responsible for the failure of organized rifle-shooting to appeal to the American gun crank.

A tin can that says "Pank!" in joyful voice each time a bullet strikes it, is essentially a more charming mark than a beringed target.

This is both because there is no tiresome waiting for a mark, and because the tin can discreetly keeps silence as to the misses. So are the feelings of nobody ruffled.

As extenuation for writing this screed I might say that in five or six years of secretaryship of the Los Angeles Rifle and Revolver Club, I have watched the idiosyncrasies of many gunatics. We have the record of having qualified more men over the Government course for rifle clubs than any other club in the country for 1911 and 1912, and our victories on the outdoor range exceed our defeats in the proportion of about six to one, but in spite of this I

am no firm believer in the adequacy of "Special Course Q," or any other course laid down by the wiseacres that control some of the rifle-shooting of the country —that slight portion of it that takes in the affiliated rifle clubs of the N. R. A.

First, competition is the strongest incentive to attend the shoots. All we have to do is to furnish a match with some other club, and a good warm day. The gang is forthwith on hand.

The next best thing is some variety of target that makes every shot a bringer of joy. Now in spite of the fact that their hunting may be but an average of two weeks out of each two years, our cranks are interested in any sort of game-shooting preparation. A standing deer cut out of pasteboard and stood up beside the 200-yard butt will take on the appearance of a colander bottom, while the targets beside it will be ignored.

A deer at 300 yards will draw ammunition out of the belts and put vexation into the souls of the cranks, so difficult is it to hit when put against a non-contrasting background.

The running deer assays five thrills to the shot, and seemingly it is not possible to carry enough ammunition to the range to last a shooter to the surfeit stage. More about this beast, later on.

A row of 12-inch plates at 200 yards as a basis of competition with some other club in a pistol shoot, will bring pistols out of a retirement that no amount of targets of Standard American sort can break. Tie a dozen toy balloons in a row at about 250 yards, conditions as you please, and note the joyful unanimity with which the regular targets are abandoned by the rifle-shooters.

These rifle-shooting head men seemingly cannot grasp the fact that a man shoots as play, recreation, a means of having some fun, and that the way that gives the most fun is the way that most tickles the shooting bugs.

I believe that day in and day out, the running targets are greater deliverers of joy than any other form. I'm going to consider the various forms of running animals in silhouette that can be the pleasure of any crowd of a few cranks with a bit of safe country at their disposal. First, let me say that when the lay of the land is such that the big rifle is not usable, the humble .22 is quite as good for the actual practice and a lot cheaper to shoot. If worst came to worst, a lot of .22's used with Maxim Silencers could be used in the very basement of a church without disturbing the congregation above. I use this comparison, for the reason that narrow-minded as these gentry usually are, the gentlemen of the cloth are quite apt to enter complaint about the most harmless sort of shooting that may go on during the day that they consider set apart for their special benefit. Also, as Sunday is the usual day of recreation for the usual man, I consider the attempt of any set of persons to legislate another set out of innocent diversion, an act to be met with any sort of weapon.

The most famous running deer in the world is that at Bisley, England. It is a deer to be contemplated with awe, as exemplifying the solidity of British institutions—and the British head. It has all the equipment of a railroad switch-yard and costs to install about the amount that is paid by all the clubs in the country to our National Rifle Association. As I say, it is something to be approached with awe, to be gazed upon with respect—and to be copied by millionaires who should be able to build something far more efficient from the mechanical standpoint.

Without going into the mechanical features, the deer is the figure of a Scotch stag with legs outstretched in the act of running, and with an eight-inch heart inscribed on the chest and shoulders, higher up than would be a real deer's heart. It is set on a small hand-car similar to that used by the track-repairing gangs of M. W. departments of our railroads. The car starts down a little grade, runs across the course by gravity and up another grade at the other side, where it is seized by the crew in waiting, reversed, the hits marked on a dummy deer above the butt, and then sent down the grade on its return journey. The deer runs 20 yards at a speed of 12 miles an hour, distance from the shooter about 100 yards. This is the speed of a deer that is in no particular hurry to get anywhere, but merely dislikes that neighborhood, but not the gait of a

really frightened animal. Also the outfit can be put in for the small price of $1,000, after which we will leave it, and look farther.

They had a deer at Camp Perry, at the National and International Matches of 1913, apparently copied after the Bisley animal. Owing to the fact that I was busy getting trimmed in other matches there, I did not have time to tackle the animal, but a look at it was an education.

Apparently—I did not measure it—the buck was the size of a fairish cow. It was known variously as the ambling elephant, the running rhino and the bounding behemoth. Situate out to the right of the whole show, close to the pistol butt, the beast inhabited the region between two small board towers, connected with a low board fence, the whole 100 yards from the firing-line.

The beast ran about 25 yards, at apparently a 10-mile gait, although I did not time it accurately. The backing for the animal was huge in size, and the deer was apparently cut out of paper and pasted on this backing. The effect was that of a huge wooden beast ambling down the line of low fence and apparently quite a fair mark for brickbats instead of rifles.

It was mounted on a hand-car, apparently the whole outfit taken from the army, where they use rolling targets in their course, this running upon a regular track, rails and all. The low board fence concealed a bank of sand which stopped bullets that otherwise might have smashed the truck.

Two large, husky and perspiring gentlemen at a windlass amply large enough for a mine shaft, furnished the motive power for the deer. The whole constituted an outfit probably ten times as bulky and heavy as was necessary.

On the shoulder of the deer they had a six-inch bull counting five, and a 12-inch outer ring counting four. The rest of the shoulder and chest counted three, while the neck and a scant strip of the midriff counted two. Haunch shots counted nothing, and the same value was given the head and legs.

The World's Championship, with a gold medal and $25 in real money, was grabbed off by Lieut. Osborne, of the Navy, who stopped collecting prizes over in the Internationals long enough to take just two chances at the deer with a service rifle and telescope sight—one with a narrow field. He scored 50 and quit, naturally, on his second trial, while poor Turret Captain Meyrick, who had spent all week and all his money pounding the deer, had to take second prize. If he ever serves on the same ship as Osborne I know a good-looking lieutenant who will find himself hoisted over the rail some dark night by a certain turret captain—names not mentioned. To say that Meyrick was peeved is to put it mildly. A third Navy boy got third prize, while all the time the former world's champion from Stockholm, a Swede, tore his hair and the four ring on the deer's shoulder, neither of which brought him anything.

In this game you could sit or lie down, accounting for the fact that any man could put ten straight shots into a six-inch ring on a running deer at 100 yards, in ten runs of the deer.

Up at Santa Barbara, Stewart Edward White, John Colby, Harry Ross and others of the clan, installed for themselves a running deer, but got things down to a more simple form. Even at this I think we beat their animal when we finally got to work.

Their deer ran at a distance of 110 yards, angling slightly away from the shooter, and he ran as if the devil were at his heels. A pine tree hid the deer from sight, and after he started there was barely time to fire one shot until he passed the safety post.

They used a package carrier from some store, stretching a tight wire for it to run upon, and using a heavy windlass arrangement with a set of gears, for motive power.

Our own deer as now rigged uses the following materials: Two 3-ft., 4 x 4-inch posts; two 6-ft. posts ditto; 26 yards of iron wire of about 1/5-inch in diameter; 55 yards of small braided wire line with cotton center; two coiled wire springs 2 feet long; one carrier, and one bicycle wheel with forks and crank rigged directly on the axle. I've not tried it, but I am pretty sure my 4½-year-old kid could run the machine. Away from the butt the

THE MOTIVE POWER, THE TRENCH AND THE "ANIMILE"

deer runs by itself, so light is the rig and so easily does it work. Outside the posts, you can pick up the deer, wire, motive power and all, including the carrier, and lug the outfit off under your arm.

The scheme is this: You set your two 6-ft. posts about 25 yards apart, with due regard to the bullet stop, background, and firing point. Let the posts down a good 3 ft. and guy them by heavy twisted wire to the small posts set six or seven feet back of them.

Dig a trench about 18 inches deep from one post to the other, making the hole a foot wide or thereabouts. Stretch the heavy wire from one post to the other. It is best to use turnbuckles and start the wire with the turnbuckles screwed out as far as they'll go, for the iron wire must be tight. The wire wants to be so stretched that it runs four inches or so below the ground surface, this to protect your carrier from stray bullets. This is your track.

For motive power we first used a bicycle wheel with the chain and cranks, but we found that it was geared too high. A bright club member finally trotted out an old "Unicycle," one of those one-wheeled affairs that you see used by trick performers on the stage, consisting of a single bicycle wheel, with cranks and pedals put directly on the axle and a saddle perched precariously on the frame above.

This proved to be the proper thing. The spindle where the seat-post used to be was run through the post at the end of the wire and bolted there with a big nut screwed on to the other end. The braided wire was fastened to the carrier, run through a pulley set in the post at the farther end of the run, back to the unicycle wheel, passed twice around the rim in the hollow where the tire used to be, and out to the carrier again. Naturally, when the wheel was revolved by the pedal, placed handy to the marker to run the deer, the carrier was dragged along the wire. The wheel is 26 inches, so each turn sent the carrier and its deer 26 times 3.1416, or about 82 inches—nearly seven feet.

The carrier we had made to order by J. T. Dickman, of Los Angeles, a man who specializes in shooting-gallery equipment and who runs the shooting-galleries at the two Coast Panama-Pacific expositions. One of the package-carriers used in the smaller stores in big cities would be made to answer quite well.

All that is necessary are two wheels,

MARKING THE DEER—A "FOUR"

grooved to fit the wire, and carrying enough of a frame to hold the two light sticks that support the deer.

Our carrier has ball-bearing wheels and carries two brass sockets about four inches long and two feet apart, to receive the inch sticks upon which the deer is fastened.

The keel must be hung a bit down into the trench, to counteract the weight of the deer and the tendency to capsize when it is run fast and the air pressure mounts up. A five-pound keel hung by two rods eight inches below the carrier is usually enough to do the work.

The deer is a matter entirely of taste, so long as it is kept light. Probably the best material is light corrugated pasteboard, which is light, and yet stiff enough not to bend under air pressure when the deer is at speed.

Don't bother with legs or with horns; material such as pasteboard won't last long when cut into such thin strips. Cut it roughly into deer shape, with head and ears; then slit the sticks and fit the sheet of cardboard down into them, keeping it low down to obviate the danger of capsizing. Wire the ends of the sticks together.

On our own range we built up a little bulkhead about three feet high, filled with sandy soil, which will stop any bullet; then dug out a hole two feet on the inner side where the wheel is mounted. The deer runs away from the marker, toward the brushy hills, and disappears behind a little point of brush when it runs its full course.

Invariably no shooting is allowed as the deer is drawn back, making assurance doubly sure that the marker will not be hit. Beside the bulkhead is piled a bit of brush to conceal the deer when he is standing, ready to start.

We used to run the animal quite slow and allow any number of shots until he disappeared. Automatics, lever-guns, bolt-guns, and all were tried out on the animal, with the automatic invariably nowhere in the final score, and the bolt and lever guns winning according to who fired them.

Usually, where the shooter tried to get off two shots, but one of them hit, while one man with an automatic, who fired four shots each run, never hit a hair. There-

YON HE GOES!

fore we cut out the slow business and now run that deer just as fast as the marker can propel it—a rate close to 30 ft. a second, or the speed of the fastest of the 100-yard sprinters.

There is no time for a second shot unless both of them are merely slobbered in, and, in fact, we had to cut out making the shooter stand with safety on, gun in the right hand, because of the short time allowed to fire. Now he's allowed to take any position, excepting that the gun must not be at the shoulder, and must be below the armpit. As soon as one shot is fired the deer is stopped, pulled back and marked. This saves time, as the rules allow but the one shot. The speed is therefore nearly twice as fast as the Bisley deer, or the one at Perry, while our distance is 130 yards instead of 100.

The marking of the Bisley and Perry deer does not appeal to us. A six-inch bull with a 12-inch four may be very well at 100 yards on a 12-mile-per-hour deer, but not at 130 yards on one twice as fast —and more of deer size.

Therefore we make the whole forward part of the deer—neck, shoulders and chest—count 5, the mid-section count 4, and the haunch count 3. At Bisley a haunch shot costs the shooter a fine.

We realize the fact that a mid-section shot is not worth more than one in the haunch when it comes to stopping live deer, but we desire to encourage shooting well forward on the animal; hence the scoring. The man who gazes upon the streak of dun-colored deer that stretches across the deer course at the sound of the whistle won't ask for finer divisions on his body.

The shooting itself is a lesson that most riflemen have no chance to learn. The utmost control of trigger finger is first of all necessary. The depth of the deer from shoulder-top down to the junction of the legs is scant—a couple of feet or less—and errors in elevation mean misses as surely as errors of lead.

Colby, who used to swat his deer with monotonous regularity, used a telescope sight on his Neidner .22 HiPower and held dead still, ahead of the deer, letting it run into the field of his scope.

Under Colby's shooting conditions this worked all right, but I am entirely opposed to the scheme. I think, modestly speaking, that I hit our own deer as regu-

larly as the rest of our bunch, and there is but one way in which I can do consistent shooting.

This is to swing up the instant the deer darts forth, swing along parallel with his course, overtake and pass him, and pull as the bead swings past his chest. With the .22 HiPower such a pull results usually in hits in the middle or fore section. To hit the shoulders I have to be traveling at the speed of the deer and two feet ahead of him—that is the way it looks as I press the trigger.

The rifle is sighted to strike where the bead rests, and the bead is held just ahead of the chest, not low down at the lower line of the body. Also, for some uncomprehensible reason the .22 HiPower requires more lead than does my Mauser, shooting the Springfield cartridge. Theoretically this should not be so; the time of flight for the two bullets is practically the same over 130 yards; but the fact remains. Figured out on paper, a deer speeding at the rate of 30 ft. per second, fired at with the Springfield, would travel five feet while the bullet got down there. Swinging with the deer, as I do, seems to reduce this to around three feet. A slight jerk forward as the trigger is pulled hits the deer in the shoulders, when the sight was apparently but two feet ahead of the chest, but when one moves the rifle rapidly as the trigger is pulled he cannot tell the exact position of the sight.

The objection I have to the method of holding ahead and holding still is that the slightest delay in pulling the trigger, or the slightest fault in the ignition apparatus of the rifle or cartridge, will score a miss. With the rifle moving slightly ahead of the deer and not stopped, this is not true. Of course, all the swing is useless if the gun is stopped when the trigger is pulled.

If the gun is *held* ahead and the trigger is pulled when the deer's nose is five feet away, the bullet will strike somewhere along the body, owing to the delay in ignition after the striker falls, added to the actual time of flight of the bullet. If the trigger pressure is delayed 1/10 second, then the bullet will strike 3 ft. farther back, and a miss will probably result. This is the reason I object to the hold-still method, against the continuous swing.

The swing makes up the delay in trigger squeeze, unavoidable at times, for the delay that results while the bullet passes out of the barrel, and insures that so far as human skill can go the bullet actually leaves the muzzle of the rifle projected to a point that is five feet or so ahead of where you want to hit. If the swing is increased to more than the pace of the deer, then the bullet leaves the muzzle at a point that is actually farther ahead than the last glimpse of the sights indicated. This is not theory, but experience, demonstrated through too many shots at a real running deer to be in doubt to the fellow doing the shooting.

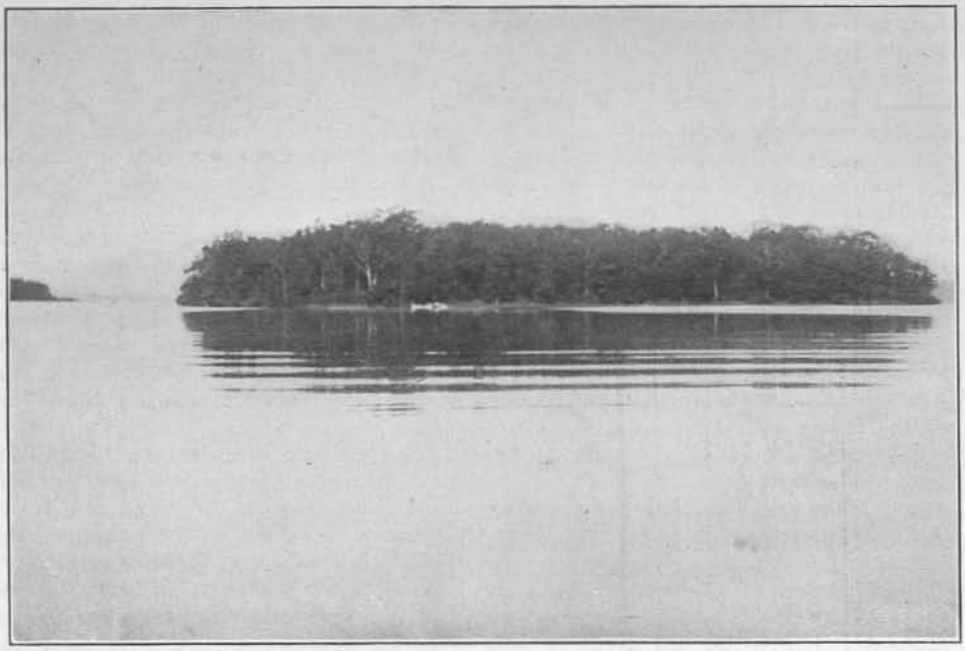
The most amusing feature of the running-deer stunt is the work of the old-timer rifles, such as the .38-55 and .45-70. One man, a habitue of the range and the proud possessor of a .45-70 repeater, fired sixteen shots with the "misanga" at the running deer and touched nary a hair. The big bullets got down there about the time the deer was at the finish of his run, and the said .45-70 man looked with dark suspicion at his rifle.

Another man, shooting a .38-55 Savage, landed for nine straight shots on the haunch of the deer, holding, as he said, about ten feet ahead of it, and using .38-55 High Power ammunition. Then he changed over to the low-power stuff and did not scrape in one hit. Until you've seen the two sorts of cartridges, the modern high velocities shot at a running object in competition with the old slow coaches, you can hardly realize the difference that exists in their "gitting thar time."

As a matter of cold fact, the deer runs ten feet in the time it takes the big .45-70 bullet to get down over the 130-yard range, and holding as far ahead as is necessary, even with the fastest swing, becomes a very inaccurate matter both in lead and elevation.

I've played a great many shooting games, but I believe that a good fast running deer is the most fascinating of them all.

With the very low cost of installation, it is surprising that more of them do not gambol around the country, to say nothing of other "animals" such as rising bears, etc.



A GOOD MUSKIE BAR OFF THIS ISLAND

A PRIZE MUSKIE OF LAC VIEUX DESERT

BY FRED BRADFORD ELLSWORTH
Winner Third Prize, Muscallunge, 1914 Contest

FOR the benefit of the more experienced anglers who adhere to the use of heavy tackle in muscallunge fishing, kindly permit the writer to try and influence them to discard it in the future. It is wholly unnecessary, and not only that, it is unsportsmanlike; and he says this without conceit or egotism. Also, that it applies in general to all kinds of fishing.

The fall of 1913 we caught 79 muskies on light tackle in Minnesota. We had fished the Wisconsin many times, but were becoming skeptical about it. I communicated with an old guide and friend whom we had fished with. He was Ed Lacou, of Eagle River, Wis., a *real guide*, and one of the best ever. He suggested Lac Vieux Desert and said it would be the only place in Wisconsin where he thought we would be satisfied. He volunteered the information that muskies ran larger there than other sections in the State, named the camp to stop at, and to engage John Knobla as guide.

The drive to the camp, five miles away, from State Line (Mich.) Station was made in a three-seated wagon, and every seat was taken. There was also an automobile filled with people. We were under the clear blue sky, and the cold, pure morning air caused the blood to tingle. It was scented with the aroma of the pines that fell pleasantly upon the senses. Our spirits rose (some might have disappeared) as the heavily laden wagon rounded the curves, slowly ascended the hills, and quickly ran down again. The driver was the most loquacious person I ever met in my life. After his winter hibernating it seemed good to meet new people and faces again. He was overflowing with good fellowship. His immense vitality seemed to absorb the sun and throw it out again. His laughter was as music and its warmth was pleasing in

the extreme. Instinctively I was drawn to him, and it seemed like meeting an old friend.

The majority of the fishermen who reached the place that day hurried out on the lake to try their luck. Time with me not being limited, I spent the morning unpacking my fishing-trunk and arranging my cabin. In the afternoon I assembled a light split-bamboo rod I made expressly for muskies. This rod corresponded to the average bass rod universally used by anglers, except experts. It was five feet long and weighed five ounces. I put on a No. 3 Meek bass reel with 50 yards of Ne Pe Nauk No. 20 silk line. To this I attached a twisted brass leader about a foot long and a No. 5 Skinner spoon, and was ready for business. Soon my guide appeared, and to my utter amazement he proved to be the driver who drove us from the station—John Knobla, the man I wanted. He explained that about ten days previous several of the guides, including himself, had fallen thirty feet with a scaffold while building a barn, and were all in a badly crippled condition. He was partially incapacitated for work, but, to my great joy, consented to do the best he could as my guide. He took me down to look at his boat. It was light, clinker-built, and, as I afterward found out, one of the easiest rowing boats I have ever been in. I made a seat to face the stern, for it is difficult to play a large fish sitting in the end of the boat, and we were soon on our way.

Back and forth we trolled over the weed-beds, and after being out a couple of hours I finally got a good strike. I knew it was a fair-sized muskie. After trying to leap into the air, which I prevented by throwing him over just as he showed, I held my rod high and John headed for deep water. Once he sounded and it was with much difficulty I succeeded in getting him out of the weeds and on top of the water. When we had cleared the weed-beds I felt jubilant and cried, "Go as far as you like, old fellow!" I think the muskie heeded the advice, for at that moment he made a short rush. Then my line began to rise and I lowered the rod until my tip nearly touched the water. Just as he was about to leave the water I toppled him over, for I dislike to see a spoon sailing through space. The fish was brought to gaff in 18 minutes, which was fast work on light tackle. It weighed just 20 pounds. It was the first muskie caught in Wisconsin the opening day.

It had been rough and windy on the lake for nearly a week, but June 6th proved an ideal day. It dawned with a thick haze covering the water. About 8 o'clock it cleared some and a slight wind blowing from the east shifted to the south.

"We certainly ought to pick up a few to-day," I said to John.

"You bet your swell life we will. I hope it will be a big one. I want to see you play 'em with that light tackle," he replied smilingly, and added: "That tooth-pick, thimble and thread you're using will 'get the goat' of some of the know-it-alls at the camp."

We rowed down the shore about a mile and a half and in the middle of the second bar a muskie struck, but the hooks were not well set and he escaped. It was evidently a good-sized fish and I said, "Let's turn back and cover the same spot over. He may hit it again. If not, there may be another sailing about." We did so, and a short distance beyond a muskie hit hard and rose to the surface. We cautiously worked him into deep water and I breathed a sigh of relief. First he bore off in one direction, then another, and put up a splendid fight. Once he went into the air, but a taut line saved him. I got him up to the boat and John slipped the gaff under him and lifted him in. He was a beauty, weighing 28 pounds, and the time was twenty minutes.

When the sun had wheeled up in the middle of the sky we went ashore to cook dinner. Soon the smoke of our camp-fire rose and drifted over the tops of the majestic trees. It carried with it the odor of pine, bacon, fish and delicious coffee. The fish never tasted better, for we had ravenous appetites. I ate for two, because I had relieved John at the oars, to permit him to rest. He often laughingly remarked after that: "You're the first and only guest at the camp that ever paid to row a guide about. Some class to you, Mr. E. Hope you come again. And I never hear you kick in the boat." When

FRED B. ELLSWORTH AND 35-LB. MUSCALLUNGE CAUGHT IN LAC VIEUX DESERT, WIS.

we had finished our meal we filled our pipes with villainous Peerless smoking tobacco and lay there an hour talking of our experience in the great North Woods. In the meantime the wind began to freshen. Whitecaps soon began to roll and we decided to make for the south shore again. We reached it safely after a hard pull and followed the same course back. Here it was smooth rowing, and within a quarter of a mile of camp we crossed the bar. I was all on the alert and as my spoon reached the middle of it, over the weeds, I received a terrible strike. Momentarily I imagined I was on salt water again and hooked to a tarpon or an amberjack.

"A corker! A big muskie! It's a whale! Hope we can get him out!" yelled John. It was like striking a wall. The fish leaped fully six feet in the air. John said it was the largest muskie he had ever seen. It was fully sixty inches long or over, and must have weighed sixty or seventy pounds. It had an enormous head and tail. I threw him down and John began to row. My little rod bent almost double. I expected it to break any moment. I tried to keep him up and did for a short distance. The strain was so intense on my rod and line that I was compelled to continually give line. We covered possibly fifty feet when he bore down but a few feet, struck the ever-protecting weed-beds, and was gone in a flash.

From the very start I considered it a physical impossibility to get the fish off of those weeds—it would have been a miracle—not even if I had been using the customary heavy steel pole, clothes-wringer and rope with grappling-hooks attached. It is my candid opinion that that muskie could have backed a mule into the lake. Perhaps with a donkey-engine and windlass an impression might have been made on him. Had I succeeded in getting him into deep water, what a time I would have had playing him on my light tackle, and feel confident that I could have landed him.

I have caught a few hundred muskies during my career as a fisherman—the largest weighed 45 pounds—but this was the third largest I have ever seen.

On reaching the shore we found the other two boats had also been successful. One man had caught one weighing 17 pounds and a lady one weighing 22½ pounds.

June 8th dawned bright and clear, with a stiff wind blowing from the southwest, and the water was rough. Indications were that it would cloud up before noon. Contrary to expectations, about 9 o'clock the sun came out hot, but the wind tempered the heat so that it was not uncomfortable except to those unused to it. John's skin was the color of ebony, and as I had recently come from Florida neither of us minded it, as we were well seasoned. We trolled down the south shore for a mile or more. Then the wind went to the west and increased, so we

turned back. We had a head-on sea to buck, but John was a powerfully built man and rowed with a strong, steady stroke. It did not bother him much, as we were in a light clinker boat.

This day I had substituted a Heddon 5-foot split-bamboo bass rod, weighing 6 ounces, in place of my 5-ounce rod, which had split near the tip. Otherwise the tackle used was same as before.

We passed several of our boats going down with the wind, but none of them had caught muskies. Others were anchored along the bar and the occupants were busy reeling in pike, which were plentiful. While watching them I had a good strike, but the fish did not get the hook. I slacked back and he struck hard, and instantly his large form rose to the surface, churning the water into white foamy lace. I expected him to leap and had lowered my pole, but as he did not I raised it as high as I could. As John pulled ahead I brought him up, and while giving line he came sailing along nicely. So long as his tail remained up I knew he could not leap. I was fearful lest he bore down and hit the weeds; we were in about five feet of water and they were very thick. "If we can go another fifty feet we're all right and will be out of the weeds, off the bar, and in twelve feet of water," said John anxiously.

It was a crucial moment. The hooks to all appearances were lodged in the upper jaw, and I could plainly see the feathers sticking out. His mouth was closed, which I did not relish; but just then he opened it, to my relief, and began to take water. My rod "Baby" bent more than I desired, but stood the strain magnificently, and also the silk line. But would those light hooks stand the strain? I hoped so, as they had done on many previous occasions and my faith in them was unbounding. But I have had much larger hooks broken by muskies as if made of glass. He started down at once, but coaxed him up again, and the next I knew John said gleefully: "Get busy now; go to it." The fish made several rushes, but I played him carefully, and I had no trail treble hooks and never use them, as many do, for I do not think it sportsmanlike. The result was I wanted to bring him in as quickly as possible, as he looked like a prize-winner. I did not let up a moment, and soon brought him to gaff. On reaching shore the muskie weighed 35 pounds 1 ounce; length, 49⅛ inches; girth, 23⅜ inches. Time, 20 minutes. I shipped it to a friend in Chicago to eat, but he had it mounted and it now adorns the wall in his place of business, the envy of his angling acquaintances.

Ofttimes we stayed out later than usual, and when we turned our boat homeward the western horizon looked like a painter's palette. It was covered with purple, green, crimson, silver and gold, but blending into an undescribable beauty that no brush could portray or writer fully describe or poet sing the praise of. The sun had disappeared behind the far-off hills to continue its travel till a new morn was born. The day had vanished, but soon moonlight and starlight poured down upon us in a glorious flood of light, and we would reach our camp both feeling supremely happy.

PRIZE CONTEST CERTIFICATE RECORD, 1914 CONTEST

Third Prize, Muscallonge, Caught by Fred B. Ellsworth

Weight—35 lbs., 1 oz.
Length—49⅛ in.
Girth—23⅜ in.
Caught—June 8, 1914.
Where caught—Lac Vieux Desert, Wis.
Rod—Heddon split bamboo.
Reel—No. 3 Meek.
Line—Ne Pe Nauk.
Lure—No. 5 Skinner Spoon.

A GOOD BEAR STORY NOW AND THEN HELPS A LOT. WE HAVE ONE IN OCTOBER BY W. R. JACKSON THAT YOU'LL ENJOY READING. SOME GRIZZLY AT THAT.

DESERT GOLD

A NOVEL, BY ZANE GREY

Book Copyright 1913 by Harper & Bros.

X

ROJAS

FOR all Dick could ascertain his friend never stirred an eyelash nor a finger for twenty-seven hours. When he awoke he was pale, weak, but the old Thorne.

"Hello, Dick; I didn't dream it then," he said. "There you are, and my darling with the proud, dark eyes — she's here?"

"Why, yes, you locoed cavalryman."

"Say, what's happened to you? It can't be those clothes and a little bronze on your face. . . . Dick, you're older—you've changed. You're not so thickly built. By Gad, if you don't look fine!"

"Thanks. I'm sorry I can't return the compliment. You're about the seediest, hungriest-looking fellow I ever saw. . . . Say, old man, you must have had a tough time."

A dark and somber fire burned out the happiness in Thorne's eyes.

"Dick, don't make me—don't let me think of that fiend Rojas! . . . I'm here now. I'll be well in a day or two. Then! . . ."

Mercedes came in, radiant and soft-voiced. She fell upon her knees beside Thorne's bed, and neither of them appeared to see Nell enter with a tray. Then Gale and Nell made a good deal of unnecessary bustle in moving a small table close to the bed. Mercedes had forgotten for the moment that her lover had been a starving man. If Thorne remembered it he did not care. They held hands and looked at each other without speaking.

"Nell, I thought I had it bad," whispered Dick. "But I'm not——"

"Hush. It's beautiful," replied Nell, softly; and she tried to coax Dick from the room.

Dick, however, thought he ought to remain at least long enough to tell Thorne that a man in his condition could not exist solely upon love.

Mercedes sprang up blushing with pretty, penitent manner and moving white hands eloquent of her condition.

"Oh, Mercedes—don't go!" cried Thorne, as she stepped to the door.

"Señor Dick will stay. He is not *mucha malo* for you—as I am."

Then she smiled and went out.

"Good Lord!" exclaimed Thorne. "How I love her! Dick, isn't she the most beautiful, the loveliest, the finest——"

"George, I share your enthusiasm," said Dick, dryly, "but Mercedes isn't the only girl on earth."

Manifestly this was a startling piece of information, and struck Thorne in more than one way.

"George," went on Dick, "did you happen to observe the girl who saved your life—who incidentally just fetched in your breakfast?"

"Nell Burton! Why, of course. She's brave, a wonderful girl, and really nice-looking."

"You long, lean, hungry beggar! That was the young lady who might answer the raving eulogy you just got out of your

system. . . . I—well, you haven't cornered the love market!"

Thorne uttered some kind of a sound that his weakened condition would not allow to be a whoop.

"Dick! Do you mean it?"

"I shore do, as Laddy says."

"I'm glad, Dick, with all my heart. I wondered at the changed look you wear. Why, boy, you've got a different front. . . . Call the lady in, and you bet I'll look her over right. I can see better now."

"Eat your breakfast. There's plenty of time to dazzle you afterward."

Thorne fell to upon his breakfast and made it vanish with magic speed. Meanwhile Dick told him something of a ranger's life along the border.

"You needn't waste your breath," said Thorne. "I guess I can see. Belding and those rangers have made you the real thing — the real Western goods. . . . What I want to know is all about the girl.

"Well, Laddy swears she's got your girl roped in the corral for looks."

"That's not possible. I'll have to talk to Laddy. . . . But she must be a wonder, or Dick Gale would never have fallen for her. . . . Isn't it great, Dick? I'm here! Mercedes is well—safe! You've got a girl! Oh! . . . But say, I haven't a dollar to my name. I had a lot of money, Dick, and those robbers stole it, my watch—everything. Damn that little black Greaser! He got Mercedes's letters. I wish you could have seen him trying to read them. He's simply nutty over her, Dick. I could have borne the loss of money and valuables—but those beautiful, wonderful letters—they're gone!"

"Cheer up. You have the girl. Belding will make you a proposition presently. The future smiles, old friend. If this rebel business was only ended!"

"Dick, you're going to be my savior twice over. . . . Well, now, listen to me." His gay excitement changed to earnest gravity. "I want to marry Mercedes at once. Is there a padre here?"

"Yes. But are you wise in letting any Mexican, even a priest, know Mercedes is hidden in Forlorn River?"

"It couldn't be kept much longer."

Gale was compelled to acknowledge the truth of this statement.

"I'll marry her first, then I'll face my problem. Fetch the padre, Dick. And ask our kind friends to be witnesses at the ceremony."

Much to Gale's surprise neither Belding nor Ladd objected to the idea of bringing a padre into the household, and thereby making known to at least one Mexican the whereabouts of Mercedes Castañeda. Belding's caution was wearing out in wrath at the persistent unsettled condition of the border, and Ladd grew only the cooler and more silent as possibilities of trouble multiplied.

Gale fetched the padre, a little, weazened, timid man who was old and without interest or penetration. Apparently he married Mercedes and Thorne as he told his beads or mumbled a prayer. It was Mrs. Belding who kept the occasion from being a merry one, and she insisted on not exciting Thorne. Gale marked her unusual pallor and the singular depth and sweetness of her voice.

"Mother, what's the use of making a funeral out of a marriage?" protested Belding. "A chance for some fun doesn't often come to Forlorn River. You're a fine doctor. Can't you see the girl is what Thorne needed? He'll be well to-morrow, don't mistake me."

"George, when you're all right again we'll add something to present congratulations," said Gale.

"We shore will," put in Ladd.

So with parting jests and smiles they left the couple to themselves.

Belding enjoyed a laugh at his good wife's expense, for Thorne could not be kept in bed, and all in a day, it seemed, he grew so well and so hungry that his friends were delighted, and Mercedes was radiant. In a few days his weakness disappeared and he was going the round of the fields and looking over the ground marked out in Gale's plan of water development. Thorne was highly enthusiastic, and at once staked out his claim for one hundred and sixty acres of land adjoining that of Belding and the rangers. These five tracts took in all the ground necessary for their operations, but in case of the success of the irrigation project the

idea was to increase their squatter holdings by purchase of more land down the valley. A hundred families had lately moved to Forlorn River; more were coming all the time; and Belding vowed he could see a vision of the whole Altar Valley green with farms.

Meanwhile everybody in Belding's household, except the quiet Ladd and the watchful Yaqui, in the absence of disturbance of any kind along the border, grew freer and more unrestrained, as if anxiety was slowly fading in the peace of the present. Jim Lash made a trip to the Sonoyta Oasis, and Ladd patrolled fifty miles of the line eastward without incident or sight of raiders. Evidently all the border hawks were in at the picking of Casita.

The February nights were cold, with a dry, icy, penetrating coldness that made a warm fire most comfortable. Belding's household usually congregated in the sitting-room, where burning mesquite logs crackled in the open fireplace. Belding's one passion besides horses was the game of checkers, and he was always wanting to play. On this night he sat playing with Ladd, who never won a game and never could give up trying. Mrs. Belding worked with her needle, stopping from time to time to gaze with thoughtful eyes into the fire. Jim Lash smoked his pipe by the hearth and played with the cat on his knee. Thorne and Mercedes were at the table with pencil and paper; and he was trying his best to keep his attention from his wife's beautiful, animated face long enough to read and write a little Spanish. Gale and Nell sat in a corner watching the bright fire.

There came a low knock on the door. It may have been an ordinary knock, for it did not disturb the women; but to Belding and his rangers it had a subtle meaning.

"Who's that?" asked Belding, as he slowly pushed back his chair and looked at Ladd.

"Yaqui," replied the ranger.

"Come in," called Belding.

The door opened, and the short, square, powerfully built Indian entered. He had a magnificent head, strangely staring, somber black eyes, and very darkly bronzed face. He carried a rifle and strode with impressive dignity.

"Yaqui, what do you want?" asked Belding, and repeated his question in Spanish.

"Señor Dick," replied the Indian.

Gale jumped up, stifling an exclamation, and he went outdoors with Yaqui. He felt his arm gripped, and allowed himself to be led away without asking a question. Yaqui's presence was always one of gloom, and now his stern action boded catastrophe. Once clear of trees he pointed to the level desert across the river, where a row of campfires shone bright out of the darkness.

"Raiders!" ejaculated Gale.

Then he cautioned Yaqui to keep sharp lookout, and, hurriedly returning to the house, he called the men out and told them there were rebels or raiders camping just across the line.

Ladd did not say a word. Belding, with an oath, slammed down his cigar.

"I knew it was too good to last. . . . Dick, you and Jim stay here while Laddy and I look around."

Dick returned to the sitting-room. The women were nervous and not to be deceived. So Dick merely said Yaqui had sighted some lights off in the desert, and they probably were campfires. Belding did not soon return, and when he did he was alone, and, saying he wanted to consult with the men, he sent Mrs. Belding and the girls to their rooms. His gloomy anxiety had returned.

"Laddy's gone over to scout around and try to find out who the outfit belongs to and how many are in it," said Belding.

"I reckon if they're raiders with bad intentions we wouldn't see no fires," remarked Jim, calmly.

"It'd be useless, I suppose, to send for the cavalry," said Gale. "Whatever's coming off would be over before the soldiers could be notified, let alone reach here."

"Hell, fellows! I don't look for an attack on Forlorn River," burst out Belding. "I can't believe that possible. These rebel-raiders have a little sense. They wouldn't spoil their game by pulling U. S. soldiers across the line from Yuma to El Paso. But, as Jim says, if they wanted to steal

a few horses or cattle they wouldn't build fires. I'm afraid it's——"

Belding hesitated and looked with grim concern at the cavalryman.

"What?" queried Thorne.

"I'm afraid it's Rojas."

Thorne turned pale but did not lose his nerve.

"I thought of that at once. If true, it'll be terrible for Mercedes and me. But Rojas will never get his hands on my wife. If I can't kill him, I'll kill her! . . . Belding, this is tough on you—this risk we put upon your family. I regret——"

"Cut that kind of talk," replied Belding, bluntly. "Well, if it is Rojas he's acting damn strange for a raider. That's what worries me. We can't do anything but wait. With Laddy and Yaqui out there we won't be surprised. Let's take the best possible view of the situation until we know more. That'll not likely be before to-morrow."

The women of the house might have gotten some sleep that night, but it was certain the men did not get any. Morning broke cold and gray, the 19th of February. Breakfast was prepared earlier than usual, and an air of suppressed waiting excitement pervaded the place. Otherwise the ordinary details of the morning's work continued as on any other day. Ladd came in hungry and cold, and said the Mexicans were not breaking camp. He reported a good-sized force of rebels, and was taciturn as to his idea of forthcoming events.

About an hour after sunrise Yaqui ran in with the information that part of the rebels were crossing the river.

"That can't mean a fight yet," declared Belding. "But get in the house, boys, and make ready anyway. I'll meet them."

"Drive them off the place same as if you had a company of soldiers backin' you," said Ladd. "Don't give them an inch. We're in bad, and the bigger bluff we put up the more likely our chance."

"Belding, you're an officer of the United States. Mexicans are much impressed by show of authority. I've seen that often in camp," said Thorne.

"Oh, I know the white-livered Greasers better than any of you, don't mistake me," replied Belding. He was pale with rage, but kept command over himself.

The rangers, with Yaqui and Thorne, stationed themselves at the several windows of the sitting-room. Rifles and smaller arms and boxes of shells littered the tables and window seats. No small force of besiegers could overcome a resistance such as Belding and his men were capable of making.

"Here they come, boys," called Gale, from his window. "Rebel-raiders I should say, Laddy."

"Shore. An' a fine outfit of buzzards!"

"Reckon there's about a dozen in the bunch," observed the calm Lash. "Some hosses they're ridin'. Where'n the hell do they get such hosses, anyhow?"

"Shore, Jim, they work hard an' buy 'em with real silver pesos," replied Ladd, sarcastically.

"Do any of you see Rojas?" whispered Thorne.

"Nix. No dandy bandit in that outfit."

"It's too far to see," said Gale.

The horsemen halted at the corrals. They were orderly and showed no evidence of hostility. They were, however, fully armed. Belding stalked out to meet them. Apparently a leader wanted to parley with him, but Belding would hear nothing. He shook his head, waved his arms, stamped to and fro, and his loud, angry voice could be heard clear back at the house. Whereupon the detachment of rebels retired to the bank of the river, beyond the white post that marked the boundary line, and there they once more drew rein. Belding remained by the corrals watching them, evidently still in threatening mood. Presently a single rider left the troop and trotted his horse back down the road. When he reached the corrals he was seen to halt and pass something to Belding. Then he galloped away to join his comrades.

Belding looked at whatever it was he held in his hand, shook his burly head, and started swiftly for the house. He came striding into the room holding a piece of soiled paper.

"Can't read it and don't know as I want to," he said, savagely.

"Beldin', shore we'd better read it," replied Ladd. "What we want is a line on

them Greasers. Whether they're Campo's men or Salazar's, or just a wanderin' bunch of rebels—or Rojas's bandits. *Sabe*, señor?"

Not one of the men was able to translate the garbled scrawl.

"Shore Mercedes can read it," said Ladd.

Thorne opened a door and called her. She came into the room followed by Nell and Mrs. Belding. Evidently all three divined a critical situation.

"My dear, we want you to read what's written on this paper," said Thorne, as he led her to the table. "It was sent in by rebels, and—and we fear contains bad news for us."

Mercedes gave the writing one swift glance, then fainted in Thorne's arms. He carried her to a couch, and with Nell and Mrs. Belding began to work over her.

Belding looked at his rangers. It was characteristic of the man that, now when catastrophe appeared inevitable, all the gloom and care and angry agitation passed from him.

"Laddy, it's Rojas all right. How many men has he out there?"

"Mebbe twenty. Not more."

"We can lick twice that many Greasers."

"Shore."

Jim Lash removed his pipe long enough to speak.

"I reckon. But it ain't sense to start a fight when mebbe we can avoid it."

"What's your idea?"

"Let's stave the Greaser off till dark. Then Laddy an' me an' Thorne will take Mercedes an' hit the trail for Yuma."

"Camino del Diablo! That awful trail with a woman! Jim, do you forget how many *hundreds of men* have perished on the Devil's Road?"

"I reckon I ain't forgettin' nothin'," replied Jim. "The waterholes are full now. There's grass, an' we can do the job in six days."

"It's three hundred miles to Yuma."

"Beldin', Jim's idea hits me pretty reasonable," interposed Ladd. "Lord knows that's about the only chance we've got except fightin'."

"But suppose we do stave Rojas off, and you get safely away with Mercedes. Isn't Rojas going to find it out quick? Then what'll he try to do to us who're left here?"

"I reckon he'd find out by daylight," replied Jim. "But, Tom, he ain't a-goin' to start a scrap then. He'd want time an' hosses an' men to chase us out on the trail. You see, I'm figgerin' on the crazy Greaser wantin' the girl. I reckon he'll try to clean up here to get her. But he's too smart to fight you for nothin'. Rojas may be nutty about women, but he's afraid of the U. S. Take my word for it he'd discover the trail in the mornin' an' light out on it. I reckon with ten hours' start we could travel comfortable."

Belding paced up and down the room. Jim and Ladd whispered together. Gale walked to the window and looked out at the distant group of bandits, and then turned his gaze to rest upon Mercedes. She was conscious now, and her eyes seemed all the larger and blacker for the whiteness of her face. Thorne held her hands, and the other women were trying to still her tremblings. No one but Gale saw the Yaqui in the background looking down upon the Spanish girl. All of Yaqui's looks were strange; but this was singularly so. Gale marked it, and felt he would never forget. Mercedes's beauty had never before struck him as being so exquisite, so alluring as now when she lay stricken. Gale wondered if the Indian was affected by her loveliness, her helplessness, or her terror. Yaqui had seen Mercedes only a few times, and upon each of these he had appeared to be fascinated. Could the strange Indian, because his hate for Mexicans was so great, be gloating over her misery? Something about Yaqui—a noble austerity of countenance—made Gale feel his suspicion unjust.

Presently Belding called his rangers to him, and then Thorne.

"Listen to this," he said, earnestly. "I'll go out and have a talk with Rojas. I'll try to reason with him; tell him to think a long time before he sheds blood on Uncle Sam's soil. That he's now after an American's wife! I'll not commit myself, nor will I refuse outright to consider his demands, nor will I show the least fear of him. I'll play for time. If my bluff goes through . . . well and good. . . . After dark the four of you—Laddy, Jim,

Dick and Thorne—will take Mercedes and my best white horses, and, with Yaqui as guide, circle round through Altar Valley to the trail, and head for Yuma. . . . Wait now, Laddy. Let me finish. I want you to take the white horses for two reasons—to save them and to save you. Savvy? If Rojas should follow on my horses he'd be likely to catch you. Also, you can pack a great deal more than on the bronchs. Also, the big horses can travel faster and farther on little grass and water. I want you to take the Indian, because in a case of this kind he'll be a godsend. If you get headed or lost or have to circle off the trail, think what it'd mean to have a Yaqui with you. He knows Sonora as no Greaser knows it. He could hide you, find water and grass, when you would absolutely believe it impossible. The Indian is loyal. He has his debt to pay, and he'll pay it, don't mistake me. When you're gone I'll hide Nell so Rojas won't see her if he searches the place. Then I think I could sit down and wait without any particular worry."

The rangers approved of Belding's plan, and Thorne choked in his effort to express his gratitude.

"All right, we'll chance it," concluded Belding. "I'll go out now and call Rojas and his outfit over. . . . Say, it might be as well for me to know just what he said in that paper."

Thorne went to the side of his wife.

"Mercedes, we've planned to outwit Rojas. Will you tell us just what he wrote?"

The girl sat up, her eyes dilating, and with her hands clasping Thorne's. She said:

"Rojas swore—by his saints and his virgin—that if I wasn't given—to him—in twenty-four hours—he would set fire to the village—kill the men—carry off the women—hang the children on cactus thorns!"

A moment's silence followed her last halting whisper.

"By his saints an' his virgin!" echoed Ladd. He laughed—a cold, cutting, deadly laugh—significant and terrible.

Then the Yaqui uttered a singular cry. Gale had heard this once before, and now he remembered it was at the Papago Well.

"Look at the Indian," whispered Belding, hoarsely. "Damn if I don't believe he understood every word Mercedes said. And, gentlemen, don't mistake me, if he ever gets near Señor Rojas there'll be some gory Aztec knife work."

Yaqui had moved close to Mercedes, and stood beside her as she leaned against her husband. She seemed impelled to meet the Indian's gaze, and evidently it was so powerful or hypnotic that it wrought irresistibly upon her. But she must have seen or divined what was beyond the others, for she offered him her trembling hand. Yaqui took it and laid it against his body in a strange motion, and bowed his head. Then he stepped back into the shadow of the room.

Belding went outdoors while the rangers took up their former position at the west window. Each had his own somber thoughts, Gale imagined, and knew his own were dark enough. A slow fire crept along his veins. He saw Belding halt at the corrals and wave his hand. Then the rebels mounted and came briskly up the road, this time to rein in abreast.

Wherever Rojas had kept himself upon the former advance was not clear; but he certainly was prominently in sight now. He made a gaudy, almost a dashing figure. Gale did not recognize the white sombrero, the crimson scarf, the velvet jacket, nor any feature of the dandy's costume; but their general effect, the whole ensemble, recalled vividly to mind his first sight of the bandit. Rojas dismounted and seemed to be listening. He betrayed none of the excitement Gale had seen in him that night at the Del Sol. Evidently this composure struck Ladd and Lash as unusual in a Mexican supposed to be laboring under stress of feeling. Belding made gestures, vehemently bobbed his big head, appeared to talk with his body as much as with his tongue. Then Rojas was seen to reply, and after that it was clear that the talk became painful and difficult. It ended finally in what appeared to be mutual understanding. Rojas mounted and rode away with his men, while Belding came tramping back to the house.

As he entered the door his eyes were shining, his big hands were clenched, and he was breathing audibly.

"You can rope me if I'm not locoed!" he burst out. "I went out to conciliate a red-handed little murderer, and damn me if I didn't meet a—a—well, I've no suitable name handy. I started my bluff and got along pretty well, but I forgot to mention that Mercedes was Thorne's wife. And what do you think? Rojas swore he loved Mercedes—swore he'd marry her right here in Forlorn River—swore he would give up robbing and killing people, and take her away from Mexico. He has gold—jewels. He swore if he didn't get her nothing mattered. He'd die anyway without her. . . . And here's the strange thing. I believe him! He was cold as ice, and all hell inside. Never saw a Greaser like him. Well, I pretended to be greatly impressed. We got to talking friendly, I suppose, though I didn't understand half he said, and I imagine he gathered less what I said. Anyway, without my asking he said for me to think it over for a day and then we'd talk again."

"Shore we're born lucky!" ejaculated Ladd.

"I reckon Rojas'll be smart enough to string his outfit across the few trails leadin' out of Forlorn River," remarked Jim.

"That needn't worry us. All we want is dark to come," replied Belding. "Yaqui will slip through. If we thank any lucky stars let it be for the Indian. . . . Now, boys, put on your thinking caps. You'll take eight horses, the pick of my bunch. You must pack all that's needed for a possible long trip. Mind, Yaqui may lead you down into some wild Sonora valley and give Rojas the slip. You may get to Yuma in six days, and maybe in six weeks. Yet you've got to pack light—a small pack in saddles—larger ones on the two free horses. You may have a big fight. Laddy, take the .405. Dick will pack his Remington. All of you go gunned heavy. But the main thing is a pack that'll be light enough for swift travel, yet one that'll keep you from starving on the desert."

The rest of that day passed swiftly. Dick had scarcely a word with Nell, and all the time, as he chose and deliberated and worked over his little pack, there was a dull pain in his heart.

The sun set, twilight fell, then night closed down, fortunately a night slightly overcast. Gale saw the white horses pass his door like silent ghosts. Even Blanco Diablo made no sound, and that fact was indeed a tribute to the Yaqui. Gale went out to put his saddle on Blanco Sol. The horse rubbed a soft nose against his shoulder. Then Gale returned to the sitting-room. There was nothing more to do but wait and say good-by. Mercedes came clad in leather chaps and coat, a slim stripling of a cowboy, her dark eyes flashing. Her beauty could not be hidden, and now hope and courage had fired her blood.

Gale drew Nell off into the shadow of the room. She was trembling, and as she leaned toward him she was very different from the coy girl who had so long held him aloof. He took her into his arms.

"Dearest, I'm going—soon. . . . And maybe I'll never——"

"Dick, do—don't say it," sobbed Nell, with her head on his breast.

"I might never come back," he went on, steadily. "I love you—I've loved you ever since the first moment I saw you. Do you care for me—a little?"

"Dear Dick—de-dear Dick, my heart is breaking," faltered Nell, as she clung to him.

"It might be breaking for Mercedes—for Laddy and Jim. I want to hear something for myself. Something to have on long marches—round lonely campfires. Something to keep my spirit alive. Oh, Nell, you can't imagine that silence out there—that terrible world of sand and stone! . . . Do you love me?"

"Yes, yes. Oh, I love you so! I never knew it till now. I love you so. Dick. I'll be safe and I'll wait—and hope and pray for your return."

"If I come back—no—*when* I come back, will you marry me?"

"I—I—oh, yes!" she whispered, and returned his kiss.

Belding was in the room speaking softly.

"Nell, darling, I must go," said Dick.

"I'm a selfish little coward," cried Nell. "It's so splendid of you all. I ought to glory in it, but I can't. . . . Fight if you must, Dick. Fight for that lovely persecuted girl. I'll love you—the more. . . . Oh! Good-by! Good-by!"

With a wrench that shook him Gale let her go.

(To be continued)

SPORTING AND VACATION PLACES

As the big game season will soon be at hand, in accordance with our fixed policy we are giving in our September number a summary of all the best localities in the United States and Canada where big game may be found. All this information is first hand and is taken from the reports from our readers and subscribers who have been in the localities given and have had successful trips. These reports are filed in our Sporting and Vacation Places files and are at the disposal of our readers. We will be glad to send you information on any section in which you may be interested. Either write us or call at the office. We will do our best to help you plan a successful big game trip, and with the great number of reports we have on file are able to cover many fine localities of which you have never heard.

NEW ENGLAND STATES

Springfield, Penobscot County, Maine, reached by Maine Central Ry. Accommodations at Bay View Camps, Joseph M. Patten, proprietor, for $10.50 a week. Deer, partridge and ducks. Guides, $3 a day.

Rangeley, Franklin County, Maine, reached by Maine Central Ry. Accommodations at York Camps, J. Lewis York, proprietor, for $2.50 a day. Deer, partridge, small game. Also trout and salmon. Guides, $2 a day.

Masardis, Aroostook County, Maine, reached by Bangor & Maine Ry. Accommodations at Billy Soule's for $2 a day. Deer, fox, bear and partridge. Guides, $2.50 a day.

Round Mountain, Franklin County, Maine, reached by Boston & Maine Ry. Accommodations at Round Mountain Lake Camps, Dion O. Blackwell, proprietor, for $10 to $16 a week. Deer, bear, fox, partridge.

Sourdnahunk Lake, Aroostook County, Maine, reached by Bangor & Aroostook Ry. to Norcross, boat to Sourdnahunk Stream, then by wagon accommodations at The Antlers, Charles Daisey, proprietor, for $2 a day. Guides, $3 a day. Deer and small game.

Kidney Pond, Piscataquis County, Maine, reached by Bangor & Aroostook Ry. to Norcross, then by launch or canoe. Accommodations at Hunt's Camps, I. O. Hunt, proprietor, for $2 a day. Guides charge $3 a day. Deer, bear and small game.

Lake Parlin, Somerset County, Maine, reached by Maine Central Ry. Accommodations at Lake Parlin Camps, H. P. McKenney, proprietor, for $2.50 a day, $17.50 a week. Guides, $2.50 a day. Deer, ducks, partridge.

Jackman, Somerset County, Maine, reached by Bangor & Aroostook Ry. Accommodations at Arbo's Hay Lake Camp, E. O. Arbo, proprietor, for $10 a week. Guides, $3 a day. Deer and partridge.

Norcross, Penobscot County, Maine, reached by Bangor & Aroostook Ry. Accommodations at Buckhorn Camps, Bert Haynes and Sons, proprietors, for $1.50 a day. Guides, $3 a day. Deer, bear, foxes, duck and partridge.

Patten, Aroostook County, Maine, reached by Bangor & Aroostook Ry. Accommodations at McDonald's Camps, Chas. E. McDonald, proprietor, for $1.50 a day. Guides, $3 a day. Deer, bear and small game.

Green Lake, Hancock County, Maine, reached by Maine Central Ry. Accommodations at Green Lake Hotel, Andre Leyneek, proprietor, for $15 a week. Guides, $3 a day. Deer, partridge and small game.

Mackamp, Somerset County, Maine, reached by Bangor & Maine, Maine Central, and Bangor and Aroostook Rys. Accommodations at Trout Brook Camps, Robert Walker, proprietor, for $10 a week. Guides $2.50 a day. Deer and partridge.

Errol, Coos County, New Hampshire, reached by Boston & Maine Ry. Party camped out. Had as guide, F. Perley Flint. Deer, partridge, also good fishing.

Warner, Merrimack County, New Hampshire, reached by Boston & Maine Ry. Accommodations at farmhouse of Mr. White for $7 a week. Deer and partridge.

Connecticut Lake, Coos County, New Hampshire, reached by Maine Central Ry. For information on camps write to W. M. Buck, Canaan House, Canaan, Vermont. He has guides and camps in the best sections. Deer hunting.

Bridgewater, Windsor County, Vermont, reached by the Central Vermont or Rutland Ry. Accommodations at Tanner's. Deer, bear, rabbits, partridge, ducks.

Beecher Falls, Essex County, Vermont, reached by New York, New Haven & Hartford Ry. to Falyan, New Hampshire, and Maine Central from there to Beecher Falls. Accommodations at Metalak Lodge, W. M. Buck, proprietor, for $40 a week. Deer and partridge.

MIDDLE ATLANTIC STATES

Griffin, Hamilton County, New York, reached by the New York Central Ry. Accommodations at house of Olie De Munn for $15 a week. De Munn is guide, charging $3.50 a day. Deer and bear. Party reports good success.

Minerva, Essex County, New York, reached by Delaware & Hudson Ry. Party camped out. Floyd Hammond, of Igerna, N. Y., guides for $3 a day. Deer, bear, rabbits, partridges and other small game.

Long Lake West, Hamilton County, New York, reached by New York Central Ry. Accommodations at Deerland Lodge, A. D. Brown, proprietor, for $2 a day. Deer hunting.

Raquette Lake, Hamilton County, New York, reached by New York Central Ry. Accommodations at the Antlers, Chas. Bennett, proprietor, for $4 a day. Deer and small game.

Wanakena, St. Lawrence County, New York, reached by New York Central Ry. Accommodations at Dobson's, Bert Dobson, proprietor, for $1.50 a day. Deer, small game and ducks.

Rio, Orange County, New York, reached by Erie Ry. to Port Jervis. Accommodations at camp of F. Muller for $7 a week. Deer and grouse.

Onchiota, Franklin County, New York, reached by New York Cen-

IMPORTANT NOTICE

The Immigration Department of the Dominion of Canada has authorized the announcement that its Officers are in no way interfering with bona fide Tourists; so that all Tourists desirous of visiting Canada, or passing through en route to other places, will be accorded the same courteous treatment as heretofore, and Passports are not required.

tral Ry. Accommodations at house of William Skiff for $7 a week. Deer, also partridge and some bear.

Chilson, Essex County, New York, reached by New York Central Ry. Accommodations at farmhouse of Alanson Moore for $10 a week. Moore is a guide and charges $3 a day. Deer and grouse.

Keene, Essex County, New York, reached by New York Central Ry. to Lake Placid. Accommodations at Owl's Head Hotel, W. B. Washburn, proprietor, for $12 a week. Deer, bear, partridge.

Benson Mines, St. Lawrence County, New York, reached by New York Central Ry. Accommodations at New Inlet House, Fred and Emma Phelps, proprietors, for $2 a day. Deer hunting.

Newcomb, Warren County, New York, reached by Delaware & Hudson Ry. to North Creek, thence by stage. Accommodations at Lake Harris House, William Anderson, proprietor, for $2 a day. Deer and small game.

Big Otter Lake, Glenfield, Lewis County, New York, reached by New York Central Ry. Accommodations at Big Otter Lake House, W. D. Crandall, proprietor, for $2 a day. Guides, $4 a day. Deer and partridge.

Canton, Bradford County, Pennsylvania, reached by Northern Central Ry. Deer, bear, coons, foxes, wild cats and small game along the line of the railroad through Bradford, Sullivan and Tioga Counties. Franklin Baxter, of Canton, recommended as good guide, charges $3 a day.

Elkgrove, Columbia County, Pennsylvania, reached by Delaware, Lackawanna & Western Ry. Accommodations at Elkgrove Hotel, J. W. Perry, proprietor, for $1.50 a day. Perry is good guide, charging $2 a day. Black bear, coon, rabbits and pheasants.

MIDDLE WESTERN STATES

Lincoln, Alcona County, Michigan, reached by the Detroit & Mackinac Ry. Accommodations at Uncle Tom's Cabin, A. Backus, proprietor, for $14 a week. Deer, partridges and ducks.

Luther, Lake County, Michigan, reached by Pere Marquette Ry. Party camped out. Deer, rabbits and small game.

Baldwin, Lake County, Michigan, reached by Pere Marquette Ry. Accommodations at Rainbow Camp, J. G. Kennedy, proprietor, for $2 a day. Deer, grouse and small game.

Lovells, Crawford County, Michigan, reached by Michigan Central Ry. Accommodations at Douglas Hotel. T. E. Douglas, proprietor, for $2 a day. Deer, partridges and rabbits.

Floodwood, Dickinson County, Michigan, reached by Chicago, Milwaukee & St. Paul Ry. Accommodations at Porter House, Charles Doan, proprietor, for $1 a day. Teams and guides for hire. Deer, bear, partridge and small game.

Grand View, Bayfield County, Wisconsin, reached by North-Western Ry. Accommodations at Camp Fire Island Camp, H. A. Scotford, proprietor, for $2 a day. Deer and partridge. Fishing in season.

Hayward, Sawyer County, Wisconsin, reached by the Chicago & North-Western Ry. Accommodations at Idlehurst Lodge, C. D. Benack, proprietor, for $12 a week. Guides, $2.50 a day. Deer and small game.

Cable, Bayfield County, Wisconsin, reached by the Canadian North-Western Ry. Accommodations at Cavalier, L. E. Cavalier, proprietor, for $9 a week. Deer hunting in season.

Tomahawk, Lincoln County, Wisconsin, reached by the Chicago, Milwaukee & St. Paul Ry. Accommodations at house of Chas. Sanders for $12 a week. Guides, $2.50 to $3 a day. Deer and bear, also ducks.

Minocqua, Oneida County, Wisconsin, reached by the Chicago, Milwaukee & St. Paul Ry. Accommodations at Mercer Lake Resort, Mrs. Bishton, for $8 a week. Deer and grouse.

Woodruff, Oneida County, Wisconsin, reached by the Chicago & North-Western Ry. Accommodations at Camp Franklin, C. J. Coons, proprietor. Guides, $2 to $2.50 a day. Deer and ruffed grouse.

Stone Lake, Sawyer County, Wisconsin, reached by the Minneapolis, St. Paul & Sault Ste. Marie Ry. Accommodations at house of Mr. Greenhagen for $10 a week. Guides, $2.50 a day. Deer, bear and fox.

Eagle River, Vilas County, Wisconsin, reached by Chicago & North-Western Ry. Accommodations at Red Oak Resort, George Jackson, proprietor, for $10 to $12 a week. Deer and partridge.

Hackensack, Cass County, Minnesota, reached by the Northern Pacific Ry. Accommodations at Spain House, W. J. Spain, proprietor, for $1 a day. Deer, bear, grouse and small game. Guides can be hired.

Williams, Beltrami County, Minnesota, reached by the Canadian Northern Ry. Accommodations at the hotel for $2 a day. T. Summers, of Pitt, Minnesota, is good cook and guide. Moose, deer and bear.

Deer River, Itasca County, Minnesota, reached by the Chicago & North-Western Ry. to Duluth, Great Northern to Deer River. Camped out. William Donnelly and Rollo Christey are recommended as good guides, charging $2 a day. Moose, deer, bear, ducks and partridge.

Tower, St. Louis County, Minnesota, reached by the Duluth Iron Range Ry. Accommodations at Shively's, Mr. Shively, proprietor. Deer, moose, grouse.

Boy River, Cass County, Minnesota, reached by the Minneapolis, St. Paul & Sault Ste. Marie Ry. Accommodations at Hotel Boy River, George H. Glandon, proprietor. Deer, moose, bear, wolves, ducks and partridge.

ROCKY MOUNTAIN STATES

Dixie, Idaho County, Idaho, reached by the Northern Pacific Ry. Accommodations at Five Mile Ranch, J. R. Painter, proprietor. 100 miles from railroad in good country. Bear, deer, mountain sheep, also trout fishing.

Bay View, Kootenai County, Idaho, reached by the Southern Pacific Ry., Bayview Branch. Party camped out. Ralph Rowley, Lakeview, Idaho, is good guide, charging $1.50 a day for each horse. Bear, deer, cougar and grouse. Also fishing.

Prichard, Shoshone County, Idaho, reached by the Oregon, Washington Ry. and Navigation Co. Party camped out. Jack Backman, of Prichard, is good guide, charging $5 a day. Deer, bear, cougar.

St. Anthony, Fremont County, Idaho, reached by the Union Pacific Ry. to Pocatello, and from there to St. Anthony. Camped out. C. M. Spaulding, Wilson, Wyoming, is good guide, charging $5 a day, extra charge for horses and pack of hounds. Elk, bear, deer and sheep.

Ashton, Fremont County, Idaho, reached by the Union Pacific Ry. and Oregon Short Line Ry. Accommodations at ranch of Clark W. Orton for $12 a week. Guides and outfit $10 a day. Elk, deer, sheep, goat and bear.

Cody, Big Horn County, Wyoming, reached by the Northern Pacific Ry. Accommodations at Frost and Richard Ranch—Resory, Ned Frost and Fred Richard, proprietors. Elk, mountain sheep, deer and bear. Camping trips by saddle horses.

Cody, Big Horn County, Wyoming, reached by the Northern Pacific Ry. Accommodations at Aldrich Lodge, S. W. Aldrich, proprietor. Good guides. Bear, elk, deer, sheep and grouse.

Jackson, Uinta County, Wyoming, reached by the Oregon Short Line. Fred Lovejoy, of Jackson, is good guide and cook. Elk, deer, bear, sheep and sage hens.

Valley, Park County, Wyoming, reached by the Burlington & Quincy Ry., or the Northern Pacific. Accommodations at McLaughlin's Ranch, Jas. L. McLaughlin, proprietor, for $2 a day. Guides, $5 a day. Elk, black-tailed deer and bear.

Salesville, Gallatin County, Montana, reached by the Gallatin Valley Ry. Accommodations at Karst's Cold Spring Resort, P. F. Karst, proprietor, for $12 a week. Deer, elk, sheep, bear and mountain lions.

Ovando, Powell County, Montana, reached by the Northern Pacific Ry. Stadler and Niemeyer, good guides. Charges are $14 for one man, $18 for two, $24 for three, and furnish cook, horses, tents and complete outfit. Elk, deer, goat and sheep. Small feathered game.

Missoula, Missoula County, Montana, reached by the Northern Pacific Ry. Accommodations at Lo Lo Hot Springs, G. F. Garber, proprietor, for $2 a day. Bear, deer, elk, moose, sheep, goats, wolves and cougar.

Stillwater Valley, Yellowstone County, Montana, reached by the Northern Pacific Ry. Accommodations at Woodbine Ranch, at Nye, Montana, of which B. Wood is proprietor. Black-tailed deer, bear, elk, sheep and goats.

Basalt, Eagle County, Colorado, reached by the Colorado Midland Ry. Accommodations at Basalt Hotel, E. P. Mattingly, proprietor, for $2.50 a day. Mountain sheep, bear, deer, elk, mountain lion, grouse and sage hens.

Las Vegas, San Miguel County, New Mexico, reached by the Main Line of Santa Fe Ry. Accommodations at Camp Montezuma, of which the Y. M. C. A. is the proprietor. Guides, $2 to $5 a day. Deer and wild turkey.

PACIFIC COAST STATES

Hartford, Snohomish County, Washington, reached by the Northern Pacific Ry. Accommodations at Granite Falls, which is reached by auto from Everett, Washington.

Little Pend O'Reille Lakes, Stevens County, Washington, reached by the Great Northern Ry. Accommodations at house of H. W. Hentage, for $1 a day. Bear, deer and small game.

Kalama, Cowlitz County, Washington, reached by the Northern Pacific Ry. Accommodations at Pigeon Springs, Mr. Wynkoop, proprietor, for $2 a day. Deer and bear, also fishing.

Keller, Ferry County, Washington, reached by the Northern Pacific Ry. to Wilbur, then 25-mile drive. Thomas Hopper is good guide. Deer, bear and small game.

Klamath Falls, Klamath County, Oregon, reached by the Southern Pacific Ry. Accommodations at Rock Point House, C. D. Wilson, proprietor, for $2 a day. J. V. McTimmons is a good hunting guide. Bear, mountain lion, bob cat and deer.

West Fork, Douglas County, Oregon, reached by the Southern Pacific Ry. Charles Tabor, of West Fork, is guide and can furnish pack animals and guide hunting parties. Bear, mountain lion and deer.

Kings River, Inyo County, California, reached by the Southern Pacific or Santa Fe Rys. Party camped out. Guides charge $1 a day. Deer hunting fair.

Azusa, Los Angeles County, California, reached by the Southern Pacific Ry. Accommodations at Cold Brook Camp for $12 a week. Deer, quail, rabbits.

Indian Falls, Plumes County, California, reached by the Western Pacific Ry. to Keddie, and stage from there. Accommodations at Farrar's, E. S. Farrar, proprietor, for $2 a day, $12.50 a week. Deer, bear, grouse, quail and doves.

San Fernando, Los Angeles County, California, reached by the Southern Pacific Ry. Camped out. Cost about $3 a day. Expressman charged $2.75 a day to take 500 pounds of duffle up the canyon for 70 miles. Deer, mountain lion, wildcats, foxes, quail and doves.

Sanger, Fresno County, California, reached by the Southern Pacific Ry. Accommodations at Kanawyer's Camp at Kings River Canyon. Deer, also groundhogs. Small game. Order horses in advance from Kanawyer's station.

CANADA

Riley Brook, New Brunswick, reached by the Canadian Pacific Ry. Accommodations at Marston and Vanderbeck Sporting Camps, Asa Marston and R. L. Vanderbeck, proprietors. Moose, caribou and deer. Also good fishing.

Sparkle, New Brunswick, reached by the Canadian Pacific Ry. Accommodations at Murdock Mackenzie's Camps on the Southwest Miramichi River. Rates, $8 a day, which includes guide and complete outfit. Moose, bear, deer, caribou and small game.

Bathhurst, New Brunswick, reached by the New York Central Ry. to Montreal, then by the Intercolonial to Bathurst. Accommodations at Imhoff Camps, Imhoff Bros., proprietors, for $8.40 a day. This covers all expenses. Moose, caribou and bear. Small game.

Plaster Rock, New Brunswick, reached by the Boston & Maine Ry. Accommodations at Central New Brunswick Hunting Camps, George E. Gouth, proprietor, for $21 a week. Good guides obtainable. Moose, deer, caribou and bear.

Taymouth, York County, New Brunswick, reached by the Bangor & Maine or Maine Central to Fredericton, then by the Intercolonial to Taymouth. Accommodations at Robert Craig's camps on Cams River for $6 a day. Moose, deer, caribou and small game. Guides, $3 a day.

Chatham, Northumberland County, New Brunswick, reached by the New York Central, Grand Trunk, and Intercolonial. Accommodations at Hotel Albert, Allen Marin, proprietor, for $5 a day. Bear, moose, caribou, deer and small game.

Newcastle, New Brunswick, reached by the Bangor & Maine, Canadian Pacific, and Intercolonial Rys. Accommodations at Bald Mountain Camps, Ed. Menzies, of Strathedam, New Brunswick, proprietor, for $9 a day. This includes guide. Moose, caribou, deer, bear and small game.

Bonny River, New Brunswick, reached by the Canadian Pacific Ry. Accommodations at camps of T. A. Sullivan for $2 a day. Guides, $3 a day. Deer, bear, moose and bird shooting.

Atikokan, Ontario, reached by the Canadian Northern Ry. Party camped out. Albert Jones, of Atikokan, is good guide, charging $6 a day. This includes complete outfit.

Latuque, Quebec, reached by the Quebec & Lake St. John Ry. Accommodations at Chateau St. Maurice for $2 a day. A. Tremblay is proprietor. Guides, $5 a day. Moose, deer, caribou and small game.

Lake Edward, Quebec, reached by the Quebec & Lake St. John Ry. Accommodations at Laurentide House, Robert Rowley, proprietor. Guides, with canoe, tent, etc., $5 a day. Moose, bear and birds.

Matabechouan, Quebec, reached by the Quebec & Lake St. John Ry. Accommodations at hotel of J. Gonther. Moose and bear. Good fishing.

Jasper, Alberta, reached by the Grand Trunk Ry. Otto brothers are good guides, charging $7.50 a day, including equipment. Bear, mountain goat, sheep, dear, caribou.

Banff, Alberta, reached by the Canadian Pacific Ry. Guides may be had from the Brewster Transfer Co. Sheep, goat, bear, moose and elk in Canadian Rockies.

Cardston, Alberta, reached by the Canadian Pacific Ry. and by the Great Northern Ry. Accommodations at Lakes, John Hazzard, proprietor, for $2 a day. Bear, sheep, deer and goats. Guides, $2 to $5 a day.

Robson, British Columbia, reached by Grand Trunk Pacific Ry. Donald Phillips, of Jasper, Alberta, is good guide. Bear, goats and birds.

For hunting in British Columbia and Yukon Territory, or Alaska, C. T. Summerson, 311 Broadway, New York City, can furnish guides and complete equipment.

LONG ISLAND

Good Ground, Long Island. Accommodations at Harry Wells' house. Duck and goose shooting. Battery and point shooting. Complete outfit.

East Quogue, Long Island. Accommodations at house of Harry G. Carter. Quail, ducks and geese. Battery or point shooting. Full equipment.

Eastport, Long Island. Accommodations at Bayside Hotel, Al. Schwebke, proprietor. Goose and duck shooting. Guides and full outfits.

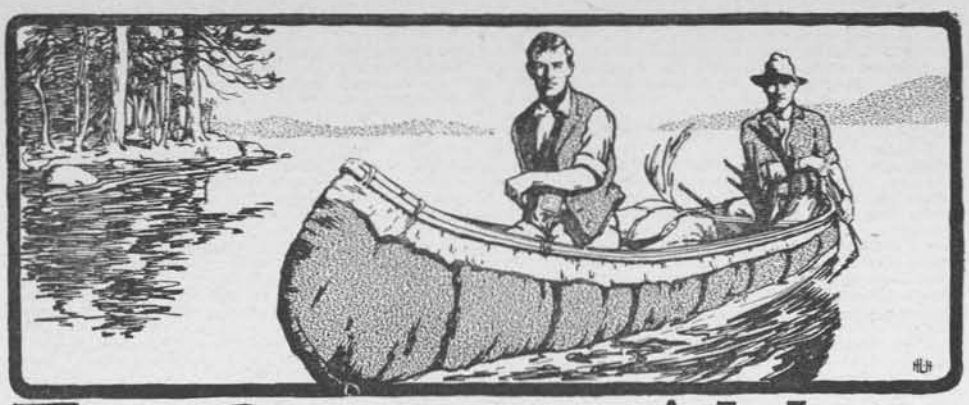
East Moriches, Long Island. Accommodations at hotel of Ernest P. Hulse, or on board boat. Black ducks and geese, also all other kinds of ducks.

Patchogue, Long Island. Accommodations on boat of Nelson D. Warner. Ducks and geese. Complete outfit.

Good Ground, Long Island. Accommodations at house of Charles Bussinah. Duck and goose shooting. Double and single batteries, live stools.

Manorville, Long Island. Accommodations at Nestledown Inn, L. Thompson, proprietor. Ducks, geese, quail, pheasants, partridge, rabbits and foxes.

If you are in doubt as to where to go for your vacation, write to this department.



The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, dogs, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

TEACH THE BOY TO SHOOT

By Hal Ross

Every boy ought to know how to shoot and handle a gun properly, as he should know how to swim, skate, ride, to sail a boat, and to do many other things in the way of manly accomplishments. Of course, the best thing for him to do would be to take regular instruction on the gun as he would on any other instrument, but few American parents take the trouble to ground their sons very carefully in the use of weapons. In England the youth quite often is sent to a professionl gun tutor; but in this country that functionary is not yet generally known—though in time he will become more common. The average American boy to-day picks up his own education with the shotgun—hit or miss.

Relatively few boys in this country have any training whatever in the art of field shooting. They pick it up themselves, after a time learning enough so that they may begin to shoot at the traps, where their education with the shotgun is finished, without much reference to their actual education in field shooting, in which courtesy, etiquette, good style and form, and carefulness are as important as actual skill in killing things. In fact, the boy's education along this line ought not to be so much education as discipline in the severest sense of the word.

Carelessness is part of the average boy, and careless habits formed early in life are apt to persist. The carelessness with which guns are handled at our trap shoots is appalling, and the same indifference is noticeable in many men when shooting in the field. We are all well aware of the fact that one cannot be too careful in choosing his hunting companions. Certainly we must educate our young shooters before they are allowed to use a weapon so dangerous as the shotgun, and the time to start is right at the beginning.

Of course, the first lesson should be as to the extreme danger of the gun, and to drive home this fact into the careless boy's mind is something that cannot be done by a few gentle words. The teacher should tell him all the horrible stories of accidents he can think of, and if his experience is at all broad he will not be at a loss. Take the boy out-of-doors and blow a hole through a board with a shotgun; then ask him how he would like to have that kind of a hole blown through himself or through his friend. Keep this up until he is entirely serious and respectful in his attitude toward the weapon he is to use, not letting him touch the gun by himself for some time.

Explain broadly the mechanism of the gun, and show him the safety device on the hammerless gun; but teach him that no device can make the gun perfectly safe. Explain to him that it is to be used only to kill something; and that at all other times it must be empty; that it is not even safe when it is empty; and that it is never safe when it points toward someone. After this is thoroughly instilled into his mind, a habit of unconscious carefulness in handling the shotgun will be established.

Get the boy a double-barrel gun, bored rather open and near the standard gauge. You can get a 12-gauge American-made gun to-day under seven pounds in weight, and if the boy is not big enough to handle that he is hardly old enough to shoot,. Moreover, as great care should be taken in fitting the boy's gunstock as the father takes with his own. Some men experiment with gunstocks all their lives but think anything is good enough for the beginner; while just the opposite is true. The boy should first begin to handle the gun in the house, of course entirely empty, until he becomes familiar with the handling and feel of it. He should not be allowed alone with the gun and should be taught to regard it as a weapon and not as a toy.

For some time the boy should carry the gun empty. If he is found pointing it at himself or someone else, leaning on the muzzle, or crawling under a fence and pulling the gun toward him muzzle first, take it away from him for a week or more. Teach him to break the gun, loaded or empty, when standing near others or when crossing a fence or stream. If he forgets, take it away from him, until he forms the right habits. Let him learn that it is discipline and not persuasion with which he has to do, and that you intend to be stern about it and not to mince matters.

After the boy has been thor-

oughly drilled in carefulness, he should be taught how to handle the gun in shooting, though the weapon should still be kept unloaded, empty shells being used if desired. Have him bring the gun up promptly to cover a bull's-eye with one motion, so that the muzzle will point at the bull's-eye just as the stock strikes the shoulder, snapping the hammers immediately. Keep this up for some time and keep the pupil snappy, teaching him the value of prompt action with a gun. See that he maintains the proper position, leaning slightly and easily forward—not hunched over—with the supporting hand well out; and that he brings the gun up with the barrels level—not tilted to one side.

After considerable practise at this, mix a few light loads of powder with some empty shells, so that the pupil will not know when to expect an explosion; gradually increase the size of the loads that he may learn not to flinch. If at any time he becomes excited or careless, take the gun away from him for a time; constantly instil into his mind that discipline is necessary. Do not be in a hurry, and do not let him pass from one stage of practise to another until he has mastered everything up to that point.

Then he may begin shooting at a target with loaded shells, but should be watched carefully that he does not flinch or become careless, and that he maintains the proper free and easy position. Teach him that speed and promptness of aim and fire are at this time more important for him than hitting the bull's-eye; that he is now learning good form and habits in the use of the gun, and that accuracy will come from greater practise. The thing that should be taught him at this point is mental focus, the concentration of purpose, under which he throws up the gun promptly, shooting it off quickly the instant he knows it is in the right place—almost unconscious that there is any trigger on the gun at all.

After the pupil has mastered these elementary things, is well grounded in the simple fundamentals, and has reached considerable accuracy on a fixed target, work may be taken up with moving objects. A tin can sent bounding over the ground at a distance of twenty-five or thirty yards, a cottontail rabbit, and certain slow-flying birds will do well for practise. Show him that it is necessary to hold well ahead and swing with the moving object, and that he cannot stop his gun when he pulls the trigger and expect to hit anything. Teach him that speed of aim and accuracy go together, and that he must not poke and aim or allow his desire to kill something run away with his discretion.

Then he must be taught the etiquette of the gun, letting him understand that he is not out merely for a lark, but for part of his education. Teach him that the mere wish to kill something is by no means the only motive or purpose of the gentleman or sportsman. Be a good example to the boy! And teach him how to handle the gun to the greatest safety of himself and every other member of the shooting party. And, most important of all, teach him never to break the game laws!

The boy will see many men standing about with their hands over the muzzle of the gun, leaning on it, or allowing it to point at their person or the person of someone else; or otherwise handling a gun in such manner that it is apparent that they were never trained as carefully as himself. In that case he should not be allowed to cease his own proper habits, but should be taught that it is not a discourtesy, but a criminal act, to be careless in the handling of a gun.

SHOOTING FLAGS

F. W. Wilson

Sounds treasonable in these stirring war times, doesn't it? But be not alarmed. It is not the American emblem of Freedom, nor yet the flag of Germany, Great Britain, or France that is being shot, but merely that species of plant life known as flags and which have proven a bother to gunners because of their tendency to clog their duck-shooting preserves.

The Pellitory Gunning Club of Virginia believes it has solved the flag problem. If so, many another gunning club will be eternally grateful to them for lots of them have similar problems. With them the flag is not something to revere, but a nuisance to blaspheme.

President McCaw, of the Pellitory Club, hit upon the idea of blasting the flags with dynamite. With him, to think is to act. That's why he's president. So he secured the expert services of one Baskervill, a demonstrator, employed by one of the big powder manufacturers, to try out his method.

On his arrival on the job, Baskervill had to do some hard thinking, for flag shooting was a new idea and there was no established modus operandi spread upon the pages of his primer to guide him to a solution of the problem.

However, Baskervill was resourceful. Moreover, he is a powder man of many years' experience. Five in the morning on June 17th found him up to his hips in mud and water figuring out a way to eradicate the flags in Mr. McCaw's duck pond.

In describing his experience, he says: "I first used a strong string for a line between two stakes; then cut short strings of the length I wanted to put the dynamite down; tied a half stick of 50 per cent. N. G. dynamite to each short string and put it down as deep as the string was long. This gave me uniform depth. The short strings were then tied to the guide line, two feet apart. A primed cartridge (that is, one having a cap and fuse attached) was in the center of the row. When this center charge was fired the detonation carried from charge to charge along the line, all discharging at practically the same time.

"In one shot of two lines, I cleared out 112 square yards of flag with 27 pounds of dynamite. The two rows of charges were about 6 feet apart."

The test was so successful that Mr. McCaw ordered fifteen hundred pounds of dynamite to finish the work.

He said he was going to tell his friends in other clubs how to send the flags to Kingdom Come but as FIELD AND STREAM has a wider acquaintance among gunners even than a popular duck hunter like President McCaw, and will see more of them in a week than he will see in a lifetime, this story is being sent to the editor of this widely read sportsman's magazine, so that all shooters having flag troubles will know that old Doc Dynamite is the boy that will perform the operation that will amputate those troublesome weeds. Doc can be found at most any hardware store and he's always willing to go out on a case, day or night. So let flags beware; their race is run.

RAISING QUAIL

FIELD & STREAM PUB. CO.:

Please send me any information you can on raising quail.

E. M. WILKINS.

Ans.—Send for Bulletin No. 2 on Propagation of Upland Game Birds by Herbert K. Job. Published by N. A. Audubon Society, 1974 Broadway, New York City. Price 25 cents.—ED.

DID IT EVER HAPPEN TO YOU?

A Head-on Collision

I have taken great interest in some of the happenings written of in FIELD & STREAM, and feel like telling about one that happened in one of my hunts after ducks. Am in a country that has numerous small lakes and sloughs, and there are many duck passes. On my farm there is a deep drainage ditch with its high dump on each side. One windy day I saw a couple of wary old mallards drop down in the ditch. It contained some water and many rushes, the usual condition for mallards in pairs.

I took my gun and hiked over. A good stiff wind was blowing from the north and ducks were coming down wind once in a while, and I figured on some more after I bagged those mallards. I was on the south side, and headed for a cut in the dump a rod or two west of where the ducks were worked down. I did not use much care, as I could walk right up to them. When I did they flew up with the usual squawking, and I was not ready, as the safe had been left on by neglect, and as I was fumbling at it, imagine my surprise to hear a crash and see two ducks fall, and no shots fired. A spoonbill had come from the north, at express rate, low over the dump at the right instant to collide with the old drake as he rose near the north dump. Both dead. I took them home at once and concluded it would not be just right to work such luck any more that day.

A. B.

CONSERVATION

FORMER PRESIDENT ROOSEVELT VISITS LOUISIANA'S VAST BIRD ISLAND RESERVATIONS

The visit of Col. Theodore Roosevelt to the many bird island reservations, many of which he set aside for this purpose while president, and game preserves of Louisiana during the first part of June has aroused considerable interest in conservation measures practiced there for bird protection.

As the guest of John M. Parker, a noted Louisiana sportsman, and the Conservation Commission of Louisiana, Col. Roosevelt was given the opportunity of setting foot on the sandy shores of the many low-lying islands that guard the delta coast of the Pelican State from the high rolling waves of the, at times, turbulent Gulf of Mexico. The trip, which consumed a solid week, began when the Conservation Commission's yacht, "Daisy," left Pass Christian at daybreak, June 8th, and the course was laid so as to circle the long stretches of Chandeleur, Errol, Free Mason, North Harbor, Battledore, Hog, Grand Cochere and Breton islands.

These islands all lie east of the many-mouthed delta of the Mississippi river and are given over almost wholly to the terns, gulls, skimmers, pelicans, man-o'-warsmen, and shore birds that breed in the south. Vast colonies of these birds flock to these islands to lay their eggs either on the sand or in the rough nests they construct. Various sized colonies, ranging from ten to twenty thousand individuals, were inspected but it was not until he went ashore on Breton Island that Col. Roosevelt realized the extent of the protection and the multitude of birds given sanctuary today in Louisiana.

At Breton Island the Roosevelt party was joined by M. L. Alexander, president of the Conservation Commission of Louisiana, and Stanley Clisby Arthur, the commission's ornithologist. The head of the commission found a ready listener in the former president when he went into the details of conservation work now practiced in Louisiana.

Breton Island proved a revelation to Col. Roosevelt. A two-mile stretch of sandy beach was covered with the eggs of the Royal Caspian and Cabot terns and Black skimmers. Back from the beach the mangroves and salt grass was filled with the nests of about fifteen thousand Laughing gulls. At the approach of the party sections of the vast colony, estimated to be over a hundred thousand, took the air in a beautiful fluttering flight of snowy wings, settling back on their eggs, however, as the party moved forward.

For an hour the former president sat on the beach and with his binoculars studied the nesting habits of the various species, noted the peculiarities of flight, and saw for the first time the reprehensible habit of the Laughing gull in pouncing on the unguarded egg of the terns, breaking it open with its stout bill and feasting on the contents. Many other habits were noted and discussed with Herbert K. Job, head of the Department of Applied Ornithology of the National Association of Audubon Societies, who accompanied the former president to make the pictures for his magazine articles, and Mr. Arthur, who in his work for the Louisiana commission, has made a special study of breeding customs practiced by the southern breeding birds.

COL. ROOSEVELT, PRES. M. L. ALEXANDER AND A GAME WARDEN EXAMINING ROYAL TERN EGG ON BRETON ISLAND

The patroling system of protecting these breeding islands from human molestation during the summer months was explained to the distinguished naturalist by President Alexander and the commission's work in this regard was highly commended by Col. Roosevelt who also showed lively interest in the other natural resources of the state under the jurisdiction of the commission.

It is expected that Col. Roosevelt will make a second visit to Louisiana during the coming winter to investigate the great game and waterfowl refuges, Marsh Island, The State Game Preserve, the Ward-McIlhenny and Rockefeller Foundation, when the ducks and geese are there.

NATIONAL ASSOCIATION GAME AND FISH COMMISSIONERS

The National Association of Game and Fish Commissioners will convene in San Francisco, Cal., September 7, 8 and 9.

Ever since this association was formed at the Yellowstone National Park in 1902, it has had a powerful influence in shaping the policy of fish and game conservation throughout the entire country. Reports will be read by the committee chairmen, relating to all phases of the work of the fish and game departments.

All present and past commission-

ers are eligible to membership, and it is expected that there will be a large attendance at this convention.

Ernest Schaeffle, secretary of the California Fish and Game Commission, is chairman of the Committee of Arrangements, and the members are assured that all arrangements of details for their comfort will be provided for.

GEORGE H. GRAHAM,
President.
ERNEST NAPIER,
Secretary.

COMMITTEES OF THE NATIONAL ASSOCIATION OF GAME AND FISH COMMISSIONERS 1915-1916

Membership and Organization—J. Quincy Ward, Chairman, Kentucky; Frank J. Beal, New Hampshire; E. C. Henshaw, Iowa.

Federal Game Legislation and International Treaties—John H. Wallace, Jr., Chairman, Alabama; Joseph G. Sachs, Kentucky; E. A. Quarles, New York.

Interstate Traffic in Game—John H. Burnham, Chairman, New York; Dr. T. S. Palmer, Washington, D. C.; J. C. Dittmar, Illinois.

State and Federal Game Preserves—Dr. Joseph Kalbfus, Chairman, Pensylvania; Chas. L. Davis, Georgia.

State Game Farms—Wm. L. Finley, Chairman, Oregon; John M. Crompton, Connecticut; George D. Pratt, New York.

Non-Game Birds—T. Gilbert Pearson, Chairman, New York; Dr. George W. Field, Massachusetts; John M. Phillips, Pennsylvania; Trinidad de Baca, New Mexico.

Federal Regulations of Migratory Fish—Edward G. Bradford, Jr., Chairman, Wilmington, Del.; Chas. W. Willard, Rhode Island.

Conservation of Fur-bearing Animals—M. L. Alexander, Chairman, Alabama; Gen. John C. Speaks, Ohio; John B. Doolin, Oklahoma.

State Fish Hatcheries—N. R. Buller, Chairman, Pennsylvania; John W. Titcomb, Vermont; Walter I. Neal, Maine; R. E. Clenton, Oregon.

Sportsmen and Their Organizations—William C. Adams, Chairman, Massachusetts; John P. Woods, Missouri; F. M. Newbert, California.

GEORGE H. GRAHAM,
President.

A NEW FORCE FOR WILD LIFE PROTECTION

The Permanent Wild Life Protection Fund and Its New Campaign

During the past two years W. T. Hornaday has been laboring at a task that appeals to the imagination. It is nothing less than the building of a great perpetual-motion machine for the preservation and increase of wild life throughout the next two hundred years, or more.

The Permanent Wild Life Protection Fund is all that its name implies. Its foundations "have been well and truly laid," and its income will carry on the work of its originator long after he has become dust and ashes. Happy is the protectionist who can leave behind him such a legacy to the harried and persecuted beasts and birds.

Two years ago Mr. Hornaday decided to make an effort to place his campaign work on an absolutely permanent financial basis. This was possible only through an endowment fund, safely invested and yielding an income of between $5,000 and $6,000 a year. The plan provides that the principal sum, which is to be not less than $100,000, shall be managed and invested by two banking trustees, while the annual income is expendable by a campaigning trustee, at his discretion along certain specified lines.

Practically alone and single-handed, the founder of the fund began a quest for large subscriptions, in four figures or more, and the success that has attended his effort thus far is most gratifying. Up to date $80,000 have been subscribed, and of that sum about 80% has already been paid in.

It is a favorite saying among sportsmen that "Nobody but the sportsmen of our country take any interest in the protection of wild life"; but the list of subscribers to this rather amazing Fund tends to disprove that statement. Of the $80,000 already subscribed, not more than ten per cent has come from sportsmen.

This Permanent Fund already is the second largest endowment fund in existence for the benefit of wild life. The lines on which it will work are briefly as follows: To stop the sale of game, and all late winter and spring shooting; to stop the killing of insectivorous birds for food, and of all birds for millinery purposes; to increase the number of game preserves; to make perpetual close seasons for all species threatened with extinction; to stop the use of automatic and "pump guns" in hunting, and to prevent aliens from using rifles and shot-guns in hunting.

The Fund still lacks $19,000 of the $100,000 that has been fixed as the irreducible minimum, and the shortage is now being sought. Several large cities, such as New York, Rochester, Detroit, Canandaigua, Cleveland and Cincinnati are represented by good subscriptions, but others are conspicuously out of the running. Chicago has contributed only $300, Boston $200, and Philadelphia—after a very thorough canvass of its wealthiest people—gave up only $25!

The work of the Permanent Fund will cover not only the United States, but all North America, and upon urgent occasions it will even lend a hand abroad. Its purpose is to aid causes that are judiciously planned and managed, and are likely to secure results of practical benefit to wild life. The first great cause which this Fund has inaugurated is the plan for the enactment of a federal law for the creation of a great number of wild life sanctuaries in national forests, and along with that the development of a great new annual food supply of legitimate game. The plan has received informally the advice and finally the approval of the officers of the U. S. Forest Service and Biological Survey, who will have most to do with carrying it into practical effect. It is now to be submitted by Dr. Hornaday, in person, to the leading business men, sportsmen and friends of wild life throughout the region westward of the great plains, with a call for their support. To this end he will make addresses, during September and a part of October, in Minneapolis, Denver, Cheyenne, Salt Lake City, Pocatello, Helena, Seattle, Portland, San Francisco, Los Angeles, Pasadena, Tucson and Albuquerque.

A bill for an enabling act will be introduced in Congress early in December.

ENEMIES OF YOUNG DUCKS

From Address on Duck Farming by A. M. Frey

The worst enemy we have found to be the cat—the wild cat, the tom cat, the stray cat. We were often obliged to organize cat hunting expeditions in the moonlight, treeing cats with dogs and bringing them down with a shotgun. We had our own cats about in order to keep down rats and mice and often thought at last we had the harmless cat which would not touch birds and young ducks, but always ending with suspecting our feline friend with good reason. Cats, I believe, destroyed more of our young ducks than all other enemies put together. Foxes will not touch iron and therefore poultry wire will keep them away. Minks will go under the wire, but we exterminated them in our vicinity. They will, however, travel a long distance and they come unseen. Probably many a disappearance of an older duck should be ascribed to their surreptitious visits. Other animals destructive to young ducks are snakes, which soon make their presence known. Frogs also will do damage. We have now a duck which when young was rescued by my little son from the throat of a frog not much larger than itself.

THE TURTLE PEST.

A summer ago one morning a duck came off its nest with eight young. They immediately sought the water and by noon there were but two left. An examination revealed the cause. There was a duckling surrounded by a circle of some twenty little turtles, some not much larger than a silver dollar. The turtles had disemboweled the young ducks alive, one after another. We had been feeding beef scrap extensively that summer and had often noticed that it attracted turtles to the shore. There they had probably found some dead duckling and so acquired the taste. We immediately went to work and caught several hundred turtles, after which we had no further trouble. —*Courtesy American Game Protective Bulletin.*

In the October issue we will print 1915 game laws of the United States and Canada.

SHOTGUNS AND RIFLES

RIFLE CURIOSITIES

Edward C. Crossman

Familiarity may breed contempt in the case of some things or some people, but it breeds contempt mighty little in the case of the rifle and shotgun. At the end of some ten years hob-nobbing with modern rifles of high power breed I approach a rifle with my hat in my hand, so far as understanding it is concerned. It is more temperamental, more moody, harder to understand than any woman. Nods of agreement from the married men.

For example take the old case of using a lighter load in the big game rifle. Periodically some excited gent comes galloping into print with the announcement of a wonderful new load, consisting of a small pinch of shotgun powder, and a cast lead bullet, the combination presumably giving about 900 ft. secs., but which he avers, gives more velocity than the 2,000 ft. factory load for that gun.

The proof, too, he points out, cannot be controverted. The light load shoots higher at 50 yards than does the factory load, what more proof could any sensible man desire?

The explanation of the strange happening plunges us into the mysteries of compensating whip of a rifle barrel, and even then the enthusiast fails to understand or to believe, and goes his way still insisting that his peanut load dedevelops more velocity than the factory load.

When pressure is developed in a rifle chamber from the burning of the powder, and the bullet starts along the barrel, vibrations are set up in the tube. The lower the velocity of the bullet, and the longer the barrel, the more violent these vibrations grow before the bullet reaches the muzzle.

As the muzzle is actually snaping slightly back and forth under the impulse of these vibrations as the bullet leaves it, the line of departure of the bullet is rarely that of the axis of the barrel. The muzzle is usually pointing higher than the axis of the barrel, or lower and the bullet is thus given a different angle of departure than that which it would have did the barrel remain rigid.

As the bullet may leave the muzzle when it is either above or below its normal position, it follows that one load may drive its bullet out while the muzzle is slightly higher than normal, and another send its own bullet out while the muzzle is lower than normal.

So, if we fire a bullet at high speed out of a barrel, and this same speed, and the vibrations set up make it leave consistently while the muzzle in its snap is lower than normal, it is possible that some other bullet in front of some other load may put its bullet out while the muzzle is higher than normal, because of the lower speed of the bullet.

This is exactly what happens when a light load shoots higher at short range than does a load of manifestly more velocity. In such cases the light load, driving the bullet at low speed, gets it to the muzzle, after the barrel has recovered from its downward or negative whip and is on the upward bend. The bullet is thus given a far higher angle of departure than the higher velocity load and at short range the strike is correspondingly higher likewise.

At some point in the travel of the two bullets, the difference in velocity makes their paths cross, the lower velocity missile being dragged down by gravity because of the longer time it takes to fly a given distance, and presently crossing the path of the high speed bullet which is holding its own because of its higher speed and shorter time of flight.

This point of meeting is usually the most accurate range of that rifle when we consider our two loads as being much alike, and both presumably of the same loading.

That is, by carefully shaping our barrel to give us negative or downward whip as higher velocity bullets leave the barrel, and higher or positive whip as lower velocities leave the barrel, we can make the whip of the barrel absolutely compensate for variations in the ammunition that occur in regular factory loading. At some one range all these bullets, regardless of ammunition variations are going to hit practically the same spot, the higher velocity bullets, that left at a lower angle, coming up to a higher path, and the lower velocity bullets, that left the barrel when it pointed higher than normal, coming down to the course their lower velocities make them take.

Hence one of the reasons why one rifle is so accurate with factory ammunition and another one is not.

Just supposing through erroneous shape our barrel worked the opposite, that low velocity ammunition left at the lowest point in the barrel whip, and higher velocity stuff left at the highest point. From the very start the inaccuracy of that rifle would be marked. The lower velocity bullets, already started off at considerable of an angle lower than normal, would keep going lower because of being low velocity, while the reverse would be true with the high velocity stuff.

So we can easily conceive of one rifle shooting into a 4-inch circle at 300 yards, and another one, with the same ammunition, shooting into 24 inches. Every little variation in ammunition with the first rifle would be neutralized by the difference of the barrel whip, with the other every variation would be picked on and emphasized by the wrong action of the barrel.

Barrels cut full of slots for sights and forearm fasteners, and front ends of magazines are far more freakish in their whipping, because of the break in the fibre of the steel, than are barrels left untouched. Barrels cut full of slots are also far more sensitive to variations in the points of support. That is, if you take a slotted barrel on a rifle for the 1906 Government cartridge, sight it in for your siting position, and then at some time rest it near the muzzle for a long shot, the difference in the shooting will be far worse than it would be with the Springfield under the same conditions.

This peculiar behavior of the rifle barrel, and the difference in shooting that arises from it, was discovered by the experimenting of German scientists, who made photographs of the muzzle during this period of vibration.

As some concrete examples of this whip effect, the British Text Book of Small Arms states that at 200 yards the Lee Enfield shoots *12 inches lower* with ammunition having 2235 ft. secs. velocity, than it does with ammunition having 2,000 ft. secs. That is, a rise in velocity of 235 ft. secs. makes the rifle shoot a foot lower at 200 yards, due to this peculiar whip, which in this case is a true compensating whip.

At 390 yards, both sorts of cartridge shoot to the same point, the high crossing up, and the low coming down from the higher line given it by the whip of the barrel. In other words then, this rifle is more accurate at 390 yards with a mixed lot of ammunition, than it is at 200 yards. Beyond 390 yards, the higher velocity stuff of course strikes higher, being 7 ft. higher at 1000 yards.

With the old style 1871 German Mauser, a black powder rifle, we have the astonishing feature of the rifle shooting higher than normal with a full charge, the bullet leaving the muzzle on the upward whip, a half charge shooting lower than normal—and a quarter charge shooting higher than the half. All of this is due merely to the place the muzzle happens to be when the bullet leaves it. Yet some "ginks" who own a .30-30 rifle, and a gun catalogue, know all there is to know about a rifle. Truly, fools

rush in where angels fear to tread.

It is manifest that if the pressure of the powder charge sets up vibrations that grow as the bullet passes along the barrel, and as the pressure continues, then the *lower* the velocity of that rifle, and the slower the bullet is in reaching the muzzle, the *more pronounced* will be the vibrations and the greater will be their effect on the shooting. Variations in ammunition will show up more glaringly if the rifle has the meaness to let the low velocity bullet out at the lowest point, and the higher velocity one out at the highest point of the whip. Variations in the support of the barrel will have more effect on the shooting, because of the frenzied way the muzzle is whipping.

Therefore the reason for the superior accuracy of modern rifles, such as the Springfield, is quite plain. With the terrific speed of the bullet, it leaves the barrel before the vibrations become great, and thus it is little affected by the gyrations of the muzzle compared to an arm with longer barrel and lower velocity of bullet. Thus far rifles with 30-inch barrels have failed to beat the Springfield, and it is quite probable that stretching out the Springfield barrel to 30 inches, would not result in the slightest increase of accuracy, but very likely give a falling off.

(To be continued.)

SMALL BORE SHORT RANGE OUTDOOR SHOOTING LEAGUE.

Results of Seventh Match for Week Ending July 17, and Aggregate for Seven Matches.

		Aggregate, 7 Matches.	Seventh Match, Slow.	Rapid.	Ag.
1.	Peters Rifle and Revolver Club...	6687	461	491	952
2.	Bucyrus Rifle Assn.....	6598	468	474	942
3.	Auburn Rifle Club	6596	461	479	940
4.	Milwaukee Rifle and Pistol Club..	6523	435	466	901
5.	Rifle and Revolver Club of N. Y.	6425	464	477	941
6.	Fremont Rifle and Revolver Club	6415	463	471	934
7.	Meeker Rifle Club.....	6289	454	466	920
8.	St. Louis Colonial Revolver Club	6276	445	441	886
9.	Fort Harrison Rifle Club.....	6243	449	459	908
10.	Portsmouth Norfolk Rifle Club...	6229	451	454	905
11.	Hydraulic Pressed Steel R. Club..	6200	464	455	919
12.	Pittsburgh Rifle and Rev. Club...	6194	422	473	895
13.	Canton Rifle Club.....	6140	452	451	903
14.	Cypress Hills Rifle and Rev. Assn.	6122	439	460	899
15.	Ashburnham Rifle Club.....	6053	409	457	866
16.	Dallas Rifle and Revolver Club...	6044	411	459	870
17.	Massachusetts Rifle Assn.....	6035	284	276	560
18.	Kiowa Shooting Club.....	5971	419	417	836
19.	Citizens Rifle and Rev. Club.....	5954	410	439	849
20.	Toledo Yacht Club R. & R. Assn.	5835	419	428	847
21.	Shawnee Rifle and Rev. Club....	5760	383	430	813
22.	Nogales Rifle Club.....	5672	418	437	855
23.	Lewiston-Clarkston Rifle Club....	5380	315	420	735
24.	Niskayuna Rifle Club.....	5360	382	406	788
25.	South Chicago Rifle Club.....	5273	340	371	711
26.	Black Hawk Rifle Club.....	5208	333	396	729
27.	Quincy Rifle Club.....	5072	320	345	665
28.	Ithaca Rifle Club.....	4956	415	427	842
29.	Interwoven Rifle Club.....	4541	288	338	626

F. McClung and A. D. Rothrock, of the Peters Club, and A. P. Lane, of the New York Club, each scored 100 at rapid fire, and J. Patterson, of the Hydraulic Club, 99, slow fire, the highest scores in the seventh match.

THE .22 AS A HUNTING RIFLE

By Edwin O. Perrin

Many people regard the .22 as a sort of plaything, a small boy's rifle, suitable for blazing away at tin cans, or for shooting sparrows at close range. This impression is doubtless due in part to the diminutive proportions of the cartridge, and in part to the many cheap and poorly constructed .22 rifles which have been widely sold in the past.

Those familiar with firearms know the .22 as an accurate and hard-shooting little weapon, but even among riflemen its power is often greatly underestimated. It is my opinion that if the effectiveness of the .22 as a hunting rifle were more generally known, many sportsmen would use it in place of the heavy artillery which is so often carried against small game. Of course, it requires greater skill to hunt with a .22 than with a shotgun, and for the pot-hunter there is no comparison. But most of us hunt for sport, and certainly there is more sport in picking a squirrel from the topmost branches of a chestnut tree with a rifle, than in raking him down with a volley of miniature grapeshot.

The killing power of the .22 may be readily seen from the fact that it has a greater range and penetration than a 12-gauge shotgun loaded with buckshot. It has been used successfully against all kinds of small and medium-sized game, and it has even killed big game. I have personally killed a full-grown deer with .22 shorts. I was hunting squirrels in thick timber with a .22 repeater, and when two deer suddenly jumped up, I was too much surprised to worry about the size of my rifle. I fired several shots into the nearest one, and it went down as neatly as if I had used a .30-30. Two of the bullets penetrated the lungs.

A friend of mine killed a big deer at about 100 yards with a single .22 short. While hunting rabbits he chanced to see the deer on the other side of a wide ravine. Wishing to scare it, he aimed well over its back and fired. To his surprise, the deer took one jump and fell dead. The little bullet had struck it in the ribs and penetrated several inches into the body, striking, of course, a vital spot.

I have also known of three other deer being killed with .22 rimfire ammunition. I am not recommending the .22 for big game, however, and these examples are given merely to show what the smallest of all rifles can do.

Wingshooting with the rifle has been practiced by true lovers of sport for a good many years, and the advent of the automatic has made this kind of hunting more practicable than ever before. To bring down a flying bird with a bullet is, of course, a very difficult performance; but there are cases on record which show that nearly all game birds can be successfully hunted in this manner. Making little noise, and having no recoil, the .22 is a very desirable arm for wingshooting, and when it lands on the game it kills far more cleanly than the scatter-gun.

The remarkable accuracy of the .22 at short ranges is well known. It holds the world's record for off-hand shooting at 25 yards. Few people know, however, that it produces excellent results up to 200 yards, and compares favorably, at that range, with many well-known rifles of larger calibre. And in order to do accurate shooting with the .22 it is not necessary to use an elaborate target rifle. On the ranges of a well-known gun company, ten consecutive shots were placed in a .32-inch circle at 12 yards, using a plain .22 repeater, and without removing the rifle from the shoulder. It will be seen that each shot covered the centre of the target, the maximum variation being only .05 of an inch, or less than one-fourth the diameter of the bullet, from the dead centre. Truly a wonderful performance for an ordinary hunting rifle!

Several different styles of .22 cartridges are manufactured, the most popular being the short, long, and long-rifle. These little rimfires are, for their size, the most vicious cartridges made.

The .22 short, loaded with only 3 grains of black powder, and a 30-grain pure lead bullet, has a penetration at 15 feet of 3½ standard ⅞-inch pine testing boards; whereas the regular .32 revolver cartridge penetrates only 3 of these boards. The short is extremely accurate up to 40 or 50 yards, and under favorable weather conditions will do good work at longer ranges. As a hunting cartridge it will do for most kinds of small game at close range.

The .22 long differs from the short only in its powder charge, which is 2 grains heavier. This gives it a slightly increased velocity, but owing to the relative lightness of the bullet it is not much superior in range, and is less accurate.

The .22 long-rifle, however, loaded with 5 grains of powder and a 40-grain bullet, equals the

short in accuracy and has a greatly increased range and power. It is an excellent hunting cartridge for squirrels, rabbits, hares, grouse, ducks, crows, hawks, and other small game. Although a pretty light cartridge for such tough beasts as woodchucks, raccoons, and foxes, the long-rifle has frequently been used against these animals with deadly effect, and it is capable of killing much larger game. It has a penetration of 5½ standard testing boards, one more than the regular .38 Smith & Wesson revolver cartridge, and only one less than the .38 United States service cartridge. With a muzzle velocity of 1103 feet a second, the bullet travels about as fast as the report of the rifle. Its trajectory is nearly as flat as that of the .32-20 rifle cartridge. Shooting at 100 yards the long-rifle bullet rises but 4.44 inches from the line of sight at the 50-yard mark, as against 3.62 inches for the .32-20.

With an effective range of at least 200 yards, the accuracy of the .22 long-rifle is almost phenomenal. U. M. C. Thomas has placed ten consecutive shots in a 2¾-inch circle at 100 yards, using black powder long-rifle cartridges in a plain .22 hunting rifle. This target is nearly as good as those made by the best modern high-power rifles at the same range. The following ballistics show that in range and penetration this little cartridge is not far behind the famous .44 Winchester, which was for years the standard big-game rifle of America:

	Penetration at 15 ft.	At 100 yds. Height of bullet at 50 yds.	At 200 yds. Height of bullet at 100 yds.
	Boards.	Inches.	Inches.
.22 L. R....	5.5	4.44	20.73
.44 W. C. F.	9	3.26	15.94

Of course, the far greater killing power of the .44 lies in the size of its bullet. The .22 long-rifle, with a 40-grain bullet, develops a muzzle energy of 108 foot-pounds, whereas the .44 throws a 200-grain bullet with a muzzle energy of 751 foot-pounds, striking seven times as hard, and making a much larger hole.

When one does a great deal of shooting the cost of ammunition is worth considering. .22 shorts cost only 20c. a hundred—twelve cartridges for the price of one shotgun shell.

Owing to the small bore it is very important that .22 rifles should be kept well cleaned. In this respect they are commonly neglected, and a large percentage of all the .22's which leave the factories are soon spoiled for accurate shooting. For this there is no excuse whatever. With ordinary use and proper cleaning a good .22 barrel will last a lifetime. If black powder cartridges are used the cleaning process is very simple, it being merely necessary to clean the bore thoroughly with any good oil or powder solvent.

Smokeless powder as now used in the .22 is unsatisfactory. Black powder is almost, if not equally, as powerful, and it gives more uniform results. The popularity of smokeless powder is largely due to a mistaken idea that it is more cleanly. It is true that smokeless cartridges produce less visible fouling, but unless the barrel is put through a rigorous cleaning process, using several chemicals, the lead-alloy bullets and smokeless-powder residue will quickly ruin it for accurate work. Lieut. Whelen, the greatest authority on the subject, says:

".22 calibre rifles using black powder, semi-smokeless or Lesmok and lubricated bullets can be kept in perfect condition by cleaning with Hoppe's Powder Solvent No. 9, and then repeating this cleaning on the following day. I am not sure that any kind of cleaning will keep .22 calibre rifles using smokeless cartridges in perfect condition for any length of time."

The .22 is often used in settled districts, where larger guns would be considered dangerous; and it is owned by small boys the country over. Fatal accidents have resulted from its careless handling, and from ignorance of its range. For this reason alone its power should be more generally recognized.

The .22-calibre rifle was introduced more than half a century ago, and it has increased in popularity ever since. The smallest and least respected of all rifles, it holds an important and unique position among the hunting arms of the world.

LAKE HALLIE GUN CLUB

FIELD & STREAM PUBLISHING CO.:

That your invaluable paper may be fully cognizant of the field doings in this region of your jurisdiction, I'm writing to inform your many readers that during the late spring the Lake Hallie Gun Club was organized here at Eau Claire, Wis., and now enjoys a membership of 63 men and women.

Primarily, the object of this club is to train its membership in the careful manipulation of firearms, and at the same time cultivate a taste for that clean, fascinating field game, trap shooting.

The meets are held semi-weekly, and are rapidly developing some good shots, both sexes.

We have running through the season a DuPont Trophy, and a three-class cup shoot, A., B. and C. The Trophy shoot is held twice a month, and the cup event on the first Thursday of each month.

On August 15th, our first tournament will be held. It will be a 100 bird event, conducted under the Seifken High Gun System.

There will also be special events, such as suitable prizes for the Ladies' Squad, and high and low gun trophies for mixed squads.

A number of professional trap shots have signified their intention to be present, and we expect to make the occasion a notable one.

H. B. CRANE, Secretary.

SOME SHOTGUN NOTES

By Theodore Gordon

We have had many practical, informative articles on shotguns, yet there are a few little things that have not received much attention, if any. These have affected my own pleasure and success in shooting, and I imagine may be important to others. For instance—straight barrels and a perfectly straight rib, without dish or hollow in it. Take a perfect billiard cue and take quick sights at nailheads or anything else, and you will be surprised to find how easily this straight stitch will cover the object. One beautiful September day I went to a big gun tournament in a Southern city. All the celebrated shots, representatives of manufacturers and others, were there. I had never done any clay bird shooting except one summer in a very amateurish way with a 16-gauge 7-pound English gun, and I had no idea of exhibiting my deficiencies in superior company. The shooting began with a series of sweepstakes, free for all, and I was much interested in the fine work done by some of the contestants. In some way I foregathered with a pleasant chap who was trying a brand new gun. He was a good shot but said that he would probably have done better with his old weapon. Then he asked me why I did not shoot and I said that I was only a field shooter and had brought no gun. He insisted that I try my hand in one of the sweepstakes and brought me his old gun. It was heavy, probably 7¾ pounds, but the design and feel of it delighted me. The barrels were a straight edge with a taper and the rib a perfect straight edge. I thought what a duck gun this would be. It was full choke, both barrels. I resolved to blow in $2.00 for the privilege of shooting it, entered my name, and when the time came took my place with a squad before the traps. In the shooting I had done with the 16-gauge a few summers before I had been thinking of getting my hand in for the autumn shooting and had not tried for trap form; consequently, I stood before the trap with my gun below the elbow and very much as I would in field shooting. The stranger's gun was perfect from my point of view, and I broke bird after bird. When the score was shot out I returned to the tent where my friend was and returned the gun; thanking him warmly for the pleasure I had enjoyed. He said that I had shot very well and he thought must have something coming to me. He went away for a few minutes and returned with some bills. He handed part of these to me and told me that we divided second money. The amount was between $11 and $12. I was astonished, and could scarcely realize that I had done well enough to win in such a field of experts; but it was the gun that did it. I had tried a 12-gauge full choke at the traps near New York one afternoon the summer before, but the rib was hollow and the barrels seemed to taper down and then rise a trifle to the muzzle, and I could hit nothing with it. I had a very expensive imported hammerless, bought second-hand, and sold it for half what I paid. I was no good with either of the weapons

last mentioned; they would have been a misery to me in field shooting. I would much prefer shooting a gun that made a poor pattern but felt right when thrown to the shoulder than the finest shooting gun in the world that did not. It seems as if some weapons are a part of you from the first day one uses them. A fine provincially built hammer gun was bought by a friend of mine at the sale of an English sportsman's effects in Cheshire, years ago, and presented to me. It was just under 7 lbs. weight, 12-gauge, and a most peculiar, old-fashioned bore. I found it just right for field shooting, but got a surprise when I tried it on ducks with No. 6 shot, it did so well, far better than expected. There were only the two underbolts to secure the barrels to the stock and these were loose. We had one of the finest mechanics in our town that ever lived, and he took the gun in hand. When he returned the gun I found that he had screwed a very thin piece of steel against the standing breech, bored two holes for the plungers and made all the bearings absolutely true. I used that gun for many years, returning to it from new guns again and again, and it remained firm and tight. It looks to me as if, granted the skill required, two bolts are sufficient. I think that it is Purdey, the celebrated English gunmaker, who always claimed that they were.

For an all-around gun for a man who has but one weapon, there is nothing to beat the 16-gauge. It has none of the faults of the 20 and is handier than the 12-gauge. I have used both 12 and 16 gauges, the 12 most, because of the greater ease in procuring fixed ammunition, but I am fond of the 16. It will do all that is required and it seems to me that this gauge must be comparatively easy to bore correctly: so many of them are superior shooters. I had a 12-gauge Greener made to my measure once upon a time, and never had a gun that fitted me worse. It did not conform to my orders in several respects, was too heavy, and also muzzle heavy. I was glad to exchange it for a 16, a beautiful little gun weighing 5½ pounds. It was extreme choke in both barrels and the wickedest shooter I ever had. My first shot with it was at a snipe, and the wings flew one way and the head another; the body disappeared. The next was a quail flying down a little draw. There were only a few bushes, and I thought that I gave plenty of time for the bird to fly 30 yards, but I picked up a head, breast and wings; the legs and innards were gone. It was no use to shoot it in the brush or swamps, as one either tore his birds to pieces or missed them clean, but in a snipe bog, dove flight or on ducks it was a wonder.

Out of the first bevy of quail I only killed one bird out of at least eight shots. The next time I got onto it a bit and killed 15 snipe, and two quail from a small bevy. I had a good deal of pleasure with the little thing but it was a pound too light in weight; it had no stability and felt like a feather in the hand. In time I sold it to a sportsman 6 feet 3 inches tall and developed in proportion, who thought that a 7¼-pound 12-gauge was too fatiguing for his strength. After a time he had the choke reamed out, as he found it too difficult to kill his birds without mangling or missing them. Then he said that he liked it, but I would not have given a snap for the gun in that condition. It was a rare and wonderful shooter for its weight and should have been in the hands of a prairie shooter. To a man who liked an extra light gun and extreme choke, and who shot in the open, it would have become a treasure, as all he would have had to do was to give sufficient time and not shoot at game under 35 yards.

It may not be generally known that we have people in this country nowadays who can build shotguns equal to anything ever imported from England. There is one firm that has not only the finest materials, but the accomplished workmen to finish the boring and all fine details in the most perfect manner. These guns, in the highest grade, are very expensive, but at least, one saves the duty. I have seen one or two that pleased me better than any imported weapon I ever had in my hands and these have been very numerous. If I had the cash to spare, I would certainly have one of these perfect guns in 16 gauge, and wealthy sportsmen will be wise if they indulge their taste for fine weapons; such work should be well rewarded. I understand that a good many in highest grade have been made to order. Whitworth fluid compressed steel is usually selected, and of the very highest quality, very tough and hard. The most beautiful stocks and the very finest, most artistic engraving are put into them. To own such a gun is a constant pleasure and the shooting qualities are away above most guns. Take one, brother; it will make a nice hole in your bank account.

NOTES OF A 20-BORE SHOOTER

FIELD & STREAM PUB. CO.:

I am going to relate you "My experience with a 20 bore," and if you see fit to publish same you may do so. I have been a reader of FIELD AND STREAM for a number of years and would not like to be without its monthly visit. I read every word in it, including advertisements, but am particularly interested in any article on guns or ammunition. I read Mr. Crossman's article, "Common sense in 20 bores" with a great deal of interest and think most of what he says hits the nail on the head, but I think there is more to the man behind the gun than to any other item in shooting. Some men could have an "ideal made to order" or any other gun and load, and then not do much execution. I have been using a shotgun ever since I was 10 years old and have owned most every good make gun and some that were not so good, from an old "10-bore Zulu to the 20 bore." The best all-round shooting gun I have ever owned was a pump, with 30-inch full-choke barrels, which I had cut off two inches. I could kill birds at 20 yards without tearing them up, and have killed at 90 yards. I once made six clean kills on prairie chickens as they arose in front of my dog, killing the first bird at 20 yards and the last one at 90 yards, and I did not have to run any of them down to get them either. I do not believe in excessive loads in any gun, as 90% of kills are made under 50 yards, and if the gun is held right the medium load will do the killing. Well, I will tell you now about that 20. I have a friend that had been using a 20 and bragging a good deal about it, so thought I would try one, and if I could get satisfactory results there was no use in toting a cannon. I bought a double-barreled hammerless stock model, made by a well-known firm, with 14¼-inch stock and 2¾-inch drop, with 26-inch barrels, right modified and left full-choke, weight 6 pounds. I find this gun fits me perfectly, and I have killed geese, ducks, rabbits and jack snipe with it, and have made as high percentage of kills as I ever did with any other gauge gun, of course at somewhat reduced range. I make it a rule as near as I can to not shoot at game unless I am reasonably sure it is within killing range. What is the use of shooting at everything one sees whether it is within range or not, and wasting 100 shells to kill a few birds, and crippling a lot to die later where we can not get them. I use 2¼ drams of smokeless powder in all my loads, using ⅞ oz. No. 5 shot for geese and ducks, and ⅞ oz. No. 8 shot for smaller birds. I sat in a boat with a friend one day last season shooting ducks, he using a 12-gauge automatic, and I killed more ducks than he did. I also went jack-snipe hunting with a friend one afternoon and I killed 10 jacks in 13 shots, two birds requiring the second barrel to stop, and missing only one jack. My friend was shooting a 12-bore and he only killed two jacks. As I said before, there may be more in the man behind the gun than in the gun itself, but the little 20 has never come out second best yet, and I do not miss many chances on account of range, as I believe I can make as many kills within reasonable range as I can with a larger bore. As to length of barrels, I think the 26-inch is long enough, as smokeless powder burns in 20 inches or less (so we are told) and I can see no argument in favor of long barrels. There is another thing worth mentioning and that is the recoil. I find with the load I use that the recoil is less than in any other gun I have ever used, and consequently there is no tendency to flinch. I am sure if prospective purchasers or users of the 20 would bear in mind that it does not take a 12 load in the 20 to kill game there would be more satisfaction with this lovely little gun and the pleasures of shooting same would be increased ten-fold. Give the little gun credit and take the blame yourself if you do not make

as high scores as you did with the CANNON. The foregoing is just my own personal experience and if it should be of any help to any small bore "crank" I will be pleased. To any one who can afford it, I think a stock made to measure will be more satisfactory, if a stock model cannot be found to fit, but I do not think a barrel over 26 inches is any advantage, and I like the little gun to be a 20 in all respects. I think the 26-inch barrel gun can be handled quicker and just as steady as the longer ones, and am sure the "punch" is sufficient in the proper hands and when held right. For mine the 20 with 26-inch barrels.

H. C. Homrighous.

NISKAYUNA RIFLE CLUB

The opening shoot of the Niskayuna Rifle Club was held some weeks ago on its new range, at Stop 15, Troy road, Schenectady, N. Y., when a large number of the enthusiastic members of the organization took advantage of the good weather to enjoy a fine afternoon's sport.

The range itself is not at present quite completed, but temporary targets were set up and some remarkably good scores made, both at the 50 yard and 100 yard ranges.

The shooting shed at the firing line will soon be completed, and the permanent quarters put in comfortable shape.

The accompanying photograph shows the targets on our range. We have contestants for a place on the team entered in the National Rifle Association Outdoor Small Bore Rifle League, and from the excellent scores made, and the small differences in total points, it would seem that the club had a splendid opportunity to select a strong representative team.

The club has a fast-growing membership and offers splendid facilities for rifle practise at small outlay.

The successful opening of the new range was due in large measure to the enthusiastic efforts of President F. T. Marks and Secretary C. C. Sliter, together with the efficient work of Deputy Range Officer E. G. DeFrate, who officiated in the absence of Executive Officer H. W. Snyder.

THE SUPPLEMENTAL CARTRIDGE FOR YOUR RIFLE

Herbert K. Savage

Many men start on a big game trip without having given the subject of supplemental cartridges for their game rifles proper thought. Some, instead of using supplemental cartridges, carry a side arm, a .22 or .32-caliber single shot pistol or revolver, with six-inch or longer barrel. This is all very well, and will answer the purpose, but if you have a sheath knife and a belt axe dangling from your belt and a camera hanging from your shoulder, the side arm is a nuisance, as it makes one more thing to get caught in thick bushes, and another hard substance to land on if you fall, and is in the way when you want to sit down, besides which the weight limit about your waist is easily exceeded.

Your heavy cartridges are too noisy and too powerful to pick off a rabbit, partridge or other member of the small game family—one shot with high power ammunition will drive away all big game within hearing distance and tear the unfortunate rabbit, partridge, etc., to pieces. What is needed is a cartridge with a small report, which will kill but not tear the small game, and yet be sufficiently powertul to stop larger game at close range.

Without some such small cartridge for the small fry, you will probably live on bacon and beans, beans and bacon until you are heartily sick of them, and your stomach rebels. With supplemental cartridges along this cannot happen, unless, of course, there is no small game about.

There are two sorts of supplemental chambers, the hollow shell chamber and the Marble-Brayton model. The latter is a steel shell with a center fire plunger which is operated by the hring pin of the rifle. The supplemental cartridge is gripped in the front end of the metal cartridge and is held there by the compression of the sides of the auxiliary cartridge, which is grooved for about three-quarters its length down the sides. The hollow shell chamber costs about 50 cents and the Marble-Brayton about 70 cents.

If your rifle is a 30-30 it will take the 32 short Colt or Smith and Wesson smokeless cartridges in the hollow shell, in the Brayton model the 32 short Colt smokeless is used. For the 32 Special the 32 short Colt is used, and the 32 Colt automatic cartridge in the Brayton model.

In the 30 Model 1903 and 1906 caliber rifles handling the Marble-Brayton pattern, the 32 Colt automatic cartridges are used. The 30-40 with the hollow chamber takes the 32 Smith & Wesson smokeless cartridge, while with the Brayton chamber it uses the 32 Colt automatic, 32 Smith and Wesson and 32 Colt New Police cartridges. The 303 and 303 British, with the hollow chamber make use of the 32 short Colt and 38 Smith and Wesson cartridges, with the Erayton chamber the 303 takes the 32 Smith and Wesson and 32 Colt automatic cartridges, while the 303 British uses the Smith and Wesson 32. The 22 Hi Power with the Brayton model chamber uses 22 calibre rimless cartridges.

With the 32-20 no supplemental chamber is necessary. Using the rifle as a single shot the 32 Smith and Wesson cartridge loaded with smokeless powder will be found very satisfactory.

The 25-35 caliber rifles with the Marble-Brayton cartridge take 25 Colt automatic cartridges. The 32-40 with the old model hollow chamber uses the 32 short Colt cartridge.

The 35 and 405 rifles—I do not mean the autoloading 35—will also take supplemental cartridges. The 35 using the hollow chamber takes the 38 Colt New Police and 38 Smith and Wesson short smokeless cartridges. The 405 takes the 41 short Colt Double Action revolver cartridge.

These supplemental cartridges, with the exception of the 41 short Colt, can be bought in most towns of any size where there is a gun store. This caliber not being as much used as the others will be harder to get, and you may have to send to one of the big sporting goods houses in one of the larger cities to have your wants supplied, but one seldom goes on an important big game trip without taking along all the cartridges likely to be wanted.

THE TARGETS ON RANGE OF NISKAYUNA CLUB

WHY NOT HAVE THE FRATERNAL ORDERS LEARN RIFLE SHOOTING?

Field & Stream Pub. Co.:

I have been a reader of your magazine for several years and I have been particularly interested in the recent editorials in regard to the value of our real sportsmen in case of war.

The one great lesson a hunter learns is to keep cool in a crisis. One man that can do the right thing in a critical moment is worth a dozen that would throw their rifles at the enemy and beat it.

In connection with this consider the military corps belonging to the fraternal orders, such as the Masons, Odd Fellows, Knights of Pythias, etc. In this city alone I can count up over a dozen companies of a hundred or more

men and not one of them drill with rifles. They all use swords. Now if they would get some regulation rifles and learn how to use them what a reserve force they would be if this country got into trouble.

This talk about a general disarmament sounds good, but it is a little too Utopian to suit me at present. I'll lay down my gun at the same time the other fellow does, but I want to be able to grab it again as quickly as he can his.

ERNEST E. DEWYER, D.M.D.

LOST—TWO DUCKS AND A NEW YEAR'S DINNER

It was on December 31, 1913, late in the afternoon, that I stood on my back porch overlooking the duck pond. I had been trying for the last two days to get a mess of ducks for New Year's Day. I had only managed so far in killing a small teal duck. I happened to glance out over the pond and saw, to my delight, a huge flock of canvasbacks circle the pond and light within twenty yards of the shore. Rushing into the house I snatched my shotgun from the rack. It took me about two minutes to sneak up to within twenty-five yards of the ducks. There must have been at least a hundred of them. Taking careful aim at the center of the flock I pulled the trigger. The ducks arose with a roar of wings and I fired the remaining five shots into their midst, expecting at each shot to see several ducks drop.

Imagine my feelings when I had emptied my gun to not even have the satisfaction of seeing one feather on the water.

All dreams of the New Year's dinner faded from my mind.

Arriving home I flung the gun savagely on the floor and explained to my folks all about my wretched shooting. Before I had finished my mother burst out laughing. As soon as she could get her breath she said, "Why, don't you remember that after lunch to-day you filled your gun with blank shells so you could shoot the old year out and the new year in?"

At that I collapsed. Why shouldn't I? LANS LENEVE.

UNKEL DAVID'S LETTER

DERE FELDE & STREME:

The femail of the speeshy is hully to blaim if this letter is lait. Tho she is my deerist & awl, I must speek the trooth & say that Sar An went rite skware bak on her own proppizishun & dident doo like she sed she wood. Wunst moar let me repeet the wizdum of Jerry Myer or sum uther proffit, hoo sed, "Doo it now & then tawk abowt it."

Sar An prommist to rite this letter, bekos I had a invite to speek befoar the gradyoo8s of a hi skool on the subjikt "Peess With Onner if We Must, but Awlwais With Proffit," & I had to reed upp sum in bak numbers of FELDE & STREME & Hawstutter's Olmanak—whitch I find has a set of simtums to fit any kase. Owt heer on the Wawbash a publik speeker gits two (2) dollers a ower & his dinner (wife or uther fare frend inklooded) & it ment that me & Sar An woodent be abel to eet anny moar for sum daze. But I was in soar trubbel, for the letter had to be rit. "Blak yore shooze & reed the olmanak, David," sais she. "I'll diktate to the stenogerfer while I dress."

"Whitch kind of a stenogerfer?" sais I, kurling up mi mustash like Kizer Bill.

"He's kross Id & moddist," sais she. "Anny how I dident kik when you set owt to be a artist with a reel live moddle."

& this is how Sar An pitcht in to rite:

"If sum buddy don't massykree them bellijerents in Yoorup, brite kullurs will kontinyoo onfashnabel an uther seezun, espeshully in wimmen's sox &— Yes, I sed sox— & you don't haff to watch mi mowth like I was deef & dumm. Hipp kossets air sum longer than last yere's stile, & the laitest in shirt wastes & lingzhary —No, sir, if I have to spell them simpul words for a abel-bodid young felloe like you, what's the objikt of a tiperiter? Now, what in the wurld did I aim to say next? Not pade to diktate & rite too? Or for eether, if you git sassy. *David!* He dident say I was a fat old fool, but he lookt like he thot it."

"Thar's a pare of us," sais I; & so it is upp to me to reezoom the thredd of Sar An's thots rite where she dropt it when the stenogerfer beet his reetreet. It is a fakt that I had artistik abillyty & dident knoe it, & Sar An sais that she don't knoe it yet—but troo tallunt whitch has a messij for posterryty must expekt krittysizzum. Mi moddle sais I am yooneek in art like I am in litteratoor, whitch means that mi pikchers & letters are on the saim hi skale. The time is neer when this grate reelijus maggyzeen will awl be the finnisht produk of Unkel David, from fruntispees to the last dooly swoar too fish stoary. This izzent a thrett, but a prommis.

P. S. This helth reezort had one (1) artist & no moddle befoar mi appeeranse. Now there is two (2) per eech. She paints while I moddle & moddles while I paint —& Sar An gits a dollar a day as shapproan, bekos I woodent consent to poaz for munny. You shood see me in the diffrent pikchers: "A Rushin Artchdook," "Starving Beljum Heero," "Sik Cheef from Injy," & uthers. Mi oan grate effurt is to be cawld "A Poartrate of a Red Kross Anjul on the Battul Felde"—whitch is a noo idee & permitz a viggerus tutch & rite smart paint. & it's awl red paint, these dais. Evry buddy has got the habbit. If you sneaze on a trolly kar, sum one (1) will grone & say, "O this offel War!" Skratch a match on the seet of yore pantz, & evry buddy looks for the perry skoap of a submerreen. A buntch of firekrakkers on a dog's tale wood stawmpeed foar (4) rijjimints of the Nashunal Gard & putt the feer of sudden deth in a Noo Yawk book ajent. We eet three (3) meels a day with a forrun invayshun on the side, & slepe in owr pantz for feer they'll be drugg up throo the shunguls by the anker roap of a airyplain. If a felloe lets hisself git kokky & say "Hoo's afrade!" the next minnit he sneeks for kuvver & tries to look like an uther man with bizness at the korn dentists. The big fite is over in Yewrup, but moast of the tawking & dojjing is rite hear. The energy we have lawst capchurring Perzizzymul wood run a buk saw throo foar (4) milyun karlodes of seezund blak hikkery & splitt the Callifory big treez intoo toothpix, & if we was haff as afrade of the Old Nik as we be of Prezzydent Woodro's Skotch-Irish peddygree, the Bibul wood be one (1) of this seezun's best sellers.

Moar P. S. We heer a lot abowt Amerrykin proggress & devellupment in the last senchurry, but the haff has not been toald. We have owtgrone sum of the barberus habbits of owr foarfathers, inklooding the praktis of kikking when sum one (1) stept on owr toze. Now we tutch wood & expostullate in a jentul & perswasive manner, leeving owrselves lattytood to taik it awl bak if the uther felloe gets hot under the koller. We'll swop jaknives with anny boy in skool, but we wont fite, & it is absolootely reediklus that sutch a impresshun shood be abrod. If owr histerry was to be maid over we wood leeve owt awl the rood feechurs like the Boston tee party & the battul of Noo Awleens, & Jeneral Washington wood be instrukted to kepe away from Vally Forj & the Dellywair River & cut owt awl ruff stuff whitch mite exsite the annymuls. Konservayshun of nacherel reesoses is the propper kaper, & the ellykwense that wood sell a litening rod or a reseet for furnichure pollish ott not be waisted in war tawk. The propper studdy of mankind is how to get further from the kwarter sekshun where the gas bums are exploading, & awl uther kweschuns are immyteeriel. The old howshoald sine "Doo it Now" has been flopped over & now reeds "Don't At Awl—Under No Sukkumstances—Futher Partiklers from Annybuddy—Grattis."

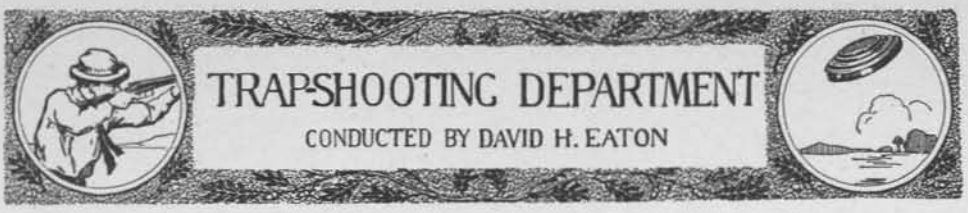
Bare in mind that the riter wood have rit a reel letter if his brane had been stokt up with anny thing eksept war tawk. He meens rite but is subjikt to undoo inflooence on awl sides—& he mussent say he don't like it. In theze bellijernt times bewair of dispooting with thoze hoo preech the gospil of peess.

If not capchurred or tawpeedoed prier there2, you can ekspekt sumthing moar next munth.

Yores trulie, UNKEL DAVID.

LEADERS FOR NEXT MONTH

Greetin's Wavies—T. Buckingham. A Goat Hunt in the Saw Tooth—H. B. Howland. Bear Hunting With Airedales—W. R. Jackson. "Big Foot," The Montana Mule Deer—F. R. Kuesler. Quail Shooting in the Game Cock State—Warren H. Miller. "Sufferin' Comfort"—Douglas Wetmore Clinch.



THE INDIANS

The Okoboji Indians met at Cedar Point, O., June 28 to July 2, for their sixteenth anual powwow and tournament. Never in the history of the tribe has a more successful affair been pulled off. The weather was propitious; the attendance, while not quite up to the mark of the previous year, was good; everything moved smoothly, and the program events each day were finished early so that the social features of the conclave could be given due prominence. The scores averaged high, and an unusual unmber of long runs ranging from 50 to 162 were recorded during the week. The feature of the second day was the Indian Championship contest, consisting of the last 100 targets of the regular program. This was won by William Ridley, of What Cheer, Ia., on a perfect score of 100. S. A. Huntley, Omaha, Neb., second with 99; J. S. Young, Toledo, O., 97, and John Deist (Chief Early Bird), Sandusky, O., 96. The Mallory Cup event at 50 targets, which has been an annual feature of the Indian tournaments for many years, was shot on the last day. It is a handicap event, 16 to 23 yards, and is open to all contestants, amateurs and professionals, who have shot through the regular program events. O. L. Brailey, Toledo, O., amateur, 16 yards, and Art Killam, professional, of St. Louis, Mo., 23 yards, tied on 48. By agreement the former took the cup, and Killam the trophy offered by the Indians to the winner; there was no shoot-off. The Indian Handicap at 100 targets was the feature of the last day, and in future tournaments of the tribe will be given more prominence. In this event John H. Noel (Chief Hole in the Boat), of Nashville, Tenn., 20 yards, and C. E. Winslow, Detroit, Mich., 16 yards, tied on 96, the former winning the shoot-off and taking the gold watch offered for the winner. An additional event this year, which proved to be a great attraction, was the night shoot held on the evening of the first day. The arrangements were made by L. H. Fitzsimmons. Thirty-three shooters were entered, and high scores were made, considering that most of the contestants had never before faced the traps after dark. George McIntosh and W. Ridley made perfect scores of 25; C. T. Stevens (Chief Muskingum), L. M. Weeden, S. A. Huntley and Fred Gilbert (Chief Heap Talk), 24 each; Art Killam, 23; R. W. Clancey (Chief High Point), W. R. Chamberlain (Chief Round Head), E. Apperson (Chief Jack Rabbit) and J. I. Brandenburg, 22 each.

On the evening of the first day the annual war dance and smoking of the pipe of peace was participated in by between twenty-five and thirty braves in full war paint and feathers. The trail, starting at the tepee of the tribe's custodian, was blazed through the corridors of the Breakers, ending in the parlors, where the council wigwam was pitched. Tom-toms, beaten by Chiefs Bald Eagle (R. O. Heikes) and Heap Talk (Fred Gilbert), furnished the music for the march, and High Chief Long Talk (Tom A. Marshall), with his squaw and papoose, headed the long line of warriors. After passing the pipe of peace around the circle of sitting braves, the High Chief delivered an address of welcome to the assembled palefaces, assuring

HIGH CHIEF LONG TALK (TOM A. MARSHALL) AND HIS SQUAW, CHIEF HOOCHEE KOOCHEE (H. W. HEIKES)

them that, though the braves were all "live ones" they were all "good Indians." He then introduced each Indian, setting forth the qualities (?) which made him a worthy member of the Okoboji tribe. As a sample of what each brave was handed by the High Chief in this ceremony, the spotlight was turned on Chief High Point (R. W. Clancey) and the paleface ladies were informed that he was unattached, and they were advised to "catch him," as he was a sure "meal ticket." Chief Heap Talk's (Fred Gilbert) reputation for silence was commented upon, and the High Chief explained he was tongue-tied, an affliction which he could not overcome. The others all got theirs, any peculiarities being good-naturedly enlarged upon. When this ceremony was over, the trail was taken for the big dining tepee, where the annual feast of "roast dog," etc., was enjoyed by the Indians and their squaws, then a trip to the big dancing wigwam of the palefaces brought the evening's pleasures to a close. The annual council was held on the evening of the third day, when the business of the tribe was transacted, and the following officers elected: High Chief, Tom A. Marshall (Long Talk), Chicago; Vice-Chief, John R. Taylor (Buckeye), Newark, O.; Keeper of Wampum, James W. Bell (Ding Dong), St. Louis, Mo.; Scribe, D. H. Eaton (Write 'Em Up), Cincinnati, O. Thirteen new members were adopted into the tribe, eleven amateurs and two professionals, bringing the membership up to the limit of 75 amateurs.

Half a gale from the southeast kept the scores a little below the average on practise day, when a program of ten 15-target events was scheduled. Fifty-two shooters entered for the events, all but five shooting through. C. T. Stevens (Chief Muskingum) was high amateur with 143; F. B. Lofland was only one target behind with 142, and W. Henderson came next with 140. The wind did not seem to affect C. A. Young's (Chief Sparrow) work to any extent, and he was high profesional with 145; J. R. Taylor (Chief Buckeye) 143, and T. A. Marshall (Chief Long Talk) and Art Killam 138 each. C. A. Young made the long run of the afternoon, 62, and J. I. Brandenburg came next with a run of 60.

Ninety-six shooters faced the traps on the opening day, shooting through the program of five 15 and five 20-target events, and 53 entered for the special at 25 targets that concluded the day's shooting. W. Henderson, of Lexington, Ky., was high amateur with 173; S. A. Huntley and J. W. Bell tied for second place on 171; J. N. Knox, J. S. Speer (Chief Black Stick) and W. Ridley 170 each. The professional division had C. A. Young (Chief Sparrow) at the top with 172; J. R. Taylor (Chief Buckeye) 169, and L. W. Cumberland 168. The daily high average trophy, a gold watch, open to amateur Indians only, was won by J. W. Bell (Chief Ding Dong) on his score of 171. G. E. Painter (Chief Quick Paddle) and B. S. Donnelly (Chief Wealthy Water) tied on 167 for the fourth trophy, the former winning in the shoot-off. Long runs were numerous, ranging from 50 to 130. W. Henderson recorded runs of 109 and 130; S. A. Huntley 91 and 54; F. S. Wright 89; G. E. Painter 87, and W. Ridley 80. In the special C. D. Coburn, F. S. Wright, W. Henderson, J. S.

Young, J. W. Taylor and F. B. Lofland were high amateurs with 25 each. J. R. Taylor and Art Killam also put up straight scores for the professionals.

On the second day there were 89 entries in the regular program events, enough more shooters reaching the grounds late to bring the entry in the Indian Championship (the last 100 targets of the program) up to 96. The special event at 25 targets had 49 entries. The amateurs occupied the high places at the close of the day, Huntley having 173, Wright and Ridley 170 each, and Henderson 168. The professional class was led by Fred Gilbert with 169, Marshall, C. A. Young and W. R. Clancey 166 each, and J. R. Taylor 165. The Indian Championship was closely contested. Huntley was in one of the early squads and went out with 99. Ridley, in squad 17, was tied with Huntley at the end of the fourth string on 80 straight, and faced the traps for his last 20 targets, knowing that only a straight could land him a winner. He turned the trick, centering each target perfectly and reducing it to dust, an exhibition of nerve which is not often seen, but 'Bill" is a "tight-pinch" shooter with few equals in the game. The professionals were well up on the list in this event, Marshall scoring 98, Killam and Gilbert 97 each, and Clancey 96.

Huntley, Max Kneussl, B. S. Donnelly and C. L. Culbertson were high amateurs in the special event with 25 straight, tying with J. R. Taylor and L. W. Cumberland, the professionals. Huntley made the long run of the day, 162; Ridley 80, 63 and 107; Killam 74; F. S. Wright 77 and 54; C. A. Young 74. A number of other runs were made ranging down to 52. Every amateur making a straight in any of the events of the first day was eligible to compete for eight trophies, and the eight high men were decided by scores made in to-day's events, beginning with the first. The first event eliminated all but 12 of the contestants; four more dropped out in the second event, and the remaining eight had a merry race before all the trophies were placed. The fight between C. D. Coburn and M. S. Hootman for fourth and fifth trophies was not settled until the sixth event, when the former got the best of his opponent by one target and took fourth. There were sixteen trophies in the Indian Championship event, distributed Lewis Class system, four classes, four trophies in each class.

On the third day there were 93 entries. The program consisted of ten 15-target events and two 25-target specials. In the specials 41 shooters entered. The shoot was delayed for some time in the afternoon by a heavy shower, the first bad weather during the week. Scores were good, first place in the amateur class being shared by Huntley, H. E. Smith and Henderson on 147; G. E. Painter and M. Kneussl were second with 146 each; Ridley, Coburn, Wright and A. R. Hensler 145 each. The professional division had C. A. Young at the top with 148, Killam and F. Gilbert 145 each, and T. A. Marshall 141. In the specials C. D. Coburn was high with 50 straight; Huntley, Henderson and Ridley 49 each. W. S. Jones, C. A. Young and L. W. Cumberland were high professionals with 49 each. M. Kneussl made the long run of the day, 116, and another of 60; K. P. Johnson 86; Killam 81; C. L. Culbertson 75; Huntley 57 and 78; C. A. Young 74, 51 and 64.

The last day of the tournament was Handicap Day, the annual contest for the Mallory Cup being first on the list, followed by the Indian Handicap at 100 targets. The former event had 61 and the latter 63 entries. In second place were C. H. Heinzerling (16), Mrs. Vogel (17), E. W. Heath (17), J. W. Taylor (18), J. H. Noel (20), H. E. Smith (21), W. Ridley (23) and S. A. Huntley (23) with 47 each. H. Feidner (16), J. D. Morris (16), J. A. Schaulis (16), H. L. Hildinger (17), E. Apperson (18), F. E. Breigel (18), A. H. Wilson (18), E. K. Crothers (19), J. S. Young (22), W. Henderson (23), F. S. Wright (22) and C. D. Coburn (21) with 46 each. Following Killam in the professional class came W. S. Jones (20), F. Gilbert (22) and R. L. Trimble (19) with 47 each; W. R. Chamberlain (18), L. W. Cumberland (20), J. R. Taylor (23) and C. A. Young (23) with 45 each. The handicaps were from 16 to 23 yards, and are indicated by the figures in brackets following each name. High amateurs in the Indian Handicap were: J. H. Noel (20) and C. E. Winslow (16) 96 each, the former winning in the shoot-off; E. Apperson (Chief Jack Rabbit) (18), W. Ridley (23), C. D. Coburn (Chief Make 'Em Grow) (21) and S. A. Huntley (23) 95 each; O. C. Funderburk (20) and C. T. Stevens (Chief Muskingum) (19) 94 each. J. R. Taylor (Chief Buckeye) (23) was high professional with 96; F. Gilbert (Chief Heap Talk) (22) 94; L. W. Cumberland (20) 93. High amateurs in the two handicap events were: J. H. Noel, 143; Huntley and Ridley 142 each; Apperson 141; C. D. Coburn 140. Professionals, Gilbert and J. R. Taylor 141 each; Killam and Cumberland 138 each; W. S. Jones 136. The trophy, open to amateur Indians only, was won by C. T. Stevens (Chief Muskingum), on 139. High amateurs on the 500 targets of the regular program were: S. A. Huntley 491; W. Henderson 488; W. Ridley 485. C. A. Young was at the head of the professional class with 486; Art Killam 475; J. R. Taylor 474. On all targets trapped, a total of 900, W. Henderson was high amateur with 865; C. A. Young high professional with 865.

The numerous trophies offered at the tournament were won as follows: Cut-glass bowl to high average on 500 targets, open to amateur Indian only; C. D. Coburn (Chief Make Em Grow), 480.

Cut-glass bowl to amateur Indian making high score in the two handicap events of the last day; C. T. Stevens (Chief Muskingum), 139 from 19 yards.

Professional daily high average —First day, gold Indian head stick pin, C. A. Young, 172. Second day, Sportsman's grip, Fred Gilbert, 169. Third day, same as on first day, A. Killam, 145.

Lewis class system in the Indian championship event on the second day; four trophies in each class. Gold watch, two cut-glass bowls and one gold enamelled Indian stick pin in Class A. Three cut-glass bowls and one gold stick pin in each of the other three classes. In Class A—1st, W. Ridley, 100; 2nd, S. A. Huntley, 99; 3rd, J. S. Young, 97; 4th, John Deist (Chief Early Bird), 96. Class B—1st, H. E. Smith (Chief Long Call), 93; 2nd, C. J. Rader, 93; 3rd, J. H. Noel (Chief Hole-in the Boat), 93; 4th, J. D. Parker (Chief Cure 'Em All), 93. Class C—1st, C. D. Henline; 2nd, H. Feidner; 3rd, A. Kuebeler, Jr. (Chief Cedar Point); 4th, J. I. Morrison (Chief Fifty-Fifty), each scoring 89 and finishing in order given in the shoot-off. Class D—1st, I. Morris; 2nd, Mrs. L. G. Vogel; 3rd, P. H. Willey; 4th, A. Ledgett.

Daily average, open to amateur Indians only. Gold watch and three silver Indian head watch fobs each day. First day, J. W. Bell (Chief Ding Dong), 171; J. S. Speer (Chief Black Stick), 170; C. D. Coburn (Chief Make 'Em Grow), 168; G. E. Painter (Chief Quick Paddle), 167. Second day, C. D. Coburn, 167; John Deist (Chief Early Bird), 166; J. W. Taylor (Chief Seminole), 165; B. S. Donnelly (Chief Wealthy Water), 165. Third day, H. E. Smith (Chief Long Call); C. L. Culbertson (Chief Pill Roller), 144; C. D. Henline, 141; E. Apperson (Chief Jack Rabbit), 140.

Indian Handicap on the last day. 1st, gold watch, J. H. Noel (Chief Hole-in-the-Boat) (20), 96; 2nd, gold Indian head watch fob, C. E. Winslow (16), 96; 3rd and 4th, same as for 2nd; 5th, silver Indian head watch fob, S. A. Huntley (23), W. Ridley (23) and C. D. Coburn (21) tied on 95, and will shoot off later in the season. E. Apperson (Chief Jack Rabbit) also scored 95, but was not eligible to win a fob. 6th to 10th silver Indian head watch fobs, C. T. Stevens (Chief Muskingum) (19), 94; F. C. Koch (20), 94; M. Kneussl (22), 93; F. S. Wright (22), 93, and W. Webster (18), 93.

Cut-glass bowl to amateur making high total score in the special events of the first three days, 100 targets; G. E. Painter (Chief Quick Paddle), 96.

Trophies for "straights" open to all amateurs making a straight in any of the regular events of the first day; ties shot off in the regular events of the second day beginning with the first and continuing until the eight high guns are determined. Gold Indian head stick pins; F. S. Wright, W. Henderson, J. S. Speer, C. D. Coburn, M. S. Hootman, A. H. Wilson, Mrs. Vogel and G. E. Painter.

Big Ben clock, won by C. A. North (Chief Make 'Em Fly).

Cut-glass bowl, for lady guessing the nearest to the exact number of targets trapped during the tournament including practice day; Miss Dixie North, 69,170, within 640 of the actual number.

MARKINGS OF DOGS

FIELD & STREAM PUB. CO.:

I would like to get some information about the English setter.

I have been breeding them for my own pleasure for a number of years, and hearing different stories as to colors and markings, I would like to know if there are any colors that are most likely to appear. I have a bitch that has had two litters of pups, having been bred to a black and white dog the first time and a lemon and white dog this time. The bitch is black and white. The first litter was all black and white with the exception of two that were lemon and white. This time she had nine: four liver colored with small white spots on chest, one black and white, two black with white on chest, one almost lemon colored, and one that looks almost like a Gordon with a white patch on chest, and I cannot understand all the different colors and markings.

What information you can give me on this subject will be deeply appreciated. E. C. NEWMAN.

Puppies throw back to various ancestors in disposition and markings. There is no line on what colors will appear except the coloration of dam, sire, granddams, grandsires and, sometimes, the greatgrandparents. My Scout I was almost a reproduction of his great-great-granddam, Louise Danstone.—ED.

SPANIELS AS FIELD DOGS

FIELD & STREAM PUB. CO.:

I would like very much if you would answer the following questions concerning dogs:

1. I have a young cocker spaniel. Is this breed good for hunting?

2. At what age are they supposed to stop biting and frisking?

3. What kind of game do they hunt?

4. Is a foxhound a dear dog to keep, and what will one cost?

5. Is it good to keep a dog in the house?

Ans.—1. Good for both upland and marsh shooting. Does not cover the same amount of territory as the setter but can do as good work in limited areas.

2. At about ten to fourteen months they lose most puppy traits.

3. Originally woodcock and snipe, whence the name "cocker." Also good for retrieving ducks, tracking pheasants, etc.

4. Foxhounds cost about five cents a day to feed. A good puppy can be had for $10.

5. More hardy if they sleep out of doors in a kennel.—ED.

FOR SKIN DISEASES OF DOGS

Four ounces black sulphur, two ounces creosote, one-half pint raw linseed oil, four ounces lard or vaseline, two tablespoons coal oil.

Mix sulphur with lard, crushing out all lumps, then add other ingredients and mix well and always stir before using.

After four days wash off with some antiseptic soap and give dog a good bath. Repeat until cured.

J. C. RAWSON.

REGISTERING THE DOG

FIELD & STREAM PUB. CO.:

I have recently purchased an English setter pup, named "Rodney's Jack," and received an application for registration in the United Kennel Club, of Chicago, Ill. Will you please advise if this is the National Association or a new organization, and would my registration with this club hold good with others? It is my understanding that there is another Kennel Club in which most dogs are registered.

P. H. FEEHAN.

Ans.—The American Kennel Club, 1 Liberty Street, New York City, and the Field Dog Stud Book, Masonic Temple, Chicago, ought to have his registration also, to be eligible to bench shows and field trials.—ED.

GUNSHY DOG

FIELD & STREAM PUB. CO.:

I have a very fine English setter, three years old, thoroughbred, registered dog, partly broken in field work. Last fall this dog was filled full of shot by a friend of mine and, of course, has developed a bad case of gun shyness. Added to this the dog is very nervous, but of fine constitution and very affectionate. The dog is valueless to me unless he can be broken of this gunshyness and I wish to know if it is possible to break him of it according to Haberlein's method and just how lengthy a treatise is given on this in his book, or if it will be possible to get in touch with Mr. Haberlein and have him write me a letter upon how to handle the dog in this case. T. M. RUNDEL.

Ans.—From a cold-blooded point of view we would advise selling your dog for a house or watch animal and break in another. If very much attached to him you can break him by Haberlein's method, or if not too nervous, try taking him regularly down to the gun club until used to gun fire. Mr. Haberlein's address is McPherson, Kansas.—Ed.

FIELD TRIALS

Twelfth American Field Futurity for pointer and setter bitches bred on or after October 30, 1914. Nominations of dams close October 29, 1915. Nominations must be made within thirty days after bitches have been bred. Send for nomination blanks containing full information. American Field Publishing Company, 801 Masonic Temple, Chicago.

All-America Field Trial Club, Denbigh, N. D., August 30. Entries to All-Age and Champion Stakes close August 1. Lewis McGrew, secretary, 220 Third Avenue, Pittsburgh, Pa.

Great Western Field Trial Club, Aberdeen, S. D., September 6. Entries close August 1. M. H. Bantz, secretary, Aberdeen, S. D.

Orange County Field Trial Club, Middletown, N. Y., October 5. C. C. Haines, secretary.

Pennsylvania Field Trial Club, Carmichaels, Pa., October 19. H. H. Cahoon, secretary.

Southern Ohio Field Trial Association, Dillsboro, O., October 26. G. R. Harris, secretary.

Connecticut Field Trial Club, Hampton, Conn., October 26. F. L. Pratt, secretary.

Canadian National Field Trial Club, Sandwich, Ont., November 2. W. P. Smith, secretary.

National Capital Field Trial Club, Bradley Hills, Md., November 2, 3, 4. F. E. Young, secretary.

Eleventh American Field Futurity, Sparta, Ill., November 4. Entries close August 2. American Field Publishing Co., Chicago.

Illinois Amateur Field Trial Association, Sparta, Ill., November 6. Dr. J. Akester, secretary.

Independent Field Trial Club, Sparta, Ill., November 8. S. H. Socwell, secretary.

Piedmont Field Trial Association, Durham, N. C., November 9. J. T. Lawson, secretary.

Southwestern Field Trial Association, Vinita, Okla., November 15. A. A. McKellop, secretary.

Georgia Field Trial Association, Waynesboro, Ga., November 22. R. L. Miller, secretary.

Continental Field Trial Club, Waynesboro, Ga., November 29. Derbys entries close August 15 and All-Age and Subscription Stakes entries October 15. F. L. Hadkin, secretary, Tottenville, N. Y.

Pointer Club of America, High Point, N. C., December 6. J. C. Weiler, secretary.

Delaware Setter and Pointer Club, December 22. H. B. Lynam, secretary.

Virginia-Carolina Field Trial Association, Spartanburg, S. C., December 13. C. B. Cooke, secretary.

National Field Trial Championship Association, Grand Junction, Tenn., January 17, 1916. W. B. Stafford, secretary.

United States Field Trial Club, Grand Junction, Tenn., January 3, 1916. W. B. Stafford, secretary.

National Field Trial Club, Calhoun, Ala., January 10, 1916. W. W. Titus, secretary.

All-America Field Trial Club, Rogers Springs, Tenn., January 11, 1916. Louis McGrew, secretary.

FISH AND FISHERMEN

LEADERS AND WINNERS IN 1915 PRIZE FISHING CONTEST

This list was compiled from affidavits received up to July 31st only.

Winners in Closed Classes

Brook Trout, Class A.

First Prize—William Allen, 4 lbs. 7 oz., length 22 in., girth 11 in. Caught at Upper Dam, Me. Thomas rod, Cummins reel, Abercrombie and Fitch line, Jock Scott fly.

Second Prize—Louis A. Ditt Verner, 4 lbs. 1 oz., length 21 in., girth 13½ in. Caught in Corning Creek, Wis. Bristol steel rod, Shakespeare reel, Kingfisher line, Royal Coachman fly.

Third Prize—C. S. Harris, 3 lbs. 2 oz., length 19 in., girth 11½ in. Caught in Bakertown Flow, N. Y. Lancewood rod, Abercrombie & Fitch Bijou reel, Kingfisher line, Queen of the Water fly.

Fourth Prize — Chester A. Minch, weight 3 lbs., length 18 in., girth 11½ in. Caught in Cranberry Lake, N. Y. Lancewood rod, fly reel, Kingfisher line, Royal Coachman fly.

Small Mouth Bass, Class A.

First Prize—J. M. Cantey, 8 lbs., length 27 in., girth 18 in. Caught in Crystal Lake, South Carolina. Abbey & Imbrie Riverside steel rod, Expert casting reel, Gold Seal line, Ultra minnow lure.

Second Prize—Arthur Lowe, 6 lbs. 8 oz., length 23 in., girth 16 in. Caught in West Pond, Connecticut. Abbey & Imbrie rod, Redifor reel, Kingfisher No. 6 line, Heddon Expert lure with white head.

Third Prize—N. D. Seldomridge, 6 lbs., length 24 in., girth 16 in. Caught in Greenbriar River. Sampson rod, Meisselbach reel, Cuttyhunk line, Heddon Dowagiac minnow.

Fourth Prize—H. C. Long, 5 lbs. 15½ oz., length 23½ in., girth 16½ in. Caught in Lexington, Kentucky. Split bamboo rod, Bourne & Bond reel, Irish linen line, Pflueger spinner.

Large Mouth Bass, Class A, North.

First Prize—Harvey F. Fisher, 10½ lbs., length 23 in., girth 20½ in. Caught in Columbia Slough, Oregon. 8 oz. rod, Hendricks reel, Kingfisher line, luminous tandem spinner.

Second Prize—H. B. Christian, 8 lbs. 5 oz., length 24½ in., girth 18¼ in. Caught in Sheldrake Lake, N. Y. Mills standard rod, Featherlight reel, Intrinsic line, home-made fly.

Third Prize—H. Henry, 8¼ lbs., length 23 in., girth 18½ in. Caught in Hayden Lake, Idaho. Montague City rod, Shakespeare Level Winding reel, Gladding Invincible line, live minnow bait.

Fourth Prize—H. B. Christian, 7 lbs. 15 oz., length 24 in., girth 17 in. Caught in Sheldrake Lake, N. Y., Mills Standard rod, Featherlight reel, Intrinsic line, home-made fly.

Large Mouth Bass, Class A, South.

First Prize—J. Morton Clark, 14 lbs. 12 oz., length 29 in., girth 23¼ in. Caught in Mascotte, Florida. H. M. Hunt split bamboo rod, Shakespeare Marhoff reel, Kingfisher line, Heddon Silver Dowagiac minnow No. 159.

Second Prize—Davis Moon, 14¼ lbs., length 29½ in., girth 23½ in. Caught in Bear Hammock Lake, Fla. Bristol No. 27 rod, Special reel, Abbey & Imbrie Lakeshore line, Heddon Dowagiac minnow.

Third Prize—J. F. Mayer, 13½ lbs., length 28 in., girth 22 in. Caught in Beachman Lake, Fla. Home-made rod, Vom Hofe reel, Cuttyhunk line, live minnow bait.

Fourth Prize—W. E. Gray, 13 lbs., length 26½ in., girth 20½ in. Caught in Orange Lake, Ocala, Florida. Imperial rod, Tripart reel, Abbey & Imbrie No. 3 line, Dowagiac minnow No. 150.

Rainbow Trout Leaders.

T. A. Ross.
Dr. A. Vanderstolp.
I. L. Robbins.
E. N Gardner

Brown Trout.

T. E. Dickinson.
Robert McConnell.
George Burroughs.
Gilbert S. Watts.

Lake Trout.

Charles H. Slater.
E. S. Williamson.
Dr. Karl Christofferson.
Cornelius H. Evans, 2nd.

Land-locked Salmon.

Henry L. Marsh.
J. C. Dougherty.
William Allen.

Small Mouth Bass, Class B.

Gorman D. Bussard.
No other entries.

Small Mouth Bass, Fly Class.

H. B. Christian.
Alex Friend.

Large Mouth Bass, Class B, South.

H. E. Yelverton.
S. W. Dolive.
C. E. Griffin.
No other entries.

Large Mouth Bass, Fly Class, South.

T D. Howard.
No other entries.

Large Mouth Bass, Delaware, Maryland, Virginia and West Virginia Class.

George C. Schuler.
W. B. Catlett.
Herbert Firth.
Aaron Clarke.

Great Northern Pike.

A. R. Thompson.
C. F. Pike.
Nobert P. Arnold.
Frost S. Smith.

Muscallonge.

William R. Babson.
No other entries.

Wall-eyed Pike.

George Ault.
Fred Martens.
George Ault.
B. F. Dilley.

Bluefish.

R. C. Graham.
Harry C. Esrey.
Peter S. Post.
No other entries.

Weakfish.

No entries.

Striped Bass.

Jacob Wertheim.
George Kennedy.
No other entries.

Striped Bass, Ladies.

Mrs. Chas. S. Irish.

Channel Bass.

J. Maxwell Bullock.
S. J. Held.
No other entries.

Tarpon.

T. W. Magill.
Mrs. T. W. Magill.
T. W. Magill.
T. W. Magill.

A SIMPLE FISH MOUNT

By Ladd Plumley

The Nipigon Indians are experts in skimming the great trout of the Superior regions and in mounting the skins on birch bark. The colors of the fish are perfectly preserved, and, although no attempt is made to round out the mount, the flat profile is artistic and beautiful.

I have lately mounted the skin of a large *fario*, following in general the Indian method, but simplifying the process to the minimum. Doubtless there are those who would be glad to hear of a method for mounting a fish that is simple and yet gives an artistic

It should be understood that the skin of the more delicate fishes, of the trout and some others, should be handled with great care, if the result is to be satisfactory. Therefore, the fish should not be doubled up in a creel and the skin should be kept moist and not allowed to come in contact with any-

thing that will soil it. And as soon as possible after the fish is caught, and before the colors have faded, the skin should be removed and varnished.

To skin a trout for mounting, use a very sharp knife, and, selecting the side that is the more perfect, run the point of the blade down the back in such a manner as will leave the back fins in position. Cut off the tail from the vertebræ, taking care not to detach from the half skin to be used, and continue the slitting of the skin along the belly of the fish, behind all fins of one side.

The head should be carefully split lengthwise and the half attached to the side skin will be of service only. And, beginning with the tail, the skin should be tenderly loosened from the flesh. This is a delicate operation and great care not to slit the skin should be used. The base bones of the fins can be separated with sharp scissors or shears. If possible, do not disembowel the fish. And wherever the flesh proves obstinate, leave such portions as threaten a disfiguring tear until the task is complete.

The eye and tongue, together with brains and all flesh within the half-head, must be removed. Otherwise, the skin of the cheek and around the eye socket will not dry and will surely disfigure the mount.

When the half-skin, with fins, tail and half-head, have been removed, reverse on a perfectly clean and well-moistened cloth. You are now to scrape away, with fingers and knife, every portion of flesh still adhering to skin, fins tail and head. This must be done with very great care, but there is nothing very difficult in the work.

For the actual mounting, you will need a freshly planed board of proper size. A one-inch white pine plank will give good results. And you will need a package of very small tacks; those known as "curtain tacks" are about the correct size. You will also need a few small-headed wire nails, about an inch in length, as well as some quick-drying and good varnish. Shellac is useless, as shellac will change to a whitish color, thus disfiguring the fish.

Place skin on board with fins and tail in a natural position and mouth wide open. And without unduly stretching, tack skin, fins, and tail to board, using three or four of the nails to keep half-head in position. For a fish of three pounds or so the tacks should be about three-quarters of an inch apart.

When tacks and nails are in position, use a moist sponge, or bit of soft cotton cloth, and carefully wash every portion of the mount. When absolutely clean, the skin, fins, tail and head should be wiped gently with a dry piece of cloth—cheesecloth is best—always wiping in the direction of head to tail.

While the skin is still moist and before the colors have faded the varnish is to be immediately applied, giving a fairly generous coating and paying much attention to fins and tail, which will cause these to adhere to the board.

You should have a piece of cheesecloth of proper size to cover the mount and to keep flies away while it is drying. Bend three or four bits of birch twigs over the board and tack them into place. The cheesecloth should be stretched over the bent twigs and tacked into position. The mount is then hung in the outdoor air, but care should be taken not to let direct sunlight fall upon it. And on the third or fourth day another coat of varnish can be given the skin. Protection from flies should be continued until the drying process is completed.

When you return to your home, if you prefer, you can paint the board around your trophy. Dull green gives a pleasing effect. You can buy a glass fish eye and insert it in the vacant socket. The result will be something really artistic.

A NEGLECTED GAME FISH

By Wolcott Tuckerman

In these days of disappearing game the sportsman turns to substitutes for his favorite pastime. The bass fisherman whose waters are fished out must satisfy himself with pickerel and the lowly crappie and perch, one-round fish of small size and short courage. Scup and fluke must take the place of blues and striped bass.

I sing the praise of no such inferior fry, but of a noble fish, clean, swift, strong, agile and courageous. Known of old in England and appreciated by a few discerning ones on this side, the gamy pollock, provides sport unsurpassed on light tackle.

Are you a fly crank? Take your trout rod north of Cape Cod in June and cast the white miller, yellow sally, or coachman in the flood of a tidal river, where the sand-eels swarm, and see how the pollock from one pound to two and a half will bring the tip of your nine-foot rod down to the reel and snap your fine leader as if it were cotton thread.

Are you a "plug nut?" Go out to the end of a rocky point at low tide, at sunrise if you are still young in spirit and old in the love of nature, and "slug the plug" with a 5½ or 6-foot casting rod. Anything shiny or white, spoons, jigs, squids, metal or phantom minnows, wigglers, wobblers, and I wot not what new creations of the bait-maker's art—all these will lure this fish of prey as well as the humble pork strip, usually represented in salt-water fishing by a piece of flounder belly. The *sport's* bait, fresh from the tackle-shop, will resemble a very teazle of barbed hooks, but the sportsman will use only one, a tail hook, or at most add one at the head if the bait is long, and when the fish are plentiful he will bend down the barb so that they can be returned to the water without injury. What sport I have had at the bait-casting game with these gentlemen of the sea! Lieutenants of two pounds, commanders of four and five, and certain well-remembered captains of six and seven taken on baits of my own contriving—but that is another chapter.

Trolling too, a mile or so out, is a fine game. A motorboat will do, but if you have a skipper, a small sail-boat makes less fuss in the water and can be sailed more slowly. A short rod, six to nine ounces, six- or nine-thread line, and an aluminum or bone squid (light baits are less easily shaken out) is the tackle when the pollock run to ten pounds and over. When you strike a school, drift and cast, so as not to drive them down. There they are, leaping clear and slapping in, tail first, churning the water in furious charges on the schools of bait. Strike! You have one on, and after a moment of surprise, away he goes, far and deep, taking the line at will, while you brake as hard as you dare. Then *zing, zing, zing,* the short, hard jerks put fear in your heart for the knot you tied. At last he yields and you pump him up, dropping the tip and reeling in and lifting again. But the fight has just begun and off he goes again fresh as ever. Your skipper lights his pipe and takes his ease with a dubious eye on your "buggy whip," while you reel in and lose it and reel in and lose it again. When he is up at last, look out; he has another kick, good for fifty feet, then he comes in drowned, and the gaff lifts him over side, a great, shining, yacht-shaped fellow with a black back, hence *pollachius carbonarius.* Another authority names him better, *gradus vireus,* the lusty cod, though in spirit he is no relation to his clumsy cousin.

The pollock does not get away from the mark as fast as the bluefish, nor does he leap on the hook, but fights much like the striped bass, going off again and again, active and struggling to the end, and when that comes he is all in, because the game heart of him is through.

Generally speaking, the pollock may be taken in tide-rips and off rocky shores east of Buzzards Bay in May when they may run to thirty pounds; north of Cape Cod in June and July, and up to the Bay of Fundy off and on all summer.

In closing, a word to the epicure: the pollock has been called "soft." This may be true of fish iced and shipped, but caught in the cold water that he loves, and eaten within the hour, not dried in the sun, I would not trade for mackerel.

NATIONAL AMATEUR CASTING ASSOCIATION NOTES

The Third Annual Bait and Fly Casting Tournament of the National Amateur Casting Association will be held at Anglers' Pool in Garfield Park, Chicago, Ill., on September 4, 5 and 6.

There will be eight events as follows:

Light Tackle Accuracy Fly (5¾ oz. rods).

Light Tackle Dry Fly Accuracy (5¾ oz. rods).

Light Tackle Distance Fly (5¾ oz. rods).

Salmon Fly.

Hobble Distance Fly (5¾ oz. rods).

One-quarter Ounce Accuracy Bait

One-half Ounce Accuracy Bait.
One-half Ounce Distance Bait.

The trophies to be awarded in each event will be:

Championship—Large Silver Cup.
Second Place—Gold Medal.
Third Place—Silver Medal.
Fourth Place—Bronze Medal.
Fifth Place—Gold Fly Trophy.
Sixth Place—Silver Fish Trophy.

There will be a handsome Bronze Cup trophy in each of the accuracy events (four in all) to be awarded to the new members. Full details will follow in the official program.

ENTRY FEES.

One Event—$1.00.
Two Events—$2.00.
Four Events—$3.00.
All Events—$5.00.

Chairmen of committees will kindly get in touch with the assistant secretary, H. Wheeler Perce, 901 Webster Building, 327 So. LaSalle street, Chicago, Ill., secure such data as has been decided on, call their committees together and get their various details into form.

The Garfield Park Anglers' Pool is, with its improvements, an ideal place for the National Tournament. Weather conditions will be provided for. The list of awards is alluring. The special trophies for new members only affords a fine chance for the less experienced members. The good fellowship is unrivaled and charming. The fun fast and furious. Reserve the dates surely and get into the finest National Tournament for Amateur Angler Sportsmen ever held.

DR. CHAS. F. BROWN,
Secretary.

TOURNAMENT RULES FOR BAIT, FLY AND SURF CASTING

REGULATIONS GOVERNING EQUIPMENT

Target.

Target shall consist of six concentric rings, placed twelve inches apart, measurement being taken from "center to center" of bars or strips constituting the rings. The inner ring shall be thirty (30) inches in diameter and shall have in its center a bull's-eye not over six (6) inches in diameter which shall project above water line not over six (6) inches.

As far as possible the target shall be so constructed that all of it except the six-inch bull's-eye shall float just below surface of water and rings shall be as narrow as possible across their tops.

Rings.

Rings for fly casting shall be thirty (30) inches in diameter with a bull's-eye in center not over four (4) inches in diameter. All shall project above water as little as possible in order to offer the least possible interference in retrieving fly.

Platform.

Surface of any casting platform or the level at any casting point, where event is cast on the water, shall not be more than eighteen (18) inches above the water line. In all events cast on the lawn, casting shall be done from ground level.

Distance Fly Measuring Line.

This may be either a series of floats strung on a line or a floating board, but must accurately indicate the points of distance in feet from the casting point on platform, beginning at eighty (80) feet and extending to at least one hundred and fifty (150) feet. Each five (5) feet shall have a distinguishing float or mark.

Casting Weights.

In all bait casting events the weights used shall be the official casting weights adopted by the N. A. S. A. C. In all tournaments they shall be given out to contestants immediately before the event and shall bear an easily discernible, distinguishing mark or color known only to the Tournament Committee up to the time of distribution.

Flies.

Flies shall conform to requirements and not exceed sizes specified. Those used in any event shall be uniform and either be furnished by the Tournament Committee or approved by the same.

Standard of Weights and Measurements.

All measurements shall be in feet and inches and all weights determined by avoirdupois weight on standard beam scales. Spring balance scales not permitted.

REGULATIONS GOVERNING EVENTS

Distance Fly.

Weight and length of rod unrestricted. Reel unrestricted. Line unrestricted, but same must not be knotted or weighted. Leader must be of single gut and not less than six feet in length. One fly only shall be used not larger than No. 10, with hook broken at the bend. Single handed, overhead casting.

Accuracy Fly.

Rod shall not exceed eleven and one-half feet in length, nor eight and one-half ounces in weight. Reel unrestricted. Line unrestricted, but same must not be knotted, weighted, or marked to indicate distances. Leader must be of single gut not less than six nor more than twelve feet in length. One fly only shall be used not larger than No. 4, with hook broken at the bend and on which the snell shall not exceed six inches in length. Single handed, overhead casting.

Each contestant shall be allowed ten minutes in which to cast for distance. He shall stand upon the platform and make his cast parallel with a buoy line or measuring board upon which shall be marked accurately the points of distance from the casting point on platform. The length of cast shall be measured from where buoy line is made fast, to the spot reached by the fly. Should any competitor whip off fly he shall replace it with another one. No cast shall count after Judges have notified the contestant that fly is missing until after fly is replaced. No time allowed for replacing flies or any other accident.

There shall be three 30-inch rings, distant 50, 55 and 60 feet from the casting point on platform. There shall be made five (5) casts at each ring. If the fly falls within the ring or on the rim of same the cast shall be considered perfect. For each foot or fraction of a foot outside the ring a demerit of one shall be made. The sum total of such demerits, divided by the number of casts, shall constitute the demerit per cent. The demerit per cent deducted from 100 shall be the percentage. Not more than one minute shall be allowed in which to extend the line to 50 foot ring and scoring to begin without extending the line to the other rings. When the contestant has extended his line and is ready, he shall call "score" and the next cast thereafter shall be counted. When five successive casts have been made at 50 foot ring, the Captain shall announce "next ring." Contestant must then lift his line, and if he so desires can make not to exceed five "dry casts" before dropping his fly at the 55-foot ring. A like procedure will be followed between 55 and 60-foot rings. Should contestant whip off his fly at any time after calling "score," he will be allowed to replace fly and proceed. For this purpose he may "work out" to point where fly was lost, call "score," and resume scoring at point where scoring stopped. The same procedure will be permitted if contestant's line is fouled. No cast shall count after Judges notify contestants that fly is lost. Line shall not be knotted or fastened to the reel at the 60-foot length. Casting shall be done from the reel set in place on rod. The line, for a length not exceeding five (5) feet, may be looped from the reel and held in the hand at any stage while contestant is casting.

Cast to score first time fly touches the water on any scoring cast from point so touched.

Distance Bait, ½ Ounce.

Rod unrestricted. Reel must be free running, without click, drag, brake, spring or abnormal device or adjustment which would tend to retard the movement of the spool. Line unrestricted. Weight to be the official half-ounce casting weight. Single-handed casting.

The casting in this event shall be done on the lawn in a V-shaped court, which is to be laid out as follows: From the casting point two diverging straight lines are to be laid out at an angle which shall cause them to be 30 feet apart at a distance of 100 feet away from the casting point. Diverging lines to be continued indefinitely at the same angle. Contestants each to make five (5) casts in turn, one cast at a time. Length of cast to be computed from casting point to where weight falls, *inside of court.* The sum total of the five casts in feet, divided by the number of casts shall be the average and constitute the score of the contestant. If casting weight falls outside the court, the cast shall be scored 0. Should the weight fall inside the court and bound out, the cast shall be scored from where the weight first fell.

If line parts after casting weight has left the starting position at tip of rod the cast shall be scored 0. If line breaks while starting the cast and before casting weight has left its starting position con-

testant shall have the privilege of another cast.

If contestant casts with click or drag it shall constitute a "foul" and contestant must cast again to score.

Casting shall be done from casting point or in line therewith at right angles to the center line of court. If contestant oversteps the casting point or line in making a cast and before casting weight falls to the ground, there shall be deducted from the length of such cast one (1) foot for each foot or fraction of a foot so overstepped.

The longest single cast *in court* shall be made a matter of record. If impossible to secure a suitable and accessible lawn for this event it may be cast on the water provided adequate provisions are made to assure accurate measurements.

Accuracy Bait, ½ Ounce.

Rod unrestricted. Reel must be free running without click, drag, brake, spring or abnormal device or adjustment which would tend to retard the movement of the spool. Line unrestricted. Weight to be the official half ounce casting weight. Single handed casting.

The regulation target is to be used in this event. It will have a "perfect" center, thirty (30) inches in diameter and be so arranged that it can be located at distances of 60, 70, 80, 90 and 100 feet from casting point on platform to exact center of bull's-eye. There shall be made three casts at the target at each of the distances, viz., fifteen casts in all. If casting weight falls within the 30-inch center, the cast shall be considered perfect. For each foot or fraction of a foot away from the 30-inch center a demerit of one shall be made. The sum total of such demerits, divided by the number of casts, shall be the demerit per cent. The demerit per cent, deducted from 100, shall constitute the percentage. One cast shall be made by each contestant in turn at 60 feet and likewise consecutively at 70, 80, 90 and 100 feet, then reversing same order, from 100 feet back to 60 feet, then again, same as first five casts, from 60 feet out to 100 feet. If weight strikes any ring of target, cast scores as though just inside of said ring. In case contestant casts with drag or click or if line breaks before weight touches the water at end of cast it shall constitute a "foul" and contestant must cast again to score.

Accuracy Bait, ¼ Ounce.

Conditions, methods, rules, scoring and target in this event shall be exactly similar to those of the Accuracy Bait ½ ounce Event, except that weight used shall be the official quarter ounce casting weight and the distances of the target from casting point on platform shall be 60, 65, 70, 75 and 80 feet to exact center of bull's-eye.

Light Tackle Distance Fly.

Rod shall not exceed eleven and one-half feet in length, nor five ounces in weight, but an allowance of ¾ ounce will be made for solid reel seat of metal (aluminum excepted), rubber, bone, ivory or celluloid, furnished with usual metal bands, socket, etc., or in case of an independent handle, providing such handle and butt joint of the rod are each made with the usual metal ferrule and the rod, exclusive of the handle, is made in three pieces joined by metal ferrules.

This allowance will not apply for both these conditions in one rod. In no case shall the rod exceed 5¼ ounces in weight. Reel unrestricted. Line unrestricted, but same must not be knotted or weighted. Leader must be of single gut and not less than six feet long. One fly only shall be used, not larger than No. 10, with hook broken at the bend. Single handed, overhead casting. Other conditions, methods, reels, scoring, measuring, etc., in this event shall be exactly similar to those of Distance Fly Event.

Salmon Fly Casting.

Rod shall not exceed fifteen feet in length; weight unrestricted. Reel unrestricted. Line unrestricted. A gut leader must be used not less than six feet in length nor more than two feet longer than the rod. This leader may be either single, double or treble, separately or in combination, and the fly used in connection therewith must not be smaller than one inch from bend of hook to end of shank. Two-handed overhead casting.

Each contestant shall be allowed ten minutes in which to cast for distance. He shall stand upon the platform and make his cast parallel with a buoy line or measuring board upon which shall be marked accurately the points of distance from the casting point on platform. The length of cast shall be measured from where the buoy line is made fast, to the spot reached by the fly. Should any competitor whip off fly he shall replace it with another one. No cast shall count after judges have notified the contestant that fly is missing until after fly is replaced. No time allowed for replacing flies or any other accident.

Distance Bait, ½ Ounce.

Conditions, methods, rules, scoring and court in this event shall be exactly similar to those of the distance bait ½ Ounce Event except that weight used shall be the official quarter ounce casting weight.

Surf Casting.

Rod unrestricted. Line must sustain ten (10) pounds dead weight. Reel must be free running without click, drag, brake, spring or abnormal device or adjustment which would tend to retard the movement of the spool. Weight to be the official two and one-half ounce casting weight; two-handed casting; any style delivery, except sling movement around head, permitted.

Court to be laid out "V" shaped as follows:

From casting point two (2) diverging lines are to be laid out at an angle which shall cause them to be sixty feet apart, at a distance of 200 feet from the casting point, diverging lines to be continued indefinitely at the same angle. Contestants each to make five (5) casts in turn, one cast at a time—length of cast to be computed from casting point to where weight falls *inside of court.*

The sum total of the five (5) casts, in feet, divide by the number of casts, shall be the average and constitute the score of the contestant. If casting weight falls outside of the court, the cast shall be scored "O." Should the weight fall inside the court and bound out, the cast shall be scored from where the weight first fell. If weight falls on boundary line, it shall be counted as inside.

If line parts after casting weight has left its starting position at tip of rod, the cast shall be scored "O." If line breaks while starting the cast and before casting weight has left its starting position, contestant shall have the privilege of another cast.

If contestant casts with click or drag, it shall constitute a "foul" and contestant must cast again to score.

Casting shall be done from casting point or in line therewith at right angles to the center line of court. If contestant oversteps the casting point or line in making *a* cast and before casting weight falls to the ground, there shall be deducted from the length of such cast one (1) foot for each foot or fraction of a foot so overstepped.

The longest single cast *in court* shall be made a matter of record.

THE MASKINONGE AS A LOVER

If that ancient classic, the "Halieutica" of Oppianus, in which occurs so much about the loves of fishes, had been written eighteen or nineteen centuries later, there would certainly have been added a good chapter upon that monster of Canadian fresh waters, the maskinonge. It is not clear that the species furnish particularly bright illustrations of parental love. The fierce combative protection of the young black bass by the parents of both sexes is probably almost unique amongst American inland fishes. At any rate, proof has yet to be furnished of any but the most gluttonous solicitude for its young, on the part of adult maskinonge. The gregarious loves of white fish, and of such others as are found traveling in families or shoals, are very unlike those of the big luce who abhors crowds of all kinds. It is as a connubial lover, a gallant monogamist of the strictest order that the maskinonge shines.

BIG PIKE FAITHFUL UNTO DEATH.

About the flats near the mouth of the Chateauguay River in Lake St. Louis, is a noted feeding ground for maskinonge. An angler trolling about the islands there was greatly puzzled as he managed a powerful strike, by the great and irregular splashing upon the surface in spite of the heavy, steady strain upon the line. Nor was it until he had pulled the 50-pound captive into sight that he realized that the churning of the water was the result of the sympathetic leaping over and about it of a second fish, which maintained a close companionship with its mate throughout its lusty but unavailing struggle against its fate.

Otto Walker, the winner, getting the checkered flag at the finish

Harley-Davidson Wins

International Grand Prize Race

300 Miles at 76-3/10ths Miles an Hour

WHEN the Harley-Davidson won 1st, 2nd, 4th, 5th, 6th and 7th in the International 300 Mile Grand Prize Race at Dodge City, Kansas, the crowd shouted their approval.

But when it became known that all six Harley-Davidsons finishing in the first seven places had broken the former World's Record, the crowd realized that they had witnessed the most stupendous victory in the history of motor driven vehicles. The pace was terrific, 80 miles an hour much of the time.

One after another of the 19 competing machines of other makes were put out of the running, until, before the race was finished every make but the Harley-Davidson had one or more of its entries eliminated and some had lost all. Such was the grind, yet every Harley-Davidson entered finished.

That the Harley-Davidson won this race so decisively as well as finishing 1st and 2nd in the other four big long distance races held this year is conclusive proof of the consistent speed and reliability of the stock Harley-Davidson.

Ask your Harley-Davidson dealer for a demonstration or send for catalog today.

HARLEY-DAVIDSON MOTOR COMPANY

Producers of High-Grade Motorcycles for Fourteen Years

437 B Street, MILWAUKEE, WIS., U. S. A.

When indeed the beaten fish came up to the top of the water, with its distended jaws and heaving sides, the other swam closely alongside until within a dozen feet of the boat, when the fisherman opened fire upon it with his revolver.

Even piscine gallantry was not proof against a discharge of bullets, and when the third shot struck close alongside, there was a farewell flourish of a broad tail above water and then the exhausted mate was left to die alone. Within fifteen minutes of the landing of the captive the angler was fast to the other fish and after a surprisingly short fight drew it alongside, fired into its head and pulled it in. It weighed 43 pounds, which was within three-quarters of a pound of the weight of its mate.

A French-Canadian professional fisherman who is a successful killer of these giant fish and who finds a twelve-bore shotgun furnishes the best quietus to a half-killed fish, has on two occasions secured the too confiding mate of the hooked maskinonge. On one memorable day when a 20-pound fish was, after long struggling, drawn into shallow water, in order that a spear might be brought into action, a maskinonge jumped right into the boat and was secured. The lucky fishermen were perfectly amazed, however, when they found that their obliging jumper was not their captive, which was still on the hooks, but was its bold and devoted mate.

Quarrels and duels which are of frightful intensity are not at all uncommon in the watery worlds wherein these fish live and move. Scars of battles about the head and sides, disfigured fins and tails, torn jaws, on pretty nearly every good-sized specimen caught, shows that conflicts on behalf of the other, it would be contradictory in this case to say fairer sex, are not peculiar to dwellers upon the land.

Eat the Beaten Foe.

As is the case also with many of the wild things on land, from bears to mice, the passions of the maskinonge carry him beyond the death of his opponent. After a prodigious fight near the surface of Lake Pernichangon ending in the slaughter of a three-foot-long fish, the victor was seen to vanish for a minute or so, and when next caught sight of, was tearing and ravenously feeding upon the dead body, his mate, possibly the cause of the encounter, sedately munching away alongside of him. Probably if the other had been victorious, she would have been escorted by him to a somewhat similar banquet, and would have partaken of it just as heartily.

One sentimentally inclined angler noticed two fish dart upon his bait, as he began to let it out, one of which dealt it a violent blow with his snout and sent it spinning right out of the water. The observer reported it as a proof of the careful affection of a more experienced maskinonge hurling the dangerous temptation out of the reach of his beloved companion. As a simple matter of fact it was nothing more than an exhibition of the regular habit of such fish in securing a moving prey, which is often done by striking it on the side, to partly paralyze it, in order that its spiny dorsal fin may be lowered, and its body absorbed end on at leisure. Many a fish is securely hooked on the upper part of the mouth, from delivering its blow too near the advancing business end of a spoon bait.

But it is the case that the female fish is often taken first, which may, perhaps, be taken to prove that her consort is accustomed to give the lady the first chance of a meal, when he has prepared the material by knocking it into semi-insensibility.

Generally Travel in Pairs.

The fisherman soon discovers that if after battling with, killing, and taking one of these monsters he has nerve enough left to put out his bait again, he is pretty certain to find the fellow to his prize not very far away, and ready for the fray. Most men, however, are rather worn out with excitement and hard work by the time the maskinonge is safely on board, and experience the single desire to get home as speedily as possible to exhibit the mighty catch. Even though left lamenting for the present, the bereaved fish does not long remain in single blessedness, but works off its widowed grief as soon as possible by battling with some other male for the possession of his mate, for it is seldom, at least in these waters, that the maskinonge is discovered in a solitary condition.

Evidently the grim old warriors possess wonderful faculties for loving, and believe in developing them most strenuously.—*Courtesy Montreal Daily Star.*

ST. LOUIS FLY AND BAIT CASTING CLUB TOURNAMENT

The St. Louis Fly and Bait Casting Club held a tournament, Sunday, June 27th, in Forest Park. The following scores were made:

½-oz. accuracy bait scores per cent. Won by Hellman.

Ashton	97.8
Hellman	97.9
Hebard	96.3
Mardorf	95.7
Schloeman	97.6
Steinmesch	95.4
Wimmer	96.

½-oz. distance bait scores in feet, average 5 casts. Won by Ashton.

Ashton	128.2
Mardorf	82.4
Schloeman	91.1
Steinmesch	11.
Wimmer	89.
Fleming	25.2
Hellman	122.

½-oz. accuracy bait fishing tackle scores per cent. Won by Steinmesch.

Ashton	95.4
Brennan	95.2
Hellman	94.3
Mardorf	92.4
Schloeman	95.6
Steinmesch	97.3
Wimmer	96.5
Fisse	91.3

½-oz. distance bait fishing tackle, scores in feet, average 5 casts. Won by Wimmer.

Ashton	110.3
Brennan	89.1
Mardorf	67.2
Schloeman	95.4
Steinmesch	115.4
Wimmer	119.4

Fly distance scores in feet. Won by Hellman.

Ashton	82.
Brennan	100.
Fleming	74.
Steinmesch	64.

Fly accuracy scores per cent. Won by Fleming.

Ashton	97.9
Brennan	97.8
Hellman	98.11
Fleming	98.13
Mardorf	95.9
Steinmesch	97.10

H. J. Steinmesch, Sec'y.

STEELHEAD AND RAINBOW TROUT

Field & Stream Pub. Co.:

You will probably remember that I wrote you some time ago expressing my desire to enter your fishing contest and asked you if you classed the steelhead and rainbow as the same fish. Your reply was that you did not and you offered no prize for steelhead trout, on account of the small field for steelhead. Not agreeing with you myself, personally, I sent your letter to W. L. Finley, State Game Warden of Oregon, and asked him to make a decision. I am enclosing his answer. I do not wish to be dictatorial in the matter at all, but just want to convince myself who is right in the matter. I have been a reader of Field and Stream for a number of years, and being an enthusiastic fisherman, naturally I am desirous of entering your contest. I trust you will look at this in the manner of a good sport, as I do, and I thank you in advance for your courtesy. Lewis Ulrich.

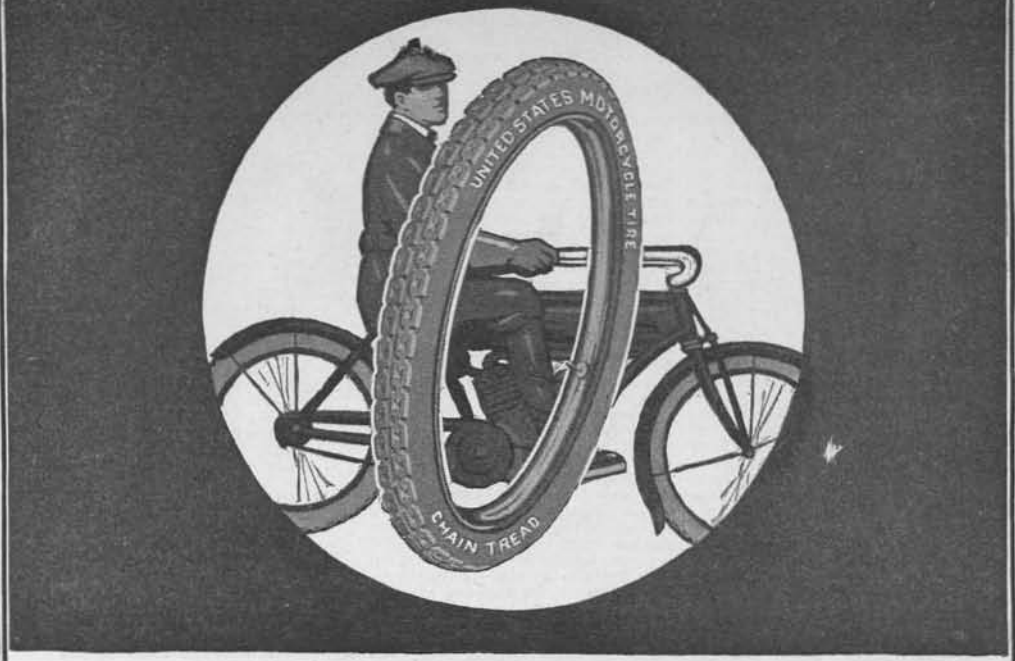
Mr. Lewis Ulrich,
Jacksonville, Oregon.

Dear Sir:—

Your letter of May 17th has not been answered because I have been out of the city. You have sent me a letter from Field and Stream in regard to Steelhead and Rainbow Trout. I cannot agree with them, as I would call them practically the same fish. Scientifically they are considered identical. The Steelhead is called such because it goes to salt water for a while, while the typical Rainbow is accustomed to stay in fresh water. However, in many cases no one can tell by an examination of the two side by side, which is the Steelhead and which is the Rainbow. Of course it is easy enough to distinguish what we call steelheads when they come in the mouth of the Columbia during the winter time. On the other hand, when the fish are caught in the Rogue River during the summer-time I think the Steelhead and Rainbow are identical.

Very truly yours,
William L. Finley,
State Game Warden.

Ans.—We thank Mr. Ulrich and State Game Warden Finley for the above information, and from now on will enter the steelhead and rainbow trout in the same class in our Prize Fishing Contest.—Ed.



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Field&Stream PRIZE FISHING CONTEST

MY PRIZE BLUE FROM NO-MAN'S LAND

By Edward M. Slocum, New Bedford, Mass.

Winner Second Prize, Bluefish, 1914 Contest.

Bang, whirr, zip! "Hold on, Hand, I've got another one and gee, he's a beaut—er will be if I ever bring him to gaff. Whoa, whoa, easy, old boy. All right, Go it."

The cause of the customary idiotic remarks was a tiger of the waters of the Atlantic that had fastened to a small eel which I had cast into the briny between the South Shore of Martha's Vineyard and Noman's Land. They were directed to William H. Hand, designer of the famous Hand V-Bottom boats, whose guest I was on one of the best fishing trips I have been on in recent years.

Eventually, after one of the tearing fights such as only a bluefish can offer, he was brought up to the side of the boat where Captain William Head slipped the steel gaff under him and it was all over—14 pounds, 6 ounces of still fighting fish flapped in the bottom of the boat.

So much for the second prize fish. Our efforts to get him into the boat provided enough fun to satisfy the ordinary man for a whole day, but the fact that he was only one of 23 bluefish and a 12-pound striped bass makes the story of the entire trip of more interest, perhaps, than just the story of the catch of the second prize. In passing, it might be said that half of the others gave the prize fish a good run for his money, for none was under 10 pounds and several were around 14.

We had received word that big fish were breaking on the back side of Martha's Vineyard. It was about time for striped bass to be on the run southward, so we supposed it was a school of them sporting themselves for a final feed in these waters. Fishermen can well understand how long it took us to throw our duds together, jump into a machine and run over to Westport Point where Mr. Hand's V Bottom cruiser was moored.

There we met Captain Head, discussed weather, grub, bait, etc., and got off that night. A quick run across Buzzard's Bay and Vineyard Sound and we reached Menemsha Bight, a little fishermen's haven about three miles east of Gay Head. We tied up by the side of a schooner whose crew had just come in from a day's mackerel fishing. That decided our supper. The fried mackerel and hot rolls alone were worth the trip. We were still eight miles from the fishing grounds, and we wanted to be there by daylight, so we declined with thanks the invitation to "sit in" at a little game aboard the schooner.

Ten minutes later, so it seemed, Captain Head gave us the "All hands on deck." A hearty breakfast and we were off! All the other fishermen were on the move, too, and long before the sun's first rays started to sneak over the eastern rim of the sky, we were under way. Once clear of the lobster-pot buoys, we struck a 20 mile clip around Devil's Bridge to the southwest point of Martha's Vineyard known locally as Squibnocket. From the point easterly down the shore are scattering rocks over which the southwest swells curl and lash, making it an ideal place for striped bass.

But as luck would have it, everything was wrong for good bass fishing. It was almost dead calm, and the sea lacked even the customary roll, but we were there and had to make the best of it. Rods had already been rigged so when we struck what looked like a good spot, we anchored the large boat and started in-shore in the small V-bottom surf boat we use as a tender.

Mr. Hand, who, by the way, is a naval architect, when he isn't fishing, sat on a seat facing aft with the writer on the forward thwart. Captain Head at the oars made up the party, and we were off, come what might.

We were using eels about 12 inches long, hooked through the head, the point of the hook entering underneath the under jaw and being brought up between the eyes. Those who intend to use this bait

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Look for that name when you next purchase shaving soap. Whether you prefer Stick, Powder or Cream you get your favorite method in Colgate's—and at its best. There is over a century of soap-making experience behind these shaving soaps—in each one there is the standard Colgate Quality. And the name Colgate on toilet articles corresponds to "Sterling" on silver.

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of the lather with the fingers is necessary with Colgate's—the softening, abundant lather rises freely under the brush as you work it up on the face —you get a quick, cool, comfortable shave and no smart or burn afterward.

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and have never attempted to get a live eel on a hook will find a piece of coarse burlap handy as a hold on, otherwise the feat will be accomplished only after resort to expressive outbursts—profane or otherwise.

The first eel had hardly struck the water, when bang! zip!! Tug!!! That was all—an empty hook. Right away we knew it was a bluefish. We changed our tackle, putting on double hook eel tail, but it was the live bait they wanted, and not a strike resulted from the bait prepared purposely for them. I changed back to the old rig and had no sooner cast than there was another strike and another missing eel. That proved it was live bait that they wanted. Several eels were snapped up this way, leaving only the head on the hook. Finally, we rigged up a new hook, with a 15-inch chain attached and a needle to thread part way through the eel so that the hook was only a short distance from the tail.

The bait looked good, and, what's more, worked well. We started in-shore again with Hand casting on one side and myself on the other. Right away, there were two more yanks and this time we had 'em. In this section the bluefish is known as the tiger of the sea. Other sections lay claim to the title for the game fish familiar to their shores, but I will match a 10 pound blue against anything his weight most any time. I have caught striped bass and tuna that weigh several times what our blues did, but in no case have they put up the rugged, vicious battle such as these fellows handed us. We took three out of the school after changing our hooks, and then they let up. We were just about ready to change when Hand landed a 12 pound bass. With him safe in the boat and no further signs of either blues or bass, we started for Noman's Land, about 4 miles southwest of Martha's Vineyard.

On our way over, we sighted several finback whales, and by way of varying our trip took a crack at them with a .30-30, but the lead failed to even sting the brutes, for they gave no sign of even being in a hurry to get out of our range.

Off Noman's Land conditions were still against bass fishing so we decided to stick to the blues, and rigged up several baits. We started in and as soon as we did, the fish showed their appreciation of live bait. Time and time again, Hand and I were both fast with furiously fighting fish. Finally, I hooked to and landed the one which proved to be the second largest fish reported to the editor of Field and Stream.

Tired of being forced to arrange new live baits for every other cast, we tried eel skins again, but neither these nor eel tails gave any results. Even the bright tuna bait that we had used with good results at Block Island failed and in order to get the strikes, we were forced to hustle around and keep our live eel tackle stock ahead, as it was seldom that the bait was good after two of the savage jaws had clamped down on it.

We were catching our fish within a radius of 100 yards, only a short distance off-shore and in about 12 or 15 feet of water, although for a space of over a mile, it seemed as if the water were alive with them. With 23 handsome bluefish and one striped bass in our boat, we were just trying to convice ourselves that we had had enough for one day, when a school of porpoises came in sight. Porpoises and blues mix about as well as milk and vinegar, and with hardly a break or sign of swirl, our friends of the afternoon vanished almost in a flash, putting an end to the best day's fishing that I had had that summer.

Prize Contest Certificate Record—Second Prize—Bluefish, 1914—Prize Fishing Contest.
Weight—14 lbs. 6 oz.
Length—35 inches.
Girth—16½ inches.
Caught—Sept. 22, 1914.
Where caught—Noman's Land Island, Mass.
Rod—Home made, bamboo.
Reel—Abbey and Imbrie.
Line—18 thread Sagamore.
Lure—Live eel.

A WINNING BASS FROM THE GOVERNMENT DAM

By Amos Z. Hunt, Washington, D. C.

Winner First Prize, Small-Mouth Bass, Class A, 1914 Contest.

On June 7th, having that hankering to wet a line that all fishermen feel so keenly at the opening of the season, I packed my grip and rods, and hied me to Trammel's fishing camp and fisherman's hotel, one mile above the Great Falls of the Potomac River and approximately fifteen miles northwest of Washington, D. C.

The Potomac River from this point for nearly a hundred miles up, is famous for its small-mouth black bass, and is haunted by the sportsmen of Washington and vicinity from May 30 until ice comes in the fall.

One mile above Great Falls (which is one of the show-places of Washington, and visited by nearly all of the tourists and visitors to the National Capital) is the Government Dam that furnishes the water to the conduit that supplies the District of Columbia and City of Washington with water. This dam was my objective point, as it is indeed a poor season that I am unable to land at least a hundred black bass during the months of June and July while wading on the dam.

Arriving at the camp, I found that fishermen were so numerous that the supply of mad toms (a dwarf species of catfish and favorite live bait on the upper Potomac) had been exhausted, so I dug some angle-worms, put on a No. 3-0 Kirby hook, and started to catch chubs for bait. The first one I caught was about eight inches in length and, as the barb of the hook projected well through its lower jaw, I did not consider it necessary to change hooks, so I started walking along on the dam, trolling my bait. I had not traveled a hundred feet when I got a strike, and knew by the feel that it was a big one. The fish circled for a moment, stopped, and then started away from the dam, for the rocky rapids below, so I struck immediately, as it is almost impossible to handle a heavy fish if he gets into the rapids.

For the next twenty minutes I was the busiest man in the United States. I have handled many big bass from 2½ to 3¾ pounds, and have had them travel a shade faster, but never have I had as hard a fight to land a fish before. Being all alone I had to handle my landing net myself, had to lead the fish to a spot where the drop was not longer than the handle of landing net, which I carry when wading, suspended from a snap-hook on my belt. Finally I reached the spot on the dam where it was either a case of get the fish or lose him, kneeled in the water, unsnapped my net, put it under my knee, and prepared for the final struggle. Three times I reeled him in and reached for him with net, and each time the fish on seeing the net would jump and break away in spite of all I could do. The next time I threw my pole behind my head in order to get additional leverage, and the pole bent until the tip struck the hand holding it, but I could not reach the fish with the net. Then I had to take the line in my hand, shove the pole in my belt and bring him in hand over hand until within netting distance, and at that stage was where I was afraid the line might break, as there was nothing to give slack in case the fish jumped. Luck was with me, and at the first stroke of the net I got him.

The fish was thoroughly exhausted, so was the fisherman, and as I was afraid to trust such a prize to my stringer, I waded ashore with one hand shoved down his mouth and fingers in gills and landing net held under him, put the fish in the live box at a spring to revive him, and also took something to revive myself.

I returned to the dam and caught a dozen more bass that day, none over 1¾ pounds in weight.

While in the live box 40 or 50 fishermen viewed, handled, weighed, and measured the bass, and without exception pronounced it the largest they had ever seen.

Upon returning to Washington that evening, I took the fish to the sporting editor of the Washington *Post*, who personally weighed and measured it, and agreed to substantiate my claim to any prize offered for the largest fish. His figures were: Weight, 6½ lbs.; length, 22½ inches.

The next morning the fish was weighed in the presence of witnesses on scales inspected by the Sealer of Weights and Measures in the District of Columbia, and after laying on ice all night weighed 6 pounds 5½ ounces.

The pole used was a Kingfisher split-bamboo, 8½ feet long. It had recently been re-wrapped by Mr. George Nichols, manager of the Washington Saengerbund, whose hobby is making fish poles, and to show my appreciation of his excellent work, I made him a present of the first fish I caught with it, which was the prize winner.

The reel used was a Shakespeare Tournament, aluminum, and

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the line a No. 66 Kingfisher. Total weight of rod, reel and line, 12 ounces.

Prize Contest Certificate Record —First Prize—Small-Mouth Bass, Class A, 1914 Prize Fishing Contest.
Weight—6 lbs. 5½ ozs.
Length—22½ in.
Girth—16½ in.
Caught—June 7, 1914.
Where Caught—Government Dam, Potomac River.
Rod—Kingfisher, split bamboo.
Reel—Shakespeare Tournament.
Line—Kingfisher silk, No. 66.
Lure—Live chub.

MY TEMAGAMI LAKE TROUT

By J. A. Ferguson, Pittsburgh, Pa.

Winner Second Prize, Lake Trout, 1914 Contest

The members of our party were Arthur, Perry and Jim, and upon our arrival at Temagami Inn, we were joined by Fred and his wife.

After a survey of the conditions, we decided to take Peter Pappin along as our guide and protector, to chance the uncertainties of these deep and treacherous waters of Lake Temagami.

After buying our provisions from the alert and accommodating manager, Harold Parker, of the Temagami Inn store, we attached our two-horsepower portable motor to the stern of a skiff, loading our tents and provisions in two canoes, which were towed in tandem.

All seven, including Frank Lavallay, who was Fred's guide, started the search which resulted in catching the second largest lake trout of the season. We roamed from point to point, first trying the waters of the southwest arm, where Arthur succeeded in landing the largest bass, and Perry a number of small lake trout.

Our luck not being satisfactory in these waters, Perry, the champion fisherman of former years, suggested we try his favorite fishing hole back of Seal Island, where he, in 1912, landed a 28-pound trout. We all made sport of his suggestion on account of the rough waters at this point and the difficulties of landing a big fish, but we finally consented to go.

In this old fishing hole of Perry's, about 1:30 p.m., August 5, 1914, when the waves were dashing their sauciest, with Peter Pappin at the paddle and myself holding a Bristol steel rod, the dark deed was done. It was here I thought the bottom of the lake was being raised to its surface when Pete yelled with all the characteristics of his Indian nature, "Hold to your rod and give him the line."

I then awoke to the fact that it was the beginning of a battle between the wits of man and the trickery of a large fish.

First I thought my reel would be set on fire from the friction caused by the rapidity with which the copper wire was reeled off.

Then the fear and possibility of the fish's escape dawned upon me, and I could feel myself verging upon a fainting condition, being caused by the extreme taxation of my strength.

After an exciting battle and getting trounced around for about fifty minutes, there was an upheaval in the water's surface and then emerged the second largest prize of the season.

A few more reels and Pete had the fish by the gills and hauled it over the side of the canoe. He immediately jumped astraddle of it to secure its captivity.

After the struggle was over the hooks were examined and, to our surprise, taken from the huge jaw without the assistance of the disgorger, as the lip had become so torn and so enlarged that the least slacking in the line would have permitted the hook dropping from the fish's mouth, and the greatest disappointment of my life would have been experienced.

With our prize Pete and I paddled back to the camp, and the pranks of schoolboys had nothing on the celebration of this lucky catch.

Prize Contest Certificate Record —Second Prize, Lake Trout, 1914 Prize Fishing Contest.
Weight—25 lbs.
Length—40 in.
Girth—22 in.
Caught—August 5, 1914.
Where Caught—Temagami Lake, Ontario.
Rod—Bristol.
Reel—Hendrix.
Line—Copper wire.
Lure—Ottertail.

HE LIKES US

Field & Stream Pub. Co.:

Your "up to the minute magazine" is received regularly each month and the more issues I receive the better I like it. I am thinking of taking out a life membership. Every issue, after I have read it, is passed on to some friend, for I believe in passing a "good thing" along. The only way I can see for you to make it more popular is to issue it twice each month, which would give us out-of-door fellows more hunting and fishing trips with the good fellows who take them and then write the articles so we at home can cock our feet up near the fire on wintry nights and be out with them. Here is hoping that Field & Stream will continue to be issued long after I am dead and gone and that my children will then enjoy it as much as I do now.

J. E. Endey.

PHOTOGRAPHIC CONTEST

Field and Stream offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submited. The prizes for next month will be: First Prize—Three years' subscription to Field and Stream. Second Prize—Two years' subscription to Field and Stream. Third Prize —One year's subscription to Field and Stream. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, Field and Stream, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO

Made by Edwin D. Miner, Jr. No. 1 Eastman Kodak. Stop 6. Flashlight. Subject—Young Buck in the Velvet.

SECOND PRIZE PHOTO

Made by Max Wilde. 3A Eastman Kodak. Stop 8. Weather cloudy. Subject—Mountain Ewe.

THIRD PRIZE PHOTO

Made by Rev. Benjamin F. Root. Eastman 5x7 camera. Goerz Dagor lens. Stop F-6. Cloudy day. Subject—Flicker Drinking.

No Guess Work With These Sights

Equip your rifle with Marble's Sights before you go on your next hunting trip. Then you'll bag the game you go after. There's no guesswork with Marble's Sights. They are used the world over by amateurs, professionals and military men and are recognized as the **standard of quality.** If your sights bear the Marble trade-mark, you can count on **absolute accuracy.**

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has jumped into instant popularity because it helps the average shooter's marksmanship wonderfully. Embodies a new principle but it "brings home the bacon." Notice the illustration. The aperture front sight when used with peep rear sight gives a telescopic effect. You look **directly at the object** and shoot **right where** you aim. No guess work, no aiming low, no holding over. You see the game and draw a true bead instantly, whereas with a bead front sight which partly covers game or target, you must "guess" how much to "hold over" depending upon distance. Get a V-M sight for your rifle now and see how much better you can shoot. **Price $1.50** at your dealer's or direct by mail postpaid if your dealer can't supply you. Remember you **must** use peep rear sight with the V-M. Open sight will not do.

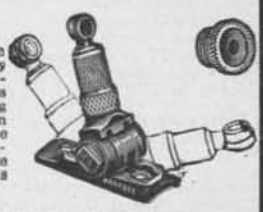
Marble's Simplex Rear Sight

(For .22 Calibre Rifles Only)

A splendid sight for target and small game shooting. Stem can be quickly set in any position by raising the lock to a horizontal position and moving stem up or down as desired. Lock holds stem rigid at any elevation. Stem can be folded and locked down. Price, with 2 discs with different apertures, $1.50.

Marble's Flexible Rear Sight

One of the sights that have made the name Marble famous. Used by thousands and thousands of sportsmen—its friends are legion. Stem is not rigid, but is held by a strong spring in base. Does not break when struck. Spring permits sight to give and instantly brings it back to correct shooting position. This is the **perfect** rear sight to use with Marble's V-M front sight. **Price $3.00.**



TRADE MARBLE'S MARK RIFLE SIGHTS

meet every shooter's every need. The few numbers here illustrated are but a small part of the wide variety we make. Before you buy sights of any kind write for special folder showing entire Marble line.

Marble's Reversible Front Sight

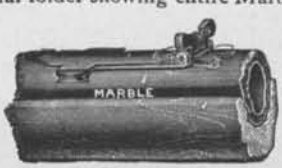
Has two beads — one ivory, one gold. Sight can be instantly reversed, so that shooter can have ivory or gold as light requires. Choice of 1/16, 3/32 or ⅛" bead. **Price $1.50.**

Marble's Improved Front Sight

Gives the shooter a long look ahead. Makes accurate shots possible at any range without stopping to adjust rear sight. Object aimed at can be seen over or under bead. Ideal sight for snap shooting. **Price $1.00.**

King Triple Bead Front Sight

Has three separate and distinct beads—ivory, gold and black. Bead holder revolves, so that shooter can have whichever color is best for each particular shot. **Price $1.50.**



ACTUAL SIZE OF NOTCH PIECE

Marble's Adjustable Leaf Sight

Can be used alone or in conjunction with peep rear sight, folding down leaf of Adjustable when peep is being used. Marble's Adjustable has two different size notches as shown above. **Price $1.00.**

Coarse Bead Folded

Coarse Bead Up

Marble's Duplex Front Sight

Gives shooter choice of fine or coarse bead as circumstances require. Fine bead is 1/16-in. gold, coarse bead is ⅛-in. white enamel. When fine bead is being used, coarse bead folds down flat as shown. **Price $1.50.**

Marble's Standard Front Sight

A high grade, dependable sight for all sporting rifles. Choice of ivory or gold bead in 1/16, 3/32 or ⅛-in. **Price $1.00.**

Ask Your Dealer for Marble's Rifle Sights. Any sight shown will be sent prepaid upon receipt of price, if not at your dealer's. State make, model and calibre of rifle when ordering. All Marble goods sold with money back guarantee.

Write for Catalog showing full line of sights, Marble's Game-Getter Gun and sixty specialties for sportsmen. Sample Nitro-Solvent Gun Oil Free if you mention dealer's name when writing.

MARBLE ARMS & MFG. CO., 525 Delta Ave., Gladstone, Mich.

SPORTSMAN'S WORKSHOP

BUILDING A SPLIT BAMBOO FLY ROD

George Parker Holden, M.D.

PART VI.

All rod-windings are finally terminated by an "invisible" knot-ending. This is a trick of winding the end under the final turns in order to hide it and keep the winding from unwrapping. Of different methods, the most ingenious known to the author is for the winder, after deciding under how many coils he wishes to bury the terminal end, to throw those coils loosely around the joint upon *beginning the winding;* there is no end to cut until all is finished and pulled taut, and no silk is wasted. Referring to Fig. 6 below, suppose that it is desired to start at A and

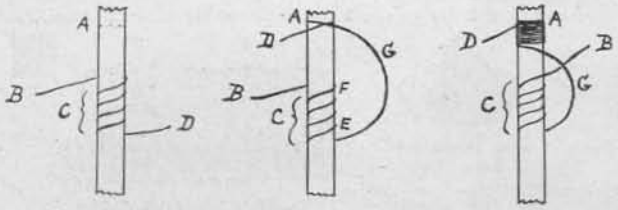


Fig. 6 Fig. 7 Fig. 8

INVISIBLE KNOT ENDING

to wind toward the reader. B is the spool-end of the silk, C indicates four loose coils, and D is the loose end of silk. The first step is to catch the end D under the first turn, as shown in Fig. 7. You can now wind ahead, holding the silk at G and rotating the joint to the left, as far as you like. As the F end of the loose coils is renewed from the spool as fast as the E end unwinds, these coils are carried right along through the whole wrapping. When ready to end the winding, passing the spool end of the silk, B, under the winding-thread end, G, catch it as shown in Fig. 8. Continue the winding for four more turns, to dispose of the four loose coils; pull the end B taut; cut it, and your winding is finished.

A hexagonal pencil and piece of ordinary wrapping twine are good materials with which to practise these windings and endings.

When making solid windings, press all the coils firmly together with some suitable instrument, as the edge of a paper-cutter; and, when completed, and before varnishing, rub them smooth with the rounding handle of a toothbrush.

We are assuming now that the underlying diamond winding is in place, that a preliminary coat of varnish has been applied and is dry, and that all ferrules have been serrated and are cemented in position. We have yet to bind on the line guides and to put on the ferrule whippings. This is done with solid or close-laid circular windings, and they constitute *all of the individual windings of this character that are needed on joints that have been previously wound as we have described.*

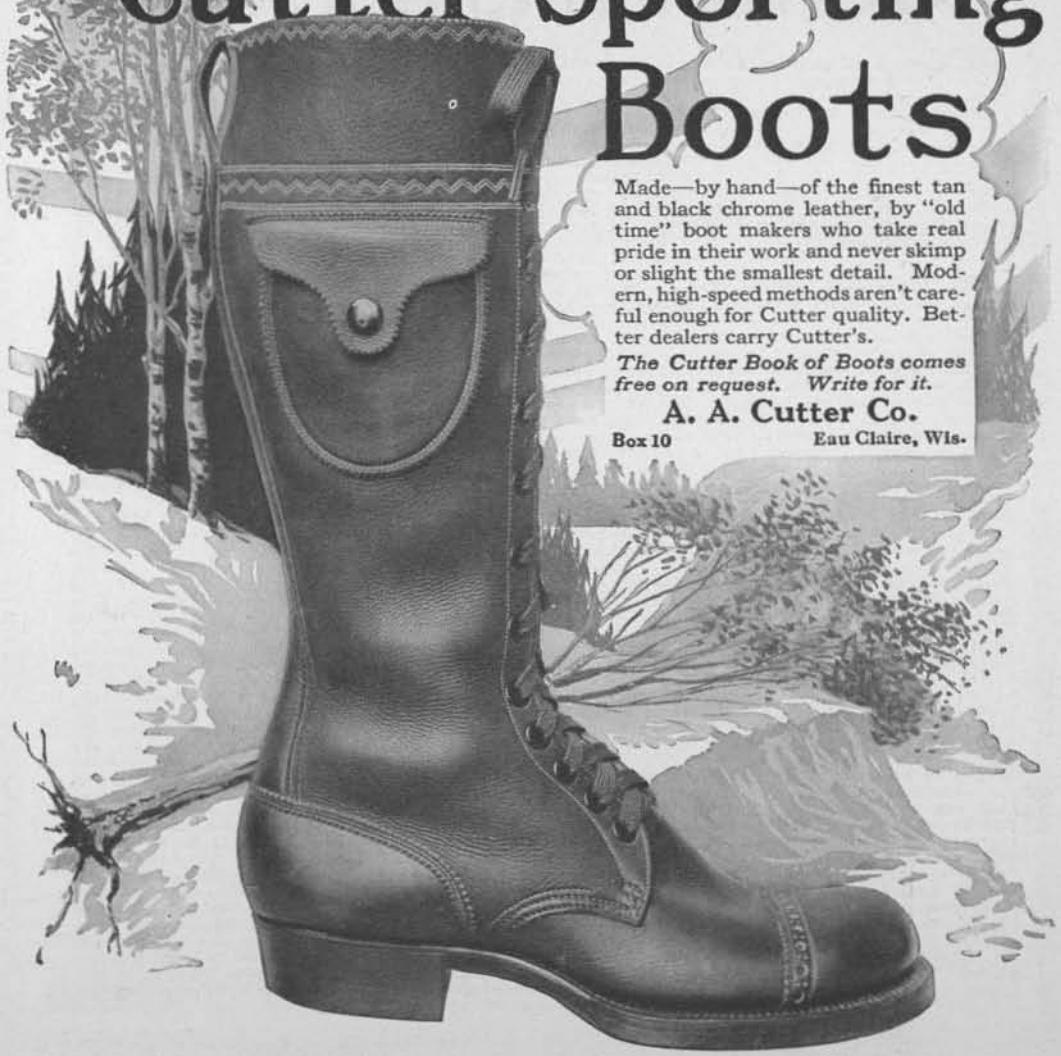
Naturally, we must first determine how many guides we shall use and just where they shall be located; also whether these outside, solid windings shall be of the same color as the others, or of a contrasting color. For the author's taste, no other color scheme appeals like all-green windings or green touched off with a little black. Let us suppose that we have agreed upon the latter, and that we are at present at work on the ten-foot fly rod. Our winding plan would be as shown in the accompanying illustration, Fig. 1, the figures indicating distances in inches from guide-center to guide-center, when the rod is assembled. The darker windings are the black silk, and these beginning with the last one of the three bands grouped at the rod-butt, which are a scant one eighth of an inch wide, should gradually diminish in width all the way to the rod's tip, where the band is composed of only four or five turns of the silk.

The two bands shown at the tip serve to identify this top joint as the duplicate one; on the other, we put a single band. It is often a convenience to be able thus to distinguish them.

Some further detail is called for concerning the guide and ferrule-windings, and reference to the diagram will aid materially in understanding this. Before starting to wind on a guide at the end of a joint, or to wrap a ferrule, we remove that part of the first, or diamond, whipping corresponding to the space A-B (Fig. 2), beyond the band A, because this bit of solid winding is somewhat *lumpy,* due to the crossing of threads that was necessitated in applying the first, continuous whipping. All guides are wound on solid, and the winding at the ferrules covers in the serrated ends *up to and lapping the solid metal of the ferrule,* at E, to prevent access of water or dampness at that end of the ferrule; and from A to E the winding consists of *three sections.* It is started at D—the point on the rod joint where the shank of the guide joins its standing part—carried to B, when the guide is placed in position and its proximal or inner shank, from B to A, covered in, and ended with its last coil close up against the band at

TOUGH and trail-proof as a moosehide moccasin—and much easier on "civilized feet." Heavy enough to stand the stab of snags and the rasp of rocky roads—but not stiff enough to chafe or tire you. Water shedding, too—in Cutter Boots properly cared for, you can slosh all day through swamp or snow, yet come to camp dry footed. What more can you ask of footgear, you who hunt or hike, heeding the Red Gods' call?

Cutter Sporting Boots



Made—by hand—of the finest tan and black chrome leather, by "old time" boot makers who take real pride in their work and never skimp or slight the smallest detail. Modern, high-speed methods aren't careful enough for Cutter quality. Better dealers carry Cutter's.

The Cutter Book of Boots comes free on request. Write for it.

A. A. Cutter Co.

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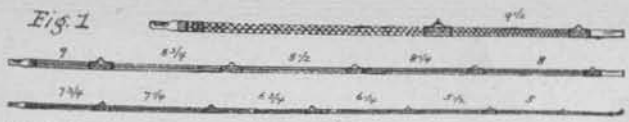


WINDING LAYOUT

A. The other, distal or outer shank of the guide, C, overlaps the ferrule tooth that lies on the flat side of the rod to which the guide is attached, the ends of both this shank of the guide and the ferrule teeth having previously been filed down thin with the little saw-file. The whipping is completed by the wholly independent section represented by D-E, starting at D; thus *this section alone need be removed for the purpose of re-cementing a loosened ferrule,* and the guide is not disturbed from its position.

Before securing any guides to the rod, it is most important that it should have been experimentally jointed up with different flat surfaces of its respective sections in alignment, in order to determine what arrangement gives the best results. And when this has been done, you should mark the guide surfaces of each joint for identification. However carefully you have endeavored to center the ferrules on the joints, you will proba-

GUIDE AND FERRULE WHIPPING

bly be surprised to find that when the rod is jointed up in a certain way there will be produced a quite decided angular deflection at least of one of the junctions, but which a slight rotation of a joint will correct. With due regard to this point, you should try also to have any joint which may show a slight long bend, extending through its whole length, so placed that the flat side most identified with the convexity shall be the down or guide side when the rod is held in position of use, with reel underneath, for the fly-rod. In other words, the guides should line up when the rod-sections are jointed, in the best possible position, with relation to rotation, looking to the true alignment of the whole rod.

GUIDES

For both bottom and tip guides, at least—points of greatest line friction—we should select appropriate agate guides; and good artificial or imitation agate guides, that are much superior to the ordinary kind, may be obtained at a reduction in the cost. For the other guides, on the fly-rod, you want a standing form of guides known as "snake" guides, and these to be of bronzed steel and not of German silver, which is quickly grooved by the friction of the line. These may be purchased for ten cents per dozen. Reference to the previous illustration, "Winding Layout," will show that the fly-rod has twelve of these snake guides, and from butt to tip we use them in this order in the following sizes: 5, 4, 3, 3, 2, 2, 1, 1-0, 2-0, 2-0, 3 0, 3-0. For the bottom guide on the fly rod the author uses the light "Tournament" agate guide, which is catalogued as size No. 10, and costing thirty-five cents (there is a smaller size, No. 9); and for the agate tip guide, a tubular form, 5-64 inch in diameter (No. 17), which costs thirty cents. Another neat device is an agate angle tip guide made to wind on instead of to be cemented.

(To be continued)

POSSIBILITIES OF THE FIELD AND STREAM ROD

FIELD & STREAM PUB. CO.:

I received your Heddon Dowagiac premium and I must say it beats my expectation. I have refitted and rewound the rod and here's a description:

To begin with, I started with the handle. This I rasped and wound with a piece of ordinary braided fishing line which was saturated with glue to insure adhesion to the rod. This, when dried, was given two coats of waterproof paint and allowed to dry. I then stripped the rod of all its wrappings, scraped the varnish off and then dissolved the finer particles from the fibers with a little denatured alcohol. After the rod had stood awhile it was given a coat of linseed oil which stayed on an hour. It was rubbed off well with a muslin rag and was then ready for the wrapping.

Then I took a good grade of the heaviest white silk thread to be had and wrapped the rod from the reel seat check to the tip. After completing the under-wrapping I took a rag saturated with a light spar varnish and rubbed the rod from end to end and allowed to dry for two or three hours. Then came the colored wrappings, from the reel seat check to the ferrule. I placed wrappings at each original place and between each original by measurements. These wrappings were about a quarter of an inch wide and gradually reduced. The wrappings were given a coat of shellac (white) which was almost immediately wiped off. The white shellac soaks into the silk and dries, allowing the wrapping to retain its brilliant shade. The guides come next. In replacing the guides I put in two extras, one just below the ferrule on the butt piece and the other on the tip. The top guide on the tip was placed about four to six inches below the casting tip-top and the other two placed according to an even distribution of the strain. The offset casting top and first guide are of agate, the others are of German silver. To finish the rod I took a fine camel's hair brush and Dowagiac rod varnish and put on a very thin coat. This was allowed to dry all day. This coat was followed by two others, each being allowed to dry all day and then the job was done.

SANDFORD PURVIANCE.

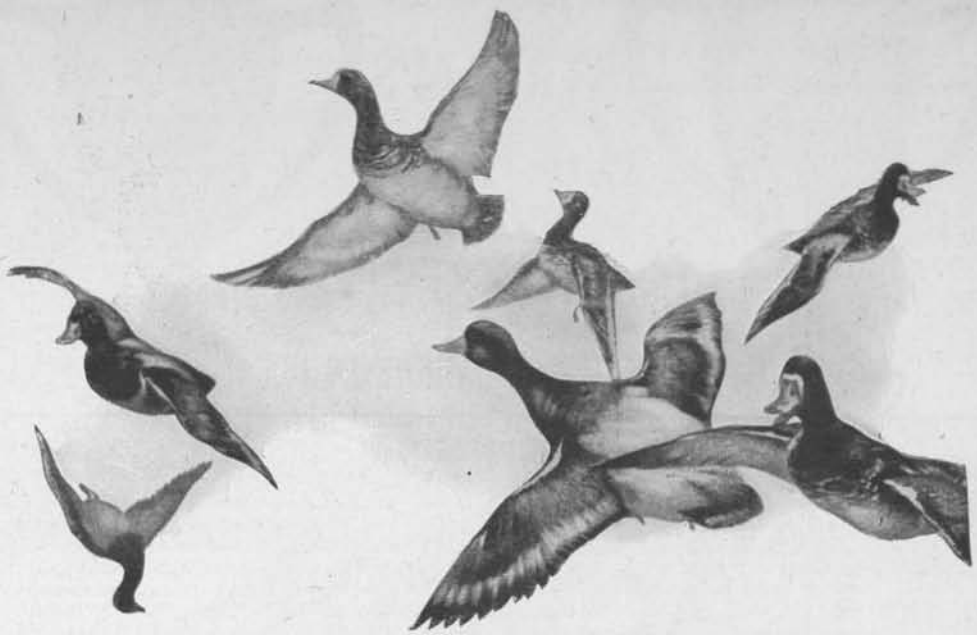
THE LIFTING POWER OF SHEARS

By Warren H. Miller

Woodsmen are often called on to lift, alone and unassisted, weights far beyond their personal strength. It may be a larger deer, a moose, a boat, or a log, and the weight may run anywhere from 400 to 1,400 lbs., yet with a pair of shears, the help of a bent sapling, a tripod of poles—and the all-essential bit of rope, the resourceful woodsman does the job alone and unaided.

Most of us are familiar with the woodsman's dodge of calling in the aid of a bent sapling and a forked pole to lift a deer or small bear. The sapling being bent to the ground and attached by belt or rope to the hind legs of the animal, the springiness of the sapling, plus the man's strength, with the crotched pole to afford him a breathing spell and hold up all gained, will do the trick and lift your buck as high as Haman. I have lifted two 200-pound haunches of elk in a similar manner; a pole was sharpened to a spud at one end, shoved through the gambrel joint of the haunch, and the upper end of the pole lodged some nine feet up the trunk of a spruce where a husky root jutted out. The other end of the pole was then led against a tree trunk, the lower branch having been lopped to stubs, and, foot by foot the pole was raised. When it got shoulder high, the tree trunk was cleaned smooth of branches and a crotched pole brought into play, shoving the cross pole up the trunk until both hams hung level and about eight feet off the ground.

The dodge of raising a moose by three long poles lashed into a tripod over the moose's hind legs and then moving one leg at a time inward until the whole tripod stood up like a teepee frame is well-known to most men in the north woods. I once moved a twenty-foot motorboat alone and unaided for sixty feet and launched it in the lake with no other aid than a pair of shears set up over the boat. The shears leant backward and the tackle passed around the boat went over the crotch in the shears. Pulling forward on the rope the shears simply *had* to come over and the lifting force they exerted was many times the pull on the rope, enough in fact to pick up that boat bodily and move her forwards about a yard. Moving the feet of the shears forward until the top again leant back over the tackle I worked the same trick with another gain towards the launching spot. A good trick if you have to move a big log alone down to the lake edge some time to make a raft of. Also to move a grounded rowboat or force a motorboat off the shoals.



"As Pretty A 'Double' As Ever You Saw"

It certainly is ***some*** satisfaction when the flock whirls over—you swing up your old twenty-gauge—and two of them crumple up to one of those pretty "doubles" that turn the youngster next you green with envy!

They come down with a "Smack! Smack!" that makes your heart glad—your little spaniel wriggles overboard and fetches them in with what looks like a "Good shot, old man!" smile wrapped around the bird!

Ducks and geese are preparing for the southern migration. Prairie chicken and quail also offer good sport. Soon the season will be opening in the famous old upland game country—Wisconsin, Minnesota and the Dakotas, along the line of the

Chicago Milwaukee & St. Paul Railway

Advance whispers from "up north" tell of unusually fine sport in store this season. So get out the old twenty-gauge and oil 'er up and give the young setter pup his last licking into shape, for the time is at hand!

The Chicago, Milwaukee & St. Paul Railway offers frequent trains from the Union Passenger Station, Chicago, and an excellence of service that will appeal to the sportsman and discriminating traveler.

GEORGE B. HAYNES
General Passenger Agent
Chicago

FIELD AND STREAM'S Fifth National PRIZE FISHING CONTEST FOR THE RECORD FISH CAUGHT IN 1915

CONDITIONS

First—The fish must be caught with rods and reels as specified,* and in legal season.

Second—The fish must be weighed on tested scales and measured with a tape measure, length to be taken from end of lower jaw with mouth closed, to tip of tail.

Third—The affidavit blank printed on the last page of this announcement, or an exact copy, must be used in applying for a prize and signed by the man who caught the fish, together with two witnesses, and sworn to before a Notary Public and his seal affixed. In case any contestant catches a fish when accompanied by a single guide, the affidavit as signed upon coming out of the woods by himself and guide before a Notary Public stating the circumstances will be duly considered.

Fourth—The weight, length and girth, date, place, and manufacturer's name and full specifications, if possible, of the rod, reel, line and lure (or bait) used in taking the fish must be stated.

Fifth—The winners in each class must send us a short account of how, when and where the fish was taken, and what tackle was used in catching the fish. The account to be published in **Field and Stream.** These accounts will not be asked for until the prizes have been awarded.

Sixth—All affidavits must be sent to the Editor of the Prize Fishing Contest, **Field and Stream,** 331 Fourth Avenue, New York. All affidavits in classes designated by A, B, and C, must be in our hands within 5 days from closing date of class. **In all other classes affidavits must be in within 15 days from closing date.**

Seventh—No fish caught from State or private hatchery will be allowed in this contest.

Eighth—In the Pike and Wall-eyed Pike Classes an outline drawing of the fish must be sent in with affidavit, drawing to be made by placing fish on side on large piece of paper and drawing an outline of fish with pencil on the paper with fins of fish all erect.

Ninth—In event of two fish weighing and measuring exactly the same number of pounds, ounces and fractions, duplicate prizes will be awarded in each case.

The Judges of this contest will be: Robert H. Davis, Editor *Munsey's;* Will H. Dilg, Chicago, Ill.; W. H. Miller, Editor, FIELD AND STREAM; E. F. Warner, Publisher, FIELD AND STREAM; E. M. Gill, Camp Fire Club; W. P. Corbett, Charles Frederick Holder.

In Tarpon Class length of fish is only measurement required. It is not necessary to give weight or girth.

* Where no special kind of tackle is specified, any tackle is allowable, provided it consists of rod, reel, line and lure.

Be sure to get a photograph of yourself with fish, if possible

FRESH WATER GAME FISH

BROOK TROUT (Salvelinus fontinalis)

CLASS A—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between opening of season and July 31st

FIRST PRIZE: One Dirigo Trout Fly Rod, length and weight to suit winner, made by F. E. Thomas, value $15.00; also one No. 200 Cream City Tackle Box, made by Geuder, Paeschke & Frey, **value** $3.50. **Total value $18.50.**

SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one No. 29 Bristol Fly Rod, made by Horton Mfg. Co., value $6.50. **Total value $16.50.**

THIRD PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and one Frostco Hydrostatic line, 50 yards, made by H. J. Frost & Co., value $3.75. **Total value $11.75.**

You Can Still Get Bass

One year of war. One year of strain, anxiety, plugging. Forget it, old pal. You can't go through another year like that without "cracking," unless you take a week or two and get out from under the load. Throw off everything! Relieve the tension! Take a couple of "BRISTOL"* Steel Fishing Rods and go off with another congenial soul or two and fish. You can still get bass—it's the finest season for them. Also, some salmon left.

Look out or you will get to that point where you're so tired that you will not have enough gumption left to make yourself take a vacation and rest. Don't put this matter off so long that your mind keeps working in a circle all the time chewing over the same old troubles. Long concentration; even people's names all gone. That stage is dangerous to health and your job. Break away now.

If you don't know where to go, we'll tell you—and what tackle to take.

Write for Free Catalogue

*Winners of fifteen prizes for the largest bass in the Field & Stream National Fishing Contest for 1914.

THE HORTON MFG. COMPANY

81 Horton Street - - - BRISTOL, CONN.

FOURTH PRIZE: One Pigskin Leather Cooper Fly Book, made by Cooper Fly Book Co., value **$6.00**; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $8.00.**

CLASS B—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between July 31st and October 31st

FIRST PRIZE: One Junior Reflex Camera, made by Reflex Camera Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**
SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50; and one Justrite No. 95 Camper's Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $15.50.**
THIRD PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one Persian Alligator Cooper Fly Book, made by Cooper Fly Book Co., value $4.50. **Total value $12.50.**
FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

GRAND PRIZE—For largest Brook Trout caught during season 1915 with Fly: Oil Painting of Brook Trout by H. A. Driscole—Value $75.00

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

RAINBOW TROUT (Salmo irideus)

GRAND PRIZES—For Rainbow Trout caught between April 1st and October 15th

FIRST PRIZE: One 9½-foot, 5¾-ounce Fly Rod, made by Edward F. Payne. **Value $25.00.**
SECOND PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one Kelso Quick-apart Quadruple Reel (80 yard), made by H. J. Frost & Co., value $8.50. **Total value $18.50.**
THIRD PRIZE: One 80-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.50; also one Three Years' Subscription to FIELD AND STREAM, value $4.50. **Total value $12.00.**
FOURTH PRIZE: One Russian Leather Cooper Fly Book, made by Cooper Fly Book Co., value $4.50; also one Frostco Combination Steel Rod, 9½ feet long, made by H. J. Frost & Co., value $3.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.70.**

SPECIAL HONOR PRIZES—For Rainbow Trout Caught with Fly on Fly Tackle

FIRST PRIZE: One VesTong Hunting and Fishing Coat, made by VesTong Mfg. Co., value $7.00; also one VesTong Hunting and Fishing Pants, made by VesTong Mfg. Co., value $5.50; and one 60-yard jeweled Worth Reel, made by Enterprise Mfg. Co., value $7.00. **Total value $19.50.**
SECOND PRIZE: One Pfleuger Redifor Anti Back Lash Reel, made by Enterprise Mfg. Co., value $7.50; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $11.00.**
LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates.

BROWN TROUT

GRAND PRIZES ONLY—For Brown Trout caught casting a FLY with Fly Fishing Tackle, between April 15th and October 1st, 1915

FIRST PRIZE: One Vernley Fly Rod, made by Horrocks-Ibbotson Co., value $15.00; also a two years' subscription to FIELD AND STREAM, value $3.00. **Total value $18.00.**
SECOND PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one selection of A. F. Meisselbach & Bros. to value of $10.00. **Total value $15.00.**
THIRD PRIZE: Selection from catalog of Schoverling, Daly & Gales to value of $10.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $12.50.**
FOURTH PRIZE: One Martin Automatic Reel, made by Martin Automatic Reel Co., value $5.00; also one Eagle Folding Net and Leather Carrying Case, made by Eagle Folding Net Co., value $3.50. **Total value $8.50.**

LAKE TROUT—TOGUE (Christivomer namaycush)

GRAND PRIZES ONLY—For Lake Trout caught between April 1st and October 1st

FIRST PRIZE: One No. 1 5x7 Film Premo Camera, made by Rochester Optical Co., value $16.00; also one selection from catalog of Abbey & Imbrie, to value of $5.00. **Total value $21.00.**
SECOND PRIZE: One Ecruette Sportsman's Style Compac Tent, made by Compac Tent Co., value $11.50; also a three years' subscription to FIELD AND STREAM, value $4.50. **Total value $15.00.**
THIRD PRIZE: One selection from catalog of A. F. Meisselbach & Bros., to value of $10.00; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50. **Total value $12.50.**
FOURTH PRIZE: One selection from catalog of Abbey & Imbrie to value of $5.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.20.**

LANDLOCKED SALMON, OR OUNANICHE

GRAND PRIZES ONLY—For Landlocked Salmon caught from April 1st to Oct. 1st

FIRST PRIZE: One Pneumatic Mattress selected from catalog to value of $22.00, made by Pneumatic Mfg. Co.
SECOND PRIZE: One Remington Model 12A .22 caliber repeating rifle, made by Remington Arms-U. M. C. Cartridge Co., value $10.50; also one Utica Automatic Reel, made by Horrocks-Ibbotson Co., value $5.00. **Total value $15.50.**
THIRD PRIZE: One Kelso 50-Yard Automatic Reel, made by H. J. Frost & Co., value $5.00; also one three years' subscription to FIELD AND STREAM, value $4.50; and one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50. **Total value $11.00.**
FOURTH PRIZE: One Yawman & Erbe No. A Reel, made by Horrocks-Ibbotson Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

SMALL MOUTH BLACK BASS (Micropterus dolemieu)

CLASS A—For Small Mouth Bass caught between opening of season and July 15th.

FIRST PRIZE: One No. 33 Bristol Bait Casting Rod, made by Horton Mfg. Co., value $12.00; also one pair No. 210, 10-inch height, Hunting Boots, made by Mohawk Moccasin Co., value $6.00; and one selection from catalog of Abbey & Imbrie to value of $5. **Total value $23.00.**
SECOND PRIZE: Five Quick Change Bass Baits, made by Skvor & Co., value $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $18.75.**
THIRD PRIZE: One selection from catalog of James L. Donaly to value of $10.00; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one VesTong Automatic Cleaning Rod, for Shotguns, made by VesTong Mfg. Co., value 50c. **Total value $12.00.**
FOURTH PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co., value $6.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $8.00.**

This is the Hunter's Practice Month

The game season will soon be here. Prepare for it now. Make sure of a full bag. Be ready to drop your bird when the fun starts. Get out your gun. Go out to the gun club and true up your aim. Get your arms—your eyes—and your mind—in alignment. Practice makes perfect, and

TRAPSHOOTING

is perfect practice. Learn to hit the flying clays. Combine training, pleasure, recreation and sport. If a gun club's not handy, get a

DU PONT HAND TRAP

—a simple, practical, portable device that throws all kinds of targets from easy gliders to "birds" that tax the skill of an expert.

John D. Burnham

President of the American Game Protective and Propagation Assn.

says:

"The hand trap gives a shooter the kind of practice that he can get in no other way except on the birds themselves. I have seen some great improvement in field shooting in cover as a result of a moderate amount of hand trap practice."

$4.00 at your dealer's. Sent direct postpaid if he can't supply you:

Write for Booklet 55 S

Du Pont Powder Company Established 1802 **Wilmington, Del.**

CLASS B—For Small Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Detroit Refrigerator Grip for fish, in shape of traveling bag, made by Detroit Refrigerator Grip Co., value $15.00; also one South Bend Anti Back Lash Casting Reel, value $7.50; one $4.50 selection of Buck Tail Baits and Minnows, made by South Bend Bait Co., total value $12.00. **Total value $27.00.**

SECOND PRIZE: One selection from catalog of Hartung Brothers & Co., to value of $10.00; also Hildebrandt Spinners, made by J. J. Hildebrandt Co. to value of $10.00. **Total value $20.00.**

THIRD PRIZE: One selection from catalog of Abbey & Imbrie to value of $10.00; also one two-years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

FOURTH PRIZE: Four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co. **Value $9.00.**

CLASS C—For Small Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One of H. A. Driscole's Famous Bass Paintings. **Value $75.00.**

SECOND PRIZE: One Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $15.00; also one Tripart Reel, made by A. F. Meisselbach & Bros., value $3.00. **Total value $18.00.**

THIRD PRIZE: One Alaska Hunting Jacket, made by George F. Webber, value $5.00; also one selection from catalog of Buck Tail Baits, Spinner Hooks, Minnows and Spoons, made by South Bend Bait Co., value $7.50. **Total Value $12.50.**

FOURTH PRIZE: One pair 10-inch height Sporting Shoes, hand sewed, two buckles at top, full-length sole, made by M. L. Getchell Co., value $6.00; also one Frostco 120-Yard Reel, made by H. J. Frost & Co., value $3.00. **Total value $9.00.**

GRAND PRIZE—For largest Small Mouth Bass caught during season: One Aerothrust Twin Cylinder Rowboat Motor, gasoline or kerosene operated, made by Aerothrust Engine Co. Value $64.75.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One Maxim Silencer for .22 Rifle, made by Maxim Silencer Co., value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

SPECIAL HONOR PRIZES—For Small Mouth Bass caught on Fly with Fly Tackle

FIRST PRIZE: One Free Spool Takapart De Luxe Reel, made by A. F. Meisselbach & Bros. **Value $13.50.**

SECOND PRIZE: One Stockford Open Spool Casting Reel, made by Stockford Reel Co. **Value $6.00.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

NORTHERN DIVISION—North of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One Model 1912 .22 Caliber Savage Repeating Rifle, made by Savage Arms Co., value $12.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $17.00.**

THIRD PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $13.00.**

FOURTH PRIZE: One assortment 12 South Bend Minnow Baits, made by South Bend Bait Co., value $7.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

CLASS B—For Large Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Abercrombie Snow Tent, size 7x7, made by David T. Abercrombie Co. **Value $30.00.**

SECOND PRIZE: One pair Gitchee Gamee 15-inch Height Shoes, with strap and buckle at top, No. B 1175, made by Northern Shoe Co., value $10.00; also one assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00. **Total value $20.00.**

THIRD PRIZE: One No. 11 Bristol Bait Rod, agate tip and guides, reversible cork handle, made by Horton Mfg. Co., value $8.50; also one Ecruette Poncho, made by Compac Tent Co., value $4.80. **Total value $13.30.**

FOURTH PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

CLASS C—For Large Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One Columbia Phonograph, made by Columbia Graphophone Co. **Value $35.00.**

SECOND PRIZE: One selection from catalog of Moonlight Bait Co. to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $3.60; and one Style E Sextoblade Razor in leather case with soap and collapsible shaving brush, made by Edward Week & Son, value $5.00. **Total value $18.60.**

THIRD PRIZE: One selection from catalog of W. J. Jamison, to value of $10.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Thermos Sportsman's Kit, made by American Thermos Bottle Co., value $5.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75. **Total value $8.75.**

GRAND PRIZE—For Largest Large Mouth Bass caught between opening of season and October 31st: One Ferro Rowboat Motor, with Kingston Float Feed Carburetor, Bosch High Tension Reversible Magneto and Rudder, made by the Ferro Machine & Foundry Co., value $85.00.

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

SPECIAL JUVENILE PRIZE: One two-years' subscription to FIELD AND STREAM, value $3.00; also one Milburn Acetylene Hand Lamp, made by Alexander Milburn Co., value $1.75; and two cans Michigan Mosquito Dope made by R. C. Kruschke, value $1.20. **Total value $5.95.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

SOUTHERN DIVISION—South of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between January 1st and June 30th, inc.

FIRST PRIZE: One No. 33 Talbot Sapphire Jeweled Reel, made by Talbot Reel and Mfg. Co. **Value $28.50.**

SECOND PRIZE: One Meridan Model 15 .22 Caliber Repeating Rifle, made by Sears, Roebuck & Co., value $12.00; also one Jim Heddon Bait Casting Rod, made by James Heddon Sons, value $6.00. **Total value $18.00.**

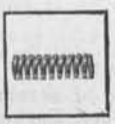
THIRD PRIZE: Selection of Heddon's Dowagiac Minnows, made by James Heddon Sons, value $4.50; also one Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $12.50.**

FOURTH PRIZE: One Camp Cot, made by the Gold Medal Camp Furniture Co., value $3.00; also one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00; and three "Chippewa" Bass Baits, 3½ inches, revolving spinner in body, made by C. J. Frost, value $2.55. **Total value $8.55.**

Gold Medal Gun of the Exposition

One-piece direct striking hammer

Rotary Bolt. Guaranteed never to shoot loose.



Unbreakable coil mainspring guaranteed forever.

AGAIN THE FOX reputation as "The Finest Gun in the World" has been justified, the Fox gun having just been awarded the Panama-Pacific Exposition Gold Medal for double-barrel shot guns.

This splendid tribute does not make the Fox gun any better; it is only because it is so much better that such a tribute is possible.

This award does not make the Fox any safer investment for the prospective buyer, for it has always been guaranteed for life any way, but this important, international, conclusive endorsement does make the Fox guarantee even more significant.

Every owner can feel additional pride in his Fox, and every one about to buy a gun can consider the Fox with unqualified confidence.

Throw a Fox to your shoulder! Feel its perfect balance! Cuddle the imported Circassian walnut stock against your cheek! Draw a bead on a target!

Admire the rich engraving—equal to the best of foreign work.

Then break her open. (A particularly short water table makes this a simple, easy operation.)

Inside you find the simplest lock mechanism ever put on a gun—and the quickest, too, bar none.

The Fox one-piece direct striking hammer works as quick as thought.

The coil mainspring is *guaranteed for life.*

The patented Rotary Bolt is guaranteed *never* to shoot loose.

A Fox grade for every taste.

From $25 to $1000

All the same Fox quality with the same Fox guarantee.

See the Fox at your dealer's, or write us direct for complete catalog, and any special information or assistance you desire. Write us today.

A. H. Fox Gun Company 4658 North 18th Street Philadelphia, Pa.

FOX GUN

CLASS B—For Large Mouth Bass caught between July 1st and Dec. 31st, inc.

FIRST PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $24.00.**

SECOND PRIZE: One Gillette Safety Razor set, made by Gillette Safety Razor Co., value $8.00; also one selection from catalog of Abbey & Imbrie to value of $10.00. **Total value $18.00.**

THIRD PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Meisselbach Automatic Reel, made by A. F. Meisselbach & Bros., value $3.50; and four Vacuum Baits in colors, made by Vacuum Bait Co., value $3.00. **Total value $11.50.**

FOURTH PRIZE: One Style E Sextoblade Razor in leather case with soap and collapsible brush, made by Edward Weck & Son, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

Maryland, Delaware, Virginia and West Virginia Division

For Large Mouth Black Bass Caught during the season within the State laws

FIRST PRIZE: One No. 3 Jeweled Meek Reel, made by B. F. Meek & Sons. **Value $32.00.**

SECOND PRIZE: One No. 041½ Moose Head Brand Knee-length Sporting Boots, made by John Palmer Co., value $10.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00; and four Vacuum Baits in colors made by Vacuum Bait Co., value $3.00. **Total value $18.00.**

THIRD PRIZE: One selection from catalog of Fred S. Sabey Co. to value of $12.00; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75; also one Abercrombie Frame Pack, made by David T. Abercrombie Co., value $4.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.20. **Total value $8.95.**

GRAND PRIZE—For largest Large Mouth Bass caught during season: One of H. A. Driscole's famous Bass Paintings—Value $75.00

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates. **Value $4.00.**

SPECIAL HONOR PRIZES—For Large Mouth Bass caught casting a FLY with Fly Fishing Tackle.

FIRST PRIZE: One Navajo Sweater Coat, made by Bradley Knitting Co., value $10.00; also 200 yards Hasting Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $15.00.**

SECOND PRIZE: One Duxbak Coat, either hunting or fishing model, made by Bird, Jones & Kenyon, value $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

GREAT NORTHERN PIKE (Esox Lucius) *(See Condition No. 8)*

GRAND PRIZES ONLY—For Pike caught between May 1st and October 31st, inc.

FIRST PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one pair 12-inch height Witch Elk Hunting Boots, made by Witchell-Sheill Co., value $10.00; and 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00. **Total value $25.00.**

SECOND PRIZE: One selection from catalog of W. J. Jamison to value of $10.00; also one Milburn Combination Campers' Table Lamp and Lantern, made by Alexander Milburn Co., value $6.00. **Total value $16.00.**

THIRD PRIZE: One assortment 22 South Bend Buck Tail Baits and Weedless Hooks, made by South Bend Bait Co., value $7.00; also one $5.00 set of Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $12.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; and one Milburn Acetylene Hand Lamp, made by Alexander Millburn Co., value $1.75. **Total value $8.75.**

MUSCALLONGE (Esox Nobilior)

GRAND PRIZES ONLY—For Muscallonge caught between May 1st and Oct. 31st, inc.

FIRST PRIZE: One 1915 Evinrude Row Boat Motor, with automatic reverse and waterproof built-in magneto, made by Evinrude Motor Co., value $80.00.

SECOND PRIZE: One assortment Keeling's Expert Minnows, made by Keeling Bait Co., value $10.00; also four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, made by Hastings Sporting Goods Co., value $9.00. **Total value $19.00.**

THIRD PRIZE: One Abercrombie Cook Outfit, made by David T. Abercrombie Co., value $10.00; also three "Chippewa" Muscallonge Baits, 5 inches, with revolving spinner in body, made by C. J. Frost, value $3.00. **Total value $13.00.**

FOURTH PRIZE: One three-years' subscription to FIELD AND STREAM, value $4.50; also one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; and three "Chippewa" Skipper Swimming and Jumping Baits, made by C. J. Frost, value $2.25. **Total value $8.75.**

LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates.

WALL EYED PIKE—PIKE PERCH *(See Condition No. 8)*

GRAND PRIZES ONLY—For Wall-eyed Pike caught from May 1st to October 31st

FIRST PRIZE: One Joymotor Outboard Motor, with reversing propeller and high tension magneto, made by Joy Engineering Co. Value $75.00.

SECOND PRIZE: One selection from the catalog of James L. Donaly to value of $10.00; also 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $5.00; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $17.50.**

THIRD PRIZE: One $5.00 set of Spoon Baits, made by S. E. Knowles Co., value $5.00; also one selection of Heddon's Dowagiac Minnows, made by James Heddon & Sons, value $4.50; and three "Chippewa" Pike Baits, 4-inch body, made by C. J. Frost, value $2.70. **Total value $12.20.**

FOURTH PRIZE: One Takapart Reel, made by A. F. Meisselbach & Bros., value $4.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00; and one Justrite No. 95 Campers' Lamp, made by Justrite Mfg. Co., value $2.00; one year's sub. to FIELD AND STREAM. **Total value $9.50.**

SALT WATER GAME FISH

BLUEFISH (Pometomus Saltatrix)

GRAND PRIZES ONLY—For Bluefish caught between May 1st and October 31st

FIRST PRIZE: One Comfort Sleeping Pocket, made by Metropolitan Air Goods Co. **Value $25.00.**

SECOND PRIZE: One Neptune Reel, made by A. F. Meisselbach & Bros., value $10.00; also one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $15.00.**

THIRD PRIZE: One Interchangeable Lens Lamp, Style 2, made by R. C. Kruschke, value $7.00; also one three-years' subscription to FIELD AND STREAM, value $4.50. **Total value $11.50.**

FOURTH PRIZE: One Ingersoll Wrist Watch, made by Robert H. Ingersoll & Bro., value $2.50; also one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50; and one selection from catalog of Abbey & Imbrie to value of $5.00. **Total value $9.00.**

Real Bargains in Guns

YOUR TWICE-A-YEAR OPPORTUNITY
to obtain a good gun or rifle at fractional cost from the Iver Johnson Sporting Goods Co.

As sporting-goods headquarters for New England we accumulate hundreds of used guns taken in exchange and many that are slightly shopworn. Every six months we must clear out this stock by radical price reductions.

Included are some very fine high-powered sporting rifles and made-to-order trap guns of exceptional quality. Look over the list carefully. Every gun has been put in splendid condition.

DOUBLE HAMMERLESS GUNS	Cost	Now
Greener—F., .12-30, 7 lbs.	$135.00	$100.00
W. & C. Scott—Monte Carlo, .12-30,	160.00	100.00
Tolly—.12-30, 7 lbs. 2 oz., auto. ej., P. G. stock	325.00	100.00
Daly—No. 135, .12-30, 6 lbs. 8 ozs.	135.00	100.00
Parker—G. H., .12-30, 7 lbs. 4 oz.	60.00	35.00
Parker—C. H., .12-30, 7 lbs. 10 oz.	93.75	75.00
L. C. Smith—3 E., .20-28, 6 lbs. 4 oz., auto. ej., S. T.	115.00	65.00
L. C. Smith—2 E., .12-30, 7 lbs. 12 oz., auto. ej., S. T.	100.00	75.00
L. C. Smith—Spec., .12-32, 8 lbs., auto. ej., S. T.	107.00	75.00
A. H. Fox—D. E., .12-32, 7 lbs. 12 oz., auto. ej	152.00	90.00
Remington—K. E. D., .16-26, 6 lbs. 12 oz., auto. ej	40.00	30.00
Remington—A. E. D., .12-30, 7 lbs.	40.00	22.00
Remington—A., .10-32, 9 lbs. 8 oz.	35.00	25.00
Claborough—.12-30, 7 lbs. 4 oz.	75.00	35.00
Baker-Batavia—Leader, .12-30	21.50	15.00
Ithaca—1 S., .12-30, 7 lbs.	22.00	15.00
Ithaca—1 S., .20-26, 5 lbs. 8 oz.	22.50	17.00
Ithaca—1 S., .20-28, 5 lbs. 8 oz.	22.50	17.00
W. & C. Scott—Imp. Prem., .12-30, 7 lbs. 8 oz., auto. ej	800.00	300.00
W. & C. Scott—Monte Carlo, .12-30, 7 lbs. 4 oz.	160.00	75.00
Sauer—No. 20, .12-26, 6 lbs.	93.75	75.00
Parker—D. H., .12-30, 7 lbs. 10 oz.	75.00	45.00
Parker—G. H., .12-30, 7 lbs. 8 oz.	60.00	35.00
Parker—Trojan, .12-28, 7 lbs. 8 oz.	27.50	22.00
L. C. Smith—2 E., .12-30, 7 lbs. 3 oz., auto. ej	75.00	55.00
L. C. Smith—2 E., .12-30, 7 lbs. 12 oz., auto. ej	96.00	45.00
A. H. Fox—D. E., .12-30, 7 lbs. 10 oz., auto. ej	152.00	90.00
Remington—A., .12-28, 6 lbs. 8 oz.	35.00	28.00
Remington—K., .16-28, 6 lbs. 12 oz.	25.00	20.00
L. C. Smith—2, .10-32, 9 lbs.	64.00	45.00
L. C. Smith—00E., .12-30, 8 lbs.	35.00	20.00
Syracuse—.12-30, 8 lbs. 1 oz., auto. ej.	50.00	25.00
Ithaca—Field, .12-30, 7 lbs. 6 oz.	19.50	13.00
Ithaca—Krupp, .20-26, 5 lbs. 10 oz.	25.00	20.00
Ithaca—1 S., .28-26, 5 lbs. 4 oz., S. T.	37.00	25.00

RIFLES	Cost	Now
Winchester '86, .45-70 T. D., fancy, 22 rd. bbl., ⅓ mag.	$42.40	$25.00
Winchester '86, .33 T. D., 24 rd. bbl.	24.00	17.00
Winchester '86, .45-70 T. D., fancy, 22 rd. bbl., ⅓ mag.	38.40	26.00
Winchester '86, .33 T. D., 24 rd. bbl.	24.00	20.00
Winchester '86, .45-90 S. F., 26 oct.	16.60	7.00
Winchester '86, .40-65 S. F., 26 oct.	20.00	10.00
Winchester '86, .38-56 S. F., 26 rd. bbl.	15.60	10.00
Winchester '95, .30 U. S., S. F., 28 rd. bbl.	27.50	16.00
Winchester '95, .30 U. S., S. F., 28 rd. bbl.	24.00	15.00
Winchester '95, .38-72 S. F., 24 rd. bbl.	24.00	16.00
Winchester '95, .405 T. D., 24 rd. bbl.	29.00	20.00
Winchester '95, .35 S. F., 24 rd. bbl.	24.00	18.00
Winchester '95, .35 S. F., fancy	41.00	20.00
Winchester '95, .30 U. S., S. F., 24 rd. bbl.	24.00	15.00
Winchester '95, .405 T. D., 24 rd. bbl.	33.00	18.00
Winchester '95, .303 British carbine.	24.00	14.00
Winchester '95, .30 U. S., S. F.	24.50	17.00
Winchester '94, .38-55 T. D., fancy.	33.00	22.00
Winchester '94, .32 Spec., S. F., 26 rd.	22.00	15.00
Winchester '94, .32 Spec., S. F., 26 oct.	16.50	12.00
Winchester '94, .32-40 T. D., 26 oct.	17.89	15.00
Winchester '94, .32-40 T. D., 24 rd.	19.75	13.00
Winchester '92, .38-40 S. F., carbine.	11.81	9.00
Winchester '92, .38-40 T. D., 24 oct.	17.89	12.00
Savage '99, .22 H. P., T. D.	25.00	18.00
Savage '99, .303 T. D., 20 rd. bbl.	25.00	20.00
Savage '99, .30-30 S. F., 26 oct.	19.50	14.00
Savage '99, .303 S. F., fancy, 20 rd.	105.00	40.00
Marlin '93, .30-30 T. D., 26 oct. bbl.	19.50	13.00
Marlin '95, .33 S. F., 22 rd.	25.00	14.00
Remington Auto., 8A, .25-35 T. D.	27.50	20.00
J. P. Sauer Double Rifle, .405, weight 10 lbs., 30-in. bbl	300.00	150.00
Savage '99, .303 S. F., 20 in.	22.50	18.00
Savage '99, .30-30 T. D., 20 rd.	31.00	21.00
Marlin '93, .32-40 T. D., fancy, 26 oct.	24.00	16.00
Marlin '93, .25-36 T. D., 26 oct. bbl.	19.50	13.00
Marlin 27, .25-20 T. D., 24 oct.	20.00	12.00

REPEATING AND AUTOMATIC GUNS	Cost	Now
Remington, 11A Auto., .12-28, full	$30.00	$22.00
Remington, 11A Auto., .12-28, full	30.00	20.00
Remington, 10A Rep., .12-30, full	23.50	18.00
Remington, 10A Rep., .12-28, full	23.50	12.00
Winchester, Mod. 1911 Aut., .12-28, full	30.00	25.00
Winchester, Mod. 1912 Rep., .16-26.	24.00	18.00
Winchester, Mod. '97 Trap, .12-30 T. D.	46.60	25.00
Winchester, Mod. '97 Rep., .12-30 T. D.	21.60	14.00
Winchester, Mod. '97 Rep., .12-30 T. D.	21.60	10.00
Winchester, Mod. '97 Rep., .12-30 T. D.	21.60	14.00
Winchester, Mod. '97 Rep., .12-26 T. D.	21.60	14.00
Stevens, No. 520 Rep., .12-30, full.	21.60	16.00
Stevens, No. 522 Rep., .12-30, full.	36.00	21.00
Marlin, Mod. 28 Rep., .12-30, full.	22.60	18.00
Marlin, Mod. 24 Rep., .12-30 T. D., full	21.60	14.00

Please give second and third choice in case the first gun ordered may have been sold when your order is received. Every gun is guaranteed satisfactory or money refunded. Complete Catalogs of Guns and Sporting or Athletic Goods will be mailed free to any address on request.

IVER JOHNSON SPORTING GOODS CO.

157 Washington St., Boston, Mass. **"EVERYTHING FOR SPORT"**

GRAND PRIZES ONLY—For Weakfish caught between May 1st and October 31st

FIRST PRIZE: One Improved Ocean King 350-Yard Reel, made by H. J. Frost & Co., value $14.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $16.50.**

SECOND PRIZE: One Oxford Gray Shooting Jacket, made by H. H. Kiffe, value $5.00; also one selection from catalog of Abbey & Imbrie to value of $5.00; and two years' subscription to FIELD AND STREAM, value $3.00. **Total value $13.00.**

THIRD PRIZE: One selection from catalog of New York Sporting Goods Co. to value of $10.00; also one Ingersoll Junior Watch, made by Robert H. Ingersoll & Bro., value $2.00. **Total value $12.00.**

FOURTH PRIZE: One Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; also one Northwestern Clasp Knife, made by R. C. Kruschke, value $2.50; and one Ingersoll Reliance Extra Thin Model Watch, made by Robert H. Ingersoll & Bro., value $3.00. **Total value $8.00.**

SPECIAL PRIZE: For Largest Weakfish caught on 5½-ounce, or less, rod, length not less than 4½ feet, 9 thread, or less, line: One selection from catalog of Marble Arms and Mfg. Co. Value $10.00.

STRIPED BASS (Roccus lineatus)

GRAND PRIZES ONLY—For Striped Bass caught between May 1st and October 31st

FIRST PRIZE: One Ithaca Hammerless Shotgun, Grade 1½, Damascus steel barrels, line engraving, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One 10-ounce Army Duck Wall Tent, size 8 x 10, height at center 6½ feet, made by George B. Carpenter Co., value $15.00; also one Parker Press-The-Button Self Filling Fountain Pen, made by Parker Pen Co., value $5.00. **Total value $20.00.**

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When caught .....Where.....

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Lure or bait..... .....Give Mf'r's names of each and full specifications

Caught by (Signed).....

Street .....

City .....State.....

Witnessed by: (Give names and addresses)

1 .....

2 .....

Sworn to before me this.....day of.....

Notary Public .....

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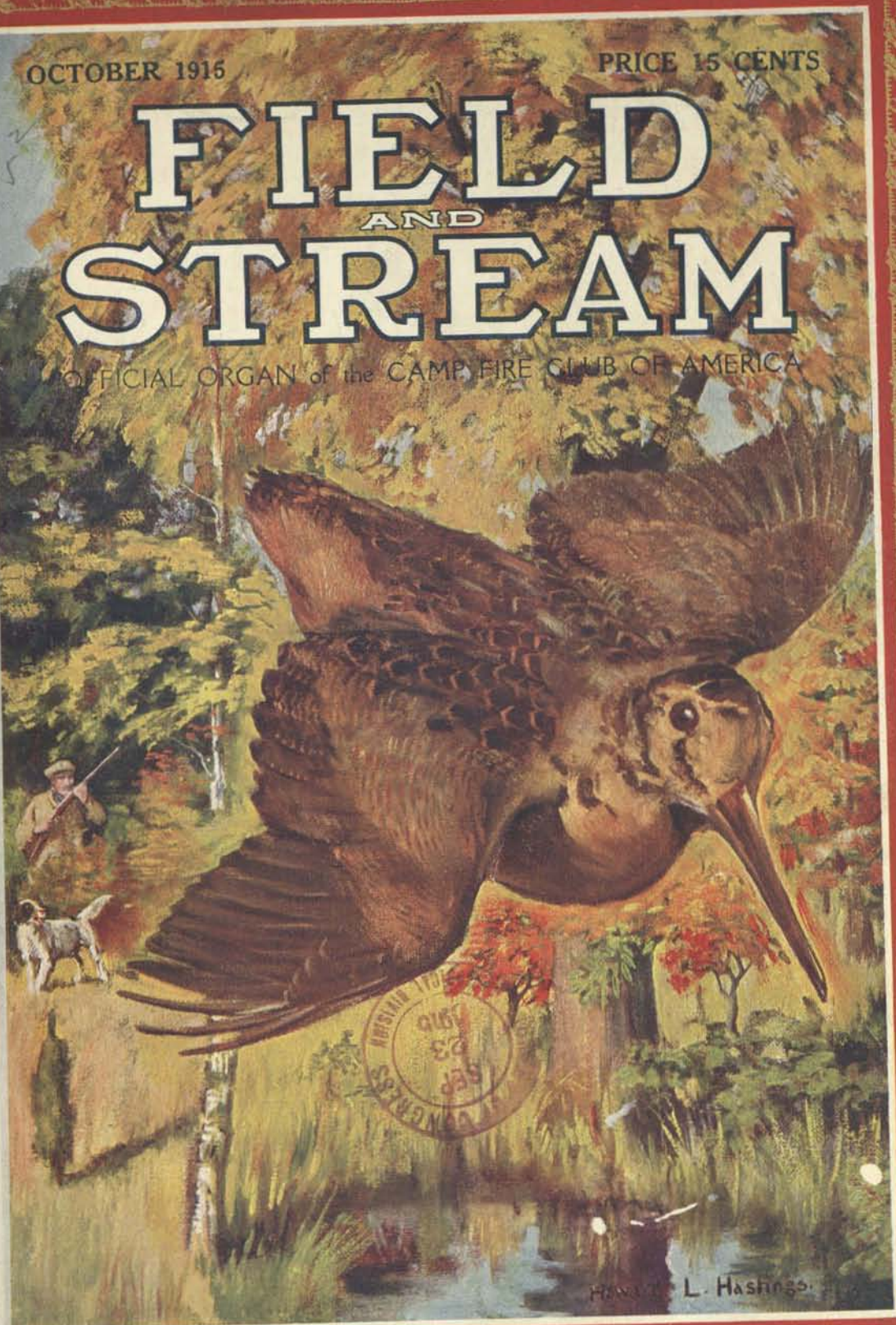
OFFICIAL ORGAN of the CAMP FIRE CLUB OF AMERICA



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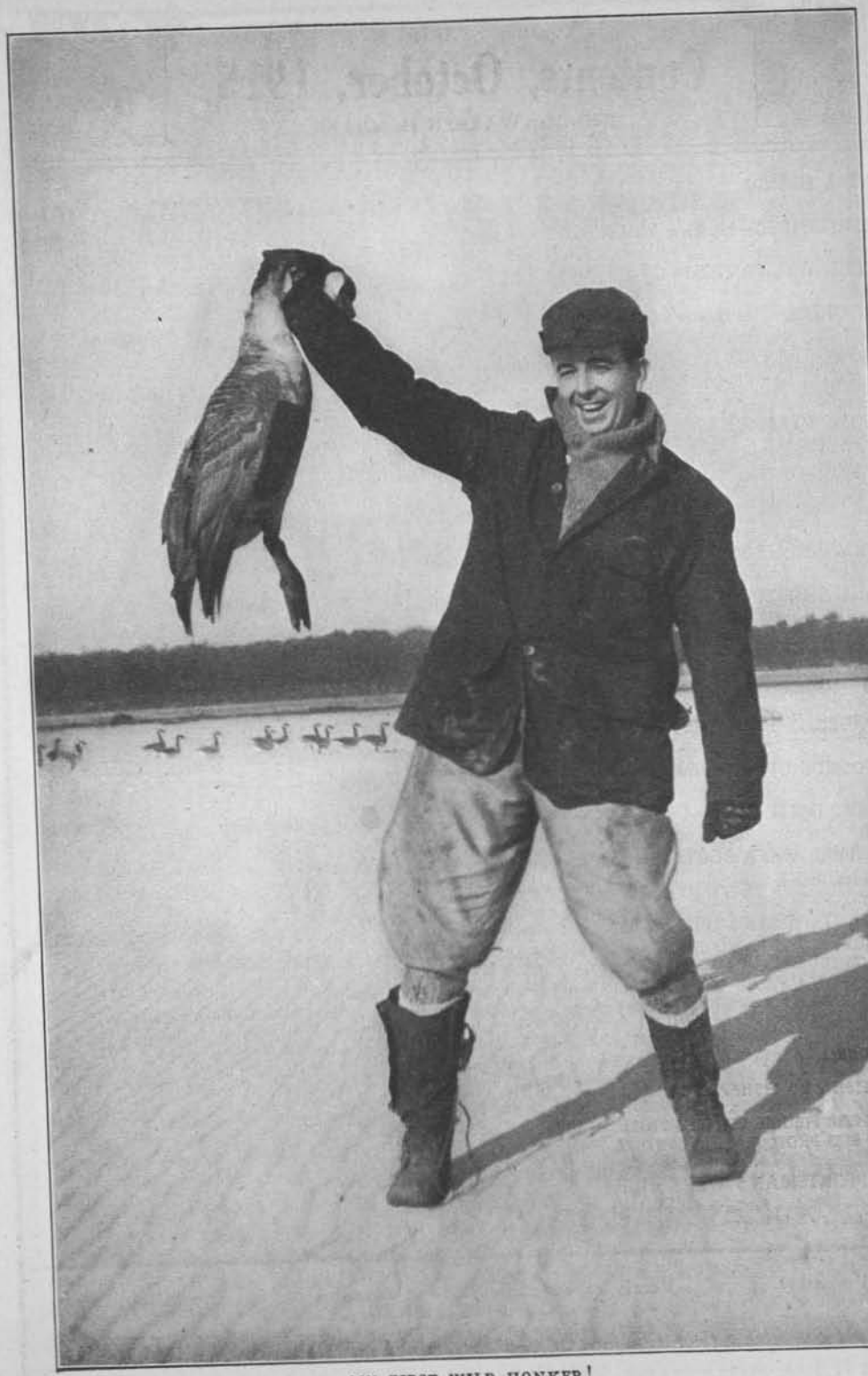

MY FIRST WILD HONKER!

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GREETIN'S—WAVIES!

By T. N. BUCKINGHAM

I

A NEW blonde Cutey presiding over the stenographic destinies of the Gunman's outer sanctum informed me in dulcet tones of firm but gentle regret that her Boss, just at present, was otherwise engaged. From behind the frosted door of that worthy's retreat came a low buzz of conversation. So, in mild contemplation of advertisements and literature of his trade thereunto appertaining, I sat me down to wait, mindful meanwhile of the metallic chatter of the busy typewriter and wind-driven smoke whisking past our windowed heights. Half an hour passed. What could the appalling idiot be doing! Probably trying to pacify some brush-whiskered squirrel turner with a kick on the last consignment, or handing out a line of guff to a suave foreign representative endeavoring to buy the factory output for a period of ten years in advance. Then, to my angered amazement, arose from that inner shrine of Big Business the positive and unmistakable voice of a mallard hen. It was pitched in the Websterian wildfowl lingo, meaning, with inflections, "Choice feed here!"—a hail, a loud, welcoming call for all passing ducks to "set in an' draw cards." Hesitating no longer, I flung wide the door, disclosing thereby the Gunman, his well-shod hoofs high upon the polished mahogany, and Fat Boy, vis-à-vis, feet up in the fireplace, so to speak. I gazed upon them with sneering inference. They gave vociferous welcome.

"Simba!" croaked Fat Boy. "Salute! He leaves the Big Spoor!"

"Behold! The rising curtain discloses Little Buck—light down, stranger, an' res' yo' hat—thar comes my Nell—she's the puttiest gal in th' camp."

"Truly, a fine pair of Camemberts," I gritted, "to keep me waiting out there for an hour, thinking there was something real doing in here, and then find you two rums sitting on your necks with your feet a mile high—and—and sucking a duck whistle, too. Can you beat it?"

"Did we understand you to say 'duck whistle'?"

"Yep! I said 'duck whistle.' What's it to you, anyhow?"

The Gunman clambered to his feet and lifted an intervening arm as Fat Boy sprang up, fists and lips clenched.

"Spare the wallop, Fat Boy, and give the poor gink a chance; he's got a wife and baby." Then to me: "Where, when and how did you come into possession of that—that 'duck whistle' charlotte russe?

Did your little Arts and Crafts teacher pin it on its itty-bitty pinafore, or did Clarice and Mignon crochet it onto you as the class yell of your sorority? Come, come; speak up, Little One, you are among friends!"

"It's a perfectly legitimate expression," I ventured. "I ain't to blame. A friend of mine from Cincinnati, an insurance shark, used it on me. It's legitimate, all right enough!"

"So is Puss-in-the-Corner," retorted Fat Boy, "but don't play it around here any more for the same reason—that is, if you care to realize on your disgustingly apparent health. Whadda ya want around these diggings, anyhow? Got something to sell, uuummmpphh—I thought maybe that was it. Do you know, or expect ever to know, anything?"

Selecting the most comfortable available chair, I elevated my feet squarely upon a bunch of apparently valuable correspondence.

"Gents," I advised, "I am here to-day upon a mission of the most profoundly stirring ingredients. The sandbar's clarion tocsin has sounded; we must be up and didding. Just now, before hurrying here, I had a talk over long-distance 'phone with Bob Riley, at Beaver Dam. He gives it to me straight that Williams, over at O. K., who has been watching the situation for him, says that the geese have started an advance movement. We must mobilize—that's all there are to it, as Horace says. All you guys'll have to do is get there. Then I'll see that you do a fair share of the hard work—it's hard work, too. Have either of you ever slain a wild goose? I pause for an answer! I thought so—nary a goose. In so far as practical wavy hunting is concerned, you two landtrummers are a pair of beribboned Gertrudes. Don't try to interrupt, Herr Gunman; I'm wise as to just about how much hunting you've ever done. Doves and ducks, like accidents, are inevitable; but geese, like sideburns, must be done on purpose—get me?

"Now then, hombres, listen: I've got a scheme. In Mississippi the duck and goose season doesn't open until a fifteen-day tardy spell is past in Arkansas. One of the bars I—er—shoot on—or over—is to all intents and purposes on this side of the river. Just a wide bend, an old struggling saw-off chute, and a legalized bit of interstate law that I don't know anything at all about. Riley, however, is Federal warden and deeply versed in the lore of the region. He says it's all right and to come ahead. I was there last year with him, and I know the ropes. The territory is far beyond the ken of our local motorboat fleet. All I ever see down there is an occasional houseboat or some trapper's outfit. We'll drop down to the club, take Horace to cook the grub, and get a big wagonful of cotton to bed in. We'll be a sort of reception committee for the southbound geese. Are ye with me, Hibernians?"

"We are!" shouted Fat Boy. "Enlist us. Joyner, one hundred and seventy-five pounds, and a tough fighting nut, on your right, and Handsome 'Gene, the Battling Masher, one of the cleverest big fellows in the business, a hundred and eighty-seven, tableside, on your left. Be sure to include plenty of buckwheats and maple gravy!"

"And a big bait of bacon and eggs," cried the Gunman.

"And some tinned mock turtle," added Fat One. When us grown-up laddies eat like piggies, you gotta feed *us*—that's all!"

"Well, my huskies, while we are on the tender subject of something good to eat, just remember that Horace bakes the crispest, brownest corn-pone on earth; that we are in the haunt of the young squirrel, the intrepid rabbit; and that Brady Baker's suckling porkers stand wide in a fatted community. Gentlemen, on behalf of our untrammeled Democracy, I thank you for this magnificent ovation."

"I ought not to be gone very long," weakened Fat Boy. "These be parlous times, my brave fellows, and I should be enlisted at all times under the banner of Ole' Work."

"If the satrap of this fountain of industry ever gets wise to *me*," mourned the bad Battling Masher, "there comes to my highly sensitive ears, even now, the pursuing rattle of the Big, Bounding Can."

"Gentlemen, gentlemen," plead I, "in the name of all that is Fun, forbear, I beg. What you might earn by working

at home wouldn't begin to pay for the fun you'd miss by not going. So be reasonable. Study the thing from an economical point of view. Neither of you took a vacation this summer—you've got it coming. All they can do is to fire you, and, once fired, you're—you're fired—that's all. Any man who has ever been fired will tell you that himself. But you can't keep a good man down or a squirrel on the ground. Let us not dim the prospective merriment with mirages of business decapitation, false doctrine of the soulless corporation, and visions of the bread-line. When you return, slip your respective bosses a nice, fat goose; you'll have 'em hipped then, practically subjugated, as it were. Oh, they'll eat it all right, don't worry; they always do. They may fire you later, but they'll eat your goose. Picture to yourselves the joy of freedom—if only for a couple of days; sniff the sparkling ozone of brisk October's ending; close your tired peepers and slant the mind's eye down a black gun barrel swinging just ahead of a spat-cheeked gander. Feel your molars shifting gears in the luscious breast transmission and apple-sauce lubricant of a richly upholstered roasted wavy. Boys! Boys! Don't run away and leave the goose battle on the bum!"

At this appeal they plucked up heart a bit, Fat Boy even making brave with some small show of personal independence.

"By the filmy V. B. D.'s of the Prophet, you're on," vowed 'Gene, and Fat Boy girt the oath of allegiance with a ponderous clincher.

"Well," questioned the Battling Masher, "now that we have murdered the goirl, what shall we do with the body?"

"What are you fine shrimps going to shoot?" asked Fat Boy.

"My ten gauge, of course," said I.

"Ten gauge!" yelped Fat Boy. "Why, I thought you were copper riveted and hermetically soldered to the sixteen! You've been hollering around here for a long time about what you and your sixteen could do. A ten gauge is about as legitimate as your little friend's duck whistle. When did you grow the bristles?"

"Bristles, nothing!" I expostulated. "You've been reading a lot of small-bore nonsense and think you've got to abide by that sort of bunk to be an up-to-date tin-medal sportsman, eh? Geese are not snipe and quail or twenty-five-yard ducks. You wouldn't send a boy on a man's errand, would you? Don't worry, though; the sixteen will be with me in the pit. Just wait—you'll see what I mean. I'm going to learn *you!*"

"My twelve suits me fine," bolstered the Gunman. "Maybe you're right. Anyhow, what I believe in is plenty of powder and shot, lots of luck and all that sort of full-dinner-pail doctrine. I'm like the petty thief who aspired to become a great cracksman—dum spiro spero!"

"My ten is simply a big gun with a big purpose—thirty-two-inch tapered tubes and ten pounds to back up a stiff load. Death in one barrel and choice of the chair or hanging in the other."

"Mr. Askins says that the ten gauge is absolutely *de rigueur* for goose shooting," continued the supporting Gunman, "and I guess he knows. I don't just know what Mr. Crossman thinks about the matter; suppose I write him for Fat Boy and find out the technical ethics of the matter before we start. I sorter hate to go hunting feeling that I am in a minority mentally——"

"Who is Mister Askins and this here Crossman?" asked Fat Boy, bluntly!

The Gunman winced perceptibly at this gross manifestation of profound illiteracy, and we exchanged glances of shocked amaze.

"Ante-ape age," I commented—"1,000,000 B. C., and then some. Observe the receding forehead, flat feet and prognathous jaw!"

"Why, Rip, old Cockywax," jibed the Gunman, "where have you been keeping yourself since last I seen you?"

"Say," fenced Fat Boy, "that day when the Lord was dishing out brains to the Class X skull-holders, you two roaches were hunting for something behind the Head Angel's harpstand. Jus' because I don't happen to know all about who's-who among your swell gun society friends you think I don't know nothing. Tha's all right—maybe I don't know nothing. But wait till I get you on the water—I'll show you up!"

"Well, then," veered the Gunman, "it's all settled; we're signed, sealed and to all intents and purposes delivered. I'll attend to the shell end of this jaunt. What loads, men?"

"Make it two and three-quarters and an ounce of two's for the sixteen; three and a half and one and an eighth, ditto pellets, for the twelve, and four drachms, one and a quarter—same size shot—for the howitzer. No side arms or carving knives permitted; meals *à la carte;* outside patch pockets, side and two hip-hip-hurrahs. And, geese, may the Lord have mercy on your souls!"

"Amen," mumbled Fat Boy. "An' whatever you do, don't forget the buckwheats!"

"Stack o' browns, an' draw one in the dark, Horace!"

"Comin' up, suh," I droned.

"All of which," proclaimed the Gunman, "reminds me that the hour waxeth late and I would fain hasten onward toward the sacred mount of the mid-day lunch. I am perfectly willing to play the part of genial host provided any gentleman here present is able to designate with more or less accuracy and precision than myself the proper surface of this coin which I am about to flip into the air——"

"I was thinking, even as you spoke, of roast beef rare and some of the Diva's paramount pie," interposed Fat Boy.

"You looked into my hand then," rebuked the Gunman, balancing the coin. "At the word, gentlemen, you may wheel—and flip."

"One—two—three," counted Fat Boy. Three coins twinkled upward, spun, and fell clinking upon the table top.

"Odd man buys," announced the Gunman. We bent over the tell-tale discs.

"Heads, I lie," from Fat Boy.

"Heads for mine," said I.

"Such announcements place me in a very embarrassing position," exclaimed the Gunman, postponing as long as possible the fateful glimpse.

"Why procrastinate?" asked Fat Boy. "The longer you stay out the colder the water gets. Read it. Something tells meh that we have you in our powah!"

The Gunman leant far over—read—and reached for his fedora.

"Let us seal the compact and pledge the hunt. Forward, citizens!"

Recall well, my friends, an afternoon when vagrant breezes barbed with scented combings from russet woodland, zephyrs wafted from new-ground pyres of green-veined hickory and leathery blend of kindred oaks, fleeting persimmon whiff, pecan or fragrant aftermath of scuppernong-cargoed spice of Indian Summer's hold—a subtle blood challenge that cried, augur-like, into the stricken face of a red-masked, copper sun. Such, then, are dusk gloamings when smoke haze from plantation manor or hunter's gun booming in the upland sedge covert drifts clingingly o'er deserted fields. Listen for the plaintive yodel of departing darkey crop-gatherers; or, as they trudge down dusty, briar-bordered paths, the soul-free chants of others, raising happy chords in the content of homing plenty. 'Tis for them the purring hiss of a hominy-lined skillet; the sizzling sputter and well-calculated prod of embrowning pork chops; frothy incense from a coffee-pot tilting its lid in bubbling song, or the frying, twilled edges of their beloved "batty" cakes. Hearken, ye of the blood which musters and flows from the crossroads and bivouac of the thin, gray line! Ground thy table arms, my canvas-covered comrades of the field! Cup thine ears of any age; bow thy heads and listen, thankfully, for that angelus of the Southland! Draw closer to the blood-embered fire-logs, friend! Stir thy beaded toddy; spin me a noble yarn, that I may tell a stouter one, and really true! For outside a stranger lurks, wraith-like, above the limpid dew-pall. B'rer Rabbit knows him—more tick grass woven into the bunny hutch. Bob Whites, rosy Tom-tits, trusting Blue, or bully bickering Blackbird, dainty Jenny Wren, and tender Mother Thrush—hover close to-night. Ole Gibble-Gobbler, perched abaft his feathery-balled family in the peach tree just outside the cabin door, kens him, too! Hear the chirrup-puttle; see him arch a broomstick neck, ghost-like, across the calendared half light. Watch past him, canny, lop-eared Houn' Dawg! Bay mournfully lost chords from the vibrous soul of the wolf song—on and

on—far beyond her rim and rills, into the star-flung train and imperial court of an ice-blue moon. Snuggle deep beneath the crazy quiltin's; pull d' kivvers 'roun'st yo' burr haids, little Niggers—f' ole Jac' Fros' am a-comin'! Picture again, ye of the Night-borning and Wanderlust, a pact of dreamless rest and an autumnal day blanched pure in its stilly dawning!

Forth from the old clubhouse, into such a world, rumbled we of the goose reception committee. Lanterns twinkled through snappy darkness; last tucks and shoves had been administered to our bulging outfit; low-voiced threats and curses dispensed impartially to spooky, stubborn mules. The Gunman, humming a cheerful lilt, rode alongside Horace, perched on a cross-board high above the wagon bed, wherein, behind the dunnage, Fat Boy and I cuddled beneath a comforting tarp, soft upon a two-foot depth of yielding cotton. For four or five miles we clanked along a road that uncoiled into graying, star-shot gloom; bordering cypress brakes whose filmy, frost-crinkled tops seemed to sweep the spangled sky; threading overhanging labyrinths of forest clustering; out through cotton fields whose white waves surfed to the wagon-hubs. We toiled the parapet of the dike and tottered groaningly into a wilderness of unprotected land. And at length, with a loud "W-h-o-a, m-u-l-e!" from Horace, we drew rein, in the penetrating bleakness of uncertain morning, before the high-stilted house-boat home of the landing keeper.

Watch-dog Jack, a huge, tawny mongrel with a wide skull, viciously pointed ears, fat, meaty tail and a prohibitive disposition, charged promptly and held us at bay until lusty shouts brought a defender in the person of Colonel Williams. We then descended, made tentative proposals of peace to Jack, and held council with his hospitable master.

"Boys," said Colonel Williams, "th' river has done rose consider'bul, but she's a-fallin' fast now—a-fallin' fast! I've seen an' heard a worl' o' geese lately, but I'm a-feered, at that, you'll hav' t' pull to th' upper bar or go on 'crost to th' big 'un. You'll fin' my skiff tied down yonder at th' foot o' th' choot. If th's anything in it, why, hell, thro' it on out! You'll fin' a couple o' spades in th' concrete bin 'mongst th' gravels. I 'spose Ho'ace is goin' t' make camp up aroun' Riley's ole p'rade groun', ain't he? Well, I'll he'p him fix up; an' sorter thro' an eye on things ev'y now an' then. Th' niggers is haulin' right sharp o' cotton to th' landin' an' I'm right smart busy—all days, some days. Jus' he'p yo'se'ves, an' I'll see you-all t'-night, when y' come in offn the bar. I'm goin' right on back t' bed now. This heah ain't boat-landin' mawnin', an' if they's one thing on earth I do lak an' need bad, hits m' beauty sleep. S'long!"

We unpacked what junk we needed for the day's sport and half slid down a frost-greased plank runway leading to the water's edge, where a throaty current gurgled and twisted chocolate-tinged foam sponges among the switch willows of the submerged bar. Ensued a violent discussion as to a division of the forthcoming honest toil involved in a mile and a half pull upstream. The argument waxed bitter, Fat Boy contending that the situation was ugly, demanding the services of a level-headed pilot and a firm hand at the tiller to steer clear of logs and perilous drifts. He volunteered for the dangerous task, admitting his fitness. Of course, we had to match, Fate decreeing that 'Gene and I bend the sweeps and consider Fat One excess baggage. In went the sack of profiles and a twisting, writhing bundle containing my active live-bird agents, Ronk and Gonk, captured and tamed honkers of a few seasons back. I assert modestly enough that the Gunman and I, as became old 'varsity oarsmen who had pulled many a luffing tub over the foaming bar, made a pair hard to beat, and before long we had hefted the big skiff far enough upstream to catch a glimpse of the bar crest. It rose first in dark, muddy banks, discolored by receding waters; then in an abrupt wall of clear white sand. Behind the gloomy shadow of a towering shore line, with its fringe of cottonwood and network of forest, the first glow of sun-warming blossomed out across the fog-clouded, smoking river.

"Look!" cried Fat Boy excitedly. "See the ducks!" Sure enough, a long, flitting

line of birds winked from the mist-bank and with a zizzing roar rushed overhead within easy gunshot.

"Go ahead, Ducky-ducks," shouted Fat One, shaking a rubicund fist after them. "Keep on moving while the going is good, for I'm bound to get you yet." Then, casting a wondering eye toward the approaching bar shallows, his face grew round in wonderment.

"By the manicured cuticle of the Sphinx —look—look at the geese!"

"Where?" demanded the Gunman, dropping his oars.

"Yonder—thousands of 'em. Look at 'em struttin' aroun'. Gimme my gun." And Fat Boy made a dive for his cased weapon.

"Hey!" ordered 'Gene, resuming his efforts. "Put that gun down!"

"Yes, leave it alone," I cautioned. "We're gotta hurry an' get where we're goin'. All we can do, anyhow, is to scare 'em off. But le's try an' git aroun' 'em. Maybe we can sorter head 'em off!" On we tugged until, from a distance of perhaps two hundred yards, we could see the long-necked, black-bodied fellows weaving about in the mud pools and sending forth alarmed cackles at sight of these strange new visitors. We held offshore, bending our sweeps against a deadly current that surged in dashing tirade through a gap between the main bar and the high-banked mainland. But, when almost past and obscured, up went our geese with an outcry that raised a bunch of mallards from a shallow bend ahead. Amid all this game, instinct made us pause and crouch, possible chance strong within our tingling blood. In the shelter of a cove we leaped overboard and hauled the skiff well up, burying and stamping the chain into the sand—for, even on a falling river, Ole Miss' "works in a mysterious way her treacheries to perform." We stuck our guns crosswise through the back-flaps of our hunting jackets—the easiest way in the world to pack a gun in open cover—divided the plunder into three loads, and hiked across the tableland, probably fifty or sixty acres of it above the recent rise, untouched. Each season the topography of a sandbar varies somewhat as to conformation and landmarks, but after a bit of a look-around I had no trouble in approximating my old pit ground.

"Come, lads," I cried, producing the two spades. "One pit here, another about there, the third over yonder. Wind is southwest a trifle. I'll set the decoys in ahead—about twenty-five yards. The geese'll have to circle in, anyhow, to drop to 'em. That's about right—hop to it, boys!"

By this time the hard-working Gunman had his cellar under way, and Fat Boy, divested of coat, was laboring considerably. I set up the profiles in a jiffy, and staked out Ronk and Gonk, the former as watch-out goose, the latter trailing as flock corporal. This done, I found the Gunman breast deep in a lovely hole. He was a worker, that boy. Fat Lad was only waist deep, wallowing in a heavy perspiration and giving off grunts of expiring ambition to excel as a pit digger.

"Climb out of there," leered the Gunman grimly; "your knees are wobbly. You'll flop in a moment and pull a Titanic before the geese get you. You ought to be digging stage graves for some ham actor's Hamlet." Fat Boy clambered meekly forth, panting audibly and dusting sand from all portions of his person. He surveyed the shallow result of his herculean labors, arms akimbo.

"Not deep," he murmured, "but very, very artistic."

"Yep," agreed the Gunman, finishing the job with desperate, heroic heaves. "You ought to get a job in a doughnut factory!" So saying he leaped from the completed nest and with a finely launched boot set Fat Boy fairly into the depths. And the deed was done just in time, too, for out of the far southwest, from across the vague height of land of the down-river cross-bar, came a faint clangor of voyaging wavies.

"The reception committee will kindly don their white mitts and gaudy ribbons," shivered 'Gene, sinking from sight while calling forth unheard advice *de profundis.* Fat Boy, however, after a preliminary Jack-in-the-Box duck, arose, shaded his eyes, and demanded that the said approaching wildfowl be pointed out to him.

"Git down! Knock him down, Buck!" grated 'Gene, rising cautiously but men-

"ABOUT THAT TIME I PUT THE SIXTEEN IN HIS EAR AND TURNED THE GAS OFF ON HIM"

acingly, "or, by golly, I'll raise his little rab-bunny hunting cap with a load of two's. Whatta ya tryin' to do—crab the game? Git down and don't make a move until Buck hollers 'Right-o!'" The babel of goose talk grew in volume, the waving black line dinned toward us—now past the headland, rising, sinking over the river channel—then sharply cut against the sun-cleared area of the bay.

Enter, Ronk: "T'-ink-a-onk-rr'-a-a-unk-ca'-onk!"

Gonk (strutting proudly): "'Eee-yunk-ee-yonk-a-onk-ah-unk-ca'-y'eunk!"

Ronk (slanting a long neck): "Ca'-on-eh-yonk-ca'-onk-ye'-uunnkk!"

These utterances, given a very free translation into the vernacular of the birds, signified about as follows:

"Pipe the rubes comin' up; give 'em

'GENE DOCTORING A CRIPPLE

the once over—they look good as wheat!"

"I'm wise; here's where I hand 'em the high sign!"

These machinations, with a proud bearing of pace, told the approaching dupes that the sighted stand was open for business. Down from their height pitched the badly fooled wavies, wings cupped in sudden determination of purpose, bodies slanted, volplaning in a sweeping circle. It brought them upwind, headed straight for the profiles and our priceless stool pigeons. Suddenly the commotion ceased and I knew such stillness for the inevitable moment of suspended outcry just before a decoying squadron drops anchor. In my mind's eye I could see the deck hands of their fleet, legs and feet drooping, pinions spread, back-pedaling for the call to furl sail. What a tense moment in the trenches! I honestly believe that one rarely recalls, beyond a sort of blurred recollection, exactly what he or his pals ever do under exciting pressure! I retain a memory of gladness that our first chance was coming so perfectly. My eyes rimmed the pit notch, the ten gauge leaned darksomely against the wall, in my hands lay the cold, trite sixteen—close, deadly, fast work this was to be. And, not twenty yards away, in the very act of alighting, breaking into their raucous cries of gawky greeting, vibrating in the smothering banter of their wide sails, were fully thirty fine geese.

"Right-o!" I sang out, and, leaping upright from a back-straining crouch, leveled on a big fellow whose web sweepers were just skidding on the sand. Then I set to work, for nine times out of ten the fellow who gives the word gets the first whack. I saw my first victim crumple and pitch forward under the keen deluge that went whipping past, cutting the sand into puffy jets far beyond. Another, amid a remote-sounding popping that told me of death sweeping into them from my comrades, rose past me in lubberly dismay and the sixteen smashed him to earth. Then almost straight overhead, onto a third, and he, with two doses injected, veered just enough for a third and last blast to bring him crashing. The battle was over and I peered through a smoke-rifted excitement and triumphant shouts from the other pits.

"One—two—three," I counted on my side, my eyes traveling in an ever-widening sweep that continued: "four—five—six," and, further on, walking off, hippity-hop, a broken-winged crip. I picked up the ten gauge, covered his neck, and when the storm of two's whipped stunningly in pursuit it was all off with the escaping one. Then I turned to the lads; we were astounded.

"How did it all happen?" shouted 'Gene. "I don't see how we managed not to double up on some other fellow's bird, but we didn't!"

"Such a hog-killing as this deserves a celebration," bawled Fat Boy, scrambling out upon the sand, seizing and raising on high a fine bird. "My first wild honker, gents! Here's lookin' toward him!"

"Put 'em all over yonder in that hollow," called the Gunman; "then come on back—quick. I'm goin' t' kill th' fatted rat an' open a can of succotash!"

Underground, later on, following a moment or so of wrist and elbow work, customary under great provocation, celebra-

tion, or stress of weather, with 'Gene and Fat One blowing smoke clouds from their "ould dudeens," we began a lengthy post-mortem.

"When you holler 'Right-o,'" explained Fat One, laboring in the present tense of high excitement, "I was about to take the count from sheer nervousness. The firs' thing I see when I raise up is a big goose 'bout 'leven foot tall—'bout two foot offn th' ground. He look at me—I look at him. Then I plaster him. I accidentally kill him and a friend o' hisn—tha's how come me to make a—a—how you call it—single-double. Then I shoot all the rest o' my loads at the sky. I di'n' mean to do it, hones' I didn'. I jes' kep' on a-shootin'. Ole Flustrate had me!"

"The first bird I pulled on was so close that I could read his thoughts plainly," declared the Battling Masher. "He was thinking that if he ever got off the hook and out of the very awkward situation in which he found himself, he would certainly bear it in mind to whistle up a covey of his friends and come back over here and bust Ronk in the beak; that what he'd do to those birds would be an ample sufficiency. About that time I put the sixteen in his ear and turned the gas off on him, and when a lunker friend of his got all mixed up and swam across the scenery, why, I gave him a liver full. I haven't any idea how that crip ever hit the mat. I guess he had tough luck and ran into a nest of Fat Boy's strays. I move we christen this section of the bar 'Clear the Arena!'"

"Clear for action!" sang out Fat One. "Yonder comes a gang!" He had 'em right, too, for out of the southwest another line wavered into sight and lugged up the pike.

"Only five," counted 'Gene a few moments later, "but they've seen the birds. Close, everybody!" On they breasted; no circling this time—just a widened sweep. But something in their alarmed cries a moment later told me that something was wrong. I always will believe that Fat Boy peeped. They veered suspiciously, and, still in strong flight, swung away from the decoy zone, 'cross wind. I saw it was a case of "So long, Steve" with them, and so a chance for the big fellow. Off went his canvas sheath and with a prayer on my lips I swung the big tubes a good bit ahead of the lead goose and tabbed both doses into the heart of things in general. And down came Mr. Goose, in a swirling clout of tumbled feathers, to smite the bar, a sounding "thoomp" of gooseflesh that jetted the sand into miniature geysers.

"Holy smoke!" cried the Gunman, rearing in his pit, mouth open and eyes like poached eggs. "I'm goin' to step that off!" And so he did, starting from my gun barrel and striding good, long-legged paces until he grasped the fallen honker's silent neck.

"One hundred and four yards, or better," he sang out. "Lucky shot!"

Back he came, buried the dead and slunk into his excavation. Fat Boy, with characteristic astuteness and a world of policy, immediately tumbled off the fence onto the correct party side.

"Jus' 'xactly like I predicted," he proclaimed. "It simply demonstrates that I an' Mister Askins were right about the ten gauge. Lemme that gnat disturber,

HORACE DISPENSING BUCKWHEATS AND MAPLE SYRUP

'Gene; I want to amble over to the swiftly gliding stream and drop it into the emulsion!"

But chances to further the argument went agley! We saw a great many geese—flocks that toiled upstream, some that drifted past and lit far out on the river, others that sailed in from the bend upstream and decoyed so close that we waited with drawn triggers and hearts aflame with hope. A glorious day whirled on toward noon; we scraped a cooling hole in the sand for our victims; we divested ourselves of our jackets and lolled in the pit-mouths, joking, story-telling, ofttimes scurrying to our warrens on some fake clew. Five hundred yards away, where the Mississippi uncoiled from the sluice of Walnut Bend, shallowing past a tightened shoal that swept into the great crooked S of Harbert's, thousands of ducks, avant couriers of the fall migration, played and fed along the bar line of the falling river. It was a glorious, inspiring sight to watch them at such rich picking, rising in matted thousands, twisting flights of brilliant multi-colors, the chuckling chatter of their feeding coming to us in a volume of sound across the sunlit air waves. As far up or down the river as one's eye could reach were ducks, mostly mallards, settling in clouds upon the mud flats, winging upstream to settle and drift lazily down the current.

Lunch time rolled around and found us removed to the shade of a towering drift-heap. A gnarled and water-logged beam, lodged against a giant tree trunk stranded by the powerful thrust of the overflow, was thatched with a curtain of washed leaves and sand grass, forming a neat bungalow. There we made away with a modest repast of sandwiches and hot coffee from a thermos. From our hiding place we could look across and see our decoys, very lifelike, with Ronk and Gonk drowsing one-legged in the noontime heat. While we lounged in drowsy satisfaction, along came a whaling fleet of wavies and lit fairly among our forsaken birds. Ronk and Gonk awoke, cackled in amazed welcome, and seemed to be calling frantically. There we lay and cursed our luck. Fat Boy swore that he saw one goose waddle to the edge of his pit, look in, and, recognizing the jacket as one belonging to Joyner the Goose Scourge, recoil and fall back with a cry of horror.

"If only I had the 22 hp., couldn't I bust 'em, though," moaned Gunman. "Look at 'em! You'd think from the way they strut around that they own the joint!"

But there was no help for it; we had to lie there and take it. Fat Boy dropped off into a profound slumber; 'Gene, with his back to the drift, snored in peace, and all I know, personally, is that when I finally awoke it was past three o'clock and still another flock had joined the invaders.

"Now, then," plotted Fat Boy, "le's frame one on those bullies. There ain't no use lettin' 'em get away with rough stuff like this. We'll toss to see who stays here with the one gun—your sixteen, ain't it . . . 'Gene? The two losers will sneak over the bluff, if they can make it without being seen, and if they succeed in getting around those geese maybe they'll git up an' come over whoever stays here. Whoever does can then do the 'doirty woirk!'" He spun a buffalo jitney into the air.

"Tails," chose Fat Boy, remembering his rowing hunch of the morning.

"Heads," declared 'Gene. "You lose. Now, then, Buck!"

"Tails again," I called. But heads it fell. So the Gunman took triumphant charge of the fort, while Fat Boy and I on hands and knees dragged ourselves across the sand and over the depression. At the edge of the slough we plotted, unseen. "Go south," pointed Fat Boy, "to that ole snag down yonder. I'll try to make it north to that cottonwood point before I try to circle. When you see me wave my handkerchief, why, cut in and beat it across; get behind them as fast as you can. Disregard the speed limit—you'll not be fined."

Down the bar I pelted until the bluff ran level with the bar and left me exposed. Then, catching a flash of white from Fat Boy's point, I dashed away for the danger zone. Far beyond the now violently agitated honkers I could make out Fat Boy, scurrying along as fast as his stubby and unconditioned limbs would pack him. The goose scouts and fighting young men emitted "ee-yunks" of dismay, the more fearsome of the band threading

about in confused ante-flight. Finally, to our great joy, the combined flocks took wing directly in the direction of the Gunman's ambuscade. I slacked and slowed to a heavy breathing walk. On went the babbling line—low—wouldn't he *ever* shoot! A goose about half way of the line wavered and pitched headlong; another flared back, caught himself, then tumbled, fighting frantically, and another —yes, surely—doubled and went down among a volley of reports that whipped across the interval. We threw our caps into the air and cheered. The goose line scattered skyward and gabbled off toward the safety of the river, while the Gunman dashed from his blind and fell upon his quarry.

"I guess," he called, when we came panting upon the scene of slaughter, "that I am some bad little gent with a sixteen. The buffalo jit knew which one to fall for. I'm bad, boys; I'm a triple-dyed goose murderer; I'm a sore-tongued wolf; I'm raw, boys—rare, red and blood raw!"

The second declaration completed, we resumed active canvass of the afternoon horizon, while the sun spun on, and, reaching its glory-crest, flared a blaze of yielding defiance.

"All dressed up again, half loaded and ready to shoot up the world—and nothing to aim at but the sky," moaned Fat Boy.

Then began a sight that comes seldom into the life of any shooter. From the pale reflections of the north distances came the night flight of the migratory hosts. It grew into a veritable parade—lines and flocks of ducks that, tip to tip across the arc of sky-sheet, black-ribboned rainbows, twinkled from naught, seethed overhead and into the yellow gold shield of the shimmering west. The sun, falling back upon its evening lines, called in its shafting sentinels—and still the winged ranks swept unbrokenly onto the flaming river bosom or lost themselves in the scatters of the great roosting grounds.

A guttural "Ya-uunnkk" burst from Corporal Gonk.

"Steady!" called Fat Boy. "It's a bit late, but never too late to mend, and I've got about five minutes of repairing to be done."

Coming gently from behind us, not a sound escaping them, deceived by the decoys and our stump-like stillness in the pits, were ten geese—from the corner of a sharply cut eye I counted them. Not a move or the bat of an eye. Then, not twenty-five yards overhead, they saw us —but the pardon came too late. When they bunched and soared upward in a surge of beating wings, into them stormed the fury of the Swamp Angel, the chatter of the twelve, and a gust of raps from the sixteen. Four birds came walloping down, dusting the ground into sand-spouts, breaking one of our profiles into fragments and sending Gonk squawking to the full limit of his cord. But there were no post-mortems, or autopsies; there was work to be done.

All four guns were piled through the Gunman's coat, the pack-sack went across his shoulders, a cravat of geese about his neck, and with a spade in each fist he staggered off across the waste. Fat Boy and I laid low the profiles, sacked Ronk and Gonk, tied the remaining bodies of our kill to a stout pole, and wobbled after the disappearing form of the Gunman. It was fairly easy going across the sand, but when we reached the boat—there was trouble with a big T. Our craft was at least sixty feet from the water's edge, and between them an expanse of black, oozy mud-bank. But there was no help for it. We loaded the packs to save trips—even at the expense of weight—took off our coats and shirts, and flew furiously on the job. Finally, hitting upon a slick sliding leverage scheme, originating in Fat Boy's fertile bean, we rocked her into the millrace. With the Gunman steering and Fat Boy dipping an occasional oar, we were with Mr. Williams in twenty minutes and had the decoys staked for the night.

(*Concluded in November issue*)

The Hunter's Moon

FROM "Camp Fires of an Epicure," FIELD AND STREAM, 1907: "We turned in early, with the second charge of night logs, and when I next awoke the embers were low and the ghostly *tu-whit, tu-whit; tu-whit, tu-whoo!* of a barred owl over in the junipers was booming through the forest. The white sand under the pines gleamed like daylight, while down into the tent the Hunter's Moon was shining. As I contemplated it I thought of the hundreds of thousands of good fellows all over this land, hardy and adventuresome, on whom that moon was shining, awakening the same thrill of the hunter's spirit, and I God-blessed them all around and took a wee one in their honor."

Thus the Colonel, philosophizing in his tent door; that typical man of the outdoors, white-haired and ruddy with his fifty-odd years of vigorous open-air life. I penned the above lines eight years ago, and the Colonel has long since passed away, but his spirit still lives in the pages of FIELD AND STREAM and his philosophies have been recorded in imperishable type—those of you who read FIELD AND STREAM in the earlier days will recall them well. This year, once more the Hunter's Moon is shining, and once more all over this broad land uncounted eager souls are grooming the shooting irons, overhauling the ammunition, repairing the camp and trail outfit and preparing to take the field again. The Editor has not changed; he feels towards you all much the same as when, as a contributor, he wrote the words which head this page. And the spirit of them, he hopes, breathes through every line of the stories and articles which go to make up the issues of FIELD AND STREAM, the spirit of the Hunter's Moon, shining through the sentences of sportsmen writing from every corner of our big country.

This is not a "picture magazine." We seldom print a picture merely because it is pretty, or because it represents some feat of expert camera craft, but rather our pictures are selected with an eye to what they can teach to the observant eye, the outdoorman's eye, accustomed to studying details and learning something from them. But, with the printed page—ah, that is different! Take, for example, Buckingham's story, "Greetin's—Wavies," our leader in this issue. Get the spirit of that story; get all the little asides, the character drawing, the pen pictures of wild life in the Southland, the hilarity and goodfellowship that pervades it throughout and then tell me if it doesn't breathe the very spirit of the Hunter's Moon! Turn to the next one; swing your mental retina three thousand miles to the West, and feel the vast silences of the snow-clad Rockies, the stern thrill of the big-game hunter's quest in the man's country that Ruesler describes in his story, "Big Foot." Just his word picture of the blizzard coming up the valley, roaring through the tree tops, is a gem that sounds the keynote of the whole story, a description that touches the chords of memory in all who have been there, and awakens a desire to experience hunting of that kind among those who have not already tried it.

Shifting the scenes four thousand miles to the east, Dr. Jones takes us into familiar New Brunswick, and his plain diary of the filling of his license with all the big game species that that country affords makes a tale of absorbing interest, full

of details that puts us at once on the very ground; and we come to know Asa the guide and learn something of the woodcraft and forest kinks that such a man uses as part of his daily trade in the North Country. Dropping across the continent again, to California, we get a thrilling tale of bear hunting with Airedales and hounds, a typical Western hunting trip, with the ponies and dogs well in the limelight, and those wiry, rangy Western cowmen as the principal actors.

And, with the essential wildness of that story well in your minds, along comes Van Dusen with another of his inimitable trout stories, staged in northern Michigan. And these big fish stories, you will note, are no hot-air dreams by some theoretical writer who never caught a fair-sized fish in his life, but rather the stories of the master fishermen who have *proved* their right to talk fish to us. For anyone can write a fish story, but if he is worthy to be heard around the Big Camp Fire he must have a big fish to give his words some authority. We have all heard from the man who hooked a big one and let him get away—FIELD AND STREAM is very tired of that kind of fisherman—and we believe that it is time that the man who really can catch a prize-winner was allowed to say something in print about it.

The next story takes us out in the Saw Tooth range of Central Idaho, and we follow the fortunes of a party of business men and doctors out for a vacation hunt amid the crags and peaks of the Main Chain. "Quail Shooting in the Game-Cock State" bears us southward to the cotton fields and piney woods of South Carolina and once again we live in the atmosphere of the plantation, with its darkeys and mules and foxy bob-whites, and again the dogs come on point and the tense, expectant hunters creep up on the crouching bevy. "Sufferin' Comfort" is the first of the practical articles in this issue, a woods-outfit study that represents a lot of hard work by an expert to gather his facts so as to avoid generalities and "get down to brass tacks." That is the kind of practical article that FIELD AND STREAM tries to run—facts from the fact factory, not hot-air; no glittering generalities, but facts, so that the beginner can take them out with him and learn the game himself. Mr. Clinch, the writer of "Sufferin' Comfort," got his experience in the school of the New Brunswick forests, with professional guides for his tutors, and what he selects as true and tried is not theory but practice, the stuff that has stood the test of service in not one season but many. This is the kind of practical article that is worth while, and Askins' "Coaching the Wing Shot," and Lemmon's "Taxidermy," are of the same kind. Askins needs no endorsement from us as to knowing what he is talking about, and, as for Lemmon, he put in two years in field taxidermy for a big museum before he ever penned a line on the subject.

Finally, "Desert Gold," Zane Grey's novel of the Southwest. Only he who has been there can know how accurately that novel reproduces the essential spirit of the great lava and cactus wastes that cover Arizona and Sonora, the extreme Southwest of the American hunter's activities. Dr. Hornaday, who hunted in that region, has written a wonderful book, "Camp Fires in the Desert and Lava," on the same country that every sportsman should read.

And, down into the tents of all the good fellows who took part in these FIELD AND STREAM stories, the Hunter's Moon was shining last year, will shine again this year, no matter where on this broad continent their game trails will lead them. Some there are who decry the hunting spirit—but we are four and one-half million strong, brothers—we licensed hunters of the United States, and we all shall rise and call the Hunter's Moon blessed in that it kindles the adventurous spirit in our minds, keeps our bodies hard and strong and free from the gross indulgences of the cities, bends our sinews to war and teaches our fingers to fight, so that when the time comes when we are needed for national defense we shall be found fit and ready to protect our homes and firesides and to shelter from the power of the invader those who so cynically laughed at us.

"BIG FOOT," THE TEN-TINE BUCK OF LAKE RONAN

By F. R. RUESLER

THE dusky shades of late November twilight had spread upon the vast Montana forest; the dull gray darkness was rapidly blotting out all visible landmarks and would soon wrap the entire scene in utter darkness. Dark and stealthy shadows from stately firs were dimly cast upon the deep, slumbering waters of beautiful Lake Ronan, while upon the brink of its high bank was the faint outline of our tent, from which a wreath of thin blue smoke curled towards the heavy, leaden clouds. Near the front of our tent, between two gigantic firs, hung the trophies of the chase—four noble bucks and a doe, whose dark, graceful bodies stood out in faint outlines against the deep, silent forest. How still it was! Almost a deadly silence—not a riffle on the water, not a breath stirred the air; a silence of soothing solitude which fills the heart of a true hunter with peace and happiness.

The dull, leaden clouds were no longer visible; the gray darkness had turned into night. Suddenly the intense stillness was broken by the lone, dismal wail of the wolf, penetrating the deep woods and lofty mountain-sides with its startling echoes. Again and again that weird call of the wild would sound and resound from peak to peak, while at my side my faithful Gordon setter, with every hair on end, would bare her teeth and respond with savage growls.

A faint rumbling could now be heard from the distant mountain-side, which, with the increasing swish of the waves below us, gave evidence that a storm was near at hand. Louder and louder grew the rumbling, and at last you could plainly hear the roaring of the wind in the tree-tops as it drew nearer. A soft wet spot hit my cheek, another and another. Our prayers were answered—it was snow.

I entered the tent just as the raging blizzard bore down upon us, shrieking, roaring and tearing through the timber, with the waves dashing against the bank in untold fury. What a keen, thrilling pleasure to be seated in a snug, warm tent with a bounteous hot supper before you, while the shrieking storm tore madly onward outside! And such a meal! An abundance of well-seasoned venison steak, baked potatoes, coffee, etcetera, which certainly hit the spot after a 20-mile tramp over mountain-tops and wind-thrown lodge-poles, a short training in which would certainly steel the muscles and put the red blood in any man's veins.

After supper pipes were lighted and my partner and I laid plans for the morrow. While we had been favored with good luck thus far, having secured within one of the limit, our shooting had all been done on bare ground and earned by the sweat of our brow. But the monarch of the range, the largest buck in the hills (Old Big Foot), with a track like that of a yearling steer, much sought and discussed by numerous hunters, was still at large. I had seen him last season, my partner had seen him this season, but as his favorite haunts were on the north side of Crater Mountain, a jungle of brush, slide-rock and down lodge-pole, which since our arrival had been covered with a foot or more of old crusted snow, we were compelled to give him up. However, we hoped to get a chance at him on the new snow in the morning, and with these thoughts in mind we went to bed and were soon soothed to sleep by the rushing storm as it swept onward.

The next morning found me out long before daylight. About four inches of snow had fallen during the night, with a few flakes still in the air. My plans were to take a trail that led up to Crater Peak,

"THIS NOBLE BUCK STRETCHED OUT ON THE LONELY WHITE MOUNTAIN-SIDE"

under whose nose I would lie in wait for Old Big Foot, hoping to get a chance at him while en route to his daily lair. I reached my destination before it was yet light, patiently awaiting the break of day. How the moments dragged, with the intense stillness of the approaching dawn, now and then broken by the sharp, piercing cry of a coyote, while with the first break of day came the whirring wings of the grouse from the deep fir thickets! Squirrels barked and chattered about in their morning frolic, while down from the snow-laden skies came the dull croak of the raven in his lonely flight.

Shortly my partner arrived upon the scene, where he planned to watch the balance of the day, while I was to go further up the mountain in search of tracks. I had not traveled more than a quarter of a mile when I came across a red-hot buck track, crossing over an open bench into the jungle on the north side of the mountain just above where my partner was standing. From the freshness of his track I knew that he would be found only a short distance ahead, and was just about to display a little more caution when my foot hit the old crusted snow, which grew deeper and deeper, making more noise at every step. The brush was now getting so thick that I was compelled to part it with my hands in order to get through, while every step rang out like a pistol shot. A few steps further and I found his warm bed in the snow, at which I was not surprised, for I could not hope to get a shot or even catch sight of him under such unfavorable conditions.

It had started to snow again—in fact, it was coming down so hard that I could scarcely see twenty feet ahead of me. I was almost at a loss as to what to do, but as I was already wet to the waist and had followed the track for quite a ways, I made up my mind to stay with Mr. Buck until something happened. With this determination in mind, I pressed on at top speed, slipping, falling and cursing through the thick, snow-covered jungle. Within the next four miles I had jumped him three times more, while his track was still taking a straight course along the mountain-side directly away from camp.

By 11 o'clock it had stopped snowing, the sun was dimly peeking through the dull gray sky, and as my stomach was now beginning to feel the effects of the strenuous tramp, I took out my lunch and ate it on the trail. I was now at least seven

miles from camp, and decided that I would follow the track just an hour longer, and if by that time it did not change its course back towards camp, I would be compelled to give him up.

About noon the track took a turn straight up the mountain, and then back towards camp. I was greatly encouraged at this good turn of luck, and, after following him about three miles further along the top of the mountain, he again took a straight turn down the mountain-side. From all indications, I could plainly see that I was now getting Mr. Buck's goat and that I would eventually get a shot at him in a short time, particularly so as it was now thawing and the old snow was making scarcely any noise. Taking a careful look below, I started down the mountain. I had not gone more than 300 yards when, to my great surprise, I saw where my buck had crossed the trail of Old Big Foot. "Such a track!" and steaming hot, headed straight for camp and for the pass where my partner was stationed. The suddenness of such an unexpected pleasure instantly filled me with renewed strength and confidence. The sights of my rifle were now carefully examined, my belt tightened, and with the keen instincts of a hunter I hit the trail of Big Foot with a stealthy tread. Slowly and cautiously I crept forward, pausing . . . listening . . . and keenly searching every bush, tree and thicket. With my finger on the safety for instant action, I again pressed onward, fully realizing that the slightest error with this cunning old veteran would prove disastrous.

Pausing at the edge of a thick "buck-brush" thicket, again keenly searching in every direction, I was just about to take another step forward when suddenly the lonely white silence was broken by a shrill whistling snort and the loud crashing of brush. My heart leaped with a bound, for the long-sought opportunity was at hand. Would my aim be true and would a bullet penetrate such a jungle of brush? It was only a fighting chance, almost impossible. There in the midst of the thicket, not more than 50 yards ahead and a little above me I caught the large gray outline of Old Big Foot in his frantic efforts to escape. My rifle came instantly to my shoulder, and with a sure, quick bead the .35 Remington barked its sharp death note. Before I could get another shot the big fellow was out of sight in the dense brush, tearing straight down the mountain-side at top speed.

My heart now began to sink, for I felt certain that the thick brush had swerved the bullet from its course. I was just about to curse my luck and everything else on the mountain-side when Old Big Foot stopped as suddenly as he had started, not over 35 yards below me. My hopes now took on a brighter aspect, for I had a faint suspicion that something was wrong with him, which was quickly confirmed by a low coughing and sneezing. Working slowly forward through the thick brush, I soon struck the trail where he had gone down the mountain. Yes, here was blood, plenty of it—large, dark blotches, which increased in size and number as I followed on.

A few steps further and Old Big Foot jumped up, not more than 30 feet from me, stumbling and crashing gamely onward, but the brush was so thick that I could not see him. A few yards further brought me to his bed, a soaked mass of blood, from which I could readily see that the bullet had sped true and that the old veteran's doom was sealed. Another hundred yards along the bloody trail and Old Big Foot again jumped up a few yards ahead of me, this time being so close that I caught just one glimpse of his rump as he staggered blindly onward through the dense jungle of brush. Realizing that the quickest way to put the old fellow out of his misery was to leave him in peace for a short time, when he would stiffen and perhaps be unable to go on from the loss of blood, I sat down for the first time that day and smoked for about fifteen minutes, when I was ready to push on.

Brushing the snow from my front sight, I crossed above his track up the mountain-side, thinking that this was about the only means of getting a shot. It was getting more open now, so with great caution I again tacked down the mountain-side to where I could see his track and stopped. With my rifle in readiness I took a sharp glance forward, and there on a little flat spot about 100 yards ahead,

with head erect, looking back on the trail, lay the greatest buck I ever saw. Quick as a flash the rifle was at my shoulder, and with a fine, steady bead the Remington again pealed forth its deadly note, and Old Big Foot sank without a quiver.

What a sad but beautiful sight—this noble buck stretched out upon the lonely white mountain-side, where for years he had fought and ruled with an iron reign!

My last shot had scored the limit, breaking the buck's neck at the shoulder. The first shot, having cut down a number of bushes, mushrooming the ball and tearing a large hole as it entered the body in front of the flank, lodged back of the front shoulder under the hide on the other side.

A difficult task now confronted me. How was I to hang this buck single-handed? With an ordinary deer it would have been an easy matter, but with Old Big Foot it was a different story. Three small pines standing side by side, of about four inches in diameter, not more than fifteen feet away, solved the problem. Foot by foot I dragged the big fellow until his limp carcass lay within a few feet of the pines, on the uphill side, when with the aid of my weight their tops were bent down one by one, fastened to the antlers, and then tied together. Then with three long crotch pries, together with the aid of the spring in the trees, his body was worked up inch by inch until it cleared the ground.

As the feeble rays of the late afternoon sun were no longer visible on my side of the mountain, and would soon sink itself behind the towering heights of the western horizon, I cast a farewell glance at my worthy prize and hit the homeward trail at top speed. How the miles dragged through the deep white forest, up and down the steep, desolate mountain-sides, with not a sound but the low crunching of the soft snow! Surely it was high time I struck the trail or caught a glimpse of the lake, as I was eager to reach camp and had been traveling fast. But no; how could I expect to see the lake or any other familiar landmark, for the great white flakes were again filling the still mountain air, falling faster and faster, until the entire scene was a white floating mass.

My compass was now brought into use, which soon told me that I was too far to the west. Two miles back to the east brought me to the trail just as the first shades of eve fell upon the gloomy silence. Was this the trail? Of course it was, for there could be no other—at least, my compass said so. With confidence again restored I hit the trail faster than ever, for the dusky silence was now getting on my nerves, and my thoughts were of a hot supper and a cheerful fire.

The great massive trunks of the slumbering pines now took on a blurred appearance as I passed them by, and with the fast-approaching shades of night came the long, mournful hoot of the owl, filling the great forest with deep solitude. A little further and the lone, shrill cry of the loon rang through the dull gray twilight, while thundering down the old familiar wood road, with short, sharp barks and ears flopping at every jump, my faithful setter bounded upon the scene, biting and licking my hands and almost breaking her back turning inside out in joyous welcome. A few yards further down the road brought forth the glowing outline of our camp, illuminated by the flickering sparks of the camp-fire and the ruddy glow of the lighted lamp, as its bright, cheerful gleam streamed through the open flap of the tent out into the still darkness. The fragrance of frying bacon quickened my steps, and as I neared the tent the familiar form of my partner loomed through the entrance in friendly welcome.

Congratulations followed in due course, and after drinking to each other's health in honor of the occasion we were quite fit to do justice to our ravenous appetites. Some meal, brothers! Fresh-caught trout rolled in cornmeal and fried in hot bacon grease to a golden brown, now and then seasoned with a strip of crisp bacon. All the wealth in the world could not secure a meal like this outside of the mountains. And did we do justice to it? A pack of hungry wolves could have done no more!

After supper pipes were lighted, and, after Old Big Foot had been killed and rekilled over and over again for about the tenth time, we were soon sleeping the sleep of the weary.

"BIG FOOT WAS LASHED TO THE SADDLE WHEN POOR DANDY'S TRIALS BEGAN IN EARNEST"

The next morning broke bright and clear, and, after a good breakfast, my partner, self and favorite saddle horse (Dandy) put forth to pack Old Big Foot into camp. By nine-thirty we had reached the summit of Crater Mountain, from whose lofty heights we beheld a white, glittering mass of grandeur. As far as the eye could reach were vast ranges of snow-clad mountains, with their white, jagged peaks glistening in the bright morning sun, while hundreds of feet below lay the deep, wooded canyons in their white, wintery silence. How warm and cheerful the sun beamed down upon us as we followed along the top of the narrow ridge, filling our lungs with the pure mountain air!

We had reached the last blaze; another 400 yards down the mountain-side would place us at our destination. But what a route over the almost perpendicular slide-rock! It looked almost impossible for man, to say nothing about beast. However, nothing ventured nothing won, so down we went, sliding and slipping along until we reached the place in safety. After a careful inspection of the buck, my partner shook his head in doubt; but as it was our ambition to pack him out whole, we decided to make a desperate effort to that end. In fifteen minutes Old Big Foot was lashed to the saddle, when poor Dandy's trials began in earnest. Never have I seen such a struggle; every few feet the poor brute was compelled to rest from utter exhaustion, blowing and trembling, with the sweat running down his nose in a stream. At the end of 200 yards came the climax, when the great weight of the buck threw the horse off his balance and over and over rolled beast and burden until stopped by the trunk of a large fir. Had we not taken great precaution in securely roping the buck's head and antlers back over the saddle, the horse would have been gored to death. However, after slipping off the load and saddle, it was found that Dandy was none the worse for the wear, so we decided to try another plan.

Snubbing one end of the rope around the saddle-horn and the other end around the buck's hind legs, another short rope was fastened around the antlers, with which it was my duty to keep the body from slewing or lodging against trees as we dragged it up the mountain-side. This seemed almost as difficult as the former method, but it was safe, and after an hour

of desperate struggling we reached the top of the ridge, both men and horse utterly exhausted. After a good rest Old Big Foot was again lashed to the saddle, and by twelve-thirty we reached camp without any further difficulty. Poor Dandy certainly earned a warm place in my heart, for never have I seen a horse go through such a terrible hardship and bear up under it with such a willing heart. The noble beast would certainly have struggled on to the bitter end, but in the future his camp duties will be of a more sane nature.

The next morning being December 1st and the close of the season, we pulled up stakes and bade farewell to our happy hunting grounds until November 1, 1915.

Just a few additional lines of personal experience in the art of still-hunting, which may be of interest to some of our readers:

In the first place, I am a great admirer of the large-bore rifle for big game, so long as the weight is not excessive. The larger ball certainly has a greater shocking power, makes a larger hole, and produces more blood, consequently a quicker score. My preference is the Remington .35 in either the auto or the new pump action, both of which are light of weight, simple in mechanism, and do powerful execution, especially the latter.

I have always found it advisable to equip my rifle with a set of fine sights, a fine gold bead in front, and a "V" notch or peep in the rear, as an ordinary coarse sight in poor light or long range is more or less guesswork. My gun is sighted so that it will shoot a little high at 100 or 125 yards, which thus far has proven satisfactory for general purposes.

Upon my arrival at the hunting grounds my first step is to locate the game. After this is done, it is very important to be on the hunting grounds at the first break of day, for from then until sunrise the game is on the move for some secluded spot or thicket in which to make its bed for the coming day. This hour of the day is worth more to me than the rest of the day thereafter, for the game generally comes to you instead of having to jump it out of the thick brush or thickets after sunrise.

I find that it is very essential to cover the ground slow and easy. I do not see how much ground I can cover, but how well I can cover it. Above all, I have learned that it pays to be a stayer. Do not feel discouraged just because your companions have had success, while you have met with utter failure. Cultivate the staying qualities and work hard, for just as sure as the sun rises and sets, so will a "stayer" with normal instincts bring home the largest end of the bacon.

"IN THE GAME FIELDS OF THE NORTHWEST MIRAMICHI" IS A TYPICAL MOOSE STORY BY DOUGLAS CLINCH—THE KIND THAT PUTS YOU RIGHT IN THE ATMOSPHERE OF THE NORTH COUNTRY, WITH ITS WOODSMEN, WHITE WATERS AND TANGLED FORESTS. COMING IN NOVEMBER, ALSO, A CARIBOU TALE BY THAT CRACK RIFLE-SHOT AND THOROUGH SPORTSMAN, DR. LOUIS SEXTON. YOU WILL NOT WANT TO MISS THESE!

OUR SHACK, WITH FULL BAG LIMIT OF TROPHIES HUNG UP

MOOSE, DEER, BEAR AND CARIBOU IN NEW BRUNSWICK

By DR. A. B. JONES

ON the 10th of September, 1914, I packed my duffle, and with a Graflex camera with a Zeiss-Tessar F.4,5 lens and 300 films, a .22-cal. Winchester rifle for birds, a .35-cal. Winchester rifle for big game (for I prefer this gun to all others, having used the .38-55 cal., the .45-70 cal. 22 h.p., .30-40 cal., and many others). I prefer this gun on account of its great shocking power and its heavy bullet, for I have not the ability to always hit the vital spot, and, no matter where this bullet hits them, they go down.

After packing this duffle, together with two heavy blankets, I loaded them into my 40-horsepower auto and started for New Brunswick, Canada, 600 miles to Plaster Rock, which I reached on September 13th, after a hard trip over very bad roads, with some tire trouble. I would not advise any brother sportsman to go this way; I never will again.

I arrived at my guide's home, situated at a place called Sisson Ridge, some three miles north of Plaster Rock, over more bad clay roads, the evening of the 13th, and was greeted by my old guide, Asa, with a hearty handshake and a good hot supper, and then to bed for a good sleep, which I was in much need of.

The next morning, September 14th, up at five-thirty. On looking out of doors, perceived a heavy frost all over everything, so let water out of auto radiator (to prevent from freezing) and covered auto with an old tent, and started for Riley Brook, 28 miles north of Sisson Ridge. This trip is made by buckboard over fair road, and is the last village we see until we come out of the woods again. It takes about 8 hours to make trip, with two horses, so one can imagine what the roads are. However, one does not mind it much, for the road follows the winding

banks of the beautiful Tobique River, and the farms get farther and farther away from each other, and timberlands take the place of well-cultivated farms. Arrived at Riley Brook late in the afternoon, and, after good supper at Jim Hayden's, had old hauling wagon loaded with provisions, such as bacon, sugar, flour, salt, coffee, tea, cocoa, tobacco and all the necessities for 40 days in the wilderness, and for an early start in the morning. Then to bed, in the last regular bed till we come out of the woods again.

Next morning, up after good sleep, had a good breakfast, and, team being all ready, we started out ahead of it with .22 Winchester, up long trail for partridges on way in to No. 1 camp. My guide carried his axe and duffle and my camera, which weighs about 10 pounds in case, nine and one-half miles to camp. One could ride on the wagon, but it would be worse than walking. I rode on one once, and that once was enough for me! No springs, and the roughest ride one could imagine. The air was crisp and biting, but after a good brisk walk we were glad to discard some of our outer garments. This trail finally led us through the burnt lands, burned over about 10 years ago, and there I saw many moose and deer signs, and I bagged 10 partridges with the .22. Some of these flocks of partridges numbered as high as 12 and 15 and could be approached to within 9 or 10 feet. Could have shot 50 as easily, but the law says 10 birds per gun a day. We hung our birds up over the center of the trail, where the wagon would pick them up, for 10 birds get pretty heavy if you have to carry them far.

We then started on again, and traveled around Old Bald Peak, the highest point in New Brunswick, boldly standing out in contrast to the surrounding blackened and almost level country. Here we jumped two deer, and a little later we saw a cow moose with a yearling bull calf; they started off and tore through the small growth like two stone-crushers, the old cow making a noise like a great Newfoundland dog, probably teaching her offspring that we were to be his worst enemy in the future. We arrived at No. 1 camp about noon, I tired, and my guide Asa as fresh as he was when he started. (Every man for his business!) The team soon came along, and, after hot cocoa and biscuits, bacon and eggs, I retired on the old fir browse bed.

The sun was streaming in the cabin window when I awoke, and a roaring fire

TWENTY-FOUR TROUT IN TWENTY-FIVE MINUTES

going in the log fireplace, with the odor of hot coffee, and after a breakfast of fried partridge, potatoes and hot coffee we started for No. 2 camp. This camp was reached at 2 o'clock, by fording the right branch of the Tobique River, and after boiling the pot here we started for No. 3 camp, some 5 miles east. We saw a number of deer on this trail, but did not shoot, on account of having only the .22-cal. rifle, which is too small for deer. We arrived at the Serpentine Lake camp at sundown, and, after good supper, went to the fir-bough bed, in the heart of the big-game country, and where we made our head camp while in the woods.

ASA AND I CARRYING MY SECOND DEER

September 17th, Asa, my guide, woke me at 5 a. m., with a cup of hot coffee, a roaring fire, and my moccasins greased with beaver oil. He told me quietly to look out on the lake, which I did, and saw two moose feeding. One of them had a fair head, but not large enough; the other was some distance off, so we could not make out whether it was a bull or a cow. We had breakfast of flapjacks and coffee, and started for Trout Lake, a small one about a mile from camp, to call for moose. We arrived at lake, and Asa cautioned me to be very careful. On approaching we saw two more moose feeding in the lake, a cow and a large calf. Asa had cut a birch-bark horn on our way over, and now started to call. The cow looked up as Asa began to call, but, after staring in our direction a few minutes, resumed her feeding and paid no more attention to us. She finally wandered off into the black growth, probably to lie down.

Asa continued to call, but got no answer, so at 12 o'clock we boiled the pot again, back on the ridge away from the lake, and then returned to the lake, but saw no moose. However, the lake was fairly alive with trout, ranging in size from ¾ pound to 1½ pounds. This was a temptation I could not resist, so I sent Asa back to camp for my rod and tackle, and when he returned with them I had no bait. To shoot a bird would spoil our chances for a big head, if there happened to be one in the vicinity, so I cut a piece of red wool from my mackinaw shirt and tied it onto my hook. You can see the result of 25 minutes' fishing in the accompanying picture. This fishing was devoid of any degree of sporting interest,

and so I soon tired of it. Twenty-four fish in 25 minutes with a piece of red cloth for a fly! Asa started to call again now, and soon another cow and calf came into the lake to feed. This calf was much larger than the other one, and the cow was very thin. Asa said the calf pulled her down and made her thin. They continued to feed, and Asa continued to call until dark, but got no answer, so we hiked back to camp and had a good supper of roast partridge, hot biscuits and tea, and then to the fir boughs for me!

"SLIPPED HER ONE OF THE .35-CAL. LEADS AND SHE NEVER MOVED AGAIN"

Next morning, up at 5 a. m., after another refreshing sleep, and, after breakfast of fried trout, started for Trout Lake again. Asa called until noon, but got no answer. This is strange, for he had called out several moose by this time last year.

We went back to camp, as the wind started to blow (as it is useless to call with wind blowing hard), and after lunch started for a small dead-water by making short canoe trip up Serpentine Lake, and then through a short trail to the dead-water (no name). Here we saw two deer feeding in the water. I shot one at a distance of 300 yards, and saw two more moose at the lower end of the dead-water, both cows. They splashed away out of the water up the ridge, and that was the last we saw of them. We then cut the saddle and a ham off the deer (the other ham I tore all to pieces with a .35 bullet, on account of his hind quarters facing me), and then went back to camp. Had supper and went to bed.

September 19th, got up and had venison steaks, hot coffee and hot biscuits, and then took a bear-trap and set it at the deer carcass killed the day before. We went up an old trail to a beaver dam, and saw six deer and lots of partridges, but did not shoot any, because we had plenty of meat on hand. Asa called here, but got no good answer, so we went back to camp very tired. These trails are very hard to navigate, as they have not been used much. If it were not for the blazes on the trees one could not follow them at all. We saw plenty of moose signs on this old trail, where the bulls had been "hooking" the alders and pawing up the ground. I saw the largest moose track here I ever saw. Asa said it was a good big head. I asked him how he knew it was, and he showed me that the front hoof-marks sunk into the ground very much deeper than the hind ones, a sign, he says, that the horns are large and

A BARK LEAN-TO, BUILT BY ASA, THE GUIDE

heavy. Asa says I will in all probability get this one (many a true word said in joke!). Started back to camp, but saw only a few partridges. Arrived there at dark, and Perry, my cook, had roast venison ready.

September 20th, another fine day, but no sun. We took some grub and camera and went to the bear-trap, and as sure as you were born we had in it Mrs. Bruin! She was caught by the left forward paw, and she was certainly tearing things up in general, and when she saw us she tore some more. Asa told me to hit her over the head with his axe and I would have her skin. I started to do this and was about to soak her when she turned on me and tore my hunting-coat, and I jumped back just in time to save my own skin. (That soaking a live bear over the bean with an axe may be all right for an old trapper, but not for yours truly!) I backed away about 30 yards and slipped her one of the .35-cal. leads, and she never moved again. She weighed about 250 pounds and had a fine pelt; Asa says the females always have the best fur. We skinned her out, Asa the head and skull, and I the rest of the body. And so back to camp with a well-pleased expression on.

September 21st, went to Trout Lake again; saw cow feeding in the lake, at a distance of about 300 yards. I started to take snapshots of her at that distance, whereupon Asa said he would call her in closer. I laughed at him, thinking it impossible to call a cow, but I soon saw my mistake, and my smile disappeared, for as Asa grunted like a bull moose she made for the shore of the lake and walked up to within 6 feet of where Asa was lying on the ground and within 15 feet of me. I took 12 pictures of her, and if you look in lower left of picture you will see Asa's head. After this accommodation she slowly walked away with an expression of "If you shoot me it will cost you $200 fine." She went back and continued to feed and thereafter paid no more attention to us. I shall probably never see one so near again. We called all afternoon, but got no answer. Asa says the rutting season must be late this year, for there are signs of bulls everywhere, but we hear no cows calling day or night.

After the hunt the next day we found camp all chewed to pieces by porcupines, so Asa built a lean-to out of birch bark, and made a fir-bough bed for the night, as it was too far back to No. 3 camp. We called there that night and in the morning.

"HE WAS A DANDY: 22 POINTS WITH A 55-INCH HEAD"

September 23rd, woke up to see Asa with hot tea, fried bacon "à la green stick," with some yesterday's biscuits and doughnuts. After breakfast Asa called and got an answer, but evidently the moose winded us, for we got only two grunts from his majesty, and he was gone. Wind was blowing right toward him from us, so we started back to Serpentine camp —no use to call with such a wind blowing!

September 28th, Asa called me at 3 a. m., and we wound our blankets around us (for it was freezing cold) and started for the beaver dam, 200 yards from our lean-to, and Asa called. He finally got an answer. How my old heart thumped at the sound of the familiar grunt! But we were disappointed again, because he soon got around into the wind, scented us and was gone. We went over where we heard him grunt and saw his tracks. Asa said it was the big one we were looking for. Started to snow and blow, and Asa said it was no use to call the way the weather was, so we went back to camp No. 3. On way back saw 6 deer.

That night I heard moose all night in dead wood on edge of lake; cows must be coming to the water at last. They will call then. Asa called from the camp and a bull came right out into the woodpile in the camp yard. He had 40-inch spread, with six points on each horn—too small. I needed a 55-inch head, at least, or would not take any. This bull had the handsomest bell I ever saw.

October 1st, up bright and early; went to a ridge all blow-downs. Saw a 16-point caribou 100 yards away, eating moss; broke his back with the old .35, and he went down like a log. One point broken off, maybe in a fight, as Asa conjectured.

On October 4th, the great day, Asa allowed that we might try the ridge camp (or No. 2), declaring that there were good chances there for a good head. We decided to go, but to visit the two bear-traps on our way over, so we went a roundabout way instead of by the way we came in, which was over two mountains by a trail that had been spotted some three years before, and now all grown in. So we started for the bear-traps and, finding nothing in the first one, went four miles to the one we set at an old deserted beaver dam, now a lake. When we got there, instead of going to the bear-trap, Asa decided to call again, but got no answer, so we started for the bear-trap. We began to walk across the lower end of this

lake, and as we were walking I distinctly heard three grunts. Asa did not hear them, so I stopped him and asked him if he could hear anything. Then we both heard two more very loud grunts. We both dropped on our knees in the mud and Asa began to call low, and each time Asa called we got a grunt in answer. When Asa would stop calling the moose would stop grunting, and Asa said afterwards he was listening. Asa finally began to whine on the horn, and the bull would grunt louder and oftener, until finally I could just discern a big blade of a horn and a big black eye in the heavy timber growth. Asa whined again, more pitiful this time, and the bull moved just far enough ahead to show his shoulder, which had been behind a tree. I now had to bring my gun to my shoulder in plain sight of him. To do this without him seeing some movement of my arms was difficult, but I finally succeeded, and, aiming at a point just below the middle of his shoulder, I let him have the .35. Then something happened; he ran right out into the open within ten feet of where we were on our knees, and I was about to let him have another when Asa stopped me, saying: "Don't shoot again; he is sick!" And he was, for he began to sink back on his haunches and his massive body sunk to the ground. He was a dandy, 22 points, with 55-inch spread. Asa said he would weigh 1,250 pounds. I took some pictures of him; then we boiled the pot and had a good lunch. Then Asa went up to the bear-trap, but nothing in it, so we started to skin out the head, while I took off the feet to have made into a taborette. It was 2:30 p. m. when we had finished cleaning up. We then started over the worst spotted trail I ever traveled, over two miles over mountains that were so steep that we had to pull ourselves up by holding onto the trees to keep from falling back down the mountain; then five miles to No. 2 camp over no trail at all and Asa going by his compass, carrying this big head, while I carried my camera, gun and the axe to cut offending timber so that Asa could get through with the head. He is some carrier. We made camp No. 2 at dark, and Asa decided to keep on and make the six miles to No. 1 camp, which we did over a trail that seemed like a city street after our hard climb over the first part of the journey. We reached our last camp at 9:30 p. m., with the moon showing us the trail, and, too tired to eat, we turned in, and I told Asa he had better sleep all day the next day, as I was going to. Asa had carried this head just 13 miles in all.

Asa thought we had better try Rocky Brook Lake for a deer; it is on our way out and we would be sure to get one. As the team could pick it up on the way out if we brought it from Rocky Brook to the trail, we started, taking enough grub to last two days. This lake is situated in the burnt land near Bald Peak. We got to the lake about 3:30 p. m.; there was nothing near there, and I did not expect to see anything, on account of the barren growth. But Asa assured me that it was worth trying, and as I never dispute my guide, we stayed. Asa said he would go up and see if some old lumber camps were still in a state suitable to camp in for the night, and if so it would save him the trouble of building a lean-to. While he was gone I started to fill and light my pipe, and, after doing so, looked up and saw four moose in the lake feeding. I took several pictures of them, and they finally went off into the burnt land again. I looked up and there was Asa standing behind me. He can get through the woods more quietly than anyone I ever saw. He pointed to the other end of the lake and said, "See the white deer, Doctor!" I looked and made out what looked to me like a little white dog, but Asa said it was a deer. So I lay down prone and fired, but missed him. He jumped, but soon came back for his drink. I fired again and missed, and then Asa caught me by the arm and ran me over blow-downs for a distance of 500 yards, and I just saw the deer put his nose in the water and then I gave it to him, and the .35 went through both kidneys and he was mine.

A 10-point albino almost pure white deer. We carried him out to the trail and hung him up for the team to take out with the rest of my trophies next morning. This ended the most successful trip I ever had, having got an excellent moose head and the full limit of game—one moose, one caribou, one bear and two deer.

"WE FINALLY GOT HIM ON THE HORSE"

BEAR HUNTING WITH AIREDALE AND HOUND

By W. R. JACKSON

WE left the camp at daybreak, crossed the clearing and entered the woods. It was still very dark under the pines, and to our minds every bush or black stump seemed a possible bear. Strange noises were on every side of us, the more mysterious in the gloom of the early morning. Not loud noises—you seldom hear them in the woods—but little suggestive sounds like the sound of footsteps. A squirrel in the dry leaves can, to one with every sense alert, seem to make enough racket for an elephant.

Jack and Lee were on horseback, Ed and Jim on foot, holding the dogs by their straps. The country was new to us and to the dogs. Following the advice of an old hunter friend, we decided to try the "berry country" first, but fate decided otherwise.

We came out into an opening in which was a small spring from which a tiny stream led off down a gully. As they crossed this moist ground the two hounds suddenly gave tongue with so much enthusiasm and noise that we nearly jumped out of our skins. There in the soft mud was the unmistakable track of a large bear, and made but a short time before at that. A fresh track seemed almost too good to be true, as one often has to take an old trail and follow it for hours before coming within speaking distance of its owner. On the other hand, a fresh scent and a good pack of dogs means that with luck your chances are good of either tree-

ing the bear soon, or else of the dogs delaying him enough so you can get within shooting distance of him. Once in a while you will run across a tough specimen who will not tree and who sometimes manages to get away altogether. This is especially true when a large bear gets into thick brush, which makes it hard for the dogs to get at him or to dodge with any quickness.

The dogs were released and were soon out of sight, but not out of hearing, for you can hear a good hound for miles unless in a deep canyon or in very heavy timber. From the sound they made we knew they were on a warm trail and not far behind bruin. We started after them at as fast a pace as we could on account of the nature of the country. We tore through heavy brush, over fallen trees, across streams, uphill and down, ever heading in the direction of the sound from that pack of dogs, who seemed to have gone mad, judging from the way they howled. Then the chorus changed, and we knew from the difference in the sound that they had caught up with the bear and were trying to stop him, and that they were carrying on a running fight. Jim and Ed ran alongside of the horses, holding on to the stirrups when going over the fairly level places. In going through low brush they had the advantage. Had we been dressed in anything but canvas we would have torn most of our clothes off in going through some of the thorny places. Riding was not all fun, as the horses were not used to the saddle and by this time had begun to get somewhat excited and had ideas of their own as to where they wanted to go, and how fast, and these did not always correspond to those of their riders. Sometimes they would tear through a patch of thick brush or under a low limb, seemingly determined to lose their masters. Then again they would balk at taking some tree-trunk, or else take a jump so suddenly that Jack and Lee had much trouble in sticking on.

In spite of these handicaps we gained on the fight and suddenly Jack caught sight of a brown object running, or rather bounding along, with the dogs nipping at his heels. When he caught sight of us he more than flew, and we lost sight of him for a time. When Lee's horse caught sight of the bear he commenced to buck, finally throwing him, and started on the back track, and, as Lee's gun was fastened to the saddle, all he could do was to run behind and yell, and if noise would have killed that bear he would have killed him sure.

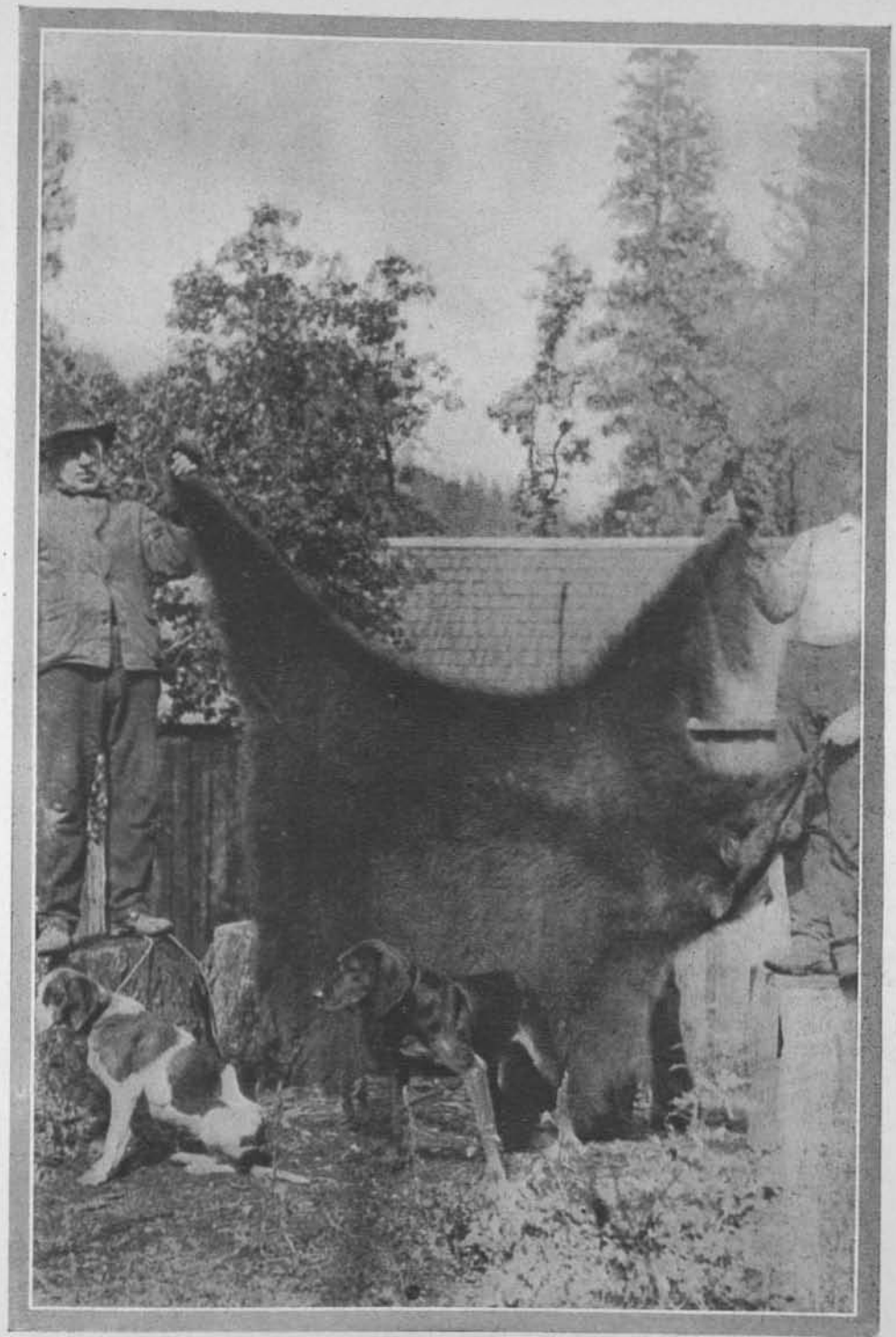
The race now became a free-for-all, with the bear as a prize to the one who got there first, and all the advantage was not with the man on the horse, as the others were often able to take a short cut impossible to the horse.

Jim tried a short cut and came upon the bear so close that he almost turned inside out in getting out of the way. In speaking of it afterwards he said: "He was coming right toward me with his mouth wide open and his eyes glowing like coals of fire, and about that time I began to feel mighty small and all alone, and to think I didn't want that bear half so much as I thought I did—and you ought to see me scratch gravel to get out of the way!"

Fortunately, the dogs fastened to his haunches and turned him, or it might have gone hard with Jim, as he was only armed with a .38 revolver, and it is one thing to pick a bear out of a tree when you can take all the time you wish, and another to stop him at six feet coming like an express train.

When the bear turned to fight off the dogs Jim ran up and emptied his revolver into him at about ten feet and with no apparent effect, although we found afterwards that three of the shots had gone clear through him, but the steel-jacketed bullets seemed lacking in shocking power.

The bear then made a spurt and got ahead of us again, but the dogs would run in at every opening and hold him back. We got in sight of the fight many times without being able to get a shot on account of the dogs. It was beautiful to see them work, especially the young Airedales, who were new to the game. I saw one get too near and get batted ten feet into the manzanita, and back he came, with eyes gleaming like green balls from rage, and ran right up on that bear's back and onto his neck and hung on. The bear in vain tried to shake him off, but could not do so until he ran under a low limb and



"CONSIDERABLE BEAR"

"YOU OUGHT TO HAVE SEEN THEM PILE OVER THAT BEAR"

scraped him off. The noise by this time was something awful. You never heard such barking, growling, squealing, and yelping in all your life in any other place. This bear, a large brown one, contrary to the usual custom would not tree, and handled the dogs pretty roughly. The dogs lacked nothing in courage, but were too eager. The best bear dog is not the one that holds on—and gets killed—but the one who can run in and annoy a bear, and who has enough sense to get away when the animal reaches for him.

We found that while a bear has an arm like a prize-fighter, he does more damage with his teeth than with his claws. If a dog holds on too long when a bear goes over a log, the bear is liable to reach back and gather that dog in and give him a bite, and then good-bye to that dog. Then, too, in the brush sometimes even the best dog will get caught, as he can't get out of the way quick enough.

Finally the bear made a stand near Jack, with his back to a tree, and as he raised up a bullet caught him in the head and it was all over. Our young dogs were pretty well used up, and even the old ones had some bad scratches, but none was killed, and you ought to have seen them pile over that bear and pull and haul him about until we drove them off. It was a few minutes before we could get them to mind, so excited and worked up were they. For about ten minutes it was hard to tell whether Jack was going to stay with his horse or not, but he got him back at last and tied him to a tree. We found that the bear's lungs were full of blood from Jim's shots, but from the way he was fighting when killed he was good for miles yet. The rifle had made a perfect mushroom, entering the skull and ranging down into the neck.

On the way back we crossed the trail of another bear. He did not make a long run and treed after a few stands. The only excitement was when Ed got too close and got the leg ripped nearly off his pants. He was more scared than hurt and next time will remember to load his gun before he tries to kill a bear. This bear, a fine black fellow, was shot out of a tree, nearly getting a dog as he fell.

As we already had a load, we skinned this one and packed in only the hide. When we reached camp we found the other horse was already there. When we took the bear off the horse and turned him loose he treated us to some of the prettiest bucking you ever saw. We had bear liver and steak for supper that night.

THE EIGHT-POUND RAINBOW TROUT OF PINE RIVER

By E. F. VAN DUSEN

YOUR letter announcing me the winner of the first prize in the rainbow trout fly class could not have arrived at a more opportune time. The city was enveloped in fog, the streets slimey and slippery, everything was dripping; business, spirits and everything was at its lowest ebb, when the FIELD AND STREAM letter arrived. The minute the envelope was seen conditions changed, and after reading it I laid back in my chair, closed my eyes, and fought every inch of that battle over again with that old rainbow on the Pine River in Michigan. Fog, business and everything were forgotten, even the noise of the elevated railroad couldn't drown out the song of the brown thrasher that was the principal songster on the stream that day. And what a day, bright and clear! The first touch of green was on the trees, wildflowers everywhere, and the woods full of birds. It was just the kind of a day you would have ordered, brother angler, had you the power to do so. There wasn't anything lacking.

I was the guest of the Skookum Club through the kindness of a very good fishing friend who wished me to have a try at the rainbow fishing. The camp is very pleasantly situated, on a high bank, on one of the bends of the Pine River in Michigan, an ideal rainbow stream. The good Lord may have made a better stream but he never made one more crooked. A one-half mile walk either way from the camp gives you an all day's fishing, wading back. And wading is the only way the stream can properly be fished; you cannot successfully do so from the shore, and a boat is out of the question owing to sunken logs, tree-tops, etc.

The first part of my stay was marked by its varied success; plenty of small fish were taken, but no very large ones. My friend had been more successful, his largest fish to date was 6 pounds, 8 ounces. There were still larger ones in the stream, for we had all seen them, and the natives were spearing them every day and night, a crime that the fish commissioners of Michigan should stop at once. Hundreds of big fish are speared there every spring, but who was to hook and save a large one? The saving part was the stumbling block, for it is no child's play fighting and saving a big fish, wading in swift water, here and there an old spruce-top, between which were sunken logs, etc. There was many a tale of woe told around the big fire each night, and lost flies, broken leaders and twisted rods were mute evidence of the struggles that had taken place. But all would start out next morning more determined than ever to take revenge for the disappointments of the day before. It was on one of these occasions that I was the principal one seeking revenge, for on the day before three good ones had been lost and my feelings were not to be trifled with.

Arriving on the bank, at the head of Big Chief Rapids, I saw three good trout, two in the center of the stream and one nearer the shore. The one near the shore was the smallest, they were not in over three feet of water. Putting on my waders and dropping into the stream above them was the work of a few seconds. The first cast was across stream, and as the fly swung around in the center the two trout rose but settled back without taking it. As the fly worked in towards the shore the third fish would have taken it but wasn't allowed to do so; he then dropped back just behind the larger ones. Again the same cast across stream, and as the fly neared the center one of the larger ones came up and would have taken it, but the smaller fish was too quick and took it away from him. The hook was sent home for keeps for I was provoked at his "butting in" on the big trout. He at once settled down as if nothing had happened. He rubbed his nose once or twice on the bottom, then started towards

E. F. VAN DUSEN AND EIGHT-POUND RAINBOW TROUT, 28½ IN. LONG, 16 IN. GIRTH

me, upstream, at express speed, making two jumps as he passed, and stopped in one of the deep bends about sixty feet away. So far things were going my way; this was one of the very few bends free of logs and driftwood, so the advantage was in my favor. I hoped he would stay there. But no such luck. Quickly he turned and went downstream into the rapids and yours truly after him. He was going thirty feet to my one. And let me tell you, brother, that was some chase! It's no exaggeration to say that I turned around three times in my waders, on that trip, trying to keep my feet under me, going into and over places that never would have been attempted any other time. Everything was forgotten—father, mother, wife and children—everything but that trout, who was now one hundred or more feet away, at the head of the next deep water in the bend below. Near by was an old log jam. Would he go under it or not? In working down on him he dropped back, fortunately, and was soon in good water again. Let us hope he will stay where he is, for the next stretch of rapids are deep and very swift; the outcome does not, therefore, look very cheerful if he goes into them. He knew what was below and laid his plans accordingly. Slowly he sagged back with the current. It was impossible to stop him, owing to his weight and the strength of the water; it was more than tackle would stand. He did at last stop at the head of the deep rapids on the opposite side of the stream. It was a sure thing now he would soon start down again, for he was slowly working into the draw at the beginning of the fast water. This happened sooner than was expected and the chase was on again, hotter than ever. Soon it was evident I must cross to the other side, as the water was fast getting deeper and deeper. With about the sixtieth part of a second to select a place to cross, I of course took the deepest and swiftest part. From there on my memory was a blank until I found myself in the bend below, fighting tooth and nail trying to keep the trout out of an old spruce top that lay across the entire stream below. Here was to be made the last stand. The battle must be won or lost on this spot. The fish was now ahead of me upstream, on a short line, and must be kept there. Each time he would work out into the current and start down I would drag him out by main force; he would then start up again. This took place, it seems to me, at least a dozen times before his troutship began to wobble. A short-handled gaff was now brought into action and on his next run for downstream he was pulled in as near as possible, and zing! went home the gaff and the battle was over. He was laid on the clean white sand and was a "bonny" trout for sure. The fact then struck me that he was the smallest of the three; the others must have weighed ten or more pounds. Well, enough is enough, so back to camp, where he was weighed —just eight pounds, after being out of water nearly an hour. Three days later I was back in the city and it was only a memory. But the skin of that old warrior hangs in my den and we often fight that battle over and over again that took place on the Pine River this spring.

HEADQUARTERS CAMP WITH SOME OF OUR TROPHIES

A GOAT HUNT IN THE SAWTOOTH

BY H. B. HOWLAND

OUR party had decided on the day when we would leave for our yearly goat hunt and, in due course of time, we found ourselves located in an old cabin at the upper extremity of a large lake in the Sawtooth Mountains. Doctor Temple was present with his usual taste for "sage-hen" and grouse, and a firm determination to undergo all sorts of hardships if he could only bag something larger than fowl, say, for instance, goat.

Doctor Sears, large, good natured, and with the ability to "tax" a patient to the full limit of his bank account, had decided to forget the medical profession for the present and had laughingly agreed to remain for the finish.

Carter had left behind the cares of the sheriff's office and, so far as it interested him, criminal work might await his uncertain return. Just at present he was very much taken up with the new .22 high-power Savage he had brought along, and its ultimate effect on Billy, the goat.

I had left the little, old hardware store to fare as best it might, while I enjoyed a vacation in the woods. Perhaps one who sells hardware may occasionally have brain-fag. Anyway, hunting is a good sport, so I was out to enjoy all one may conceive in the words, "hunting trip."

The log cabin we were now using as headquarters had, at one time, been a miner's abode and later was occupied, during the winter months, by trappers, but was now owned by stockmen. Through the kindness of the latter we were now ensconced in rather comfortable quarters and had, also, their promise of information freely given, as well as the use of their stock, wagons and pack-saddles, if we wished them.

Owing to the absence of the owners we were the guests of Howe and Moore, both in the employ of the La Mar Brothers, and both acquainted with every hill and valley in that section of the mountains. The two were well versed in the art of camp cooking, and I suppose the outdoor life and the fresh mountain air added to the ravenous appetites we possessed during the entire time of our stay.

On the date of our arrival our time was taken up in preparing camp and resting

PEAKS AT THE HEAD OF BOISE RIVER

from the sixty-mile trip over the mountain roads, to the north, from the O. S. L. station. During the day Dr. Sears snapped a few pictures of our camp and also of some of the points of interest nearby but, as a whole, no violent exercise was indulged in.

I had brought with me a small kodak, but will give most of the credit for the pictures we took away with us to Dr. Sears and his persistence in carrying along a camera on all of our trips, while I was satisfied with a small, meat sandwich as excess baggage.

It was unanimously voted that we should retire early in order to be fresh for our work the next day. I might write of the many deeds of prowess I dreamed of accomplishing, but this isn't a story of dreams. Suffice to say, the only sound of discord during the night was the loud snoring of one of the doctors (each of whom later denied the accusation), and the occasional intrusion of a pack rat. At five the next morning, after a hasty breakfast, we started for the peaks where the boys assured us we would find goat. The first four miles of our way was made on horseback but, at the forks of the stream we had been following, we were forced to dismount and leave our horses, as the country ahead was too perilous for riding, besides being within a radius of goat pastures. Here we decided to form into two parties and follow each fork of the creek, later to re-unite at the divide separating the source of the two. Howe agreed to act as guide for Dr. Temple and myself so, after wishing one another the best of luck, we began what finally proved to be a hard, stiff climb of three miles to the summit.

Silence was the order of the march and, by following the channel of the stream, we managed to keep fairly well hidden from any possible prying eyes from the hills above. The walking was tough work and our feet were getting blistered. We were tired and were "winded," but who would complain when there is a chance for comparatively big game at the finish. After what seemed ages, we reached more level and less rocky going, skirted two small lakes, became very excited over large goat tracks in the soil near the lake, and could see what appeared to be a mountainous semi-circle of apparently impassable rock walls ahead of us. The white, granite rocks in this section of the country, with their peculiar effect on the eyes, produced an illusion of nearness, but in reality we were more than three thousand feet from their base.

For more than fifteen minutes we climbed on, silently threading our way about the rocks, skirting along the edge of all available timber, following any depression or hollow we could find at hand when suddenly, through a small opening in the creek banks, we came into a natural and wonderfully perfect amphitheater, which, though appearing to be somewhat diminutive in size, occupied perhaps an acre.

At the extreme upper side of the meadow a low, regular hill crossed at right angles, giving the impression of tier upon tier of seats surrounding the place

of honor at the upper end of an arena. Three small streams trickled down over the rocks of this rather small hill, one at either end, and the other very near the middle. Close by the latter stream stood a tall, stately pine, very like a lonely sentry. We three stopped as of one accord, to admire the view before us, and to regain our natural breathing. Back and above the green, mossy banks about us, could be seen the rough, barren cliffs and rock-slides, and each of us realized that we were at the upper limit of vegetation, besides being very near our goal.

When we had rested for a few moments, and each of us had decided to follow his own course, I started up the stream to the left while Dr. Temple and Howe turned to the right. Luckily, I had chosen the shortest way to land me on the open mountainside ahead. This was due to the location of a small lake, lying at the base of the crags, which was not visible until we topped the low hill before mentioned. Its course lay to the right, thus forcing my two companions to follow a more devious trail to the summit beyond. At the time I reached this lake I was too intent on bagging any chance game I might see, to notice the beauty of the sight before me, and many times since I have wished that I had taken my kodak along. At the lower extremity of the lake, just above the three waterfalls, ran a fringe of scrub pine, interspersed with mossy soil and light-colored granite boulders, while on the far side rose the mighty peaks of the Sawtooth, casting their darker, shadow-like reflections on the water below.

Following along the left shore, and keeping in the shade of the trees as much as possible, I came to a halt under the last bit of protection I could find, a large boulder, and scanned the hillside for a sign of goat, either climbing or feeding in the little meadow just before me. I had given up all hopes of seeing one and was walking out into the open when, hearing a rolling of stones above me, I glanced up and beheld two large "Billies" slowly climbing the rocky slide about three hundred yards away. I suppose their usual curiosity had held them there for some time, watching my cautious movements, while I had been flattering myself that I was unseen. I'll not deny being nervous, for I was so "wild" with the first shot that it is doubtful whether the bullet struck even the small hillside on which the goat was standing. Believing that I would likely lose them under such conditions, I ran across the intervening space until I reached the foot of the slide, and did the unsportsmanlike act of resting my gun upon a large rock. In five more shots I managed to bring down the larger one, with two hits to my credit. Not good work, of course, but anyhow I had the goat, which proved to be a fine, large specimen, with exceptionally long whiskers and a pair of perfect horns.

In the meantime Doc and Howe had rounded the lake and opened fire on the other one, but the range was too great for them and he scrambled, unharmed, over the divide above us. A little later,

WOUNDED—AND AFTER A FALL OF TWO HUNDRED FEET

with the pelt and head roped over my shoulders, we followed over the same pass and were rewarded by hearing sounds which very much resembled those made at the bombardment of Santiago. We decided that it must be the other party, and, later, such proved to be the case. They had sighted our escaped "Billy" and were firing shot after shot at him as he tore down the slope, crossed the rocky, uneven valley below, and climbed the far hill on his way to the higher peaks of the main ridge. Apparently, after reaching the ridge on which we now stood, he had started up this with the intention of climbing the mountain, but meeting our other party had been forced to the crossing, with results just related.

Doctor Sears, Carter and Moore could be seen going back on the trail of the fugitive, so, deciding they had located us, we began the descent back to our horses and to camp. We were rather hungry, but so tired that our progress was slow. The country was similar to that we had gone over during the morning, with the exception of a much larger and very beautiful lake. The horses we found as they had been picketed and from here the trip was soon made to camp where, after a good rest, we were feeling sufficiently revived to prepare supper for the others.

Carter came in much elated over the goat he had killed earlier in the day, and Dr. Sears was pleased with the many fine views he had snapped though, of course, he had not succeeded in getting a goat. The entire crowd was so nearly "all in" that we went to bed early, and I do not believe any one of us was troubled with insomnia.

The next day was an "at home" day at Lake Camp. We did some fishing and grouse shooting, but were idle most of the time.

A single goat being the limit permitted anyone to kill in a season, Carter and I were obliged to seek other means of pleasure during the following days. The greater portion of the time we spent in trout-fishing, though we did make two unsuccessful trips after deer. Had we been camped sufficiently close to some good range, to enable us to go and return in one day, we no doubt would have gotten some deer.

In the meantime Dr. Sears and Dr. Temple were becoming more and more discouraged over their inability to bring in a goat, so we decided to make a flying trip to a camp higher in the mountains, but accessible by wagon. From this latter point we packed enough supplies for three days' rations and night found us at a small lake about eight miles back in the hills, at an elevation of probably nine thousand five hundred feet. We remained here for two days, which were profitable ones for the doctors.

The country we were now hunting in was more rugged than any we had heretofore traversed, and was filled with a number of snow-water lakes. Many traces of elk were found, but we never managed to catch a glimpse of one, though some of the tracks along the waterways appeared to have been very recently made.

For the first day's work I kept myself busy with Dr. Sears' camera, which I had borrowed. With the camera for a weapon, and lacking the tension under which I had labored when hunting for live game, I found I had lost some of my nervous energy, but the pictures taken that day were well worth all the hard climbing I had done. One point in particular I felt repaid me for the entire day's work. This was when I stood on an enormous bank of snow from which I could see the headwaters of the Boise, Payette and Salmon rivers, besides numerous lakes and small streams tributary to the three rivers.

Once during the afternoon, by aid of my binoculars, I could see Dr. Temple on a distant ridge in hot pursuit of a goat. For a time I had hopes of his lugging a head into camp that evening, but this was a pleasure reserved for Dr. Sears, whom I found in camp on my return. He had already prepared the skull and hide for shipment, and a more beautiful set of horns I have never seen.

Dr. Temple was very much discouraged that evening and was in favor of breaking camp the following morning, but by taxing our persuasive powers to their capacity, we prevailed upon him to try

just once more. For this I believe we deserve several Carnegie medals, though Doc has never once mentioned them. It befell him to have the only really exciting experience of our vacation. While we were preparing supper a Ranger had stopped, examined our licenses, and until some time later we were not aware that his dog stayed with us when he left. We couldn't drive the animal away and hated to abuse or shoot the poor thing and he was the cause of Doc's encounter the ensuing day. In the morning, unable to keep the dog from following him, he decided that by keeping it close to his heels perhaps no harm would be done. Until about ten o'clock the dog minded his instructions when, just after crossing a boggy and heavily timbered stream, he was much startled by its loud baying, apparently issuing from a cluster of short pines not very far above the crossing.

Mentally cursing all dogs, particularly this one, he rushed to the place and to his amazement saw a large, brown bear in one of the trees, around the base of which the dog was running, barking excitedly. Aiming for the bear's ear Doc fired, and was rewarded by seeing it tumble to earth, but it was up and running almost immediately. The shot had gone through the neck and only stunned it for a moment.

He fired four more shots, but later examination showed that only one struck, and it passed through the fleshy portion of the bear's shoulder. Forgetting that he had only one shell in the gun he hurried over a little ridge over which the bear had just disappeared, and almost ran into it standing at bay. The enraged animal charged him, but the dog's timely interference gave Doc the chance to send his last bullet crashing through its brain. Subsequently, everyone was called upon to help in packing the animal to camp, where part of the meat helped to stock our now diminished larder.

Collecting our spoil and returning to headquarters was a matter of short duration, and the next day found us on our way to the railroad.

Dr. Temple took possession of the dog, and promised it would always have a home with him, which promise he has fulfilled up to the present time.

I know that I, for one, hated to leave the mountains and return to the plains below, but since that time have spent many pleasant moments looking over the pictures we secured on the trip and have come to believe that there is a greater pleasure to be derived through the use of a camera than by means of a rifle, though the conjunction of the two would appeal more to the average man.

ROMANY ROAD

By CHART PITT

There are camp-fires unkindled and songs unsung,
And the untraveled miles of the trail.
There are unbroken dreams 'neath whispering trees,
Till the stars of the morning grow pale.
Why are you doubting—why tarry so long,
When the god of the wanderlust calls?
The gipsy-road trails through the perfume of dusk,
Where the witchery of shadow-land falls.

The night-road is freighted with romance and bliss,
From the castles of romany-land.
Their legends live on through their grandeur is gone.
Like the castles they built on the sand.
A camp-fire awaits when the day's march is o'er,
And a smoke by the bright, leaping flame.
Let the faint-hearts return to their pillows of down—
We'll be sports to the end of the game.

"SOMEP'N GWINE TER HOP SHUAH!"

QUAIL SHOOTING IN THE GAME-COCK STATE

BY WARREN H. MILLER

THE hunting grounds of our vast country are so diverse in appearance that almost every State in the Union presents to mind some characteristic picture when one recalls his hunting or fishing trip in that country. When I think of Montana, a vision of deep snows and fir-clad mountain slopes sweeps across the mental retina; of Wyoming there presents itself lofty snow-clad mountains in bright sunlight with the cloud shadows racing across the golden brown bunch-grass, dotted and intersected with spruce and popular draws. Pennsylvania calls to mind hemlocked ravines whose moss-grown, slatey walls guide the swift, clear waters of mountain torrents; New York, New Jersey and Connecticut, hardwood ridges and forest-clad hills, with granite boulders and ledges jutting out under foot and the gorgeous tones of autumn leaves coloring every hillside. South Jersey—pines, oceans of them, vast green marshes and white sand dunes with plenty of open blue water to look at, all about. The old Tar Heel state of North Carolina brings up scenes of large, rosin pines, with wire-grass underneath, dotted here and there with the green "niggerhaids" of the young long-leaf yellow pine, and there is usually a darkey cabin somewhere in the scene with one of those black, long-tailed, semi-tame "piney hawgs" browsing contentedly just outside the paling fence that shuts in the ole mammy's truck patch.

Similarly, memories of South Carolina paint, first of all, a white cotton-field bordered with pines, a nigger shack planted in the midst of it; mammy, in turbaned cap, with corncob pipe, peering

out of the unpainted door, *and*—a half-dozen long-legged, rangy game cocks and pullets strutting about the grass plat in front of the porch or scratching dirt around the log mule shed. For South Carolina is the Game-Cock state; here the breed is raised and bred to gorgeous perfection, and even in the darkey shacks one never sees common barnyard chickens but rather these queer, rangy fowl with their long necks, huge legs and ridiculous tail, dabbed up on the end of the body as a half-forgotten afterthought. Swamp Eagles, Irish Gilders, Rhett-Adams—all the famous Southern pit-game strains are here to be seen—but never an Orpington or a Plymouth Rock nor even one of the ubiquitous Leghorns.

When the Live One and I settled into the familiar Pullmans of the Seaboard Air Line, which road had so often carried us south to quail and happiness, my field of vision was entirely open to and expectant of new impressions. North Carolina, Georgia, Florida, the West Indies, all were put out of mind, for we were bound for South Carolina and it was going to be different and novel and entertaining. South Carolina began with a rush next morning when we blew into Columbia. Here we were, in the Southiest South, with swarms of darkeys all about and Tom and Tad, two of the Doctor's sable retainers, on hand with a mule team for our duffle and a car for ourselves. A short whirl through the streets of the city and we were at the office of our host, Dr. Adams, "of Columbia, Sooth Ca'olinah, at youah service, suh!"

"C'mon out and see mah chickens, suh," was about the first invitation the Doctor got off his chest. Of course we must see the all-important chickens, more dear to the heart of a true South Carolinian than his horses to an Arab! He had no less than seventy-five of the precious gamesters, right out in the back yard of his city office—so that he and his patients could go out and inspect them during business hours, no doubt; they were a sure cure for anything from blues to measles, I'll warrant! Each gorgeous buster had a cage to himself, so that the precious lambs could not tear each other limb from limb, and each beauty was quite ready to fight any other, or the Doctor or me or any living being that came before his cage looking for trouble.

"What do you think of them, suh?" enquired the Doctor proudly.

"I shall sell all my prize Orpingtons forthwith, Doctor," I declared, "and with a few settings of your pit games I shall corrupt the good old bluenose state of South Jersey. Within a year *we* will be challenging *you*."

That got the Doctor; he was my friend from that moment; he nearly slipped a couple of prize games into my coat pocket, then and there, to make sure I would not forget my word!

A dash of seven miles out to the Doctor's plantation brought us to a lake with a grist mill on it, a hunting lodge, a prize farm in full blast and dozens of the inevitable pit game fowl strutting about. The Live One and I set to work to tidy up the place for the girls, while Tom and Tad mustered an army of darkeys who toted furniture, split firewood, overhauled the provisions and got steam up in the cook shack. Then I selected a beautiful grove of shortleaf pines, festooned with Spanish moss and overlooking the river, and here I pitched my tent, unpacked the packsack sleeping bag and raked up a huge pile of long leaf pine straw for bedding. No hunting lodges for mine—not while there was a strip of forest left in which to pitch my tent and a wild ravine to look out over and a chance to make friends with the wild creatures that might live thereabouts! The Doctor opined that there might be *some* Yankee lunatics who would actually prefer sleeping in a tent in December within a hundred yards of a nice, warm hunting lodge with a roaring wood fire in it, but—personally—"not fo' me, thank you, suh."

Next morning the Banker and the girls arrived and we all set out for the quail. The Three Graces rode mule back, with ready cameras, following the course of the hunt, while we three men worked along the edges of a long cane and cypress swamp looking for our first covey. We had not a hundred yards to go before Flip, the Doctor's pointer bitch puppy, began making game. Tense excitement,

THE THREE GRACES AND THEIR GAME

expectation, caution, as we advanced, foot by foot, with the dog crouching, now going into a rigid point, now creeping forwards, now testing the wind and finally going into a cataleptic stand right on the brink of a backwater pond which formed part of the swamp.

"They've flown across the swamp!" declared the Live One, impatiently relaxing his vigilance and throwing his gun over shoulder. We all did likewise and started forward, but Flip was not to be moved. Another step and—*Whirrrrrr!!!!* fifteen of them jumped from the very bank under the dog's nose and beat it over the pond through the thickets. There was a scattering volley—and three rattled men began to swear with one accord. Score one for foxy Bob White!

"PUNK!!—Never touched a feather!" yelled the Live One disgustedly, "we're a fine bunch of rums!"

"Camemberts!" ejaculated the Banker, "Let's get out of this before the girls get up."

We fled the scene, just in time to hear a shrill feminine chorus pipe, "How many did you kill, boys?" But Flip was picking up another covey and we masculines were too intent on game to answer unnecessary questions! This time she stopped on dead point in a clump of low scrub oaks just on the edge of the swamp and we knew we were in for the meanest kind of a shot—with the fair sex all lined up on mule-back and looking at us, too! Whoosh!! this was quail shooting with a vengeance! The covey burst and whirled right over our heads, requiring an acrobatic feat to get on them at all. I missed both barrels clean; so did the Banker, but the Live One proved that he was not a Dead One by scoring neatly. One quail, twelve cartridges—Tad maintained a discreet silence but he kept up a divvil of a thinkin'. The quail was passed around the audience and the Live One enjoyed the brief notoriety of a Hero.

But the next bevy was more in line with the grandold Square Deal. Flip found them in an open field covered with the leavings of a sweet potato planting and we all scored. Great elation; quail on toast for supper looming up at last! Here also we lost our feminine gallery, for, coming across a field, they happened upon a cow, and "he" looked at them so hard that they decided that the longest way around was the shortest way home and that those men weren't shooting well enough to look at anyhow, so they turned their part of the affair into a cross-country gallop.

We worked homeward a matter of two miles along the opposite side of the swamp. This scheme was simple quail strategy, for the foxy rascals always made for the swamp and flew out later on the opposite side so that we picked up all the coveys on the way back that we flushed on the way out. This country did not permit of the cream of quail shooting, i. e., walking up the separate birds of the covey after flushing the main flock, but we were to have lots of that later.

That night I did not even have a camp-

fire but hit the sleeping bag *tout de suite* and was dead to the world until the Live One routed me up at sunrise next morning. It was the kind of day that the South is famous for in winter; clear and sunshiny, with rich, sparkling, white frost on all the fields and a crisp, bracing air with just enough balminess in it to take off any suggestion of northern chill.

"Allons, enfants de la Patrie! —here's where we kill 'em dead!" quoth I, leading forth. So we three, with Tad bringing up the rear, set out, reversing our march of the day before. Flip of the Agile Heels was all over the fields as fast as she could race, and soon she came to a staunch point at the brow of a little hill tipped with small pines. Through them we crept and suddenly a large bevy jumped into the air and the battle was joined. It rained quail: pretty good for us dubs, and Flip got so excited that she broke point and got well licked for it. The covey soared across the fields and went down in an "island" or thicket just on the edge of the main swamp. Joy! Now we would get some single bird shooting. We did. More than we expected, for, as soon as we got into that swamp and were cautiously jumping from one hummock to the next with gun held vertically and ready to fire at the instant of landing, a woodcock jumped and then another and another. That cane brake was full of them. "Mark!" called the Live One excitedly, sending a hatful of shot hurtling after a quail and dropping him with a thud in the cane. Him I went after, only to put up two cock, one of which I dropped as he topped a low thicket. The Banker's gun kept up a continuous fusillade from somewhere in the depths of the cane while the Live One and I, as old shooting partners, worked up the wet, foot by foot, taking cock or quail now and then. In this kind of shooting one invariable rule is to be kept in mind: Always pick out the spot that you are to put your foot on next with an eye to arriving in position to shoot. It will not do to just crash along, for every time you move a bird jumps and you are in no position to shoot. Add to this the habit of carrying your gun muzzle up right in front of you, and getting a quick snap at birds in thick cover is no great trick.

THE LIVE ONE RAISING A SINGLE

We cleaned up that island finally and went out on the uplands where a full bevy rewarded the efforts of our dogs. Flip had now been reinforced by Max, a setter sent down from the North. We were awfully shy on dogs even yet, as all the native dogs were at work elsewhere and not to be had for love or money. But Big Tom, the big colored man who did so much for our welfare on this trip, came to the rescue. "Ah knows whar dey *is* two pointer-dawgs," said he, "but de man what owns 'em, he in de jug a-doin' time fo' sellin' de niggahs morphine. But ah'll bail him out, 'ginst the time he loan us he dawgs."

And Tom was such a power in Columbia that somehow the gentleman was re-

leased long enough to get us his two pointers. He arrived out at the lodge that night, loaded to the ears with moonshine, but polite; gravely and painfully so. He included us all, girls and men, in one maudlin gesture. "You-all, ladies an' gen'lmen, is welcome to dem dawgs; yo' sho' is—but dey ain't wuth the powdah to blow 'em to hell," he confided. "An' I invites you-all to come coon huntin' with me to-night. I got to go back to jail tomorrow—bein' temporarily embarrassed, suh—but Ah sho' is goin' t' git mah fill of coon huntin' to-night." Which invitation was declined with thanks; in fact the girls had mischievously taken him up on his invitation and were gravely accepted and would have been carted off on a swamp-fest forthwith had not the Live One thought up one of his plausible excuses on the spur of the moment. Sure enough, that night we heard the baying of his hounds all about the swamps that intersected the plantation fields.

Getting back to our quail hunt, we struck open fields with dried brown wild pea patches in them, and a bevy that Flip found rose out of them and dropped in an area of small pines, giving us the finest kind of single bird shooting. I found myself far too slow for brush shells and did much better with the standard loads.

On this trip also I experimented successfully with nuts and raisins for a midday sustainer. What is wanted is a nourishing non-bulky food that does not have to be cooked nor served in a dish of any kind. It must also not be "heavy" so as not to make one logy after eating, and a pocketful of shelled almonds and raisins proved to be the very ration.

That night I built me a bright, cheerful camp-fire in front of the tent and the whole party came out to enjoy it. Spreading tarpaulins and mackinaws about on the pine needles, I accommodated them all and we had quite a time. The girls were all good sports, enjoying the outdoors keenly, and together we planned another trip to Glacier Park the following year. It was good to watch the Live One relax and enjoy himself, leaning up against my tent wall under the glow of the camp-fire. Himself a hard-driven man, of necessity obliged to take part in all the complex and feverish activities of the publishing game, the Live One is simple at heart and never happier than when just puttering around a camp or letting himself go under the spell of indolence that tent life conjures up. His wife had to drag him away from that tent by force when the party broke up, and several times he attempted to sneak back and bunk in with me, thereby escaping the inevitable bridge rubber that awaited him.

Old Tad alone remained. The darkey had the sweetest old voice I ever heard; it was a pleasure just to make him talk. Soothing, caressing, like honey, the liquid mellow notes rolled on and we entertained each other for hours, for the darkey was wise in woods lore and all the subtle intimate life of the animal world which the black man seems to understand so much better than the white. And, Tad surprised *me* by confiding that he "loved to talk to a man like you, Marse Warren, 'cause I kin learn somethin'."

Finally he left for his humble cot and the embers of the camp-fire died down. There was a high wind on that night and wild shrieks sounded through the forest. I was camping in an old Civil War graveyard, long since levelled over and grown up to tall pines, but as I dozed off in the sleeping bag the shrieks increased in intensity until I came to life to realize that a forty-horsepower cat fight was being pulled off out in the cypress swamp. It was like a city back yard tomcat row magnified to the nth power.

"Doc keeps a brand of Manx cats among the by-products of his farm, no doubt," I muttered going off to sleep. Next morning I inquired of Tad about the row.

"No, sah, dey haint no cats heahabouts," declared the darkey emphatically, "Doc done had em all kilt off, 'ginst dey eat de quail. What you hearn was ole he-one wil' cats. I done kilt a forty pound wil' cat last month right up dar whar yo' tent is now!" Just my luck—always missing a good chance! Now, with a carbide lamp and a load of twos, one could have enjoyed a fine wild cat hunt in that swamp in one's pajamas!

(*Concluded in November*)

A NORTH COUNTRY BARK LEAN-TO WITH CHEESECLOTH INTERIOR TENT

SUFFERIN' COMFORT

BY DOUGLAS WETMORE CLINCH

WHENEVER a date of departure for the woods is decided, a subconscious element of my mind begins to ponder on clothes, grub, and "riggin'." The rest is generally one wild scramble till that luxurious moment when I sink back into a car seat. In my immediate vicinity there are apt to be half a dozen weird-looking bags; in the baggage-car ahead, several checked bundles. If the train leaves very early, it's a cinch I have been up long past midnight. The jumping-off place calls for further adjustment, in which clothes are changed and the intricacies of the equipment explained for the benefit of the aborigines who masquerade as guides. This much has got to happen, and later on many things are possible. It is considered broadening to the mind to have a canoe upset, and to sleep in damp blankets or with no blankets or equipment at all. As an Injun once said to me, "I drowned a grand gun last fall." Hacking firewood and fighting flies develop a vocabulary only equaled by that of golf. Of course, you get wet through, or swear by the shadows of departed Nimrods that never, no never, will you pack a pack again. This is preferable on blazing-hot days, when you have acquired the art of stubbing your moccasined feet and linger, temporizing, in the shadows. It's a crucial test for your disposition to wake just before dawn, when the fire has gone out and your blanket disappeared into unexplored angles on the further side of your side-kick. Most especially your neck and shoulder muscles must be set in a half-Nelson. As Charlie Raynes used to say, "It sure jars the appetite of the jaded rich."

Offhand, I here recall some incidents of my misspent life. I remember running the Nepisiguit late in November, 1910. At least, Billie Gray ran the canoe and swore by all that was unholy that "this river sure is an inch deep and a mile wide," while I pattered along the shore. We lugged our loads far back on a ridge and tented in the immediate vicinity of a dis-

AUTHOR WITH LODEN HUNTING SUIT

franchized stove that was beyond any further moving. We just cleared the frozen ground, flung down our bags and blankets, and went to sleep. Old Bill found us there and left me alone while they went out for a team. I'd read everything in the outfit long ago, down to the minute instructions on such cans and packages as remained. In desperation I overcame a long-cherished horror of cutting myself with an axe, incidentally adding to my comfort therewith. Last September, while on the Upsalquitch, I was left on one side of the river for about four days. Alone I put up my miner's tent, cut wood and cooked, hunted and photographed, with no sounds for company other than the purr of the rapids, the wind overhead, and the flop of rising salmon. Two weeks later old John Harris took me back to one of the lakes you dream about, intending to spend the day. That is, we had lunch for two meals, but no blankets or tent. By a six-foot fire in a bough wickashee, beneath cold stars and a few odd flakes of snow, we put in a comfortable night. In November, 1914, I was at the home camp of Ed Menzies when word came for Allen Menzies and myself to come out. We had a week to spring several long lines of traps, stalk over a hundred caribou, sleep in four camps, and pack out on snowshoes about 75 pounds each, including a live mink. Our destination was a lumber camp on the Sevogle we had heard of but never seen. With half an hour to spare we came through on schedule. As Allen would put it, "When I get these here seen-to larrigans over Jack English's bunk to-night, with old Joe lambastin' his sourdough, I'll sure make this pipe suffer comfort."

Now, as Mr. Horace Kephart has rightly said, "If anyone invented the perfect woods outfit, half our joy would be gone." So this cannot be a perfect, complete, and satisfying for-all-time epistle. However, some experiments have been made and researches of note come to the light of day.

The first thing I think about is woolen underclothing, new and husky and fresh from the loom. I wear it because it absorbs perspiration and prevents me taking cold. In summer the weight is medium; in snow, heavy. Two-piece suits are much the best, union garments being apt to chafe and requiring a complete change whenever your feet are wet after a long day. A change—that is, two suits—suffices. Added to this should be country knit socks of the heaviest weight. In summer two pairs are worn, but in the winter the arctic bed sock, often made of white flannel or white Hudson Bay blanket, is best to wear next the skin. Flannel shirt (oxford gray) or "buckskin" (cravenetted), with four pockets with flaps, and a silk neck cloth (gray) are the universal choice.

So much, I think, is hardly to be disputed. Coming into the field of outer clothing, there are divers opinions. Mr. Stewart Edward White, after much experimenting, chose a pair of khaki army breeches, which he had covered with Indian tanned buckskin. This combination was soft and did not stretch, and stood a fair amount of rain. A sweater, slicker, waistcoat, hat and gloves were added. In the East, most sportsmen wear an old suit, or buy at some country store a pair of lumberman's trousers and a mackinaw

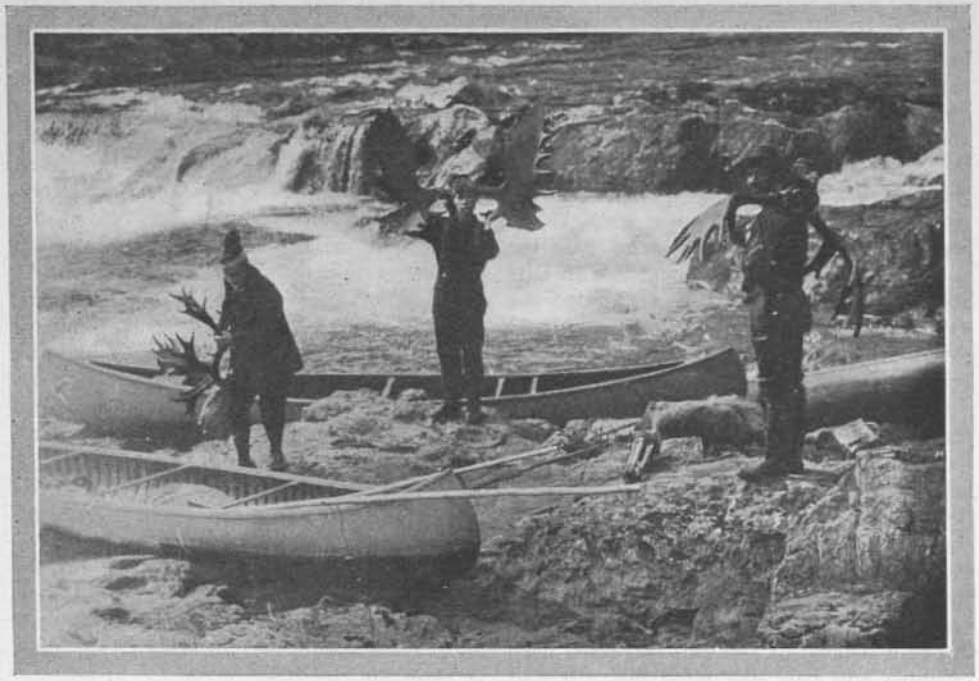
coat. I have long since discarded the old suit. It is very hard, too, to get the very best mackinaw. The lumberman's trousers of various heather mixtures also require considerable alterations. Last season, therefore, I had an outfitting firm make for me a loden suit. The trousers were of the loose riding-breeches cut. I wore them steadily for two months, sleeping in them. I would fish to my hips for salmon, climb aboard a canoe, and in half an hour they were dry. Only toward the very end of my trip did they tear, and then only with abnormal pressure, which bruised my knee, as I stole over deadfalls on a caribou band. But I have improved these trousers by lining the knees and seat —inside, of course—with "Kenlit," the best light-weight waterproof material I have seen. Thus I can move quickly, as the trousers are light in weight, the early morning dew has no effect in marching through undergrowth, and I can sit down on the snow or a damp log.

The waistcoat of this suit was lined with chamois and kept the wind out. It had many large pockets with flaps. The coat proper was worn only when traveling slowly. It stood one entire day's rain, wetting through only where the pack-bag brought undue pressure on the shoulders and back. Therefore, I am putting a strip of Kenlit down over the shoulders and back, inside the lining. Two sets of buttons are allowed for. When sitting in a blind or a canoe the extra set allow me to tighten the coat up at the waist. Inside, the pockets are long and deep and so hung that the weight is carried from the shoulder. If you cannot get loden cloth, care should be taken to choose what is known as a "milled" cloth. Then have it cravenetted. Such a suit is much better than the combination of old coat and odd trousers, as it is very light in weight. Incidentally, it is always ready and not bestowed on guides in farewell appreciation.

In my opinion boots have no place in Eastern woods travel. Most moccasins one buys are too short and chafe in cold weather—that is, most of those I have tried. Last season I took this matter up with the makers, complaining that they wore through at the ball of the foot and at the heel with about three weeks' wear. They therefore put me up a special pair of extra thick outer bottom. These I wore consistently for two months without them in any way being "seen to." For all-round work they are, in my own opinion, the best—that is, till the snow comes. Even then, in wet weather, they are superlative. For dry hunting, though, and snowshoeing, some makers turn out an Indian smoketan that you will distrust on sight and cherish forever, after trial. They are very light and delivered by post. Add to them a pair of moccasin "stags" and the footgear is complete. Soled moccasins without calks are a delusion and snare and the first cousins to slippery places and sprains. After the manner of shoes, I have seen one pair of eight-dollar hobnails that have been through Idaho and Wyoming, up the Fraser into the sheep country, and are still presentable. Insoles of heavy harness felt should be used with moccasins, of course. Ordinarily such moccasins should be two sizes larger than a shoe for city use.

Mittens I buy at the edge of the settle-

A ONE-LEG CAMERA STAND FOR THE WOODS



CANOES AND OUTFIT FOR A CANADIAN HUNTING TRIP

ment, hand-knit by farmers' wives. In extreme cold weather two pairs are essential. I use a heavy safety-pin with each mitten, fastening it to the sleeve. Under the stress of exciting moments this prevents the mittens being mislaid.

Clothing, bedding, food, making camp, equipment come in order. Having considered the first-named, bedding is in order.

From eleven seasons' experience and a long discourse with friends who have been in Hudson's Bay and the Canadian Northwest, as well as through the East, my mind is pretty well made up on this matter. In the beginning I used to carry a double gray blanket. Graduating from this came the Hudson's Bay, which at any rate is long and wide enough. Sleeping bags of most sorts I have tried and seen used. Air beds, bough beds, cots, etc., are personally familiar to me. The rabbit-skin blanket I have heard of, but not seen or used. The eiderdown robe, designed by Mr. Hubert Sinclair, I have seen tried out. Now we have Warren Miller's combination pack and sleeping bag. Since 1911 I personally have sworn by a well-known "sleeping pocket," and used it last season. From all angles, then, what is the best manner to come to a decision, always bearing in mind Mr. Kephart's hypothesis?

What's the bedding to be used for, in the East, say? How is it to be transported? In most cases you go into camp by canoe or team. Within a radius of ten miles from that camp you pack back to stop over-night, perhaps, or for a week. You carry your food, a camera and a man-sized axe. Very often one way you carry a head. At least, the guide does, while the sportsman carries the bedding, for in most cases a guide and sportsman are unattended, the cook being at the main camp. In some sections of Newfoundland packers are used and no teams or canoes. Then it's apt to be a caravan. It is reasonable, therefore, to figure one's outfit for the lightest possible trips, adding such luxuries as a team or canoe will allow.

Unless you have permanent outlying camps, the first thing to be considered is a tent. It is nothing short of ridiculous to sleep out without one. I've done it

many times, even without blankets, sleeping bag, or robe. There are various contrivances in which one can sleep dry, even in a pouring rain; but how about undressing in the rain, getting breakfast in the rain, packing up in the rain?

There are many good tents on the market weighing from 3 pounds up. I have used a double Miners tent for four seasons and under stress four men have slept in it. There are several forms of Baker shelter tents, the Forester tent, and often a spread of 7 by 9 waterproof sheeting is all that is necessary. Added should be a set of pockets, which may either hang from the tent, or be attached to stakes driven in the ground alongside the bed, so as to be easily reached when pockets are emptied. Plenty of headroom should be a prime essential. Also, cheesecloth should be taken along or sewed inside with tabs to tie it up out of the way.

AUTHOR'S SHELTER TENT, LACED UP AND READY TO RAISE

In conjunction with the relative ratio of tents to sleeping equipment, one must consider the theory of the bough bed. If you have nothing else to do, well and good. Fell a good tree and strip the lighter branches. It is much quicker than soliciting small boughs from undersize trees. At the best of times it is a good hour's work and requires skill. Mind, I do not disavow allegiance to the solace of such a bed, but generally I am too tired or have not the time. The most important consideration, however, in sleeping out is not in bough beds or any other kind, but in having the head high enough to take the strain off the muscles of the shoulders, shoulder blades and neck. If you prove this truth you can soon learn to sleep on any level surface. Of this level surface, the second important part is that from the shoulders to the lower hips. Therefore, any bed you require is essentially from the head to the hips.

Summing up, my preference is for a light sleeping bag weighing about four or six pounds, fitted with an eiderdown quilt of from four pounds in weight up. Eiderdown will work through almost anything but sateen, which material varies in weight. Naturally, I will have this bag waterproof. At present I am having one made with the upper of Kenlit. It is the bottom that gets the wear and tear and the upper which can be lightened. The bag I have in mind can, equipped with an eiderdown, be fitted inside the sleeping pocket and used as an auxiliary for packing back. Thus in camp I have an air bed to my knees, remove the inner bag and pack back, using a stretcher. This outfit also has several other good features which will be made public when the patents have been awarded. The Miller pack also seems very attractive, and, if lined with wool and mackinaw, as at present, meets many needs for low-temperature work.

For those who do not wish to use a bag, two concerns in Ottawa have gotten up, respectively, an eiderdown robe and eiderdown sleeping quilt. All of the Dominion Government surveyors are so equipped. The quilt I saw was 84 by 84 inches, of a light duck upper, a serge lower, with the quilt proper inserted at the side. The owner and designer, Mr. Hubert Sinclair, of Newcastle, N. B., told me that he used

two of these quilts for two men—one under, one over—the edges being snapped together. In the summer he said the combination was really too warm and that in the future he would have the eiderdown in two thin sheets, using but one in summer. The weight of these two quilts in their proper bag was about ten pounds. Add to this a 7 by 9 3½-pound shelter, the bedding for two men would be complete. The same quilts were used by my friend last season during the winter of 1913-14 in Hudson's Bay.

It is difficult, because of various tastes, to choose an ideal grub list. Unquestionably, as Warren Miller describes in his new book, "Camp Craft," there is less bulk in uncooked food. On short trips, however, where I go into camp with a team or canoe and have a depot camp, I buy a local brown bread put up in Saint John. This form of food keeps for upwards of three weeks and is very sustaining. In camp, where you have an opportunity of baking daily, sourdough bread is a treat—that is, yeast is made of sourdough, and each time you make a batter a piece is saved, called "the lad," with which the next batch is leavened.

The other essentials for camp fare are, in my own opinion, first of all most assuredly baked beans, cooked in the woods. Bacon always should go along, and cheese, in individual jars, is a choice lunch food. Corned beef is most excellent when no game can be had and makes a good hash with some potatoes (about two parts potatoes to one of beef) and onions. Dates and raisins I would not be without, especially for lunch and odd moments to eat while traveling. Dried codfish is nice to vary the diet and, when mixed with potatoes, makes good cakes. Pork is necessary for beans and biscuits. Cornmeal and flour are always good for cooking fish, corn bread, etc. Self-raising flour makes good cakes. Chocolate can be dished up with corn starch in camp and is the ideal dessert. Of course, you require some dried prunes and apricots and raisins and nuts (though I prefer the dates). New Orleans molasses, when procurable, is the equal of most syrups. Marmalade is excellent to butter biscuits for lunch, no matter what you eat with them. Tea is much to be preferred to coffee, and generally, if you have something sweet like jam to eat with bread, you can put away several more pounds of food a day. The taste for sweets developed in the open is abnormal, anyway, and should be allowed for. Olive oil is preferred by many for cooking. Butter should be pressed into friction-top cans.

Of late there have been so many improvements in cooking outfits that I hesitate to say which I even think is the best. The steel fry-pan, with two rings on handle, which in turn folds back under the pan when not in use, is the best I have tried. Next you require a kettle to make tea in, and which is best low and flat. One kettle for boiling is generally enough, though two of almost equal size are almost as easily carried as one. Several complete outfits are on the market, namely, the Forester Kit, the Kompakt Kook Kit, and the Stopple Kit. The sane rules are that all cups and spoons must not be of aluminum, as they will burn the mouth. The fry-pan is of light steel, the rest of an alloy. Most especially you should have a folding grate. Once you get the correct height, they are a joy forever. They come in separate bags and do not smudge the rest of the outfit. The Stopple Kit could be improved if the boiling can allowed for the fitting of a snug bag between the kettle and the cups, as the latter have to be cleansed each time before using. A couple of large spoons for stirring and ladling out food are also necessary and should have the handles fold back, to prevent them slipping into the concoction in process of boiling. Of dish-rags and a mop there are seldom enough. Cleanser powder is worth any trouble it requires in transportation. Bakers of the reflecting type must be kept bright, or they will not cook quickly. Hot water for washing dishes is most important, as the sand-by-the-lake-elbow-grease theory has long been exploded. A trick in cleaning your fry-pan is to warm and empty, grease, warm again and, while holding it at arm's length, dash quickly with a pint of cold water. All grease is removed with this one motion and the pan is dry and ready to be packed.

(To be continued)

COACHING THE WINGSHOT

BY CHAS. ASKINS

III

SOME distance away from the house, far enough so that the sound of the guns would not annoy the inmates, stood an old ginhouse—a rambling structure, little used except in midwinter, when its rusted machinery would be set to creaking. We used the broad side of this building to tack our paper targets on.

From what I had seen of his work, I thought J-C could shoot fully as well as the average lad; in fact, I concluded he had a lot of natural ability with a gun. I was determined, however, to make a finished shot of him, if possible, and with this object in view meant to devote considerable time to the mechanics of gun-pointing. When he had become fully able to shoot where he looked, he could subsequently build on that foundation by acquiring a knowledge of angles, speed of flight, lead, swing and its effect on lead, snap and half-snap, with both rapid and deliberate carry through.

The foundation of wing-shooting—as, in truth, of all shooting—is to be able to center the mark. In the shooting game, the next best thing to never missing is to assign the correct reason for misses when they do occur. If my novice landed his charge in the center of a three-foot square of paper every time, never taking more than a second to throw up his gun and shoot, well and good; we would soon pass on to something else. If he couldn't, we would learn the reason, and then shoot that reason so full of holes that it wouldn't exist any more.

Our target was a four-inch black spot in the center of the paper, distant twenty-five yards. I was to hold a stop-watch on J-C, and he was to fire at the word, for I meant eventually to develop in him both quick and regular time. From the beginning, no pottering aim was to be tolerated or any attempt to hold the piece still while the trigger was deliberately pressed. Later, I intended to place double targets on the barn, having him use the second barrel in correct form and time. Lastly, would time him afield, this by way of establishing a time speed which would best agree with his style of shooting.

We brought out the Parker gun, partly because it made the closest pattern of the three guns we had, and partly because its stock was of the description which might be called rational—2½ inches at butt, 1½ at comb, and 14¼ long. Almost any man can shoot a stock of such dimensions with fair effectiveness, unless his imagination is over-developed. It wouldn't exactly fit everybody, of course, but it would come near enough to it, so that the shooter himself might well be saddled with misses in place of the gun. In shooting at a fixed target the bulk of the charge would naturally go high, for it requires a 1⅞-inch comb drop to bring the aim flat down on the rib.

"Want some of the shot removed from these cartridges, son?" I asked when we had the target in position and had paced off the distance. "A gun always kicks a man in the jaw just when he has nothing else to do but expect it to."

"I'll not flinch. I've played behind the bat, remember—pretty good training for this kind of thing, eh?"

"Good! A gun kicks its charge a trifle higher when fully loaded than it does with a reduced load. I am anxious to see what you will do with the standard cartridge. I'll start this watch with the word 'Fire' and stop it at the crack of the gun. Take all the time you need, this first shot, and get the center. Ready! Fire!"

Contrary to his style when quail-shooting, J-C took a pottering aim. I caught his time at five seconds.

"Five seconds. Bird flies three hundred feet while you were aiming. Now, before we take a look at the target, tell me where you held and how—muzzle moving up when you pulled or swinging?"

"I raised the gun to the mark and then swung off to the left before I could pull; as the sight came back across I let go dead at the bull."

"We'll find that shot has gone to the right. Always look for the shot, bullet either, a trifle farther away than your eye told you it would be, in the direction your sight was moving. Such is bound to be the case, unless you checked your gun as you pulled the trigger, or you started the pressure on the trigger before the sight cut the mark. A lot of training is demanded in order to perfectly time a trigger pull to the movement of the gun, and you have either shot out to the right and high, or you 'lost' your sight and don't know where it went to. We will see."

We found that only a few scattering pellets had struck the black, almost the entire pattern going to the right and high.

"The deuce! What do you know about that? Confound the thing! I'm onto this gun—it don't shoot where you hold. No wonder I missed with it—I'd have missed sitting."

"Looks like it; but I have known pigeons to be missed on the ground by men who were good for 90 per cent on the wing. This time you pull trigger while your piece is rising, just before it reaches the mark, without checking it. Never try to take a second aim with a shotgun; that is rifle work. Don't look at the sight, either; that is rifle work, too. Fix your eye or eyes on the mark and pull trigger as soon as you feel that the light is being cut off—that something is not yet between you and what you are looking at, but that it is threatening to come. Never mind whether you are exactly on the mark or not; you let-off without fail as soon as the gun reaches the level. Taking a second aim is entirely against the principle of wing-shooting—can't be done, in fact, where it is a case of a fast bird."

"Oh, I'll shoot fast enough when it comes to a bird."

"Well, why not now? The mark is right before you, and it is not twisting or doubling or trying to dodge. Let me see how sharp you can be about getting on. Keep your eye on that mark and pull when you *think* you are right. Don't wait—never wait to have eye confirm judgment when wing-shooting."

I caught J-C's time for the next shot at a second and a half.

"Doing better, old man! Where do you think you hit that time?"

"Search me! Pulled as I was coming up, without thinking—gun went off itself."

"Good! I'll bet we find shot holes in the black this time. The man who deliberately put his mind on his trigger-pull or his sight, in wing-shooting, would be a dub. The work is altogether too fast for the 'every-day thinker' to get into action. What we are working for is to teach nerves and muscles to obey the subconscious mind, sometimes termed instinct, which is not only more rapid in action, but far less liable to error. Ha! Here we are! Well on the target, but about four inches high—just right, for ten to one the bird would climb that much."

"But I thought I was low, hang it! That black spot never was covered until the muzzle kicked above it."

"Don't want to be either, class A, exhibit 1. When the front sight or the muzzle gets within four inches of the black, and the gun is not moving very rapidly, there is tendency to lose the eye focus we have had on the mark and transfer it to the sight. That's wrong. Never hide your target. Keep it clear above the muzzle—so high above the muzzle that it cannot be even darkened, not to mention covered and obscured. Now note the

utility of a high-shooting gun. A high-shooting gun is not the thing for a man who squints one eye and tries to make a rear sight out of the rib of his gun, but the style of that chap is so antiquated that its only use is to serve as a warning. Of course you will shoot high with this gun, at a target, but wait until your trigger finger gets on edge, and a bird is climbing off at the rate of ninety feet a second."

Presently J-C was hitting the mark pretty regularly. Shooting a bit to one side or the other and generally high, as in the nature of things he could with that gun, his patterns presently fell lower to center the black. I suspected the young man was deliberately holding low. Taking a boyish pride in hitting in the center, he took the surest means of doing that by holding low with rifle-like accuracy. I couldn't permit him to defeat my purpose in that way.

"Double quick time now, son. We've got to get that load off in a second. Ready! Fire!"

J-C was equal to the occasion. But he jerked his piece up and let off on the instant, just as he had with the Captain's gun on quail. To my surprise, if not his, the target was centered. He was elated.

"Just my old style," he confided. "See what it does!"

I made no comment. If he could keep on snapping at the target like that, and hitting it, nothing was to be said—he was a new order of novice to me. However, he didn't keep it up, but peppered about on every side. Neither had he an idea of where his charge had gone.

"Now, J-C, this has gone far enough. You can't slam that gun to your shoulder and hit the spot any more than I could. You are making the mistake that has been made by a thousand youngsters before. You see an expert at work, note the rapidity and certainty of his results, and in imitating him you take it for granted that his accuracy is due to quickness rather than the other way about. His work can be imitated after it has been clearly analyzed and learned step at a time, otherwise you had as well take the balls of a juggler and hope to keep all of them in the air the first time you tried."

"You are as wise as my old English punter, who used to wonder in his soul how I ever got about at all, not having brains enough to imitate a bay-snipe. If I am to fire in a second and must hit the mark, and can't fire in a second *and* hit the mark—what's the answer?"

"The answer is such an amount of training that every movement can be made with bullet speed, *except the conclusion of the aim.* That must be, if not deliberate, at least regulated so that you can time the trigger-pull to the line of aim closing on the mark. The more expert you get to be in pressing trigger, so that you know it will yield at a precise instant, the faster this concluding 'time movement' may become. Bring your gun up as you would flash a baseball bat through the air, if you like, but check it under the mark and from there cover steadily, steadily, *steadily.* Never forget this, son, though I have never known a shot yet who didn't lose his steadiness some time or other—and he misses when he does it.

"Now try again. I am taking your time, but don't let that hurry you. Hurrying you is just what the bird will be forever doing—hurrying you out of correct time, because, since it appears he is surely getting away, you will want to jerk your gun on him. If you happen to be faced to the north, a jerked gun is more apt to shoot to the north than it is to the south; but that is about all that can be said. Correct time—that is, regularity and steadiness of gun movement in its final aim, with perfect trigger pressure—is not all of wing-shooting, but your father, who knows the game pretty well, used to say that if he could discharge his gun with a flash of electricity from his brain he could kill every bird he shot at. If he had his trouble in timing the trigger-pull to the movement of his piece, after twenty years of practice, be sure that you will have to travel the same road for a little while."

J-C plugged away, and I saw that the plucky lad was doing his very best to acquire steadiness. He succeeded very well, too, all of his shots striking the black with some part of the pattern, and many centering it. Gradually his time slackened, though, from a second and a quarter to nearly two seconds. I noticed also that

he gripped his gun tighter and tighter, and knew that it was time to call a halt with those heavy charges, else my pupil might develop flinching before I knew it.

"This will do for one lesson, son. You are straining your nerve now, and it's liable to take a fall out of you. A world of training is needed before a man can shoot all day, and this sort of shotgun shooting is a nerve-wrecking business. Our next lesson will be with a .22 rifle. I have one with about the same stock dimensions as this Parker. Mean to knock off the back sight and then you can shoot just as you would a shotgun, depending on the fit of the comb for a rear sight. It will tell a straight story of where you are holding without the continual nervous shock you are getting now."

"Holy smoke! Not done pounding away at a mark yet! Maybe we'll put in such a whale of a foundation that we'll not feel like building anything on it."

"Son, the world was built in a day, but to make a foundation for it, so that it would stay put when built, took so many years that nobody has ever yet been able to compute them. Every kid kicks about being obliged to learn the A B C's, but he gets his reward later in reading of wonderful desperadoes."

"Cut it, Coach! Look at old Jack watching us through the kennel fence. He can't see a thing in potting away at a barn with a thousand quail around here wondering what the devil all the noise is about. Jack's disgusted. Dogs are exceeding wise. Let's go to lunch."

I kept J-C practicing with the small rifle until his shots went regularly into an eight-inch circle, firing in quick time. By and by the work was varied by placing him with the wrong foot forward, whereupon, in the given second, he was forced to swing his other foot in front, balance himself and aim. At this stage I constantly urged greater speed, desiring to secure such rapidity of action that there would be no possible chance for a second aim or any checking of the gun as the trigger was pulled. At the same time the accuracy insisted upon was landing in not greater than a ten-inch circle every shot.

Noticing that J-C still used his arms rather than a body movement in directing his aim, I attached a kicking strap to the gun and by running his arm through this and slipping the leather just above the elbow, his piece was held in rigid position, which forced him to develop the body swing. A marked increase in accuracy followed, so that nearly all his bullets went into a six-inch circle.

We maintained the rifle practice for three days, firing so many shots that Cut-Bias sarcastically remarked that if his building became so shot to pieces that he could no longer use it as a ginhouse, he might still sell it for old lead and come out winner. J-C took it all with good temper; I knew he was keen to get afield after the quail, and the niggers kept telling us tales about a lot o' ole briah snipe that had just come in. The youngster had apparently made up his mind to see the thing through at whatever cost, and I think he was beginning to appreciate the utility of all this preliminary work.

Presently I had him firing at the target with a horizontal swing, coming on first from the right and then from the left. His instructions were to swing right on evenly past the target, never checking the arm as he pulled trigger, and the youngster quickly grasped the truth of what I had been preaching regarding the necessity for a perfectly timed trigger-pull. The very first attempt at shooting with the side-swing proved beyond a doubt that if he waited until the mark was covered before starting pressure on the trigger that the result must be a miss. In due time and with few words from me, he learned that gun-swing and trigger-speed must exactly equal and balance one another if the bullet was to land in the black. It was no less apparent to him that speed of gun movement might be increased at will, up to the point where it could be negatived or balanced by a pull in perfect time with the swing. This point, however, was soon reached, after which speed of swing was secured at the expense of accuracy.

In due time a further step was taken in this swinging work. J-C was instructed to place his bullets, not on the mark, but a foot to one side in the direction of swing. When attempting this, I told him *never* to take his eye off the bull, which

represented the bird, but to throw his bullets ahead by feeling or by calculation. He must not take his eye from the mark to divert it to the spot where the bullets were meant to strike, since in doing this, when it came to a bird traveling at a high rate of speed, he would invariably shorten and miscalculate the lead he intended to make. The boy learned this for himself after experimenting enough, and at the expiration of a couple of days of hard work he could throw his bullets one foot ahead, two feet, or three feet, grouping them where he wished almost as well as he could send them into the black.

In doing this swinging practice, my man learned what every right-hand shooter does sooner or later: that a swing from right to left is more rapid, more even, and easier of execution than that from left to right. The right swing can be taken with equal facility, however, provided the side of the foot is turned toward the target in place of the toe of the left foot, as usual. Many a marksman has gone through life without learning the proper position to take for a right swing, and as a result he is much less certain on those birds than the ones angling off to the left.

Being pretty well grounded in trigger-timing and to securing lead along the line of swing, we now had a few lessons in snap-shooting. J-C was told to keep his eye focused on the black—never to let that black get away from him—and then, in place of raising his sight directly to where he was looking, to shoot a foot to one side. Of course, he had some difficulty in doing this for a while, but after expending a box or two of cartridges he began to secure nice groups, both to the right and to the left of the bull. Then he was required to make groups of ten shots a foot beneath the bull and a foot above it. This took time and a lot of it, but I was determined that my man should acquire the knack of taking lead through his judgment of where his piece was directed, rather than by changing his focus-point from the game to some imaginary point ahead of it.

In due time J-C became proficient in taking his lead of a foot, and then he was required to take two feet, and the work was continued unflaggingly until he could group at the required lead with great uniformity.

Returning to the firing with a swing, I placed two targets up about a dozen feet apart. We changed the rifle for the double shotgun now, since it was two-barrel work. The feat consisted of swinging past the first target, firing at it, and then maintaining the even movement onto the second paper, which is shot at in turn, carrying past as usual. I considered this work important. It guaranteed a uniform and sustained swing, no checking of the piece as the trigger was pressed, and it furthered both regularity and promptness in getting the second charge on the way. Moreover, it brought home to my pupil the necessity of "recovering his line of elevation" before discharging his second barrel.

"I've splattered the first paper till it looks like a pepper-shaker," J-C declared, when we went up to inspect the targets; "but deuced if I know what went wrong with that second barrel. I know that I swung through according to Hoyle—Askins either. I timed the pull the same as always, and I had the bull just above the sight."

"What do you reckon happens, John C., when a shotgun is fired?"

"Blest if I know what might happen! It shoots and it kicks, and sometimes it hits where you held."

"True enough, as far as you go. But the gun goes further. Remember what I told you the other day when you were missing those quail with the second barrel: the same thing is happening now. Then we had to guess at what was wrong, and now we can see. When a gun is discharged it drives back against your shoulder, where, meeting resistance, the rearward movement is checked and the muzzle flies up. That is not the end, for in rising it had to pull against your grip and the strength of your arms, which quickly brought the piece down again. The gun was brought down, but your head on its stiff neck was not brought down with it, and the aim for the second barrel was taken with a high, very high, rear sight. Shotgun or rifle, a high rear sight means the charge sent above the point of aim.

"Now, obviously, since the trouble is

due to a high rear sight, said rear sight being the comb of the gun from which your cheek has been kicked upward, the remedy is either to firmly replace the cheek to comb before the second aim or hold low. Better try both remedies at the same time—lock cheek to comb again and hold a bit low."

My man followed instructions, as the second target proved, at the next attempt. Presently we varied the work by alternately swinging from left to right and from right to left. Then the position of the targets was changed, one being placed higher than the other, until he was taking them at all angles, from horizontal to the second placed directly above the first. The object, of course, was to accustom him to swinging in any direction, at any angle—an experience he would need in duck-shooting, if not at quail.

Occasionally, by way of quickening his trigger-time, the two targets were placed very close together. With those targets within six feet of one another, swing of gun well sustained, we learned that the second shot would have to be pulled within a quarter of a second of the first—celerity of every brain and nerve faculty was demanded if that trigger was to be pulled ere the sight passed the mark. Again, the bulls were fixed forty feet apart, and now the problem was to carry the line of swing fast enough so that the follow-up barrel would not be slow.

At last I announced: "Some of the drudgery is over, son. Moving targets are the next thing on the program."

(*To be continued*)

THE CAMP-FIRE

By WILLIAM HOLMES WENSTROM

Have you smelled its fragrant smoke at dawn or twilight,
Or seen its friendly glow light up the trees?
Have you seen its dying sparks, like little fire-flies,
Go floating down a sleepy autumn breeze?

Have you watched the pine-logs blaze and snap and crackle,
And seen your tent stand ghostly in the light
Of the camp-fire, burning bright when all about you
Has merged into the purple gloom of night?

When you've been cold and hungry and disheartened,
Have you felt its cheery warmth drive care away?
Have you crouched before it wet and nearly frozen,
And waited for the coming of the day?

If you haven't then you'd best desert your office
And haste to some primeval wood or plain,
There to sit before a blazing, roaring camp-fire
As darkness hides the wilderness demesne.

TAXIDERMY FOR THE SPORTSMAN

II. Field Work on Big-Game Heads

By ROBERT S. LEMMON

ILLUSTRATIONS BY THE AUTHOR

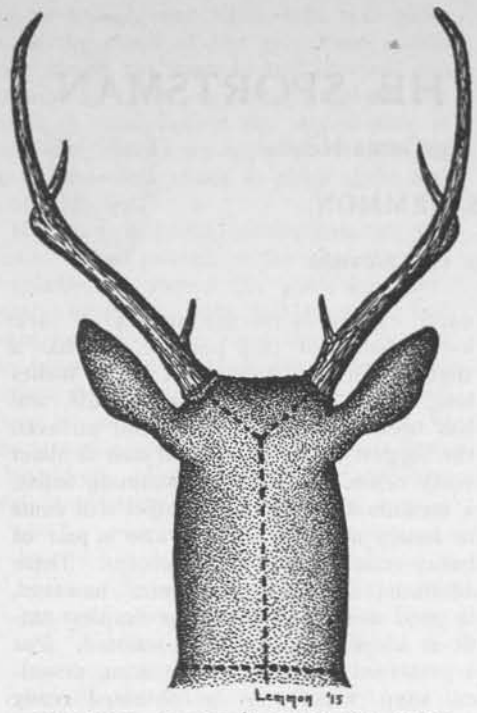
IN some respects the skinning and field preparation of game heads is easier than in the case of birds. To be sure, it takes longer and demands more real work of the man behind the knife, but far less necessity for delicacy of touch and care in manipulation of the skin exists than in the treatment of feathered game. The hide of a moose, bighorn or other large animal withstands a lot of pulling and hauling without appreciable harm; it is tough and does not tear, the hair can be easily and satisfactorily washed to remove blood or other stains, and there is no need so to shape it in the field that it shall dry in even approximately the form in which it will subsequently be mounted.

As these articles treat taxidermy solely from the sportsman's standpoint, I shall omit instructions for skinning and preserving complete specimens of big game, confining attention to heads, pure and simple. Few men, probably, would care to undertake the task of skinning, skeletonizing and preserving an entire moose or even a deer, for that is no small job and results in a rather bulky package to take home. The mounted head is what most of us want to keep as a reminder of our big-game trips. Such smaller animals as it may be desirable to prepare entire will be considered in a separate article.

The field equipment of the man who wishes to preserve his game heads is neither bulky nor expensive. The professional, of course, carries a considerable outfit, for he must be prepared to handle a large number and a wide variety of subjects; but his case is not that of the sportsman. First and most important, the latter must have a *good* skinning knife—one with a thin, sharp-pointed blade of the best steel, which will take and hold a keen edge. There is on the market an ideal knife made for this purpose. It has a slightly curved blade about three inches long, set in a plain wooden handle, and has been used with satisfaction on even the biggest of big game. Its cost is about forty cents. Besides the skinning knife, a medium-sized all-steel scalpel will come in handy at times, as will also a pair of heavy scissors and strong forceps. These additional tools are not essential, however, to good work, and where the simplest outfit is sought, they may be omitted. For a preservative to use on the skins, arsenical soap, which can be obtained ready mixed, dry, from dealers in taxidermists' supplies, is about the best for field work. A pound or two of it should be carried in a tin box with screw top. A small tape measure will also be needed, and a good carborundum stone for sharpening the knife and scalpel; dull tools are an abomination in any kind of taxidermy.

With implements at hand and a head ready for skinning, the first thing to consider is how it is to look when mounted. Study carefully the general contour of the neck in relation to the head. See how the lips are attached to the gums, the shape, size and color of the tongue, the swellings and hollows about the throat and jaws. Get well in mind the shape of the nose and the appearance of the nostrils; these will alter considerably as the skin dries, and it will be up to you, in mounting, to restore them. Study all these points, therefore, and make notes of them. If possible, scratch down a few rough drawings as an aid later on; even a few crude lines will often be the key to a puzzling situation in finishing the head at home, perhaps several months later.

The great majority of heads, of course, are placed on shields to be hung on the



CUTTINGS FOR DEER'S HEAD AND NECK

wall, and many such, especially those prepared by amateurs, are spoiled by having too short necks. The proportion of head to neck must be right if the best effect is to be attained. It is right in nature, so do not make the mistake of altering it.

The opening cut is made entirely around the neck, just where it begins to swell out into the body. Start at the back, close to the shoulder, and run the point of the knife, just under the skin, down the right side to the throat, keeping it right against the body. Then start again at the back and cut the left side in the same way, joining the two incisions on the chest.

Now return to the place where the first cut was started, and run the knife straight up the center of the back of the neck to a point midway between the ears. From there make a straight cut to the base of each horn, and cut entirely around the latter. The three cuts will thus form a Y, as shown in the illustration. Never cut lengthwise along the neck and throat of a big-game head, for it would be difficult to make a neat job of joining the edges of the skin when mounting. The hair along the ridge of the neck is relatively long and heavy, and serves to conceal the stitches needed to draw the skin together.

All the opening cuts are now made; the rest is a peeling proposition. Start at the base of the neck, on top, and work down the side toward the throat, pulling the skin away from the flesh with one hand, and, with the knife in the other, cutting at the little fibrous threads by which it is attached to the neck. Pull steadily and use the knife freely until nearly the whole side is clear and you come to the base of the ear. Free the other side of the neck in the same way, and work the skin forward along the throat as far as possible. Then cut off both the ears close to the skull, and continue forward along the cheeks.

Turn your attention next to the spot between the ears where the V-shaped point of skin which forms the junction of the two arms of the Y still adheres to the skull. Get hold of this point and turn the whole thing forward between the horns, over the forehead and down toward the nose. Just above each eye is a circular depression in the skull, with the skin growing tightly down to its very bottom. Be very careful, in working around these two places, not to cut through the skin. Keep the knife close against the bone and skin down the sides of the depressions quite to their bottoms. There is no flesh between skin and bone here, so extra care must be taken to avoid a miscut.

On reaching the eyes, go very slowly. The edges of the lids must on no account be even slightly cut or marred in any way, else the appearance of the finished specimen will suffer. Keep the knife-blade right against the bony rim of the socket as you work the skin loose from its edge. The membrane over the eye itself must be cut through, taking care not to puncture the eye. At this stage it will be found helpful to insert one finger into the eye from the outside, to serve as a guide and show just where and how you should cut.

When both eyes are free, skin down to the jaws and nose. Cut the lips loose close to the bone, and sever the nostrils far enough back so that the cut cannot be seen when looking into them from in

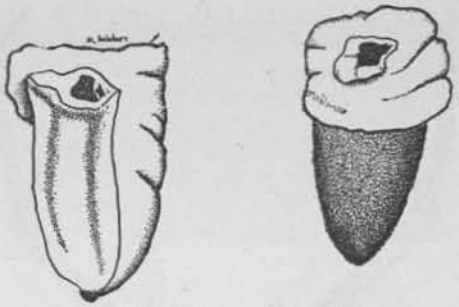
front. The lips are more or less thick and fleshy, and they must be slit open on the inside and thoroughly cleaned. This must also be done with the strip of cartilage and flesh which lies between the two nostrils. Be sure to do this cleaning thoroughly, and make mental note of how much waste matter you cut away, so that it can be properly reproduced when mounting the head later on. If the surplus flesh is not removed now the skin about the nose and lips will shrivel badly and be liable to the attacks of insect pests.

So much for skinning the head and neck, which are now entirely separated from the skin and may be laid aside for the time being. The next step is to skin out the ears.

The ear of a deer, caribou or similar animal has as foundation for its covering skin an oval, thin piece of cartilage, slightly rolled and gathered together at its base. There is no flesh in it, the cartilage alone being responsible for the form and flexibility of the ear. It must be entirely removed from the skin proper, else the hair is apt to slip. Even if decomposition should not set in, the ear would shrivel beyond recall in drying, giving that grotesque, misshapen appearance seen in so many poorly mounted heads. The taxidermist who knows his business will replace this cartilage foundation with a thin metal sheet, when he comes to set up the head.

Skinning the ears is probably the most difficult step in the field preparation of game heads, particularly for a novice at the game. There is little need to worry over the ultimate result, however, if you work carefully and patiently to make the job thorough and complete. After one or two heads have been finished the rest will come much more easily.

Roughly speaking, the ear must be turned completely inside out and every bit of cartilage removed. Begin at the base, where the cartilage was cut loose from the head, and work down the back or convex side of the ear clear to the tip, separating skin from cartilage by a combination of pulling and many light strokes with the scalpel or the point of the skinning knife. Along the edges and at the tip the cartilage leaf is very thin, so extra



SKINNING OUT THE EARS

care must be exercised to avoid cutting through it and slicing the skin on the inside of the ear. When the entire convex side is free, skin out the inner side in a similar manner. For subsequent reference in making the metal form, it will be well to note carefully the form of the cartilage leaf, and make a couple of rough drawings showing its exact size and shape. A professional would preserve the cartilage in "pickle" so that it could be used as a model later on, but most sportsmen do not care to be bothered with lugging around a few ears in a salt and alum bath. The drawings and a little thoughtful observation will serve the purpose quite well enough.

The last of the skinning proper has now been done, but the entire inside of the hide must be pared and scraped to remove every scrap of adhering flesh and unnecessary tissue. Do this job thoroughly, so that the preservative will have a chance to act directly on all parts of the skin itself. Then wash it in clear water, to remove any blood, etc., that may be on the hair, coat the whole inside generously with arsenical soap dissolved in enough water to make it into a thickish liquid, and rub on a lot of salt. Finally, hang the skin in a shady, protected place, opening it out so that the air can circulate freely over its entire inner surface. Never dry a skin of any sort in the heat of a fire. If the weather is persistently wet, the hide may be hung where the smoke and air dried by the fire will reach it, but any amount of heat is harmful.

With the skin properly taken care of, turn your attention now to the neck and skull. Make four measurements of the former: length from the base of the skull

to where it joins the body; girth at throat; girth at center; and girth at the point where the opening cut, separating the neck skin from the body, was made. Put these measurements down on paper where they will not be lost, and get well in mind the general contour of the neck, the way it joins the head, etc. Then separate it from the skull by disjointing the last vertebra, and throw it away.

The skull must be conscientiously cleaned of flesh, the tongue and eyes removed, and the brains taken out through the opening made by disjointing the neck. An ordinary knife should be used for the final scraping, so as not to dull the edge of the skinning knife by contact with the bone. Then paint the whole thing inside and out with liquid arsenical soap, and hang it up to dry.

The foregoing directions are, in the main, applicable to all horned game, from a dik-dik to a moose, except that the bell of a moose also requires the cartilage skinned out of it. For hornless heads, such as bear, lynx, etc., only two opening cuts will be needed: one around the base of the neck, as above, and another straight one running far enough up the ridge of the neck to allow the skin to be turned forward, inside out, over the skull to the nose.

There is nothing in any of these operations which anyone need hesitate to undertake. They may sound difficult in the telling, but when you actually get down to work you can hardly go wrong if you follow the principles laid down. And let me repeat: cultivate the habit of really *seeing*, not merely looking at, the characteristic fulness, hollows, general lines, etc., which give to a game head in the natural state its beauty and appearance of life. Without a basically correct conception of these underlying characteristics you will find it difficult to make of the mounted head what it should and can be—a true representation of the living animal.

FIFTY-FIVE POUNDS OF FIGHTING CHANNEL BASS

By J. A. BROWN

Winner First Prize, Channel Bass. 1914 Contest

EVERY fisherman along the Jersey coast—at least, those who try their luck with the channel bass—know Gustavus Bergner, probably not by the name of Gustavus, but most certainly as "Gus" Bergner. His reputation as a channel and striped bass expert is chiefly responsible for the rapid development of Avalon in the last few years. Every inhabitant of that prosperous community seems to be his admirer and follower. I therefore decided last summer, when the big fellows had apparently deserted all other parts of the Jersey coast, to try my luck at his favorite haunt; so early on the morning of Sunday, July 5, 1914, with bait and tackle I journeyed down from Philadelphia to Avalon in the teeth of a cold, wet east wind. The day was just about as inviting as any damp, drizzling, east-windy day is at the shore, but as my fishing days are only possible on week-ends, I decided to try my luck. There are usually two gullies at Avalon—an outer, which can be reached at low water, and an inner gully.

On that morning the tide was half-way up, but, thanks to my friends, Gustavus—also known as "Gus"—and Walter Müller, of Philadelphia, I had a rod that made nothing of seventy or eighty yards, so I was able to reach the outer gully without the discomfort of a thorough soaking.

Fortunately, my first strike was a small kingfish, and I accidentally hooked him while reeling in, and I decided to try my chances with fish bait instead of the shedder crab, as I have usually found the big ones usually prefer fresh fish to crab bait.

In a couple of hours I hooked into a game young bass that gave a good account of himself, probably fifteen or twenty minutes, and tipped the scales at 32 pounds. By this time I was driven in from the outer gully and I was undecided whether to stop or try my luck again. Fortunately, the weather cleared up a little and I tried the inside gully. It wasn't long before I had an easy nibble and I let Mr. Bass have four or five yards before I tightened. Then away he went like a racehorse. I let him have about 100 yards and then began to get worried, as he showed no signs of stopping. Finally he slowed up at about 150 yards and then began to buck. I've had my fair share of luck with the big boys in the last few years, but this one beat them all. He was all fight and several times I nearly lost him. Finally he "tailed" high over the bar, and I gradually worked him inshore and landed him with the help of the surf. He certainly was a beauty, and I had a hard haul for a quarter of a mile back to my kit, where I had first hooked him.

About this time "Gus" Bergner and some others came down and we weighed him. Fifty-five pounds full, he tipped the scales, and every ounce fight, bone and muscle. I was pretty well tired by then, for the old boy had tussled with me for at least three-quarters of an hour. So with the help of some enthusiastic Avalonites we packed him away in the baggage-car of the Philadelphia express, after he had been photographed, measured and weighed, and brought him to Philadelphia.

Instead of mounting him, I made the mistake of calling in some of my fishing friends and we all had delicious channel steaks for a week—if not a fitting, at least a satisfying end to the big fellow's career.

Now I'm overhauling my bamboo casting rod, made by the Müller boys, of Philadelphia, dyed-in-the-wool enthusiasts,

J. A. BROWN AND 55-LB. CHANNEL BASS CAUGHT AT AVALON, N. J.

and, incidentally, the best surf-rod makers in the East, and am getting ready to tackle the big fellows as soon as spring comes 'round again.

PRIZE FISHING CONTEST CERTIFICATE RECORD

First Prize, Channel Bass, 1914 Contest

Weight—55 lbs.
Length—53 in.
Girth—28¼ inches.
Where caught—Avalon, N. J.
Rod—Müller Surf-casting.
Reel—Edward Vom Hofe.
Line—Vom Hofe Surf-casting.
Lure—Kingfish.

"DUCK SHOOTING IN THE WILD RICE," BY THEO. MACKLIN, IS ONE OF OUR LEADERS FOR NOVEMBER; ALSO AN ILLUSTRATED GROUSE YARN BY EDMUND J. SAWYER, THE MAN WHO DID THOSE WONDERFUL DUCK PICTURES THAT YOU WILL ALL RECALL IN OUR JANUARY, 1915, ISSUE

DESERT GOLD

A NOVEL, BY ZANE GREY

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XI

ACROSS CACTUS AND LAVA

BLANCO SOL showed no inclination to bend his head to the alfalfa which swished softly about his legs. Gale felt the horse's sensitive, almost human alertness. Sol knew as well as his master the nature of that flight.

At the far corner of the field Yaqui halted, and slowly the line of white horses merged into a compact mass. There was a trail here leading down to the river. The camp-fires were so close that the bright blazes could be seen in movement, and dark forms crossed in front of them. Yaqui slipped out of his saddle. He ran his hand over Diablo's nose and spoke low, and repeated this action for each of the other horses. Gale had long ceased to question the strange Indian's behavior. There was no explaining or understanding many of his maneuvers. But the results of them were always thought-provoking. Gale had never seen horses stand so silently as in this instance; no stamp—no champ of bit—no toss of head—no shake of saddle or pack—no heave or snort! It seemed they had become imbued with the spirit of the Indian.

Yaqui moved away into the shadows as noiselessly as if he were one of them. The darkness swallowed him. He had taken a direction parallel with the trail. Gale wondered if Yaqui meant to try to lead his string of horses by the rebel sentinels. Ladd had his head bent low, his ear toward the trail. Jim's long neck had the arch of a listening deer. Gale listened, too, and as the slow, silent moments went by his faculty of hearing grew more acute from strain. He heard Blanco Sol breathe; he heard the pound of his own heart; he heard the silken rustle of the alfalfa; he heard a faint, far-off sound of voice, like a lost echo. Then his ear seemed to register a movement of air, a disturbance so soft as to be nameless. Then followed long, silent moments.

Yaqui appeared as he had vanished. He might have been part of the shadows. But he was there. He started off down the trail leading Diablo. Again the white line stretched slowly out. Gale fell in behind. A bench of ground, covered with sparse greasewood, sloped gently down to the deep, wide arroyo of Forlorn River. Blanco Sol shied a few feet out of the trail. Peering low with keen eyes, Gale made out three objects—a white sombrero, a blanket, and a Mexican lying face down. The Yaqui had stolen upon this sentinel like a silent wind of death. Just then a desert coyote wailed, and the wild cry fitted the darkness and the Yaqui's deed.

Once under the dark lee of the river bank Yaqui caused another halt, and he disappeared as before. It seemed to Gale that the Indian started to cross the pale level sand-bed of the river, where stones stood out gray, and the darker line of opposite shore was visible. But he vanished, and it was impossible to tell whether he went one way or another. Moments passed. The horses held heads up, looked toward the glimmering campfires and listened. Gale thrilled with the meaning of it all—the night—the silence—the flight—and the wonderful Indian stealing with the slow inevitableness of doom upon another sentinel. An hour passed and Gale seemed to have become deadened to all sense of hearing. There were no more sounds in the world. The desert was as

silent as it was black. Yet again came that strange change in the tensity of Gale's ear-strain, a check, a break, a vibration—and this time the sound did not go nameless. It might have been moan of wind or wail of far-distant wolf, but Gale imagined it was the strangling death-cry of another guard, or that strange, involuntary utterance of the Yaqui. Blanco Sol trembled in all his great frame, and then Gale was certain the sound was not imagination.

That certainty, once for all, fixed in Gale's mind the mood of his flight. The Yaqui dominated the horses and the rangers. Thorne and Mercedes were as persons under a spell. The Indian's strange silence, the feeling of mystery and power he seemed to create, all that was incomprehensible about him were emphasized in the light of his slow, sure, and ruthless action. If he dominated the others, surely he did more for Gale—colored his thoughts—presaged the wild and terrible future of that flight. If Rojas embodied all the hatred and passion of the peon—scourged slave for a thousand years—then Yaqui embodied all the darkness, the cruelty, the white, sun-heated blood, the ferocity, the tragedy of the desert.

Suddenly the Indian stalked out of the gloom. He mounted Diablo and headed across the river. Once more the line of moving white shadows stretched out. The soft sand gave forth no sound at all. The glimmering camp-fires sank behind the western bank. Yaqui led the way into the willows, and there was faint swishing of leaves; then into the mesquite, and there was faint rustling of branches. The glimmering lights appeared again, and grotesque forms of *saguaros* loomed darkly. Gale peered sharply along the trail, and, presently, on the pale sand under a cactus, there lay a blanketed form, prone, outstretched, a carbine clutched in one hand, a cigarette, still burning, in the other.

The cavalcade of white horses passed within five hundred yards of camp-fires, around which dark forms moved in plain sight. Soft pads in sand, faint metallic tickings of steel on thorns, low, regular breathing of horses—these were all the sounds the fugitives made, and they could not have been heard at one-fifth the distance. The lights disappeared from time to time, grew dimmer, more flickering, and at last they vanished altogether. Belding's fleet and tireless steeds were out in front; the desert opened ahead wide, dark, vast. Rojas and his rebels were behind, eating, drinking, careless. The somber shadow lifted from Gale's heart. He held now an unquenchable faith in the Yaqui. Belding would be listening back there along the river. He would know of the escape. He would tell Nell, and then hide her safely. As Gale had accepted a strange and fatalistic foreshadowing of toil, blood, and agony in this desert journey, so he believed in Mercedes's ultimate freedom and happiness, and his own return to the girl who had grown dearer than life.

A cold, gray dawn was fleeing before a rosy sun when Yaqui halted the march at Papago Well. The horses were taken to water, then led down the arroyo into the grass. Here packs were slipped, saddles removed. Mercedes was cold, lame, tired, but happy. It warmed Gale's blood to look at her. The shadow of fear still lay in her eyes, but it was passing. Hope and courage shone there, and affection for her ranger protectors and the Yaqui, and unutterable love for the cavalryman. Jim Lash remarked how cleverly they had fooled the rebels.

"Shore they'll be comin' along," replied Ladd.

They built a fire, cooked and ate. The Yaqui spoke only one word: "Sleep." Blankets were spread. Mercedes dropped into a deep slumber, her head on Thorne's shoulder. Excitement kept Thorne awake. The two rangers dozed beside the fire. Gale shared the Yaqui's watch. The sun began to climb and the icy edge of dawn to wear away. Rabbits bobbed their cotton tails under the mesquite. Gale climbed a rocky wall above the arroyo bank, and there, with command over the miles of the back-trail, he watched.

It was a sweeping, rolling, wrinkled, and streaked range of desert that he saw, ruddy in the morning sunlight, with patches of cactus and mesquite rough-etched in shimmering gloom. No Name

Mountains split the eastern sky, towering high, gloomy, grand, with purple veils upon their slopes. They were forty miles away and looked five. Gale thought of the girl who was there under their shadow.

Yaqui kept the horses bunched, and he led them from one little park of galleta grass to another. At the end of three hours he took them to water. Upon his return Gale clambered down from his outlook, the rangers grew active, Mercedes was awakened; and soon the party faced westward, their long shadows moving before them. Yaqui led with Blanco Diablo in a long, easy lope. The arroyo washed itself out into flat desert, and the greens began to shade into gray, and then the gray into red. Only sparse cactus and weathered ledges dotted the great low roll of a rising escarpment. Yaqui suited the gait of his horse to the lay of the land, and his followers accepted his pace. There were canter and trot, and swift walk and slow climb, and long swing—miles up and down and forward. The sun soared hot. The heated air lifted, and incoming currents from the west swept low and hard over the barren earth. In the distance, all around the horizon, accumulations of dust seemed like ranging, mushrooming yellow clouds.

Yaqui was the only one of the fugitives who never looked back. Mercedes did it the most. Gale felt what compelled her, he could not resist it himself. But it was a vain search. For a thousand puffs of white and yellow dust rose from that backward sweep of desert, and any one of them might have been blown from under horses' hoofs. Gale had a conviction that when Yaqui gazed back toward the well and the shining plain beyond, there would be reason for it. But when the sun lost its heat and the wind died down Yaqui took long and careful surveys westward from the high points on the trail. Sunset was not far off, and there in a bare, spotted valley lay Coyote Tanks, the only waterhole between Papago Well and the Sonoyta Oasis. Gale used his glass, told Yaqui there was no smoke, no sign of life; still the Indian fixed his falcon eyes on distant spots and looked long. It was as if his vision could not detect what reason or cunning, or intuition, perhaps an instinct, told him was there. Presently in a sheltered spot, where blown sand had not obliterated the trail, Yaqui found the tracks of horses. The curve of the iron shoes pointed westward. An intersecting trail from the north came in here. Gale thought the tracks either one or two days old. Ladd said they were one day. The Indian shook his head.

No farther advance was undertaken. The Yaqui headed south and traveled slowly, climbing to the brow of a bold height of weathered mesa. There he sat his horse and waited. No one questioned him. The rangers dismounted to stretch their legs, and Mercedes was lifted to a rock, where she rested. Thorne had gradually yielded to the desert's influence for silence. He spoke once or twice to Gale, and occasionally whispered to Mercedes. Gale fancied his friend would soon learn that necessary speech in desert travel meant a few greetings, a few words to make real the fact of human companionship, a few short, terse terms for the business of day or night, and perhaps a stern order or a soft call to a horse.

The sun went down, and the golden, rosy veils turned to blue and shaded darker till twilight was there in the valley. Only the spurs of mountains, spiring the near and far horizon, retained their clear outline. Darkness approached, and the clear peaks faded. The horses stamped to be on the move.

"Malo!" exclaimed the Yaqui.

He did not point with arm, but his falcon head was outstretched, and his piercing eyes gazed at the blurring spot which marked the location of Coyote Tanks.

"Jim, can you see anything?" asked Ladd.

"Nope, but I reckon he can."

Darkness increased momentarily till night shaded the deepest part of the valley.

Then Ladd suddenly straightened up, turned to his horse, muttered low under his breath.

"I reckon so," said Lash, and for once his easy, good-natured tone was not in evidence. His voice was harsh.

Gale's eyes, keen as they were, were last of the rangers to see tiny needle-points of light just faintly perceptible in the blackness.

"Laddy! Camp-fires?" he asked, quickly.

"Shore's you're born, my boy."

"How many?"

Ladd did not reply; but Yaqui held up his hand, his fingers wide. Five camp-fires! A strong force of rebels or raiders or some other desert troop was camping at Coyote Tanks.

Yaqui sat his horse for a moment, motionless as stone, his dark face immutable and impassive. Then he stretched wide his right arm in the direction of No Name Mountains, now losing their last faint traces of the after-glow, and he shook his head. He made the same impressive gesture toward the Sonoyta Oasis with the same somber negation.

Thereupon he turned Diablo's head to the south and started down the slope. His manner had been decisive, even stern. Lash did not question it, nor did Ladd. Both rangers hesitated, however, and showed a strange, almost a sullen reluctance which Gale had never seen in them before. Raiders were one thing, Rojas was another; Camino del Diablo still another; but that vast and desolate and unwatered waste of cactus and lava, the Sonora Desert, might appal the stoutest heart. Gale felt his own sink—felt himself flinch.

"Oh, where is he going?" cried Mercedes. Her poignant voice seemed to break a spell.

"Shore, lady, Yaqui's goin' home," replied Ladd, gently. "An' considering our troubles I reckon we ought to thank God he knows the way."

They mounted and rode down the slope toward the darkening south.

Not until night travel was obstructed by a wall of cactus did the Indian halt to make a dry camp. Water and grass for the horses and fire to cook by were not to be had. Mercedes bore up surprisingly; but she fell asleep almost the instant her thirst had been allayed. Thorne laid her upon a blanket and covered her. The men ate and drank. Diablo was the only horse that showed impatience; but he was angry, and not in distress. Blanco Sol licked Gale's hand and stood patiently. Many a time had he taken his rest at night without a drink. Yaqui again bade the men sleep. Ladd said he would take the early watch; but from the way the Indian shook his head and settled himself against a stone, it appeared if Ladd remained awake he would have company. Gale lay down weary of limb and eye. He heard the soft thump of hoofs, the sough of wind in the cactus—then no more.

When he awoke there was bustle and stir about him. Day had not yet dawned, and the air was freezing cold. Yaqui had found a scant bundle of greasewood which served to warm them and to cook breakfast. Mercedes was not aroused till the last moment.

Day dawned with the fugitives in the saddle. A picketed wall of cactus hedged them in, yet the Yaqui made a tortuous path that, zigzag as it might, in the main always headed south. It was wonderful how he slipped Diablo through the narrow aisles of thorns, saving the horse and saving himself. The others were torn and clutched and held and stung. The way was a flat, sandy pass between low mountain ranges. There were open spots and aisles and squares of sand; and hedging rows of prickly pear and the huge spider-legged *ocatillo* and hummocky masses of clustered *bisnagi*. The day grew dry and hot. A fragrant wind blew through the pass. Cactus flowers bloomed, red and yellow and magenta. The sweet, pale Ajo lily gleamed in shady corners.

Ten miles of travel covered the length of the pass. It opened wide upon a wonderful scene, an arboreal desert, dominated by its pure light green, yet lined by many merging colors. And it rose slowly to a low, dim and dark-red zone of lava, spurred, peaked, domed by volcano cones, a wild and ragged region, illimitable as the horizon.

The Yaqui, if not at fault, was yet uncertain. His falcon eyes searched and roved, and became fixed at length at the southwest, and toward this he turned his horse. The great, fluted *saguaros*, fifty, sixty feet high, raised columnal forms, and their branching limbs and curving lines added a grace to the desert. It was the low-bushed cactus that made the toil and pain of travel. Yet these thorny forms were beautiful.

In the basins between the ridges, to right and left along the floor of low plains

the mirage glistened, wavered, faded, vanished—lakes and trees and clouds. Inverted mountains hung suspended in the lilac air and faint tracery of white-walled cities.

At noon Yaqui halted the cavalcade. He had selected a field of *bisnagi* cactus for the place of rest. Presently his reason became obvious. With long, heavy knife he cut off the tops of these barrel-shaped plants. He scooped out soft pulp, and with stone and hand then began to pound the deeper pulp into a juicy mass. When he threw this out there was a little water left, sweet, cool water which man and horse shared eagerly. Thus he made even the desert's fiercest growths minister to their needs.

But he did not halt long. Miles of gray-green spiked walls lay between him and that line of ragged, red lava which manifestly he must reach before dark. The travel became faster, straighter. And the glistening thorns clutched and clung to leather and cloth and flesh. The horses reared, snorted, balked, leaped—but they were sent on. Only Blanco Sol, the patient, the plodding, the indomitable, needed no goad or spur. Waves and scarfs and wreaths of heat smoked up from the sand. Mercedes reeled in her saddle. Thorne bade her drink, bathed her face, supported her, and then gave way to Ladd, who took the girl with him on Torres's broad back. Yaqui's unflagging purpose and iron arm were bitter and hateful to the proud and haughty spirit of Blanco Diablo. For once Belding's great white devil had met his master. He fought rider, bit, bridle, cactus, sand—and yet he went on and on, zigzagging, turning, winding, crashing through the barbed growths. The middle of the afternoon saw Thorne reeling in his saddle, and then, wherever possible, Gale's powerful arm lent him strength to hold his seat.

The giant cactus came to be only so in name. These *saguaros* were thinning out, growing stunted, and most of them were single columns. Gradually other cactus forms showed a harder struggle for existence, and the spaces of sand between were wider. But now the dreaded, glistening *choya* began to show pale and gray and white upon the rising slope. Round-topped hills, sunset-colored above, blue-black below, intervened to hide the distant spurs and peaks. Mile and mile long tongues of red lava streamed out between the hills and wound down to stop abruptly upon the slope.

The fugitives were entering a desolate, burned-out world. It rose above them in limitless, gradual ascent and spread wide to east and west. Then the waste of sand began to yield to cinders. The horses sank to their fetlocks as they toiled on. A fine, choking dust blew back from the leaders, and men coughed and horses snorted. The huge, round hills rose smooth, symmetrical, colored as if the setting sun was shining on bare, blue-black surfaces. But the sun was now behind the hills. In between ran the streams of lava. The horsemen skirted the edge between slope of hill and perpendicular ragged wall. This red lava seemed to have flowed and hardened there only yesterday. It was broken, sharp, dull rust color, full of cracks and caves and crevices, and everywhere upon its jagged surface grew the white-thorned *choya*.

Again twilight encompassed the travelers. But there was still light enough for Gale to see the constricted passage open into a wide, deep space where the dull color was relieved by the gray of gnarled and dwarfed mesquite. Blanco Sol, keenest of scent, whistled his welcome herald of water. The other horses answered, quickened their gait. Gale smelled it, too, sweet, cool, damp on the dry air.

Yaqui turned the corner of a pocket in the lava wall. The file of white horses rounded the corner after him. And Gale, coming last, saw the pale, glancing gleam of a pool of water beautiful in the twilight.

Next day the Yaqui's relentless driving demand on the horses was no longer in evidence. He lost no time, but he did not hasten. His course wound between low cinder dunes which limited their view of the surrounding country. These dunes finally sank down to a black floor as hard as flint with tongues of lava to the left, and to the right the slow descent into the cactus plain. Yaqui was now traveling due west. It was Gale's idea that the

Indian was skirting the first sharp-toothed slope of a vast volcanic plateau which formed the western half of the Sonora Desert and extended to the Gulf of California. Travel was slow, but not exhausting for rider or beast. A little sand and meager grass gave a grayish tinge to the strip of black ground between lava and plain.

That day, as the manner rather than the purpose of the Yaqui changed, so there seemed to be subtle differences in the others of the party. Gale himself lost a certain sickening dread, which had not been for himself, but for Mercedes and Nell, and Thorne and the rangers. Jim, good-natured again, might have been patrolling the boundary line. Ladd lost his taciturnity and his gloom changed to a cool, careless air. A mood that was almost defiance began to be manifested in Thorne. It was in Mercedes, however, that Gale marked the most significant change. Her collapse the preceding day might never have been. She was lame and sore; she rode her saddle sidewise, and often she had to be rested and helped; but she had found a reserve fund of strength, and her mental condition was not the same that it had been. Her burden of fear had been lifted. Gale saw in her the difference he always felt in himself after a few days in the desert. Already Mercedes and he, and all of them, had begun to respond to the desert spirit. Moreover, Yaqui's strange influence must have been a call to the primitive.

Thirty miles of easy stages brought the fugitives to another waterhole, a little round pocket under the heaved-up edge of lava. There was spare, short, bleached grass for the horses, but no wood for a fire. This night there was question and reply, conjecture, doubt, opinion, and conviction expressed by the men of the party. But the Indian, who alone could have told where they were, where they were going, what chance they had to escape, maintained his stoical silence. Gale took the early watch, Ladd the midnight one, and Lash that of the morning.

The day broke rosy, glorious, cold as ice. Action was necessary to make useful benumbed hands and feet. Mercedes was fed while yet wrapped in blankets. Then, while the packs were being put on and horses saddled, she walked up and down, slapping her hands, warming her ears. The rose color of the dawn was in her cheeks, and the wonderful clearness of desert light in her eyes. Thorne's eyes sought her constantly. The rangers watched her. The Yaqui bent his glance upon her only seldom; but when he did look it seemed that his strange, fixed, and inscrutable face was about to break into a smile. Yet that never happened. Gale himself was surprised to find how often his own glance found the slender, dark, beautiful Spaniard. Was this because of her beauty? he wondered. He thought not altogether. Mercedes was a woman. She represented something in life that men of all races for thousands of years had loved to see and own, to revere and debase, to fight and die for.

It was a significant index to the day's travel that Yaqui should keep a blanket from the pack and tear it into strips to bind the legs of the horses. It meant the dreaded *choya* and the knife-edged lava. That Yaqui did not mount Diablo was still more significant. Mercedes must ride; but the others must walk.

The Indian led off into one of the gray notches between the tumbled streams of lava. These streams were about thirty feet high, a rotting mass of splintered lava, rougher than any other kind of roughness in the world. At the apex of the notch, where two streams met, a narrow gully wound and descended. Gale caught sight of the dim, pale shadow of a one-time trail. Near at hand it was invisible; he had to look far ahead to catch the faint tracery. Yaqui led Diablo into it, and then began the most laborious and vexatious and painful of all slow travel.

Once up on top of that lava bed, Gale saw stretching away, breaking into millions of crests and ruts, a vast, red-black field sweeping onward and upward, with ragged, low ridges and mounds and spurs leading higher and higher to a great, split escarpment wall, above which dim peaks shone hazily blue in the distance.

He looked no more in that direction. To keep his foothold, to save his horse, cost him all energy and attention. The course was marked out for him in the

tracks of the other horses. He had only to follow. But nothing could have been more difficult. The disintegrating surface of a lava bed was at once the roughest, the hardest, the meanest, the cruelest, the most deceitful kind of ground to travel.

It was rotten, yet it had corners as hard and sharp as pikes. It was rough, yet as slippery as ice. If there was a foot of level surface, that space would be one to break through under a horse's hoofs. It was seamed, lined, cracked, ridged, knotted iron. This lava bed resembled a tremendously magnified clinker. It had been a running sea of molten flint, boiling, bubbling, spouting, and it had burst its surface into a million sharp facets as it hardened. The color was dull, dark, angry red, like no other red, inflaming to the eye. The millions of minute crevices were dominated by deep fissures and holes, ragged and rough beyond all comparison.

The fugitives made slow progress. They picked a cautious, winding way to and fro in little steps here and there along the many twists of the trail, up and down the unavoidable depressions, round and round the holes. At noon, so winding back upon itself had been their course, they appeared to have come only a short distance up the lava slope.

It was rough work for them; it was terrible work for the horses. Blanco Diablo refused to answer to the power of the Yaqui. He balked, he plunged, he bit and kicked. He had to be pulled and beaten over many places. Mercedes's horse almost threw her, and she was put upon Blanco Sol. The white charger snorted a protest, then, obedient to Gale's stern call, patiently lowered his noble head and pawed the lava for a footing that would hold.

The lava caused Gale toil and worry and pain, but he hated the *choyas*. As the travel progressed this species of cactus increased in number of plants and in size. Everywhere the red lava was spotted with little round patches of glistening frosty white. And under every bunch of *choya*, along and in the trail, were the discarded joints, like little frosty pine cones covered with spines. It was utterly impossible always to be on the lookout for these, and when Gale stepped on one, often as not the steel-like thorns pierced leather and flesh. Gale came almost to believe what he had heard claimed by desert travelers —that the *choya* was alive and leaped at man or beast. Certain it was when Gale passed one, if he did not put all attention to avoiding it, he was hooked through his chaps and held by barbed thorns. The pain was almost unendurable. It was like no other. It burned, stung, beat—almost seemed to freeze. It made useless arm or leg. It made him bite his tongue to keep from crying out. It made the sweat roll off him. It made him sick.

Moreover, bad as the *choya* was for man, it was infinitely worse for beast. A jagged stab from this poisoned cactus was the only thing Blanco Sol could not stand. Many times that day, before he carried Mercedes, he had wildly snorted, and then stood trembling while Gale picked broken thorns from the muscular legs. But after Mercedes had been put upon Sol, Gale made sure no *choya* touched him.

The afternoon passed like the morning, in ceaseless winding and twisting and climbing along this abandoned trail. Gale saw many waterholes, mostly dry, some containing water, all of them catch-basins, full only after rainy season. Little ugly bunched bushes, that Gale scarcely recognized as mesquites, grew near these holes; also stunted greasewood and prickly pear. There was no grass, and the *choya* alone flourished in that hard soil.

Darkness overtook the party as they unpacked beside a pool of water deep under an overhanging shelf of lava. It had been a hard day. The horses drank their fill, and then stood patiently with drooping heads. Hunger and thirst were appeased, and a warm fire cheered the weary and footsore fugitives. Yaqui said, "Sleep." And so another night passed.

Upon the following morning, ten miles or more up the slow-ascending lava slope, Gale's attention was called from his somber search for the less rough places in the trail.

"Dick, why does Yaqui look back?" asked Mercedes.

Gale was startled.

"Does he?"

"Every little while," replied Mercedes.

Gale was in the rear of all the other horses, so as to take, for Mercedes's sake, the advantage of the broken trail. Yaqui was leading Diablo, winding around a break. His head was bent as he stepped slowly and unevenly upon the lava. Gale turned to look back, the first time in several days. The mighty hollow of the desert below seemed wide strip of red—wide strip of green—wide strip of gray—streaking to purple peaks. It was all too vast, too mighty to grasp any little details. He thought, of course, of Rojas in certain pursuit; but it seemed absurd to look for him.

Yaqui led on, and Gale often glanced up from his task to watch the Indian. Presently he saw him stop, turn, and look back. Ladd did likewise, and then Jim and Thorne. Gale found the desire irresistible. Thereafter he often rested Blanco Sol, and looked back the while. He had his field-glass, but did not choose to use it.

"Rojas will follow," said Mercedes.

Gale regarded her in amaze. The tone of her voice had been indefinable. If there were fear then he failed to detect it. She was gazing back down the colored slope, and something about her, perhaps the steady, falcon gaze of her magnificent eyes, reminded him of Yaqui.

Many times during the ensuing hour the Indian faced about, and always his followers did likewise. It was high noon, with the sun beating hot and the lava radiating heat, when Yaqui halted for a rest. The place selected was a ridge of lava, almost a promontory, considering its outlook. The horses bunched here and drooped their heads. The rangers were about to slip the packs and remove saddles when Yaqui restrained them.

He fixed a changeless, gleaming gaze on the slow descent; but did not seem to look afar.

Suddenly he uttered his strange cry—the one Gale considered involuntary, or else significant of some tribal trait or feeling. It was incomprehensible, but no one could have doubted its potency. Yaqui pointed down the lava slope, pointed with finger and arm and neck and head—his whole body was instinct with direction. His whole being seemed to have been animated and then frozen. His posture could not have been misunderstood, yet his expression had not altered. Gale had never seen the Indian's face change its hard, red-bronze calm. It was the color and the flintiness and the character of the lava at his feet.

"Shore he sees somethin'," said Ladd. "But my eyes are no good."

"I reckon I ain't sure of mine," replied Jim. "I'm bothered by a dim movin' streak down there."

Thorne gazed eagerly down as he stood beside Mercedes, who sat motionless facing the slope. Gale looked and looked till he hurt his eyes. Then he took his glass out of its case on Sol's saddle.

There appeared to be nothing upon the lava but the innumerable dots of *choya* shining in the sun. Gale swept his glass slowly forward and back. Then into a nearer field of vision crept a long white-and-black line of horses and men. Without a word he handed the glass to Ladd. The ranger used it, muttering to himself.

"They're on the lava fifteen miles down in an air line," he said, presently. "Jim, shore they're twice that an' more accordin' to the trail."

Jim had his look and replied: "I reckon we're a day an' a night in the lead."

"Is it Rojas?" burst out Thorne, with set jaw.

"Yes, Thorne. It's Rojas and a dozen men or more," replied Gale, and he looked up at Mercedes.

She was transformed. She might have been a medieval princess embodying all the Spanish power and passion of that time, breathing revenge, hate, unquenchable spirit of fire. If her beauty had been wonderful in her helpless and appealing moments, now, when she looked back white-faced and flame-eyed, it was transcendant.

Gale drew a long, deep breath. The mood which had presaged pursuit, strife, blood on this somber desert, returned to him tenfold. He saw Thorne's face corded by black veins, and his teeth exposed like those of a snarling wolf. These rangers, who had coolly risked death many times, and had dealt it often, were white as no fear or pain could have made them. Then, on the moment, Yaqui raised his hand, not clenched or doubled tight, but

curled rigid like an eagle's claw; and he shook it in a strange, slow gesture which was menacing and terrible.

It was the woman that called to the depths of these men. And their passion to kill and to save was surpassed only by the wild hate which was yet love, the unfathomable emotion of a peon slave. Gale marveled at it, while he felt his whole being cold and tense, as he turned once more to follow in the tracks of his leaders. The fight predicted by Belding was at hand. What a fight that must be! Rojas was traveling light and fast. He was gaining. He had bought his men with gold, with extravagant promises, perhaps with offers of the body and blood of an aristocrat hateful to their kind. Lastly, there was the wild, desolate environment, a tortured wilderness of jagged lava and poisoned *choya*, a lonely, fierce, and repellent world, a red stage most somberly and fittingly colored for a supreme struggle between men.

Yaqui looked back no more. Mercedes looked back no more. But the others looked, and the time came when Gale saw the creeping line of pursuers with naked eyes.

A level line above marked the rim of the plateau. Sand began to show in the little lava pits. On and upward toiled the cavalcade, still very slowly advancing. At last Yaqui reached the rim. He stood with his hand on Blanco Diablo; and both were silhouetted against the sky. That was the outlook for a Yaqui. And his great horse, dazzlingly white in the sunlight, with head wildly and proudly erect, mane and tail flying in the wind, made a magnificent picture. The others toiled on and upward, and at last Gale led Blanco Sol over the rim. Then all looked down the red slope.

But shadows were gathering there and no moving line could be seen.

Yaqui mounted and wheeled Diablo away. The others followed. Gale saw that the plateau was no more than a vast field of low, ragged circles, levels, mounds, cones, and whirls of lava. The lava was of a darker red than that down upon the slope, and it was harder than flint. In places fine sand and cinders covered the uneven floor. Strange varieties of cactus vied with the omnipresent *choya*. Yaqui, however, found ground that his horse covered at a swift walk.

But there was only an hour, perhaps, of this comparatively easy going. Then the Yaqui led them into a zone of craters. The top of the earth seemed to have been blown out in holes from a few rods in width to large craters, some shallow, others deep, and all red as fire. Yaqui circled close to abysses which yawned sheer from a level surface, and he appeared always to be turning upon his course to avoid them.

The plateau had now a considerable dip to the west. Gale marked the slow heave and ripple of the ocean of lava to the south, where high, rounded peaks marked the center of this volcanic region. The uneven nature of the slope westward prevented any extended view, until suddenly the fugitives emerged from a rugged break to come upon a sublime and awe-inspiring spectacle.

They were upon a high point of the western slope of the plateau. It was a slope, but so many leagues long in its descent that only from a great height could any slant have been perceptible. Yaqui and his white horse stood upon the brink of a crater miles in circumference, a thousand feet deep, with its red walls patched in frost-colored spots by the silvery *choya*. The giant tracery of lava streams waved down the slope to disappear in undulating sand dunes. And these bordered a seemingly endless arm of blue sea. This was the Gulf of California. Beyond the Gulf rose dim, bold mountains, and above them hung the setting sun, dusky red, flooding all that barren empire with a sinister light.

It was strange to Gale then, and perhaps to the others, to see their guide lead Diablo into a smooth and well-worn trail along the rim of the awful crater. Gale looked down into that red chasm. It resembled an inferno. The dark cliffs upon the opposite side were veiled in blue haze that seemed like smoke. Here Yaqui was at home. He moved and looked about him as a man coming at last into his own. Gale saw him stop and gaze out over that red-ribbed void to the Gulf.

Gale divined that somewhere along this crater of hell the Yaqui would make his final stand; and one look into his strange, inscrutable eyes made imagination picture a fitting doom for the pursuing Rojas.

(To be continued)

SPORTING AND VACATION PLACES

This issue being the last one of this year in which we publish Sporting and Vacation Places information, we are giving data on the best shooting and fishing localities in the Southern States, for the benefit of sportsmen who go South for the winter fishing and shooting as well as some of the best hunting places in New England and the Middle Atlantic States. This department will be closed in the magazine until next April, when we will publish the best trout-fishing localities. Our information files, however, are always open for the benefit of our readers, and we are always glad to answer letters of inquiry and help our readers to plan a successful trip. Our files cover all the United States and Canada, and all classes of game and fish.

NEW ENGLAND STATES

Springfield, Penobscot County, Maine, reached by Maine Central Ry. Accommodations at Bay View Camps, Joseph M. Patten, proprietor, for $10.50 a week. Deer, partridge and ducks. Guides, $3 a day.

Rangeley, Franklin County, Maine, reached by Maine Central Ry. Accommodations at York Camps, J. Lewis York, proprietor, for $2.50 a day. Deer, partridge, small game. Also trout and salmon. Guides, $2 a day.

Masardis, Aroostook County, Maine, reached by Bangor & Maine Ry. Accommodations at Billy Soule's for $2 a day. Deer, fox, bear and partridge. Guides, $2.50 a day.

Round Mountain, Franklin County, Maine, reached by Boston & Maine Ry. Accommodations at Round Mountain Lake Camps, Dion O. Blackwell, proprietor, for $10 to $16 a week. Deer, bear, fox, partridge.

Sourdnahunk Lake, Aroostook County, Maine, reached by Bangor & Aroostook Ry. to Norcross, boat to Sourdnahunk Stream, then by wagon accommodations at The Antlers, Charles Daisey, proprietor, for $2 a day. Guides, $3 a day. Deer and small game.

Kidney Pond, Piscataquis County, Maine, reached by Bangor & Aroostook Ry. to Norcross, then by launch or canoe. Accommodations at Hunt's Camps, I. O. Hunt, proprietor, for $2 a day. Guides charge $3 a day. Deer, bear and small game.

Lake Parlin, Somerset County, Maine, reached by Maine Central Ry. Accommodations at Lake Parlin Camps, H. P. McKenney, proprietor, for $2.50 a day, $17.50 a week. Guides, $2.50 a day. Deer, ducks, partridge.

Jackman, Somerset County, Maine, reached by Bangor & Aroostook Ry. Accommodations at Arbo's Hay Lake Camp, E. O. Arbo, proprietor, for $10 a week. Guides, $3 a day. Deer and partridge.

Norcross, Penobscot County, Maine, reached by Bangor & Aroostook Ry. Accommodations at Buckhorn Camps, Bert Haynes and Sons, proprietors, for $1.50 a day. Guides, $3 a day. Deer, bear, foxes, duck and partridge.

Patten, Aroostook County, Maine, reached by Bangor & Aroostook Ry. Accommodations at McDonald's Camps, Chas. E. McDonald, proprietor, for $1.50 a day. Guides, $3 a day. Deer, bear and small game.

Green Lake, Hancock County, Maine, reached by Maine Central Ry. Accommodations at Green Lake Hotel, Andre Leyneek, proprietor, for $15 a week. Guides, $3 a day. Deer, partridge and small game.

Mackamp, Somerset County, Maine, reached by Bangor & Maine, Maine Central, and Bangor and Aroostook Rys. Accommodations at Trout Brook Camps, Robert Walker, proprietor, for $10 a week. Guides $2.50 a day. Deer and partridge.

Errol, Coos County, New Hampshire, reached by Boston & Maine Ry. Party camped out. Had as guide, F. Perley Flint. Deer, partridge, also good fishing.

Warner, Merrimack County, New Hampshire, reached by Boston & Maine Ry. Accommodations at farmhouse of Mr. White for $7 a week. Deer and partridge.

Connecticut Lake, Coos County, New Hampshire, reached by Maine Central Ry. For information on camps write to W. M. Buck, Canaan House, Canaan, Vermont. He has guides and camps in the best sections. Deer hunting.

Bridgewater, Windsor County, Vermont, reached by the Central Vermont or Rutland Ry. Accommodations at Tanner's. Deer, bear, rabbits, partridge, ducks.

Beecher Falls, Essex County, Vermont, reached by New York, New Haven & Hartford Ry. to Falyan, New Hampshire, and Maine Central from there to Beecher Falls. Accommodations at Mettalak Lodge, W. M. Buck, proprietor, for $40 a week. Deer and partridge.

MIDDLE ATLANTIC STATES

Griffin, Hamilton County, New York, reached by the New York Central Ry. Accommodations at house of Olie De Munn for $15 a week. De Munn is guide, charging $3.50 a day. Deer and bear. Party reports good success.

Minerva, Essex County, New York, reached by Delaware & Hudson Ry. Party camped out. Floyd Hammond, of Igerna, N. Y., guides for $3 a day. Deer, bear, rabbits, partridges and other small game.

Long Lake West, Hamilton County, New York, reached by New York Central Ry. Accommodations at Deerland Lodge, A. D. Brown, proprietor, for $2 a day. Deer hunting.

Raquette Lake, Hamilton County, New York, reached by New York Central Ry. Accommodations at the Antlers, Chas. Bennett, proprietor, for $4 a day. Deer and small game.

Wanakena, St. Lawrence County, New York, reached by New York Central Ry. Accommodations at Dobson's, Bert Dobson, proprietor, for $1.50 a day. Deer, small game and ducks.

Rio, Orange County, New York,

reached by Erie Ry. to Port Jervis. Accommodations at camp of F. Muller for $7 a week. Deer and grouse.

Onchiota, Franklin County, New York, reached by New York Central Ry. Accommodations at house of William Skiff for $7 a week. Deer, also partridge and some bear.

Canton, Bradford County, Pennsylvania, reached by Northern Central Ry. Deer, bear, coons, foxes, wild cats and small game along the line of the railroad through Bradford, Sullivan and Tioga Counties. Franklin Baxter, of Canton, recommended as good guide, charges $3 a day.

SOUTHERN STATES

Coden, Mobile County, Ala., reached by the Bay Shore Ry. from Mobile. Accommodations at Rolston Hotel, John Rolston, proprietor, for $2 a day, $12.50 a week. Guide, $5 a day with motor boat. Sea bass, sea trout, redfish, black drum, sheepshead, tarpon. Good duck shooting.

Long Key, Monroe County, Fla., reached by the Atlantic Coast Line. Accommodations at Long Key Fishing Camp, Mr. Schutt, manager, for $4 to $5 a day. (Bungalow for two.) Guides $8 a day, including boat. Tarpon, amberjack, barracouta, grouper, kingfish, Spanish mackerel. Best season Dec. 15th to April 15th.

Palatka, Putnam County, Fla., reached by the Atlantic Coast Line. Accommodations at Putnam House, W. T. Ledbetter, proprietor, for $3 a day. Guides $3 a day, with boat. Good large-mouth bass fishing.

Salerno, Palm Beach County, Fla., reached by the Florida East Coast Ry. Accommodations at private cottages or hotel kept by B. W. Mulford. Salt-water fish and large-mouth bass, quail, wild turkey, wild hogs, bobcats, red deer, black bear.

Camp Walton, Santa Rosa County, Fla., reached by the Louisville & Nashville Ry. to Pensacola, then by steamer to Camp Walton. Accommodations at Gulf View, Theodore Staff, proprietor, for $10 a week. Guides $2 a day. Large mouth bass, sea trout, redfish, bluefish, quail, deer, turkey, ducks.

Pensacola, Escambia County, Fla., reached by the Nashville Ry. Accommodations at San Carlos Hotel, in Pensacola, for $1.50 a day. Boats necessary. Sheepshead, redfish, trout in Pensacola and Escambia bays.

Clermont, Lake County, Fla., reached by the Atlantic Coast Line. Accommodations at house of A. L. Cashwell for $7 a week. Guides $2 a day. Black bass, pickerel, also quail, deer, turkeys.

Boca Grande, Lee County, Fla., reached by the Charlotte Harbor & Northern Ry. from Arcadia. Accommodations at Boca Grande Hotel, F. H. Abbott, proprietor, for $18 a week. Guides $2 a day. Mackerel, trout, redfish, tarpon fishing in Charlotte Harbor, Boca Grande Pass.

Fort Myers, Lee County, Fla., reached by Atlantic Coast Ry. Accommodations at $2.50 a day, $16 a week. Guides $6 a day, including boat. Tarpon, jewfish, kingfish, channel bass, rovellia, jackfish, trout, Spanish mackerel, and many smaller fish. Deer, turkey.

Ocala, Marion County, Fla., reached by the Seaboard Air Line. Accommodations at Harrington Hall, R. T. Adams, proprietor, for $2 a day. Black bass fishing reported good.

Myrtle Grove, Plaquemine County, La., reached by the New Orleans, Southern and Grand Isle Ry. Accommodations at house of L. J. Magner, for $2 a day. Guides $4 a day. Duck shooting and salt-water fishing in the bays.

Doulluts, Plaquemine County, La., reached by the New Orleans, Southern and Grand Isle Ry. Accommodations at Hingle's, John Hingle, proprietor. Sheepshead, redfish, speckled trout, drum, croakers.

Cumberland Falls, Pulaski County, Ky., reached by Queen and Crescent Route. Bass fishing in Cumberland River.

Tillery, Halifax County, N. C., reached by the Atlantic Coast Ry. Accommodations at Pine Top Lodge, C. and L. P. Blow, proprietors, for $2 a day. Guide $2 a day. Quail shooting reported good.

Waynesville, Haywood County, N. C., reached by the Southern Ry. Dr. J. F. Able, Waynesville, N. C., is good guide, having pack of bear dogs. Bear and deer. Four black bears shot on one trip, three on another.

Waterlily P. O., Currituck Sound, Currituck County, N. C. Ducks, geese, November, December, January. English snipe, yellowlegs, plover, Sept. 1st to Dec. 16th. Very fine shooting reported.

Ocracoke, Hyde County, N. C., reached by the Norfolk and Southern Ry. Accommodations at Beacon Island, W. D. Gaskill, proprietor, for $10 a day; this includes guides. Geese, brant, ducks.

Pine Bluff, Monroe County, N. C., reached by the Seaboard Air Line. Accommodations at E. G. Gay's house. Wild turkey, quail, ducks, geese, deer and wild hogs.

Oriental, Pamlico Sound, N. C., reached by the Norfolk and Southern Ry. Accommodations at Neuse River Inn, S. W. Everitt, proprietor, for $6 to $9 a week. Guides $2 a day, $3 for launch. Quail, woodcock, ducks, geese, turkeys.

Georgetown, Georgetown County, S. C., reached by the Atlantic Coast Line or Clyde Line steamers. Accommodations at plantation of Frank E. Johnston for $5 a day. Guides $2 a day. Bass fishing. Snipe, woodcock, turkey, deer, ducks, geese, quail. Good shooting reported.

Georgetown, Georgetown County, S. C., reached by the Atlantic Coast Line or Clyde Line steamers. Accommodations at Dale's, A. Dale, proprietor. Horses, boats, dogs, guides at hand. Separate quarters. Deer, turkey, quail, snipe, duck shooting.

Charleston, Charleston County, S. C., reached by the Atlantic Coast Line. Accommodations at Charleston Hotel, for $3 a day and up. Captains Swanson, Fairchild, Boles said to be good guides. Drum, channel bass, weakfish, bluefish, in the bays and inlets.

Harpers Ferry, Jefferson County, W. Va., reached by the Baltimore and Ohio Ry. Accommodations at Hilltop House, T. S. Lovett, proprietor, for $2 a day, $10 a week. Black bass and perch in Potomac and Shenendoah rivers.

Petersburg, Grant County, W. Va., reached by the Baltimore and Ohio Ry. Accommodations at hotel for $1 a day. Also good camping locality. Hugh Rogers said to be good guide, charging $2.50 a day, including boat. Black bass in South Branch of the Potomac River.

McComb, Pike County, Miss., reached by the Illinois Central Ry. Accommodations at Dixie Camp, J. A. Jacola, proprietor, for $14 to $17.50 a week. Quail shooting, black bass and salt-water fishing in the Gulf.

WESTERN STATES

Port O'Connor, Texas, reached by the Brownsville and Texas Ry. Accommodations at La Salle Hotel, Joe Matthews, proprietor, for $16 a week. Guides and launch $7 a day. Tarpon, mackerel, sea trout, other salt-water fish, also ducks.

Rockport, Aransas County, Tex., reached by the San Antonio and Aransas Pass Ry. Accommodations at house of Andrew Sorenson, for $5 a day, $35 a week. Guides included in daily charge. Ducks and geese, tarpon in Aransas Bay.

Bayside, Refugio County, Tex., reached by the San Antonio and Aransas Pass Ry. Accommodations at Bayside Hotel, Jack Brightman, proprietor, for $1.50 a day, $8 a week. Ducks, geese. Deer hunting. Bass fishing in Aransas River and Copan Bay.

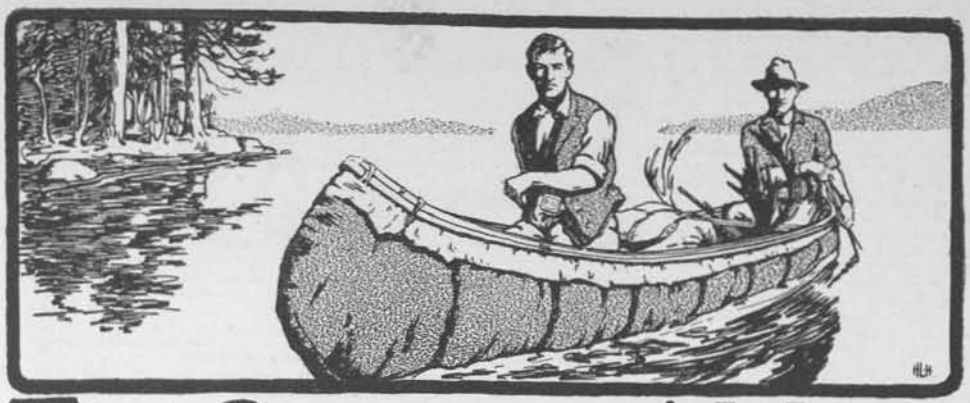
Glorietta, San Miguel County, New Mexico, reached by the Santa Fé Ry. Accommodations at Valley Ranch, J. F. Miller, proprietor, for $9 a week. Guides $1 a day, horses $5 a week. Quail, turkey, mountain lions, deer, bear.

Las Vegas, San Miguel County, New Mexico, reached by the Main Line Santa Fé Ry. Accommodations at Camp Montezuma for $2 to $5 a day. Native and rainbow trout. Deer, wild turkey.

Redlands, San Bernardino County, Cal., reached by the Southern Pacific Ry. Accommodations at Pine Knot Lodge for $3 a day, $20 a week. Lake and brook trout, ducks, deer.

Lone Pine, Inyo County, Cal., reached by the Southern Pacific Ry. or over the Bug Hunter trail. Accommodations at Bug Hunter Camp for $2.50 a day. Trout fishing in about ten lakes. Small game, deer and mountain lions.

Indian Falls, Plumes County, Cal., reached by the Western Pacific Ry. to Keddie and stage from there. Accommodations at Farrar's, E. S. Farrar, proprietor, for $2 a day, $12.50 a week. Rainbow trout, deer, bear, grouse, quail, doves.



The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, dogs, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

SAND CAMPS

By Herbert K. Savage

Wind and blowing sand and the quivering heat of the open beaches! How many of you have ever experienced these discomforts while on a camping trip after snipe in September, or after channel bass, striped bass or bluefish in September and the first part of October?

If your camping has been confined to the woods where it is possible to find a cool spot in the shade of a tree, and where there are no sand fleas, green-head flies, such as inhabit the beaches and sand dunes, or hungry salt-marsh mosquitoes, which seem to grow to an unusual size, you cannot realize what it is to sleep, eat and live surrounded and sometimes partly covered by drifting sand.

With all its discomforts, however, camping on the beach has a fascination for one who really enjoys the great outdoors. The pounding of the surf at night, which lulls you to sleep; the cool gray of the early morning, with the snipe just beginning to trade up and down the beach just above surf line, and maybe a half-seen schooner sliding by about a mile off shore; the sunrise over the open ocean; the fine view of the sunset, which throws a pink tinge of color over all the beach and sea, and at night, when fishing in the surf, the phosphorus in the waves and on the sand at your feet, and the ghostly shapes of the sand dunes and wreckage faintly outlined in the light of the distant stars, exert a subtle influence, and even though the skeeters and flies may have moved you solemnly to take oath of "Never again!" when the next year comes it will find you once more camping on the open beach.

There are ways and means of taking the edge off much of the discomfort encountered on such a camp, ways learned through sad experience and hints from others. Having been through the mill a number of times in the last few years, we have learned to make a pretty comfortable trip out of

TENT PITCHED INSIDE HATCH COAMING OF WRECKED SCHOONER

what would ordinarily be penal servitude.

The first great DON'T is not to lay anything down on the sand, no matter what it may be; it either gets sanded over in a few seconds or collects so much sand as to become useless. When building your blind, stand your gun up as nearly straight as possible, and never lay it down flat even on a log, as even a little sand in the barrel is dangerous, and the working of the safety and triggers is not improved by gritty particles.

If you do not own a sand spike for your rod, be sure that the butt is firmly sunk into the sand; I have seen several fellows' afternoons spoiled by their rods falling over, and the reels becoming jammed full of sand, due to insufficient care in placing the rod upright. The same precautions should be taken with your pots and pans, axes, knives, shells, etc.

For cooking, a cook-log fire is the best, two thick timbers placed about eight inches apart, and the cooking fire built between. On these logs and over the fire may be placed the frying-pan, coffee-pot, cooking-pot or whatever the utensil may be, and unless the cook or his helper be careless no sand will find its way into the food. On a windy day, a windbreak should be built to protect both the cook and the fire from the blowing sand; an old trunk-cover, a bathing-house door, or several boards nailed together and firmly set up edgeways in the sand, and supported by strong stakes; then the wind may blow and no harm will be done either to the food or the temper of the cook.

For a table, if several boxes are not handy on which to rest boards, then get to work and make a table and chairs, such as may be seen in the accompanying photograph taken on a duck-shooting trip down Barnegat Bay several years ago. It will be some job to nail the table-top securely to the legs, and this should be done only

after the legs are firmly pounded into the sand. Above all be sure to get the table-top level. It is a wise rule to allow no one, with the sole exception of the cook, near the cooking-fire while grub is under way, then if there is grit in the bacon, or the eggs and flapjacks are liberally coated with sand, there is only one man to blame and no trouble in picking him out.

From experience, we have found the best tent to be one with but one pole necessary for its erection, as on the beach long poles, that is, poles over six feet in length, are at a premium, and it generally takes quite a hunt to locate even one of them. Of course if you are using a dog tent, or low wedge tent, several short poles may easily be found, but a low tent on the open beach is very hot, and as the flies, if there are any in the tent, always stay up near the top at night, they will be too near your face for comfort. A tent of any other color than white, green or khaki preferred, is the proper thing, as the flies and skeeters do not seem to be as easily attracted by the darker colors. Be sure that your tent is waterproof, as out on the open beach there is no other protection from rain, and you will be lucky if during a week's trip you do not have a lively thunderstorm, or maybe a day's blow from the east, accompanied by driving rain. I spent one night during a northeast blow in such a tent, and had more than enough of it. Whenever I touched the tent wall it would start a small waterfall.

Another thing, do not buy a tent made of very light material for use on the beach, as no matter how tight you may draw the stay ropes, the tent is bound to sag somewhat, due to the stakes loosening in the yielding sand. A fresh breeze will make the canvas flap sharply and slits will probably appear in the light material, a great opportunity for rain and skeeters to get in some fine work. It is not necessary to carry a heavy 8 or 10-ounce canvas tent, one of light yet strong canvas, well waterproofed and reinforced is the proper thing.

AN EFFICIENT TABLE OF BOXES AND BOARDS

A waterproof ground cloth, or a light rubber blanket, will be found useful, both to keep out the ground dampness and keep sand from sifting into your sleeping-bags and blankets. This can also be supported on poles as a roof over your fire in rainy weather.

A folding waterproof canvas bucket with a spout, and a tie top to keep out flies and mosquitoes with suicidal instincts, will be found the best for beach work, as the evaporation will keep the water comparatively cool, while if it is all kept in a tin bucket you will only have lukewarm water to drink.

Paraffined food bags securely tied at the neck will keep out the ants and sand fleas, and for your butter a small glazed, airtight crock is the proper thing. This can be put in a bucket of water and the butter kept comparatively hard.

For your bed use dried seaweed thickly spread over the sand, and over that the rubber blanket, and you will have a regular spring mattress. Wild sweetpeas, which grow in great abundance along the tops of the sand dunes, also make a good bed.

A mosquito bar for the tent-door is an absolute necessity, and the time you spent at home carefully fitting this you will be thankful for later on, when you hear the hungry hum of the Jersey skeeter around the tent-door. If you should have to go across to the bay, wear a head-net, or else use some good mosquito dope. Many of the U. S. Coast Guards say that kerosene oil on the hands and face will keep them away, but I have never tried it.

For your cooking utensils, towels, etc., build a rack as in the picture on this page; with this at hand there will be no sand sticking to the frying-pan, in the bottom of the coffee-pot, or on the dishcloth. You can use this also to lean your rods against if you build it strong enough.

If fishing at night, do not go without shoes, as the sand fleas are always ready to bite, and will do their best to keep you busy smashing them. It is well also to keep your bait covered over, otherwise they will soon have it sadly torn and mutilated.

Be sure to bury potato peelings, and similar refuse, some distance from camp, as otherwise it will attract flies, and the heat of the sun will soon cause it to give forth strange odors.

If, when you go to bed, the weather looks threatening, store away under an empty box, or under the flap of the tent, enough wood for cooking several meals. Hot tea in the early morning dispels a lot of gloom occasioned by bad weather. In case of a heavy wind or thunderstorm, it is a wise precaution to place heavy sticks of wood around the base of the tent, over the loops through which the stakes are driven. The yielding sand offers but an insecure hold for even a long stake driven in nearly full length, and the pulling of the tent soon loosens them. With the logs over the loops, and sand piled up around the lower edge, the tent is pretty securely anchored. If your tent has no sod cloth, then sew one on; sand piled up on this inside will keep bugs from crawling in under the edge and will also foil the mosquitoes.

Next time you get a chance to take a beach camping trip, make sure of it, and you will find yourself enjoying the experience in spite of the inconveniences which beset the sand camper.

COOK LOG FIRE, RACK FOR POTS AND PANS, AND DRIFTWOOD TABLE AND BENCHES

STATE GAME LAWS FOR 1915, INCLUDING CANADIAN PROVINCIAL LAWS

(These laws have been checked by the Game Commissioners of the various States and have all the recent changes therein. The Federal Migratory Bird Law takes precedence over the State laws as regards migratory birds. The Canadian Laws have also been checked by the Commissioners of the various Provinces.)

Alabama

Wild turkey gobbler, Dec. 1st to March 31st; quail, Nov. 1st to Feb. 28th; ducks, geese, brant, rails, coots, woodcock, mudhens, sandpiper, curlew and other shore birds, Sept. 1st to March 14th; snipe, plover, Nov. 1st to April 30th; pheasants, Nov. 15th to Dec. 14th; deer, Nov. 1st to Dec. 31st; squirrels, Oct. 1st to Feb. 28th. Bag limits: One deer per season; 2 turkey gobblers, 25 game birds of any species per day. Licenses: State, resident, $3; county, resident, $1; State, non-resident, $15.

Arizona

Deer, turkey, Oct. 1st to Dec. 15th; quail, snipe, rail, Oct. 15th to Feb. 1st; geese, ducks and brant, Sept. 1st to April 1st; doves, whitewings, June 1st to Feb. 1st; elk, mountain goat or sheep, antelope, female deer and fawns, bobwhite quail, grouse and pheasants, protected. Bag limits: Two male deer per season; 25 quail per day; 25 ducks per day; 35 doves or whitewings per day; 3 turkeys per season. License: Resident, 50 cents; non-resident, big game, $25; non-resident, bird, $10; alien, big game, $100; alien, bird, $25.

Arkansas

Partridge, Nov. 1st to Feb. 28th; quail, Dec. 1st to Jan. 31st; wild turkey, deer, Nov. 10th to Jan. 10th; pheasant, protected; grouse (prairie chicken), Nov. 1st to Nov. 30th (protected in Prairie County); county laws on squirrels. Unlawful for non-resident to hunt or fish, except may fish in Spring River in northern district of Sharp and Fulton counties.

California

Have written the Game Commissioner but have received no reply.

Colorado

Deer, elk, antelope, mountain sheep, wild turkey, quail, pheasant, protected; prairie chicken, mountain and willow grouse, Aug. 15th to Oct. 10th; geese, ducks, brant, swan, plover, cranes and other wading, marsh and shore birds and water-fowls, Sept. 1st to Apr. 20th; sage chickens, Aug. 1st to Sept. 1st; curlew and yellowleg snipe, Aug. 1st to Apr. 20th; doves, Aug. 15th to Aug. 31st. Bag limits: Twenty birds of all kinds in aggregate per day. License: Non-resident hunting, $10; resident hunting and fishing, $1; non-resident fishing, $2.

Connecticut

Deer may be killed with a shotgun, or captured on land owned or leased by owner or lessee, or any member of his family, or bona fide employee of such owner or lessee; squirrels, Oct. 8th to Nov. 23rd; hares, rabbits, Oct. 8th to Dec. 31st; wood-duck, protected; geese, brant, ducks, swan, Oct. 1st to Jan. 15th; quail, ruffed grouse, woodcock, pheasants, Oct. 8th to Nov. 23rd; shore birds, sandpipers, plover, snipe, Sept. 1st to Dec. 31st; rail, Sept. 12th to Dec. 31st. Bag limits: Quail, woodcock, partridge, pheasants, grouse, 5 a day, 36 a year; shore birds, snipe, 50 a day; rail, 35 a day. License: Resident, $1.25; non-resident, $10.25; alien, $15.25. Hunter's license required for trapping.

Delaware

Quail, woodcock, Nov. 15th to Dec. 31st; rails, coots, gallinules, Sept. 1 to Nov. 30th; reedbird, Sept. 1st to Oct. 31st; geese, ducks, brant, Nov. 1st to Dec. 31st; rabbit, Nov. 15th to Dec. 31st; doves, Aug. 1st to Dec. 31st (Kent and Sussex counties only); plover, snipe, yellowlegs, Sept. 1st to Dec. 15th; band-tailed pigeons, cranes, curlew, swans, and small shore birds, protected; skunk, mink, otter, Dec. 1st to March 10th; fox, Oct. 1st to April 30th; raccoon, 'possum, Oct. 1st to Feb. 15th; squirrel, Sept. 1st to Oct. 15th. Bag limits: Fifty railbirds in one day; 20 ducks; 12 birds or fowl of any other species; 6 squirrels, rabbits, hares a day. License: Resident, $1.10; non-resident, $10.50.

Florida

Deer, Nov. 20th to March 10th; ruffed grouse, pheasants, protected until Dec. 1, 1915; squirrels, Oct. 1st to March 1st; quail, wild turkey, doves, Nov. 20th to March 10th; ducks, geese, brant, coots, Nov. 20th to Feb. 16th; black-breasted and golden plover, yellowlegs, Wilson and jacksnipe, Nov. 20th to Feb. 1st. Bag limit: One deer, 2 wild turkeys; 20 quail, or 25 birds of any other species in one day; 3 deer, 10 turkeys; 300 of any other game bird species in one year. License: resident county license, $1; non-resident county license, $3; non-resident license, $15.

Georgia

Quail, doves, partridge, turkey gobblers, plover, Nov. 20th to March 1st; snipe, Dec. 1st to May 1st; woodcock, Dec. 1st to Jan. 1st; male deer, Oct. 1st to Dec. 1st; cat or gray squirrels, Aug. 1st to Jan. 1st; pheasants, grouse, protected; opossum, Oct. 1st to March 1st. Bag limits: Three male deer per season; 3 turkey gobblers per season; 25 game birds per day; 40 snipe or doves per day. License: Resident (county), $1; (State), $3; non-resident, $15.

Idaho

Deer, mountain goat, Sept. 1st to Dec. 1st; deer in Bonner, Kootenai, Shoshone, Latah, Nez Perce, Clearwater, Idaho counties, Sept. 20th to Dec. 20th; female elk, yearling elk, female or doe deer, spotted fawn, yearling deer, mountain sheep, protected; elk (in Fremont, Bonneville, Teton, Bingham), Sept. 1st to Dec. 31st; moose, antelope, buffalo, beaver, protected; Mongolian, Chinese, English pheasants, prairie chickens, pinnated grouse, protected; quail, Nov. 1st to Dec. 1st; quail in Lemhi, Cassia, Twin Falls, Oneida, Bear Lake, Bannock, Power and Franklin counties, protected; partridge, pheasant, grouse, Aug. 15th to Dec. 1st; partridge, pheasant, grouse, north of Salmon River, Sept. 1st to Dec. 1st; ducks, geese, snipe, plover, Oct. 1st to Jan. 15th; swan, protected; sage-hen, turtle doves, July 15th to Dec. 1st; in Fremont County, sage-hen and doves, Aug. 15th to Dec. 1st. Bag limit: Quail, 18 a day; partridge, pheasant, grouse, 12 a day; 24 ducks a day, 24 snipe; 24 plover; 4 geese; 12 sage-hens; 24 turtle doves; only 24 birds of any kind allowed in one day. License: Resident, $1; non-resident, big game, $25; non-resident, bird, $5.

Illinois

Deer, wild turkey, partridge, pheasant, protected until June, 1923; prairie chickens, Oct. 1st to Oct. 15th; ruffed grouse, Hungarian partridge, quail, capercailzie, heath grouse, woodcock, protected until 1920; bobwhite quail, Nov. 11th to Dec. 9th; dove, Aug. 15th to Aug. 31st; squirrel, Aug. 1st to Jan. 31st; rail, protected; rabbit, Sept. 1st to Jan. 31st; black-breasted, golden plover, yellowlegs, jacksnipe, Sept. 1st to Dec. 16th; ducks, geese, brant, Sept. 1st to Dec. 16th. Bag limits: 12 quail a day; 3 prairie chickens a day; shore birds, ducks, 15 a day; geese, brant, 10 a day. License: resident, $1; non-resident, $25.50.

Indiana

Deer, wild turkey, pheasant, Hungarian partridge, prairie chicken, protected; quail, ruffed grouse, Nov. 10th to Dec. 20th; geese, ducks, brant, Sept. 1st to April 15th; squirrels, July 1st to Nov. 1st; woodcock, July 1st to Jan. 1st. Bag limits: Grouse, quail,

ducks, geese, brant, 15 per day, 45 per season. License: Resident, $1; non-resident, $15.50.

Iowa

Woodcock, July 10th to Dec. 31st; prairie chicken, Sept. 1st to Nov. 30th; ruffed grouse, quail, wild turkey, Nov. 1st to Dec. 15th; ducks, geese, brant, plover, rail, Sept. 1st to Dec. 15th; squirrels, Sept. 1st to Dec. 31st; elk, deer, protected; pheasant, Hungarian partridge, protected until 1917. Bag limits: 8 prairie chickens per day, 16 in possession; quail, 15 per day, 25 in possession; squirrels, 25 per day. License: Resident, $1; non-resident, $10.

Kansas

Deer, antelope, quail, prairie chicken, Hungarian partridge, imported pheasants, protected; fox squirrels, Sept. 1st to Jan. 1st (other squirrels protected); geese, brant, ducks, Sept. 1st to Apr. 15th; plover, Aug. 1st to Apr. 30th; snipe, Sept. 1st to Apr. 30th. Bag limits: Snipe, 12; plover, 20; wild ducks, 20; geese, 6; brant, 6. License: Resident, $1; non-resident, $15.

Kentucky

Wild turkey, Sept. 1st to Feb. 1st; quail, partridge, pheasant, Nov. 15th to Jan. 1st; pheasant (imported), protected; woodcock, Nov. 1st to Jan. 1st; geese, wood-duck and other ducks, Oct. 1st to Jan. 16th; doves, Aug. 1st to Feb. 1st; squirrels, June 15th to Sept. 15th and Nov. 15th to Feb. 1st; rabbits, Nov. 15th to Sept. 15th. License: Resident, $1; non-resident, $15. License secured from county clerk at county seat of each county.

Louisiana

Game birds, wild geese, brant, ducks, night herons, rails, coots, gallinules, snipe, woodcock, sandpipers, tattlers, curlews, plovers, wild turkeys, quail, doves, and red-winged blackbirds. Open season on all game birds, Nov. 1st to Feb. 15th, except killdeer and turkey hens, which are protected until Dec. 15, 1915. SALE: Only following game birds may be sold, and only between Dec. 15th and Feb. 15th: Wild geese, brant, ducks, coots, rail and snipe. Game animals: Squirrels, Oct. 1st to Feb. 15th, sale allowed in open season. Deer: State divided in two zones—Northern Zone, open season, Sept. 15th to Jan. 5th. Southern Zone, open season Oct. 1st to Jan. 20th. Fawns protected at all times. No deer allowed sold and not to be killed between sunset and sunrise, or when driven to high land by overflow or high water. Game fish: Black bass, yellow bass, crappy, perch or sunfish. No closed season for rod and line. No line to have more than five hooks attached. Game fish not allowed to be sold. Bag limits: One person, one day, amateur or professional, 1 wild turkey, 25 ducks, coots, sandpipers or doves; 15 geese, night herons, rails, gallinules, woodcock, upland plover, tattlers, curlews, plovers, quail and red-winged blackbirds. Squirrels, 15; deer, 5 in one open season, no more than 2 in one day. Hours of hunting restricted to between sunrise and sunset. License: Parish (county) license for actual residents and not good out of parish, 50 cents; State license, $3. Resident professional hunter's license, $10. Non-residents and aliens, $15. Obtainable from parish tax collectors.

Maine

Moose and caribou, protected; deer, in Aroostook, Penobscot, Washington, Hancock, Piscataquis, Somerset, Franklin and Oxford counties, Oct. 1st to Dec. 15th, inc.; in Androscoggin, York, Cumberland, Sagadahoc, Lincoln, Waldo, Kennebec and Knox counties, the month of November, limit in these counties, 1 deer; deer protected in towns of Deer Isle, Stonington and on Mt. Desert Island, Hancock County; on Isle au Haut, Knox County; on Cross and Scotch islands, Washington County; and in town of Perkins, Sagadahoc County; hunting prohibited in Kineo Point, Moosehead Lake, in town of Eden (Bar Harbor) and on Prout's Neck, Cumberland County. Beavers protected; muskrat, Nov. 1st to Apr. 30th; no closed season on bears, bobcats, loupcervier, Canada lynx or weasels; open season on all other fur-bearing animals, Nov. 1st to Feb. 31st; rabbits, Oct. 1st to March 31st; gray squirrels, October (protected in parks and villages); $4 bounty on bobcats, Canada lynx and loupcervier. Partridge, woodcock, in Oxford, Franklin, Somerset, Penobscot, Piscataquis, Aroostook, Washington, Hancock counties, Sept. 15th to Nov. 14th, inc.; in Androscoggin, Cumberland, York, Kennebec, Waldo, Knox, Lincoln and Sagadahoc counties, Oct. 1st to Nov. 30th; ducks, brant, geese, Sept. 1st to Dec. 15th; black-breasted and golden plover, jacksnipe, greater and lesser yellowlegs, Aug. 15th to Nov. 30th; rails, coots, gallinules, Sept. 1st to Nov. 30th; Hungarian partridge, capercailzie, black game, all species of pheasant (except ruffed grouse or partridge), curlew, wood-duck and all other wild birds (except crows, hawks, owls, mudhens, kingfishers, loons, herons), protected. Bag limits: Two deer a year, 5 partridges, 10 woodcock, 10 snipe, 5 plover a day. License: Non-resident hunting (until deer season opens), $5; deer license, $15. A $5 license may be returned and $10 more given for a $15 license.

Maryland

Partridges or quail, English or Mongolian pheasants, pheasant or ruffed grouse, rabbit, squirrel, wild turkey, woodcock and deer, Nov. 10th to Dec. 24th, inclusive; ducks, geese, swan or brant, Nov. 1st to Jan. 31st, inclusive; doves (season regulated by county laws); reed, rail, ortolan, coots and gallinules, Sept. 1st to Nov. 30th, inclusive; plover and snipe, Sept. 1st to Dec. 15th, inclusive.

License fees regulated by county laws.

Massachusetts

Deer, from sunrise of third Monday in November to sunset of following Saturday, must be reported in writing to Commissioners; hares and rabbits, Oct. 12th to Feb. 28th; gray squirrels, Oct. 12th to Nov. 12th; ruffed grouse, woodcock and quail, Oct. 12th to Nov. 12th; quail protected in Essex County; pheasants, Oct. 12th to Nov. 12th, in counties of Barnstable, Norfolk, Middlesex, Essex, Worcester, Hampden, Berkshire, limit 2 in one day, 6 in season; plover, snipe and rail, Aug. 15th to Nov. 30th; ducks, geese and brant, Oct. 1st to Dec. 31st (winter and summer yellowlegs, golden plover and black-breasted plover, jacksnipe and rail only to be taken); Hungarian partridge, protected. Bag limits: Ruffed grouse, 3 in one day, 15 per season; quail and woodcock, 4 per day, 20 per season; deer, 1 per season; squirrels, 5 per day, 15 per season; 15 black ducks per day. License: Residents, $1; non-residents, $10; aliens, $15, if owning $500 worth of property.

Michigan

Caribou, elk and moose, protected; deer, Nov. 10th to Nov. 30th (protected in some counties); rabbits, Oct. 1st to March 1st; squirrels, protected until 1920; quail, pheasants, capercailzie, black fowl, hazel grouse, wild turkey, protected until 1920; prairie chickens, protected; partridge, woodcock, spruce hen, Oct. 1st to Nov. 30th; ducks, snipe, plover, shore birds, Sept. 1st to Dec. 15th; rails, coots, Sept. 16th to Nov. 30th, inc.; geese, brant, Sept. 1st to Dec. 16th. Bag limits: Deer, 1 per season; partridge, woodcock, spruce hens, 6 per day, 50 per year; ducks, geese, brant, 25 per day, 50 in one week; not lawful to have more than 15 partridge, spruce hens, or 25 of other game birds in possession at any one time, or to take more than 25 in one season. Deer license: Resident, $1.50; non-resident, $25; other hunting, resident, $1; non-resident, $10; alien resident, $10.

Minnesota

Moose, deer, Nov. 10th to Nov. 30th; snipe, prairie chicken, Sept. 7th to Nov 7th; woodcock and plover protected until Sept. 7, 1918; ruffed grouse, partridge, quail, pheasant, Oct. 1st to Nov. 30th; imported pheasants, protected; caribou and elk, protected; wild ducks, geese, water-fowl, Sept. 7th to Nov. 30th. Bag limits: Deer, 1 per season; 10 birds a day, except ducks, of which 15 may be taken. License: Resident (small game), $1; resident (big game), $1; non-resident (small game), $10; non-resident (big game), $25.

Mississippi

Does, fawns and wild turkey hens, protected; deer (bucks), bear, Nov. 15th to March 1st; quail or partridge, Nov. 1st to March 1st; doves, July 1st to March 1st; geese, swan, ducks, rail, coots, plover, wood-ducks, Sept. 1st to March 1st. Bag limit: Twenty of any one kind of game

bird per day; 1 deer per day, or 5 deer per season. License: Non-resident, $10.

Missouri

Deer, turkey, Nov. 1st to Dec. 31st; dove, Aug. 1st to Nov. 10th; duck, geese, brant, snipe, plover, Sept. 15th to April 30th; prairie chicken, pheasant, Mongolian, Chinese and English, protected; quail, woodcock, Nov. 10th to Dec. 31st; squirrel (gray, black and fox), June 1st to Dec. 31st; fur-bearing animals, Nov. 1st to Jan. 31st. Bag limit: One deer, 2 turkeys, 10 quail and 15 additional game birds of each and every other family for each person in any one calendar day. No person shall have in possession at one time more than 2 deer, 4 turkey, 15 quail and 25 additional legal game birds of each and every other family. License: Resident, $5; non-resident, $25; county resident license, $1.

Montana

Elk (in Sweetgrass, Stillwater, Park, Gallatin, Madison, Teton and Flathead counties, and that portion of Beaverhead County lying east of the Oregon Short Line Ry., between Willis post-office and the town of Monida, and also portions of Powell, Missoula counties), Oct. 1st to Dec. 15th; deer, Oct. 1st to Dec. 15th; moose, bison, buffalo, caribou, antelope, mountain sheep, Rocky Mountain goats, beaver, quail, Chinese pheasants, Hungarian pheasants, turtle doves, as well as songbirds, protected; grouse, prairie chicken, fool hen, pheasants, partridge, sage hen, in all counties except Custer, Dawson, Richland, Sheridan, Valley, Phillips, Rosebud, Big Horn, Prairie, Fallon, Sept. 15th to Oct. 15th, in these excepted counties from Sept. 1st to Oct. 1st; ducks, geese, brant, Sept. 1st to Dec. 16th. Bag limit: Elk, 1 a year; deer, 2 a year, any age or sex; grouse, prairie chicken, fool hen, pheasant, partridge, sage hen, 5 a day; ducks, 20 a day. License: Resident, $1; non-resident, large game, small game and fish, $25; small game, $10; alien, general license, $30.

Nebraska

Geese, ducks, water-fowl, Sept. 1st to April 5th; prairie chickens, grouse, sage hens, Sept. 1st to Nov. 30th; snipe, Sept. 1st to April 30th; doves, plover, July 15th to Aug. 31st; swan, white cranes, protected; squirrels, Oct. 1st to Nov. 30th; antelope and deer, protected; quail, Nov. 1st to Nov. 15th, Bag limits: Twenty-five birds, 10 squirrels, 10 geese, prairie chicken, grouse, quail and 25 other game birds, or 50 game fish in possession at any one time. License: Resident, $1; non-resident (hunting and fishing license), $10.

Nevada

Deer, antelope, Sept. 15th to Oct. 15th; mountain sheep and goats, pheasants and partridge, protected; ducks, geese, Oct. 1st to Jan. 15th; mountain quail and grouse, Sept. 15th to Jan. 1st; sage hen, July 15th to Feb. 15th; plover, curlew, snipe, Sept. 15th to Dec. 16th; woodcock, Nov. 1st to Jan. 1st. Bag limits: Deer, antelope, 1 per season; ducks, 20 a day; sage birds, 10 a day; mountain quail, valley quail, 20 a day; grouse, 6 a day; plover, 5 a day; snipe, 15 a day. License: Non-resident, $10; resident, $1; aliens, $25.

New Hampshire

Moose, caribou and elk, protected; deer, Coos County, Oct. 15th to Dec. 16th; deer in Grafton and Carroll counties, Nov. 1st to Dec. 16th; Sullivan, Cheshire, Hillsborough, Belknap, Merrimack, Rockingham and Strafford, Dec. 1st to Dec. 16th; (exceptions) hares, rabbits, Oct. 1st to March 1st; gray squirrels, protected; sable, otter, fisher, mink, marten, muskrat, skunk, raccoon, fox, Nov. 1st to March 1st; quail, ruffed grouse, Oct. 1st to Dec. 1st; woodcock, Oct. 1st to Dec. 1st; black-breasted, golden plover, yellowlegs, Wilson and jacksnipe, Aug. 15th to Dec. 1st; ducks, geese, brant, Sept. 1st to Dec. 16th. Bag limits: One deer in Rockingham, Strafford, Belknap, Merrimack, Hillsborough, Cheshire, Sullivan counties; 2 deer in Coos, Carroll, Grafton counties; hares, rabbits, 5 a day; 5 gray squirrels; 5 quail a day; 10 ruffed grouse a day; 10 woodcock a day. License: Resident, $1; non-resident or alien, $15.

New Jersey

Deer (bucks over one year old), last 3 Wednesdays in October and 1st Wednesday in November; quail, rabbit, squirrel, male English ring-necked pheasant, ruffed grouse, prairie chicken, Hungarian partridge, Nov. 10th to Dec. 15th; turkey, female English ring-necked pheasant, protected until 1919; reedbird, Sept. and Oct.; little brown, sandhill, whooping cranes, swans, curlews, upland plover and wood ducks, protected until 1918; black-breasted plover, golden plover, jacksnipe, greater and lesser yellowlegs, Sept. 1st to Dec. 15th; rails, coots, mudhens, gallinules, Sept. 1st to Nov. 30th; woodcock, Oct. 10th to Nov. 30th; ducks, geese, brant, Nov. 1st to Feb. 1st; raccoon, Oct. 1st to Dec. 15th. Bag limits: One deer a season; 10 quail a day; 3 English or ring-necked pheasants; 3 Hungarian partridges a day; 10 woodcock; 3 ruffed grouse; 20 ducks, 19 geese, 10 brant; 10 rabbits; 30 mud-hens. License: Residents, hunting and fishing, $1.15; non-residents and aliens, hunting and fishing license, $10.15.

New Mexico

Deer, with horns, north of parallel 35 of north latitude, Oct. 16th to Nov. 5th; south of said parallel, Oct. 25th to Nov. 25th; tassel eared gray squirrels, June 1st to Nov. 30th; grouse, Sept. 16th to Nov. 25th; wild turkey (classed as bog game), north of 35th parallel of north latitude, Nov. 1st to Dec. 31st; south of said parallel, Oct. 25th to Nov. 25th; native or crested Messina, California or helmet quail, Oct. 25th to Dec. 31st; doves, Aug. 16th to Sept. 30th. Bag limit: One deer a year; 5 grouse a day; 3 wild turkey in possession in one day; native, crested, Messina, California, helmet quail, 20 in possession in one day; doves, 20 a day. License: Resident, big game, bird and fish, $2; non-resident, big game, bird and fish, $30; resident-alien, big game, bird fish, $30; non-resident alien, $55; non-resident, bird, $10; resident, big game, $1; resident, bird, $1; non-resident, big game and bird, $25; non-resident alien, big game and bird, $50.

New York

Beaver, protected; deer (with horns not less than 3 inches in length) may be taken in wholly enclosed deer parks and in counties of Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Jefferson, Lewis, Oneida, Oswego, Saratoga, St. Lawrence, Warren and Washington, except in all that portion of Oneida, Lewis, Jefferson counties lying westerly of the Utica and Black River Ry., from Utica to Ogdensburg, Oct. 1st to Nov. 15th. In Ulster County and in the towns of Neversink, Cochecton, Tusten, Highland, Lumberland, Forestburg and Bethel and all that section of the towns of Mamakating and Thompson lying south of the Newburgh and Cochecton turnpike in Sullivan County, and the town of Deer Park in Orange County, Nov. 1st to Nov. 15th. Female deer, fawns, elk, moose, caribou, antelope, protected; sable, marten, mink, muskrat, Nov. 10th to Apr. 20th; hares and rabbits, Oct. 1st to Jan. 31st; (Long Island, Nov. 1st to Dec. 31st); raccoon, Oct. 1st to Apr. 20th; skunk, Nov. 20th to Feb. 10th; squirrels, black, gray, fox, Oct. 1st to Nov. 15th; duck, goose, brant, Sept. 16th to Jan. 10th; (Long Island, Oct. 1st to Jan. 10th;) grouse, partridge, Oct. 1st to Nov. 30th; (Long Island, Nov. 1st to Dec. 31st;) Hungarian or European partridge, protected; Hungarian, dark-necked, English, Mongolian, Chinese pheasants, last 2 Thursdays in October, first 2 Thursdays in November (Long Island, Nov. 1st to Dec. 31); quail, protected until 1918 (except on Long Island, Nov. 1st to Dec. 31st); woodcock, Oct. 1st to Nov. 15th (Long Island, Oct. 15th to Nov. 30th); black-breasted, golden plover, yellowlegs, Wilson, jacksnipe, Sept. 16th to Dec. 1st (Long Island, Aug. 15th to Dec. 1st); rails, gallinules, coots, mudhens, Sept. 16th to Dec. 31st. Bag limits: Two deer; hares, rabbits, 6 a day; squirrels, 5 a day; ducks, geese, brant, 25 in aggregate in one day, 40 for two or more people in same boat, blind, or battery; 4 grouse or partridge in one day; 3 male pheasants in one day; Long Island, 6 male pheasants in one day; quail, 10 in one day; woodcock, 4 in one day, 20 during the season; rail, gallinules, coots, mudhens, 15 of all kinds in one day. License: Resident, $1.10; non-resident alien, $20.50; non-resident citizen, $10.50.

North Carolina

Seasons governed by local laws. Turkey and quail, Nov. 1st to March 1st; woodcock, Nov. 1st to

Jan. 1st; black-breasted, golden plover, yellowlegs, Sept. 1st to Dec. 16th; ducks, geese, brant, Nov. 1st to Feb. 1st.

North Dakota

Cranes, protected until 1918; ducks, geese, brant, Sept. 7th to Dec. 1st; upland plover, golden plover, snipe, grouse, woodcock, prairie chicken, Sept. 7th to Nov. 1st; deer, protected until 1920; antelope, protected until 1920; quail, doves, partridge, pheasants, protected. Bag limits: Grouse, prairie chickens, cranes, 10 a day; geese, brant, ducks, snipe, plover, woodcock, 15 a day. License, resident, $1; non resident, $25.

Ohio

Virginia partridge, Hungarian partridge, quail, pheasants, ruffed grouse, protected until 1917; then Nov. 15th to Dec. 4th; woodcock, Oct. 1st to Nov. 30th; rail, coots, mudhens, Sept. 1st to Nov. 30th; ducks, geese, brant or other waterfowl, plover, Wilson or jacksnipe, greater or lesser yellowlegs, Sept. 1st to Dec. 15th; Carolina dove, protected until 1917, then Sept. 1st to Oct. 20th; rabbits, Nov. 1st to Jan. 1st; raccoon, Nov. 1st to March 1st; squirrels, Sept. 15th to Oct. 20th; fox, Oct. 2nd to Jan. 9th. Bag limits: Woodcock, rails, plover, snipe, geese, shore birds, 12 per day; ducks, 25 per day; squirrels, 5 per day. License: Resident, $1.25; non-resident, $15.

Oklahoma

Deer, Nov. 1st to Dec. 1st; wild turkey, Nov. 15th to Jan. 1st; quail, Nov. 30th to Jan. 1st; ducks, geese, brant, Sept. 15th to Feb. 1st; snipe, black-breasted and golden plover, Sept. 1st to Dec. 16th; pheasant, prairie chicken, curlew, wood duck, mourning dove, cranes, pelicans, herons and gulls, protected; deer, bear, wild turkey in Comanche, Caddo, Kiowa, Major and Blaine counties protected. License: Resident, $1.25; non-resident, $15. Bag limits: One deer with horns; 1 wild turkey; 10 quail in a day, 100 in season; plover, ducks, geese, brant snipe, 10 a day, 100 a season.

Oregon

Divided into two districts. District No. 1, comprising all counties west of the Cascade Mountains: Buck deer, Aug. 15th to Oct. 31st; silver gray squirrel, Oct. 1st to Oct. 31st; ducks and geese—Federal law now in force—Oct. 1st to Jan. 15th; rails and coots, Oct. 1st to Jan. 15th; shore birds, black-breasted and golden plover, Wilson and jacksnipe, woodcock and greater and lesser yellowlegs —Federal law now in force—Oct. 1st to Dec. 15th; male Chinese pheasants, quail and grouse, Oct. 1st to Oct. 31st, except that there is no open season on Chinese pheasants in Jackson, Josephine, Coos and Curry counties; quail, protected; doves, Sept. 1st to Oct. 31st.

District No. 2, comprising all counties east of the Cascade Mountains: Buck deer, Aug. 15th to Oct. 31st; gray squirrel, Oct. 1st to Oct. 31st; ducks and geese—Federal laws—Oct. 1st to Jan. 15th; rails and coots—Federal law —Oct. 1st to Jan. 15th; shore birds, black-breasted and golden plover, Wilson or jacksnipe, woodcock and greater and lesser yellowlegs—Federal law—Oct. 1st to Dec. 15th; sage hens, Aug. 1st to Aug. 31st; grouse and doves, Sept. 1st to Oct. 31st; quail, Oct. 1st to Oct. 31st; bobwhite quail, protected. Bag limits: Pheasants and grouse, 5 in one day or 10 in any seven consecutive days; doves, 10 in one day, or 20 in any seven consecutive days; ducks, geese, rails, coots and shore birds, 30 in any seven consecutive days; quail, 10 in any seven consecutive days; silver gray squirrels, 5 in any seven consecutive days; deer with horns only, 3 during any open season.

Mountain sheep, antelope, elk, beaver, female deer, spotted fawn, female Chinese pheasants, silver pheasants, golden pheasants Reeve's pheasants, English partridge, Hungarian partridge, Franklin grouse or fool hen, prairie chicken, bobwhite quail, swan, wood-duck, wild turkey, lesser sandpiper, western sandpiper, semi-palmated plover, snowy plover, protected.

License: Resident, $1; non-resident, $10; resident anglers, $1.

Pennsylvania

Deer (male with horns visible 2 inches above the hair), Dec. 1st to Dec. 15th; elk, protected; hares, rabbits, Nov. 1st to Nov. 30th; English, Chinese, Mongolian ring-necked pheasants, Oct. 15th to Nov. 30th; Hungarian quail, ruffed grouse, squirrels, woodcock, Oct. 15th to Nov. 30th; plover, protected; snipe, Sept. 1st to Dec. 16th; shore birds, protected, except black-breasted and golden plover, and jack snipe; wild turkey, Oct. 15th to Nov. 30th; waterfowl, Oct. 1st to Jan. 15th; wood duck, protected. Bag limits: Deer, 1 a season; rabbits, 10 a day; Hungarian quail, 4 a day, 10 a week, 20 a season; imported pheasants, 4 a day, 10 a week, 20 a season; quail, 8 a day, 25 a week, 40 a season; snipe, plover, shore birds, no limit; ruffed grouse, 5 a day, 20 a week, 30 a season; squirrels, 6 a day; woodcock, 10 a day, 20 a week, 30 a season; water-fowl no limit. License: Resident, $1; non-resident, $10.

Rhode Island

Deer, protected; rabbits, hares gray squirrels, Nov. 1st to Dec. 31st; skunk, muskrat, raccoon and mink, Nov. 10th to Apr. 15th; ducks, brant, geese, Oct. 1st to Jan. 1st; rails, coots, gallinules, Aug. 15th to Dec. 1st; woodcock, Nov. 1st to Dec. 1st; black-breasted plover, golden plover, jacksnipe, greater and lesser yellowlegs, Aug. 15th to Dec. 1st; band-tailed pigeons cranes, swans, curlew and small shore birds, and wood-ducks, protected until 1918. Hungarian partridge, protected; ruffed grouse, quail, woodcock, pheasant, Nov. 1st to Dec. 31st. License: Resident, $1; non-resident, $10; alien, $15.

South Carolina

Wild turkey, partridge, Nov. 15th to March 15th (exceptions); deer, Sept. 1st to Jan. 1st; woodcock, Nov. 1st to Jan. 1st; quail, Nov. 15th to March 15th (exceptions); willet, Nov. 1st to March 1st; ducks, geese, brant, Nov. 20th to Feb. 16th; black-breasted, golden plover, yellowlegs, Wilson snipe, Nov. 20th to Feb. 16th. Bag limits: partridge, 25 a day; woodcock, 12 a day; deer, 5 a season; turkey, 2 a day. License: Non-resident, $25; duck license, $10.

South Dakota

Geese, ducks and other waterfowl, Sept. 10th to April 10th; prairie chicken, grouse, snipe, plover, woodcock, partridge, Sept. 10th to Oct. 10th; deer, Nov. 1st to Nov. 30th; quail and pheasant, protected. Bag limits: Prairie chicken, partridge, grouse, snipe, woodcock, plover, 10 per day; water-fowl, 20 per day; deer, 1 per season. License: Small game, resident, $1; non-resident, $15. Big game, resident, $5; non-resident, $25.

Tennessee

Deer, protected until Oct. 1, 1917; rabbits, no closed season; squirrel, June 1 to Jan. 1; quail, Dec. 15 to March 1 exceptions); wild turkey, Nov. 15 to Jan. 1; gobblers, April 1 to April 25; geese, brant, duck, Oct. 1 to Jan. 15; plover, snipe, Oct. 1 to Dec. 16; rail, mudhens, coot, sandpipers, curlew, Sept. 1 to Dec. 1; woodcock, Nov. 1 to Jan. 1; doves, Aug. 15 to Jan. 1. Bag limits: 50 ducks, 30 quail. License: Non-resident, $10; resident, $3.

Texas

Deer, Nov. 1st to Dec. 31st; antelope, mountain sheep, prairie chicken, pheasants, protected; wild turkey, Dec. 1st to April 1st; quail, Dec. 1st to Feb. 1st; dove, Sept. 1st to March 1st; ducks, geese, snipe, curlew, no closed season. Bag limit: 3 deer a year; 15 birds a day; 3 turkeys a year. License: Resident, $1.75; non-resident, $15.

Utah

Antelope, mountain sheep and elk, protected; deer, Oct. 15th to Oct. 31st (protected in Toole County); prairie chicken, partridge, pheasant, mourning dove, Aug. 15th to Aug. 31st; quail (Washington, Garfield, Kane counties, Sept. 1st to Feb. 1st; Salt Lake, Davis, Utah, Weber, San Pete, Uinta, Sevier, Carbon counties, Oct. 1st to Oct. 31st; Iron County, Oct. 1st to Nov. 30th); sage hens and grouse, in Rich and Uinta counties, Aug. 15th to Sept. 15th, in all other counties Sept. 1st to Sept. 15th; ducks, geese, snipe, Oct. 1st to Dec. 31st. Bag limit: Deer, 1 per season; quail, 15 per day; sage hens, 8 per day; grouse, 6 per day, 25 per season; geese, 12 per day; snipe, ducks, 25 per day. License: Resident, $1.25; non-resident, $5; alien, $15.

Vermont

Elk, caribou, moose, protected; deer, Nov. 15th to Dec. 6th; gray squirrels, ruffed grouse, quail, woodcock, Sept. 15th to Dec. 1st; ducks, geese, Sept. 16th to Jan.

15th; snipe, plover, shore birds (except upland plover), Sept. 15th to Dec. 1st; pheasants, wood-duck, upland plover, protected. Bag limits: Deer, 1 a season; squirrels, rabbits, 5 a day; quail, woodcock, ruffed grouse, 4 a day; 25 a season; snipe, plover, shore birds (except upland plover), 10 a day; geese, ducks, 20 a day. License: Resident, fishing 60c.; resident, hunting, 60c.; resident, fishing and hunting, $1; non-resident, fishing, 60c.; non-resident, hunting, $10.50, non-resident, fishing and hunting, $10.50.

Virginia

Wild turkey, pheasants, grouse, partridge, quail, woodcock (east of Blue Ridge Mountains), Nov. 1st to Jan. 31st; elsewhere, Nov. 1st to Dec. 31st; deer, Sept. 1st to Nov. 31st; water-fowl, Nov. 1st to Feb. 1st; black-breasted and golden plover, yellowlegs, Wilson and jacksnipe, Sept. 1st to Dec. 16th; rail, Sept. 1st to Dec. 1st; rabbits, Nov. 1st to Jan. 31st. Bag limits: Thirty water-fowl, 50 quail or partridges, 10 pheasants or grouse, 1 deer, 3 turkeys, 25 of each or 100 in aggregate of plovers, snipe, sandpipers or curlews may be transported from State by non-resident. License: Non-resident, $10, obtained from Clerk of County Court.

Washington

State divided into two sections by the Cascade Mountains, Western Washington and Eastern Washington.

Western Washington: Deer, mountain goat, Sept. 15th to Nov. 1st; ruffed grouse, Chinese pheasant, blue grouse, ptarmigan, any species of quail, Sept. 15th to Oct. 31st; English pheasant, Mongolian pheasant, Reeves pheasant (Mason and Thurston counties excepted), Oct. 1st to Oct. 15th.

On the islands: Deer, October only.

Eastern Washington: Deer, caribou, mountain goat, Oct. 1st to Nov. 15th; ruffed grouse, blue grouse (Walla Walla, Asotin, Garfield, Columbia counties excepted), Sept. 1st to Nov. 15th; except that ruffed grouse may not be killed in Yakima County. In counties of Asotin, Columbia, Garfield, Walla Walla, ruffed grouse, blue grouse, Aug. 15th to Oct. 1st. Any species of quail, Oct. 1st to Oct. 10th; prairie chicken, Sept. 15th to Nov. 1st. Benton, Spokane, Yakima counties, Chinese pheasants, Oct. 1st to Oct. 15th; sage hens, Oct. 15th to Nov. 1st. Kittitas County, Hungarian partridge, Chinese pheasants, sage grouse and sharp-tailed grouse, Oct. 1st to Oct. 10th. Adams, Asotin, Columbia, Ferry, Garfield, Lincoln, Okanogan, Walla Walla, Whitman counties, sharp tailed grouse (Western prairie chicken), Sept. 15th to Nov. 1st. Spokane County, bobwhite quail, Hungarian partridge, Oct. 1st to Nov. 15th. Douglas County, sharp-tailed grouse, Sept. 1st to Nov. 1st.

Water-fowl in the entire State: ducks, geese, brant, coot, rail, Oct. 1st to Jan. 16th; black-breasted plover, golden plover, jacksnipe, Wilson snipe, greater and lesser yellowlegs, Oct. 1st to Dec. 15th.

Unlawful to kill any geese, brant, or other water-fowl upon the Columbia or Snake rivers within the State, or within one-fourth mile of the shores thereof throughout the counties of Klickitat, Walla-Walla, Franklin, Yakima, Kittitas, Douglas, Columbia, Garfield, Benton, Grant and Whitman. Bag limit: Two deer, 1 mountain goat; prairie chicken, grouse, partridge, Hungarian partridge, native pheasant, Chinese, English, golden, Mongolian, silver, blackneck, Japanese pheasants, 5 in one day; quail, 10 a day; in one week not more than 25 upland birds. In Kittitas County, the bag limit for Chinese, Hungarian pheasants, Hungarian partridge, sage grouse, sharp-tailed grouse, 3 birds of any one variety, or 3 birds mixed bag. Ducks, geese, brant, golden plover, jack or Wilson snipe, greater and lesser yellowlegs, 20 in one week. License: Resident hunting and fishing for county, $1; resident hunting and fishing for State, $5; non-resident county fishing, $2; non-resident State hunting and fishing, $10.

West Virginia

Deer, with horns 4 inches long, Oct. 15th to Dec. 1st; squirrels, gray, black, red and fox, Sept. 15th to Dec. 1st; rabbits, Oct. 15th to Jan. 1st; fox, raccoon, mink and skunk, Nov. 1st to Jan. 1st; quail, Nov. 1st to Dec. 1st; pheasant, wild turkey, ruffed grouse, Oct. 15th to Dec. 1st; ducks, geese, brant, Oct. 1st to Jan. 16th; woodcock, Oct. 1st to Dec. 1st; rail, Sept. 1st to Dec. 1st; snipe, Oct. 15th to Dec. 16th. Bag limit: Twelve quail, 6 ruffed grouse, 2 wild turkeys, 12 squirrels in one day, or more than 96 quail, 25 ruffed grouse, 6 wild turkeys, or 100 squirrels in one season. License: Resident State license, $3; non-resident, $16.

Wisconsin

Deer (bucks only), Nov. 11th to Nov. 30th (protected in some counties); quail, pheasant, swan and moose, protected; squirrels, rabbits, Sept. 10th to Feb. 1st (exceptions); grouse, prairie chicken, Sept. 7th to Oct. 1st (protected in some counties); plover, woodcock, Sept. 7th to Nov. 30th; wood-duck protected until 1918; partridge, Sept. 7th to Nov. 1st; brant, geese, Sept. 7th to Nov. 30th (protected on Lake Geneva); water-fowl, Sept. 7th to Nov. 30th. Bag limit: Deer, 1 per season; prairie chicken, grouse, woodcock, 5 per day; geese, brant, partridge, 10 per day; ducks, water-fowl, 15 per day; mixed birds, 20 per day. License: Non-resident, small game, $10; non-resident, big game, $25.

Wyoming

Moose, protected; elk, mountain sheep, Sept. 1st to Nov. 15th (only in Park, Lincoln and Fremont counties exceptions); deer, Oct. 1st to Nov. 15th (in Crook, Sheridan, Johnson, Weston and Niobrara counties, Oct. 15th to Oct. 31st); sage grouse, Aug. 1st to Sept. 1st; all other grouse, Sept. 1st to Nov. 15th; quail and Mongolian pheasants, protected until 1919; ducks, geese, coots, mudhens, avocets, godwits, curlew, willet, tattlers, plovers, snipe, sandpipers, Sept. 15th to Dec. 16th; Carbon county, curlew, mudhens, ducks and geese, Sept. 1st to Dec. 16th. Bag limits: One full-grown bull moose a year; two elk; 1 deer with horns; 1 male mountain sheep; 18 game birds a day, not more than 6 of which may be grouse. License: Resident, big game, $2.50; non-resident, big game, $50; resident, game bird, $1; non-resident, game bird, $5; bear license, $10. Non-residents must be accompanied by guides.

CANADA

Alberta

Antelope, buffalo, elk, wapiti, protected; female sheep, deer and moose, protected at all times; young of all animals under one year of age protected at all times; caribou, deer, moose, Nov. 1st to Dec. 14th; mountain sheep and goats, Sept. 1st to Oct. 15th; swans, ducks, cranes, coots, rails, snipe, plover, sandpipers, curlew, and other shore birds, Sept. 1st to Dec. 31st; partridge, grouse, ptarmigan, prairie chicken, Oct. 1st to Nov. 30th; imported pheasants, protected. Bag limits: Two mountain goats or sheep, 1 deer, moose, caribou, grouse, ptarmigan, partridge, prairie chicken, 10 a day, 100 a year. License: Resident, big game, $2.50; bird, $2.25; non-resident, general game, $25; bird, $5.

British Columbia

Game can be killed only under open seasons declared by Order of Council. These open seasons for 1915-1916 posted in post-offices, at game wardens' offices and those of government agents throughout the Province. Big game, Sept. 1st to Dec. 15th (exceptions). Sheep, Sept. 1st to Dec. 15th.

Manitoba

Moose, deer, antelope, elk, wapiti, reindeer, caribou, Dec. 1st to Dec. 15th; otter, beaver, north of 53rd parallel of north latitude, Nov. 1st to May 31st; south of said parallel, protected; fisher, sable, marten, north of 53rd parallel of north latitude, Nov. 1st to Apr. 30th; south of said latitude, fisher, sable, marten and mink, Nov. 1st to March 31st; mink north of 53rd parallel, Nov. 1st to May 31st; fox, lynx, north of 53rd parallel of north latitude, Nov. 1st to March 31st; muskrats, north of parallel 53, Oct. 20th to May 31st; south of parallel, Nov. 1st to April 30th; bison or buffalo, female deer or fawns of deer under 1 year old, pheasants, curlew, quail, protected until 1920; upland and other plover, woodcock, snipe, sandpiper, Sept. 15th to Nov. 30th; ptarmigan, prairie chicken, partridge, grouse, Oct. 1st to Oct. 20th. Bag limits: Cari

bou, moose, deer, elk, antelope, 1 per season; grouse, prairie chicken, partridge, 20 a day; ducks, 20 a day; during last 15 days of Sept. 50 a day during the rest of season. License: Resident, big game, $4; game bird, $1; non-resident, big game, $50.

New Brunswick

Mink, otter, fisher, Nov. 1st to Dec. 31st; muskrat, March 25th; to May 15th; beaver, sable, protected; deer, protected on Grand Manon Island; in other sections, open season Sept. 15th to Nov. 30th; moose, caribou (cows and calves protected), Sept. 15th to Nov. 30th; snipe, woodcock, partridge, Sept. 15th to Nov. 30th; geese, brant, teal, wood duck, black duck, Sept. 1st to Nov. 30th; shore birds, Aug. 15th to Jan. 1st; foxes, Oct. 1st to Feb. 21st. License: Resident, big game $3, trapping $2; non-resident, big game $50, trapping $25; non-resident bird license, $10. Bag limits: Ducks, geese, 20 a day; partridge, woodcock, 10 a day; 1 caribou; 2 deer; 1 moose per season.

Newfoundland

Elk, moose, protected; caribou, Aug. 1st to Sept. 30th and Oct. 21st to Jan. 31st; snipe, curlew, plover, willow grouse, ptarmigan, Sept. 21st to Dec. 31st; fox, Oct. 15th to March 15th; capercailzie, protected. Bag limit: Three caribou per year.

Nova Scotia

Moose, Sept. 16th to Nov. 30th (protected on Cape Breton Island); caribou, Sept. 16th to Oct. 15th in Victoria and Inverness counties (protected elsewhere); deer, protected until 1918; rabbits, hares, Oct. 1st to March 1st; woodcock, Wilson snipe, Sept. 1st to Jan. 1st; wild geese, brant, river and sea ducks, Sept. 15th to March 1st; ruffed grouse, Oct. 1st to Nov. 1st; spruce partridge, pheasants, wood-duck, protected; teal, plover, curlew, sandpipers, yellowlegs and beach birds, Aug. 15th to March 1st. Bag limits: One moose per season; 1 caribou per season; woodcock, 10 per day; ruffed grouse, 5 per day. License: Non-resident, general, $30; small game, $15; resident to hunt caribou outside own county, $5. Non-residents must be accompanied by licensed guides.

Ontario

Deer, Nov. 1st to Nov. 15th; caribou, moose (south of main line Canadian Pacific Ry. from Mattawa to Port Arthur), Nov. 1st to Nov. 15th; elsewhere, Oct. 16th to Nov. 15th; grouse, quail, protected; fowl, partridge, Oct. 15th to Nov. 15th; woodcock, Oct. 1st to Nov. 15th; squirrel, wild turkey, Nov. 15th to Dec. 1st; swan, geese, Sept. 15th to April 15th; duck, water-fowl, snipe, plover, shore birds (north and west of main line Canadian Pacific Ry. between Montreal and Toronto, Toronto to Guelph and Guelph to Goderich), Sept. 1st to Dec. 15th; elsewhere, Sept. 15th to Dec. 15th; capercailzie, protected until 1918; hare, Oct. 1st to Dec. 15th. Bag limits: Deer, caribou, moose, 1 per year; partridge, 10 per day; duck, 200 per season. License: Resident, deer, $2; all big game, $5; non-resident, small game, $25; big game, $50.

Prince Edward Island

Have written the Commissioners for the 1915 laws, but have not yet received an answer.

Quebec

Province is divided into two zones: Zone 1 includes the entire province, except part of the counties of Chicoutimi and Saguenay to the east and north of the Saguenay River. Zone 2 includes the area not covered by Zone 1.

Zone 1: Deer, moose, Sept. 1st to Dec. 31st (except in Ottawa, Labelle, Temiscaming and Pontiac counties, Oct. 1st to Nov. 31st); caribou, Sept. 1st to Jan. 31st; hares, Oct. 15th to Jan. 31st; woodcock, snipe, sandpiper, curlews, plover, Sept. 1st to Jan. 31st; birch or swamp partridges, Sept. 1st to Dec, 15th; white partridge, Nov. 1st to Jan. 31st; widgeon, teal, wild ducks (except sheldrakes, loons, gulls), Sept. 1st to Feb. 28th.

Zone 2: Deer, moose, Sept. 1st to Dec. 31st; caribou, Sept. 1st to Feb. 28th; hares, Oct. 15th to Feb. 28th; birch or swamp partridge, Sept. 15th to Jan. 31st; white partridge, Nov. 15th to Feb. 28th; woodcock, plover, snipe, curlews, sandpiper, Sept. 1st to Jan. 31st; widgeon, teal, wild ducks (except sheldrakes, loons, gulls), Sept. 1st to Feb. 28th.

Bag limits: Zone 1, 1 moose, 2 deer, 2 caribou. Zone 2, 1 moose, 2 deer, 4 caribou. License: Resident, for 1 moose, $1; 2 caribou, $1; 2 deer, $1; non-resident, $25; non-resident, but members of incorporated game clubs or lessees, $10.

Saskatchewan

Antelope and buffalo, protected; caribou, deer, moose, elk (north of Township 34), Nov. 15th to Nov. 30th, protected elsewhere; geese, ducks, swans, rails, coots, snipe, plover, curlew, cranes, Sept. 15th to Dec. 31st; partridge, grouse, chicken, Sept. 15th to Nov. 15th. Bag limits: Deer, caribou, moose, elk, 2 per season; grouse, partridge, chicken, 10 per day, total of 100; geese, ducks, swans, 50 per day, 250 per season.

FEDERAL REGULATIONS PARAMOUNT

Washington, D. C.

The approach of the hunting season makes it desirable to bring to the attenion of sportsmen the fact that where State laws do not agree with the regulations under the Federal Migratory Bird Law the Federal regulations are paramount and should be observed. Under the Federal regulations it is unlawful at all times to hunt or kill robins, and it is unlawful at any time before September 1, 1918, to kill band-tailed pigeons, cranes, swans, curlew, and any of the small snipe or shore birds.

BEAGLE TRIALS

Sixth American Field Beagle Stake, fall of 1915. American Field Pub. Co., 801 Masonic Temple, Chicago.

Empire Beagle Club, October 18. J. R. MacElroy, secretary.

Pennsylvania Beagle Club, Knox, Pa., October 19. A. C. Peterson, secretary.

Central Beagle Club, October 25. John Waldron, Jr., secretary.

Northern Hare Beagle Club, October 25. Earl Edick, secretary.

New Jersey Beagle Club, October 25. Gordon B. Phillips, secretary.

Western Beagle Club, November 2. J. V. Burton, secretary.

LEADERS FOR OUR NEXT MONTH

The Fascination of Duck Shoting, by Theodore Mackin.—Reflections of a Grouse Shooter, by Edmund J. Sawyer.—Moose Hunting in the Northwest Miramichi, by Douglas Wetmore Clinch.—The Salmon and Caribou of the Upper Humber, by L. A. Sexton.—Quail Shooting in the Gamecock State, by Warren H. Miller.—The Fighting Buck of the Chippewa, by Paul W. Callagher.—Still Hunting Foot Gear, by Raymond Spears.—The Beagle, by Walter H. Dering.

We have been obliged to omit "Our Shooting Companions" and "The Sportsman's Workshop" this month on account of the amount of space taken up by the Game Laws.

CONSERVATION

GAME PROTECTION AND THE BIOLOGICAL SURVEY

Two recently published hacks at the U. S. Biological Survey have turned my thoughts backward to the days when there was no Biological Survey on the firing line, and the defenders of wild life received no help from the National Government. In 1898 I published a formal demand that the Survey should "devote the entire services of one man to active protection work." "Extermination of Our Birds and Mammals," p. 106.)

Those were the dark days. The absence of Federal participation in the warfare was, by at least one man, bitterly resented.

Presently the Federal Government took hold, through the Survey. I marked that beginning as the dawn of a new era; which it was. Since that time the Survey has developed into a tremendous power for good. I know; because I have for more than ten years planned at headquarters, and fought in the trenches, with its campaigners.

Few men know as well as I do how many good game laws have been made, how many bad game bills have been killed, how many bird reservations, game preserves and bison ranges have been due to the Biological Survey. There never has been any other influence equaling it in Congress and the White House, for wild life protection. The outsiders who have had most to do with securing Congressional aid for game preserves and great game laws are the ones who best can testify to the truth of what I have said above. During these years of Federal activity in game preservation Dr. T. S. Palmer has had charge of this section of the work in the Biological Survey, and, backed by the Survey as an organization, has worked tirelessly in the cause.

Often and often I have wondered at the ceaseless industry and boundless complaisance which for years kept the representatives of the Survey at the beck and call of nearly every State game commission or State association of defenders that got into serious trouble with the army of destruction. One week it would be an appearance at Albany, with maps, charts and specimens galore, to help beat the game dealers. Next week it was in New Jersey; and the next in Wisconsin, trying out candidates for game wardenships *à la* civil service. After that it was a fight to the death with the notorious Binkley-Purdy gang of poachers in the Yellowstone Park, breaking up the gang forever. Then it was a cold, raw trip to Jackson Hole, on starving elk business.

And so forth, and so on. For years it was the Biological Survey here, and the Biological Survey there. Who knows it better than the *real* wild life protectors of the United States?

Well, since the enactment of the Federal migratory bird law, the shrewdest of its opponents have made things rather hot for the Federal inspectors, and for the Survey.

The Biological Survey has been criticized for failing to have its inspectors make arrests, and for not prosecuting cases based on the possession of ducks, and also for not having bag limits reduced. Those critics do not appear to know that in the Federal Migratory Bird Law there was *no authority* given permitting Federal inspectors to make arrests, even in cases where the law was violated in their presence, or that it does not make possession proof of an offence. It does not give the Survey, or the President, any right whatever to do either of these things, or to change the bag limits!

The Survey has been condemned for not pushing numerous cases which, from inside knowledge, it was sure would terminate adversely, and thus harm the general cause.

Certain conditions existed that wise men knew better than to discuss in print. Conditions that could not be cured out of hand just had to be endured—until certain things are done.

I know that the Biological Survery has, by a very few persons, been denounced; and for what? For not having made laws overnight, and for not having accomplished utter impossibilities! For instance, the Survey has been criticised for not more thoroughly guarding our National bird presefves, ignoring the fact that the Survey has 69 bird preserves and several big game reservations in its charge, scattered from Florida to Alaska and the Hawaiian Islands, with only $21,000 a year to do it with.

Recently Mr. Emerson Hough has permitted himself to attack the Biological Survey, destructively, in the *Saturday Evening Post*. I am surprised that he should have missed his cue so widely. The charitable supposition is that his attack was due to lack of information. But it gets on our nerves, just the same as if it were due to other causes

In my opinion, whoever says or insinuates that the Biological Survey ought to be abolished is an enemy to the wild life of North America, and a menace to the cause of game protection.

The Survey needs no defense from me. Its splendid record of achievements is too fresh, and too well known, to be obscured by a thousand attacks. I am writing this statement solely to warn American sportsmen generally not to be deceived, not to acquire wrong impressions, not to accept a totally wrong point of view! I assert that in the enforcement of the migratory law the Survey has done the very best that it could do under the circumstances, and with the means at its disposal.

During the first year the Survey had—what? The whole of $10,000 with which to enforce the law in 48 States! That would have placed one warden in each State at a salary of only $17 per month, with nothing for his expenses. But that was *all it could get, along with the law!* To get the measure through, its friends in Congress *had* to put it through as a 20 line "rider," on the Agricultural Appropriation bill. And the next year, what happened?

The Survey needed $200,000 to enforce the law. In the Departmental estimates it asked for $100,000. And then that was cut down to $10,000! But, in spite of the teeth of the enemies of the game birds, we secured the $50 000 originally allowed by the House. That means a trifle over $1,000 for each of the 48 States! Can not even Mr. Hough appreciate how far such a sum will go in paying salaried inspectors, and handling cases? Does any sane and fair-minded man expect the Biological Survey to protect our game birds, and other birds, with *one-fifth* of the sum that should be regarded as the irreducible minimum? Nevertheless, even under existing conditions the 17 Federal inspectors have accomplished a very great amount of good work. But this service is only making a beginning. Is it possible that thinking men do not realize this?

A few sportsmen have made a fuss about certain details of the regulations, which they demand shall be made to fit *their* local conditions to a T. The vast majority of American sportsmen are loyally and patiently giving the regulations a fair trial, to see how they will work out. These are the men to whom I am now writing. A good sport, or a good sportsman, will give every well-meaning law *its chance!* The regulations are subject to change on proper showing, and changes will undoubtedly be made, after the most fair-minded consideration, when the evidence shows the justice of the demand for a change.

The Biological Survey is doing the very best that it can do under the very trying circumstances that embarrass its work. Present drags on success will some day be cast off; and then we will have the conditions we all desire. The real bone and sinew of American sportsmanship is behind the Federal law, and behind the Survey; and that support will enable both to triumph, eventually.

Any bureau, and any campaigner, can have plenty of friends in fair weather. It is the storms and hurricanes that try out men, and separate the sheep from the goats.

Someone has said: "It is charged that Dr. Palmer, and the Survey, are really against sport with the gun, and against the shooting of game!"

What nonsense? It cannot be true that any man who can be trusted with a loaded gun is so foolish as to give serious ear to such a suggestion. The intimation is not worthy of serious comment. The most of the principal officials of the Biological Survey are thorough sportsmen as well as naturalists, and in hearty sympathy with the sportsman's point of view. Their great desire in administering the Federal Migratory Bird Law, as well as other Federal laws for the conservation of game birds and mammals, is to prevent the wiping out of our game resources, in order not only that the species may be preserved, but that good hunting may be continued into the distant future.

During the past six years, the work of the Biological Survey in stopping game slaughter has made for that bureau many enemies. Those who wish to insure good shooting for 50 or 100 years hence are mighty friendly to the Washington game protectors. Anything that would in any manner hamper or curtail the activities of the Biological Survey in wild-life protection would be a calamity in direct proportion to its measure of effect. The sportsmen and friends of wild life need to thank Congress most fervently for having given us that one powerful engine of protection, and kept it running.

Hands off the Biological Survey! If it ever is seriously threatened, 100,000 strong men and earnest women will rush to its defense. No other nation on earth has, or ever had, such an expression of governmental force for the defense of wild life, and the perpetuation of gentlemanly sport with the gun. In this respect we are the most envied nation. It was a great day when the Survey was ordered to help defend wild life, and I am thoroughly assured that the people of the United States mean that the activities of that bureau shall not be diminished.

WILLIAM T. HORNADAY.

TEN CALVES ADDED TO U. S. BISON HERD

Buffalo on Wichita National Forest Now Number Sixty-two and Promise to Continue Increasing

The government's herd of buffalo on the Wichita National Forest, in Oklahoma, which is also a Federal game preserve, has been increased by the arrival of ten calves, according to a report received by the Forest Service from the supervisor in charge. The herd, which now comprises sixty-two specimens of the almost extinct bison, is in good condition, says the supervisor, and promises to continue increasing at a rapid rate.

Three years ago the buffalo herd on the Wichita Forest was little more than half as large as it is now. It is said that the other game animals in the preserve, including the elk and antelope, also are increasing, due to the protection afforded, not only against hunters, but against wolves, wildcats, and other predatory animals, which committed serious depredations from the establishments of the preserve in 1905 until measures were taken to stop them.

A PROPOSED GAME AND INLAND FISH LAW FOR THE STATE OF VIRGINIA

The proposed law is that the Department of Game and Inland Fisheries be created, to be under the control of the Board of Game and Inland Fisheries, made up as follows: Six resident land-owners to be appointed by the Governor, no two of them from the same Congressional District, two of them to serve three years, two to serve two years, and two to serve one year. The duty of the board would be to enforce all laws of the State for the protection of wild animals, birds and fish, to adopt means to make expenditures of the Game and Fish Fund found necessary to restocking or for introducing new species of game, animals, fish, or birds.

OCTOBER 12 DATE SET FOR TEST OF FEDERAL BIRD LAW

Association's Counsel Preparing Statement of Facts Showing Necessity For and Benefits of Such Legislation — Valuable Data Gathered—Attorney-General Open to Suggestions.

The Department of Justice has announced that the Supreme Court has placed on the calendar for October 12 next the case of the United States against Shauver, involving the constitutionality of the Federal migratory bird law.

The attorney-general will be glad to receive any helpful suggestions in support of the law; but all briefs to be submitted must have his approval, as it is necessary that the arguments in favor of the constitutionality of the law should conform to the ideas of the department.

Statements of Facts Being Prepared

Mr. Haskell, the counsel of the Association, is preparing a statement of facts, giving a brief history of the movement to obtain the law, the necessity for such legislation, and the benefits obtained by its operation.

The Association has in its files reports from almost every state in the Union, giving information as to the observance of the law, the increase in the number of birds since the law became effective, and other data which show conclusively that the matter is of national importance, and thus one over which the Federal Government should have supervision.

Keynote of Law's Defense

The keynote of the brief in support of the constitutionality of the law is that migratory birds belong to the people of the nation and therefore the nation should control in all matters relating to them. This was the argument which convinced the congressional committees, who reported favorably when the proposed legislation was before them, and great confidence is felt that the same argument will prevail in the present instance.

THE FEDERAL LAW IN NEW YORK

To answer the flood of inquiries that are pouring in upon the Conservation Commission on account of the conflict of dates between the State and Federal regulations defining the open season on game birds, the Commission has just issued a special circular summarizing the State law and also the open season under the Federal migratory bird act.

According to this circular, the season for some birds begins earlier under the State law than under the Federal regulations. In all such cases, however, the Federal date must be observed, to avoid violation of the act of Congress protecting migatory birds.

A similar difference in closing dates operates to shorten the season. Accordingly, to be sure of observing both laws, sportsmen must observe the latest date for opening the latest date for opening and the earliest for closing for each species.

AMERICAN QUAIL IN CANADA

A novelty for British Columbia sportsmen this season is the appearance of large numbers of American or "bob white" quail in several localities in the Province, according to a report just made public at Washington from R. E. Mansfield, U. S. Consul General at Vancouver. Previous efforts to introduce this species of game bird in Canada have failed, and the bevies reported this year are said to have migrated from the south of their own accord, and in some places they are reported quite plentiful.

The birds came into British Columbia for the first time last season. There were only six pairs, and they are supposed to have migrated from the flocks which the United States Government has been breeding in the State of Washington. As a result of breeding and by additional migrations, the covies have multiplied rapidly.

By next season it is expected that the quail will have attained great numbers. This addition to the game birds of the Province compensates for the willow grouse which have been, for some reason unknown, disappointingly small in recent years.

SHOTGUNS AND RIFLES

RIFLE CURIOSITIES

Edward C. Crossman

PART II.

Some day some maker will go carefully into the question of compensating whip for barrels. One company has already done so, and its match barrels cleaned up Bisley at long range for three years without a break. With such compensating barrels, the poorer the ammunition, the more the barrel will outshoot those made without regard to compensation, and possibly compensating the wrong way.

So cutting off a barrel may greatly add to—or take away from—the accuracy of that rifle. If a rifle is not accurate, cutting it off may result in great improvement, first because a new and clean muzzle with perfect delivery of bullet is had thereby; second, because a point may be had when the whip becomes compensating, instead of exaggerating differences in velocity.

Consider that at 1,000 yards the Lee-Enfield, with the two classes of ammunition mentioned, would have shot nearly 14 feet apart from one sort to the other, had not this compensating whip occurred. Instead the bullets struck 7 feet apart and so the whip at this range is worth 8 feet of error that is eliminated.

Consider this in target shooting, and with the difference in ammunition of course much less—the minor differences that occur in factory loading. This whip would sadly beat another rifle with the compensating principle nil, or else exaggerating ammunition differences.

The same tendency of a barrel to "fish-rod" around under stress makes important minor differences in ammunition having the same muzzle velocity but using different powder or bullets just a little different.

For example, an ammunition giving 2800 ft. secs., with a sufficient charge of pyro powder, and another giving the same velocity with a sufficient charge of Lightning. The muzzle velocities are the same, and the bullets are the same in weight, but the innocent that takes for granted the two lots shooting into the same circle at 200 yards has another guess coming.

The pressure of the pyro is higher than that of the Lightning, velocities being the same, the vibrations of the barrel are affected, and the two lots are quite likely to hit a foot and a half apart at 200—this very likely in a lateral—sideways—direction. Experiment proves that this is so, and theory explains why.

A common error among the unthinking, or those who think only enough to run them into errors, is the vertical shooting belief. One of the most laughable things I ever saw in print was the diatribe of some know-it-all who horned into print to prove a French aviator a liar.

Said aviator had remarked that bullets from rifles were not dangerous at a height of more than 4,000 feet. The know-it-all gent threw four verbal handsprings with said handsprings punctuated with shrieks of Munchausen and Ananias, and then showed conclusively that a modern bullet would go just nineteen miles high if fired vertically! As a modern bullet such as the Springfield manages to get some 2½ miles over ground, if fired at a 45-degree angle, it is evident that our buttinski friend had several kinks in his mathematics.

Inspection proved that the amusing party had calculated the performance of the bullet from formulæ governing the performance of bodies in a vacuum! He had never heard of the air resistance part of the tribulations of a bullet.

Actual experiments made years ago demonstrated that a Spitzer bullet fired vertically, point first, as usually provided, returned to earth in 45 seconds. They proved also that if the bullet were reversed and fired base first, it came home again in 30 seconds. The difference in time was due purely to air resistance, the resistance to the base of the reversed bullet making its vertex or final height much less than that of the bullet traveling sharp end on. On the home stretch the sharp end, being downward, cut down air resistance and helped cut down the time of the trip.

Our nineteen-mile friend, therefore, even though we were unable to calculate the height of the bullet by ballistic formulæ and did not know better, would have the bullet with the muzzle velocity of 2,700 ft. secs. hiking 19 miles and back again, or, roughly, 200,000 ft. in 45 secs., which figure is known by experiment. This means the average speed of 4,400 feet per second, or a speed higher than that with which the bullet started.

Our vertical shooting experiments, unhappily, went still farther into details, and told of the bullet *not sticking into pine* when it was fired point first, returning, of course, base down as it left. When fired in the reversed position so the point came back first, it went a bit more than its length into the wood of the platform. All of which would lead us to believe that our bullet hardly gets 19 miles in the air even though our ignorance of bullet flight were as dense as that of the perpetrator of the 19-mile-high yarn.

Roughly, modern bullets get not more than 11 000 ft. high, or two miles in round numbers. Formulæ for the performance of objects in vacuo have as much to do with the flight of a bullet through the air as they have to do with the progress of a feather, dropped off the edge of a high building.

Another good old superstition is that about bursted barrels. For years we have been told that sealing a barrel—not necessarily with any thickness or weight of material—would infallibly burst it.

We also learned with amazement that this was done by air pressure. Just how enough air got compressed between an obstruction of this piffling sort, and the shot or bullet, was never explained. Evidently air is considerably vicious when it is pinched a little.

Having an old barrel to blow up, and being informed of the experiments of other Missourians in gunnery, I sealed up its muzzle with mud, making a good solid seal with fully ¼ inch of good thick mud. It was a poor way to treat a barrel that had killed nearly 200 head of big game in the hands of Stewart Edward White, but better a quick and scientific end than an inglorious rusting out, tied up with bows of pink baby ribbon as somebody suggested it should be arranged.

Then we tied a long string to the trigger, and removed ourselves to a convenient bulkhead lest some of the rain of fragments stop with us. Prior to this performance we had inserted one 1906 cartridge in the apportioned spot at the south end of the barrel.

We secured a loud bang in response to our yank on the long string, but that's all. The mud was gone, and the barrel was unharmed. The pressure of the 1906 cartridge at the muzzle of the rifle is about .12,000 lbs. per square inch, or more than the pressure of a shotgun shell in the chamber.

So the next time we made a good job of it. Friend Bob found a nice moist mud bank, and into this he rammed the muzzle of the rifle repeatedly until he had the barrel filled with compressed mud for nearly an inch. Then we again sought our bulkhead, trailing gingerly the long brown string.

This time the sound indicated that the boilers had blown up. The bellow of the service rifle gave place to a vicious, ear-splitting crack.

The old barrel had split lengthwise, from muzzle to rear sight band, almost as neatly and evenly as one could do the job with a hacksaw. The two halves had sprung outward until the muzzle

ends stood eight inches or so from each other.

Where the mud had been—just behind it, rather—the barrel was bulged, and the rifling was wiped clean from the bore, merely a smooth bulged place to show where the gases worked before they got uproarious and split the barrel in two.

Another shot, fired in the chamber end, with the point of the bullet showing through the split, finished the job. We had two neatly divided half-barrels, and a receiver with the threaded portion and the locking shoulders removed completely.

So we proved to our satisfaction that this seal stuff was all piffle, there had to be actual resistance, actual weight, to blow up a barrel.

Later we went into the matter with a ballistic engineer who had done much work of the sort. He stated that bursting a barrel from an obstruction was a matter of the actual weight or the resistance offered by the obstacle, that sealing the bore had nothing to do with the matter. Also, said he, the ruin was wreaked by the wave action of the gases, traveling at terrific speed, and suddenly checked by the shot or bullet striking the obstruction. On the motion of the gases being checked, they set up a wave action, so called, resulting in frightful pressures just behind the bullet or shot, and usually ruining the barrel when the obstruction occurred well down it, where the thickness was not calculated for any such unusual pressures.

I forgot to say that as a preliminary we pushed a rag or patch down the clean, oily bore of our old barrel, and tried that out. The bore was sealed, but there was little resistance in the patch. As we expected, there was no result, other than removing the patch.

But this might not hold true were the patch stuck in a small-bore barrel like a .22, with the bore dirty and the patch offering resistance. Sealing the bore won't hurt the barrel, but a patch that checked the progress of the bullet enough to set up wave action is more than sealing it, it is offering substantial check to the progress of the bullet, and that is all that is needed to make trouble.

The trouble in bursted barrels does not seem to arise from the air space itself between bullet and obstruction as we used to believe, but from the fact that this air space represents bullet travel with the gases getting up speed behind it. It is the check to the rapidly moving gases that makes the damage.

LENGTH OF BARRELS

FIELD & STREAM PUB. CO.

Will you kindly advise regarding comparative merit of 30, 32 and 34-inch barrels in 12-gauge for trap and field use? Also on shells 12-gauge, loaded 3⅛-1⅛ with 3⅛-1¼ for trap and field use.

THOS. E. COVINGTON.

Ans.—We should advise not over 30-inch for field use. Barrel may go 32 inches in single-shot trap guns. If a light-weight man 1⅛ oz. shot will be best for trap-shooting, though 1¼ of numbers 4 or 5 give best results on ducks, even for a lightweight.—Ed.

SIDE ARMS FOR THE WOODS LOAFER

H. P. Sheldon

Unless one contemplates a trip into raw country where a heavier weapon is desirable, the average week-ender will find in the .22 pistols and revolvers manufactured on this continent a side arm which embodies all that he desires in such a weapon. Whether it be a fishing trip which he contemplates, and wants a .22 along to enable him to pick up a succulent panful of frogs' legs from the bow of the canoe, or to repulse the advances of the inquisitive porky, or whether he wishes to use the pistol as an auxiliary to his heavy rifle and pot some of the small game which is always so abundant during deer season, the accurate, compact little hand gun is the embodiment of the idea.

The .22 caliber revolver, while it lacks nothing from the consideration of accuracy, has an inherent drawback as a trail companion in that it requires more in the way of cleanliness in order to maintain this accuracy than does the pistol of the same caliber. Gas leakage at the space between the cylinder and the barrel is responsible for this condition, and unless the gun is thoroughly cleaned after one or two cylinders full, the accuracy is very noticeably impaired. Shooting the .22 L. R. smokeless cartridge with the greased bullet, this trouble is, in a great measure, eliminated, but it is usually present in some degree and these cartridges are not always available at the cross-roads store.

For several years a .22 revolver was a part of our outing equipment, and we finally developed a means of cleaning the gun which was at all times available and could be applied as often as the case required.

At the harness maker's we had a small pouch of leather made with loops to slide upon a 1½-inch belt. This pouch measured 3 inches by 2 inches, and was about 2 inches wide, so that it easily held 100 .22 L. R. cartridges in one end and a small vial of powder solvent in the other. A piece of rawhide was stitched to the top of a .45 S. A. holster at the point farthest from where the butt of the gun protruded. This allowed us to carry an 8-inch bristle brush in the sheath and a twist of the rawhide thong passed through the ring at the end of the rod effectually prevented its loss and held the rod securely in place when the gun was drawn. There was plenty of room in the big holster for both rod and revolver. When in use the gun became foul it was a simple matter to dip the brush in water, if it was handy, or in the vial of solvent if it was not, and swab the barrel and cylinder thoroughly.

It was not even necessary to dry the barrel after this application, and the work took but a minute of one's time. A revolver which has been treated in this way has had over 10,000 bullets fired through its barrel, but still retains its original velvety polish. Of course at the end of the day's tramp the revolver should be thoroughly cleaned and oiled in the orthodox manner and clinging bits of caked powder removed from in front of the cylinder.

After a deal of hot discussion, I finally settled upon the .22 pistol as the best all-around side arm for the sort of trips which we

"—POSITIONS SELDOM SEEN UPON THE ACCREDITED PISTOL RANGE"

take; it was open to none of the above criticisms and with its ten-inch barrel, and consequent improvement in accuracy and range, was equal to the more cumbersome pocket rifle.

At 100 yards it was easy to break quart bottles with this model and a little practice in range guessing, and, in the field, it proved to be equally efficient upon woodchucks, crows, etc. It could be shot all day with Lesmok powder with no diminution of accuracy. Used in conjunction with the pouch described above, the pistol was not even slow of fire and could be manipulated with a rapidity and precision which was surprising to one who was accustomed to the revolver. With its long barrel it easily lent itself to a variety of different holds which are seldom seen upon the accredited pistol range, but which are, nevertheless, mighty handy when one wants to nip a gray out of the top of a walnut.

The pistol is ideal for all sorts of small game, and with the hollow-point ammunition is sufficiently deadly for an occasional fox or woodchuck. In the winter, when Jack Frost has placed a seal upon the haunts of summer, one has but to grab a handful of "shorts" and retire to the basement to continue his interrupted sport in cozy comfort and pleasant anticipation of the season to come.

CARTRIDGES FOR BIG GAME

FIELD & STREAM PUB. CO.

As a reader of FIELD & STREAM am taking the liberty of asking you a few questions.

Will a .25-20-caliber rifle give satisfactory service for moose, deer and bear hunting, and what is the best gun for this kind of game?

Will one find the country between the "lake of the woods" and International Falls, in Minnesota, a very good country for the game as mentioned in my first question?

A. E. LUND.

Ans.—.25-20 is a good deal too small for all the above game, in our opinion. For moose .30 U. S. Government '06, .303, .33 and .35 Winchester, .35 Remington Automatic, and .405 Winchester are all good cartridges, and for deer and black bear the smallest cartridge we would recommend would be the .32-20 with the .30-30, .250 and .33 all much preferable. The latter are all used in light-weight rifles easy to carry. The country you speak of is good.—ED.

THE .22 RIFLE FOR RECREATION AND GAME

By Rev. Arthur Requa

Among all the interesting and enlightening discussions concerning modern rifles for sport and various kinds of game, it is interesting to note the attention so frequently given to the .22 rifle. As might naturally be expected, considering how humanity is constituted, while some are enthusiastic over the good points of this little rifle that appears to be rapidly growing in popularity, others write in a more derogatory vein, as if the .22 were good only for boys learning to shoot or for target practice. Only recently a writer of considerable merit wrote an article that appeared in one of the many excellent magazines of the day that is devoted to outdoor recreations, not merely questioning the efficiency of this little weapon, but positively asserting its inferiority and inefficiency as a weapon for small game, emphasizing the necessity of having a .25 rifle for even squirrels, woodchucks and rabbits, while still another writer lately went so far as to advise the use of a .32 rifle for these miniature representatives of the game kingdom.

Fortunately, however, the rifle under present discussion appears very safely to be holding its own. Its friends are not only numerous but evidently well convinced as to its merits and able to base their judgments upon their personal experience in the game field. A single fortunate and fatal shot, or a very limited number of such shots, might not constitute an authoritative argument in favor of this rifle, but when, with reasonable skill in its use, the shots afield prove to be *generally* effective, there is reason for affirmative testimony of an enthusiastic kind.

Considering that even the best ammunition designed to be used in the .22 rifle for hunting purposes, which, of course, is the long rifle hollow-point, is compartively inexpensive, and that many who crave the exhilarating effects of the game field can ill afford needless expense, it seems an act of friendly sportsmanship to emphasize the fact that they of only moderate means need not feel that they must purchase firearms of very large caliber or costly ammunition in order to have genuine sport and a fair degree of success in hunting certain kinds of game. Not all can go to Alaska or Africa, nor even one-half across the Continent for the sake of recreation with a gun or rifle. Such is the grinding necessity of toil, mental or manual, for many thousands, that they are compelled to gratify their hunting propensities in some near-by forest or on some neighboring open fields. If they cannot go to the more distant mountains or plains for the larger game, they can at least avail themselves of the pleasure to be had in hunting squirrels, rabbits, woodchucks or grouse. And, in the writer's candid opinion, the .22 rifle of any one of the many good makes, if properly manipulated, will prove reasonably effective on any of these, though, in case of the grouse or partridge, one will need to be well drilled in the art of snap-shooting, unless remarkably favored with standing shots. And no apologies are called for in accepting standing shots at the grouse, in case the .22 rifle is used, instead of a shotgun.

On the desk directly in front of the type-writer on which these lines are being writen, stand two magnificent specimens of gray squirrels, beautifully set up by an expert to whom was intrusted the task. Each one weighed exactly one pound, eleven ounces and a fraction. Each one was brought down by the very first shot fired from a .22 repeater. The discovery of the first gray squirrel secured by the writer was a delightful surprise, as a gray squirrel had not been seen in that forest for years. The writer was out after red squirrels and was sitting down somewhat in an open space in the forest, when, at some distance ahead, there was seen high up on an oak tree what appeared to be the tail of a gray squirrel blown by the wind, the squirrel being on the opposite side of the tree. Careful stalking was necessary. It was almost impossible to walk noiselessly to get near enough for a promising shot. It took time to get to a certain log lying on the ground that was at last reached and used as a seat. Sitting quietly and looking up into the tree the question was, "Is he up there yet, or has he gone?" When first seen he was going towards the ground. Quietly and as motionless as possible the writer sat on that log with the .22 rifle ready to speak on short notice. Not a sign of life appeared for ten or fifteen minutes. Presently, high up on the tree, motionless as the tree itself, appeared something. How or when did it get there without being seen? But there it was, just the head of the squirrel, or a fraction of it, peering from behind the tree. Slowly and with careful aim the little rifle was brought to the shoulder. Once in place it instantly spoke out with a "Bang!" The bullet had done its deadly work and the beauty was in hand. One of the grays on the desk was shot in the same forest on another day. As the writer approached a familiar and lofty pine tree, he heard something of a commotion. What could it be? Was there a fight betwen a gray and a red squirrel? Such proved to be the case, for the red was chasing the gray in wonderful fashion up and down and around that tree. How they did go! And only a little space between the two. At length there was a brief pause, while the writer, at considerable distance away, was cautiously peering through the branches of another tree, following the gray with his rifle sights. When there was the pause in the race around the tree, the gray was high up on a short piece of broken limb and facing the tree ready for another leap. No time could now be lost. Instantly the shot was fired and down came the gray and he did not even give one kick. He had been shot directly through the heart. The companion of this one sitting on the desk was killed a few days later. It was in the same forest but in a different direction. There was a rustling through the fallen leaves, but nothing could at first be seen. The writer was stationed behind the limb of an evergreen tree. Presently the gray came into view, running along a piece of fallen tree. Suddenly he stopped to inspect the writer over on the opposite side of the brook. But that little pause was instantly fatal. The shot was fired from the right side of the squirrel just opposite the heart, and there was merely a slight tremor of the body as it rolled over on the backside of the log. These were the very first three gray squirrels at which, with any kind of a gun, the writer had ever shot. Thus it will be seen that the merits of the .22 appear inasmuch as three consecutive shots with it brought down three grays. Since then the same little rifle has continued to demonstrate its effectiveness on gray squirrels.

FINAL STANDING OF CLUBS IN SMALL-BORE SHORT-RANGE

Outdoor Shooting League

Order	Name of Club	Aggregate Score
1	Peters R. & R. Club	9575
2	Auburn Rifle Club	9431
3	Bucyrus Rifle Ass'n	9225
4	Rifle and Revolver Club of New York	9211
5	Fremont Rifle and Revolver Club	9196
6	St. Louis Colonial Revolver Club	9026
7	Meeker Rifle Club	9006
8	Pittsburgh Rifle & Revolver Club	9002
9	Ft. Harrison Rifle Club	8982
10	Hydraulic Press Steel R. Club	8902
11	Portsmouth-Norfolk Rifle Club	8889
12	Cypress Hills R. & R. Association	8853
13	Canton Rifle Club	8814
14	Ashburnham Rifle Club	8653
15	Citizens' Rifle and Revolver Club	8567
16	Dallas Rifle and Revolver Club	8548
17	Toledo Yacht Club Rifle & Pistol Ass'n	8445
18	Milwaukee Rifle and Revolver Club	8366
19	Nogales Rifle Club	8330
20	Shawnee Rifle and Revolver Club	8283

21 Kiowa Shooting Club....8268
22 Niskayuna Rifle Club...7857
23 Lewiston-Clarkston Rifle Club 7846
24 South Chicago Rifle Club.7727
25 Quincy Rifle Club.....7532
26 San Simon Rifle Club...7451
27 Black Hawk Rifle Club..7440
28 Ithaca Rifle Club.....7300
29 Massachusetts Rifle Ass'n.7117
30 Interwoven Rifle Club...6680
31 Kansas City Rifle Club..6655
32 Ephrata Rifle Club.....1978
33 Fort Worth Rifle Ass'n..1518
34 Chicago Rifle Club..... 389

The National Rifle Association of America has announced the prize winners in the Small-bore Short-range Outdoor Shooting League, which ran from June 5 to August 7, a series of ten matches, one a week. The winner was the Peters Rifle and Revolver Club of Kings Mills, Ohio, with a total score of 9575. The members of the winning team are James Crawford, John Beedle, Forest McClung, A. D. Rothrock and Clarence Pierson. The Auburn, N. Y., Rifle Club finished second, score 9431, and third place was won by the Bucyrus, Ohio, Rifle Club, 9225. The Portsmouth-Norfolk, Va., Rifle Club finished eleventh and won first place and medals for Class B. The Kiowa Shooting Club, of Des Moines, Iowa, gets first place and the medals in Class C, being 21st in the order of standing.

In the individual shooting nearly all the honors went to A. D. Rothrock, of the Peters Club. He had a total score of 1942 out of a possible 2000. He made the highest aggregate score in rapid fire, 991, but as under the conditions of the match he could take only one medal, the prize for the best rapid fire goes to his clubmate, Forest McClung, who scored 980. The medal for the highest aggregate slow fire was won by J. Patterson, of the Hydraulic Pressed Steel Company Rifle Club, of Cleveland, total 963.

UNKEL DAVID'S LETTER

Dere Felde & Streme:

The moar trubbel a felloe has, the moar he can expekt. I thot hot wether & Yooropeen belijerensy was enuff, whitch I must endoor with awl uther peepul; but wuss in menny wais is the smawl tribbelashuns of hoam life, doo to the peekoolyarities (I gess that is rite) of Sar An, hoo is mi loffel & beluved wife. For ekzampel: Sar An objex to mi smoaking when I taik a bath, tho the saim is a habbit of grate valyoo, bekos a steddy smoak indykates that the subjikt is not hully submerjd. I like to have mi perryskoap above the surfiss. In fakt, too mutch watter gives me the fijjits. If I don't see mi toze I'm afrade of submarcen attakt. Whitch is the reel reezon why the sail of bath tubz has deeklined among nootrels & neer-nootrels like Bill Brine & uthers hoo will stik upp for pees as long as there's a pees of it left. The way to dodj torpeedoze is to kepe away from watter. If you must wash, uze sanniterry prekawshuns. Sar An sais it is the dooty of awl troo sittyzens to prepair for a forrun fo with a helthy appytight, & there4 she frize one (1) pankake where it was owr praktis to eet a tolabel-sized stak; & at uther meels we have dride peeches & smawl potatoze with the skinz onto them. Like wize Sar An woodent give mi last yeare's britches to the son of a klerjyman hoo was krooly abandund by his abel bodid & well too doo wife, bekos she sais the Jermuns will taik mi uthers on site.

It seems the yoonannymus idee that owr subjygashun will okkur as soon as the vikters can raze the prise of a sekond-klass tikkit to Noo Yawk. We are whipt now alreddy, befoar we knu there had been a fite, whitch will be a sad diskuvery to menny hoo hoapt to see the war befoar it was awl over. I knoe a man hoo has throde up brestwurx in his kaff paster & sais he don't ame to retreet till he shutes up awl the Number ate (8) shells that was left from the jak snype seezun; but his nayburs expekt to hog-ty him at the owtbrake of hostillytes. We never have fit, & why shood we go bak to the rood praktisses of owr 4fathers? Let the konkrers hitch upp with owr reglar jobz & see how they kum owt. I wood like to see the Kizer kivering korn with a ho in the rokky bak feeld, or a kuppel of Allys hitch owr old Soozy mewl to the harrer. Tawk abowt the veesissytoods of life at the frunt! Nobuddy but a Konnettykut man can taik foar (4) fingers of last yere's sider on Mundy, & sober up in time for his Bibul klass befoar sekkond pi time the next Sundy. I tride it—after a yere of Suthern moonshine whisky & blokaid brandy, & Sar An was bizzy exploaring sellers for foar dais befoar she found me. The felloe hoo lived at the rite plais had mislade me in the koal bin, but sed he mite have went down seller agin the first Sattydy in Oggust when the preecher come. The ordinnerry likker of commerss may be a perril to civilizashun, but hard sider will git the gote of a seezund hikry seegar stoar Injun. Hense foarth give me sumthing moar sootabel for childrun—like wood alkyhawl or karbolik assid.

Upon owr reeturn from the moar or less sunny Sowth I set in stait for three (3) dais in the offis of the grait reelijus maggyzeen, to the delite of the commun peepul hoo knoe me so well by repoot. I had ruther have helpt Sar An inspekt the noo shirt wastes in the deepartmint stoars, but she objekts to mi tawking with the lady sailsmen—whitch is owr privylij under the konstytooshun & don't interfeer with traid & traffik. The broonet klerx are moast app to speek to me, espeshully if slimmer in the figger than Sar An—whitch nobuddy is to blaim for, & shoodent maik nobuddy mad. Ruther than have trubbel I sed I wood skip the shirt wastes & konfine miself to sox & tukking koams excloosive; but Sar An thot I aut to stay in the offis & tawk to the peddlur. Gentul Reeder, for a minnit mi hart was broak by her kroolty; but heer come a feemail poit with a pome naimed "The time we swum in the Krik," & two fare yung sportswimmen hoo had rit a pees on "The Straddel Bug in Kamp Kookery," & I coodent have been moar amoozed at a shirt waste kownter. That was Mundy 4noon, & Wendy Sar An come in ahed of time & fownd me in the pryvit offiss with haff a day's akoomylashun of wimmen riters & pikchur artists, diskussing the pollysee of the maggyzeen, while the eddytur had went fishing over to Noo Jerzy. There was no interdukshuns, & I dident stay till the funkshun broak up, but Sar An sed that the litterrerry peepul of Noo Yawk was awl wind & no stummyny. We brung her too with sum stimmylents fownd in the advertizing deepartmint, & sum of the stenografers soad up her hobel skirt where the gaim protekshun woman got holt with boath hands in the thutteenth rownd; but Sar An sais there'll be no moar offis work for yore Unkel David. Whuther she thinx I am too yung or too old to mix with awl sorts of peepul still remanes a misterry, but it is mi idee that I am just abowt rite.

Trulie Yores,
UNKEL DAVID.

NOTICE TO SUBSCRIBERS

Up to the August number of FIELD AND STREAM our subscription list has always been addressed by an Addressing Company but, owing to the fact that we received so many complaints from our subscribers of the non-receipt of the magazine and having these addresses correct on *our own* lists, we decided that the only way to avoid complaints in the future would be to install our own addressing plant and do our own addressing.

Accordingly we have put in, what we believe is, the best addressing system that money can buy and during the entire summer have been transferring our subscribers on to our own lists and, beginning with the September Number, sent all subscription copies direct from this office.

During this change it is very possible that some mistakes with regard to addresses, etc., have been made, and we, therefore, want to say to our subscribers that if anyone has any trouble from now on with their subscription we would appreciate an immediate notification of the non-receipt of any number as we are extremely anxious to know that our lists are absolutely correct from now on.

We also want to state that if there has been any trouble in the past ("mistakes are apt to happen in the best of families"), with the system we are installing I hope that they will be reduced to a minimum, and assure you that any complaint you may have to make will be acknowledged immediately and it will be considered a favor if the same will be called to our attention.

E. F. WARNER, Publisher.

TRAP-SHOOTING DEPARTMENT

CONDUCTED BY DAVID H. EATON

GRAND AMERICAN HANDICAP

THE WINNERS

GRANT PARK INTRODUCTORY—235 entries; W. S. Hoon, Jewell, Ia. 196.

CHICAGO OVERTURE—219 entries; H. J. Rebhausen, No. Platte, Neb., 98.

NATIONAL CHAMPIONSHIP AT DOUBLE TARGETS—80 entries; Guy V. Dering, Columbus, Wisc., 91.

NATIONAL AMATEUR CHAMPIONSHIP AT SINGLE TARGETS—C. H. Newcomb, Philadelphia, Pa., 99.

PRELIMINARY HANDICAP—689 entries; 683 starters; R. H. Morse (18 yards), Chicago, Ill., 95.

GRAND AMERICAN HANDICAP—884 entries; 828 starters; L. B. Clarke (18 yards), 96.

CONSOLATION HANDICAP—270 entries; 266 starters; H. Hammersmith (18 yards), Milwaukee, Wisc., 91.

SANFORD TROPHY (Professionals)—Rolla O. Heikes, Dayton, Ohio, 96.

The sixteenth Grand American Handicap, held in Chicago, on Aug. 16th to 20th, established a high mark for attendance that has never been equalled at any trapshooting tournament in the world, and that will remain the top record for many years to come, if it is ever equaled; 884 shooters entered the main event on Thursday, of which 80 were penalty entries, paying $5.00 extra for the privilege of competing. The event was staged in Grant Park, Michigan avenue, within a short walk of the hotels in the loop district, with the result that the work of the shooters was witnessed by thousands during the week. The use of ten traps for the regular events was an innovation which presented a rather difficult problem to Manager Shaner, but one which he solved successfully; the odd-numbered squads started in on the odd-numbered traps, and the even squads on the even traps; having shot at 10 targets, they went on to the next trap and completed the event, thus each man shot the same number of targets over each of the 10 traps. The traps were set within a few yards of the water, the targets being thrown due east, out over the lake, with a perfectly clear sky background. The tournament was a success in every way, and the fact that it was brought to a close on schedule time, Friday night, speaks volumes for the efficiency of Mr. Elmer E. Shaner in handling the innumerable details of an event of this size. Working with Mr. Shaner was the Chicago Association of Trapshooters, Incorporated, organized for the express purpose of promoting the Grand American Tournament at Grant Park. Forty-nine of the gun clubs, commercial organizations and athletic clubs of Chicago and vicinity were represented on the Promotion Committee, and the attendance shows that they did their work well. In the office Mr. Shaner gathered a force of men who have been with him for many years at other Grand Americans: Fred Whitney, of Des Moines, Ia., cashier; Bernard Elsesser, of York, Pa., compiler of scores; D. H. Eaton, Cincinnati, Ohio, assistant compiler of scores; T. Chalfont, Wilmington, Del.; C. S. Hitchcock, Chicago, and W. H. Hoffman, Pullman, Ill., the last two serving at the three previous Grand Americans held in Chicago. Traps Nos. 1 to 5 were Ideal Leggets, throwing blue rock targets;

C. H. NEWCOMB, WINNER NATIONAL AMATEUR CHAMPIONSHIP, 99-100

traps 6 to 10 and the trap for professionals, No. 11, were Western Automatics, throwing white flyers. The Jokers were experts, situated at the extreme south end of the line. During the week 282,380 targets were trapped, the Grand American event alone taking 74,520.

Grand American Handicap, $7,813.00; fifty moneys; 1st, $781.30; 2nd, $703.15; 3rd, $625.05; 4th, $546.90; 5th, $468.80, and $78.15 for each of the last thirty-six places.

The week opened with the Grant Park Introductory, an event at 200 targets, 18 yards' rise, and $20.00 entrance. A stiff proposition, but one which 235 amateurs had the nerve to enter, and the scores put up by a majority of the contestants, though not landing them in the money, justified their confidence in their individual skill. Like everything else connected with the tournament, the number of entries was a record for "Practice Day."

The first shot of the tournament was fired by Eugene Pike, City Controller, and it is on record that he smashed the target. The star on the amateur traps was W. S. Hoon, of Jewell, Ia., who finished at the top with 196 out of 200. He missed one target in each of four events, the 1st, 3rd, 4th and 8th. S. A. Huntley, of Omaha, Neb., finished in second place with 195, his five lost targets being scattered over five events, one in each. In third place there were three men, J. E. Harkin, William Ridley and H. C. Hood, with 194 each. The latter dropped one bird in each of the first six events and then broke the last 80 straight. Harkin broke the first 60 straight and then dropped 3 targets in his fourth string. Ridley's six misses were spread over six events, one in each. C. B. Eaton and Mark Arie tied on 193. The work of these shooters, as well as that of all those finishing in the first flight, was extremely good, as the conditions were such as to put their endurance and skill to the severest test. In the morning a broiling sun kept the temperature on the firing line well up in the 90's, and in the afternoon a stiff southeast wind caused the targets to perform all kinds of tricky stunts. While the amateurs were keeping the traps busy, the professionals were turning in good scores over trap No. 11, which was installed for their special use. A majority of the 20,000 spectators estimated to have visited the grounds during the day were attracted to this trap, and were rewarded by witnessing the snappy work of some of the world's best shots. The pros shot at 100 targets, and four of the 45 contestants turned in scores of 99; these were Art Killam, of St. Louis, Mo.; W. D. Stannard, Chicago; L. S. German, Aberdeen, Md., and Tom A. Marshall, Chicago, the latter dropping his lone target after having broken over 70 straight. A feature of the shoot was the presence of a squad composed of five members of the all-American team which made the trapshooters of England and Europe "sit up and take notice" in 1901; these were Ed Banks, Fred Gilbert, W. R. Crosby, R. O. Heikes and Tom A. Marshall. In one of the

events the squad turned in a score of 99 out of 100, showing that they have none of them lost the skill which landed them winners in their contests abroad. A record over the professional trap was the "century" scored by a squad composed of F. G. Bills, C. A. Young, Bart Lewis, J. R. Hinkle and E. M. Daniel, each of whom broke 20 straight. This work was duplicated by squad 11, amateurs, in the 7th event, P. O'Brien, M. Arie, S. A. Huntley, R. A. King and F. Troeh breaking straight, and by squad 19, Hinshaw, Carlton, Beard, Kelsey and S. G. Vance, in the same event. These proved to be the record squad scores of the week. F. G. Bills, B. Lewis, C. G. Spencer, Ed. O'Brien, H. D. Gibbs, W. Huff, H. W. Cadwallader, Homer Clark, were second high professionals with 98 each. Several good runs were made; J. S. Frink, 95; J. S. Speer, 87; H. C. Hood, 82; J. Noel and L. B. Maytag, 95 each; G. W. Vall, 98; P. O'Brien, 104; F. Troeh, 105; F. J. Coburn, 82; E. C. Hinshaw, 93, unfinished; H. J. Pendergast, 92, and F. G. Fuller, 91.

First on the program for the first day of the tournament was the Chicago Overture, 100 targets, $25.00 entrance; $13.00 divided on the 100 targets, and $10.00 divided on the five events, $2.00 on each event. It was a stiff proposition, but 219 amateurs went up against it. The weather was not propitious, a strong northeast gale blowing in the faces of the contestants, and making the targets very erratic in their flight. Shooting began at 8:10, and the event was finished about 3 o'clock. S. A. Huntley, in squad 7, finished early with 97, and it did not seem likely that this mark would be exceeded, but H. J. Rebhausen, Champion of Nebraska, in squad 19, forged to the front and nosed Huntley out by one target; he dropped two in the first event and then went straight, getting a run of 85, and a total of 98, and winning first place. In squad 31 William Wettleaf was being watched closely as a possible contender for first place; he was 2 down in the first 60 targets, but let another escape in his fourth event, finishing in a tie with William Foord, of Wilmington, Del., third with 96. J. R. Livingston, in squad 33, stepped into the limelight, with only one down in the first 80 targets; his chances were good to land in first place if he could keep up his good work, and even if he dropped one more target he would still be tied and have a fighting chance to win. But the last string proved too much for him; he lost the 6th, and later let three more get away, going out with a total of 95, which included a run of 83.

The feature of the day was the contest for the National Amateur championship. This was open only to winners of the State championships, or to the runners-up, in case a winner was unable to attend. Thirty-five States were represented: Connecticut, Oregon, Washington and Texas by the runners-up, respectively, W. W. Rice, P. H. O'Brien, F. M. Troeh and P. R. Miller. The race was at 100 targets, 16 yards' rise, and was shot over traps 5 and 6, beginning about 3 o'clock. It was a hot fight from start to finish, and held the attention and interest of a large crowd of spectators. C. H. Newcomb, of Philadelphia, Pa., proved the winner, on a score of 99, breaking his first 91 targets straight. His exhibition of skill was thoroughly appreciated by the gallery; he snapped the targets almost on the instant of their appearing in sight over the traphouse, and every break was a clean one; his solitary miss was due to the hard conditions, the wind causing the target to jump suddenly and his load going under it. He shot his last 25 targets under an added strain, for just before he went out for the final string J. R. Jahn, champion of Iowa, had finished and set the high mark at 97; a few moments later R. A. King, of Colorado, raised this mark to 98. In the same squad with Newcomb was A. B. Richardson, the Delaware champion, who was hard after the man from the Keystone State. Richardson dropped two in his first string and then went straight, and Newcomb had to keep up his first clip in order to avoid getting in a three-cornered tie on 98.

The contest for the National Amateur Championship at doubles was the last event of the day and had 80 entries. Guy V. Dering, of Columbus, Wisc., was the winner on a score of 91. His nearest competitor was Mark Arie, of Thomasboro, Ill., with 90, followed by S. A. Huntley with 87. Dering is reckoned as one of the best shots at doubles in the country, if not the best, and this makes his third win this year. He won the Hazard Cup at doubles at St. Louis, was successful in defending it against Del Gross, of Kansas City, Mo., on Aug. 14, and then copped the big race here. It was a poor day for shooting at doubles, and most of the contestants realized this fact almost from the start. The race was at 50 pairs, 10 pairs at each trap. Not a perfect string was made, though several, including Dering, who got two, and Arie, managed to break 19 in some of the frames. The professionals enjoyed the sport over their own trap, 46 of them facing the traps. J. E. Dickey took first honors with 97 out of 100; R. R. Barber was second with 96. In the 95 hole were Bart Lewis, C. A. Young, L. S. German, J. S. Fanning, J. M. Hawkins and F. G. Bills.

The Preliminary Handicap occupied the stage on the second day with the record entry of 689, and 683 starters. The event was at 100 targets, same handicap distances as awarded for the Grand American. The same high wind blowing into the faces of the shooters prevailed, and this, in connection with the added yards' distance, threw many of the contestants off their true gait. The event was won by R. H. Morse, of Chicago, with a score of 95 from the 18-yard mark. Morse is comparatively new in the game, having been shooting only about three years, and this was his first registered tournament. Before Morse started on his last string three others had finished with 94 each, and two misses would mean that he would join them in a shoot-off for first. But he escaped with only one down in the last 20, giving him the winning score of 95. The men with 94 were E. S. Schindel, Milwaukee, Wisc.; G. K. Mackie, Lawrence, Kan., both at 18 yards, and C. A. Gunning, Longmont, Colo., at 20 yards. In the shoot-off for second and third trophies Schindel was second with 19, and Gunning took third with 18. Ed. Voris, A. R. Castle, C. B. Helm, P. R. Miller and C. L. Parsons, 93 each.

At the professional trap forty-eight contested in the 100-target

R. O. HEIKES, W. R. CROSBY, FRED GILBERT, ED. BANKS, TOM A. MARSHALL

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38 West 59th. St.,
N.Y. April 22/15.

Victor Talking Machine Co.
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Gentlemen:--

I would like to express my delight at renewing my contract with the Victor Talking Machine Company for ten years more.

During my extensive travels I have had such a vivid illustration of the great work you are doing for the world that it is with the deepest feeling that I say I'm proud to be a part of such a great work, and that I may long enjoy the privilege is the earnest wish of

Yours very sincerely,

Alma Gluck

program provided, and gave a classy exhibition, five men going out with only one target down; these were L. S. German, Bart Lewis, R. O. Heikes, J. R. Taylor and Ed. Graham. Close up were J. M. Hawkins and J. R. Graham with 98 each; H. Kennicott, Ed O'Brien, Fred Gilbert and W. Huff with 97 each, and J. R. Hinkle and C. A. Young with 96 each. In the individual matches between the professionals, L. S. German defeated C. G. Spencer 100 straight to 95. J. E. Dickey, 98, vs, Ben Schwartz, 94; H. Cadwallader, 97, vs. W. D. Stannard, 83; J. S. Fanning, 96, vs. M. Ballou, Jr., 86; C. A. Young, 98, vs. Art Killam, 98; Homer Clark, 99, vs. J. R. Taylor, 96. Long runs were made by German, 169; Heikes, 94; Lewis, 86; J. R. Taylor, 86; Ed. Graham, 91. The shooting started at 8 o'clock, but was not finished until nearly dark, although there were no delays during the day. The section system was used, each section consisting of 27 squads, the first squad in each section starting on the odd-numbered traps at the same time, section 1 in event 1; section 2 in event 2, and so on.

The Grand American Handicap, the blue-ribbon event of the trapshooting world, was staged on the third day. When the entries finally closed 884 names had been listed; of these, 80 were penalty entries; 53 failed to show up at the grounds, and three were not there in time to start and were scratched, so that 828 shooters actually faced the traps and began the competition in the biggest shooting event ever held in the world. The number of starters precluded all possibility of finishing the event on schedule time, and Manager Shaner announced that only four of the five 20-target events would be pulled off, the remaining 20 targets to be shot at on the following day. The weather was slightly improved from the trapshooters' point of view, the sky being clear and a light east wind blowing. The section system was used, with 33 squads in each section. Shooting began promptly at 8 o'clock, but the last squad did not finish in the fourth event until nearly seven in the evening. At that time six men were tied on 78; these were C. W. Irrgang, 16 yards; M. E. Dewire and C. B. Helm, both at 18 yards; C. C. Hickman and J. J. Randall, both at 19 yards, and L. B. Clark, at 20 yards. Next to them were R. Gerstell, Jr., 21 yards; P. J. Graham and C. C. Emery, both at 19 yards; G. K. Mackie, A. Gilson and C. M. Beer, all at 18 yards, and H. W. Leffingwell, at 17 yards, each with 77. There were a number of scores of 76 and 75, and from that down to almost the 50 per cent mark. During the day many shooters dropped out, as they realized that their chances were *nil*. The work of Gerstell was really the best of the bunch, as he was the only one to stand at 21 yards and keep up with the first flight. Clark's work was also a nice exhibition of marksmanship from 20 yards. Former Grand American winners were not in the running; Riley Thompson, of Cainesville, Mo., who won in 1910 with a straight score at the Chicago Gun Club, was badly off form, breaking but 61 of the 80 targets from 20 yards. W. Henderson, of Lexington, Ky., last year's winner on a score of 98 from 22 yards, had but 63 to-day from the 23-yard line. There was a lot of interesting shooting over the professional trap, the feature being a series of individual matches. Bills disposed of his opponent, H. C. Kennicott, 97 to 92; P. J. Holohan got the best of Tom A. Marshall, 97 to 93; Gilbert and Crosby tied on 94; R. O. Heikes and J. R. Graham each broke 98; J. M. Hawkins got the best of J. R. Hinkle, 98 to 96; Bart Lewis took E. S. Graham into camp with 99 to 95, and also copped the honor for high individual score in the matches. Fifty-two took part in the regular 100-target event, C. G. Spencer and J. R. Taylor tying for first on 99; Ed. Banks, C. E. Goodrich, C. A. Young, Bart Lewis, J. K. Eastman, L. S. German, T. H. Keller, Jr., and W. Huff, 98 each; G. H. Ford, H. Kennicott and Art Killam, 97 each.

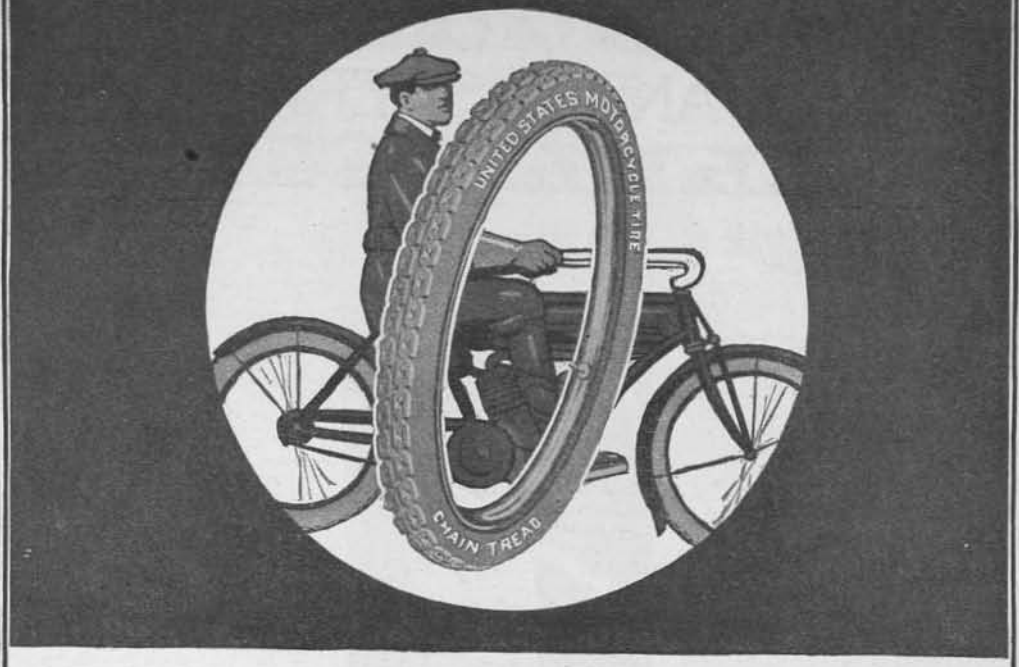
L. B. CLARK, WINNER GRAND AMERICAN HANDICAP, 96-100, AT 18 YARDS

The first thing on the program for the fourth day was the finish of the Grand American Handicap. When the squads were called to the firing line at 8 a. m. it was found that there was a falling off in the number of shooters; one, two and three men in a squad, and in several cases entire squads failed to respond. Many of the contestants found their hopes of making a killing blasted, and faded away. The weather conditions were the worst of the week; cloudy skies and strong east wind. The round was finished at half-past ten, and four men were tied on 96 for the first place; L. B. Clarke, Chicago; M. E. Dewire, Hampton, Ind.; J. J. Randall, Greenburg, Kan., and C. C. Hickman, Yoeman, Ind. Clarke and Dewire stood at 18 yards, and the others banged away from 19 yards. The matter was settled in one shoot-off, Clarke winning with 20 straight; Dewire dropped his sixth target, and then went straight, winning second trophy; Randall kept up with Clarke for the first 15 targets of the shoot-off, but dropped his 16th and 19th targets, getting 18 and winning third trophy; Hickman was neck and neck with the leaders for ten targets, but lost three in his third five, and went out with 17, taking fourth trophy. There were six men in a tie on 95 for fifth trophy, and three shoot-offs were needed to decide the winner. A. Gilson, Minneapolis, Minn., and C. B. Helm, Rockford, Ill., each at 18 yards, and C. N. Irrgang, Chicago, 18 yards, dropped out in in the first round, the two former scoring 16 each and the latter 18; E. W. Anderson, Pecatonia, Ill., and J. H. Ferry, Lima, Ohio, both at 17 yards, and P. L. Heinecke, Blue Island, Ill., 16 yards, tied on 19; in the second round Ferry dropped out on 17, the others scoring 19 each; in the third time up Anderson broke 19 and won the trophy, Heinecke scoring 18.

The Consolation Handicap, open to amateurs who failed to win any money in either of the other two handicaps, was started at 12:10 with 270 entries, and was quickly run off. H. Hammersmith of Milwaukee, Wis., proved to be the winner after shooting off a tie on 91 with Sam Leever, of Goshen, Ohio. The former stood at 19 yards and the latter at 21. In the shoot-off Hammersmith broke 18 to Leever's 16. Seven men tied on 90 for the third trophy, D. Livingston, of Youngstown, Ohio, winning with 20 straight from 16 yards in the shoot-off. A. Koyen, 19 yards, 19; J. B. Barto, 19 yards, 18; H. J. Butler, 18 yards, and A. H. Goering, 19 yards, 17 each; F. E. McKay, 20 yards, 16, and F. C. Koch, 20 yards, 14.

The professionals wound up the week with the final contest for the Sanford trophy. Six men had qualified during the previous three days and a race at 100 targets was shot to eliminate one of these, leaving five men to compete in the final trial. J. R. Taylor dropped out on 87, and German, 98; Lewis and Heikes, 93 each; E. S. Graham, 97, and Spencer, 91, were left in. The cup was won by R. O. Heikes on a score of 96; Lewis, 95; E. S. Graham, 94; German, 93, and Spencer, 92.

In the match races Gross lost to Goodrich, 92 to 96; Barber defeated H. C. Kirkwood 91 to 86, and R. W. Francis scored 91 to W. Huff's 89.



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FISH AND FISHERMEN

LEADERS AND WINNERS IN THE 1915 PRIZE FISHING CONTEST

This list compiled from affidavits received up to August 31st only.

Winners in Closed Classes

Small-Mouth Bass—Class B

First Prize—A. T. Gibbes, 7 lbs 2 oz., length 24½ in., girth 15 in. Caught at Crystal Lake. Abbey and Imbrie Riverside steel rod, Revonoc reel, Invincible line, No. 1 Buel Spinner.

Second Prize—Gorman A. Bussard, 6 lbs. 4 oz., length 22½ in., girth 16 in. Caught in Potomac River. Jim Heddon rod, Shakespeare Perfect reel, Mills Record line, stone cat.

Third Prize—C. F. Pascoe, 5 lbs. 9 oz., length 21 in., girth 15½ in. Caught in Brown Lake, Quebec. Sampson steel rod, Shakespeare Level Winder reel, Kingfisher Silver Sheen line, small frog.

Fourth Prize—W. G. Horton, 5 lbs. 8 oz., length 22 in., girth 15½ in. Caught in Sunset Lake, Marlboro, Vt. Bristol steel rod, make of reel unknown, Crimson Beauty casting line, live frog.

Large-Mouth Bass, Northern Division—Class B

First Prize—Albert White, 7¾ lbs, length 23 in., girth 18 in. Caught in Rye Lake, N. Y. Sampson steel rod, Takapart reel, Robert Ogilvy line, Decker plug lure.

Second Prize—George Kreeger, 7 lbs. 10 oz., length 23¾ in., girth 17½ in. Caught at Sheridan, Mich. Sampson steel rod, Rushmore reel, Kingfisher line, Shakespeare float lure.

Third Prize—E. E. Mirick, 7 lbs. 9 oz., length 22 in., girth 17½ in. Caught in Cranberry Meadow Pond, Mass. Greenheart rod, South Bend Anti-Back Lash reel, No. 4 Classic line, No. 150 Heddon Dowagiac minnow.

Fourth Prize—C. D. Chisholm, 7½ lbs., length 23¼ in., girth 17½ in. Caught in Lake Hallie, Wisconsin. Heddon rod, Takapart reel, Invincible line, Heddon 1600 Dowagiac minnow.

Leaders in Open Classes

Brook Trout—Class B

Emil S. Weisse,
Dr. Karl Christofferson,
No other entries.

Rainbow Trout ,

J. C. Ward,
T. A. Ross,
Dr. A. Vanderstolp,
I. L. Robbins,

Rainbow Trout—Fly Class

G. E. Richardson,
G. E. Richardson.

Brown Trout

I. E. Dickinson,
Robert McConnell,
George Burroughs,
Rev. D. Cochlin.

Lake Trout

Charles H. Slater,
E. S. Williamson,
E. D. Calvert,
Dr. Karl Christofferson.

Landlocked Salmon

Henry L. Marsh,
Ashley A. Smythe,
J. C. Dougherty,
William Allen.

Small-mouth Bass—Class C

Roy D. Miller,
No other entries.

Small-mouth Bass—Fly Class

H. B. Christian,
Alexander Friend.

Large-mouth Bass, North—Class C

William S. Leeseer.
No other entries.

Large-mouth Bass, North—Ladies

Mrs. Robert T. Ives.

Large-mouth Bass, South—Class C

Miss Byrdie Tapp,
H. E. Yelvington,
S. W. Dolive,
C. E. Griffin.

Large-mouth Bass, South—Fly Class

T. D. Howard,
L. S. Wachs.

Maryland, Delaware, Virginia, W. Va. Class

George C. Schuler,
W. B. Catlett
Herbert Firth,
Aaron Clarke.

Great Northern Pike

A. R. Thompson,
C. J. Sager,
C. F. Pike,
Nobert P. Arnold.

Muscallonge

George A. Streeter,
C. R. Hallowell,
William A. Babson,
J. D. Benes.

Wall-Eyed Pike

George Ault,
Edward B. Cady,
Fred Martens,
George Ault.

Bluefish

R. C. Graham,
Harry C. Esrey,
Peter S. Post.
No other entries.

Weakfish

No entries.

Weakfish, Light Tackle

Charles F. Guhring.

Striped Bass

William H. Hand, Jr.
George Kennedy,
William H. Hand, Jr.
William H. Hand, Jr.

Striped Bass—Ladies

Mrs. Charles S. Irish.

Channel Bass

J. Maxwell Bullock,
S. J. Held.
No other entries.

Tarpon

T. W. Magill,
Margaret C. Magill,
T. W. Magill,
T. W. Magill.

THE BEST SPOOL DUMMY FOR THE CASTING REEL

Robert S. Lemmon

If you ask fifteen average bait-casters what they use to build up the cores on their reels over which the casting lines are wound, fourteen of them will promptly answer "String or old line." Ask an equal number of tournament casters, and the same proportion will probably just as promptly reply "cork." The former material renders the process of core-making simpler, the latter makes the result more efficient.

Just why more casters do not employ the cork dummies on their fishing reels is rather hard to understand; perhaps it is because they do not realize the superiority of this sort of core. What are its good points? Well, in the first place, the properly built cork dummy is lighter, smoother, and results in better spooling of the line than does one of string. Secondly, it never gets wet through, and so when the day's fishing is over you are under no moral obligation to your line to unwind a few yards of water-soaked string so that it, as well as the line proper, will have a chance to dry out thoroughly. Thirdly, the cork dummy, both in material and construction, is the more durable of the two kinds. These are but a few of the reasons which put the string core out of the running.

To look at a well-made cork dummy the uninitiated would despair of ever being able to duplicate its smooth, finished appearance. It seems to be a cylinder of solid cork, perfectly fitting the spool ends of the reel. The fact that it is made of three or four separate discs is apparent only after careful scrutiny.

The first thing to do in equipping your casting reel with one of these good cores is to secure from a druggist or a regular cork supply store a few of the flat corks such as are used in vaseline bottles. These are about 1¼ inches in di-

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ameter and ½ inch thick. Pick out four of the most perfect ones, and through the center of each bore a hole very slightly larger than the spindle of the spool. One side of each of two of the corks should be cut a little concave, to correspond with the convexity of the spool end plates. This cutting should be done with a thin bladed, very sharp knife.

Now, from the hole in the center of each disc cut through the cork in a straight line to the outer edge, thus splitting them so they can be slipped on the spindle of the reel. Take out the spool, slip on the concaved-end corks first, coating them lightly with shellac on both sides, and push them snug against the end-plates. Fit on the third cork, shellacked, between them, and trim the fourth until it fills all the remaining space. Turn the discs until no two of the slits are together, wind thread over the whole until the shellac dries, and set it aside.

After drying, the next step is to finish off the dummy perfectly round. Assuming that you have determined what diameter it must be in order that the casting-line wound on it shall fill the reel properly, take your sharp knife and carefully cut the cork down to within an eighth of an inch of the proper size, being careful to take off an equal amount all around. Then assemble the reel, put it on a rod to hold it steady, and revolve the spool while you hold a fine flat file lightly against the cork. Keep blowing the cut dust away as you thus gradually bring the dummy to its correct diameter and a perfect smoothness and regularity.

WORM PARASITES OF BLACK BASS

FIELD & STREAM PUB. CO.

In answer to your letter enclosing a communication from D. M. Evans, of Mason City, Ia., in regard to worm parasites of the black bass, I have to say that I have written to Mr. Evans to advise him that such worms are usually derived from water birds which are the final host of the parasite. As a rule, the worms located between the muscle layers are flatworms. If there were no water birds on the lakes and streams most of the worm parasites of fish would disappear. Doubtless you have often observed black specks under the skin of the bass and yellow perch. These are caused by small encysted worms, and the attack comes from the swimming larvæ of certain worms which are hatched from eggs voided by water birds. The birds feed on the fish which are affected by parasites. The immature worms develop and lay eggs in the bird, and these are voided into the water where they hatch out, and then the larvæ find lodgment on some species of fish.

I do not mean to say that all worm parasites of fishes arise in this way, but certainly most of them do.

TARLETON F. BEAN.
Fish Culturist.

WINNERS IN THE INTERSTATE CASTING TOURNAMENT

Held under the Auspices of the Southern California Rod and Reel Club and the Southern California Trout Association, Saturday and Sunday, August 7 and 8, 1915, At Eastlake Park, Los Angeles, California.

SATURDAY, AUG. 7

FIRST EVENT—DRY FLY ACCURACY

	Per cent.
Won by Fred N. Peet	99.1
Second, Joe Welsh	99
Third, John Waddell	98.1

SECOND EVENT—ONE FOURTH OUNCE BAIT ACCURACY

	Per cent.
Won by C. H. Garr	98.3
Second, M. M. Clarke	98.3
Third, J. M. Ranney	97.4

THIRD EVENT—LIGHT TACKLE FLY ACCURACY

	Per cent.
Won by J. M. Ranney	98 9/15
Second, Fred N. Peet	98 8/15
Third, C. S. Van Horn	98 3/15

FOURTH EVENT—DELICACY AND ACCURACY FLY

	Per cent.
Won by C. S. Van Horn	98 13/30
Second, Fred N. Peet	98 5/15
Third, Joe Welsh	98 4/15

FIFTH EVENT—ONE-FOURTH OUNCE DISTANCE BAIT

Won by E. J. Kennedy, 114 ft., 10 4/5 in.
Second, Sherman Baker, 89 ft., 5 4/5 in.
Third, O. C. Smith, 45 ft., 4 2/5 in.

SIXTH EVENT—LIGHT TACKLE FLY DISTANCE

Won by Fred N. Peet, 108 ft.
Second, John Waddell, 102 ft.

SUNDAY, AUG. 8

FIRST EVENT—HEAVY TACKLE FLY ACCURACY

	Per cent
Won by Fred N. Peet	99 5/15
Second, C. S. Van Horn	96 10/15
Third, J. Mfl Ranney	94 9/15

SECOND EVENT — ONE-HALF OUNCE BAIT ACCURACY

	Per cent.
Won by C. H. Garr	98.4
Second J. M. Ranney	97.6
Third, H. A. Richey	97.4

THIRD EVENT—HEAVY TACKLE FLY DISTANCE

Won by John Waddell, 102 ft. 6 in.
Second, Fred N. Peet, 101 ft.

FOURTH EVENT — ONE-HALF OUNCE DISTANCE BAIT

Won by Sherman Baker, 145 ft. 2/5 in.
Second, E. J. Kennedy, 143 ft. 3 in.
Third, C. H. Garr, 113 ft. 8 1/5 in.

FIFTH EVENT—TWO AND ONE-HALF OUNCE DISTANCE BAIT

Won by A. E. Perkins, 239 ft.
Second, G. W. Griffey, 193 ft. 7 in.
Third, E. J. Kennedy, 178 ft. 9 in.

SIXTH EVENT—ONE FOURTH OUNCE DISTANCE SLAM

Won by E. J. Kennedy, 128 ft. 10 in.
Second, H. A. Richey, 111 ft. 3 in.
Third, O. C. Smith, 100 ft.

SEVENTH EVENT—ONE-HALF OUNCE DISTANCE SLAM

Won by E. J. Kennedy, 186 ft. 5 in.
Second, G. W. Griffey, 151 ft.
Third, C. H. Garr, 145 ft. 8 in.

EIGHTH EVENT—TWO AND ONE HALF OUNCE DISTANCE SLAM

Won by A. E. Perkins, 267 ft. 10 in.
Second, Sherman Baker, 262 ft.
Third, C. H. Garr, 243 ft. 9 in.

THE COMPELLING HACKLE

Ladd Plumley

The stream was extraordinarily low and amazingly clear, the kind of low water and crystal clearness that you find in late August during a long continued drought. We were ending the fishing season, and, with the conditions did not expect to do much. Still, a dry-fly brought one or two big fellows, and toward afternoon, on my leader, a few fairish fish were netted, rising to a minute Jenny Spinner and a number sixteen Black Hackle, presented wet.

A portion of the dainty river swished over riffs, flattish water for the most part and with few pools; here we met with the little success that was dealt out to us. Below the mile or so of riffs the stream dropped rapidly. Here were many quiet pools, with baby cataracts at the heads and spreading out into the most mirror-like of water. Early in the day we had given up all attempts to raise a trout on the shimmering flat-waters. And in the afternoon we again took a chance at their discouragement, but with never a rise.

Toward three o'clock the trout stopped rising entirely, even on the riffs, and my friend, who had for hours been casting his arm almost off, found a mossy place under a tree.

"It's no go," he said. "Might as well take a snooze. I'm sick of trying to raise trout over double distilled water. One place back there I could have seen a pin on the bottom. Clear? Like air put through a filter!"

"I'm going to use a couple of midges and try the pools once more," I said. "Gives me something to do and doesn't deplete the stream."

"Better cast 'em into the sky," grumbled my companion. "You might land a hungry swallow."

I left him to his nap and linking on two Kelso-tied midges took my way to the nearest pool. But the thing seemed hopeless. There was no more sign of fishy life on the glass-like surface than if every trout was fast asleep under his particular rock. But I sneaked to the tail of the pool and dropped the dainty contraptions as gently as I knew how. Then I changed to a single dry-fly and worked up toward the deeper water, dropping a Whirling Dun at the edge of the three-foot cataract and letting it drift downward toward me. But I might just as well have flipped my flies into a bathtub in a city flat. There was no more response than to a request by pirates for volunteers to walk a plank. Then I tackled another pool, and yet another. I changed back to midges, presented wet; I dallied with a sunken Coachman; I went through my fly-book and gave a trial to every anomaly I could dig out, even lending to the water the invention of some ingenious expert, which had celluloid wings

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and was supposed to look so like the real thing that the merchant who unloaded a dozen on me added the assurance that they could be put among a collection of real insects without exciting the suspicion of a naturalist. But no trout wanted to test the edible qualities of these curiosities, and I went back to midges, after displaying the artificial darning-needles, which were as long as my thumb. Then I gave up and sat down on a rock, with my apparently useless fly book on my lap.

I have a friend who, like myself, ties flies for amusement. Certainly his earliest efforts in silks and feathers, like my own, were amusing enough. And on a page of my book was inserted one of my friend's earlier attempts, when his artistic touch was yet in its infancy.

It was a strange fly, known to him as a "Ginger Hackle." Tied on a huge hook, it looked a giant among the number fourteen dry-seducers and baby gnats. It had a ragged body, a hackle as bushy as a shaving brush, and a swollen, conceited-appearing head, much like a big shoe button. This weird eye bulger I hitched to the end of my drawn gut leader, not taking the trouble to remove the dainty dropper. Then, still sitting on the rock, I chucked the ill-assorted pair into the pool below.

Perhaps I had made a half-dozen casts of my raggedy—ragged hackle and its fairy companion, when, as I carelessly yanked my cast toward me, a good trout rushed from under some rock and churning along the smooth surface like a pickerel took the big-headed hackle with a vigor that brought my heart into my mouth.

With the sun still hanging glaringly high, for an hour I took on that fuzzy ginger-colored experiment one or two splendid trout in every pool where I allowed it to flaunt itself. I had but the single shaggy beastie, and my companion, having joined me, I urged him to enjoy the fruits of the ragged lure, but he would not take the rod. Every fish grabbed the "Ginger," not one rose to the Scottish midge, which had been left upon the leader. And every fish seized the hackle after a churning rush, as trout in my boyhood days used to take bait when dragged along the surface.

Since that time I have used a bushy Ginger Hackle of afternoons during the latter part of the fishing season—in late August. And, like all special and peculiar lures, sometimes trout will eagerly accept the Ginger Hackle and sometimes it will fail to bring a single rise. But when other dodges leave vacuity of creel, it is well to have a supply of these hackles on hand and to try them out. It can be added that sometimes—generally just before the close of the season—trout will eagerly take a Ginger Hackle all through the evening and until late into the dusk.

I recall a big brown trout—a fish considerably over the pound—which took my Ginger in a clear pool of the Beaverkill River. The time was close to sunset, and I saw the trout come from under a rock and slowly scull forward, taking the hackle far below the surface, as if the fish had been gathering in an angleworm. But generally trout seize the Ginger with a savage rush, like the rush of a black bass when seizing a frog.

For ordinary use in our mountain streams the Ginger Hackle should be tied on a large hook—number eight is about right. The body should be of dusky deepish-yellow floss silk and the hackle itself should be wound the entire length of the body, with a double hackle near the head. A shaggy, bushy effect is what the fly-tier should seek.

I do not think that the addition of tinsel over the body of this fly is of advantage. In my own tying, sometimes I add the tinsel; but I cannot discover that the fish are more eager for the decorated variety. What is important is that the hackle should be deep ginger in color. These hackles are somewhat difficult to obtain. The best that I have ever had were said to come from the neck of a game-cock. But any brownish red hackle will serve, provided that the windings produce a shaggy effect, the more shaggy, I believe, the better.

All of us have our theories. My theory as to the success that I have frequently had with the Ginger Hackle is that the trout think it is something in the nature of a wounded and drowning grasshopper. They certainly take this lure as if it were of the nature of bait. And I have never met with much success with the Ginger Hackle except during the season of grasshoppers. As to why trout will sometimes take the Ginger when they refuse everything else, and sometimes utterly refuse the Ginger, these things are beyond my powers of deduction.

But all fly-fishing is experimentation. The longer I am at this delightful, if mysterious, craft, the more certain I feel that experimentation is more productive than formulated rules. Were it otherwise, fly-fishing long ago would have crystallized into an exact science, where under certain conditions you should do such and such things to bring creelful results. We all know to the contrary. I once beheld a basket of monsters caught in late August, to quote the statement of the catcher, "at the tails of the pools with a big Blue Professor." And those who know the Blue Professor know that for black bass it is considered an excellent fly; but one would think that over clear water this giddy instructor would frighten a trout into the next county and way beyond.

It seems to me that the wise angler is one who is forever on the alert to meet conditions that he does not understand and cannot foresee. And for myself, if the fish do not desire a dry fly I try a wet, or I would try one soaked in kerosene, if there were evidence that there are fishy oil magnates. If they don't like the latest artistry in fly-tying, which in my case are a dozen eye-delighting feather wonders, gifts from a tackle house, tied on *gold plated* hooks and provided with "forked tails," I would not be above casting an old shoe at them, if I had reason to imagine that they preferred those things of luck.

PLEASED

EDITOR FIELD & STREAM:—

Permit me to horn into your valued magazine with a yowl of gladness over the series of shotgun stories you are running by Charles Askins. I own a shotgun myself, and have shot just enough to be able to appreciate the fact that for combined shooting experience and knowledge of shotguns, Mr. Askins has anybody in this country where the hair is short.

In these days of near-experts, almost-experts, and book-learned shotgun shooters that we find in print, I read Mr. Askins with a sigh of relief and then a merry whistle of gladness. In a few things we don't agree—which is all the worse for me—because I never could hit much by pointing two hands in the direction of the bird, but I'll bet Askins can do it, else he'd not recommend the method. Also he's been there too long to theorize.

The shotgun shooting contingent of FIELD & STREAM had best get out the old scrap book and the shears and add the Askins series to the treasured pages. I haven't seen the articles, but I know Askins. EDWARD C. CROSSMAN.

THE INDIAN METHOD OF CURING SKINS

FIELD & STREAM PUB. CO.:

Please tell me what method was used by the Indians for curing skins, making them soft and pliable. CARLETON SHAW.

Skin was shaved thin, deer's brains rubbed in flesh side and skin worked over a beam until all fibres were made soft and pliant. The method took lots of elbow grease and time.—ED.

BLACK BASS AND DEEP WATER

FIELD & STREAM PUB. CO.:

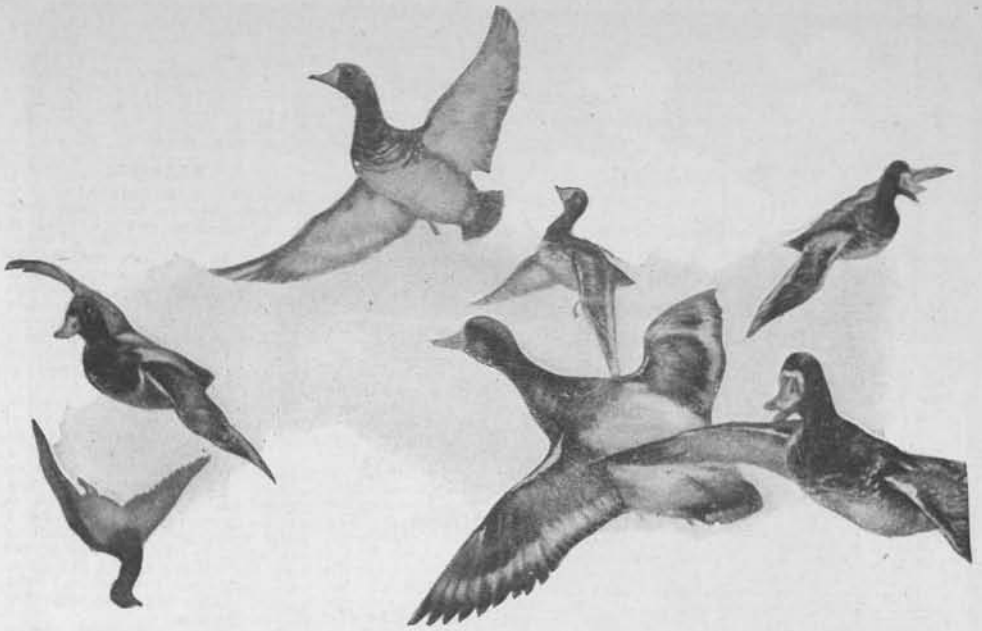
The enclosed is an extract from the New York *Evening Telegram*.

"Frogs are said to be the best bait for black bass during the autumn. This is because as the water cools the bass seek deeper and somewhat darker waters in which the struggling frog in a conspicuous bait."

In one of your 1914 issues I was given to understand that black bass invariably sought deep water in the hot weather, gradually becoming more of a surface feeder as the weather became cooler.

BART SCHIAVONE.

ANS.—Depends on the species of bass and the lake, also temperature to a certain extent. In cold weather large mouth bass will leave the flats and seek deep water. When bait fishing for them with frogs or helgramites, you will succeed better than plug casting.—ED.



"As Pretty A 'Double' As Ever You Saw"

It certainly is ***some*** satisfaction when the flock whirls over—you swing up your old twenty-gauge—and two of them crumple up to one of those pretty "doubles" that turn the youngster next you green with envy!

They come down with a "Smack! Smack!" that makes your heart glad—your little spaniel wriggles overboard and fetches them in with what looks like a "Good shot, old man!" smile wrapped around the bird!

Ducks and geese are preparing for the southern migration. Prairie chicken and quail also offer good sport. Soon the season will be opening in the famous old upland game country—Wisconsin, Minnesota and the Dakotas, along the line of the

Chicago Milwaukee & St. Paul Railway

Advance whispers from "up north" tell of unusually fine sport in store this season. So get out the old twenty-gauge and oil 'er up and give the young setter pup his last licking into shape, for the time is at hand!

The Chicago, Milwaukee & St. Paul Railway offers frequent trains from the Union Passenger Station, Chicago, and an excellence of service that will appeal to the sportsman and discriminating traveler.

GEORGE B. HAYNES
General Passenger Agent
Chicago

Field&Stream PRIZE FISHING CONTEST

MY PRIZE ADIRONDACK PIKE

By Edward J. White

Winner Third Prize, Great Northern Pike, 1914 Contest

We had run up to our camp at Saratoga Lake for a few days to enjoy the trolling for wall-eyed pike, which, at this time of the year, is very good.

The camp is owned by the East Side Rod and Gun Club, and you can always find some of the members there during the hunting and fishing seasons.

The Saratoga Lake Association has been stocking the lake with pike for several years, and it bids fair to become a fisherman's paradise, as it is specially adapted for this kind of fish.

We had good sport with the pike for a few days, Chick landing the best one of the week—7 pounds 4 ounces.

On Sunday morning we were listening to Mr. Yeiser and Old Jake catch them from the porch (this is the only kind of fishing they ever do), when the Doctor proposed that we take his car and run up to the Adirondacks for a try at the trout. His kind invitation was eagerly accepted, and a party consisting of the Doctor, Mr. Howe, Chick and myself, soon had our kits ready, and were off for a 100-mile run to Lake Harris.

A good State road runs through this part of the mountains, so we had good going all the way. We passed through the villages of Saratoga, Hadley, Chestertown and North Creek.

We arrived at Lake Harris about seven o'clock, and after putting up the car we did justice to a good trout supper.

We then had a talk with two of Mr. Anderson's guides. Reports seemed to indicate a good catch of trout on the coming day, so after hitting the pipe we retired to dream of the big ones we would land in the morning.

We were up before the rising bell and got everything in readiness for a day's sport.

After breakfast we hopped in the car and made a run of about nine miles to a point where the State road crosses a stream called the Fishing Brook. It is a fairly good sized stream, easy to fish, very little wading, lots of nice pools and plenty of trout.

We had pretty fair luck, but did not get hold of any big ones, the average size being about ten or eleven inches.

About three o'clock we decided to call a halt for the day, so we returned to the hotel. Upon arriving there we strolled down to the boathouse to have a look at the lake.

It looked so inviting that we secured a couple of boats, rigged up our rods and started to troll for pike.

The luck was not very good. We had landed three small ones, and were getting pretty tired, when Mr. Howe suddenly cried out, "Look at that one!"

Chick, who was rowing for Mr. Howe, almost overturned the boat in his scramble to turn around and see the fish that had caused the excitement.

The Doctor and I were a few yards behind their boat, and by the time we rowed near them and inquired the cause of Mr. Howe's unearthly yells there was nothing to be seen.

Mr. Howe pointed frantically toward a patch of lily-pads, and insisted in awestruck tones that a fish as long as one of the oars had jumped out of the water near the weeds. While the Doctor was inquiring about the new brand of dope Howe was using, which enabled him to see such things, I was busy changing spoons, putting on one with which I had, on other occasions, made very good catches.

Howe was still raving about the size of the monster he had seen, when the Doctor, at a word from me, backed the boat quietly toward the lily pads which Howe had pointed out. I shot the lure, over near the edge of the weeds, perhaps a dozen times without any result.

The Doctor moved the boat a little nearer and said, "Try a cast at that little opening in the middle of the lily-pads!"

YOUR footgear is the most important part of your outing rig. When you are well shod—Cutter Booted—you find the miles are shorter and the going less rough. With your feet always dry—Cutter Booted—you forget there are such things as chilblains, scalds and blisters.

Only the centers of the best hides are good enough for Cutter Boots—and only masterworkmen, men who have grown up with cobblers' needles in their hands, are skilled and careful enough to make them. Cutter "Pac" Boots, made to be worn over heavy wool socks, combine moccasin comfort with boot protection. Probably your dealer carries them.

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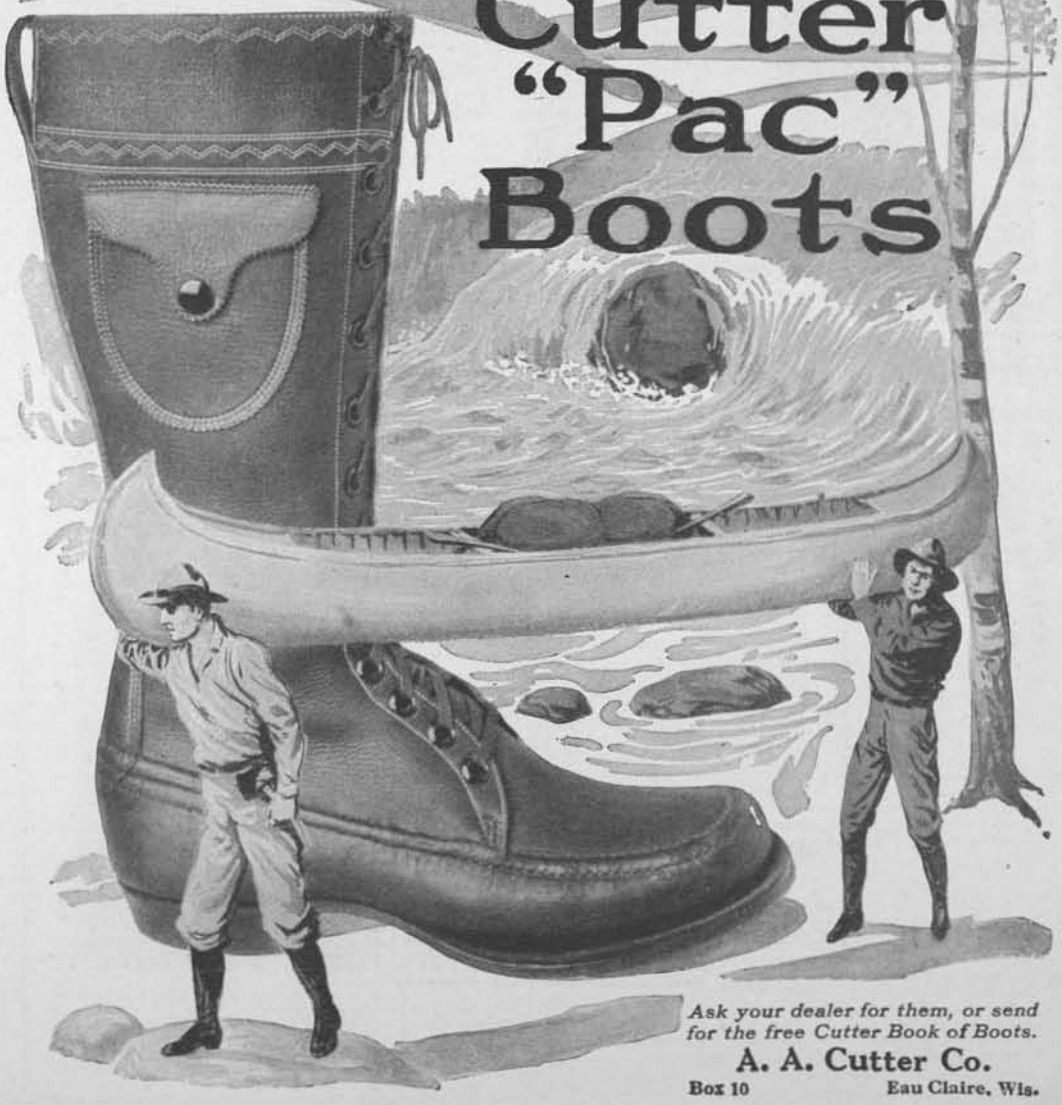
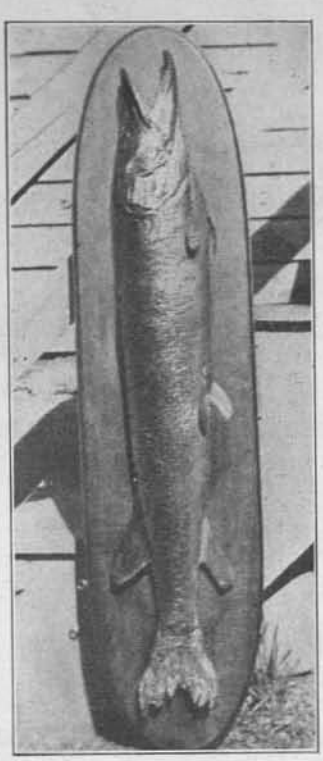


Ask your dealer for them, or send for the free Cutter Book of Boots.

A. A. Cutter Co.

Box 10 **Eau Claire, Wis.**



THE 20-POUND PIKE CAUGHT BY MR. WHITE AT HARRIS LAKE

I did so, and the lure struck the water fairly in the center of the open spot.

I had started to retrieve the line when, bang! he struck, and as he did I sank the hook home. He broke water at once and we had a good view of him, and realized the fact that we had hooked on to one of those big fellows that you dream of but seldom see.

He made a rush through the weeds like an enraged tiger, and for an instant I thought he would tear the hook out. I let him have the line freely, without too much strain, and we soon saw him break water again over one hundred feet from us on the other side of the patch. He was now in the clear, open water, and Doc. rowed the boat quickly through the weeds toward him.

He was now sulking near the bottom, and I reeled in the line carefully, as we approached him, just keeping it taut without too much strain. When we were clear of the weeds I started him with a little tug of the line, and the real fight commenced.

Back and forth he rushed and plunged, sometimes varying his performance by going deep and trying to sulk.

I did not allow him any rest, but kept him moving all the time.

After a series of rushes he had taken nearly 200 feet of line, but I still had plenty left on the reel.

Doc. gradually worked the boat toward the shore and as he grew tired we led him in the direction of a small sandbar. Not having a gaff with us, we did not want to risk lifting him into the boat, so I stepped on the sandbar as the boat grounded and led him slowly into the shallow water. He made a couple of short rushes as he came into the shallows, but he was all in and I soon had him near enough to reach down and slip my thumb in his gills and lift him out on the bar.

After admiring his size and beauty, we rowed over to our landing and showed him to the guests at the hotel. One of them suggested that we enter him in the FIELD & STREAM contest, so we took him at once over to the store at Newcomb and had him weighed and measured before the local notary, and sent in our affidavit. We were much pleased later on to learn that he had captured third prize, and I hope in the 1915 season to land another.

Prize Contest Certificate Record.
Third Prize, Great Northern Pike, 1914, Prize Fishing Contest.
Weight—20 pounds.
Length—45 inches.
Girth—17 inches.
Caught—June 29, 1915.
Where caught—Harris Lake, Adirondacks.
Rod—Sampson.
Reel—Meisselbach Featherlight.
Line—Abbey & Imbrie silk.
Lure—Hartung Bros. brass wobbler.

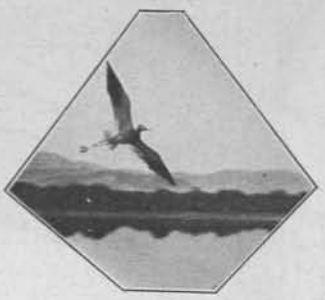
Do not forget to enter your big fish in the Contest. It may prove to be one of the Prize Winners.

PHOTOGRAPHIC CONTEST

FIELD AND STREAM offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submitted. The prizes for next month will be: First Prize—Three years' subscription to FIELD AND STREAM. Second Prize—Two years' subscription to FIELD AND STREAM. Third Prize—One year's subscription to FIELD AND STREAM. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, FIELD AND STREAM, 331 Fourth Ave., New York City.

Send in your best wild animal photographs to this Contest.



FIRST PRIZE PHOTO

Made by H. M. Hall, 1A Special Kodak. Zeiss Kodak lens. 1/250 sec. Stop F-63. Subject—Avoret Flying.

SECOND PRIZE PHOTO

Made by E. H. Hill. 5x7 Premo camera. R. R. lens. Stop 8. 1/50 sec. Subject—Antelope Doe.

THIRD PRIZE PHOTO

Made by A. F. Westervelt. 3A F. P. K. 1/50 sec. Bright sun. Subject—Young Foxes.

Here is another attractive gun
ITHACA No. 1 - List $40 Special Price $25

¶ If you want a gun for $25.00 that will stand any amount of use and a lot of misuse, you can have it in our No. 1 grade in 28, 20, 16, 12 or 10 gauge.
¶ The appearance of the gun has been improved by adding new engraving. It's a quality gun.
¶ Barrels furnished in Nitro Steel or imported Stub Twist; stock made of black walnut, full pistol grip, hand checkered; locks are of the same mechanical construction and same quality of material as in higher grades; frame, top lever, forend iron and guard line engraved.
¶ Send for large catalog and special prices on our entire line – 18 grades $17.75 net to $400 list.

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ADDRESS – ITHACA GUN COMPANY BOX No. 11 ITHACA – NEW YORK

TROUT ON YOUR COUNTRY PLACE.

On your estate or country place you may have a brook, a small stream or pond well adapted to trout, without realizing it.

We shall be pleased to have our fish culturist answer, without expense to you, any inquiries you may care to address to us in reference to the matter, or have one of our expert fish culturists visit and examine your waters and advise you of the desirability of stocking them with trout, and what kind.

The charge for this service will be three dollars per day and his necessary expenses for the time he is away from our Preserve.

We have for several years scientifically bred trout on the Darwinian theory of artificial selection and developed a remarkably vigorous, healthy variety, absolutely free of diseases, that grow rapidly to a large size and will usually thrive under conditions where others fail.

Our trout are known as **Yama Brook Trout**, and on account of their vigor and health, we have been successful in shipping them long distances—the four- to six-inch trout, several hundred miles—and the very young (fry) seven days. We take all the risk of transportation and only charge for the live trout put into your waters, plus the expense of transportation from our railroad station, including a nominal charge for the attendant's time and his necessary traveling expenses.

October, November and December are ideal months for stocking with the four and six-inch trout and larger; very young trout we can ship long distances to best advantage in December and January. We have been very successful in putting them in the water through holes in the ice, at this period.

Fish culturists who have visited our Preserve and hatcheries write in saying that our Yama Brook Trout are superior to anything they have ever seen, and in two cases the statement has been made they "did not suppose such trout existed." Our trout have reached a point of development where they are growing about twice as fast as ordinary trout. We have on hand several hundred thousand upwards of 5½ inches long that were hatched this year.

YAMA FARMS
Address, Fish Preserve Dept., Napanoch, Ulster County, New York.

Broad, Soft Toe, Snug Heel

Munson Last Munson Last

Herman's U. S. Army Shoe

Designed by the army board, built according to their specifications and required to be worn by every U. S. officer and enlisted man because "experience with thousands of men proved that this shoe will neither deform nor abrade the feet under continued hard marching over rough roads." Wear Herman's U. S. Army shoe and "take the load off your feet!"

You can have a pair of these perfect shoes from one of our 4,500 dealers or direct from us postpaid for $4.50. Fit, comfort and service guaranteed.

JOS. M. HERMAN SHOE CO.
159 Lincoln Street Dept. 52 Boston, U. S. A.

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FIELD AND STREAM'S

Fifth National PRIZE FISHING CONTEST FOR THE RECORD FISH CAUGHT IN 1915

CONDITIONS

First—The fish must be caught with rods and reels as specified,* and in legal season.

Second—The fish must be weighed on tested scales and measured with a tape measure, length to be taken from end of lower jaw with mouth closed, to tip of tail.

Third—The affidavit blank printed on the last page of this announcement, or an exact copy, must be used in applying for a prize and signed by the man who caught the fish, together with two witnesses, and sworn to before a Notary Public and his seal affixed. In case any contestant catches a fish when accompanied by a single guide, the affidavit as signed upon coming out of the woods by himself and guide before a Notary Public stating the circumstances will be duly considered.

Fourth—The weight, length and girth, date, place, and manufacturer's name and full specifications, if possible, of the rod, reel, line and lure (or bait) used in taking the fish must be stated.

Fifth—The winners in each class must send us a short account of how, when and where the fish was taken, and what tackle was used in catching the fish. The account to be published in **Field and Stream.** These accounts will not be asked for until the prizes have been awarded.

Sixth—All affidavits must be sent to the Editor of the Prize Fishing Contest, **Field and Stream,** 331 Fourth Avenue, New York. All affidavits in classes designated by A, B, and C, must be in our hands within 5 days from closing date of class. **In all other classes affidavits must be in within 15 days from closing date.**

Seventh—No fish caught from State or private hatchery will be allowed in this contest.

Eighth—In the Pike and Wall-eyed Pike Classes an outline drawing of the fish must be sent in with affidavit, drawing to be made by placing fish on side on large piece of paper and drawing an outline of fish with pencil on the paper with fins of fish all erect.

Ninth—In event of two fish weighing and measuring exactly the same number of pounds, ounces and fractions, duplicate prizes will be awarded in each case.

The Judges of this contest will be: Robert H. Davis, Editor *Munsey's;* Will H. Dilg, Chicago, Ill.; W. H. Miller, Editor, FIELD AND STREAM; E. F. Warner, Publisher, FIELD AND STREAM; E. M. Gill, Camp Fire Club; W. P. Corbett, Charles Frederick Holder.

In Tarpon Class length of fish is only measurement required. It is not necessary to give weight or girth.

* Where no special kind of tackle is specified, any tackle is allowable, provided it consists of rod, reel, line and lure.

Be sure to get a photograph of yourself with fish, if possible

We have published during the past seven months, four pages of prizes (250 in all amounting to over $3,000), which we are offering for the largest fish caught in this Contest.

Before going on your fishing trip, write us for sample copy containing this list of prizes, affidavit and entry blank, and we will be glad to send you the same by return mail.

NOVEMBER 1915 PRICE 15 CENTS

FIELD AND STREAM

OFFICIAL ORGAN of the CAMP[illegible]E CLUB OF AMERICA

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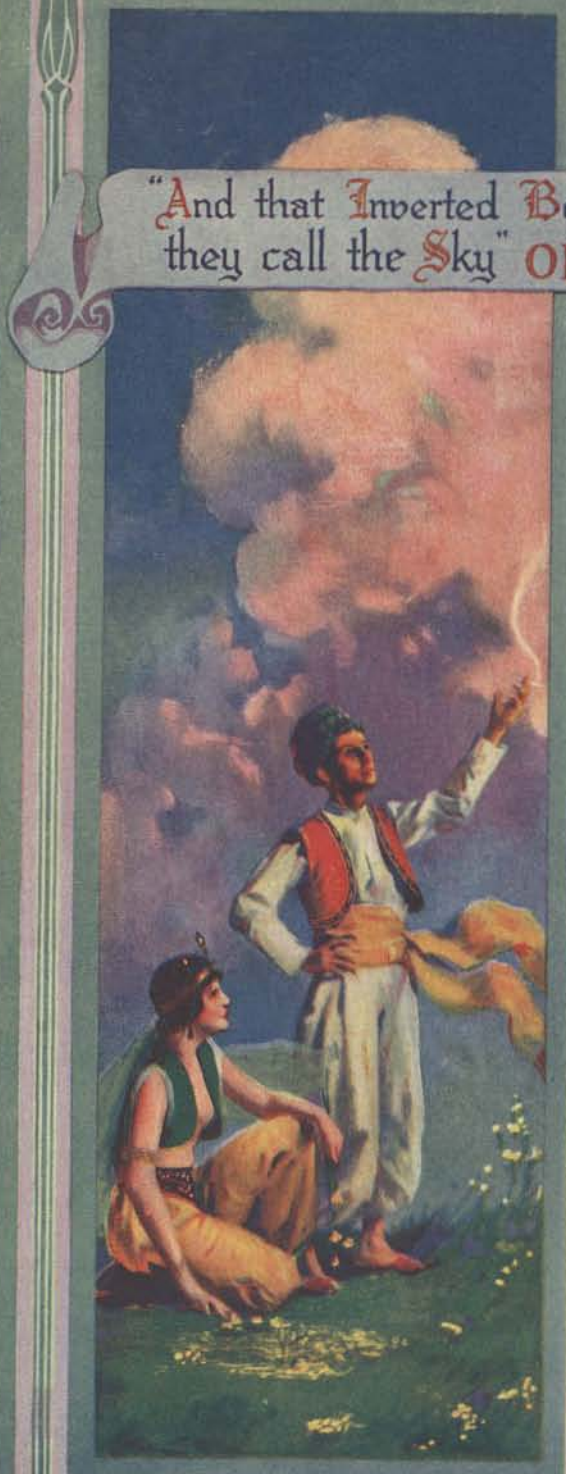

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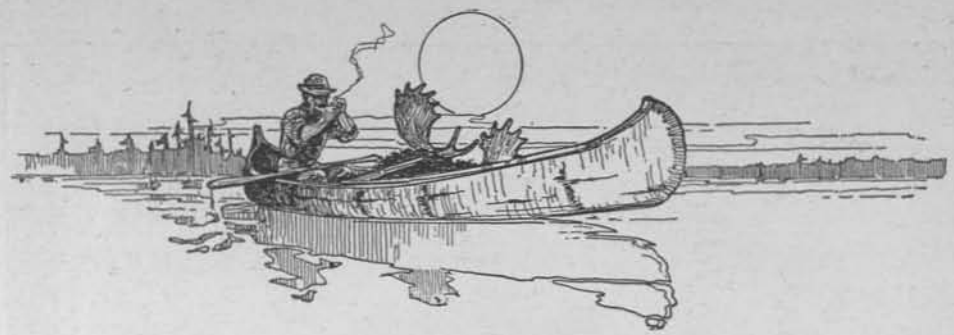

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Building a Split Bamboo Flyrod, by George Parker Holden.

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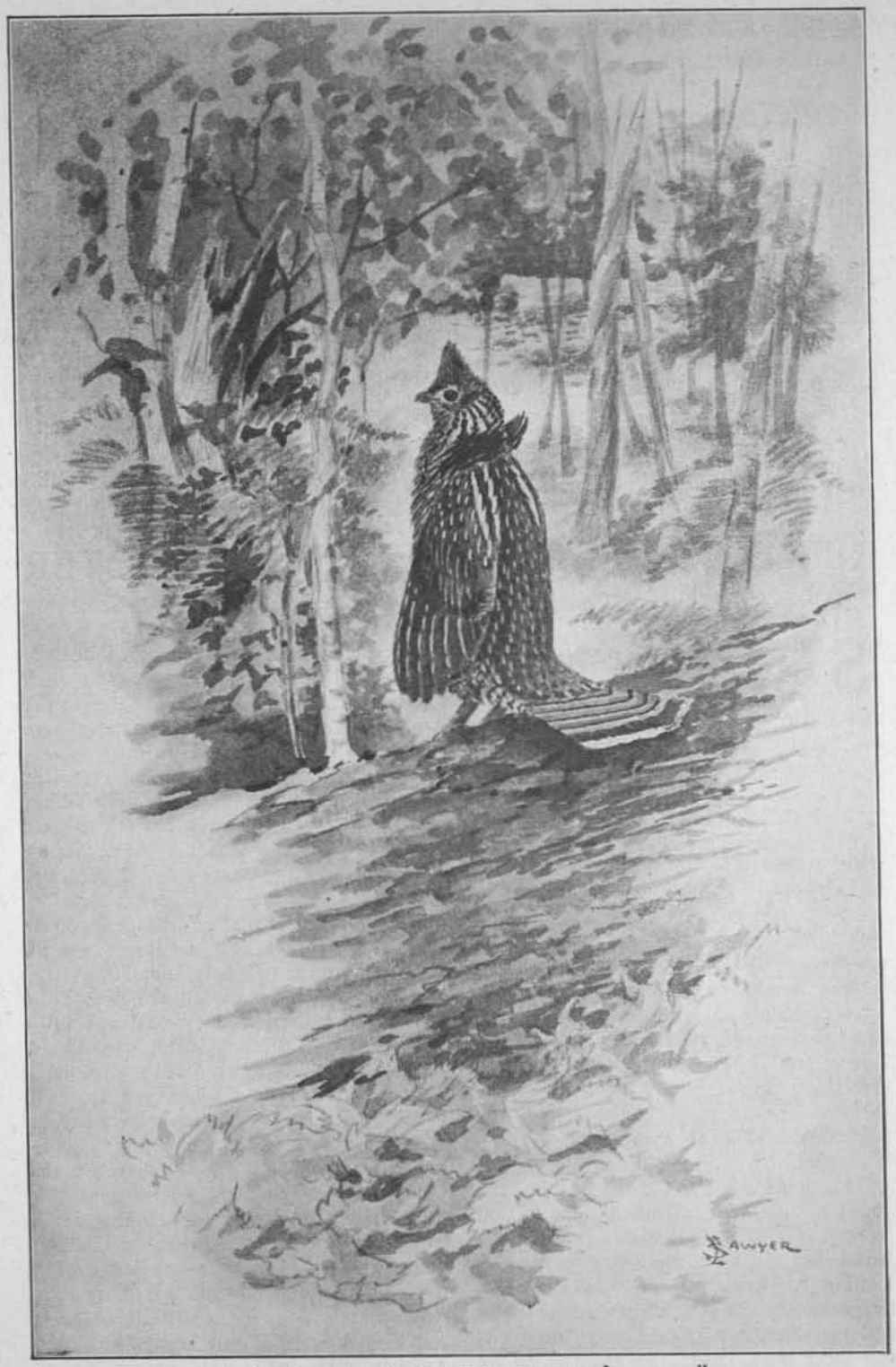


"WHY DID I CALL HIS DRUMMING CRUDE? . . ."

"ANOTHER FOLLOWED, THEN ANOTHER . . ."

"THE ONE FOR WHOM IT WAS INTENDED"

will (in vain) for many moments after, but at the psychological instant, whatever that is, when it happened you weren't there.

Remember—I mean, can you ever forget?—the first grouse you brought home? Not the first one you shot at—oh, no; but the one you were able to display to an envious circle of boys? I had gone to B——'s woods in proud possession of a "genuwyne breech-loader"; in other words, a second-hand, single-barrel hammer-gun using black powder. Oh, what a dream of refined perfection in sporting goods I considered that combination! which, as I think back, reminds me of an earthquake and heavy thunder, the open mouth of hell, and a cloud of smoke like that over Sakurajima in eruption. It was a beautiful autumn day with a dreamy haze clinging to the trees in the woods and along an old grass-grown roadway that I found almost choked by crowding saplings. Listening to the weird voice of a tree-frog, I came out in this roadway and started to follow it when—*whir-r-r-r!*—a grouse got up and flew straight down the road; another followed, then another, and then half a dozen in quick succession. I was following each bird over the barrel of my gun, but each time I was about to press the trigger another would bound up and I would switch to him for a closer shot. The last bird of the covey was just turning off among the trees on one side when at last I fired. All was smoke ahead. For all I could see I might have killed the bird, or the whole covey for that matter, or not touched a feather. I ran forward, but there all was still, with no sign of a grouse anywhere. After searching a good many minutes I was about to give up—had given up, in fact—when I saw something brown at my feet; and I seem to see her yet, her soft, dark eyes fixed on me, all their native and magnificent wildness gone and, instead, a deep, brooding light caught from that mysterious realm she was entering, as she sat in the attitude of a bird on her nest and as motionless and beautiful as a bird carved in marble. I turned to pick up a stick; never mind the rest. It was the first grouse I had shot.

Here is another, several years later, in another part of the country. The bird rose at a distance behind me, flying hard away in dense cover and offering only a chance shot as I wheeled round and fired. I searched the ground for several minutes, found no evidence of a hit, and gave up. Then, as I stood still while deciding which way to go, there was a sudden and tremendous fluttering on the ground forty or fifty feet away. Hurrying there, I found the grouse in a last paroxysm. His head was thrown far back, so that he looked straight upward, and his wings, fully extended, were beating rhythmically and rapidly, as though he were in full flight, yet serving only to beat his flowing blood into spray till it flecked his beautiful plumage with pin-points of crimson. How perfectly motionless and silent and self-possessed he had kept all that while, though it would seem he must have been in mortal pain! And even at the last who

"HER SOFT, DARK EYES FIXED ON ME"

shall say (for who knows?) but that he deemed he was winging his way out of danger, or even to some land where a fair autumn reigns perpetual, the wild grape never fails, and the unholy boom of a gun never profanes the stillness?

I remember seeing, years ago, in some magazine a picture by that peerless artist of rural life, A. B. Frost, if I recollect rightly—a picture showing a disreputable, ill-clad youth, apparently on the same mental level as the nondescript dog figured as his companion. The youth, his visage utterly devoid of, and apparently incapable of, expression, is looking at a dead grouse which hangs in his rude "twitch-up" snare; title, "Mongrels."

Have you not met such a character as that unlovely gentleman coming from the river with a beautiful teal drake, let us say, rammed into his dirty pocket? Or emerging from the bushy field with erstwhile cheery bob-white dangling from a piece of dirty shoestring tied to the shooter's suspenders? Or with a fine cock grouse clutched by one foot and about half the tail, and handled with all that tender care which showed the bird was recognized for a pound and a half of perfectly good meat? Thereat have you not felt a sickening revulsion, an unspeakable contempt?

Perhaps, too, you have soliloquized as follows: "But who am I, to assume that I can truly appreciate that 'meat,' though I do happen to know its Latin name? Let's see: do I know even satisfactory English for the beautifully mottled back of a ruffed grouse? Didn't Linnaeus say of a bit of moss, 'Here is matter for life-long study'? And as for the dirty string, why, if you want to look at it that way, it must be all one whether this autumn air be cut off from the grouse by unclean string or well-washed hand."

A DUST BATH

And then our own prowess with hammerless, smokeless powder, chilled shot and everything "up to form"—which, by the way, begging your pardon, does not necessarily mean the help of a dog. You sit on a comfortable log, draw the bird ever so carefully from your capacious game-pocket, and lo! where has your loving, appreciative touch improved him—

> The bird of self-dependent might—
> Of mottled brown and rocket flight?

What can you make of your victory but this?—What a poem in brown! Could I describe it so that another could see it in anything like its real beauty?—the marvelous harmony of these fine lines of waving brown and black, the orderly layers of coverts; the fan-like symmetry of the tail, crossed by arc within arc; the jet-black ruff, glossed with hues borrowed from some dove's neck; the large, full eyes, as deep and dark and full of hidden meaning as the ocean. No, it was never meant to be pictured in words. But he was dumb, you say. Was he? Not to his companions, nor to his mate; nor was she dumb to her brood. How well they knew when to scatter, or sit still; when to be silent, and when to reply to her calling; and how well she could say to them, "The danger is past; come this way." Even I knew each of those notes and several others, and their meanings. What a mere fragment it must be of the grouse lan-

"AS THOUGH HE WERE IN FULL FLIGHT"

guage. Why did I call his drumming crude music or inexpressive—a makeshift? Was it? To the one for whom alone it was intended it was the song of the ages; the only love poem; the whole literature of passion and desire embodied in a word—a single word, all-expressive, irresistibly sensuous—a word without a synonym. He was dumb to me only because I was deaf to him. Oh, that I could match in myself the power of those wings!—the freedom, the independence, the bold self-reliance and hardihood that were lately here! If only I were as fully equal to the possibilities of my life as he was to his! He had no unsatisfied longings, no deferred hopes, no disappointments; sorrow, care and regret he knew nothing of; he had no aspirations, or rather he every day lived up to such aspirations as he may have had. His highest happiness was complete in merely being what he was; self-contented, self-satisfied. Life, even life in this world, held for him that last pinnacle of bliss which I count myself happy to fancy awaits me in the dim by and by. He had already reached his goal, but I must strive painfully on towards mine, feeling that Death lurks by the way. He fitted into his life as I never can into mine. I live largely in the past and the future, but he could grasp the present and make it his. I start appalled at the shadowy creatures of a nightmare; but he could live surrounded, pursued, threatened night and day by a host of real terrors just as hideous—his natural enemies in feather and fur—yet, as it were, "smiling in scorn," in his superior self-reliance; ready any instant to be met by an assassin; eternally vigilant, yet with a bold or even a holiday spirit.

Such he was in life. He never cringed nor looked for quarter, nor would he, whatever the odds against him. How superior to me in woodsmanship! How much better able to find and grasp, and reap a blessing from, the "goods the gods provide"! How much better able to grapple unaided with the elements! How effeminate I am in comparison!—afraid of heat and cold, shrinking away from drafts, hiding from the rain, slinking away from under God's sky every night as though the very stars of heaven were goblins. And where is my triumph in holding him here—he that was more than a match for me on equal terms, so superior was his instinct to my judgment, his native sense to my vaunted learning? Even now I should be trying in vain to puzzle out where he had gone, while he would be feeding in quiet nonchalance, already forgetful in his disdain of such a trivial enemy as I, but for the unfair advantage of my infernal powder and lead. Yet he met even such a death as he would have met any other—bravely, gamely, not uttering a sound, but with a heart that was steel, all steel, to its last beat.

Editorial

The New York Constitutional Convention

AS most of our New York readers are aware, the Constitutional Convention has been sitting at Albany for the greater part of the summer just past. It was called by the people in their vote at the last general election, and it consists of delegates elected from various districts throughout the State. The general results of the Convention's labors have been reported from time to time in the public press; that part of the work which particularly interests sportsmen is the constitutional amendment proposed for Section Seven, the Conservation Section. The committee on this branch of the work consisted of seventeen men, all elected from their various districts, one only being from the Adirondack district around St. Lawrence County, so that it cannot be justly held that the revision was colored by any especial point of view. Of the seventeen, the majority voted for Section Seven with amendments as recently printed in the newspapers and as printed in FIELD AND STREAM'S Conservation Department in this issue. Read it over carefully; you will be called to vote upon it this election day if a citizen of New York State. Three delegates voted for it as a whole, though dissenting that the discretionary powers proposed for the Commission were under too narrow limitations; three dissented to the mandatory appropriations forced on the Legislature, and one would not vote at all, being opposed to the nine-headed commission and to nearly all other measures proposed, one more delegate joining him in opposition to the nine-headed commission.

In brief, Section Seven still stands on the rock-bottom proposition that the lands of the State shall be forever kept as wild forest lands and shall not be leased, sold, exchanged or be taken by any corporation, public or private, nor shall the trees and timber thereon be sold, removed or destroyed. A battle raged around this Rock of Gibraltar all summer—the same old battle that has been carried on since the Camp-Fire Club opened up the first batteries, with Gifford Pinchot at the lanyard, in 1911. Since then many proposals have been made having in view the entrusting of the people of New York with the administration of their own forests under scientific management. These proposals have varied all the way from giving the Conservation Commission power to cut timber and manage the forests, up to universal introduction of scientific forestry under control by the Commission, cutting and management blueprints to be filed with the Commission and by them approved before any cutting would be allowed. But, no matter what was proposed, whether vetoed by fickle Governor or passed by friendly Legislature, the Constitution, the organic law of the State, stood in the way of anything positive being done.

Now, in 1915, the year for constitutional amendment (if any) comes around, and as we look back on those efforts to introduce some kind of scientific forestry on our State lands, the question comes up whether or no we really want to do anything with them, further than was most wisely outlined by our predecessors in constitutional amending a generation ago. These men had the present and very real fear of Tammany graft always before their minds. It was in the days when the City of New York was just getting out of bondage to Tammany Hall, when Albany itself was almost as completely under the domination of Tammany politicians as the City, when every measure proposed in the Legislature held some sort of a grab joker concealed in it, and when the introduction of "scientific forestry" would mean a wild orgy of grab and slash in the name of science which would result in the total elimination of every vestige of forest cover at all merchantable.

Twenty years of progress in government have been made since then, and in the minds of many eminent national foresters—such men as Pinchot and Henry Grave, Chief Forester of the United States —New York is ripe for the introduction

of forest management similar to that obtaining in the national forests.

But, meanwhile, the proposition has been advanced by the Camp-Fire Club that, even if managed scientifically, the revenue from these forests would not begin to pay for their loss of value as recreation grounds to the people of the State, their value as primeval forests, the last primeval forests left to us here in the East where we could go to for rest and recreation, without having to travel clear across the continent to the Rockies. If lumbered, however scientifically, it would mean good-bye to the game, for lumber crews and sawmills never did yet get on with deer and trout. True, lots of lands *have* been logged and are to-day the best deer grounds in the Adirondacks, but as a rule such logging was unscientific, taking out here and there the best trees and leaving most of the stand, and much of it was done ten to fifteen years ago, giving the game plenty of time to re-enter the area.

And so, when we came right down to it, the general feeling gained headway that as New York was a billion-dollar State, it ought to be able to afford a million-dollar playground. Compromises were proposed, suggesting the cutting of certain areas of the Park and leaving the rest as wild land, but the convention most wisely turned them down, and as it now stands the amendment to Section Seven permits only removal of dead and down timber for the purposes of reforestation only, said timber not to be sold; and it further permits the construction of one State road from Saranac to Old Forge. With this as the programme for the next twenty years, the people will be able to judge, by the results in reforestation accomplished and the record made for wise and conservative forestry, whether to entrust the forestry department with the commercial management of the forests covering certain parts of the Park. Meanwhile, Section Seven stands practically as before as regards introducing commercialism into the Adirondacks, and for twenty years longer we shall enjoy the Park as a bit of untamed wilderness where one can fish and hunt and get back to Nature unmolested by civilization and the railroad whistle.

A new paragraph, No. 1 of the Amendment, contemplates a nine-headed commission to serve nine years without pay, one member appointed by the Governor from each of the nine judicial districts throughout the State, and at the expiration of the nine-year term a new commissioner is to be appointed every year, so that each Governor will have the choosing of two members, as party politics fluctuate. The continuity of the body is assured by the long term and gradual change, and the idea undoubtedly removes the makeup of the commission from the direct influence of politics. The objections to the scheme seem to be that it will be difficult to get nine men to serve without pay for any such term as nine years and still give to the work the time and attention that it deserves if properly administered. The nine-headed commission has great powers entrusted to it: the promulgation and enforcement of the game laws, instead of it being done by the Legislature, as at present; the care and administration of the forests; the propagation of the fish, birds, game and shellfish of the State; and the development of a State-wide fire patrol.

This would seem to be a large order for nine disinterested men to undertake without pay, and the fact that they can get together and appoint a superintendent and let him do it all under adequate compensation seems to leave a loophole open for acceptance by those philanthropically inclined, yet unwilling to give up nine good years to philanthropics. This scheme would at least let us have one permanent incumbent out of the reach of petty politics, who would retain office during good behavior. At present, while we have a splendid Commissioner now in office in the person of Mr. Geo. D. Pratt, President of the Camp-Fire Club, his term of usefulness terminates with that of our present Governor—which may be at the next gubernatorial election for all man can prophesy to the contrary. But as the Amendment is not subject to further change before the people vote on it, we had best cast our votes for it as a whole. The Amendment appears to contemplate plenty enough change to work on for the next twenty-year period.

"WITH THE DECOYS, PINTAIL AND TEAL, I PADDLED FOR SHORE"

THE FASCINATION OF DUCK SHOOTING

BY THEO. MACKLIN

DUCK shooting? A picture presents itself—one of several excited-looking persons making wild strides towards the depot, lugging severely cumbersome-appearing suit-cases and overloaded with guns and hip-boots. At least, that is the impression received from the cartoon in the paper early last fall. Or maybe it was a take-off in the form of a picturesque pond—picturesque because of its remoteness from reality—with one poor duck in the center, hiding behind a slender shelter of cat-tail rushes. The bank, all too close to the duck for comfort, was surrounded with hunters, each wondering whose duck it would be after the carnage. More common still are the drawings of desolate, weary stretches of water bounded by a line of thin, short rushes, out of which looms the sad, woe-begone form of a hunter. In the center of the immense open, far from the disconsolate mutterings of the disappointed hunter, floats one stingily small flock of six ducks. But the acme of newspaper duck shooting is that laughable scene, after nightfall, of a forlorn, tattered object dragging himself away from the marsh, followed at no distance by the faithful retriever with ears drooped and a lonely tear about to burst down one cheek.

The difference, however, between "hunting ideas" in cartoons and those in a hunter's mind is known only to those who feel the charms which the outdoor has at that time of year. The chill, fitful gusts of wind, associated with dull, leaden skies, dark, heavily driven clouds and falling leaves are all signs that welcome visitors will soon be arriving from the far regions

"I HEARD THE BELL-LIKE CALL OF THE PINTAIL"

of the North. But, after all, they are only signs. What hunter has not gone often to the same marshy lake and often returned with little or no game, but who, nevertheless, has come home with high spirits and a keen hope that next Saturday may prove a more lucky day. There are always certain to be some days of poor shooting that must be taken with the good. These off-days build up the appreciation that is so strongly developed among hunters and fishermen. The spirit that never gives up, that hopes for good luck next time in spite of yesterday's misfortune, and that can think to-day of scenes worth realizing to-morrow will, ten chances to one, have developed the power of being happy regardless of the mere chance of the day. There is an optimism of disposition that finds much pleasure in substituting hopes and memories in the place of accomplishment when fortune prevents the latter. It is that same quality of character that makes some men fishermen or hunters of success while others drop from the ranks.

Game alone is far from being the only pleasure of the marsh. It matters not what sort of a day chances to greet you out there at daybreak, there is certain to be plenty of life and much of nature to attract attention, especially if one of your passions is the love of the great outdoors. It is a combination of all these charms that lures the duck hunter, and while the realization of one set of fancies only is good, it never quite matches up to the satisfaction afforded by the combined pleasure of an ideal duck day, a convenient and attractive marsh and good luck.

Of all the marsh-hunting recollections that come to mind, none are so vivid and satisfactory as the memory of one particular day which was loaded full of surprise, discovery and ducks. For several days past the weather had been unfavorable. Cloudless; waves sparkling. The ducks were not moving at all during the daytime. Instead of seeking shelter in the rushes, they spent the days out in the cornfields, returning to the lake only after sundown had warned them of coming night. And thus one's otherwise most vivid moments had been cut short of part of their excitement, for darkness alone ushered the birds to their sleeping places in the water.

In the previous night a blowing gale roused us to shut out the chill blast. The sky, a few hours before brilliant with a silvery moon, was now sullen and threatening. With a shiver of coldness I had jumped back into bed, and there, wondering, had hoped that morning would be another sample of Nature's variable character.

And sure enough it was. The wind, blowing shrilly with a bleak northwest iciness, had rushed down over the prairies, as it so often does, without the slightest warning. And "Mother Meyer," for our breakfast an hour before sunrise, had made a great platter of brown buckwheat pancakes—hot ones that almost sizzled when the butter, followed up by a layer of syrup, made them ready for internal application. Yum! Yum! They're the kind!

It was mysteriously dark when the lantern disappeared over the rise. Meyer, who had come to show us the best way to loosen the boats from the grip of ice which now held them fast, had brought it for convenience. His task completed, he was gone, and with him the lantern. The lake was familiar to us in every part; at least, we felt that way, and so out into the inkiness we poled. The last sounds

of Major's poling soon made me realize that I was alone, but such we had planned to be. The most fascinating portion of the lake was the part least desired by my comrade. Several years before, I had observed, one evening, that the mallards, instead of circling the main portion of the lake, were continually settling somewhere over on the western side. Upon investigation it was found that a vast marsh, broken here and there by patches of open, shallow water, was the favorite feeding ground and sheltered resting place of the game we sought. It was for this part of the lake that I headed.

A WELL BUILT HIDE IN THE WILD RICE

The wind was furious. The waves, lashed into spray and much larger than usual, were threateningly cold, from what one might judge of the portion that reached him. Rushes, waving in long, undulating, ghost-like masses, were scattered everywhere. Long before daylight my boat was grounded on a shallow neck, grown with tall cat-tails. Water was on either side of me, and to the right floated the little fleet of wooden imitations.

The armful of fresh, dry straw and my overcoat and extra raincoat were more than welcome. They were there as extra precaution, and their presence was most timely. Daylight came, not with a beautiful sunrise painted on the clouds and dazzling up through the treetops, but dreary and cold. Gray, snowy clouds scuttled across the marsh, promising in their threatening appearance surprises before many hours. Now and then squalls beat across the lake, scaring up what ducks there were in unsheltered spots. I watched long and eagerly, but not a sound of shotguns came to my ears. It was too much, that morning. However, such a battle of the elements, like all other outdoor experiences, has a fascination, provided one is comfortably situated, and I was.

The storm broke with a driving sleet alternating with snow flurries. Ducks would never fly in that if they could help it. The half-green, half-withered appearance of the rushes changed to a uniform white. The decoys, coated with ice and over-balanced with frozen spray, appeared like so many drunken dummies, if that expresses the condition. Even the black overcoat, which served as a fine cover while I lay in the bottom of the boat, was white. The snow had made an ideal blind. All at once, through the moaning of the wind, came the familiar bell-like call of a pintail, imploring advice from my iced-up flock of decoys. He got an answer from my call and swerved about deliberately, as if to light. Pretty bird!

It gave me new spirits, but not enough to push out and retrieve while such a wind was blowing. It mattered not. Ice had formed in the rushes, beyond which it could not drift. By this time it was midforenoon. My cap was an ice-covered helmet. The sleet had frozen over my coat, making a perfectly windproof case out of it. I was warm and supremely contented. Fortunately, the decoys seemed to draw out conversations from all the passing ducks, for otherwise I should have seen none of them. Once the whistle of a teal came, alarmingly sharp it seemed, and when I caught sight of the moving object there were two, both in line at the moment I fired.

Dinner-time came, and with the decoys, the pintail and two teal I poled for shore. Back at Meyer's, Major had spent the morning by the fire. The lake was far too rough, he thought. And I agreed. But the marsh seemed to him, if not too

"IT IS A COMBINATION OF ALL THESE CHARMS THAT LURES THE DUCK SHOOTER"

rough, at least too cold, so the afternoon came with fair promise of my being alone on the lake.

The sleet and snow had cleared away and a strong northeast wind was sweeping across the lake. Cold!—the word is not half expressive enough! Wherever the rushes grew, ice had formed thick enough to walk upon. Now and then, fighting up against the gale, came scattered flocks of ducks. It did not take many minutes to see that a flight was on. Every flock came over the same rise on the distant prairie, and followed close down the long, smooth sweep to the broken rush-grown edge of the marsh. Then for a few moments they disappeared, soon looming up into view just above the rushes. But they never came near my location. I was out of the line of flight. And even then, as I peered over the horizon, flock after flock of mallards kept coming. Over the same place they came, now circling, now darting down to miss a sudden gust, and swerving to the left or to the right.

To get under that line of flight, find any little open place large enough for the decoys, and sit there in talking distance of those birds—that was the call that started me. In some places the boat pulled along with little trouble, in others the work made the distance seem infinite. Here the ice would break without a warning and I would lunge onto the boat, to escape the job of emptying hip boots unwillingly filled with water. It was mid-afternoon when the rushes ended before a stretch of open water. There, at last, was the drawing card that caught the eyes of each passing flock. For hours, it had seemed, every bunch of mallards and bluebills had dropped into the rushes ahead of me. Would I ever get there? Where was it? How far yet? All the questions that ever haunt one passed through my excited mind. And now, what a sight! There, through the rushes, I could see a great raft of birds bobbing about like so many corks. The stretch of open water was several hundred yards long by about

a hundred wide. All around it were tall cat-tails. I pulled the boat into a thick clump and cut a bunch of cat-tails to further screen it. A moment more and—Quack! Quack! Q-u-a-c-k! rasped into my ears. The air was full, it seemed. Which one—that big gray-bodied fellow? Oh, there is a bigger one! You know that puzzle that kills time when the unexpected happens. It's a wonder the whole bunch did not get away. But something happened and I walked the ice for what seemed a terribly long distance from the blind. But, you know, one duck in the boat is worth—"Get down!" I imagined my old hunting comrade urging. There they were, headed right for the boat. Too late for that bunch!

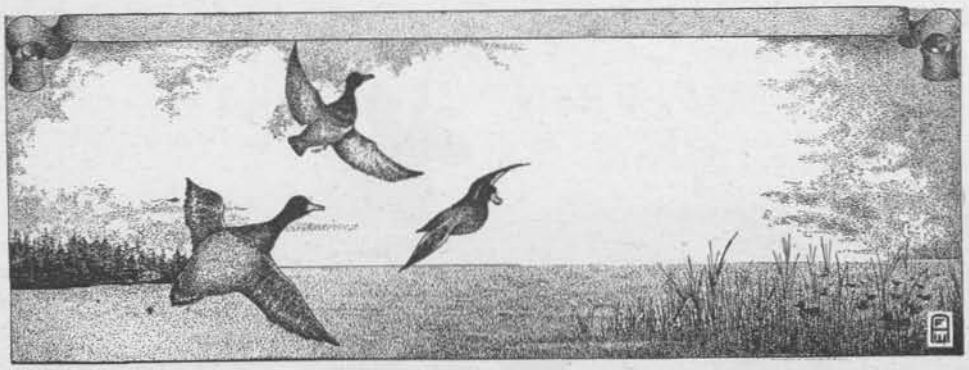
How a fellow can hustle when the mallards are in flight! The lonely drake, picked up from where he hit the ice, got a swift trip to the boat. Say, but the decoys did float like a real troop of ducks! I threw them out as far as I could from the blind. With the help of the wind and the length of the strings they drifted plenty far enough out, too. Hold on! What a flock! From the distance there was coming a literal swarm. What a sight it is to see magnificent mallards fight the wind. They rise and then sweep down, dart from side to side, and perform all kinds of aeronautics. Many a time before I'd have given a lot to see such sight. The wind was lashing the open water into furious waves. Whitecaps broke and blew up in spray. The rushes moved in great swaying patches, as if suddenly struck by whole acres of force at one time. And there, above the rushes, soon to battle out across the few hundred yards of water, were a hundred splendid, crafty greenheads—birds so wild that the very thought of decoys would make them hiss and snap fear and hate. Would they come straight on? Would the call lure them and the decoys coax them into bended wings and drooping necks and

"AND SO THE GAME OF HUNTING GOES!"

lowering feet? It is a breathless moment. You scarcely dare to breathe. Don't move —no, not even an eye! They are above the decoys, but must circle before dropping to join them. Sure enough, they're turning. An earnest, pleading chuckle assures them that the decoys are not fakes. Ready? Ready? Just a minute. Now! Before they light! My! the way they scatter, pounding the air and climbing wildly out of range!

But look, there on the water. Aren't they beauties? Yes, a couple of greenheads and a duck. That's the fun! And, what is more, they can drift only up to the ice. No use to retrieve until the flight is over. And so the few hours left me at the start had flown by. I had been in a dream, it seemed. Time and again the great beauties, a whole drove at a time, passed close by or above me. It was growing dusk. In the west the rifts in the clouds showed signs of a beautiful sunset, pictured beyond the low-hanging remnants of the day's storm. It was time to make the round of the ice-bound pond. What a task it is to retrieve from the water single-handed, while the wind and waves make fun of the boat. But there were ducks to be picked up—nineteen big, fat ones; some bluebills, a few teal, but more than half mallards—even, to be sure.

And so the game of hunting goes. One time it will be a day closed by the most glorious nature-painting that one might ask for, another time night comes suddenly after a few short moments of abbreviated twilight. Sometimes there is occasion to idly wait, passing the time with memories, recollections, or drinking in the scenes about one, while less often still are the days packed full of excitement and only too suddenly terminated by Mother Nature's call to rest. They are all days of welcome that, speaking long after they have passed, leave gifts of patience, optimism and great hopes.



Pa't'idge

THOMAS NICHOLS BIGLIN

Follow along the tote-road,
That's where they love to run;
See that you use a brush load,
Walk with a ready gun;
For when they jump
From an old pine clump,
And the shotgun sings
To those whirring wings,
You'll miss 'em, two to one!

A TYPICAL NEW BRUNSWICK OUTLYING CAMP

SUFFERIN' COMFORT

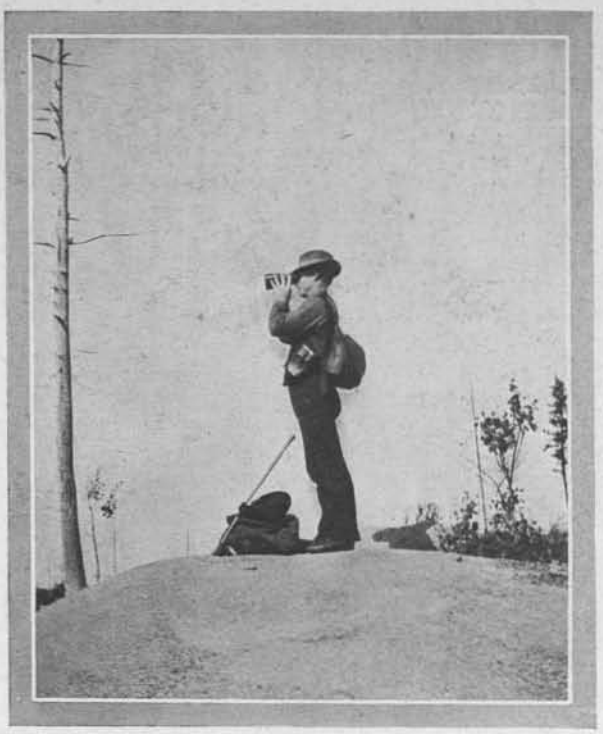
BY DOUGLAS WETMORE CLINCH

II—(*Concluded*)

IN making camp you, of course, choose a dry spot near water and wood. Then a good 3 to 5-pound axe comes into its own. First, you cut some tent-pegs and a crutch for the rear of the tent. Never use a crutch for the door, however, as it is in the way and does not allow for the easiest means of tightening the tent ropes. Much the best manner of putting up an A tent is to use two poles tied together to form a crutch or shears. In this the ridge-pole rests. You can then enter or leave a tent without damage, and, when the tent slacks up a bit, you simply raise up one end of one of the front poles and lift it a few inches toward the center of the tent door. An A tent should be laced together and pegged down before you put up the ridge-pole, a fact not generally considered. Lean-tos can be put up by rope, two crutches, or between two trees, as the situation and fancies dictate. If you use a lean-to it is best to pitch it toward the southeast, in case a storm comes up.

Cutting wood for camp has long since graduated from the hacking stage. If you have not a cross-cut saw (and one should always be carried back when camping out for a week or more while hunting), you select your stick and nick it *half-way* through in the lengths desired. Then you turn the log over and nick the other half. Most beginners endeavor to hack their way through from one side.

In splitting, lay one log parallel with the cutter's position, so that the axe will strike it at right angles. At right angles to this log, leaning against it on the *far* side, place the piece of wood to be split. Then strike easily but firmly. This, of course, comes with practice, but the position of the wood in splitting as outlined



THE 8-POWER BINOCULAR IS THE RIGHT GLASS

prevents the axeman cutting himself in case the axe misses the log to be split. Also, the trick of nicking a piece of firewood first half-way through on one side and *then* on the other is not chronicled in guide-books.

Wire, nails, and surgeons' plaster come in handy in making camp.

While one man puts up the folding grate and gets water the other should lay out the sleeping blankets, quilts, etc. The ground is smoothed off, leaves and boughs gathered for "heading," and the things one is through with for the day put away in bags hung from the tent. Of course, in summer there is a cheesecloth inner tent. All these things are ready by sunset and save much confusion after dark, when you stretch out after a huge meal to yarn.

I have never failed to find deadwood near my camping grounds, and I cut and split plenty of it. Also, I have a good supply of birch bark. Only last fall, when alone, I found my acetylene lamp had gotten choked up. I had not my customary candle, and matches were out of the question. Rapidly it was getting dark, and I threw on the fire an armful of split dry wood. By its blaze the lamp was soon repaired and a long evening with the Arabian Nights made possible—a comfort when you are alone. I also generally lay aside a handful of splits and bark, as when one turns out from a warm bed on a frosty morning they are sometimes worth their weight in ducats. The trick of sleeping with the head covered also comes with a little practice.

There are many tricks of camp lore which one picks up only in travel. Generally, when you tent out for the night, water is obtained by bailing a tiny spring. Very often it has to be cleaned out. Of course, you have no wash-basin, so the best thing to do is to fill a tin pint and hold it in the teeth. When John Harris showed me last fall I must admit it was a new one. A pint of water will suffice to wash one's hands. You dampen, lather, and rinse, all in a moment. When you have food to cut it comes in handy to have your hands clean.

And, of course, there some day comes that evening with its oil-surface lake and orange afterglow, as Service has said, "full of hush to the brim," when canoes and all that savors thereof take lodging in your soul. Guides, of course, supply the craft, but a little knowledge on the part of the sportsman helps wonderfully. On strong rivers, where portages are unknown, the dugout is supreme. Aside from the better models of this class, the Gaspé is the salmon craft. These failing, the Guide's Special model is much the best for all-round use. Generally this canoe is 18 feet in length and weighs 80 pounds. It is flat and straight on the bottom and has considerable "tumble-home." From my experience I offhand suggest the following:

All outfits should be equipped with

water-tight coverings. We are experimenting with several bags for this purpose at present and doubtless they will be available when this appears in print. In loading a canoe all heavy articles should be placed low, so they cannot roll or move. So placed, heavy duffle helps wonderfully to prevent a canoe overturning. Generally things are "hove in," get wet, and, when you stop for lunch to later push on, the outfit never seems to go back from where you removed it, to consequently be lost when you do upset. I have had to jump out in rapids, but to date have never been upset, save on one occasion when the bow of the canoe was on the shore and my partner became careless. I endeavor, therefore, to adhere to such rules as—Always lean your weight on pole or paddle when you step in or out of a canoe—lower the weight by grasping the gunwales—have your paddles the height of the paddler—using on long trips the Indian stroke (by which the elbows are kept stiff, and which was proven the best stroke on the long race down the Ottawa). Poling I have discussed at length in other issues. Never till last season, though, did I see men pole on either side the canoe. This is done because if you are going along the left side of a river the water is naturally more shallow on the left side of the canoe, and vice versa.

To woods cameras much attention has been given of late. In 1914, in company with friends, I spent over three months in experimenting. As a result of that work the outfit I would choose at present would be much improved.

Generally the light in the woods is poor. In photographing, game will often stand still for a full second, especially if something attracts its attention. For snow and cloud scenes, a color screen is absolutely essential. For photographing game with any telephoto lens the focal plane shutter unquestionably courts vibration.

I would therefore choose one of the better models of cameras now on the market which will allow for the fitting of a B. & L. telephoto lens and plate-holders. To this add the Harvey one-leg tripod.

Most of the good boxes will allow for the entire lens being put, with shutter, in a tube, which can be screwed, or fitted instantly, on a separate lens board, into the bellows. That is to say, you have a camera of fair bellows length. It has a compound shutter fitted, with lens, in front. You remove the shutter and lens *en bloc* and put in its place the telephoto. Then to the front of the telephoto you attach the lens and shutter. This telephoto is a corrected negative lens and the lens in the shutter is a positive lens, making a complete combination.

The one-leg tripod is an aluminum tube, large enough to hold a fly fishing rod, with a cap on top and a screw. The lower end is well-nigh bayonet shape and readily sticks into the ground.

For ordinary work the camera is set up on the tripod, focused and driven into the ground, and exposures made by the antineous release. Whenever possible the color screen is used, and requires three times the ordinary exposure. When using the telephoto the change is quickly made. The screen can be used with the telephoto whenever the light and the position of the object allow.

In stalking game, the telephoto is set at infinity at the number of magnifications

SHELTER TENT WITH MOSQUITO-CLOTH FRONT

decided on. Regular film may be used in the very best light and the Eastman Graphic plates in the worst lights. Generally I carried my camera as if it were a hod. When I finally set it down to photograph, anything short of the most rocky ground generally held the tripod steady. Of course, a camera for such work would have to weigh less than, say, about three pounds.

As to the size of cameras used, I have tried most. I really do not think I would choose any camera smaller than the 3¼ x 4¼. For pocket use there are several new ones on the market equipped with F 4.5 and 6.3 lenses. Short of these I would take the old reliable 3 A. It's all very well to talk about enlargements and the price of film, etc., but enlargements are an art in themselves, and frightfully expensive, when you finish many dozen.

The complete telephotos as tried out last season were satisfactory when the light was strong enough to stop them down to about F 11. Otherwise they were not sharp enough. I was able to get some pictures, including one of a band of twenty-five caribou, at an 1/80th of a second, at F 6.3, with a plate having a speed of H. & D. 500, or four times the speed of regular film. With the compound shutter I could have stopped down to F 11 and used a 1/20th.

At the present date of writing there is a new flash-lamp which should be in every sportsman's equipment. You cock it and when the trigger is pressed two distinct things happen. First, the cap which explodes ignites the flash; and, second, the piston of a tiny cylinder is so compressed that it drives a shaft, which in turn strikes the head of the antineous release, or drives sufficient air through a tube to release the old type of bulb release. This trigger is also so adjusted that at the maximum of the flash the shutter is opened. For instance, if you wish to take a picture anywhere from one-fifth of a second up to one-three-hundredth, you set your shutter there and pull the chain. This requires no setting up, other than a place for the camera, no shutter left open, no guesswork about stopping movement. For exposures such as looking out of a camp window and still showing the interior, you simply set the shutter as the meter reads for the daylight exposure outdoors.

In the way of small stuff for the trail, tastes differ. For occasional light I prefer a flash-lamp, with extra battery. To prevent it burning out I reverse the battery when it is not in use. For chasing round camp in the middle of the night I positively refuse to be without one. Then surgeons' plaster is just about worth its weight in kopecks. In winding axe-handles, winding-rods, and a score of other things I always come home with about six inches left, which I have wound round my knife-handle. Dental floss is very handy and pays to carry. You can wind odd things with it and save many a dentist bill, as men are careless about such things when on the trail.

The best binocular I have ever used is the B. & L. new 8 power. I generally wound mine with tape to keep it clean and shortened the strap so the glasses just rested on my left chest, in a pocket especially constructed. Thus they were always ready. In fact, from the day I enter camp the binocular case is not in service.

In the camp kit should be included a swab for washing dishes, as the water used is often on the verge of boiling.

Last season I had occasion to pick up several spools of wire which the department (5 and 10 cent) stores sell for a nickel. It suffices to say I used it all, its needs being manifest.

Tobacco for the open should be a cut plug flavored with latakia, according to taste. Mixtures soon burn out and the straight woodsman's plug is generally too strong.

FOR TRAPSHOOTERS: "HOW TO HOLD" BY H. H. LAKE, A WELL-KNOWN SHOOTER. ONE OF THE BEST ARTICLES OF THE KIND EVER WRITTEN. NO GENERALITIES, BUT FACTS ILLUSTRATED WITH ACTUAL PHOTOGRAPHS

"THE FIGHTING BUCK OF THE CHIPPEWA LAY, AS WE THOUGHT, DEAD"

THE FIGHTING BUCK OF THE CHIPPEWA

BY PAUL W. GALLAGHER

THE first day of the open season for deer in Wisconsin broke clear and frosty; no snow for tracking, nor had there been any rain for several weeks. In other words, conditions were decidedly unfavorable for the still-hunter. However, the little village of Exeland was full to overflowing with red coats, red caps, and even full suits of red—red mackinaw, red flannel, red canvas. For the next ten days it would not be safe to go out even into the back garden without some flaming scarlet signal that one was not a deer. So red was the fashionable color for all, even those who had no evil intentions against the white-tails for meat or trophy.

This army of "redcoats" were not British soldiers, though they were well armed, some with old-time Winchesters and other popular rifles, to which each owner pinned his faith, based upon former successes, while the majority proudly exhibited the latest high-power sporting arms, lever-action, pump-action, and automatic. Everything from .22's to .45-70's, though the .30-30's and small-bore high-powers were most in evidence.

Deer are reasonably plentiful in this part of the State, and should remain so for some years, under the present game law that allows but one deer per annum to each licensed hunter. The "Soo Line" runs through here, and there are quite a good many settlers and lumbermen, though but comparatively little cleared land. Several good highways are already established and new ones being built every year. The deer are, therefore, pretty well acquainted with the sight and smell of man. In this connection I beg to offer an opinion as to the habits of deer.

Lately I have seen several discussions, pro and con, as to what extent the white-tail deer depends upon his sense of smell in avoiding danger from the hunter, some claiming that the deer has not a very keen sense of smell, or at least does not use that sense to any great extent in avoiding his

pursuers. Others argue just the opposite, that the white-tail deer depends almost solely upon his keen sense of smell in keeping out of the way of his enemies, and especially his human enemy. Both of these claimants have good grounds for their views, and no doubt both have had experience to warrant their conclusions. But the conditions were different under which the tests were made. My own observations and the experience of others have led me to believe that deer have a very keen sense of smell, and that they depend upon it in protecting themselves from their enemies, including the hunter. The deer's sense of sight is, like that of practically all wild animals, keen only for moving objects. His sense of hearing is most acute, and must be reckoned with in all attempts to approach the unsuspecting deer.

But what I wish to say is, that in unsettled sections of the country where deer are hunted, and where the deer practically never see, hear or smell a man except as an immediate enemy—the hunter—there one must take into consideration the direction of the wind if one hopes for success in approaching within shooting distance of his buck. That is to say, take every precaution against the deer's taking alarm from detecting the hunter through the sense of smell. On the other hand, in localities where the deer are accustomed to the smell of the human animal from birth to old age; where they roam and feed throughout the greater part of the year within smell and frequently in sight of man, and where man is an enemy but for a few days in each year, there the hunter may and does approach to within shooting distance of his buck, though his quarry must have been aware of the odor of his pursuer. The deer did not flee, not because he did not smell the hunter, but because the smell did not sufficiently alarm him to the extent of instant flight. Again, deer frequently depend upon other tactics and attempt to escape, and do escape, by hiding in thick cover, or by slipping around the hunter, turning his flank, as it were.

But to return to the story. The conditions were not good for still-hunting. The ground was bare in spite of the prayers of the hunters, and the leaves and twigs were as dry as veritable powder. The deer territory in this section is largely "popple" thickets, wind-falls, cranberry swamps, with here and there pine and hemlock, and in places, some hardwood timber. Most of the land has been cut over by the lumberman, and now overgrown with smaller trees and bushes, making ideal cover for deer, and a few bear, and harboring, besides, abundance of ruffed grouse. The country is nearly level, with just enough rolling land to relieve the monotony, and among the ravines are numerous small streams full of speckled trout, and near by is the Chippewa River, a very beautiful little river with clear, cold water in which the rainbow trout "inch for inch and pound for pound, the gamest fish that swim, abound," to say nothing of the "fresh-water tiger," the muskelunge, or muscallonge, or however you spell it, that inhabit the deeper rocky recesses.

And for miles on either side of this sometimes smooth-flowing, quiet, placid, lady-like little river, this sometimes rapid-flowing, talkative, spluttering, gurgling, turbulent, rock-beset, beautiful Chippewa, lies the home and stamping grounds of the whitetail deer family, and in particular, His Lordship, the Fighting Buck of the Chippewa. Just how he first earned the title is not known to the writer, but by such was he known, and nobly did he prove his right to the distinguishing title to the very end.

And this is how it all came about. My pal and hunting partner, Charles A. Groves, "Bo," for short, and I were both formerly from Missouri. True, we did insist, at times, on being shown, but our usual motto was, "We'll show you."

"Sliver," says Bo ("Sliver," by the way, is a pet name Bo gives me, simply for the reason that I am decidedly longer than I am thick)—"Sliver," says he, "let's go over on the Chippewa and have a try for that old fightin' buck that thinks he can fool 'em all. Let's show him we're from Missouri."

"That's the very caper," said I, "for I have a hunch that we can outwit him, and to-day will be a good time, for the woods will be full of hunters, and that old buck

will be dodgin' in around those pine thickets over by the little lake about three miles on the other side of the Chippewa, where we gathered the cranberries and blueberries."

So, we climbed upon the fence to talk it over, and fixed our date for the following day. Next morning, with pack-sack, containing lunches, small hunting ax, camera, compass, matches, pipes and ammunition for both rifles and pipes, we started on our six-mile jaunt for the little lake where we hoped to locate the big buck or some of his kindred. Bo was armed with his Remington .35 automatic, while I carried an old .38-40 Winchester.

The morning was fine, the air cool to a decided sharpness, the ground was covered with white frost so heavy that it appeared like a light snow. Full of the hunter's joy of anticipation, full of the joy of outdoor life, and incidentally full of black coffee with bacon and eggs, why shouldn't we feel that the gods were kind to us!

Eastward we hiked along the wagon road, with a sharp lookout for game on either side, for it was not an uncommon thing for deer to be seen anywhere along this roadway. However, we did not see any game on our three-mile walk to the river. On reaching the Chippewa, we crossed in our small boat and began a careful still hunt through the three or four miles of popple thicket, wind-fall and scrubby timber to the shores of the lake which was our objective point for the time being.

Whirr-r-r-r! Burr-r-r-r! The grouse would get up all around us. "Don't it beat the Sam Hill, and Tom Walker, and Bill Jones!" says Bo, only Bo combined and concentrated the gentlemen's names into one little word, "how it is that when a feller goes out with a shotgun a-purpose to kill a mess of them darn'd grouse, that not a-one of them will get up closer than fifty yards of you, and then with a bushy tree between you and him. And now when a feller has a rifle and wants to be 'specially quiet, the blamed galoots let you walk on 'em." *Whirr!* goes another from nearly under Bo's feet and up goes his gun, but with a grin he lowers the rifle and remarks, "I could have got that one, all right, but there wouldn't been much of him left."

"Yep," said I, "that's a very wise and learned observation of yours, but the remarkable fact you have just shed yourself of is a very important and wise provision of nature: First, to prevent the destruction of the individual grouse, thereby tending to promote the continuation of the species. Secondly, to furnish opportunities for such as you to exercise the virtue of self-control and to refrain from the use of language that is barred from polite society."

Just what answer Bo would have made to my very learned observations will never be known, suffice it to say that it would, no doubt, have been sufficiently strong and appropriate, for at that very moment, a cautious snapping of twigs, and then a crash from a small brush patch a little way ahead, took all thought from our chaff to the more serious matter of game. We ran forward, one to either side of the cover, but a glimpse of a tell-tale white flag was all either of us really saw, though I had a fleeting impression of a set of antlers disappearing in the evergreen bushes.

"That's him," loudly whispered Bo, with appropriate disregard for the rules of syntax, "that's him; I've seen him before. Looks big as a mule, don't he?"

"Why didn't you shoot?" I asked, "or isn't a mule a big enough target for you?"

"I saw him big enough," said Bo, "but not long enough. Why didn't you shoot?"

"Well, I didn't see anything to shoot at except a white flash, and I would be inclined to think that a ghost if it were not for the noise he made. But it must be the big buck, all right—the Fighting Buck of the Chippewa."

We laid our heads together to decide the best plan to get another chance, and perhaps a better chance, to annex his Lordship to our more immediate possessions, so we decided to follow in the general direction taken by the buck, though there was no possibility of tracking him. To our right was the river, a mile or less distant, and to the front and to the left of us, the small lake where the big buck was known to frequent. Separating, though keeping within hailing distance of

BO AND AUTHOR; ALSO SHOWING HOW TO PROTECT A TAR PAPER SHACK WITH LATHS

each other, we cautiously advanced, but did not again see nor hear the buck.

After another half mile through the wind-fall, we found we could not get through the brush quietly enough to hope for a sight of our game, so we agreed that our only chance for success would be to cut across to the lake, and then to take a stand there and chance the buck's showing up there some time later in the day. Accordingly we did this with as little noise as possible, and soon came out on the swamp bordering on the lake.

This pond, locally known as Birch Lake, is bordered on about three-fourths of the shore-line with a tall grassy swamp, with a few small trees and bushes standing, and with many fallen trunks of small trees and limbs over which the grass has grown, making a rather difficult place to walk without stumbling and falling, though it is criss-crossed with narrow deer paths. This grassy swamp is really an interesting phenomenon, being a float ing shore-line, made up of many years' growth of moss and grass, the whole resting upon a moss-filled underground lake. One can walk over it safely, and by jumping, or rather by teetering up and down, one can shake an acre of it, seemingly. This condition is characteristic of the shores or a part of the shores of the small lakes in this part of Wisconsin.

We were following up the outlet to the lake, and, having reached a point about a quarter of a mile of the water-line, we found a large fallen tree on which we sat down to rest and have a smoke, and likewise to plan our future actions. We were entirely in the open, in plain view from every direction for some distance. We smoked and chatted there for perhaps half an hour, and decided to separate, each to take a stand agreed upon, and Bo had started and reached a point some thirty yards from me, when to my surprise I saw a large deer coming toward me from the woods to the south, and perhaps three hundred yards away. The distance was too great for a successful shot with my .38-40, and fearing that the buck would see me and bolt before getting within shooting distance, I succeeded in attracting the attention of Bo, whose .35 automatic could reach him. But the buck was not in sight from where Bo was standing. Motioning him to me, Bo came as quickly and quietly as possible, but by the time he had reached me the buck had gotten out of sight by turning into a dense pine thicket that came to within about one hundred yards of our position. I hurriedly acquainted Bo with the facts, and both

of us felt that an opportunity had been lost, fearing that the buck had slipped away. Yet, although the buck had entered the cover in full view of me, he did not seem to have seen me, or at least to have been frightened.

It was a period of anxious uncertainty. Whether the buck was aware of our presence, whether he had turned back in the thicket and reached the cover of the timber again or was still in the thicket of small evergreens, we did not know. It seemed most probable that he had slipped back. But hope springs eternal, and neither of us spoke nor moved. Within three or four minutes the buck stepped boldly out of the evergreen shelter at the very point nearest us, one hundred yards away. Directly facing us, he threw up his head and gave a snort of defiance. A more beautiful, a more majestic picture, I never expect to see. It was high noon, the sun was shining full on his splendid coat, his antlers glistened in the bright light as he stood staring at us, rigid as a carven statue. I do not think either of us breathed. I remember distinctly how hard my heart was pounding at my ribs. At last Bo raised his rifle, aimed quickly and fired. The buck dropped as if dead in his tracks. A breath of relief, a silent handshake, a sigh of regret—for the Fighting Buck of the Chippewa was dead! So we thought.

With leisurely haste we worked our way to where the buck had fallen, while Bo explained that he held right between his eyes—a brain shot—and how that buck had never moved a muscle since he dropped. Which I think was true, so far as moving was concerned, but when we got up to within about thirty feet of the fallen buck he raised his head and looked at us, but seemingly without comprehending the situation. So Bo suggested that we take a picture of him. I laid down my rifle and, taking the camera, proceeded to "find" him, when something happened, and happened very suddenly. That buck sprang to his feet, with the hair on his neck bristling; with an angry snort, flinging blood from his nostrils, with eyes fairly blazing, he charged straight at Bo with all the fury of crazy madness. So sudden and unexpected was the onslaught neither of us was prepared to shoot, though I realized what a chance for a camera shot I missed. Please bear in mind that the fallen limbs and small trees overgrown with grass made it precarious footing when one undertook to move quickly; but Bo *did* move quickly, I can tell you! for that buck was almost upon him before he realized there was a fight

TEN TINES AND IN HIS PRIME—DRESSED, ABOUT 250 POUNDS

on hand. Jumping to one side, Bo fired, striking the buck back of the fore legs and passing through the lungs. That buck should have gone down, but he didn't. Instead he staggered but slightly and made for Bo again, and again Bo fired a broadside through the lungs, but that buck refused to quit. There was a scrambling, jumping, dodging, shooting fight on the part of Bo, and a lunging, snorting, determined, vicious fight on the part of the buck, which lasted but a matter of seconds, during which Bo fired four shots, all that were in his gun, all striking the buck where any one of them should have put him down to stay. In the meantime I was losing no time in exchanging a loaded camera for a loaded rifle. Bo's last cartridge seemed to leave the buck facing me, and without hesitation he came for me, the bloody froth flying at every snort, and those antlers looked mighty big and sharp. I fired at once, breaking a fore leg at the shoulder, and down went the valiant buck for good.

"Well, I be damned," said Bo, as he took off his hat to the fallen foe. "The Fighting Buck of the Chippewa? I should say so!" Another hand-shake.

"I should like to have had a moving-picture machine and got a film of that scrimmage," I remarked; "it would make a small fortune." But, on further reflection, I admitted that I would have had to have some disinterested party to turn the crank of that machine at about the wind-up.

The buck was a large one for this section, with a beautiful head—not a very large one—of ten points; the right-brow tine had been lost in some former mishap. An examination showed that Bo's first shot had struck an inch below the eyes and not quite a center shot, and had grazed the brain and out at the top of the neck near the shoulder. The four shots fired during the fight had all passed through the lungs; the copper jacket of one bullet, or parts of it, had passed through the heart. The bullet from the .38-40 had merely broken the leg at the shoulder, knocking him down, where he died from the other shots within a few minutes after falling. The buck was in fine condition, evidently in his prime, and dressed about two hundred and fifty pounds. His vitality was remarkable. That any animal of the deer family could stand up under the successive shocks of the .35 automatic seems scarcely believable, yet he did just as I have related.

The Fighting Buck of the Chippewa is dead, but long shall the memory of his last heroic struggle remain among the most vivid as well as the most cherished mental pictures of sports afield, collected from time to time in the great out-o'-doors by my pal and your humble servant.

COLORADO IS THE PLACE FOR BIG MOUNTAINS AND BIG BEARS. "BEAR HUNTING IN COLORADO" BY AN OLD-TIMER—WM. STABECK, TELLS OF GREAT SPORT AFTER GRIZZLIES WITH A HOUND PACK—COMING IN DECEMBER

NED MENZIES' COUNTRY, IN NEW BRUNSWICK

THE GAME FIELDS OF THE NORTH-WEST MIRAMICHI

BY DOUGLAS WETMORE CLINCH

THE parish of Derby, New Brunswick, is in Northumberland County. At its northeast end the Miramichi, perhaps the best-known river in the province, divides. There are really two main branches. The southwest branch almost crosses the country for over two hundred miles, seeming but to taunt civilization, as it drains from the west, now and again losing itself in the forest. On either side, going in from Bristol, on the Canadian Pacific, to Indiantown, on the Intercolonial, you can hunt "Miramichi country." There is McKeil, the North Branch, North Pole, Dungarven, and Little Southwest, on the north; Cain's River, etc., on the south. The Northwest Miramichi, however, is not so well known.

To me the first rumors of this country percolated through hurried descriptions and inaccurate railway folders. Somewhere up North was a land of gravel-bed streams where, with the rise of the water, salmon "moved up over night," Old Noal had schooled Bill Gray, and bears "cotched hell." There, too, in the early days, had the Mic-Mac slunk across country, leaving a trail which needed little blazing. By the full of the moon 60-inch heads had "waughed" in the moonlight, and, with the coming of the first snow, 20-point left antlers were known to be carelessly cast aside. Truly, a country savoring of the romance that to the woodsman is solace—and in October, 1908, I took myself thither.

Newcastle drew nigh, a North Shore town, wistful in the early evening against its background of gravel-beds and skyline of forest slopes; amusing in its lumberjack zeal in things political and personal. John Jarvis was to guide me, and on the morrow we drove at a slight angle to the trail of the sun, to pull up at "McNeals." On our left, as we had traveled toward this head of the Settlements, the main Northwest had completed two sides of a triangle, the highway forming the third. At Redbank, or the apex of this angle, the Little So' West "took in," and some ten

"JIMMIE HAD IT IN SHAPE BY THE MORROW"

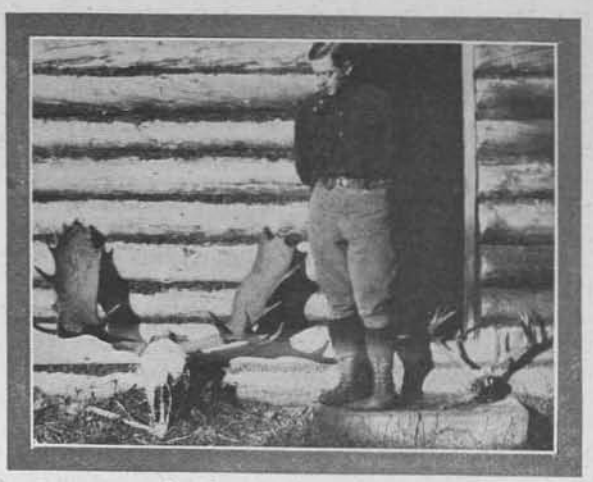
miles above Redbank the two Sevogles branched off, to the left, in a northwesterly direction. At "McNeals," or "Ways," the road on which we traveled crossed the Miramichi, to then swing west, entering the forest with the water on the north, or right, and the main branch of the North Sevogle paralleling it on the south.

Consultation of the map at this stage will show that between the Sevogle and the Miramichi there must be one watershed; between the Miramichi and the Nepisiguit another. Also, the two main branches of the Miramichi are clearly marked; the Tomogonops, and the Little River, which has a lake at its head. Just beyond Wayerton the portage, or main highway, rather, stops abruptly. On the Tomogonops I have marked two camps, which belong to William and George McKay, of Chapel Island Road, and just above them the main or Muddy Lake Camp of William Grey, of Bathurst. The McKays are supposed to have the right to hunt, exclusively, all the country directly north and south of them, or rather the two watersheds which drain into the Tomogonops. At the head of Little River, Edward Way, of Wayerton, has the same privilege. From the Lower South Branch Nepisiguit, known locally as the Big South Branch, William Grey hunts clear east along the Nepisiguit to Indian Falls, on the north side of the river. Menzies has the exclusive right to the country lying between the Nepisiguit and the Miramichi and its north branch. Arthur Pringle, of Stanley, York County, takes the balance, or between the two Sevogles, west to Big Bald Mountain, or Mount Kagoot (as shown on the map), and south of the north branch of the Northwest Miramichi. The only exception to this division is that Grey has one lake, about three miles below the Devil's Elbow, on the south side of the Nepisiguit, and another outfit just east of the Big South Branch, known as Blue Ledge Lake.

On my first October trip I hunted from Arthur Pringle's "Camp Waite" and later on packed over to the camp on the Big South Branch, within three miles of "Camp Crawford," the name of which, at the moment, I do not recall. In the first afternoon's shooting on the day of arrival I counted thirty-two caribou, and in the next five days something over 100, finally tagging a 26-pointer. This country I found easy to hunt, the environment inspiring, the food and outfit all one could desire. Just previous to my arrival Mr. J. G. Nobles shot a 39-point head, and in 1911, hunting with guide Sydney B. Thomas, Mr. Nash, of Boston, brought out a 43-pointer that is the best New Brunswick head the writer has seen to date. Pringle's country has thus sustained the name of being the better early caribou ground.

The evening I arrived in Newcastle on my first trip I hooked up with Ned Menzies in person. As before mentioned, I had heard of this hunting, but on this occasion we waxed turbulent, as one is wont to do when friendships ripen in the wee sma' hours. Suffice it for concerning minds that late that same fall, November found me on the Sevogle ridges, where, with crust-hunting and Injun tracking, and no little superstition pertaining to a sowet owl, I lost the largest bull it has yet been my privilege to swear at—to later redeem myself. On the heels of the

season Ned and I packed up the ice on the Miramichi, swung to our right, and climbed the watershed toward the "42" Camp, passing on to the Home Camp, near the open country. It may be in order here to record that the summit of the watersheds in this region, or rather the country some three miles back from the Nepisiguit, on either side, is open, the slopes on either side being wooded. In 1909 I hunted in from Chipman, on the Dungarven and Hayden County, and sent to Menzies an Englishman who, from the Peabody Lake Camp, shot a 60-inch, 24-point head. In June, 1910, Ned and I ran the Miramichi from Camp Adams to just below where the Big Sevogle took in, and during the fall I spent 71 days with Grey hunting from just above the Elbow clear down, at intervals, to within three miles of the Narrows. August, 1911, found me again at the Elbow, and after talking the situation over with Grey, as he was full up, I went back with Ned.



THE SURGEON'S 48-INCH HEAD AND BIG BUCK DEER

There were, of course, reasons for choosing this section, aside from anything Grey might agree with me concerning. In the first place this section is not overhunted, there are good camps, and certain few good guides. In the morning and evening of the early season there are any number of feeding ponds, while during the day the open hills offered all the stalking one could desire. The question of calling could not be determined in advance, but in a water country big heads already mated up, and which could not be called, might "come in." Some parties, however, prefer to hunt early, as the moose, not having been molested for a year, are less wary. Any good water country, however, is apt to be good in the first part of October, providing the calling weather is ideal, even though it has been shot over the week previous. I therefore arranged to join Menzies at Newcastle on or about the 13th of September.

To the naked eye Ned Menzies is bald as a monk, languid and cool as one of his own backwaters. In the tempered atmosphere of the September afternoon his very presence begat good humor, and we felt at home as, duffle-laden, we swayed toward the hotel, to ponder anon at the election placards which had replaced the paint on innumerable barns. In the course of time we emerged clad in the garb of the North and henceforth raided such emporiums as the town boasted, where, amid the gingham-perfumed alcoves, we unearthed the remainder of our stores. With the rising of the moon, now at its full, our whiffletreed, clucking caravan toiled up the sandy hill, so seemingly hemmed in by the forest shadows. At brooks we paused, by frosty roadsides our moccasins "patted," one by one the occasional ghost-like clearings dropped behind. Then, as the stories waned and the moon rode high, the horses clattered over a covered bridge, to swing down a deceiving lane into a barnyard. As the teamster unhooked and we stretched our legs, a hound's wail sounded above the gentle purr of the great old Nor'west. Over the veranda roof a light appeared, and, as a frowsy boy in huge suspenders kindled a fire, we thawed to Ned Way's welcome.

Our breakfast the next morning being of the kind which mellows strangers, the licensees, the "Brain Surgeon," the "Princeton Wrestler," and the "Fan" plied with enthusiasm their respective guides,

Luke Keating, Geo. McKay, and Jimmie, and then in the wake of Ned's vocabulary we took the portage for Stony Brook, where at noon we "biled." About four o'clock, with twenty-odd miles under our belt, our camp was pitched. Again the teamsters unhooked while the four of us stole through the amber-tinted ridges to where the mountain current, deep set between abandoned "brows," choked over the ledges, and the purr of the gravel-bed stream unlocked the inner chamber of our souls. Even as a fish for breakfast was landed, the "tomawee" smoke hung listless in the evening air. Interested, but content, we returned for supper. As the North Star stood sentinel we spread our blankets. Occasionally a log spluttered and the cooling, creaking stove mumbled to throw about us its dancing gleams.

On the way in Ned had decided it was best to divide our party. On the morning of the fifteenth, therefore, the Surgeon, the Wrestler, and the Scribe pushed on to Peabody Lake. Geo. McKay took the Fan in charge and they packed up to "42," where Ned had a small over-night camp. It was from Peabody that I had hunted in 1908, the Englishman in 1909, while in 1910 Mr. Coffin and his party had been successful in getting their moose in the water. We therefore decided to try the Peabody country till Allen Menzies, Ned's son, moved out from the Home Camp in the mountains. It is interesting here to note that, though the calling came in early where Allen was hunting, that we did not have any real "weather" at Peabody. This we attributed to the prolonged warm weather which prevented the early killing off of the foliage. Notwithstanding, the writer, on the evening of the fifteenth, called a small bull of about 35 inches, which was feeding at the lower end of the lake, to within fifty paces and had him "answer" distinctly. We thereafter divided the first week between Peabody and the Sevogle Camp, during which time two bulls were called out. The first of these, without having answered, stepped into the lake not 75 yards from the blind. As the head was only about 48 inches, with narrow pans, the Wrestler passed him up.

The second morning in question the Surgeon and Luke had their first adventure. They were hunting from the Sevogle Camp. This structure had been erected with the idea of using it after the snow fell. There was, however, a small pond close at hand, but so near the camp that no fire could be started before the morning calling. They therefore were without breakfast when they took up their position. It was a dull day, threatening rain, but with the atmosphere well suited to the carrying of the call.

A bull some distance up the ridge answered Luke, who, expert that he is, soon managed to bring him into the water, across from their positions. As the .45-70 roared in the still morning air the moose dropped. Luke, sure that he was down to stay, hurried back to camp for the tape. Meantime it came on to rain, and, in his impatience, the Surgeon crept round through the alders, during which period the moose, hidden from the hunter's vision, got to his feet and stole away. Under ordinary conditions a bull as hard hit would have been allowed to rest a while, in hopes that he would lie down. The rain, however, would soon obliterate any signs and the guide and Surgeon therefore took up the blood trail. This required most of the morning, which, on an empty stomach, in the pouring rain, was hardly elevating. Three poor shots did offer, but by noon Luke gave up the trailing and returned to camp.

Meanwhile, through the medium of the packer, who made frequent trips, from the upper country where the Fan was, tales of adventure, mingled with mirth, poured in. It was the Fan's initial trip and, after the manner of such, his opportunities were legion. In the first week three heads over 50 inches, with one close to 60 inches, passed him by. In the first instance George, not realizing that the intimate signals, essential between caller and hunter, were unknown to the Fan, placed the latter behind a blind, and, when the bull stepped out, there was no sound from his sport save the combatting of black flies and mumbled expletives. "How in blazes," the Fan afterwards told us, "could I see the moose when all those pesky flies were stealing bases?" The second time, the Fan

THE BRAIN SURGEON AND JIM AT SHORE CAMP

obtained his first conception of a moose's proportions and the .405 plowed through a retreating flank; while on the third occasion the advance, at the crucial moment, of the Fan through the alders might just as well have been announced by a brass band. Between heats, so to speak, it became apparent that George, marvelous hunter though he was, scorned cooking, and the Fan, exiled from his beloved Broadway and its over-tipped waiters, was undone. There is also a tale that the Fan nearly froze until the packer, heavily bribed, toted up the Fan's unwieldy sleeping-bag, when, with the door open, it was George's turn to forage for firewood in the wee sma' hours. Finally, in desperation, George bethought himself of a plan, and so cunningly did he summon moose No. 4 that the monarch of the forest paused not to parley, but charged straight on, to snag himself on the .405 pellets at 30 paces. In the meantime we had wagered that if the Fan dropped anything the rifle would have to be revolving in circles, such as the game might be induced to cross. Encouraged by these reports, in company with Jimmie, the Surgeon and I packed up-country, the Fan, with Luke, going back to Peabody. En route, at the Depot Camp I brewed the Fan a pot of beans of which he speaks fondly to this day.

From the Home Camp, some six miles or more beyond "42," overlooking a meadow on the edge of the open country, we packed three miles to the Shore Camp, which is on the North Branch. Four miles beyond this is Camp Crawford, while in the gulch, beyond the first open country hunted from the Home Camp, is Bald Mountain Camp. All these camps, save Crawford, are new, of peeled logs, and were built for a man whom Ned agreed to guide exclusively. Later they fell out and Ned came into the possession of a new outfit and a country which had been little hunted. To hunt Crawford and the Nepisiguit really requires a pack-horse to bring out the heads and to pack in the necessary provisions.

We were now on the third week of our trip, six opportunities for shots offering within the first week or ten days. The Surgeon on the way up killed a very heavy buck deer, the first night at "42," which somewhat revived his spirits. The first morning from the Shore Camp he and Jimmie came on a spikehorn and also sighted a very large bear. As so often happens in bear hunting in the mountains, they lost him while moving down from

their position to cross over to the mountain on which the bear was feeding. This sustains the writer's contention that in such hunting it is best to carry a very high-power rifle shooting at the first notch at about 500 yards. Very often these shots will offer at this distance where the big-bore gun, which stops dead game hit at 100 yards or less, falls down.

In the afternoon of the same day Jimmie and the Surgeon tried another section and started for the nearest meadow to call. It had developed into one of those crisp, still days when at even the orange tones of the sunset tarry a while on the surface of oil-like lakes; sentinel pines stand listless yet inspiring, and the scarred skeletons of forest fires dream of bygone days. It is then that the caller's garments stiffen, that in the hollow air echoes carry, and the pioneer blood seems to merge all that is hardy and fine in a man. Gliding with apparently no effort along the trail, but a snowshoe track at its best in winter, the moccasins seemed verily to find their way along. As the hunters swung into a tiny clearing an alder "swisshed" and, accompanied by a cow, a bull sauntered forth. There was little time for calculation, save such as passed on the spread, and at point-blank range the .45-70 commenced to roar. The first shot caught the bull fair on, the second in the flank as he whirled, and the third was hardly needed. Jimmie crashed through the bushes in the wake of the moose and stretched the tape —48 inches, with 24 points did it measure. Just then, from afar, was audible the evermore-distant echoes of the retreating cow as the silence of the September evening again became manifest.

This head was killed on the last Saturday. Jim had it in shape by the morrow and we decided to follow a new trail that would bring us out to the river above the north fork of the Miramichi. The second day we started early and were able to make Way's that night, and Newcastle before midnight, where the Fan met up with us. On the way out we passed a chap from Texas who had only five days to hunt from the Home Camp. Luke, we afterwards heard, guided this gentleman, procuring for him a 57-inch bull moose and a 500- to 600-pound black bear. Two other parties followed and brought out moose, caribou, deer, etc. In 1912, Mr. Lane, of Montreal, hunted with Luke and brought out a moose, two bear, one caribou, and two deer. Other parties were also successful. In 1913, however, the writer planned a trip for Francis Manierre, of Chicago, who, in company with his friend, Mr. Marshall, went after bear and trout in August. In the first five days on the mountains 43 bear were counted and five killed. The balance of the time was then devoted to fishing, one trout over 4 pounds being killed at the Nepisiguit pool, and any number ranging up to 3 taking the fly in more handy waters. In going on this trip the party poled up from Grand Falls on the Nepisiguit, cutting across country from below Injun Falls. This, in the writer's opinion, is the most pleasant way to either hunt or fish this country, as one can come out in a day downstream.

SHOOTING YOUR OWN CHRISTMAS TURKEY IN HIS NATIVE FASTNESSES IS A STUNT NOT OFTEN PUT OVER NOWADAYS. READ "A WILD TURKEY HUNT IN SOUTH CAROLINA," BY D. J. HART, COMING IN DECEMBER

THE UPPER HUMBER WITH ITS SALMON AND CARIBOU

BY DR. LOUIS A. SEXTON

HUMBERMOUTH is a nice little village located at Bay of Islands, N. F., three days and three nights from New York. Here one can secure guides, supplies, license, etc. The license costs $50 and guides $3 and $3.50 per day. This includes their camp outfit, canoe, etc. The best plan is to ship canoes and supplies by train to Deer Lake, which is thirty miles up the Humber. One can make this in canoe or motorboat, but, aside from the beautiful scenery along the narrows, nothing is to be gained and the river is very swift for a good part of the way. With E. P. (Ned) Brake for a guide, I left Deer Lake on September 17th. We crossed the lake and camped on a small island just where the Humber runs in. It was almost dark and the mosquitoes were active beyond description. We soon got our smudge going and had supper over, and started in on our first night's sleep in the open. Next morning, September 18th, we started on our long paddle up the Humber into the caribou country. We kept at it all day in a steady downpour of rain. We made two portages during the day and I walked the greater part of the afternoon. The going along the shore was rough and hard, and it was all I could do to keep pace with Ned, who was out of the canoe about half the time. The ascent, while not very steep, is gradual and rough. We camped that night in a log cabin belonging to George Nicholas. It was very good to get on a nice caribou rug in front of a cheerful fire after such a day's climbing and wading.

Next morning found us again battling with the rapids, and let me say now that I have never seen Ned's equal with a canoe. We had swift, steep water all day, and late in the afternoon arrived at "The Great Falls." I sat for an hour and watched the salmon in their tireless efforts to jump the falls. About one in twenty would get up, while the others would tumble back again and again. I was not able to get more than one in any picture, but they never stopped and seemed to be a numberless horde. This is purported to be the best salmon stream in the world, and I doubt it not, for all day they were jumping in front of the canoe. The week before Norman Fisher had connected up with a thirty pounder, which upset his canoe and lost his gun and other belongings, but he saved the fish. We spent a very peaceful night just up over the falls, the roar of which can be heard for miles. Several liveyeres were camped at the falls that night on their way down with meat which they had killed that day.

September 20th we got away early and by noon were in the heart of the caribou country. Just before we reached the spot where we expected to camp, we came upon a stag and three does. I shot the stag for meat, not thinking his head worth keeping, but, when we caught up with him, found he had a perfectly symmetrical head of twenty points. The sun was broiling hot; the black and green flies were there by the million.

We skinned our stag, hung up his meat and made camp in good time. Next morning we started out and I verily expected to see caribou by the dozen, but was sorely disappointed. At the end of the day we had seen one small doe. The weather was so warm they were not moving, and for almost a week we met with the same

MY SECOND STAG, SHOWING THE LONG STRETCH OF MARSH

result—an occasional lone doe or a few does and fawns.

On the morning of the twenty-sixth Ned called me to "Come quick! There's a big stag just across the river." I got out of my bag and ran down to the river and took a shot at him, eight hundred yards across and up the river. With the crack of my Mauser he reared up and fell flat on his back on the sand, but before I could congratulate myself he was up and gone. I dressed hurriedly and we crossed the river and found plenty of blood where he had fallen. We started out in hot pursuit and came up with him a few hundred yards up, just in time to see him lie down and stretch out; so I thought surely he was dead this time, and we walked up within ten steps of him before he showed any signs of life, and, before I knew what had happened, he was up and gone again. Oh, yes, I was shooting all this time, but he didn't stop. We trailed him about two miles, and met him coming back on his trail, whereupon I began to shoot again with as much deliberation as if he were a "rising bear," but he kept coming and was in fifty yards of me when he finally fell. I had shot all told fifteen times at him. When we were sure he was dead we went back to camp for breakfast. It was now ten o'clock. We had been chasing him four hours. I decided to get on some more clothes, and when I pulled my boots off I found I had two socks on my right foot and none on the left. I don't think I was ever quite able to explain that satisfactorily to Ned.

SALMON LEAPING THE HUMBER FALLS

After breakfast I got my gun out to see what my trouble had been and found my sights elevated, and I had been shooting about thirty inches too high. We went back over and photographed and skinned him out. He had a massive set of antlers, with perfect brow antlers reaching almost to the end of his nose. While he only had twenty-six points, his was a much better head than many I have seen with many more points.

We next spent two days on an unsuccessful bear hunt, and, on the twenty-ninth we went out to have a last look for another stag. It was cold and windy and the marshes were literally alive with caribou on their long journey to the south.

I spotted a nice thirty-one-point stag moving slowly along with seventeen does, and, after a stalk of about half a mile, made quick work of him. Three quick shots, any one of which would have killed him, restored me somewhat in Ned's estimation.

That afternoon we broke camp and found the river had fallen at least two feet since we went in, so I had to walk the greater part of ninety miles out.

In conclusion, I want to advise against going to Newfoundland in September. The green flies were so numerous that we had to dig troughs and pickle our scalps in order to save them; besides, the black flies and mosquitoes were ever present. On our way out we had an inch of snow, the first of the season, and I rejoiced that the flies would have a long rest.

SPYING FOR GOOD HEADS

"HE HAD A MASSIVE SET OF ANTLERS"

RONK AND GONK DROWSING IN THE NOONDAY SUN

GREETIN'S—WAVIES!

By T. N. BUCKINGHAM

II

UPON a low knoll just inside the cane-banks and willow thickets of the shelving mainland, carpeted with wind-swept leaves from giant oaks, Horace had pitched our camp. The wagon stood hooded by a wide-spreading tarp, close beside two neighboring pecan trees. The table was laid across the crates of our water carboys, there was a neat kitchen shelf built against a log, and a grand rip-roaring fire grilling in a stove of borrowed concrete blocks. Horace's humble cot and bedding sagged beneath a spreading bush, and that worthy himself, when we staggered in with our burdens, was bending over the fire poking into frying-pans and adjusting pots and kettles.

"Well, gent'muns, gent'muns," he greeted, his dark, satin face gleaming in the leaping reflections, "how many is you-all done kilt?" Then, when he saw our geese: "Uummpphh-uummpphh! Lawdy! Lawdy! I b'lieve you-all is done kilt *all* de birds! Yaas, suh, gent'muns, whin I heer'd dem cannons poppin' up yonder on de bar I say t' myse'f, I say, uummpphh-uummpphh! I say, step light, ganders, caus' he'ah come ole Hard Luck, an' ole Hard Luck he's de fus' cuzzin' t' ole Crimp. How many is you-all got? Uummpphh-uummpphh! Jes' look *at* de geese!"

It was a bully supper the darkey set before us—smoking hot, thick soup, crisp crackers, a royal stew of rabbit, squirrel, pork and all the vegetables within reach of Horace's arm and wire-pulling influence in the district. And when the moment arrived he had the griddle busy turning off buckwheats until even Mr. Williams cried out that his tank was full and turned down a stack of browned applicants.

We sat around our camp-fire until long after Horace had finished his chores. A lop-sided moon strung over the parapet of the distant levee and turned its searchlight upon the sleeping lowlands. Our stories were told in the hush-voiced peace of thrilling night quiet, broken by queer calls from the jungle walks and honking

geese flying the brightened paths of a river world. There were tales from Williams of the old days, when bear and deer roamed at will; thrilling episodes of high-water perils, crumbling levees and devastation. Mr. Williams suggested, along toward bedtime, that in the morning we work what he very appropriately termed "magic" on the geese. His plan was for us to take Horace along and when two of us had reached the upper bar for the others to go across the river and shoot on the lower big bar. So, good-nights were exchanged, our host took his way home down the river bank, and we made off to the land of dreams. The Gunman and I took possession of the wagon, while Fat Boy drew a cot alongside the wheels and draped the tarp above his covers. I remember the sinking glow of the fire; Horace moving about, a vague form in the wasting firelight, and a last echoing din of geese in the distance.

A rustling of the tarp awoke me. The Gunman, struggling confusedly from the warm blankets, sat bolt upright in the darkness and began fumbling for his boots.

"S'what time, Amigo?"

I reached sleepily for the electric torch and diagnosed the Ingersoll.

"S'three, excusin' ten minutes!"

"Much too early—mornin' paper hasn't come—have my coffee sent up," mumbled the Gunman, sinking back into the cotton. A sharp snapping from the direction of Horace's stronghold.

"S' a fire started?"

"Yep—git on up. Where do you think you are—in the Ritz-Carlton?"

"Switch on the glim again, citizen—I prithee, friend, m' toothbrush?" I exhumed the flash and flooded the dungeon blackness of our quarters. The Gunman struggled toward the far end of them and emerged, swearing.

"This nest, for the purpose of donning one's trousers, is nothing more or less than a sublimated upper berth," he gasped, writhing and twisting into his moleskin knickers. "Is Fat Whelp stirring?"

Breakfast didn't take long. To quote dispatches from the front, "We made heavy progress on bacon and eggs and established a *rideau de fer* on the buckwheats and coffee." We washed the dishes and stored camp in a jiffy and were soon pulling up-river, Horace and I at the oars. The rapidly falling water greeted us with a bar at least half a mile nearer than our landing place of the day before. 'Gene and Fat Boy hurried off through the shadows, while Horace and I pushed out across the moon-dimmed river. The sweep of the current aided and almost before we knew it the boat's keel grated on the bar gravels. We were not particularly heavily burdened—just Ronk and Gonk, a half-dozen board profiles, a spade and, besides my two guns, a twenty-two automatic for Horace. We mounted to the ridge of the bar and turned south for a mile walk, leading out upon a great beaked peninsula pointing into the broad lagoon bend. Some two hundred yards off the willows and half a mile from the river we staked the birds and fell to, turn and turn about, upon my pit. When we finished I racked my shrouded guns, climbed in after them, and sent Horace off on a voyage of discovery to the south end of the bar, with the rifle as comrade. It was good daylight by this time and I watched the darkey until he disappeared behind a clump of islanded mounds just off the main woods of the riparian sections. A moment or so later there bit across the sands a nasty whip from the automatic—a pause—then a second spiteful crack. At the second report four great birds rose in the hazy, pink sun-mist and whirled high out toward me. A storm of shots followed them and one faltered in flight and almost collapsed. But, circling far beyond even the killing range of my ten, they swung away and sank, mere specks, into the depths of the forest. Just my luck, for I knew only too well that Horace had stumbled into a bunch of wild turkeys. And so it proved when he returned that forenoon, very doleful, to tell how he walked up within sixty feet of them and had two ground shots at a fine gobbler.

I had a royal shoot that morning. Two flocks came up the bar soon after Horace's adventure with the turkeys. One of the gangs decoyed beautifully and left

HORACE "HAD HIM ER CATFISH FIAH"

three victims weltering on the sand; another, a trifle more leery, dropped a pair, stricken by the Swamp Angel. Hardly had the last group taken a disorganized departure when from the direction of the river came the "putt-putt-putt" of a motorboat. Soon I made out a long, low-waisted craft cut in from the Mississippi side and disappear under the bluff a mile below me. Two men emerged before long, and as they made their way toward my district I could hear them passing surmise as to my identity and remarking my use of live decoys. When they came up I found them fellows of about my age, well gotten up as to outfit, and packing two of the strangest-looking guns it has ever been my lot to behold. They were twelve-gauge automatics, evidently with extension magazines. Over the forward tube of the barrel and magazine was chamois skin, glued and wrapped not unlike the handle of a golf club. The chamois disappeared into a casing of well-soldered tin, which extended clear back over the entire metalwork of their guns, ending in a neat job around the pistol grip. There was a small shifting aperture for loading and another for the extractor to discharge. They were the most deadly, bunglesome, hideous-looking coffee-mills I ever saw—but, from their owners' point of view, evidently treasures and objects of pride. It seemed that my two visitors were nomad pothunters—they confessed as much, pointing to their tent across the river and explaining casually their methods of rounding up the river duck-rafts and pouring leaden hail into them. From a pit, not fifty yards from mine and cleverly sunk flush with the sand and neatly lined with tarpaper, they hauled a bundle of tin profiles. We chatted for quite a while before they very courteously shouldered their duds and went off up the bar a mile or so. They told me, among other things, how they frequently killed twelve and fifteen geese from a flock; how they drifted down and ofttimes disposed of their kill under cover of night. Maybe they took me for one of their brotherhood, I don't know. Later on I found that I had spent the morning with two of the worst game pirates in the business, and I know that if the efforts of a certain warden are successful that next fall will find that pair going shy on that beat.

By noon four flocks had passed my way. I made a hideous mess of one, much to Horace's dismay, for that luckless turkey-misser had returned and hidden himself not far from the scene of operations. From two other flocks I cut a pair each. But with all the fun, however, I was lonesome. My friends the pothunters repassed with a burden of six geese, and their going was the last straw. I summoned Horace, we tied the dead birds into a spare sack, harnessed ourselves into a team with a stout cord and a willow breast-strap, and towed them across the bar. Try that method some time—if you have a heavy load.

We went upstream a good way, then shot across into the smooth back eddies of my comrades' bar. We took our time, hitting the long, easy back-swing of the river stroke, with its quick catch and recover. We hid the boat and walked to where my comrades stood pitted. They had six dead birds, and one big lunker with a single shot through and through

his skull. He had been standing, apparently stunned, since early morning, and the tender-hearted Gunman was doing all in his power with cold-water applications to keep him alive. I am glad to state, too, that this attention kept "Gink" with us for life—for he recovered. Late afternoon saw the old skiff poled off, drifting beneath the night flight. We put up flights of protesting mallards, we cried out at darting bands of teal that streamed away to inland marshes.

"Boys," hailed Mr. Williams, as our skiff, whirling g e n t l y down-current, bumped unjarringly against his tub fishing barge, "slow down; I got sumpthin' for ye." He arose from his task of netting fish from his trot-lines and piked toward the stern. Into an accumulation of water-wash he delved a cautious hand and came up holding a wide-mouthed blue channel cat of about eight pounds.

"You-all like cat?" he queried. "'R would ye ruther hav' sturgeon? Got 'em both. Some laks one, some t'other. I ain' got no pref'rence pussonally. I'm a hell uv er fish-eater an' I lak 'em all!"

"Do we like cat?" yelled the Gunman. "Does a houn' puppy love to chase rabbits?"

"They tell me sturgeon's mighty fine," objected Fat Boy, tentatively intervening while Mr. Williams stood hesitatingly with the clammy prospect held on high. Horace could stand the agony no longer.

"Thro' dat catfeesh on in de bote, Mistah Williams, pleese, suh—thro' him right on in de bote, quick! Lawdy, gent'muns, yo'-all ain't figuratin' on bringin' 'bout no argymint t'wixt dem feesh. I know Mistah Nash laks dat dev'lish stug'gon, but, gent'muns, I'se yo'-alls' cook an' I'm er nigger, an' dat yon'ner's er ole catfeesh. Thro' him on de bote, Mistah Williams."

At this appeal in thudded B'rer Catfish, and, after making over him considerably, Horace was persuaded to land with our prize. The wretched cat having been duly slain, his preparation, or rather obsequies, under the personal supervision of Chef Horace was a work of art. The great gaping head was detached and saved for a delectable nigger dish of catfish head soup. The hide was next marked off into

"STEP LIGHT, GANDERS!"

sections and stripped away with a pair of pliers. Particular pains surrounded the making of a fire, and, upon being questioned as to why the precautions and peculiar build, Horace explained that "whin he cooked er cat he sho' had to have 'im er catfeesh fiah!" The steaks were rolled in meal and dropped into deep boiling lard. Then Horace, armed with a long prong, mounted guard over his treasure, and before long we lined up at a feast. Mr. Williams came up as our guest and established himself as a dangerous factor in the race for eating honors of the trip. To Assistant Ed, summoned by 'phone from the club, Horace turned over our geese, with instructions that they be put on ice.

I think that one remembers with more pleasure than all else the last night of the camp hunt. To the fireside come happy incidents of the treasure days just passed—fleeting moments, random pleasantries, deeds of prowess, mole-hill dangers that loomed mountainous in the imagination of the moment. Fresh logs

DOWN THE OLE MISSISSIP' WITH OUR PLUNDER

are heaped upon the lagging blaze; comrade faces light in fitful accord of more deeply cemented friendship; a veil of tangy, shifting smoke, strung with spark showers, is swept into the night spaces. Comes again the sounding flight call, sonorous challenge, belling overhead—lost in the distance. Each story-teller swings to the points of a well-beloved compass; each listener conjuring hard-luck fancies and joys that were his. We ranged across moose bogs and caribou barren; we clambered up saw-toothed rim rocks, we still-hunted through trackless swamps, and cast lures into well-remembered pools of memory. But to all such came a time when Sleep, settling upon the ambition of our camp-fire, reached past the barrier of alluring reminiscence; when Silence, that latent forerunner of the Sand Man, wafted tentacles into our midst and drew us with increasing power, weary limbs, tired but happy hearts and all, into the Land of Nod.

"Horace," yawned the Gunman, as that ebony jewel, seated comfortably upon his cot-side, was in the act of shedding his brogans, "Horace, suppose that during the night—to-night, we'll say—you were awakened by a deep growl, and, looking up, you saw a great big, hungry bear with one foot on your bed, the other on your bosom, and his teeth all set to chaw you. what would you do?"

The darkey's eyes, stabbed with the shock of dream-ridden suggestion, absorbed the fearsome query in bulging bulbs of increasing whiteness. They rolled first over one shoulder, out across the prohibitive silvered river width, back again in furtive calculation of the jungle's yawning gloom, up and down the mast-like trees. Then—

"You mean, suh, whut would I do ef I woke up an' seen er ole he-bear stannin' up ovah me wid one foot in mah ches' an' fixin' t' bite——?"

"I mean any kind of a bear. I've heard that the female of the species is more deadly than the male, anyhow!"

"Yes, suh; yes, suh; you's right, dey is. I knows—look at Molly. You mean whut else would I do 'sides sweat?"

"Yep!"

Deep cogitation.

"Well, boss, I doan know jes' 'zactly, but I guess 'long as you done tho'd dat bear right in my bosom, an' he done got dat close to me—he could des go right on an' have dis nigger!"

And there ended the duties of the "wavy" reception committee!

THEY'RE RIGHT DOWN IN FRONT OF YOU!

QUAIL SHOOTING IN THE GAME-COCK STATE

BY WARREN H. MILLER

II

THE Banker left next morning and the Live One and I were thrown into each other's arms, so to speak. We made a fine pair of partners, for he is an ardent soul, always eager for more game, sparing himself not at all; a bearcat of a hunter, the kind that gets all the "luck," which is another name for good judgment and hard work. I try to live up to those specifications myself, and between us we wore out two pairs of breeches and put two pairs of cruiser moccasins on the fritz. Tad was given the cameras and game sacks and together we sallied forth. We made a great team, for we were both shooting pretty well by this time and we knew the ropes thoroughly so that we could do the kind of thorough hunting that puts up game in the most unlikely places and combs the territory completely. To say that this day was a repetition of the others would be to give the wrong impression. No day is like any other in quail shooting, even if the same ground be hunted over, for never do you reproduce conditions as before. This day I walked right through a bevy of thirty quail without any of the little devils jumping; a feat that I would not have believed possible. Old Jack was on point, 'way up the hillside and he was aimed in a line traversing the ground I had just walked over. Limpy Jim was backing him, a specialty of his, and, as neither dog was at all reliable we were going on without

LUNCH AT THE LOWER PLANTATION

honoring the point when Flip of the Agile Heels came galloping down the hill. She shouldered Jack out of the way and stole his point, as was her unladylike custom, and came to a dead stop not fifteen feet behind where I had just been. We could pass up Jack, and Limpy Jim was never taken seriously, but to treat Flip-dog's point unceremoniously was not to be thought of, so I whistled the others over and we crept up. Then—*Whirrrrr!!!*—thirty of them! and *Bang! Bang! Bam!! Pow!!* went the guns and One Quail fell! They took us by surprise a whole lot, and besides only had forty feet to go for the timber. Both the Live One and I were shooting full-choked twelves, a big handicap in this country, for the birds lie close right near the thickets and you want a medium choke for at least the right barrel. We got three more out of another bevy which got up a reasonable distance away from us, and then home, and, after luncheon, on mule back to the West Plantation. The Live One and his wife went in a two-wheel cart while I drew Ella for a remount. Ella looked me over aggressively, and when I gave her the Western High Sign and proceeded to manhandle her about, she raised a hind hoof suggestively. I wasn't sure whether I was too proud to fight or had better just recall my ambassador and sever diplomatic relations, but I finally led her over to a stump and did a Von Hindenburg up on her back. Taken away by the suddenness of my attack Ella fought a rear-guard action for some time, but finally cranked up and set sails for the two-wheel cart, now far over the fields. The girls were on horseback and all sitting a most correct riding-school seat, so that when Ella hove over the horizon with me bobbing up and down on her spine and trying to hold up a heavy shell vest off the saddle and at the same time trying to look dignified, the crowd exploded. J. Gilpin had nothing on me, or Ella either, for that matter! Luckily for me she took up a strategic position to the rear of the cart and so long as the Live One did not whip up his nag I had a reasonably comfortable time on Ella.

We now had four dogs and whenever one of them found scent there was as pretty a roading and game-making as any hunter could desire. We all shot well and the girls got in with their twenty-gauges so that there was some lively cannonading when the birds deigned to rise. The Doc got out after business hours and joined us, arranging that evening for a big barn dance at the mill to be held the following night. Then, after an evening with us around the Lodge fire, the good Doctor gathered up his six feet three of generous hospitality and called for his car. He is never more completely in his element than when five or six adoring darkeys are fussing over him. Scene of the Doctor getting under way for Columbia:

"Mose!"—

"Yes, massah"—

"Fill mah radiator.—Bella!"

"Yes, massah"—

"Fetch meh some gas out'n th' sto'."—Tawm!"

"Yes, massah"—

"He'p me awn with these dashed overcoats.—Tad!"

"Yes, massah"—

"Git mah chicken."

The fowl is brought, muffled in a crocus sack and uttering indignant cackles. He is stowed away under the seat and the Doctor tucks himself into the dark recesses of the car. "George!"

"Yes, massah—" says the eager George, who so far has not had a chance to do anything.

"Light mah haid lights.—Robert!" (Our chef—none better on God's footstool.)

"Yes, massah—"

"Crank mah car.—Good bye, you-all," and waving a hand off the steering wheel the Doctor dashes out into the night, winging a tree or two and ripping off a fence rail from the pond fence as he turns into the main road.

Well, where was I, anyway, when I got into that aside? Oh, yes, we had said good-night to the Doctor and there was nothing to do till to-morrow. I went out and lit the camp-fire while the others started another game of bridge. Flip found it too exciting up at the lodge, so she came down to my tent and stretched herself before the grateful fire. She had been one busy little puppy and had won most of the points that day, besides being cold and wet and tired, and that fire looked good to her.

A Tent, pitched 'neath the Piney Bough,
A book of verse, a cheerful fire, and thou,
Flip-dog, beside me hanging up to dry—
Oh, Wilderness were paradise enow!

To paraphrase Omar! As the flames died down, the raptured Flip curled up, until, in the gray of the next morning, I found her, a little furry ball, snugged up against the outside of my sleeping bag. She never missed a night in the tent after that.

After the barn dance we had the Hunt of the Hangover Headache. Tom unearthed a rabbit dog from somewhere and we all set out into new country across the swamp and river bottom overlooked by my tent. This was all wet, low, thickety ground and the dog was not slow in getting up a rabbit. I penetrated in to where the row was going on and came to a piney grove full of game trails and runways. There were fresh coon tracks in them, made the night before by "ole tiger coons" that would go seventeen pounds. I wanted to see more of it, but just then along came bunny and he got his. The Live One and I pitched into the cane alongside the swamp and routed out four or five cocks, three of which we got, and finally a long, queer, rakish bird rose out of the pond and was bowled over by the Live One's ready gun. He turned out to be a clapper rail. He with another rabbit ended the bag for the Hunt of the

FLIP OF THE AGILE HEELS ON POINT—JIM BACKING

"VENISON" IN CAMP!

Hangover Headache; ended the headache too, for that matter, for they cannot last long against plenty of outdoor exercise and the excitement of a good hunt.

Three o'clock next morning the whole party was up and dressed for the Big Day, a hunt in the lower plantation, fifteen miles away. A straw wagon, with Ella and Sady as motive power and Tad and Mose as Chorus, furnished the transportation. We all tucked ourselves comfortably away and started off along the ghostly roads. Tad and Mose always sang when driving at night to keep away the "ha'nts" and we had no difficulty to get them to do so now. Both had sweet voices and both knew all the old plantation songs that somehow never get into score. They could syncopate them and rag them and together would make a fortune on any stage as a buck nigger team.

By sunup we made the outskirts of the lower plantation and turned out the dogs. The frost was thick on the ground and the quail lay close. We left the girls playing bridge in the cart to tramp through wet frosty brown grass up to your thighs. Presently the dogs came to a stand and the game was on again. *Briffff!!!* a big bevy got up and we knocked down one each. Then after the scattering birds, of which we got three more, and back in the wagon to the lower cabins.

Tad knew every mammy in these cabins and always passed the time of day with them when a woolly head would stick out, puffing the inevitable pipe.

"How is yer dis mawnin', Tad?"

"Oh, ma'am, Ah's feelin' no 'count. An' how is you-all a-feelin'?"

"Po'rly, thank you—Po'rly!"

This was the invariable salutation—except *this* morning when Tad had had a Bottle to "keep off de ha'nts." This morning, at the first cabin Tad was feeling "no 'count," as usual, and, reflecting upon this circumstance, he had recourse to the Bottle to revive his low spirits. At the next cabin he was "Feelin' tol'able," and at the next, after more Bottle, he was "Feelin' right sma'ht," and after the Bottle was empty he told the next mammy "Yas'm Aunty, Ah's feelin' des lak de top ob de mawnin'!"

Be that as it may, we got into wonderful quail country. The Live One and I had a great day. We were both shooting fine and there was no end to our capacity for hard driving. Jack came to one of his far-off points, due to his excellent nose, and after working up a long distance with Flip leading the van and even Limpy Jim on a point of his own we rose the biggest bevy it has ever been my good fortune to see. There must have been at least fifty quail in that bevy. The air was full of them and they separated into two flocks, both of which we marked down and walked up, getting the finest shooting in "ole fiel' pine" that you ever saw. The day wore on with incident after incident; here we stepped into a sudden single at which the Live One blazed away with both barrels not touching a feather, which feat caused him as much physical pain and poignant regret as overlooking a good bet on the stock exchange. He kept referring to it again and again throughout the day. "Damme, Cap, I jes' *got* to get my time slower! Shot too quick—I'm always doing it," and so on, belaboring himself until

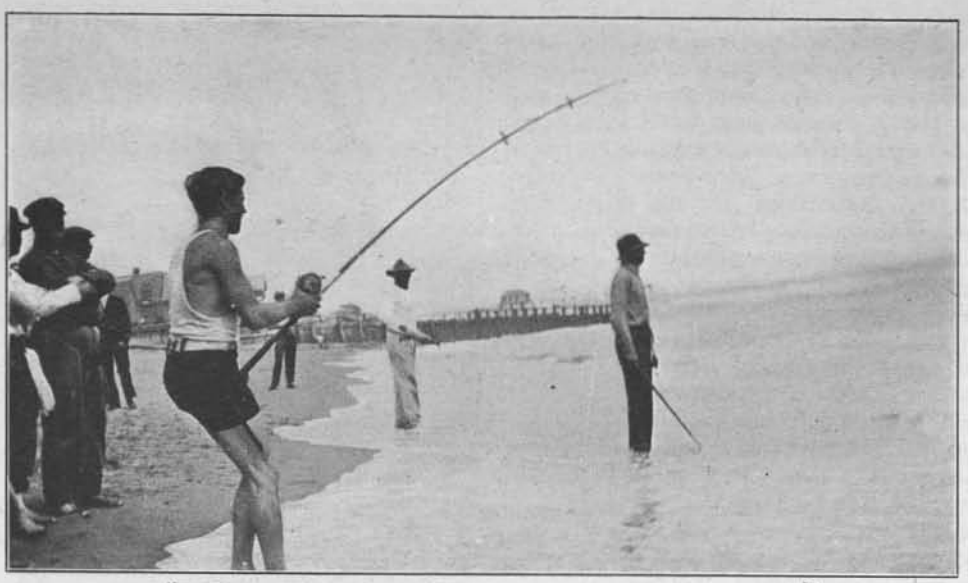
a nice double restored his equanimity again. Side by side, we worked the whole plantation, now and then doubling on the same bird, and together we had a great day. The cotton fields still lacked their third picking, owing to slackness caused by the war, and they were white under the warm December sun. The lack of a killing frost made the single bird shooting difficult and erratic in the extreme, for there was just grass scent enough left to kill the scent of singles and more than once we marked down a single perfectly, only to walk right over him—men, dogs and equestriennes—kill a rabbit right where he was sitting, and finally have him jump just when nobody was expecting him to ever come to light again.

WATCHING THE GUNS

Evening drew on. The South rested from her labors of planting corn and wheat against the world demand for 1915, and each unpainted brown hovel saw its returning darkies, hoe on shoulder and song on lips. In the gloaming Flip treated us to the most perfect point of the whole trip. Ranging along a hillside with quivering muzzle excitedly testing the air she was making game strong, now and then crouching to a half point, again galloping fast upwind. Suddenly in mid-gallop she froze to a canine statue while Jack and Jim honored her point. But we had no eyes for them, just for that one wonderful doggie of the Doctor's showing anew the miracle of her instincts, that marvelous nose and nerve system that could instantly arrest every muscle upon the sudden invisible scent of quail. And she did not stop a yard too soon, for, as we drew up, the covey rose right under her nose and we took toll, the last quail of the day and the last shots of the trip. For we had had a week of quail and cock shooting in the Game-Cock state, as pleasant a week with dog and gun as it is possible for any sportsman to experience, and the train to bear us up North was waiting.

Before we went I gave Tad his heart's desire, an Airedale puppy which Tad proposes to cross on his hounds; and one of the girls gave Tad's daughter *her* heart's desire, a certain black-and-white-checked pair of riding breeches that had been much in evidence throughout the trip. Said Bella, viewing the gift with strong disapproval, "Da's all right, Matilda, yo'-all kin hab dem britches; but ef Ah catches you a-wearin' em, Ah sure gwi' bresh off yo' haid wif dis-yeah flatiron!"

"Well, so-long, Doc. Send up a setting of those game chick eggs, and I'll surely corrupt the grand old state of South Jersey with them!" And so we left him, waving us good-bye from the station platform, the most generous, hospitable and open-hearted host and the best all-around sportsman it has ever been our pleasure to shoot with in the Sunny South. Prince of good fellows!—it is not often that one has a whole plantation, automobiles, negroes, carts, horses, dogs, and houses turned upside down for the comfort and enjoyment of one's party as guests; all out of the boundless hospitality which is part and parcel of the Doctor's make-up.



"WELL, THE OLD BOY WAS A SELF-STARTER—SURE ENOUGH!"

TAKING THE RECORD SHARK ON ROD AND LINE

By T. H. BERINGER

CHARLIE WHITE, captain of Life Saving Station No. 6, situated at the foot of Takanassee Lake, N. J., cast his line into the surf and waited developments. This was in the first part of August and the Captain had not forgotten the 45-pound striped bass he had hooked and landed at this identical spot the month previous. Perhaps he might have been reminiscing over that very event when—Zing!—Swish!—and the Captain was ruefully regarding his two thoroughly scorched thumb-tips, and all that remained of his original tackle.

"Some bass, that!" thought the jovial Cap, as he rigged up a new outfit and went to it again. This time he climbed upon the jetty which covers the Takanassee Lake flume, hoping he would be fortunate enough to again hook into what he thought was a big old "he striper." Safely ensconced upon the piling, the Captain turned his attention to something which he now saw approaching over the sand dunes. Surely it is some sort of sea bug; but what species could so resemble a human being in exterior appearance and stature? With bated breath (not hook) he watched its crab-like approach until it resolved itself into the greatest salt-water "fish bug" that ever trod the sandy wastes of the Atlantic—the same being none other than the redoubtable Hartie Phillips, press agent for the Asbury Park Fishing Club and poet laureate on subjects piscatorial. The Captain displayed his blistered thumbs and was relating his experience when he was literally lifted to his feet by the violence of another strike. Now, as everyone knows, most seafaring men are built broad across the beam, and Capt. Charlie White is a seafaring man if there ever was one. Around 200 pounds he weighs, and the fish that can jar him loose from a jetty must carry some punch! The Captain put on as much pressure as his outfit and sore thumbs would permit, but he might just as well have tried to

stop a submarine. The fish left a short line (the Cap won't laugh at this pun) which said: "I have been—and went."

Charlie scratched his chin and looked at Hartie. Hartie scratched his head and looked back at the Cap. Then the big idea hit them simultaneously.

"By George—they're sharks!" they exploded. Why, of course! That was the solution. The Life Saving Station is situated alongside of a pound fishery. The offal from each day's catch is cast into the sea, and it is this offal that had attracted these sea scavengers and brought them close inshore.

What a find! Here, within two miles of the Asbury Park Fishing Club headquarters was to be had fishing, right from the beach, for man-eating, blue-nose sharks! Hartie quickly communicated the good news to the boys (leave it to Hartie for that!), and they were soon on the trail of these deep-sea body snatchers. So they fared forth, led by Frank Ernst, Hartie and big Ed. Davis (winner of last year's striped bass prize), and their success was unlimited. That is, their success in receiving "strikes" and "hanging" their fish was unlimited—but beaching them, Ah, that is different! Let me describe one "catch," which will be characteristic of the first eighteen. Hartie gets a strike, sets his hook and cries, "Watch him go, boys!" and go he does—also 600 feet of Hartie's line.

Finally the redoubtable Frank "hangs into" a 130-pounder, and after a battle enduring one hour, brings him to gaff. The club prize for the largest fish caught, edible or otherwise, consists of a pair of hip-boots, and Frank is just about to inform the prize committee what size his feet are, when Jack Clayton succeeded in capturing one weighing 140 pounds, after an argument lasting one hour and thirty minutes.

Up to this time the only intimation I had of all this was what I read in the local newspaper. However, I did not give the matter any serious thought until Saturday morning, August 7, when the irrepressible Hartie suddenly appeared before my window in the Seacoast National Bank and handed out as vivid a description of what it meant to hook into a man-eater as

"EVERY MUSCLE TENSED"

only he knows how. Before he was half through I was paying out 20-dollar bills in mistake for ones and had accepted his proposition to accompany him and some of the boys on the following morning. He immediately ducked around the corner into the tackle store, and returned with a couple of proper tackles, which he shoved through the window to me. Upon opening them I found each to consist of two 4-foot lengths of piano wire joined together by a three-way swivel in the center; a barrel swivel where it attaches to the line, and a 10/0 hook fastened through the eye at the business end.

"Why not one piece of wire 8 feet long?" you ask.

Because you could not cast from the beach with an 8-foot leader used in the regular manner. In this case the 4-oz. pyramid sinker is fastened to the three-way central swivel, then add to this the bait, consisting of a small herring or one-half a moss-bunker, and you will have trouble enough to cast 200 feet.

As per arrangement, Hartie called for me at nine o'clock Sunday morning, and in a short time we were putting our outfits

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"WE GERMANS ARE STRONG ON THIS UNDERWATER STUFF"

together at the scene of the conflict. While thus busily engaged, the rest of the old salts began to arrive. The tide was about one hour past the ebb and soon all hands were heaving the moss-bunkers seaward to the best of their respective abilities. Just as I had completed tying on half a moss-bunker with No. 30 cotton thread there was a disturbance in the immediate vicinity occupied by Fred Fech. It was soon over, and Fred's face wore a bewildered look as he dangled his broken line in his fingers.

"A donkey engine and hawser is all you want for those babies," remarked Fred. "I'm through till properly outfitted." Being in a bathing suit, I immediately waded out on the bar 60 or 70 feet in the direction where Fred had "got his," then, the water being nearly shoulder deep, I made my cast and returned to the sand. In about ten minutes there was a sudden easing up on my line which put me on the alert. I had sensed rather than felt that there were "breakers ahead," so I dug in my heels and set the hook in a manner calculated to make it stay put.

Well, the old boy was a self-starter, sure enough! Right out of the water, exactly like a fresh-water black bass, he came, and then with a splurge that could be heard around the world he started straight to sea.

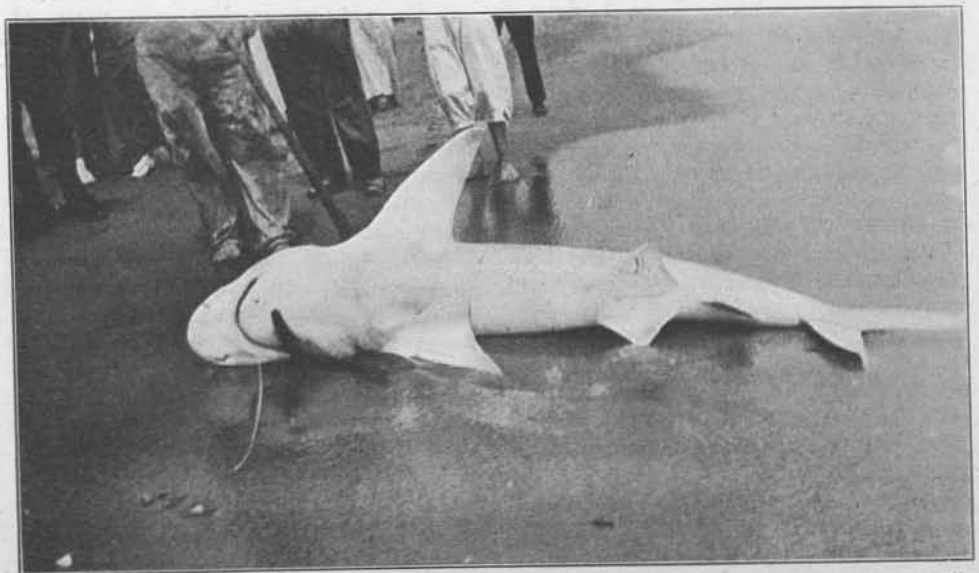
So did I. My reel contained 800 feet of 12-thread special line at the start—remember I said start—and although I had both thumbs jammed down from the outset as hard as the tackle would stand, it looked as though no human agency could stop him this side of the war zone. My right thumb was wound with several layers of adhesive plaster, which was burned through in a flash, and the smoke began to arise from my thumb tips. Naturally I was propelled forward toward the surf and soon found myself waist deep therein, where Frank Ernst waded out and shoved a cord thumb protector on my right thumb. Frank advised staying in the surf—good advice inasmuch as I had succeeded, by this time, in slowing down the natural-born submarine into which I had hooked. It was no time to rest, however, for there remained upon my reel but 150 feet of line. Putting on every ounce of pressure I dared, I made futile efforts to regain at

least a few feet of line, but the best I could do was a stand-off. The sea-tiger was now swimming up and down the coast, about 650 feet from shore, and if by strenuous efforts I was fortunate enough to gain a few turns on the reel handle, he would retaliate by making said handle beat a merry tattoo on my already bruised and bleeding knuckles. Firmly braced and with every muscle in my body highly tensed, we fought on. My throat was parched, and my breath coming in short gasps. Despite the wetting in the cool ocean, streams of perspiration rolled off me. My right arm and thumb were fast becoming too numb to use the reel effectively. It looked as though the fish was going to win, after all. Then someone was kind enough to suggest giving me some water with a little whiskey in it. I croaked at them to make it whiskey with a little water in it, which was forthwith poured into me and the fight went merrily on.

Slowly, so slowly as to be almost imperceptible, the fish was being brought nearer the shore. Surely he could not be over 400 feet out now. Suddenly a shout arose from the crowd. The man-eater had risen to the surface, his dorsal fin cleaving the water like the periscope of a submarine. Never will I forget how I felt at that sight. North he started until the strain of the slender 12-thread line proved too much for his waning strength and he was forced to an unwilling turn. A quick dash to the south was frustrated in a like manner and again he was forced to turn. Several repetitions of those dashes up and down the coast were successfully met with ever-increasing gain on my part at every turn, until, with a sudden change in tactics, he made directly for me. Not to be out-generaled at this late stage, however, I ran rapidly backwards, reeling as I ran, and was thus enabled to keep the line taut. This latter move of the fish hastened his end somewhat, for in a few minutes more I had him well in the undertow, a badly beaten fish.

Carefully now—no undue haste! Frank is manipulating the gaff—a favorable wave, a lightning quick stroke of the gaff, and the Takanassee tiger is flopping and snapping in the center of a ring of spectators and fellow fishermen—forty-seven minutes after the "strike."

Quickly we load him onto the running board of our car and start in triumph for the Fishing Club, there to weigh him in on the official scales. One inch over 7 feet in length, 3½ feet in girth, and, when placed on the scales, he shoved the dial around to the 155-pound mark—15 pounds more than I weigh myself!



"7 FEET 1 INCH AND 155 POUNDS—FIFTEEN POUNDS MORE THAN HIS CONQUEROR"

COACHING THE WINGSHOT

BY CHAS. ASKINS

IV

"BEFORE our English class in American wing-shooting begins experimental work to-day, I have decided to give a lecture on the art, science, or practice of 'shooting a-flying,' paying especial attention to mechanical execution."

So began I as I lighted my pipe after a good breakfast on the first sausage of the season, while J-C stretched his long legs luxuriously before the crackling wood fire in our room, for it was a frosty morning.

"Lecturing suits me," announced J-C with great satisfaction. "Make it a hummer, Coach—last clear till noon. I feel shot out. I'd miss the barn."

"Might be something in that, son. I have known a willing horse hurt before now because of not being given a day's rest just when the skin on his back was beginning to wear through. Now pay attention. Of course, you won't remember it all, maybe none of it, but delivering this lecture is a part of my professional duty, and others will follow from time to time. That's it, Jim; fire up for us and then get out and give those dogs a run.

"Wing-shooting might arbitrarily be divided into three parts—the mechanical, the scientific, and the psychological. Up to the present we have been concerned with the mechanical mostly, but by and by we will see where mathematics takes a hand, and in the end you will learn for yourself that you are to become a good shot, a fair shot, or a poor shot, according to your mental make-up and nervous organization. This cannot be demonstrated so well now as it can later, when you have really learned *how* to shoot, yet may not be able to turn knowledge into action for lack of self-control, self-confidence, concentration, or like reason. Psychologically I am considerably encouraged concerning you, J-C, for the reason that college must have given you some little mental discipline, while athletics surely have done you a good turn by insuring your physical training and furthering mental, physical and nerve control. The principles of sport are the same, whatever the game may be, always including self-control and nerve control under excitement, and the more expert we may be at one description of sport the more readily we pick up the next thing we tackle.

"We have been trying for mechanical facility in handling a gun, because mechanical skill enters into every trade that man has learned or followed since the world began. Yet mechanical perfection has never been attained in the very simplest performance, and never will be—it is not in human nature. I doubt, either, if there is any such thing as mechanical perfection in the performances of the lower animals. We are accustomed to saying that those animals or birds which do things instinctively make no mistakes, yet never were two birds' nests built precisely alike, and the one was better than the other and the best might have been improved upon. Only an inanimate machine can turn out its work with mechanical regularity, and hence the ideal of mechanical execution in wing-shooting is

to handle the gun like a shooting machine.

"In human beings, mechanical ability varies more, perhaps, than any other quality. Nature has given some men a mechanical turn, so that with little training they can perform mechanical feats which are impossible to other men with any amount of training. But no man ever becomes absolutely perfect in any performance demanding physical and mental effort. No man ever made two strides which were precisely the same length, ever formed two letters which were of precisely the same shape, ever struck the keys of a typewriter with precisely the same force, ever played a tune the second time precisely as he played it the first—yet he can, given the necessary amount of training, be it less or more, perform a given task with such accuracy that *results* are perfect. For example, we aim at a flying bird, and, while our aim is not perfect, as witness we should be sure to miss him with a rifle ball, yet we place our ten-inch pattern on him and as a result he is as dead as though struck by a cannon shot. The mechanical ideal of the rifleman is the finest possible accuracy of aim, to be obtained regardless of the time consumed; that of the wingshot is the utmost regularity, combined with accuracy sufficient to give perfect results with his weapon, and, unlike the rifleman, time is to him of maximum importance.

"That no man ever reaches mechanical perfection is proved by the rifleman. Aiming an accurate rifle offhand, so that the bullet will strike a half-inch circle at seventy-five feet, is a simple mechanical problem. The rifleman holds his sights on the black, presses the trigger, and the bullet goes home. The feat is so simple that never a rifleshot but has accomplished it; some men have repeated the performance ten times in succession; yet no man ever lived or ever will live who can place all his bullets in that black.

"Analogous to the rifleman who knows perfectly how to 'pull' a bull's-eye yet cannot invariably do so is the clay-bird shot who knows to the fraction of an inch where he should hold, whose every gun-movement has been studied, analyzed and systematized, who is, in fact, the finest mechanical human machine that man has ever been able to develop himself into; yet he misses. Old Human Nature now and then—very seldom, I must admit—takes a fall out of him.

"The field-shot's ideal or standard of perfection is, of course, the same as that of the trap-shot: one hundred straight—in other words, all of them—and that he can by no means approach the trap-shooter in percentage of kills is due as much to the superior mechanics demanded of him as to any other one thing. The mechanical factors which enter into the problem which the trap-shooter has to solve are fewer and simpler than those which confront the field- or the duck-shot.

"The field-shot is often walking about when his bird is sprung, perhaps with his back to it; his gun possibly on his shoulder or across his arm. He must then place his feet in proper position, poise his body, grasp his piece in a precise way, with hands exactly where they should be, not varying an iota; his cheek must then go to the comb like a wheel into its cog, and his butt must *hit* his shoulder, not be adjusted to it, neither too high nor too low on the shoulder muscles; his hands must grip with uniform force, not clinched into the wood with one shot and barely retaining the gun with the next; and, lastly, after all this is well accomplished, he may still have to 'bring off' a long, highly governed, difficult swing ere he can cover the mark, pull trigger and 'carry through' ready for the second barrel. Contrast this with the work of the trap-shooter, whose feet are placed with great care previous to calling 'Pull!' whose body is balanced like a druggist's scale, whose cheek is glued to the wood and adjusted there with conscientious forethought, and who has a very slight and very simple gun-movement to make in covering his bird. Nevertheless, the trap-shooter misses sometimes, and the field-shot is going to miss oftener than sometimes. I have been pounding you through mechanically, son, because later, when I tell you where to hold for any given shot, I want you to hold right there and nowhere else. It is the commonest thing in the world for a man to fool himself into the belief that he hasn't made the right calculation for lead, when the whole trouble lay in his not having been

able to place his charge where he meant it to go. It doesn't matter the game, from clays to geese, when experience has taught us where to hold; about nine-tenths of our misses are to be ascribed to a failure in mechanical execution.

"My observation has it that sixty per cent on quail or snipe is equal to ninety per cent at the trap, and seventy per cent afield equals ninety-five to ninety-seven at the traps. Of course, other factors as well as mechanics have a bearing on this difference in the standard of excellence on game or clay birds, but I wish to thoroughly impress you with the fact that there is no such thing as steady, high-class work afield except it is accompanied with beautiful mechanical execution. Never was a man who shot so well that he didn't go 'off form' now and then, and, believe me, this loss of form is due entirely to a failure in mechanics, for undoubtedly the man knew where to hold just as well as he ever did.

"One advantage the field-shot has over his comrade of the traps, and that is width of pattern. The trap-shot has a small mark, taken at a fairly long range, and he must have a close-shooting gun; on the other hand, the field-shot, particularly when bob-white shooting, gets many chances under thirty yards, and, since his mark is a trifle larger than the 'sailing saucer,' he can effectually use a gun with a wider spread. No man has enough mechanical skill to place a bullet on his mark, either in the case of quail or clays, and few could hit either bird with a four-inch pattern at twenty-five yards. Many would land pretty frequently were the spread eight inches when shooting live birds, and the trap expert might think this pattern just offset his skill. Doubling that spread, now having sixteen inches, and the trap-shot is exactly suited; a crack wildfowl-shot can use that pattern, too, but it is too narrow for the mechanical skill of the man who must take a tricky, dodging mark or do a part of his work in cover. Your Parker has about that pattern, and I am having you use it because it is the proper thing with which to develop mechanical skill. Later, when you change to a gun with a wider spread, you will surprise yourself at the way your field percentage will climb; but thereafter you wouldn't improve much in mechanics any more. Eventually there comes a time when a man regulates his spread of pattern by the skill he has been able to develop, but when in so doing he chooses a gun with a wide spread it is equivalent to admitting that he has lost ambition to excel as a wing-shot; he has reached his limitations and his limitations are far short of superiority.

"Now, permit me to digress a bit for a word on the ethics of wing-shooting. There is nothing whatever in killing a little bird in the air, any more than there is on the ground, except the very human pleasure we take in exercising a skill which we have developed by hard and intelligent effort. If we shoot a pattern so wide—as witness the Captain's gun—that no skill whatever is demanded in order to kill, then we are pot-shooting our birds in the air, and nothing short of that. The man who insists on a forty-inch spread at twenty-five yards, or a thirty-inch either, granted he knows how to shoot and is shooting such a gun purely to insure and guarantee a kill, is a pot-hunter from his hair to his heels. The man who admittedly doesn't know how to shoot, and who admittedly never expects to learn, might be forgiven for using any sort of a gun.

"We will now inquire wherein faulty mechanics often betray us. The man who sees a bird going straight away and in attempting to shoot directly at it fires far enough to one side to miss, lacked mechanical ability to shoot. If the bird were crossing the gun, and the marksman knew beyond a doubt that a lead of two feet would kill, and in attempting to secure such a lead he got a foot farther ahead than he meant to and missed, he was deficient in mechanics. If the gunner covered his first bird perfectly, yet, through his dwelling on the trigger, the bird was given time to swerve out of his course, that is another example of a lack of mechanics. On the contrary, the gun might be bearing perfectly for the mark and just before it covered said mark the trigger would be pressed prematurely—poor mechanics. Premature let-offs are the devil's own worry to many a good shot, let me add. If when making, say, a right swing after a duck the gun, instead of keeping

a true line with the fowl, has a tendency to bear downward, throwing the charge beneath, it is some more faulty mechanics. The same way on an incoming bird: the marksman may know perfectly that if he covers that bird and passes in front of it until it is hidden by the barrels, then pulls, a kill is certain, yet as he brings up his sight he notes that it is a trifle to one side of the mark, and he misses. A thousand other examples might be given, but we will cut this short now with the assertion that any miss of whatever nature, in which we knew exactly where to hold but could not point the gun there, is due entirely to poor mechanics.

"Perhaps the greatest mechanical strain on the wingshot is to keep an even swing or other gun-movement and to maintain regular time in trigger pulling. When bringing up the piece and aiming at the bird, the insistent thought in a man's mind is, that I am too slow, the bird is getting too far away, he will dash behind that tree; and then comes temptation. The temptation, when covering a bird, to *jerk* the gun on it is overpowering at times—also the temptation to yank the trigger. There are occasions when a jerked gun is demanded, when it is plainly to be seen that such is the only chance; but such occasions are rare, and if the trick is pulled off so regularly as to become a habit the marksman is in a bad way. The jerked trigger generally accompanies the blinked eyes, and a certain line of business goes with it. A man sees his mark above the tubes, jerks his gun on it, jerks the trigger, and jerks his eyes shut; when he opens them and sees the bird forty feet farther away, driving for the tall timber, he repeats the whole performance.

"All this work you have been doing has been pretty much in the nature of a drill to secure mechanical system, together with such mechanical regularity of doing things that all gun and other movements will become as nearly as possible automatic. So far as man may, we mean to make habit rise superior to nerves when the pinch comes, for the condition of our nerves is going to vary all day long, from hour to hour, while habit remains with us by the month.

"Presently we are going to continue these lessons that you have had recently, making a further advance toward perfect trigger-pulling time, and, having grounded you in that, we will go on to the matter of lead. I have been investigating the old ginhouse, and I conclude that by bringing the 12-foot flywheel into play we can time your trigger-pull to a nicety, as well as improve it in regularity. After which, by means of the 40-foot belt running from the flywheel to the horsepower, I think we can mount a running target, by the use of which my honorable English friend shall receive some lasting lessons in lead and swing. Whether we make a complete success of the running target or not depends on the mule. One mule can pull that horsepower when the machinery is detached, and if Jim can find a mule with a military stride, not too fast, I am hopeful that we get an exact definition of the speed of target and the lead necessary to strike it with fast swing, deliberate swing, and the intersecting snap-shot. I have little fear but Jim will be able to find a lazy enough mule."

"How about the scientific end of it? If science has anything to do with shooting quail instead of barns, I am strong for it," declared J-C with a yawn.

"Science has to do with the velocity of our load, its time over the course, the striking force of the shot, the rate at which the powder burns, the quickness of the powder, and even the rapidity with which the lock acts, the speed of the mark, and its angle and distance, the rate of swing, and the time of pulling the trigger and their effect on lead—of course, all with the object of making shot charge and mark connect. There are also certain optical principles of aiming, and certain other optical illusions which might be placed under the head of science. We will lecture on the scientific branch of the art as we go along and not try to work it all into one chapter."

(To be continued)

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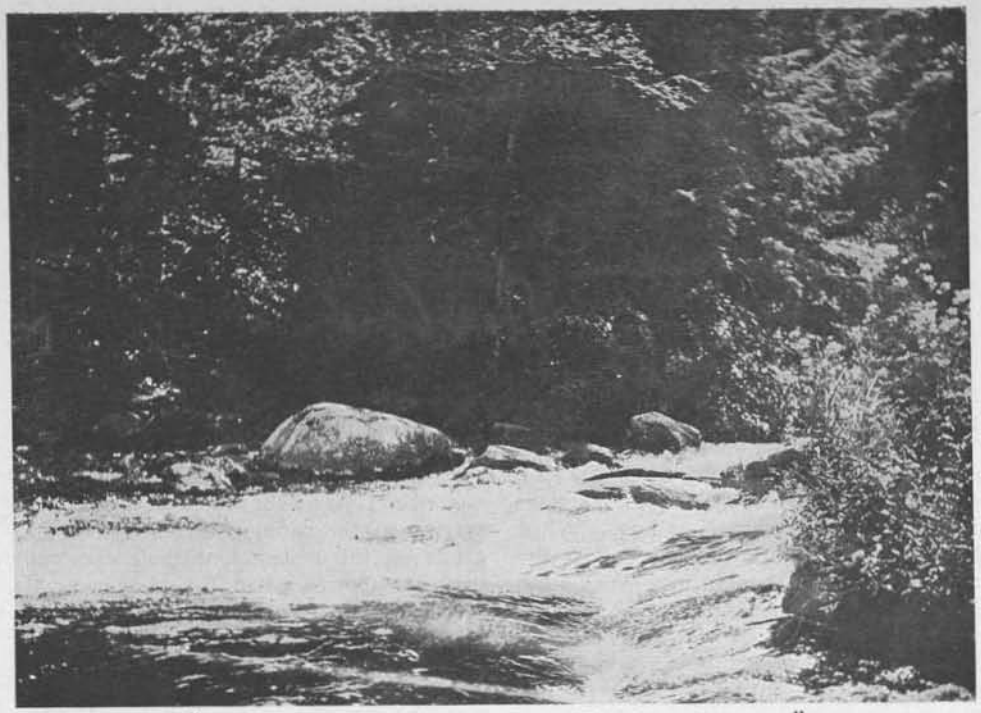

"A THREE-MILE STRETCH OF RAPIDS, EDDIES AND FALLS"

BIG TROUT ON THE OSWEGATCHIE

BY H. B. SCOTT

THE Oswegatchie River is, and always has been, a great yielder of big speckled brook trout. Those of you who have trod its wooded banks, whipped its deep pools and chafing rapids, know that this is mildly stated.

There are sixteen miles of good fishing, the best I know of in the Adirondacks. There are long stretches of still, deep water, with narrow channels, where the alders, arching from either bank, nearly meet in midstream. Here one often sees the waters roiled by the mad rush of a ravenous trout. At Sternberg's, as if it could no longer be restrained, the water dashes wildly over rocks and boulders in a three-mile stretch of beautiful rapids, swirling eddies and falls, finally resting quietly in Cranberry Lake. I have often sat at the whirlpool beneath High Falls, and seen trout weighing from three to six pounds attempt to climb them, only to be hurled back by the terrific force, to try again. Seldom will they bite when endeavoring to run these falls, although frequently, after persistent effort, they are taken here on a fly. I, myself, had the good fortune to land a 3½-pound trout at the lower pool, after a morning's session.

Cranberry Lake, into which the river flows, is fourteen miles long, fed by numerous mountain streams. This affords an excellent breeding ground for the small trout, and here they are protected. These fish are soon able to navigate the big waters of the lake, and then the fierce rapids of the Oswegatchie.

The big speckled trout are no easy prey for the fisherman. Even Reuben Wood, who spent much of his time practicing the finny art here, was not always successful, and many a fisherman has spent a week on the bank of this stream with disappointing results. One must have a knowledge of

the holes of the river and the habits of the fish. This can only be gained by numerous trips and unsuccessful attempts. The most difficult place to land a fish is on the 2½ miles of rapids before the river reaches the lake. I have had big catches, and have seen big catches made on Cranberry Lake, and many have had great luck on the still waters of the upper half of the river, but seldom is a fisherman rewarded for his efforts on the rapids. Probably 95 out of a hundred come away from them disappointed. The most propitious time is just after a heavy fall of rain. The river becomes swollen and the big fish in the lake improve the opportunity to run up these rapids which are now more easily navigated; also, food is more plentiful. Season after season I was unable to land one big trout on those rapids, but my efforts were finally rewarded.

After two days' solid rain (and it more than rains in the Adirondacks) I attempted to negotiate a fishing trip from our summer camp at Star Lake, some eight miles distant from the nearest point of the Oswegatchie. My father has fished this river for twenty years, and probably no fisherman, outside of a guide, ever took such big catches from this stream as did this experienced angler. In fact, it is to him that I owe my knowledge of fishing. Yet never, during all these twenty years, was he able to cajole one big trout to tackle his dangerous line on the rapids of the Oswegatchie. He scoffed in open ridicule at my proposed expedition.

My uncle, a man who had fished from boyhood, and who had many a time left the woodpile to steal a few casts into some shady stream, was a guest at our camp.

Since my experienced father had so ridiculed the trip from a fishing standpoint, I decided to disguise it in part by making it a picnic party, and included my wife and sister, together with my uncle and brother-in-law. Enough duffle and utensils were placed in one pack for the day's luncheon. We took the motor-car about six miles. Here we shouldered the pack in turn, and "hoofed" it to Sternberg's, which is at the head of the rapids. It was a rare day in the woods, cool and clear. The waters in the stream were whipped to a fury, due to the heavy fall of rain. Surely the big fish must be on these rapids to-day. Max, old fellow, agreed to escort the ladies and the duffle to the falls, where we were to cook our lunch. My uncle and I harnessed our rods, determined, at least, to catch enough small fry for the meal. Having on high boots, I took to midstream while he, provided only with low shoes, fished the holes along the bank. We left no likely ones untried. All too soon the morning sped by, and as we rounded a bend in the river, saw to our astonishment that we had arrived at the luncheon grounds. A shout went up from the ladies, and the smoke of the cook fire wafted across the stream. It was nearly noon. What a glorious scene, as I stood there at the beginning of three series of falls! My uncle had caught four or five small trout, and I a half-dozen, quite enough for a modest ladies' luncheon in the woods, but no big ones. Things looked rather disappointing from a fisher-

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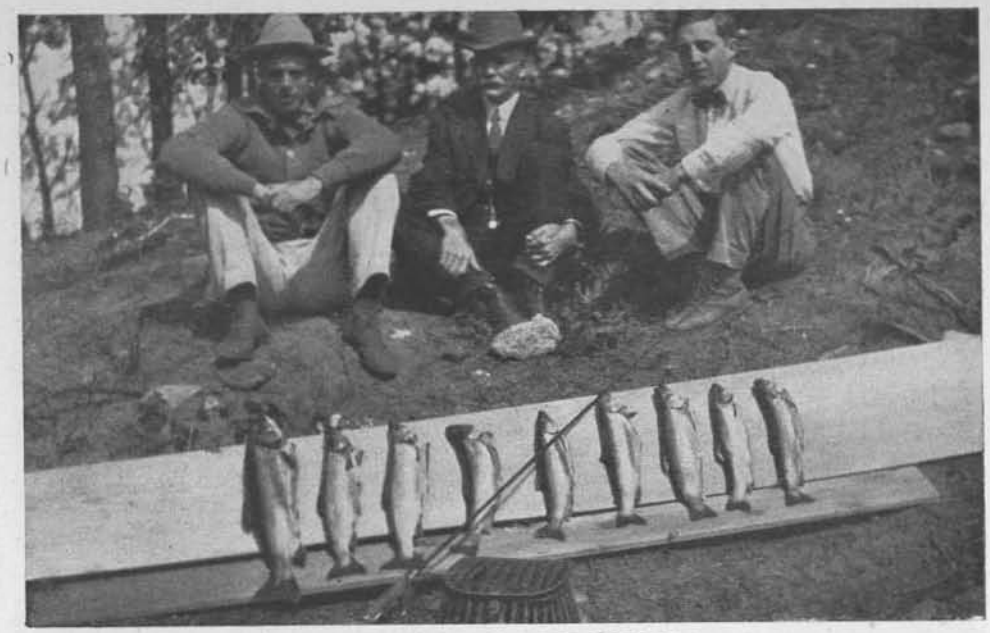

OUR CATCH FROM THE BIG POOL

man's viewpoint, although we had enjoyed the morning immensely.

The ladies are calling us to lunch, so I will obey the impulse to hang up the rod and taste the fruits of the frying pan, and the coffee, which, boiling on the fire, gives forth a delightful aroma; but hold! There is a likely spot about six rods from the first falls. A solid ledge of rock runs across the river, over which the water drops a foot. This rock's ledge forms a horseshoe, making a miniature pool in midstream about 18 inches deep. The bottom is covered with sand which glows a ruddy red under the brilliant noonday sun. Truly, no time to fish, but yes, I will try a cast. A real angler always makes a last cast after he has finished his day's fishing. By all the gods! The sight that met my eye! A big trout darted across the ruddy sand bed just beneath the horseshoe, and lightly struck my flies. Excited by this rise, I pulled in and prepared for another cast. Squatting in midstream, that my shadow might not be thrown across the spot, I made a second cast. Would he come again? Oh, the terrible anxiety of the moment, which seemed like a year. Splash, presto! With an exultant shout and a sharp twist of my wrist, I set the Red Ibis deep in his gristly mouth. The waters were soon churned with my game. All hands assembled to watch me land him. I had no net, but Max came up from below, and with the admiring eyes of wife and sister on us, we landed a 2½-pound beauty.

But the fun had only started. Another and still another from the spot was added of 2 and 2¾ pounds, respectively. The ladies looked on, the coffee was ready, and all hands were waiting for me. How could I leave such an opportunity? Max was just pulling in his line about 10 rods below me on the lower falls, but again I plied my last cast.

Gadzooks! I hooked the biggest fish of all! All hands again to the scene. He made a rush down-stream in not over 12 inches of rapidly moving water. We could see the very spots on his back; such a fish! I must not lose him, yet I cannot stop his mad career. Straight for the falls he is headed. If this torrent of water is reached, he is lost. He must not be held too taut against the swift course of the water, yet he must be stopped. Excited instructions were being shouted from the bank. There was only one thing to do. I again called upon Max for help. Running

up from below, he saw the situation, and just before my fish had reached the brink of the falls, he plunged up to his waist into the swift water, and actually succeeded in heading the big fellow upstream. He literally drove him onward. It was not so easy for the fish to go against the current with my taut line holding him from behind. It was a pretty fight, and during many mad rushes my chances were not so good. Having no net nearly undid us, but after much excitement, I lured the big fellow into a shallow little cut in the bank, and as he turned on his side, weary from the struggle, Max first cooled his hand in the water, then slowly ran it along the back towards the head of the exhausted fish, and firmly clutched it behind the gills. What a sight to gaze upon. All was over. He weighed exactly four pounds; the biggest speckled trout I had ever caught. He was a magnificent specimen.

The party, being very impatient, now insisted on having the noonday meal. I felt pretty cocky about my catch, but on appearing at the luncheon ground, I found that my uncle had captured two beautiful trout, and Max also had one big one to his credit. It was a wonderful lunch of fried trout, and the splendid coffee which only a woman can make. The ladies had arranged a most comfortable seat in the root of an old hemlock for my uncle. We were on high ground next to the fishing pool, with the cool breezes blowing. I shall not forget the expression of benign happiness which lit up my uncle's face. He had never before caught trout the size of those just captured, and while envious of my four-pounder, there was no denying his satisfaction over his morning's work. I doubt if he ever experienced a more pleasant outing.

However, the excitement of the chase was too much for me, and I could not enjoy to the full our excellent lunch, so I crept away with rod and reel to try again. Soon we were all at it. A party coming up from below had seen our trout, and the news of our success was quickly spread down the river. Inside of one hour the river was lined with lumbermen from the sawmill below, and with summer guests from the Wanakena Hotel. All stopped to admire our fish. Many of the men had never seen such specimens. Man after man that we passed on the river had had no luck. Surely fortune had smiled on us that day!

The afternoon passed too quickly, but with no more success until about five o'clock, when the fun again began. Five more were added to the count, making eleven. We had lost several in the rapid water, due to having no landing net. Our time was short, as the train left Wanakena at seven o'clock, a mile and a half away. All had stopped fishing but myself. I had broken every hook I had, including those belonging to the rest of the party. Most of my tackle was worn out, and for the first time in my life I put another fellow into the fishing hole when the fish were biting. I saw a lumberman just above me who had tried all afternoon with no success, so, beckoning him to my place, I showed him where I thought he could get one. I had the pleasure of seeing him pull out a three-pound trout before leaving. Our fish were thrown among some ferns into the top of the pack basket, and after a rapid walk we reached Wanakena, and there, at the country store, was assembled the whole town, as our catch had been well advertised by this time.

We boarded the train for Benson's Mines, where the auto again met us and took us to Star Lake. The family had gathered at the camp to welcome us home from what they thought was a fruitless fishing trip. It was too good an opportunity to lose. As my father approached the auto, I said we had had some luck, and showed him the smallest of our catch. He was surprised at this and congratulated us. I lifted the basket from the car, and threw on the electrical switch operating the headlights. Placing the basket where the lights would strike it, I uncovered the fish and one by one laid them on the ferns under the intense light. Never have I seen more surprised fish-gazers. All were amazed, and my father was speechless. He had missed the one chance to get the big fellows on the rapids of the Oswegatchie, but he was a good loser, and afterwards rewarded me with a leather case for my tackle, and a letter saying he welcomed me into the Brotherhood of Anglers.

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SOME CLASSY BEAGLE PACKS STARTING FOR THE HUNT

THE BEAGLE

BY WALTER H. DEARING

THE rapidity with which the beagle has sprung into popular favor with American sportsmen is a remarkable but very logical result of the natural adaptability of this silvery-tongued little warrior to the hunting conditions that have been evolving in our game fields for years past. And if many of us are inclined to view with a commendable amount of fear and trembling the increasing depletion of our favorite game bird—we can at least find considerable consolation in the fact that we still have with us an abundance of those irrepressible little vagrants, the cottontails, and that there is no danger of our becoming bereft of good sport so long as the supply of said cottontails is in ratio to the supply of beagles, plus the number of sportsmen who have learned to appreciate the sport of following the rabbit with these good little American hounds.

There are many theories regarding the descent of the beagle, but the important point is that he finally found his way to America, having been brought over from England during colonial days, a point of importance to prospective purchasers of beagle hounds, because there is an erroneous impression among some sportsmen that the first importation of beagles was that made by General Richard Rowett, the famous Illinois sportsman, in the year eighteen seventy-six.

Were that true, and had the Rowett strain, and later importations of the pure

breed, been the only stock from which the American beagle derived his inheritance, the task of selecting a clean-bred dog would be much simpler. But as a matter of fact, not only were beagles imported prior to the Rowett importation, but the blood of the earlier arrivals became so mixed with the fox-found and other strains that the so-called American beagle was, in many instances, either a cross-bred mongrel, or a sort of imitation of the true harrier. While the standard of the American beagle is now well established there are still many of the hybrid variety, and it is therefore essential to caution sportsmen who have never had any experience with the breed against being hoaxed into purchasing a beagle that is not a beagle. Probably nearly everyone who has had much to do with the beagle has, at some time or another, run across a dog of the kind referred to above, and I have a very vivid recollection of one such specimen that I looked over for a friend of mine who was in search of a beagle for the purpose of hunting the wily cotton-tail. The owner of the dog in question informed me with a great deal of semi-professional enthusiasm, that he had a beagle that "had anything within a radius of a hundred miles of our section of the country beaten forty ways to Pearl street," and on being asked to exhibit said canine, he trotted out one of the most mongrelish-looking hounds that it had been my misfortune to run across for many a day. "It" may have been all that he claimed for it as to hunting ability, though I doubt it. I have seen some cross-bred curiosities that possessed a good portion of the hunting genius that their owners claimed for them, and so, I think, have most other dog lovers. But the point is that "it" was not a beagle, and that the man who is searching for a beagle usually wants not only a good hunting dog, but a good beagle as well.

One of the first things to be considered in selecting a good hound is breeding. If a dog is bred right and modelled right, there is every reason to suppose that he can "make good." A dog that comes from good stock has ten chances to one against the hound whose blood fountain springs from an untried source, and the safest way to get a well-bred dog is to get one that is registered with one of the reputable kennel clubs. Of course, if one can be got that has already proved his hunting ability, or that is known positively to be the pup of a dam and sire that have proved their ability in the field, it is so much the better. But, as before stated, a well-bred hound, with good points, has every prospect of bringing home the bacon.

Two of the oldest hunting strains are those that trace back to Frank Forrest and Ringwood. Frank Forrest, whose descendants are plentifully sprinkled throughout New England and other sections of America, was one of the first of what may truthfully be called the American beagles. This distinction may also be claimed for Ringwood, who, together with the Rowett hounds, Sam, Dolly and Warrior, formed the nucleus of the strains that produced the first true type of the beagle in America. Frank Forrest, although bred in New England, sprang from Rowett stock, as did so many of the early bench and field trial winners. Other beagles that did much to develop a good standard were Ch. Blitz (of Kentucky), Bannerman, Rattler 3d, Lee, Fitz-Hugh Lee, and Dorseys' Pilot.

I have dwelt at some length on the early history of the breed, because many of the best dogs imported from England have been confined either to foot beagling, or bench shows, or both. In foot beagling the hounds are trained to hunt the hare in packs, after the manner of the English style of fox-hunting, *no gun being used;* and because of that fact it is not a bad idea when buying a beagle to give preference to the hounds that trace back to what has just been referred to as the American strain. The American dogs were trained to work to the gun only, and their descendants should, by reason of heredity, be better adapted to American methods, and less likely to gun-shyness (a failing which beagles, like other dogs, sometimes have) than are the descendants of hounds that have been limited exclusively as "foot beagles." Not that there are not many cracker-jack hunting dogs bred from the later importations, or that the latter are not fully up to the mark, as

"WHAT A GOOD BEAGLE LOOKS LIKE"

regards build, breeding, etc. No one who has seen such hounds as Somerset Watchman, Wheatley Charmer, Wheatley Challenger, Rock Ridge Midget, and countless others, could place them anywhere but on the top pinnacle of beagle fame, so far as build and breeding are concerned. But all else equal, a dog that has several generations of American hunting blood in his veins has an advantage that is not to be overlooked.

While still on the subject of "American-bred beagles" it might be well to mention a variety of hounds that were of frequent occurrence throughout Delaware, Maryland and Pennsylvania, prior to the Rowett importation. These hounds bear a strong resemblance to the Dachshund, from whom many, if not all of them, derived their crooked legs. Although the number of such dogs has dwindled away since the coming in of the standard type, there are still some of them to be found, and while it may seem almost superfluous to warn those who are unfamiliar with the beagle not to confuse these bench-legged hounds with the standard type, still there is no harm in pointing out the distinction.

The legs of a true beagle should be straight with plenty of bone in proportion to the size of the dog. Good, straight pasterns are desirable, as they are better adapted to the kind of rough work the beagle is called on to perform, than are sloping pasterns. "Spread out feet" are condemned by the standard, and although many hounds with spread feet work well enough, a firm foot, with well-arched toes, is preferable in every way.

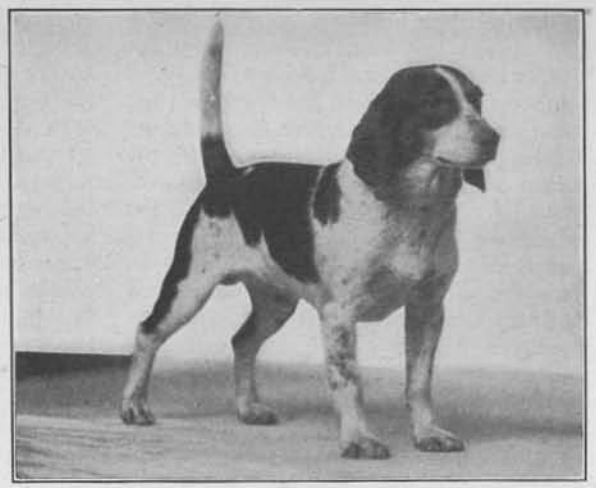
The coat should be coarse, and of good length. This is a matter of more importance than would appear at first sight.

Not only is this style of coat the one recommended by the standard, but it plays an important part in protecting the dog from being torn by the underbrush and briers he has to work in. The right sort of coat keeps many a young dog from getting "sour on his work" before he has grown to love it with all the ardor of his nature. A silky coat would undoubtedly add to the beauty of the hound, but it would do so at the cost of great suffering (and, in some instances at least), at the cost of his courage and usefulness. A low, well-set ear, rather broad, and rounded at the tips, with front edge closely inturned to the cheek, almost devoid of erectile power, and reaching almost, but not quite, to the tip of the nose (when pulled out straight), is the right type. And here again the requirements are in harmony with hunting utility, as the low-set ear spreads out when the dog is running, thereby avoiding the many scratches that would necessarily be inflicted on a high-set ear.

Hounds with wide muzzles and open nostrils are usually equipped with better scenting powers than those which do not possess these attributes, so that the recognized type of muzzle is also in consonance with the requisites of the field, although this rule is not infallible by any means. The remainder of the standard requirements are as follows:

Muzzle of medium length; stop, square and well defined; jaws level, the lips free from flews; neck rising free and light from the shoulders, strong in substance, yet not loaded, of medium length; throat, clean and free from folds of skin, a slight wrinkle below angle of jaw being permis-

sible; shoulders somewhat declining, muscular, but not loaded, giving the idea of freedom with lightness, activity and strength; chest moderately broad and full; back short, straight, muscular and strong; loin broad and slightly arched; ribs well sprung, giving abundance of lung room; hips strongly muscled, giving abundant propelling power; stifles strong and well let down; hock firm, symmetrical and moderately bent; tail well up, carried gaily, with medium curvex, comparatively short and clothed with decided brush; height not over fifteen inches; skull moderately domed at occiput, with cranium full and broad. All hound colors admissible.



LORD DERBY, A BENCH AND FIELD-TRIAL WINNER

Just how close this formula should be adhered to by sportsmen depends largely on whether or not one is looking for a dog that can hold his own in the show ring, besides performing his work in the field. It is not, of course, necessary that the hound should be correct in every detail in order to be a good prospect for the field. There are many hounds capable of holding their own with the best of their breed in the field that would be shown the gate in short order at any of the leading shows; that goes without saying. One of the best rabbit beagles I ever knew had a muzzle so pinched that it would probably have precluded whatever chances he might otherwise have had of distinguishing himself in the show ring; yet he had a scent so delicate as to call forth the unfeigned admiration of all who saw him at work. He would work out a cold scent with a skill that made him an invaluable possession in districts where game was comparatively scarce, and I doubt if his owner would have exchanged him for a dog of ten times his monetary value in the show ring. But, in general, it is a good plan to seek hounds that come reasonably close to the standard. Among the most important points are plenty of bone and substance and a strong (preferably a a short) loin, built on a comparatively light body. These are the essentials necessary to endurance in man or beast; and endurance, plus scent, hunting instinct, and nervous energy are the essentials of a good hunting beagle. Plenty of room in front, where the lungs and the heart are confined, combined with a short, strong back, are also necessary to physical power, and, given a make-up such as that, you have a house built upon the rock that has proved the saving grace of about half the physical marvels of the age, from sporting hounds to the stock of Mr. Tom Sharkey.

The height will necessarily be regulated largely by the country in which the dog is to be hunted, but for general purposes a dog that is pretty close to the fifteen-inch standard is none too large. The larger hound can force his way through obstacles more easily than the hounds of lower build and exerts less nervous energy in bringing into play his powers of speed and endurance. The foregoing comparison does not, of course, apply to the dwarf beagle. The latter is a small specimen of the breed, not over nine inches in height, and is especially adapted to sections where the undergrowth is dense, his small size giving a decided advantage in that character of country. But unless the dog is to be used in the kind of territory just described it is better to use the larger hound. Not only are standard hounds more hardy and much faster, but they have not been subjected

to that constant breeding, breeding, breeding, always breeding, to keep down the size, which the dwarf beagle has been subjected to, and which has been the bane of so many small miniature dogs. In order to get a small variety of dogs, the pocket beagle naturally had to be produced by selecting the smallest—often the weakest—pups in each litter, which necessarily affected their endurance and in some instances their scent. The natural tendency of the beagle is to increase in size over the size of the dam, so that a constant straining after a small size is likely to have a more adverse effect on him than on some other breeds. I do not say this with the intention of detracting one iota from the value of the pocket beagle when employed in his legitimate field; I have seen too many examples of the utility of good dwarf beagles not to appreciate the desirability of maintaining the little bush dodger for precisely the purposes at which he has proved his ability. But where only one dog is required for general use, and the choice lies between the standard and the pocket beagle, I do not see how the balance can fail to lie on the side of the standard type.

Regarding training, there is little need to do much more than give the beagle a chance to follow the natural bent of his inclinations; he needs direction, rather than coercion. Personally, I enjoy the developing of a hound as much as hunting the hare. I have known many men who always sent their beagles away to be trained by professional trainers. But why they resorted to that course has always been beyond my comprehension. Professional trainers have their uses and I have none of the prejudice entertained against them by some sportsmen. Having seen much of them, I have found them to be about like the rest of us erring mortals —good, bad and indifferent, no better and no worse than the average human. But as the training of the beagle is usually such a simple matter, it seems a pity that any lover of outdoor life who possesses one of these spry little bunny trailers should miss the pleasure of observing the development of his hunting qualities.

I have enjoyed many pleasant hours spent in some secluded place, with no company but a pipe of good tobacco and a young beagle that was just learning his letters. The best method to pursue with the beagle is to take him out in company with an older and experienced dog, and let the latter teach the young enthusiast how to do the thing right. There is an indescribable fascination in getting out on a pleasant morning (just before Old Sol comes peeping up over the hills), with a couple of beagles for company, and observing how well Mother Nature has done her work in moulding them into a natural-born rabbit hound.

When you have reached a likely spot (one that you know the cottontail is in the habit of haunting), stop for a while, light up your old briarwood, take up your post near the prospective scene of action, and play you're a wooden Indian for the next half hour; let the dogs do the rest. The older hound will quickly proceed to take up his task in a workmanlike fashion, and it's a study in dog psychology to note the difference between the young dog and his teacher. Gradually the youngster begins to exhibit all of the characteristics of a small boy just learning his first lessons in baseball, or some other sport that appeals to his youthful fancy. It doesn't take many lessons before he learns to follow the ways of the veteran, and his evident self-satisfaction at being able to mimic the methods of "the grown-up" is as amusing as it is commendable. Many trainers advocate letting the older hound capture a hare, as this serves as an example to stimulate ambition in the pup. There can be little question as to the wisdom of this course, but personally I have never been fortunate enough to have the stunt "put over." It's not a cinch job for a single beagle to land "brer rabbit," unaided, and he's got to go some to make good on the proposition. But it does not take much to arouse the rabbit-trailing instinct of a beagle pup, and whether or not his elder brother succeeds in bagging the quarry, the "young 'un" soon gets the hunting habit. As a rule beagles will practically teach themselves to hunt, if turned loose in a section where they have an opportunity to learn, and the principal thing to do is to accustom them to the gun.

DESERT GOLD

A NOVEL, BY ZANE GREY

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XII

THE CRATER OF HELL

THE trail led along a gigantic fissure in the side of the crater, and then down and down into a red-walled, blue-hazed labyrinth.

Presently Gale, upon turning a sharp corner, was utterly amazed to see that the split in the lava sloped out and widened into an arroyo. It was so green and soft and beautiful in all the angry, contorted red surrounding that Gale could scarcely credit his sight. Blanco Sol whistled his welcome to the scent of water. Then Gale saw a great hole, a pit in the shiny lava, a dark, cool, shady well. There was evidence of the fact that at flood seasons the water had an outlet into the arroyo. The soil appeared to be a fine sand, in which a reddish tinge predominated; and it was abundantly covered with a long grass, still partly green. Mesquites and *palo verdes* dotted the arroyo and gradually closed in thickets that obstructed the view.

"Shore it all beats me," exclaimed Ladd. "What a place to hole-up in! We could have hid here for a long time. Boys, I saw mountain sheep, the real old genuine Rocky Mountain bighorn. What do you think of that?"

"I reckon it's a Yaqui hunting-ground," replied Lash. "That trail we hit must be hundreds of years old. It's worn deep and smooth in the iron lava."

"Well, all I got to say is—Beldin' was shore right about the Indian. An' I can see Rojas's finish somewhere up along that awful hell-hole."

Camp was made on a level spot. Yaqui took the horses to water, and then turned them loose in the arroyo. It was a tired and sombre group that sat down to eat. The strain of suspense equaled the wearing effects of the long ride. Mercedes was calm, but her great dark eyes burned in her white face. Yaqui watched her. The others looked at her with unspoken pride. Presently Thorne wrapped her in his blankets, and she seemed to fall asleep at once. Twilight deepened. The campfire blazed brighter. A cool wind played with Mercedes's black hair, waving strands across her brow.

Little of Yaqui's purpose or plan could

be elicited from him. But the look of him was enough to satisfy even Thorne. He leaned against a pile of wood, which he had collected, and his gloomy gaze pierced the camp-fire, and at long intervals strayed over the motionless form of the Spanish girl.

The rangers and Thorne, however, talked in low tones. It was absolutely impossible for Rojas and his men to reach the waterhole before noon of the next day. And long before that time the fugitives would have decided on a plan of defense. What that defense would be, and where it would be made, were matters over which the men considered gravely. Ladd averred the Yaqui would put them into an impregnable position, that at the same time would prove a death-trap for their pursuers. They exhausted every possibility, and then, tired as they were, still kept on talking.

"What stuns me is that Rojas stuck to our trail," said Thorne, his lined and haggard face expressive of dark passion. "He has followed us into this fearful desert. He'll lose men, horses, perhaps his life. He's only a bandit, and he stands to win no gold. If he ever gets out of here it'll be by herculean labor and by terrible hardship. All for a poor little helpless woman —just a woman! My God, I can't understand it."

"Shore—just a woman," replied Ladd, solemnly nodding his head.

Then there was a long silence during which the men gazed into the fire. Each, perhaps, had some vague conception of the enormity of Rojas's love or hate—some faint and amazing glimpse of the gulf of human passion. Those were cold, hard, grim faces upon which the light flickered.

"Sleep," said the Yaqui.

Thorne rolled in his blanket close beside Mercedes. Then one by one the rangers stretched out, feet to the fire. Gale found that he could not sleep. His eyes were weary, but they would not stay shut; his body ached for rest, yet he could not lie still. The night was so sombre, so gloomy, and the lava-encompassed arroyo full of shadows. The dark velvet sky, fretted with white fire, seemed to be close. There was an absolute silence, as of death. Nothing moved—nothing outside of Gale's body appeared to live. The Yaqui sat like an image carved out of lava. The others lay prone and quiet. Would another night see any of them lie that way, quiet forever? Gale felt a ripple pass over him that was at once a shudder and a contraction of muscles. Used as he was to the desert and its oppression, why should he feel to-night as if the weight of its lava and the burden of its mystery were bearing him down?

He sat up after a while and again watched the fire. Nell's sweet face floated like a wraith in the pale smoke—glowed and flushed and smiled in the embers. Other faces shone there—his sister's—that of his mother. Gale shook off the tender memories. This desolate wilderness with its forbidding silence and its dark promise of hell on the morrow—this was not the place to unnerve oneself with thoughts of love and home. But the torturing paradox of the thing was that this was just the place and just the night for a man to be haunted.

By and by Gale rose and walked down a shadowy aisle between the mesquites. On his way back the Yaqui joined him. Gale was not surprised. He had become used to the Indian's strange guardianship. But now, perhaps because of Gale's poignancy of thought, the contending tides of love and regret, the deep, burning premonition of deadly strife, he was moved to keener scrutiny of the Yaqui. That, of course, was futile. The Indian was impenetrable, silent, strange. But suddenly, inexplicably, Gale felt Yaqui's human quality. It was aloof, as was everything about this Indian; but it was there. This savage walked silently beside him, without glance or touch or word. His thought was as inscrutable as if mind had never awakened in his race. Yet Gale was conscious of greatness, and, somehow, he was reminded of the Indian's story. His home had been desolated, his people carried off to slavery, his wife and children separated from him to die. What had life meant to the Yaqui? What had been in his heart? What was now in his mind? Gale could not answer these questions. But the difference between himself and Yaqui, which he had vaguely felt as that between savage and civilized men, faded out of his mind for-

ever. Yaqui might have considered he owed Gale a debt, and, with a Yaqui's austere and noble fidelity to honor, he meant to pay it. Nevertheless, this was not the thing Gale found in the Indian's silent presence. Accepting the desert with its subtle and inconceivable influence, Gale felt that the savage and the white man had been bound in a tie which was no less brotherly because it could not be comprehended.

Toward dawn Gale managed to get some sleep. Then the morning broke with the sun hidden back of the uplift of the plateau. The horses trooped up the arroyo and snorted for water. After a hurried breakfast, the packs were hidden in holes in the lava. The saddles were left where they were, and the horses allowed to graze and wander at will. Canteens were filled, a small bag of food was packed, and blankets made into a bundle. Then Yaqui faced the steep ascent of the lava slope.

The trail he followed led up on the right side of the fissure, opposite to the one he had come down. It was a steep climb, and encumbered as the men were they made but slow progress. Mercedes had to be lifted up smooth steps and across crevices. They passed places where the rims of the fissure were but a few yards apart. At length the rims widened out and the red, smoky crater yawned beneath. Yaqui left the trail and began clambering down over the rough and twisted convolutions of lava which formed the rim. Sometimes he hung sheer over the precipice. It was with extreme difficulty that the party followed him. Mercedes had to be held on narrow, foot-wide ledges. The *choya* was there to hinder passage. Finally the Indian halted upon a narrow bench of flat, smooth lava, and his followers worked with exceeding care and effort down to his position.

At the back of this bench, between bunches of *choya,* was a niche, a shallow cave with floor lined apparently with mold. Ladd said the place was a refuge which had been inhabited by mountain sheep for many years. Yaqui spread blankets inside, left the canteen and the sack of food, and with a gesture at once humble, yet that of a chief, he invited Mercedes to enter. A few more gestures and fewer words disclosed his plan. In this inaccessible nook Mercedes was to be hidden. The men were to go around upon the opposite rim, and block the trail leading down to the waterhole.

Gale marked the nature of this eyrie. It was the wildest and most rugged place he had ever stepped upon. Only a sheep could have climbed up the wall above or along the slanting shelf of lava beyond. Below glistened a whole bank of *choya,* frosty in the sunlight, and it overhung an apparently bottomless abyss.

Ladd chose the smallest gun in the party and gave it to Mercedes.

"Shore it's best to go the limit on bein' ready," he said, simply. "The chances are you'll never need it. But if you do——"

He left off there, and his break was significant. Mercedes answered him with a fearless and indomitable flash of eyes. Thorne was the only one who showed any shaken nerve. His leave-taking of his wife was affecting and hurried. Then he and the rangers carefully stepped in the tracks of the Yaqui.

They climbed up to the level of the rim and went along the edge. When they reached the fissure and came upon its narrowest point, Yaqui showed in his actions that he meant to leap it. Ladd restrained the Indian. They then continued along the rim till they reached several bridges of lava which crossed it. The fissure was deep in some parts, choked in others. Evidently the crater had no direct outlet into the arroyo below. Its bottom, however, must have been far beneath the level of the waterhole.

After the fissure was crossed the trail was soon found. Here it ran back from the rim. Yaqui waved his hand to the right, where, along the corrugated slope of the crater, there were holes and crevices and coverts for a hundred men. Yaqui strode on up the trail toward a higher point, where presently his dark figure stood motionless against the sky. The rangers and Thorne selected a deep depression, out of which led several ruts deep enough for cover. According to Ladd, it was as good a place as any, perhaps not so hidden as others, but freer from the dreaded *choya.* Here the men

laid down rifles and guns, and, removing their heavy cartridge belts, settled down to wait.

Their location was close to the rim wall and probably five hundred yards from the opposite rim, which was now seen to be considerably below them. The glaring red cliff presented a deceitful and baffling appearance. It had a thousand ledges and holes in its surfaces, and one moment it looked perpendicular and the next there seemed to be a long slant. Thorne pointed out where he thought Mercedes was hidden; Ladd selected another place, and Lash still another. Gale searched for the bank of *choya* he had seen under the bench where Mercedes's retreat lay, and when he found it the others disputed his opinion. Then Gale brought his field-glass into requisition, proving that he was right. Once located and fixed in sight, the white patch of *choya,* the bench, and the sheep eyrie stood out from the other features of that rugged wall. But all the men were agreed that Yaqui had hidden Mercedes where only the eyes of a vulture could have found her.

Jim Lash crawled into a little strip of shade and bided the time tranquilly. Ladd was restless and impatient and watchful, every little while rising to look up the far-reaching slope, and then to the right, where Yaqui's dark figure stood out from a high point of the rim. Thorne grew silent, and seemed consumed by a slow, sullen rage. Gale was neither calm nor free of a gnawing suspense nor of a waiting wrath. But as best he could he put the pending action out of mind.

It came over him all of a sudden that he had not grasped the stupendous nature of this desert setting. There was the measureless red slope, its lower ridges finally sinking into white sand dunes toward the blue sea. The cold, sparkling light, the white sun, the deep azure of sky, the feeling of boundless expanse all around him—these meant high altitude. Southward the barren red simply merged into distance. The field of craters rose in high, dark wheels toward the dominating peaks. When Gale withdrew his gaze from the magnitude of these spaces and heights the crater beneath him seemed dwarfed. Yet while he gazed it spread and deepened and multiplied its ragged lines. No, he could not grasp the meaning of size or distance here. There was too much to stun the sight. But the mood in which nature had created this convulsed world of lava seized hold upon him.

Meanwhile the hours passed. As the sun climbed the clear, steely lights vanished, the blue hazes deepened, and slowly the glistening surfaces of lava turned redder. Ladd was concerned to discover that Yaqui was missing from his outlook upon the high point. Jim Lash came out of the shady crevice, and stood up to buckle on his cartridge belt. His narrow, gray glance slowly roved from the height of lava down along the slope, paused in doubt, and then swept on to resurvey the whole vast eastern dip of the plateau.

"I reckon my eyes are pore," he said. "Mebbe it's this damn red glare. Anyway, what's them creepin' spots up there?"

"Shore I seen them. Mountain sheep," replied Ladd.

"Guess again, Laddy. Dick, I reckon you'd better flash the glass up the slope."

Gale adjusted the field-glass and began to search the lava, beginning close at hand and working away from him. Presently the glass became stationary.

"I see half a dozen small animals, brown in color. They look like sheep. But I couldn't distinguish mountain sheep from antelope."

"Shore they're bighorn," said Laddy.

"I reckon if you'll pull around to the east an' search under that long wall of lava—ther—you'll see what I see," added Jim.

The glass climbed and circled, wavered an instant, then fixed steady as a rock. There was a breathless silence.

"Fourteen horses—two packed—some mounted — others without riders, and lame," said Gale, slowly.

Yaqui appeared far up the trail, coming swiftly. Presently he saw the rangers and halted to wave his arms and point. Then he vanished as if the lava had opened beneath him.

"Lemme that glass," suddenly said Jim Lash. "I'm seein' red, I tell you. . . . Well, pore as my eyes are, they had it right. Rojas an' his outfit have left the trail."

"Jim, you ain't meanin' they've taken to that awful slope?" queried Ladd.

"I sure do. There they are—still comin', but goin' down, too."

"Mebbe Rojas is crazy, but it begins to look like he——"

"Laddy, I'll be danged if the Greaser bunch hasn't vamoosed. Gone out of sight! Right there, not a half mile away, the whole caboodle—gone!"

"Shore they're behind a crust or have gone down into a rut," suggested Ladd. "They'll show again in a minute. Look sharp, boys, for I'm figgerin' Rojas'll spread his men."

Minutes passed, but nothing moved upon the slope. Each man crawled up to a vantage-point along the crest of rotting lava. The watchers were careful to peer through little notches or from behind a spur, and the constricted nature of their hiding-place kept them close together. Ladd's muttering grew into a growl, then lapsed into the silence that marked his companions. From time to time the rangers looked inquiringly at Gale. The field-glass, however, like the naked sight, could not catch the slightest moving object out there upon the lava. A long hour of slow, mounting suspense wore on.

"Shore it's all goin' to be as queer as the Yaqui," said Ladd.

Indeed, the strange mien, the silent action, the somber character of the Indian had not been without effect upon the minds of the men. Then the weird, desolate, tragic scene added to the vague sense of mystery. And now the disappearance of Rojas' band, the long wait in the silence, the boding certainty of invisible foes crawling, circling closer and closer, lent to the situation a final touch that made it unreal.

"I'm reckonin' there's a mind behind them Greasers," replied Jim. "Or mebbe we ain't done Rojas credit. . . . If somethin' would only come off!"

That Lash, the coolest, most provokingly nonchalant of men in times of peril, should begin to show a nervous strain was all the more indicative of a subtle pervading unreality.

"Boys, look sharp!" suddenly called Lash. "Low down to the left—mebbe three hundred yards. See, along by them seams of lava—behind the *choyas*. First off I thought it was a sheep. But it's the Yaqui! . . . Crawlin' swift as a lizard! Can't you see him?"

It was a full moment before Jim's companions could locate the Indian. Flat as a snake Yaqui wound himself along with incredible rapidity. His advance was all the more remarkable for the fact that he appeared to pass directly under the dreaded *choyas*. Sometimes he paused to lift his head and look. He was directly in line with a huge whorl of lava that rose higher than any point on the slope. This spur was a quarter of a mile from the position of the rangers.

"Shore he's headin' for that high place," said Ladd. "He's goin' slow now. There, he's stopped behind some *choyas*. He's gettin' up—no, he's kneelin'. . . . Now what the hell!"

"Laddy, take a peek at the side of that lava ridge," sharply called Jim. "I guess mebbe somethin' ain't comin' off. See! There's Rojas an' his outfit climbin'. Don't make out no hosses. . . . Dick, use your glass an' tell us what's doin'. I'll watch Yaqui an' tell you what his move means."

Clearly and distinctly, almost as if he could have touched them, Gale had Rojas and his followers in sight. They were toiling up the rough lava on foot. They were heavily armed. Spurs, chaps, jackets, scarfs were not in evidence. Gale saw the lean, swarthy faces, the black, straggly hair, the ragged, soiled garments which had once been white.

"They're almost up now," Gale was saying. "There! They halt on top. I see Rojas. He looks wild. By ——! fellows, an Indian! . . . It's a Papago. Belding's old herder! . . . The Indian points—this way—then down. He's showing Rojas the lay of the trail."

"Boys, Yaqui's in range of that bunch," said Jim, swiftly. "He's raisin' his rifle slow—Lord, how slow he is! . . . He's covered someone. Which one I can't say. But I think he'll pick Rojas."

"The Yaqui can shoot. He'll pick Rojas," added Gale, grimly.

"Rojas—yes—yes!" cried Thorne, in passion of suspense.

"Not on your life!" Ladd's voice cut in

with scorn. "Gentlemen, you can gamble Yaqui'll kill the Papago. That traitor Indian knows these sheep haunts. He's tellin' Rojas——"

A sharp rifle shot rang out.

"Laddy's right," called Gale. "The Papago's hit—his arm falls—— There, he tumbles!"

More shots rang out. Yaqui was seen standing erect firing rapidly at the darting Mexicans. For all Gale could make out no second bullet took effect. Rojas and his men vanished behind the bulge of lava. Then Yaqui deliberately backed away from his position. He made no effort to run or hide. Evidently he watched cautiously for signs of pursuers in the ruts and behind the *choyas*. Presently he turned and came straight toward the position of the rangers, sheered off perhaps a hundred paces below it, and disappeared in a crevice. Plainly his intention was to draw pursuers within rifle shot.

"Shore, Jim, you had your wish. Somethin' come off," said Ladd. "An' I'm sayin' thank God for the Yaqui! That Papago'd have ruined us. Even so, mebbe he's told Rojas more'n enough to make us sweat blood."

"He had a chance to kill Rojas," cried out the drawn-faced, passionate Thorne. "He didn't take it! . . . He didn't take it!"

Only Ladd appeared to be able to answer the cavalryman's poignant cry.

"Listen, son," he said, and his voice rang. "We-all know how you feel. An' if I'd had that one shot never in the world could I have picked the Papago guide. I'd have had to kill Rojas. That's the white man of it. But Yaqui was right. Only an Indian could have done it. You can gamble the Papago alive meant slim chance for us. Because he'd led straight to where Mercedes is hidden, an' then we'd have left cover to fight it out. . . . When you come to think of the Yaqui's hate for Greasers, when you just seen him pass up a shot at one—well, I don't know how to say what I mean, but damn me, my som-brer-ro is off to the Indian!"

"I reckon so, an' I reckon the ball's opened," rejoined Lash, and now that former nervous impatience so unnatural to him was as if it had never been. He was smilingly cool, and his voice had almost a caressing note. He tapped the breech of his Winchester with a sinewy brown hand, and he did not appear to be addressing anyone in particular. "Yaqui's opened the ball. Look up your pardners there gents, an' get ready to dance."

Another wait set in then, and judging by the more direct rays of the sun and a receding of the little shadows cast by the *choyas*, Gale was of the opinion that it was a long wait. But it seemed short. The four men were lying under the bank of a half circular hole in the lava. It was notched and cracked, and its rim was fringed by *choyas*. It sloped down and opened to an unobstructed view of the crater. Gale had the upper position, farthest to the right, and therefore was best shielded from possible fire from the higher ridges of the rim, some three hundred yards distant. Jim came next, well hidden in a crack. The positions of Thorne and Ladd were most exposed. They kept sharp lookout over the uneven rampart of their hiding-place.

The sun passed the zenith, began to slope westward, and to grow hotter as it sloped. The men waited and waited. Gale saw no impatience even in Thorne. The sultry air seemed to be laden with some burden or quality that was at once composed of heat, menace, color, and silence. Even the light glancing up from the lava seemed red and the silence had substance. Sometimes Gale felt that it was unbearable. Yet he made no effort to break it.

Suddenly this dead stillness was rent by a shot, clear and stinging, close at hand. It was from a rifle, not a carbine. With startling quickness a cry followed—a cry that pierced Gale—it was so thin, so high-keyed, so different from all other cries. It was the involuntary human shriek at death.

"Yaqui's called out another pardner," said Jim Lash, laconically.

Carbines began to crack. The reports were quick, light, like sharp spats without any ring. Gale peered from behind the edge of his covert. Above the ragged wave of lava floated faint whitish clouds, all that was visible of smokeless powder. Then Gale made out round spots, dark

against the background of red, and in front of them leaped out small tongues of fire. Ladd's .405 began to "spang" with its beautiful sound of power. Thorne was firing, somewhat wildly Gale thought. Then Jim Lash pushed his Winchester over the rim under a *choya*, and between shots Gale could hear him singing: "Turn the lady, turn—turn the lady, turn! . . . Alaman left! . . . Swing your pardners! . . . Forward an' back! . . . Turn the lady, turn!" Gale got into the fight himself, not so sure that he hit any of the round, bobbing objects he aimed at, but growing sure of himself as action liberated something forced and congested within his breast.

Then over the position of the rangers came a hail of steel bullets. Those that struck the lava hissed away into the crater; those that came biting through the *choyas* made a sound which resembled a sharp ripping of silk. Bits of cactus stung Gale's face, and he dreaded the flying thorns more than he did the flying bullets.

"Hold on, boys," called Ladd, as he crouched down to reload his rifle. "Save your shells. The Greasers are spreadin' on us, some goin' down below Yaqui, others movin' up for that high ridge. When they get up there I'm damned if it won't be hot for us. There ain't room for all of us to hide here."

Ladd raised himself to peep over the rim. Shots were now scattering, and all appeared to come from below. Emboldened by this he rose higher. A shot from in front, a rip of bullet through the *choya*, a spat of something hitting Ladd's face, a steel missile hissing onward—these inseparably blended sounds were all registered by Gale's sensitive ear.

With a curse Ladd tumbled down into the hole. His face showed a great gray blotch, and starting blood. Gale felt a sickening assurance of desperate injury to the ranger. He ran to him calling: "Laddy! Laddy!"

"Shore I ain't plugged. It's a damn *choya* burr. The bullet knocked it in my face. Pull it out!"

The oval, long-spiked cone was firmly imbedded in Ladd's cheek. Blood streamed down his face and neck. Carefully, yet with no thought of pain to himself, Gale tried to pull the cactus joint away. It was as firm as if it had been nailed there. That was the damnable feature of the barbed thorns: once set, they held on as that strange plant held to its desert life. Ladd began to writhe, and sweat mingled with the blood on his face. He cursed and raved, and his movements made it almost impossible for Gale to do anything.

"Put your knife-blade under an' tear it out!" shouted Ladd, hoarsely.

Thus ordered, Gale slipped a long blade in between the imbedded thorns, and with a powerful jerk literally tore the *choya* out of Ladd's quivering flesh. Then, where the ranger's face was not red and raw, it certainly was white.

A volley of shots from a different angle was followed by the quick ring of steel bullets striking the lava all around Gale. His first idea, as he heard the projectiles sing and hum and whine away into the air, was that they were coming from above him. He looked up to see a number of low, white and dark knobs upon the high point of lava. They had not been there before. Then he saw little, pale, leaping tongues of fire. As he dodged down he distinctly heard a bullet strike Ladd. At the same instant he seemed to hear Thorne cry out and fall, and Lash's boots scrape rapidly away.

Ladd fell backward still holding the .405. Gale dragged him into the shelter of his own position, and dreading to look at him, took up the heavy weapon. It was with a kind of savage strength that he gripped the rifle; and it was with a cold and deadly intent that he aimed and fired. The first Greaser huddled low, let his carbine go clattering down, and then crawled behind the rim. The second and third jerked back. The fourth seemed to flop up over the crest of lava. A dark arm reached for him, clutched his leg, tried to drag him up. It was in vain. Wildly grasping at the air the bandit fell, slid down a steep shelf, rolled over the rim, to go hurtling down out of sight.

Fingering the hot rifle with close-pressed hands, Gale watched the sky line along the high point of lava. It remained unbroken. As his passion left him he

feared to look back at his companions, and the cold chill returned to his breast.

"Shore—I'm damn glad—them Greasers ain't usin' soft-nose bullets," drawled a calm voice.

Swift as lightning Gale whirled.

"Laddy! I thought you were done for," cried Gale, with a break in his voice.

"I ain't a-mindin' the bullet much. But that *choya* joint took my nerve, an' you can gamble on it. Dick, this hole's pretty high up, ain't it?"

The ranger's blouse was open at the neck, and on his right shoulder under the collar bone was a small hole just beginning to bleed.

"Sure it's high, Laddy," replied Gale, gladly. "Went clear through, clean as a whistle!"

He tore a handkerchief into two parts, made wads, and pressing them close over the wounds he bound them there with Ladd's scarf.

"Shore it's funny how a bullet can floor a man an' then not do any damage," said Ladd. "I felt a zip of wind an' somethin' like a pat on my chest an' down I went. Well, so much for the small caliber with their steel bullets. Supposin' I'd connected with a .405!"

"Laddy, I—I'm afraid Thorne's done for," whispered Gale. "He's lying over there in that crack. I can see part of him. He doesn't move."

"I was wonderin' if I'd have to tell you that. Dick, he went down hard hit, fallin', you know, limp an' soggy. It was a moral cinch one of us would get it in this fight; but God! I'm sorry Thorne had to be the man."

"Laddy, maybe he's not dead," replied Gale. He called aloud to his friend. There was no answer.

Ladd got up, and, after peering keenly at the height of lava, he strode swiftly across the space. It was only a dozen steps to the crack in the lava where Thorne had fallen in head first. Ladd bent over, went to his knees, so that Gale saw only his head. Then he appeared rising with arms round the cavalryman. He dragged him across the hole to the sheltered corner that alone afforded protection. He had scarcely reached it when a carbine cracked and a bullet struck the flinty lava, striking sparks, then singing away into the air.

Thorne was either dead or unconscious, and Gale, with a contracting throat and numb heart, decided for the former. Not so Ladd, who probed the bloody gash on Thorne's temple, and then felt his breast.

"He's alive an' not bad hurt. That bullet hit him glancin'. Shore them steel bullets are some lucky for us. Dick, you needn't look so glum. I tell you he ain't bad hurt. I felt his skull with my finger. There's no hole in it. Wash him off an' tie—— Wow! did you get the wind of that one? An' mebbe it didn't sing off the lava! . . . Dick, look after Thorne now while I——"

The completion of his speech was the stirring ring of the .405, and then he uttered a laugh that was unpleasant.

"Shore, Greaser, there's a man's size bullet for you. No slim, sharp-point, steel-jacket nail! I'm takin' it on me to believe you're appreciatin' of the .405, seein' as you don't make no fuss."

It was indeed a joy to Gale to find that Thorne had not received a wound necessarily fatal, though it was serious enough. Gale bathed and bound it, and laid the cavalryman against the slant of the bank, his head high to lessen the probability of bleeding.

As Gale straightened up Ladd muttered low and deep, and swung the heavy rifle around to the left. Far along the slope a figure moved. Ladd began to work the lever of the Winchester and to shoot. At every shot the heavy firearm sprang up, and the recoil made Ladd's shoulder give back. Gale saw the bullets strike the lava behind, beside, before the fleeing Mexican, sending up dull puffs of dust. On the sixth shot he plunged down out of sight, either hit or frightened into seeking cover.

"Dick, mebbe there's one or two left above; but we needn't figger much on it," said Ladd, as, loading the rifle, he jerked his fingers quickly from the hot breech. "Listen! Jim an' Yaqui are hittin' it up lively down below. I'll sneak down there. You stay here an' keep about half an eye peeled up yonder, an' keep the rest my way."

Ladd crossed the hole, climbed down into the deep crack where Thorne had

fallen, and then went stooping along with only his head above the level. Presently he disappeared. Gale, having little to fear from the high ridge, directed most of his attention toward the point beyond which Ladd had gone. The firing had become desultory, and the light carbine shots outnumbered the sharp rifle shots five to one. Gale made a note of the fact that for some little time he had not heard the unmistakable report of Jim Lash's automatic. Then ensued a long interval in which the desert silence seemed to recover its grip. The .405 ripped it asunder —*spang—spang—spang*. Gale fancied he heard yells. There were a few pattering shots still farther down the trail. Gale had an uneasy conviction that Rojas and some of his band might go straight to the waterhole. It would be hard to dislodge even a few men from that retreat.

There seemed a lull in the battle. Gale ventured to stand high, and, screened behind *choyas*, he swept the three-quarter circle of lava with his glass. In the distance he saw horses, but no riders. Below him, down the slope along the crater rim and the trail, the lava was bare of all except tufts of *choya*. Gale gathered assurance. It looked as if the day was favoring his side. Then Thorne, coming partly to consciousness, engaged Gale's care. The cavalryman stirred and moaned, called for water, and then for Mercedes. Gale held him back with a strong hand, and presently he was once more quiet.

For the first time in hours, as it seemed, Gale took note of the physical aspect of his surroundings. He began to look upon them without keen gaze strained for crouching form, or bobbing head, or spouting carbine. Either Gale's sense of color and proportion had become deranged during the fight, or the encompassing air and the desert had changed. Even the sun had changed. It seemed lowering, oval in shape, magenta in hue, and it had a surface that gleamed like oil on water. Its red rays shone through red haze. Distances that had formerly been clearly outlined were now dim, obscured. The yawning chasm was not the same. It circled wider, redder, deeper. It was a weird, ghastly mouth of hell. Gale stood fascinated, unable to tell how much he saw was real, how much the exaggeration of overwrought emotions. There was no beauty here, but an unparalleled grandeur, a sublime scene of devastation and desolation which might have had its counterpart upon the burned-out moon. The mood that gripped Gale now added to its somber portent an unshakable foreboding of calamity.

He wrestled with the spell as if it were a physical foe. Reason and intelligence had their voices in his mind; but the moment was not one wherein these things could wholly control. He felt life strong within his breast, yet there, a step away, was death, yawning, glaring, smoky, red. It was a moment—an hour for a savage, born, bred, developed in this scarred and blasted place of jagged depths and red distances and silences never meant to be broken. Since Gale was not a savage he fought that call of the red gods which sent him back down the long ages toward his primitive day. His mind combated his sense of sight and the hearing that seemed useless; and his mind did not win all the victory. Something fatal was here, hanging in the balance, as the red haze hung along the vast walls of that crater of hell.

Suddenly harsh, prolonged yells brought him to his feet, and the unrealities vanished. Far down the trails where the crater rims closed in the deep fissure he saw moving forms. They were three in number. Two of them ran nimbly across the lava bridge. The third staggered far behind. It was Ladd. He appeared hard hit. He dragged at the heavy rifle which he seemed unable to raise. The yells came from him. He was calling the Yaqui.

Gale's heart stood still momentarily. Here, then, was the catastrophe! He hardly dared sweep that fissure with his glass. The two fleeing figures halted—turned to fire at Ladd. Gale recognized the foremost one—small, compact, gaudy. Rojas! The bandit's arm was outstretched. Puffs of white smoke rose, and shots rapped out. When Ladd went down Rojas threw his gun aside and with a wild yell bounded over the lava. His companion followed.

A tide of passion, first hot as fire, then

cold as ice, rushed over Gale when he saw Rojas take the trail toward Mercedes's hiding-place. The little bandit appeared to have the sure-footedness of a mountain sheep. The Mexican following was not so sure or fast. He turned back. Gale heard the trenchant bark of the .405. Ladd was kneeling. He shot again—again. The retreating bandit seemed to run full into an invisible obstacle, then fell lax, inert, lifeless. Rojas sped on unmindful of the spurts of dust about him. Yaqui, high above Ladd, was also firing at the bandit. Then both rifles were emptied. Rojas turned at a high break in the trail. He shook a defiant hand, and his exulting yell pealed faintly to Gale's ears. About him there was something desperate, magnificent. Then he clambered down the trail.

Ladd dropped the .405, and rising, gun in hand, he staggered toward the bridge of lava. Before he had crossed it Yaqui came bounding down the slope, and in one splendid leap he cleared the fissure. He ran beyond the trail and disappeared on the lava above. Rojas had not seen this sudden, darting move of the Indian.

Gale felt himself bitterly powerless to aid in that pursuit. He could only watch. He wondered, fearfully, what had become of Lash. Presently, when Rojas came out of the cracks and ruts of lava there might be a chance of disabling him by a long shot. His progress was now slow But he was making straight for Mercedes's hiding-place. What was it leading him there—an eagle eye, or hate, or instinct? Why did he go on when there could be no turning back for him on that trail? Ladd was slow, heavy, staggering on the trail; but he was relentless. Only death could stop the ranger now. Surely Rojas must have known that when he chose the trail. From time to time Gale caught glimpses of Yaqui's dark figure stealing along the higher rim of the crater. He was making for a point above the bandit.

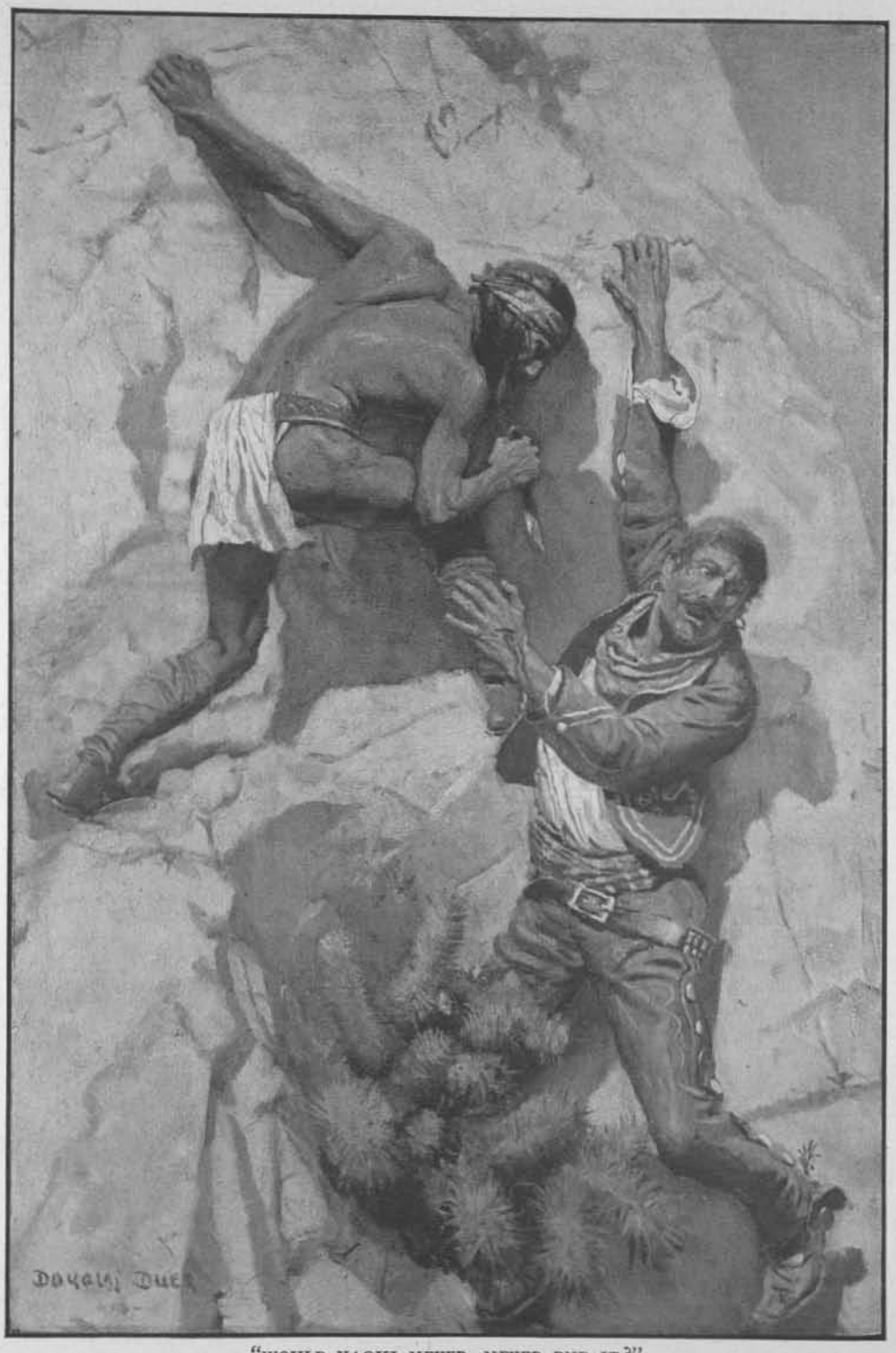
Moments—endless moments dragged by. The lowering sun colored only the upper half of the crater walls. Far down the depths were murky blue. Again Gale felt the insupportable silence. The red haze became a transparent veil before his eyes. Sinister, evil, brooding, waiting, seemed that yawning abyss. Ladd staggered along the trail, at times he crawled. The Yaqui gained; he might have had wings; he leaped from jagged crust to jagged crust; his sure-footedness was a wonderful thing.

But for Gale the marvel of that endless period of watching was the purpose of the bandit Rojas. He had now no weapon. Gale's glass made this fact plain. There was death behind him, death below him, death before him, and though he could not have known it, death above him. He never faltered—never made a misstep upon the narrow, flinty trail. When he reached the lower end of the level ledge Gale's poignant doubt became a certainty. Rojas had seen Mercedes. It was incredible, yet Gale believed it. Then, his heart clamped as in an icy vise, Gale threw forward the Remington, and sinking on one knee, began to shoot. He emptied the magazine. Puffs of dust near Rojas did not even make him turn.

As Gale began to reload he was horror-stricken by a low cry from Thorne. The cavalryman had recovered consciousness. He was half raised, pointing with shaking hand at the opposite ledge. His distended eyes were riveted upon Rojas. He was trying to utter speech that would not come.

Gale wheeled, rigid now, steeling himself to one last forlorn hope—that Mercedes could defend herself. She had a gun. He doubted not at all that she would use it. But, remembering her terror of this savage, he feared for her.

Rojas reached the level of the ledge. He halted. He crouched. It was the act of a panther. Manifestly he saw Mercedes within the cave. Then faint shots patted the air, broke in quick echo. Rojas went down as if struck a heavy blow. He was hit. But even as Gale yelled in sheer madness the bandit leaped erect. He seemed too quick, too supple to be badly wounded. A slight, dark figure flashed out of the cave. Mercedes! She backed against the wall. Gale saw a puff of white—heard a report. But the bandit lunged at her. Mercedes ran, not to try to pass him, but straight for the precipice. Her intention was plain. But Rojas outstripped her, even as she reached the verge. Then a piercing scream pealed



"WOULD YAQUI NEVER, NEVER END IT?"

across the crater—a scream of despair.

Gale closed his eyes. He could not bear to see more.

Thorne echoed Mercedes's scream. Gale looked round just in time to leap and catch the cavalryman as he staggered, apparently for the steep slope. And then, as Gale dragged him back, both fell. Gale saved his friend, but he plunged into a *choya*. He drew his hands away full of the great glistening cones of thorns.

"For God's sake, Gale, shoot! Shoot! *Kill her! Kill her!* . . . Can't—you—see—Rojas——"

Thorne fainted.

Gale, stunned for the instant, stood with uplifted hands, and gazed from Thorne across the crater. Rojas had not killed Mercedes. He was overpowering her. His actions seemed slow, wearing, purposeful. Hers were violent. Like a trapped she-wolf, Mercedes was fighting. She tore, struggled, flung herself.

Rojas's intention was terribly plain.

In agony now, both mental and physical, cold and sick and weak, Gale gripped his rifle and aimed at the struggling forms on the ledge. He pulled the trigger. The bullet struck up a cloud of red dust close to the struggling couple. Again Gale fired, hoping to hit Rojas, praying to kill Mercedes. The bullet struck high. A third—fourth—fifth time the Remington spoke—in vain! The rifle fell from Gale's racked hands.

How horribly plain that fiend's intention! Gale tried to close his eyes, but could not. He prayed wildly for a sudden blindness—to faint as Thorne had fainted. But he was transfixed to the spot with eyes that pierced the red light.

Mercedes was growing weaker, seemed about to collapse.

"Oh, Jim Lash, are you dead?" cried Gale. "Oh, Laddy! . . . Oh, Yaqui!"

Suddenly a dark form literally fell down the wall behind the ledge where Rojas fought the girl. It sank in a heap, then bounded erect.

"Yaqui!" screamed Gale, and he waved his bleeding hands till the blood bespattered his face. Then he choked. Utterance became impossible.

The Indian bent over Rojas and flung him against the wall. Mercedes, sinking back, lay still. When Rojas got up the Indian stood between him and escape from the ledge. Rojas backed the other way along the narrowing shelf of lava. His manner was abject, stupefied. Slowly he stepped backward.

It was then that Gale caught the white gleam of a knife in Yaqui's hand. Rojas turned and ran. He rounded a corner of wall where the footing was precarious. Yaqui followed slowly. His figure was dark and menacing. But he was not in a hurry. When he passed off the ledge Rojas was edging farther and farther along the wall. He was clinging now to the lava, creeping inch by inch. Perhaps he had thought to work around the buttress or climb over it. Evidently he went as far as possible, and there he clung, an unscalable wall above, the abyss beneath.

The approach of the Yaqui was like a slow dark shadow of gloom. If it seemed so to the stricken Gale what must it have been to Rojas? He appeared to sink against the wall. The Yaqui stole closer and closer. He was the savage now, and for him the moment must have been glorified. Gale saw him gaze up at the great circling walls of the crater, then down into the depths. Perhaps the red haze hanging above him, or the purple haze below, or the deep caverns in the lava, held for Yaqui spirits of the desert, his gods to whom he called. Perhaps he invoked shadows of his loved ones and his race, calling them in this moment of vengeance. Gale heard—or imagined he heard—that wild, strange Yaqui cry.

Then the Indian stepped close to Rojas, and bent low, keeping out of reach. How slow were his motions! Would Yaqui never—never end it? . . . A wail drifted across the crater to Gale's ears.

Rojas fell backward and plunged sheer. The bank of white *choyas* caught him, held him upon their steel spikes. How long did the dazed Gale sit there watching Rojas wrestling and writhing in convulsive frenzy? The bandit now seemed mad to win the delayed death.

When he broke free he was a white patched object no longer human, a ball of *choya* burrs, and he slipped off the bank to shoot down and down into the purple depths of the crater.

(*To be continued*)

The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, dogs, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

SUGGESTIONS FOR PRESERVING GAME HEADS

Common salt is the best thing to use on a skin.

Cut well back on the shoulders, up the back of the neck, and free skin from head.

Cut flesh from eye-lids, nose and base of ears. Skin up back of ears from inside and turn flesh-side out. Wash all blood from the hair.

Rub salt into the skin thoroughly and roll up over night. In the morning fleshy parts may be further trimmed, resalted and hung up to dry.

Give scalp and skull the same number. Save lower jaw.

These may be sun-dried, but salting is better.

Dust with equal parts powdered alum and arsenic.

Pack in damp salt.

JAMES L. CLARK.

A JUNGLE KNIFE THAT WORKS

Chas. J. Lisle

After looking for fifteen years for someone to market a real hunter's knife such as I have seen in my dreams, I finally went to the forge and made one for myself.

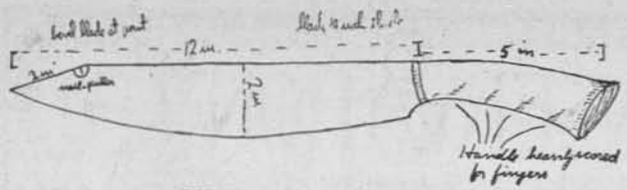
I used to gaze on some of the hunting knives put out by the sporting goods houses, and think them quite "awful weapons" of destruction. Such a knife really might have been worth while to use against a bear, when he came up to embrace you around the neck, and you'd pull the trusty steel and disembowel him at one fell downward stroke. Likewise, it might be used in the same way on a human enemy with one hand after giving him the glad hand-shake with the other. Or you could tie it on to a pole and use it as a spear, to transfix the bear that had you treed, and was coming up after you.

But this light-bladed, dagger-like stabber, whether dirk-bladed or double-edged, has small place in the hunter's camp. It is too big, too thick for whittling; too long for sticking in the pocket; too light and has no balance for chopping; too straight for skinning; the handle is too small, and it tapers the wrong way. Indeed, it is like the Jack-at-all-trades in modern business—a misfit in everything.

While in the Philippines, soldiering for two years, I started out carrying a quartermaster's hand axe—a good little implement of its kind. But later, I discarded it for a native bolo or jungle knife—just as many of the boys discarded their rusty canteens for the native bamboo-joint canteen that will carry water without rust or nausea. I got some ideas on knives that I have finally worked out into the weapon I now carry. A good knife is better than a small axe for camp use; for cutting kindling, for clearing brush—especially in the winter when the brush is wet or snowy and the footing insecure; and a slip when using a narrow bladed axe or hatchet may mean a gashed knee or shin, or at least a ruined boot. But one needs some weight to the blade; one can chop about ten times as fast as one can whittle brush out of the way.

So I made my knife with a heavy drop-blade; the weight is low down and the haft is crooked so that it naturally hangs into position for chopping. One does not want a knife for stabbing—so the sharp point that gives unusable length that only gets broken, is left off. The haft is of wood, generous enough to fill the hand; and the "hang" of the weapon actually tempts a lazy man to cut the camp kindling. The blade was made from tool steel, laminated over and over until it shows the beautiful markings of a Damascus gun-barrel or sword; and it takes a temper that makes it a real joy in the hills. There is no guard, save the heel of the blade. The back of the blade for the first two inches from the point is ground into a dull "bone-knife," for such heavy work as one would not demand of a keen-cutting blade. A serviceable nail-puller is cut into the blade, just at the end of the back taper. Back of that it is thick enough, and heavy enough, to drive nails. A cleverer workman would have made a smoother-finished knife, no doubt.

But I don't profess even this weapon to be a universal woodsman's knife. It is not for skinning game, for sharpening tooth-picks, for table use, for minor surgical operations. For these I carry a good jack-knife—a three-bladed "stock knife" that costs a



THE HOME-MADE JUNGLE KNIFE

dollar and a half. The other is for heavy use; to take the place of the less efficient hatchet. It is heavy enough—it weighs a pound and a half without the sheath; it will dig almost like a spade; and it will cut any tree that any hatchet or belt-axe will cut, and do better a score of things that the axe will not do.

I have never seen anything else half so good since coming from the Philippines where the babies are born with a jungle knife in their teeth—and usually die, prematurely, with one in their gizzard or back. Only, their knives are all pot-metal, whereas mine is of steel that would have delighted Saladin, the Saracen, for its keenness, or Richard Lion-Heart for its strength. A poor knife is an insufferable abomination.

A small, 30-cent carborundum pocket-stone is a good investment for the camper, whether with knife or axe, in his equipment. It pays its cost many times over.

"SAFETY FIRST" WITH CAMP FIRES

By Chas. J. Lisle

It should not be necessary to urge any sane man to "Put Out The Camp Fire Before You Leave"—but with the close proximity of the fall shooting season, when thousands will take to the fields and the forests for birds and big game, this warning can hardly come amiss.

Don't build a big fire—that's foolish. You can't get close enough to a big fire to cook your food well; three times out of every four you'll burn at least part of the meal.

Don't build a fire against a big log—green, half-green, dry, or even rotten. You can't tell how wood will act in conjunction with fire. A log may smoulder for a night, or for a week, and then burst into a blaze—after you thought the fire was dead for ever so long.

Don't build a fire where a tree has fallen and rotted away. Some of those old punk piles will carry fire for an unbelievably long time. And when you think it is only dying steam that comes up after you have deluged the blaze with water, some of it is likely to be real fire that may break out after you have moved over into the next county.

Don't camp in a bed of leaves. They are devilishly deceptive in their coquetry with fire. They might rout you out of bed in a hurry, at night, with your blankets afire—though that would be a minor calamity beside starting a great forest conflagration—like the forest fires in Idaho four years ago, that burned to death almost 100 people, and drove hundreds from their ruined homes; while the property loss ran into millions. Most of these fires were caused by careless campers, who did *not* put out their fires! I wonder what the Day of Judgment will bring to those fire-builders!

Don't ever leave your camp, for an hour, for a day, forever, without putting out the last vestige of fire. If you have been reasonable in placing and maintaining the fire, there won't be much to do; for you'd have no surplus fuel within reach, and the blaze would be small enough to die out as soon as you were through cooking. If you are near a stream, carry water and pour over every stick and coal. If it is a dry camp, scoop sand or earth over the place, scattering all the fagots, and see that no fuel is left within reach that could possibly become ignited. If you are in the rocks, a minute's work will wall in the fireplace so that no fugitive blaze can get away. But wherever you are, PUT IT OUT!

A fireplace built of stones is always good to cook over—and it is almost certain to be small enough that no great quantity of fuel can be put in. If one has a big camp knife, a fire-hole can be dug in the earth, that will work very nicely if there are no stones at hand. A good stout wire, to string between two stout stakes and to carry the kettles over a fire built on the level ground, is not so bad. Some of the dainty little pocket camp cook outfits are "as good as gold," for the small camping party; one would hardly need to be told to build a small fire for one of these! It would be almost a rational law to require all hunters to use only these, or go to jail—for they allow only of "Safety First" fires!

A Filipino woman with one of her little hand-made clay firepots would cook a full course meal on as little fuel as most campers would cut up for kindling to merely start a camp fire—and nobody ever heard of a Filipino thatched nipa shack, as dry as tinder and almost explosively inflammable, burned by a fire that got away from its builder. The excellence of camp cookery, the safety of the party and the peace of mind, if not the lives and property of the whole mountain and forest country, is in inverse ratio to the size of your camp fire.

A penitentiary sentence is none too heavy for the leaving of an unguarded camp fire. The National Forest Service is making a notable educational campaign in all the national forests, to teach the rational use of fire; and some of the timbered States are going even further in the way of patrols, education, fire-fighting service, and penalties for offenders. Financial responsibility for damages caused by these "accidental" camp fires is one of the best remedies. I have a friend who owns a ranch along one of the famous Idaho trout streams; it has a fine little grove, a tempting place to camp. In one year he had two disastrous fires, both caused by careless campers who left their fires in his grove and made their get-away before he knew they were there to camp. The two fires cost him close to $4,000—and, unfortunately, he couldn't catch the miscreants to see who they were!

Sometimes the neglected camp fire does its deadly work on the fire-builder or his family. A friend who took his family out to the Big Wood River, a famous Idaho trout stream, had a little camp fire to heat the coffee for dinner. They thought they had put out all the fire; and the six-year-old girl was playing around where the fire had been. One neglected ember set fire to her dress and burned her frightfully. A long siege in the hospital, some painful skin-grafting, a $500 doctor bill, and almost a million-dollar funeral and lifelong regret came from this one little neglected camp fire that the man said he had "put out!"

Only individual care will keep down the fire menace, and make life and property safe, as well as game more plentiful and easy to get; and make the laws more tolerant of the intruding hunter. A rope or a bullet seems so much quicker than the law, and so much more sure and appropriate, for the careless trespasser who sets out a fire that harms the public or the individual who is innocent. No wonder that the trespass laws are getting more strict, as the fence-cutting, gate-opening, fire-building, "didn't-know-it-was-loaded" gang take to the hills to ravage and to have a little "fun" without considering the rights of others.

Put out your fires, shut all the gates you open, be absolutely certain what it is before you shoot at anything—and you won't be a public menace, like a skunk or a "typhoid Mary" or a smallpox refugee. Be a sportsman!

WATERPROOFING HUNTING BOOTS

FIELD & STREAM PUB. CO.:

You have undoubtedly published in some past issue a formula for waterproofing leather boots or shoes. If you have such a formula on file I would appreciate your printing same in the next issue.

GEO. W. GRAHAM.

Ans.—It is not a good plan to waterproof leather. Rub boots with fat or one of the boot greases sold by the sportsmen's outfitters and renew same as fat works out of leather.—ED.

The Federal regulations governing the open seasons for migratory birds will be found on page 731, under Shotguns and Rifles.

CONSERVATION

LAWS PROTECTING GAME

The more important changes affecting big game included the closing of the season for four years on moose in Maine; authorization for the killing of 50 bull moose in Wyoming; lengthening the season on elk in Montana two weeks; closing the season on mountain sheep in Montana; changes affecting does in seven States, including the removal of protection in Florida, Nevada, New Jersey and Wyoming; establishment of a limit in Arkansas; and decrease in the limits in Alaska, Michigan, Montana and Nevada.

Under present conditions deer-hunting is permitted in 36 States, in about one-third of which the hunter is limited to one deer a season and in most of the others to two. Eighteen States protect does at all seasons and allow only bucks to be killed, namely, Alabama, Arizona, California, Georgia, Idaho, Missouri, Mississippi, New Mexico, Nevada, New York, Oklahoma, Oregon, Pennsylvania, Texas, Utah, Vermont, West Virginia and Wisconsin. Pennsylvania requires that deer killed shall have horns two inches above the hair, New York and Vermont at least three inches long, and West Virginia four inches long, while California prohibits entirely the killing of spike bucks.

SALE OF GAME IN THE MISSISSIPPI VALLEY

Washington, D. C.—Three important changes have radically affected traffic in game in the Mississippi valley during the present year, according to Farmers' Bulletin 692. In February the Supreme Court of Arkansas held that a local law permitting shipment of game from the Chickasawba district of Mississippi County, Ark., was unconstitutional, and that the general law prohibiting shipment of game was in effect in this county as well as in other parts of the State. A little later the Legislature of Tennessee prohibited the sale of all protected game taken within the State, thereby cutting off the market for ducks killed on Roolfoot Lake. Finally, in June, a new game law was passed in Illinois prohibiting sale of all game, native or imported, except rabbits. For 20 years or more Illinois has permitted the sale at certain seasons of game imported from other States. Illinois now not only prohibits the sale but also the export of all protected game except rabbits. Missouri has strengthened its export law by a provision prohibiting export of quail for any purpose.

WATERFOWL

All the States now allow waterfowl hunting, but the wood duck is protected for several years throughout the northern zone and in the southern zone in the States of California, Kansas and West Virginia. Daily bag limits were established for the first time in Arkansas and Connecticut, reduced in Oklahoma from 25 to 10, and increased in Missouri from 10 to 15. Most of the States now have a limit of 25 or less per day.

THE ALIEN GUN LAWS

As a result of the decision of the Supreme Court of the United States on January 19, 1914, sustaining the alien hunting law of Pennsylvania, legislation prohibiting aliens from hunting or owning shotguns or rifles was enacted in at least four States: Massachusetts, New Jersey, North Dakota and West Virginia—but certain exceptions based on property qualifications were made in Massachusetts and New Jersey.

THE WORLD'S RECORD FISH HOG

F. C. Tuttle, of Skowhegan, who is reputed to be the greatest fisherman for brook trout in that section of the State, has closed his fishing season and has made a record for this season as follows: April, 65; May, 270; June, 180; July, 241; August, 317; 26 to September 4, making a total of 1,144 trout for the season. And still we wonder that the brooks are depleted of trout.—*Courtesy Franklin Journal.*

Can't some citizen of Skowhegan or vicinity put a damper on this party's future activities along this line.?—Ed.

PROPOSED NEW YORK CONSTITUTIONAL AMENDMENT

To insert in the Constitution a new article in relation to the conservation of natural resources

The Delegates of the People of the State of New York, in Convention assembled, do propose as follows:

*Part in italics represents new matter.

*Section seven of article seven of the constitution is hereby repealed and the constitution is hereby amended by inserting a new article to read as follows:

ARTICLE ——

Section 1. The department of conservation shall consist of nine commissioners to serve without compensation and to be appointed by the governor by and with the advice and consent of the senate for terms which shall expire in nine successive years, the first ending on January first, nineteen hundred and seventeen, and their successor shall be appointed for terms of nine years. Vacancies shall be filled for the unexpired term. One commissioner shall reside in each judicial district. They shall be subject to removal by the governor on charges, after an opportunity to be heard. Subject to the limitations in this constitution contained, the department shall be charged with the development and protection of the natural resources of the state; the encouragement of forestry and the suppression of forest fires throughout the state; the exclusive care, maintenance and administration of the forest preserve; the conservation, prevention of pollution, and regulation of the waters of the state; the protection and propagation of its fish, birds, game, shellfish and crustacea, except migratory fish of the sea within the limits of the marine district, with the power, subject to the approval of the governor, to enact regulations with respect to the taking, possession, sale and transportation thereof, which shall have the force of law, when filed in the office of the department of state and published as the legislature may provide, until and unless the legislature shall thereafter modify such regulations. The department shall exercise such additional powers as from time to time may be conferred by law. The department shall appoint and may at pleasure remove a superintendent. It may also appoint all other necessary subordinates.

§ 2. The lands of the state, now owned or hereafter acquired, constituting the forest preserve as now fixed by law, shall be forever kept as wild forest lands. They shall not be leased, sold or exchanged, or be taken by any corporation, public or private, nor shall the *trees and* timber thereon be sold, removed or destroyed. *The department is, however, empowered to reforest lands in the forest preserve, to construct fire trails thereon, and to remove dead trees and dead timber therefrom for purposes of reforestation and fire protection solely, but shall not sell the same. Nothing herein contained shall prevent the state from constructing a state highway from Saranac lake in Franklin county to Long Lake in Hamilton county and thence to Old Forge in Herkimer county by way of Blue Mountain lake and Raquette lake.*

§ 3. [But] The legislature may by general laws provide for the use of not exceeding three per centum of such lands for the con-

struction and maintenance of reservoirs for municipal water supply, for the canals of the state and to regulate the flow of streams. Such reservoirs shall be constructed, owned and controlled by the state, but such work shall not be undertaken until after the boundaries and high flow lines thereof shall have been accurately surveyed and fixed, and after public notice, hearing and determination that such lands are required for such public use. The expense of any such improvements shall be apportioned on the public and private property and municipalities benefited to the extent of the benefits received. Any such reservoir shall always be operated by the state and the legislature shall provide for a charge upon the property and municipalities benefited for a reasonable return to the state upon the value of the rights and property of the state used and the services of the state rendered, which shall be fixed for terms of not exceeding ten years, and be readjustable at the end of any term. Unsanitary conditions shall not be created or continued by any such public works.

§ 4. *The legislature may authorize the use by the city of New York for its municipal water supply of lands now belonging to the state located in the towns of Hurley and Shandaken in the county of Ulster and in the town of Lexington in the county of Greene, for just compensation.*

§ 5. *The legislature shall annually make provision for the purchase of real property within the Adirondack and Catskill parks as defined by law, the reforestation of lands, and the making of boundary and valuation surveys.*

§ 6. *The department, upon payment of just compensation, may issue to any occupant of and continuous resident throughout each year upon state lands within the forest preserve a revocable, nontransferable license for the continuance of such occupancy to the extent of not exceeding ten acres; provided that on December first, nineteen hundred and nine, such lands were, and have ever since been, actually occupied by such occupant and improved by the erection thereon of permanent buildings.*

§ 7. A violation of any of the provisions of this [section] *article* may be restrained at the suit of the people or, with the consent of the supreme court in appellate division, on notice to the attorney-general at the suit of any citizen.

ELK IN WEST VIRGINIA

By Wm. Perry Brown

Some two years ago, through the influence of the Allegheny Sportsman's Association, and by aid of the Federal Government, there were brought to West Virginia some fifty head of elk from the Yellowstone National Park. During that year over a thousand head were loaned by the Government to various States and thus brought to their several destinations. Being awarded to the whole State, J. A. Visquesuey, State game warden, co-operating with the Allegheny Sportsmen's Association, established them on the 25,000-acre preserve near Minnehaha Springs in Pocahontas County in said State. At the same time twenty-five more elk were consigned to Virginia and located in another preserve across the State line in the adjoining county of Bath, in Virginia. Also, at the same time, fifty more head of elk were sent to Pennsylvania. These 125 head constitute, we believe, the total number loaned by the Government to States east of the Mississippi River.

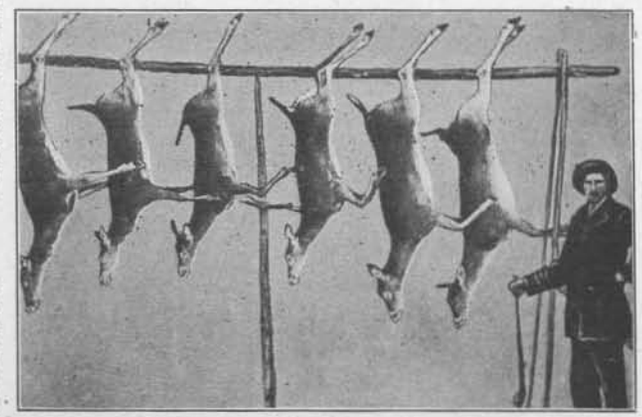
FEEDING TIME FOR THE ELK

Part of these West Virginia elk were placed in the club enclosure, probably half of the original number. Those in the enclosure are still doing well, are quite tame, and have had a small increase by birth. Those outside have naturally remained more in a wild state, yet are in a flourishing condition, having passed two winters on the forest mountain range with but little assistance in the way of food, shelter and so on. I was told by the mountain men that young elk have been seen with their mothers, but cannot vouch for the accuracy. Yet the location is ideal.

Ultimately this preserve will either adjoin or be incorporated within the Appalachian National Park, its territory being taken from both States. It is on the high mountain plateau forming the backbone of the main Appalachian range, has abundant feeding valleys, surrounded by forest-clad ridges, with ample winter coverts. It is well watered throughout. At present "all these elk are doing fine and have wintered nicely among these mountains." I am quoting from the warden's private letter. He also says: "Those in the enclosures were fed to some extent, both last winter and the one previous. But the herd outside the park, having a large range, have subsisted without aid, and have increased to some extent."

All this is encouraging to those who believe that, with proper government protection, our ancient forests, so long the prey of the untrammeled hunter and lumberman, may yet be restocked with the wild creatures which the white man found roaming here in abundance, when his blighting presence was first felt among them. More rational game and timber laws are being more and more put in force. Thousands and thousands of "second growth" forest land are now either controlled by enlightened sportsmen's associations, or are under negotiation by the Federal Government for the preserves that will eventually shelter from mischief the mountain sources of our mid-west and southern coast rivers.

For much of the information recently obtained upon these matters the writer desires to acknowledge the kindness of J. A. Visquesney, State Forest, Game and Fish Warden.



THE KIND OF DEER HUNTING THAT MEANS EXTERMINATION

This slaughter of female deer and fawns was photographed in a far-Western State we will not name. It is time for every State that contains deer to enact a buck law.

—From the Permanent Wild Life Protection Fund.

SHOTGUNS AND RIFLES

OPEN SEASONS FOR MIGRATORY BIRDS IN 1915 UNDER FEDERAL REGULATIONS—ZONE NO. 1

WATERFOWL	SEPT. 1—DEC. 16
Exceptions: Massachusetts, Rhode Island	Oct. 1—Jan. 1
New York, Connecticut, Pennsylvania, Oregon, Washington, Idaho	Oct. 1—Jan. 16
New Jersey	Nov. 1—Feb. 1
Minnesota, North Dakota, South Dakota, Wisconsin	Sept. 7—Dec. 1
RAILS, COOTS, GALLINULES	SEPT 1—DEC. 1
Exceptions: Massachusetts, New Hampshire, Rhode Island	Aug. 15—Dec. 1
Connecticut, Michigan, New York, Long Island	Sept. 16—Dec. 1
Minnesota, North Dakota, South Dakota, Wisconsin	Sept. 7—Dec. 1
Oregon, Washington	Oct. 1—Jan. 16
WOODCOCK	OCT. 1—DEC. 1
Exceptions: Connecticut, Massachusetts, New Jersey	Oct. 10—Dec. 1
Rhode Island	Nov. 1—Dec. 1
Pennsylvania, Long Island	Oct. 15—Dec. 1
SHORE BIRDS—BLACK-BREASTED AND GOLDEN PLOVER, JACKSNIPE, YELLOW-LEGS	SEPT. 1—DEC. 16
Exceptions: Maine, Massachusetts, New Hampshire, Rhode Island, Long Island	Aug. 15—Dec. 1
New York (except Long Island)	Sept. 16—Dec. 1
Minnesota, North Dakota, South Dakota, Wisconsin	Sept. 7—Dec. 1
Oregon, Washington	Oct. 1—Dec. 16

Insectivorous birds protected indefinitely. Band-tailed pigeons, cranes, swans, curlew, smaller shore birds, and wood ducks protected until September 1, 1918. Rails in Vermont and woodcock in Illinois also protected until 1918.

Shooting prohibited between sunset and sunrise; or at any time on sections of upper Mississippi and Missouri Rivers after January 1, 1915.

ZONE NO. 2

WATERFOWL	OCT. 1—JAN. 16
Exceptions: Delaware, Maryland, District of Columbia, Virginia, North Carolina, Alabama, Mississippi, Louisiana	Nov. 1—Feb. 1
Florida, Georgia, South Carolina	Nov. 20—Feb. 16
Missouri, Kansas, Oklahoma	Sept. 15—Feb. 1
Arizona, California, Texas	Oct. 15—Feb. 1
RAILS, COOTS, GALLINULES	SEPT. 1—DEC. 1
Exceptions: Tennessee, Utah	Oct. 1—Dec. 1
Missouri	Sept. 15—Jan. 1
Louisiana	Nov. 1—Feb. 1
Arizona, California (coots)	Oct. 15—Feb. 1
WOODCOCK	NOV. 1—JAN. 1
Exceptions: Delaware, Louisiana	Nov. 15—Jan. 1
West Virginia	Oct. 1—Dec. 1
Georgia	Dec. 1—Jan. 1
SHORE BIRDS—BLACK-BREASTED AND GOLDEN PLOVER, JACKSNIPE, YELLOW-LEGS	SEPT. 1—DEC. 16
Exceptions: Florida, Georgia, South Carolina	Nov. 20—Feb. 1
Alabama, Louisiana, Mississippi, Texas	Nov. 1—Feb. 1
Tennessee	Oct. 1—Dec. 16
Arizona, California	Oct. 15—Feb. 1
Utah (snipe)	Oct. 1—Dec. 16
Utah (plover and yellowlegs)	Sept. 1, 1918.

Insectivorous birds protected indefinitely. Band-tailed pigeons, cranes, swans, curlew, and smaller shore birds protected until September 1, 1918; wood ducks in Kansas and West Virginia, rails and wood ducks in California, and woodcock in Missouri are also protected until September 1, 1918.

Shooting prohibited between sunset and sunrise; or at any time on the Mississippi River between Minneapolis and Memphis after January 1, 1915.

TESTING FOR DROP OF STOCK

Mr. Paul A. Curtiss, Jr.

I have read with interest your recent article in FIELD & STREAM on gun stocks. I am taking the liberty of asking you the best method of fitting a gun-stock. I am not an expert shot. But do not think, since reading your article, that I am entirely at fault.

I recently purchased a new gun, stock, 14 inches long, and 3 inch drop. I have always used a 3-inch drop, thinking it fit exactly. But have never had good results. In trying the new gun at the trap the other day I only broke nine out of twenty-four. At the time I thought it was the new gun, not having shot it before, but remarked several times to my companion that I could not understand how I missed several times.

P. R. SCHMIDT.

Ans.—You say that your stock is 14 inches by 3 inches, so I take it that you are a man of average size or you would use a longer stock.

If I am right in this I think that you are using a stock that is far too crooked for you, and I would suggest that 2½-inch drop would improve your score a great deal. For with very few exceptions 14 inches by 3 inches would not be a good proportion.

Fully 75 per cent. of the game shot at is rising and going away from the gunner—which requires overshooting in order to connect with the bird. Therefore a gun that naturally shoots high is an advantage. This is even more true of trap shooting.

Get some large squares of stiff brown paper, about 4 feet by 4 feet, make a small bull in the center, then pace off 30 yards, and with a quick aim firing as the gun reaches the shoulder. Make half a dozen targets on separate sheets of paper.

On comparing them if you find that your gun shoots low have it straightened, and if possible lengthened by adding a recoil pad.

THE SELECTION OF A HUNTING RIFLE

FIELD & STREAM PUB. CO.:

I notice that you are kept busy answering questions relative to ammunition and firearms and wish to comment on some that are asked occassionally. It is my opinion that the editor of any sporting paper should not be confronted with the question of deciding which company makes the best shotgun, rifle or ammunition. It is quite proper for him to answer as to who makes certain kinds and styles of firearms and ammunition of high grade, and will also advise as to his personal taste or liking. He will always use his best judgment as to the size, caliber or bore of arm best suited for the particular game which you wish to hunt. He will also advise you of several good makes of rifles or guns which you

can thoroughly rely upon. But don't ask him to tell you which is the best, as that is entirely a matter of choice or opinion, and he will be compelled to tell you that he cannot answer questions of that kind.

My hunting experience has taught me that it is not so much a question of the rifle itself as the man behind it. If one is a fair shot and can place the bullet at some vital spot, the game is sure to go down and is not so much a question of the kind of rifle and caliber used. My advice to those who intend hunting large game, such as moose, elk and large bear, is to use a rifle with a caliber from .30 to .38 with a velocity of not less than 2,000 feet per second, and bullet to weigh from 170 to 250 grains. For all such animals as deer, goat, black bear, mountain lion, wolf, etc., a smaller caliber can be used to good advantage. So far as the different styles of actions are concerned, namely, lever, slide, bolt and auto loading, this is a matter of fancy or choice of the user. For my own personal use I have a Winchester .33 caliber, '86 model. Pistol grip and forearm checkered, half magazine, take-down, with set triggers. Sights, Lyman's combination rear peep with cup disc. Middle, Marble's adjustable leaf sight; front, King's patent ideal gold bead sight. This combination I have found the most satisfactory for my hunting as well as target practice. This is strictly a big game rifle. For smaller game and where long or open country shots are to be made, I have a high powered .250-3000 Savage with a combination of sights similar to that on my .33 Winchester. From my past experience in big game hunting it is my opinion that a large caliber rifle is much better than the smaller ones, i. e., .22 and .25. I think it is safe to say that 90 per cent of the big game today is killed with the .30-30, .32 Spec., .33, .32-40 and .35 calibers, which are all made in high power by the leading rifle manufacturers.

In commenting further on the question of various size calibers being a matter of choice, I wish to show you the difference of opinions of two big game hunters who are particular friends of the writer. One is the father of the other and they have been hunting big game together for seventeen years from California to New Brunswick. The father uses a .45-90 Winchester and the son a .30-30 Winchester. Both of these gentlemen bring back the same kind of game and neither of them can be convinced by the other that he has the best gun for big game shooting.

A. L. Kern.

LOADS FOR THE .25-20

Field & Stream Pub. Co.

I have two rifles shooting the .25-20 S. S. cartridge, one with a 24-inch barrel, the other a 28-inch barrel.

Using full charges of King's semi-smokeless powder, F.F.G., the 28-inch barrel gives off but little smoke, while the 24-inch barrel produces a great deal. What would you consider the cause for this? Is powder of the F.F.G. class of the proper degree of fineness for the .25-20 cartridge?

(2) I am tempted to load some smokeless shotgun shells with semi-smokeless powder. Would any unsatisfactory results arise from such a combination as black or semi-smokeless powder and smokeless primers?

(3) Do you know whether leather wads would in any way improve the shooting of a shotgun?

(4) What is considered a good low-pressure bulk smokeless powder for a .25-20 rifle? I mean what brand of powder.

J. E. Lewis.

1. The longer barrel gives off less smoke because of the most perfect combustion of the powder in the longer tube.

F.F.G. is correct.

2. Use shells adapted to black powder, and equipped with black powder primers. Smokeless primer flame is hotter than black, might give uneven results.

3. Leather wads would be of no use. Cork wads have given good results in days gone by.

4. Any of the bulk smokeless rifle powders will be found good.

E. C. C.

NOTES OF THE MOHAWK AND HUDSON FISH AND GAME ASSOCIATION

The incorporators of the recently organized Mohawk and Hudson Fish and Game Association, with its principal offices at Cohoes, N. Y., met on September 13 and elected the following officers:

President, Dr. Wm. M. Campbell; first vice-president, Warren L. Pine, Troy, N. Y.; second vice-president, Harry J. Bartle, Watervliet, N. Y.; third vice-president, S. Edward Horrocks, Cohoes, N. Y.; secretary, Wm. T. Ford, Cohoes, N. Y., and Daniel J. Carlon, Cohoes, N. Y.

The club will operate in the counties of Albany, Rensselaer and Saratoga. Its objects are the stocking of streams and woods with fish and game in the counties named, the enforcement of the laws affecting the same, and to bring together a large number of persons having the same objects in view. The secretary, Mr. Ford, has been instrumental in stocking the Mohawk River, at Dunsbach Ferry, three miles west of Cohoes, with pike and small-mouth black bass, for a period of 19 years past. The catches this season have been phenomenal. The canalizing of the Mohawk, between the Crescent and Visschers Ferry dams, creates a lake twelve miles in length and several hundred feet in width at its narrowest point, with a depth of over fifty feet in many places. If the plans underfoot are carried out, no better fishing in the State will be the result in a very few years.

QUAIL CALLS

Field & Stream Pub. Co.:

Am a constant reader of your magazine and find it very interesting on outdoor sports. Could you inform me where I could purchase a quail call or whistle. I have tried all of the sporting goods stores here. They seem to have most all the game birds calls, except the quail.

Wilbur L. Johnson.

Ans.—We know of no such call on the market. The whistle of Bob White is so easy to imitate that any child can do it. The female quail call is much more difficult and would be impossible with any kind of pipe.—Ed.

BALANCE IN SMALL-BORES

By Edwin L. Hedderly

Balance in a shotgun is of the highest importance in its effect upon the accuracy and consistency of one's shooting. The smaller of bore and lighter of weight the gun, the more essential does a proper distribution of weight become; and like some other things that we know when we experience them, this fine and fancy quality of "balance" is not easily described, nor readily reducible to rule.

It is not a matter of knife-edge balancing so many inches from the face of the standing-breech as so many seem to think. In fact, the balance of every gun is a law unto itself, and in considerable measure, the same is true of individual requirements as to balance. There is something about the feeling of a gun whose weight seems to lie just right between the hands that is utterly beyond lucid description, but instantly sensed when experienced; and it has everything to do with quick, effective shooting.

True of the twelve-bore with its seven and a half or eight pounds of weight, this importance of balance becomes much more manifest in the six and a quarter to six and a half pounds of the twenty-gauge. A misconception of the principles of balance is probably keeping many a man from doing full justice to himself in the field with a light gun; and in all probability the greater steadiness of handling so noticeable with 32-inch twenty-bores when compared with shorter barrels is as much accountable for their greater practical efficiency as the longer sighting-radius and alignment feature.

Many light twenty-bores are so heavy behind that the stock fairly whips them around, and gives an unreliability to the pointing of the piece that casts strictures upon the efficiency of a wonderfully capable calibre of shotgun. Often a light, short twenty-bore is fitted with a full rubber recoil pad weighing nearly five ounces, which utterly destroys the shooting of some people, although it does not affect others to so great a degree. Light, short guns are apt to jar and so suggest recoil absorbers; but a judicious removal of weight in the stock with an auger-bit of 1½-inch size may help greatly to maintain the original balance and permit the pad also.

Boring out all possible weight and substituting a block of fine-grained cork for the rubber pad will give good service with some guns, but there is always a danger of lightening a stock under the comb until it becomes a sounding-board for the magnification of jaw

jar. Good, honest walnut has considerable capacity for absorbing vibration; but in a gun of fair weight the cork will correct muzzle-lightness if it be substituted for the recoil pad of rubber, and cork has considerable absorbing power itself. The next stock I bore out will be filled with a mixture of cork crumbs and some light but efficient binder. One American gun firm runs two holes right up the center of the stock leaving plenty of wood above and below, and their bored-out stocks do not jar. The best British practice balances the metal work, and then makes the wood harmonize. By this method, I have cured guns of rearing or "flipping" badly with the first barrel, and made them lie steady along the left hand. The gun upon which most of this experimenting was done, illustrated several benefits, and incidentally, some pitfalls to be avoided in "monkeying" with the stock-timber of a fine shotgun.

The makers never wanted to fit a full recoil pad on this gun—and they were right, as usual. They balanced the gun exactly as asked, meeting even trivial details of the specifications, and established a new record for lightweight and fast handling qualities. Right there was where the trouble came in. They turned out a gun that bordered upon being too fast for anybody to handle consistently one day with another. There are days come to every good shot when he can't miss, and again days when there is a disposition to do everything wrong. These are the times when a "whippy" gun bothers. More weight corrects this and steadies some men; but the question is more a matter of distribution of weight than of weight itself. What is wanted is just enough "hang" of barrel-weight on the left hand to give it some sense of responsibility in pointing and to obviate those prolific tendencies toward missing that develop in shooting high through failure to "get down" on the stock. A heavy-stocked, light-muzzled gun loosely handled, tends to ride low behind and begets carelessness in the cheeking of it.

Taking off the recoil pad and excavating the rest of the stock, covering it with a block of fine-grained cork "float" shaped to fit, did much to utterly wreck the balance of this fine twenty-bore as viewed by the book standards for this sort of thing; but five ounces weight was removed in this process, and seemingly the trick was done. The gun hung like a seven pounder to the backset of the first barrel, and bar one thing, it simplified the second shot noticeably. That "one thing" was the development of a straight-up jar that settled close to the cheek-bone and after several trials at blue rocks, seemed prohibitive. The net result was to replace the rubber pad at a saving of the weight bored out from the stock, and the jaw jolting decreased at once. The gun hung better, and the work was worth while.

At the same time, a 6½-pound, 28-bore, 32-inch gun was fitted with the cork. Always a bit light forward, this gun now handles like the guns one dreams of, but seldom sees. Of course its weight absorbs all kinds and classifications of recoil; it comes back little more than a .22 rifle. Let anyone who thinks the recoil of the first barrel has no appreciable effect upon his delivery of the second, just try a few doubles with that long 28-bore gun, and he will not require his error pointed out to him. It is the quickest gun to get "on" with yet handled, and all since the cork was substituted for the rubber. Now it weighs what a 28-bore should weigh, namely about 6 pounds 2 ounces. Handles faster in every way, is lighter to carry, and a surprisingly deadly little field-piece with No. 8 shot. All of which merely served to show the advantage of the cork pad in a gun of full weight. These pads were glued on by Will Wilshire, one of our most ingenious gunsmiths, and the one which required to be taken off divorced so reluctantly that all fears as to the integrity of that method of attachment passed. As a method of lengthening the stock without adding weight at a bad place, or of balancing a stock-heavy—or rather butt-heavy—gun, the cork pad is worth knowing.

Granted a really close-shooting twenty-bore to weigh 6¼ pounds with 32-inch barrels and so nicely balanced that the center of mass comes nicely back of the left hand, one will find he has a gun so responsive, and so handy that there will be no worries over a wider gauge. This tendency to featherweight, "corky-handling" twenties is doing injury to the small-bore movement; the short-barreled plaything abominations with which some makers are flooding the markets will do more to discourage the sportsmanlike trend toward narrower gauges and lighter weights than any inherent insufficiency in the gun or inefficiency in its ammunition as issued, ever could work.

It is a mistake to assume that an ultra-fast handling gun is a quicker gun to shoot with, because one swings over and past too many birds with it. Only a better-than-average shot will realize that he is doing this, and such will correct for it, whilst the average misses; and lets it go at that. Light weight properly distributed is one thing, and a grand thing; but a featherweight, corky-muzzled gun is everything else. Bluerock shooting will do something toward teaching a man this much about his gun and his shooting at doubles; the gun that permits a quick and accurate second-barrel is apt to be the gun that handles right for that particular shooter. Taking wood from the stock of a gun with the ordinary hard rubber type of butt-cap affixed is a simple matter, but one that should be done very gingerly, a little at a time and without attempting to "gild the lily" by going too far in search of the ultimate of perfection which nature seems to abhor—even gun-nature. Every change in the stock, or the barrels of a gun should be a matter of a little work, a little practical demonstration, then a little more work and so on; not an attempt to do it all at once, for that means doing too much, and taking out that which cannot be put back.

28 AND 30-INCH SHOTGUN BARRELS

FIELD & STREAM PUB. CO.:

Kindly inform me on the difference in velocity and penetration of 28 and 30-inch length shotgun barrels. Are straight stocks on shotguns more desirable than pistol grip How can a fellow fit a gun, when he has to do it himself?

P. R. SCHMIDT.

Ans.—Practically no difference in velocity. The two lengths are for different work: 28-inch is for fast handling in brush, 30 for ducks, etc. The shotgun stock must fit user. As a rule 2½-inch drop at heel is plenty. The English prefer no pistol grip and use a very straight gun which overshoots. Home-made straightening depends on the model of the gun; with some the fingers of the frame can be heated and bent when red hot; with others the stock must be steamed at the tang and bent by hanging a heavy weight on heel and leaving it there for some time. —ED.

SHOTGUN LOADS FOR DIFFERENT SPECIES OF GAME

FIELD & STREAM PUB. CO.:

Will you kindly tell me what kind of shot to use in the shells for different game to obtain the best results.

HUGH T. DAVIS.

Ans.—Ducks, 4s and 5s in 10 and 12-gauge respectively, 7½s in 12 for quail, 6s for grouse, 8s for rabbits and squirrels.—ED.

FITTING THE SHOTGUN STOCK

By Paul A. Curtis, Jr.

In fitting a shotgun stock, as in many other things, it is far easier to say what should be acquired than how to obtain it.

To begin with, the writer does not believe that it is possible for a man to fit himself alone as well as he can with the help of an expert, and a try-gun. Yet, due to the average gunner's lack of consideration for the all important fit of his gun, the expert gun-fitter has received no encouragement in this country, and as a result out of our ninety-odd million inhabitants there are probably not a half-dozen experienced men competent to do the work.

However, many of our sportsmen are in out-of-the-way localities, and could not receive the services of such a man even if they did appreciate them. So for them it is necessary to fit themselves by following the best recognized rules in gun fitting.

In the first place select a gun that "feels right"; for it may be perfectly balanced in point of proportion, and yet not suit your own particular style of holding. If the gun is muzzle-heavy it will make you shoot low, and behind your game, while if it is muzzle-light and heavy in the butt you will shoot high and find it difficult to hold on the mark.

A gun to feel right will have its weight distributed principally around the breech and action which is also where it is needed the most to withstand the recoil. This puts

the weight between the two hands of the shooter which promotes rapidity of handling, and will make the gun seem a pound lighter than another that is no heavier, but is poorly balanced.

If the gun is muzzle-heavy it can be remedied by weighing the butt—by taking off the heel-plate and boring a hole in the stock, and filling it with shot until the proper balance is obtained. But if the gun is properly constructed in the first place this should not be necessary.

After selecting a likely gun pick out an object twenty-five or thirty feet away and, walking towards it, suddenly stop and throw the gun to the shoulders with both eyes open; then without trying to correct the aim close the left eye and sight down the rib at the object aimed at, to ascertain whether the aim was correct or not. Repeat this operation a few times, and if the sight just touches the mark, try turning around with your back to the object aimed at—and wheel quickly and aim at it. Then select two objects to aim at. If the sight seems to accurately cover the mark after repeating these maneuvers several times the gun may be reasonably considered a fit.

It is now necessary to take the gun out and try it on a stationary target, for the proof of the pudding is in the eating, and the gun may act altogether different when being held, for due to the alignment and the boring of the barrels, no two guns will shoot alike unless carefully adjusted in the making.

Get some large squares of stiff brown paper, about four feet square, and tack them up on the side of a building, or on a fence after marking a small bull's-eye in the center. Pace off thirty yards, and fire as directed before. Bring the gun to the shoulder as if firing at a bird, and without deliberating over the aim fire at the center of the paper with both eyes open.

If, after making half a dozen targets for comparison, you find that the gun consistently shoots low it has too much drop for you or the stock is short, or if it shoots high the stock is too long and too straight. But it should be as straight as is practical for the owner to use as it will point easier, and the recoil will be less severe.

On the other hand, if the gun shoots to the left, or the right of center, the stock should be bent or cast-off in the opposite direction.

The tendency in this country is to use a gun without any cast-off, but perfectly straight from heel to muzzle. The writer believes that this is correct and that it is generally due to the shooter's style of bringing the gun to the shoulder that makes a cast-off necessary, and if you school yourself to bring up the gun properly it will not be needed.

Despite the fact that the gun fits correctly it may throw the charge high or low, or to the right or left, and if on comparing the targets this is found to be true, the stock should be adjusted as before directed. Any good gunsmith can bend it properly so that it will stay put by first boiling it in oil; if it needs to be lengthened recoil pads of long desired thickness may be secured.

Sometimes it will be found that the barrels are not aligned correctly, and do not shoot true, if this is the case send the gun back to the manufacturer, he can probably make it right, but if your targets show that you are shooting first high, and then low, the fault is probably your own, and you had better get out and practice to improve your shooting.

If your hand is small a stock with a pistol grip may be too thick to afford a good hold—if so it can be smoothed down with a file and reshaped, or if the grip is thin it may be easily remedied with tire-tape, or if a neater job is wanted it will make a good appearance, and give an excellent grip if bound with cord and shellacked, like the butt of a fishing rod.

Most gun stocks are too thin at the comb and the cheek is badly bruised by the recoil as a result, if so the comb may be filed down a little to round it off; but if it is made too low it will be liable to cause the owner to crossfire by looking too far over on the rib. Therefore it would be better to attach a cheek-pad.

It should also be remembered that the stock that does not appear to be too long in the store, when you have on your best civilized clothes, may be very unhandy when your shoulder is built out by a heavy gunning coat, and a couple of sweaters.

However, it is unquestionably true that the average American sportsman uses a stock that is somewhat short and very much too crooked for him.

The average gun carried in stock by the dealers has from 2½ to 3 inches drop at the heel, particularly in the cheaper grades of guns. Yet the rank and file would undoubtedly do much better work with a drop of from 2¼ to 2⅞ inches at the heel.

The reason for this is that fully seventy-five per cent of the game flushed will be going away and rising rapidly which requires our shooting high to connect with it. A straight stocked gun makes this allowance automatically for it shoots high, consequently the game does not have to be covered up by the muzzle to be hit, and therefore is always in view of the marksman, which is a tremendous advantage.

One great cause of trouble that few men ever account for lies in the trigger pull. Some like a heavy pull, while others prefer a light pull, but no one can ever hope to shoot really well with a pull-off that does not suit him, or what is far worse, a "creepy" pull that does not respond immediately to the pressure of the finger. Nothing will cause flinching quicker than this.

A slow shot should use a rather light pull, as it will speed up his shooting—while a quick shot will be much safer with a heavier pull and will probably do better work; particularly if he has the habit of firing too quickly, before his sight reaches the game—a common fault among various shooters.

The right trigger, however, should never be less than three pounds pull and the left not less than four pounds, otherwise it is liable to jar off from the recoil of the first shot.

Care should be taken to test the trigger-pull occasionally for it will vary from wear, and nothing will quicker throw the gunner out of his time in shooting than this.

THE 12-GAUGE FOR GENERAL SHOOTING

FIELD & STREAM PUB. CO.:

I would very much like to know which gauge gun you would recommend for small game such as squirrels, grouse, quail, etc. Is a 20 powerful enough for ducks and brush shooting?

JACK BOL.

ANS.—We prefer the 12-gauge unless one is an expert shot. The 20 is plenty powerful enough for ducks and all brush shooting, but it takes a crack shot with it to kill dead and avoid cripples.—ED.

ROSS RETRIEVING THE QUAIL

A QUAIL-HUNTING INCIDENT

FIELD & STREAM PUB. CO.

I am enclosing a picture sent me after I returned from the South this year, thinking many of your readers might be interested in it. I had added it to my collection of shooting and fishing pictures, but so many sportsmen who have seen it this season have admired it that I thought it selfish to keep it for my own pleasure. It was sent me by Mr. J. D. Patton, of Cleveland, Tenn., a shooting companion of many years, and one of the truest sportsmen it has ever been my luck to associate with. An extract from Mr. Patton's letter will describe it better than my pen could.

R. M. HELFENSTEIN.

"Was out one day last week to the Ranch (Mr. Patton's shooting preserve) when rather an unusual incident occurred. Took Ross and

the pups and had a fair morning's sport. Just before reaching there the dogs pointed and put up part of a covey that evidently the hawks had scattered. They flew directly toward the hills. I picked out a bird and shot. It flew its flight and then dropped. The dogs hunted and failed to find it. You remember the deep creek that winds around the base of the steep hill? I followed this down for some distance, thinking it might have dropped into the water and lodged behind some large rocks. Ross would not leave the spot shown in picture, and when I returned, found him trying to climb up a mass of honeysuckle vines that had matted about ten feet high over the creek and on top of a small tree. The edge was about four feet from the ground and not stiff enough to hold him, so I had George boost him up. When on top of the mat he found the quail dead. His feet went through it and I had some trouble taking the snap-shot that I send you, on account of the swaying of the vines. What do you think of it?"

THE BIG GRIZZLY SHOT BY WALTER JOHNS

A BIG RIVER GRIZZLY

FIELD & STREAM PUB. CO.

It's been quite a long time since I sent a line FIELD & STREAMWARD, but the magazine and the editor have had my good wishes, nevertheless.

I am enclosing a picture of a good grizzly I got last spring, one of four gotten on a thirty-five day trip on upper Big River, the same country rivaling the famous Jackson's Hole for elk. I counted forty-two in one band last spring, and there wasn't a day but we saw from half a dozen to thirty, and though they were in the velvet, there was the promise of some mighty good heads. No one hunts in there. Three of us went in there last fall, in November, after meat, and we got two dry cows and a spike bull, and two whitetails in four days' hunting. And good meat was harder to get than heads would have been.

It's a great country, that, and I'll guarantee good, fair shots to anyone not an invalid.

W. R. JOHNS.

TO STRAIGHTEN A SHOTGUN STOCK

FIELD & STREAM PUB. CO.:

Having been a constant reader of FIELD AND STREAM for a number of years I am much interested in outdoor sports. As I am an old-time gunmaker I thought a few tricks of the trade might interest some of your many readers.

I see considerable comment in your magazine on the fit of gun stocks but never anything to remedy the fault, and as I have in my time bent and straightened a good many stocks without ever breaking one I will describe the process.

Take the frame from the stock, remove locks, springs, triggers, etc. Put the frame, trigger plate and guard back on the stock; take a piece of 2x4 soft pine about 16 inches long (in case you wish to straighten the stock), fit it to the lower part from where the action meets the wood to the butt of the stock. Then scoop out some of the wood in the 2x4 so it will have a good bearing and so it will not interfere with the trigger guard, put a short piece of the 2x4 about 3 or 4 inches long over the wrist of the stock just forward of the comb, now take a piece of rag or cloth about 2½ inches wide and about 1 foot long and wind it around the wrist of the stock, tying it with a piece of string so it will stay there. Put about a quart of raw linseed oil in a pot on the fire and heat to the boiling point. Hold the wrist of the stock over the pot and pour hot oil on the wrist where the rag is wound around for about half an hour, letting the oil run back into the pot as it is poured on. Then while hot put the two pieces of 2x4 on the stock, one above and one below, put the whole into a vise and slowly screw up the vise; leave the stock in the vise for about twelve hours so it will set.

This process will soften the wood the same as steaming it without swelling the wood, and after it is well done it can never be detected. I have bent and straightened stocks as much as one-half inch at the butt. Of course, this will not change the shape much at the comb, but it gives the gun a different feel from what it had before. A gun with a 3-inch drop straightened to 2½ inches handles better for me.

I came to Toronto, Ontario, from Iowa about nine years ago and have spent nearly every summer in the woods, cruising with canoes and pack in the out of the way places, a good deal of the time alone. JOHN J. OHRT.

THE USE OF A SIDE-ARM

By "Blisters" and "Pal"

FIELD & STREAM PUB. CO.:

The side-arm, to-day, is becoming a questionable piece of property. Not only the sportsman, but the citizen feels the strong restraint of our laws.

In civilian life, our revolver laws are aiding the criminal and taking the actual means of property and life protection from the hands of the honest citizen.

But the sportsman, going into an unknown and thinly populated country, where the none-too-particular classes consider him apt prey for their operations, has to depend on some means to protect his life and property—and the only means is the possession and use of a side-arm.

This, we admit, is a rare occurrence, and the percentage quite small, nevertheless the security felt and knowledge that he is prepared is a valuable asset to the sportsman. And, all told, none can get around the fact that it is really a mighty cheap life and property insurance.

Aside from the primary reason for the use of the side-arm, consider a few other uses the pistol has. An instance: The angler, far out in a lake, alone, and at the end of a hard struggle, finds a "musky" lying alongside the boat. To gaff or net him is impossible. To kill the fish with a paddle or oar is far from being practical or handy, and surely uncertain, and there is only one means of making sure this trophy for which he has come long miles to get, spent good money for tackle and transportation, and a hard day's work to locate, hook, tire and finally coax to the boat's side, ready for the final operation. With a pistol, one well-aimed shot, a short struggle and the fish is his! *Without*, you can draw one of many pictures, all, however, generally ending in a lost "musky."

Again with the big-game hunter. How about a wounded buck, bull-moose, grizzly, elk, caribou or mountain-lion? Range is short, the wounded animal charges, and the last cartridge misfires, jams, or you miss! Where are you, then? Again, suppose the rifle is struck from your hands, or the game is too close for a rifle shot. With a reliable six-gun, whip it from the holster, pull, and perhaps you have not only saved a mangled limb, but your life! With no pistol, I again suggest that you draw your own mental picture.

These are only a few of the instances of the pistol's value. With the long-barreled .22 or .32 you can get grouse, rabbits and other small game, and with only your rifle on a big-game hunt, if you hit, they would only be completely demolished, and anyhow, consider the expense of a high-powered cartridge for small game. And one more! How about *wounded* game of *all* kinds? Why one expensive cartridge when a less expensive one from the .38 or 44-40 would do the business?

These experiences and examples have all been demonstrated in my comrade's and my own experiences, and while neither of us consider ourselves competent to expound any subject, we have at least, "shot the course," and in conclusion declare that the pistol—automatic, double-action or single, from .22 to .45 calibre, is as much, by rights, a part of the sportsman's equipment as the very coat on his back, and it is not hard to imagine that the ordinary man, before going on such a trip, will allow his judgment to overbalance his distaste of the operation of procuring a license or permit, and go forth as a prudent sportsman should, with a six-gun in valise, pack-sack or holster.

GAME BIRD LOADS AND GUNS

Herbert K. Savage

Now that another gunning season is at hand, the old scatter gun, companion of many a trip through the woods and fields or in the duck blind, is tenderly lifted from its well-worn case, carefully gone over for stray spots of rust, and oiled and put in perfect condition for another two months of real joy. The question of loads for the old timer has been already settled to his satisfaction by experience, but the beginner has no such guide. He must take the word of some one who has been at the game for years, or else try out the various loads and sizes of shot for himself. This is the best way, as you will then learn what loads work best in your particular gun, make the best pattern, etc., but the man who lives in the city and has only a limited time in which to do his hunting, does not care to take any of that time for experiments. It is for the benefit of these men that this article is written.

If during your vacation you plan a foray after quail, woodcock, squirrels and rabbits, with possibly a chance at a pheasant, shells loaded with No. 7½ shot will be found about right. No. 8s are often used for the birds, and indeed I favor this size, but they are a little small for the occasional rabbit which may cross your path. For him No 6s are generally used. The pheasants may be stopped by a load of 7½ shot, and this size also is the proper thing for squirrels. A good way is to carry a load of No. 8 shot in the right barrel, which should be either cylinder or modified, and a shell loaded with 7½ shot in your left barrel, which should be either slightly modified, or, as some prefer, full choked. With this combination all the game you are likely to meet will be dropped, provided, of course, you are able to cover your target properly. If your gun is full choked in both barrels, then try the scatter loads, which are put out by the various shell manufacturers. While the patterns may be patchy at times they will drop a good many of the birds which before had been serenely flying away in spite of your best shooting or else shot to pieces by the full load. These brush shells may be bought loaded with both 8 and 7½ sized shot.

The proper gauge of gun for field use is a mooted question. Many, among them the writer, favor the old 12 gauge, with a 26-inch barrel for repeating guns and 28-inch barrels for double guns, bored both barrels modified choke. Others prefer the 16 gauge, and swear by its stopping power and quickness in swinging. Still others are 20-bore men, who would not carry any other gauge in the field, and even go so far as to recommend it for duck shooting. I do not consider myself a good enough shot to successfully use one of these spiteful little guns, and do not particularly favor the 16 gauge. A field gun in the 12 gauge should weigh not more than seven and one-half pounds, and the barrels may be had in either 26 or 28-inch length, the former for short-armed men. The 16 bore should weigh not more than six and three-quarter pounds, and should have the same length barrels as the 12 gauge. A 20 bore should weigh about six pounds and have barrels not shorter than 28 inches, as shorter barrels will cause you to swing too far past the bird.

Three drams of smokeless powder, or at the most three and one-eighth drams, is the right load for field use in the 12 and in the 16 and 20 two and one-half drams and two and one-quarter drams respectively.

For duck shooting a 12 gauge gun with 30 or 32-inch barrels or a 10 gauge with 32-inch barrels is most often used. The weights for the 12 should not be less than seven pounds twelve ounces, and for the 10 gauge not less than eight and one-half pounds. Both barrels should be bored full choked, or if preferable the right might be slightly modified. I know a man who shoots a 10 bore with both barrels modified, and swears that there is not another gun made which will shoot further and kill cleaner than old "Sally." Heavy loads are the proper thing for ducks; personally I use in my 12 gauge the following load: 3½ drams of smokeless powder, 1¼ ounces chilled shot. For my first shot I had been using No. 5 chilled shot and for the second barrel No. 4 chilled. With the second barrel and the 4s I made some pretty raw misses, so decided to try No. 6 in the right and No. 5 in the left barrel, as recommended to me by an old duck hunter. I had such good success with this combination that I now swear by it. For geese BB shot is used for the long distance shots, and for those close in to the stools, No. 2 will be found about the right size.

The light-weight man, or one susceptible to headaches, cannot stand a powder that has a lot of recoil, and must be careful to choose one that is light on his shoulder, otherwise he will flinch and so spoil his aim. Some powders punish your shoulder pretty severely, while others can be used all day without much resulting soreness, therefore be careful to order "mild" powder if you are lightly built. They hit just as hard as the violent ones but are a trifle slower in their action.

As regards chilled shot vs. soft, it is the privilege of the gunner to make his choice. Some hold to the argument that chilled shot has not the stopping power of the soft shot, as the latter mushrooms when it hits a bone and so paralyzes and generally musses up the victim. On the other hand, the soft shot is more liable to flatten when leaving a full-choked barrel, and the result is a patchy pattern. I have used chilled shot on ducks with very good results, and have as yet found no reason to change to the soft.

In the 10 gauge for ducks and geese 1¼ ounces of shot is generally used, although some prefer larger loads, and have their shells specially loaded, or else do the loading themselves. For the 12 on ducks the same amount of shot is used, or if preferred 1⅛ ounces, which latter load many claim is much more effective than the former. One and one-eighth ounces of shot is the proper load for snipe, quail, rabbits, woodcock, pheasant and squirrel, while for partridges the heavier load should be used.

In the 16 gauge for ducks one ounce is standard, and for quail, snipe, rabbits, woodcock and squirrel the ⅞ ounce load is most generally used. In the 20 bore ⅞ ounces of lead to your load for all game, the ¾ ounce load being meant for boys and ladies.

DIMENSIONS OF A 20-BORE

FIELD & STREAM PUB. CO.:

I would like any information you could give me on the proper dimensions of a twenty-gauge double gun, for a young man five feet ten inches tall, with an arm length from the shoulder of thirty inches, and weighing about 135 pounds.

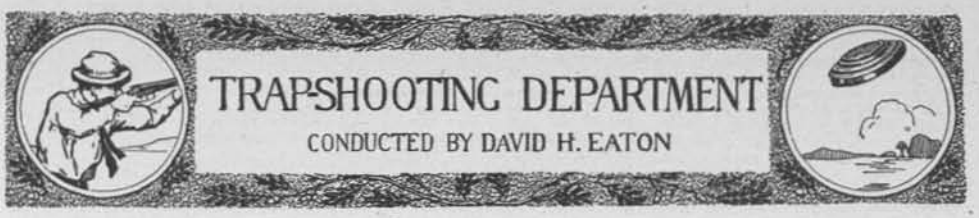
HENRY REICHERT.

Ans.—Would advise your purchasing gun of following proportions: Stock 14½ in. long, 2½ in. drop at heel, 1¾ in. drop at comb. 28-in. barrels, right modified, left full choked. Weight about 6 lbs. —ED.

We are always glad to answer letters of inquiry concerning guns, cartridges, targets, rods, reels, habits of fish and game, camping, canoeing, hunting, dogs and all other outdoor subjects.

OUR LEADERS FOR DECEMBER

Grizzly Bear Hunting in Colorado, by W. N. Stabeck; Turkey Hunting in South Carolina, by D. J. Hart; The Black-Tailed Deer of the Lower Rogue, by Dennis H. Stovall; The Fascination of Duck Shooting, by Theodore Macklin; The Blue Grouse As a Game Bird, by Harvey Ferguson; Still-Hunting Foot Gear, by Raymond Spears; A Deer Hunt in Minnesota, by E. W. Boerner; Dry Fly Fishing on the Merced, Yosemite, by F. W. Adams; Where to Hold in Trapshooting, by H. H. Lake.



WESTY HOGAN TOURNAMENT

The ninth annual tournament was held at Venice Park, Atlantic City, September 14 to 18, and was notable for the establishment of a world's record, as well as for some of the keenest contests in the history of the organization. The bright star of the occasion was Lester S. German, of Aberdeen, Md., who far outclassed the entire field of amateurs and professionals, and performed the heretofore unheard of feat of breaking 490 out of 500 targets in a three days' registered shoot. He broke the entire program of the first and second days, 175 targets each, missed his first target on the third day, and then broke the remaining 149 straight. With the last 22 targets of practice day he made a continuous run of 372. His remarkable work easily gave German the high average for the tournament; and on the 650 targets of the program, including practice day, he made the wonderful showing of 647. Not far behind German came Woolfolk Henderson, of Lexington, Ky., with a score that would have received special attention under ordinary conditions. He was high amateur with 493 out of 500, and 641 out of 650.

As usual at the Westy tournaments the list of trophies was a long one, and each was won only after a hot contest. The winners follow:

Westy Hogan Championship—Henry Powers, 98.

High Amateur Average—Woolfolk Henderson, 493 out of 500.

Atlantic City Cup—F. S. Wright, 148.

Westy Hogan Special, 88% Class—George J. Tuckett, 95.

Du Pont 18-Yard Championship—Al. Heil, 97.

Bull Durham Handicap—C. D. Coburn (20 yards), 96.

Double Championship—Woolfolk Henderson, 86 out of 50 pairs.

High Professional Average—Lester S. German, 499 out of 500.

Special Trap Trophies—Trap 1, J. P. Sousa trophy, W. Henderson, 100; Trap 2, B. M. Shanley trophy, Al. Heil, 99, and 19 in shoot-off; Trap 3, D. T. Leahy trophy, F. S. Wright, 98, and 19-19-20 in shoot-offs; Trap 4, H. W. Smith trophy, Wm. Ridley, 100; Trap 5, Westy Hogan trophy, R. H. Bruns, 100.

High scores on each handicap mark in the Bull Durham Handicap event. Winners of trophies for high scores eliminated. 16 yards, John McKean, Frankford, Philadelphia, 91; 17 yards, J. L. Wright, Medford, N. J., 90; 18 yards, E. G. Ford, Philadelphia, 90; 19 yards, F. M. Zeigler, Allentown, Pa., 91; 20 yards, E. N. Gillespie, Freeport, Pa., 89; 21 yards, G. N. Fish, Lyndenville, N. Y., 89; 22 yards, F. S. Wright, South Wales, N. Y., 91.

Bear Trap, Special Trophy—A. B. Richardson won shoot-off of ties on 10 straight.

Following Henderson in the amateur high average column came F. S. Wright, of Buffalo, N. Y., with 489; Allen Heil, of Allentown, Pa., in third place on 485; E. Hellyer, Jr., and W. S. Hoon 484 each; R. H. Bruns 483; R. A. Hall, L. Colquitt, F. Billmeyer and W. Ridley 479 each; C. H. Newcomb, C. B. Platt and F. B. Stephenson 477 each; J. I. Chipley, G. N. Fish, W. Behm and C. S. Strausse 476 each. In the professional ranks J. M. Hawkins and H. L. Worthington were second with 482 each, and E. H. Storr, of Richmond, third with 481. The weather conditions throughout the week were very nearly ideal, each day perfectly clear, though a trifle warm, and with no rain during the shooting of the events.

There were 132 entries on practice day, a good promise for the success of the shoot. The field included some of the most noted shots in the country, and high scores were a feature of the competition. W. Henderson, the famous amateur shot of Lexington, Ky., was at the head of his class with 148, including a run of close to 90 straight; J. S. Young, of Chicago, and G. N. Fish, of Lyndenville, N. Y., were tied for second on 147 each; W. S. Hoon, of Jewell, Ia., came next with 146; F. S. Wright and W. Behm 145 each; C. D. Coburn, J. I. Chipley and W. H. Cochrane 144 each. The professionals finished with a three-cornered tie for first place between H. H. Stevens, of Roselle Park, N. J., J. M. Hawkins, Baltimore, Md., and L. S. German, Aberdeen, Md., each scoring 148; H. S. Welles, of New York 147; Neaf Apgar and E. H. Storr 145 each. The long run of the day was made by J. M. Hawkins, 124; Neaf Apgar 106; H. H. Stevens 105; Henderson 88; W. S. Jones and J. S. Young 72 each.

The spectators, and there were many of them, were treated to some spectacular displays of skill in target smashing by the 201 contestants in the events of the first day's regular program. L. S. German, for the professionals, and Woolfolk Henderson, for the amateurs, were the stars of the day. The former set the pace, and went through the program without a miss, breaking 175 targets straight; this with a few targets from practice day gave him an unfinished run of 198. Henderson traveled a little too fast for his opponents in the amateur ranks, dropping but one target, and going out with 174. R. H. Bruns, of Brookville, Ind., gave him a close race to the finish, dropping but two targets and having a score of 173; R. A. Hall, Al. Heil, F. S. Wright and F. B. Stephenson 171 each; Jay Clark, Jr., 170. In the professional class H. L. Worthington finished next to German with 172; then came H. H. Stevens and J. M. Hawkins with 169 each; Walter Huff and E. F. Slear with 168 each. Henderson missed his solitary target early in the day, completing a run of 125, including the last 88 targets of practice day, and went out with an unfinished run of 137. The feature of the day was the Five-men State Championship race, shot in the last 100 targets of the program. Eight teams were entered, and for the first time in four years Pennsylvania failed to land in first place, being nosed out by one target by the New York contingent. The Quakers went out with a total of 482, and looked like sure winners, but in a later squad Corfield, of the New York team, scored 97, and pulled his team out in the lead. New York, F. S. Wright and F. B. Stephenson 98 each; W. E. Corfield 97, D. F. McMahon 96 and G. N. Fish 94, total 483. New Jersey 480; Maryland 470; Virginia 442; Illinois 432; Delaware 415, and Connecticut 353. Each member of the winning team received a Westy Hogan diamond scarf pin.

On the second day 212 shooters faced the traps, conditions were perfect, though a little too hot for comfort and the attendance of spectators was larger than on the previous day. On the day's program of 175 targets Lester German duplicated his work of the first day, and broke them all, giving him the wonderful straight run of 372. His nearest competitor in the professional ranks was E. H. Storr with 169; H. S. Welles, H. H. Stevens, J. M. Hawkins, Sim Glover and Ed Banks, 168 each, and O. R. Dickey, 167. Henderson and W. S. Hoon tied for first place in the amateur ranks with 172 each; E. Hellyer, Jr., 171; A. Heil, F. S. Wright, W. M. Foord and C. B. Platt, 170 each; R. A. Hall, C. H. Newcomb, R. D. Morgan, F. Billmeyer and C. S. Strausse, 169 each. The feature of the day was the Westy Hogan championship event, shot in the last 100 targets of the program. This was won by Henry Powers, of Atlantic City, but only after a hot fight with one of the best shots in the country, W. Henderson, of Lexington, Ky., and Ed Hellyer, Jr., of Alexandria, Pa. They were tied on 98 out of 100, and three

shoot-offs were required to decide the winner. In the first shoot-off Hellyer dropped out with 17, Henderson and Powers tying on 18; in second shoot-off both men broke 20 straight, but in the third time up Henderson let one target get away, and Powers went straight, winning the Continental Hotel trophy. Twelve trophies were given in this event, first, second, Westy Hogan Diamond Watch Fob, and third, Westy Hogan Gold Watch Fob, going to the first-place men in the order of their finish in the shoot-off. The other eight trophies, Gold Watch Fobs, were won by the following in the order named. W. M. Foord, 97; C. B. Platt, 97; W. S. Hoon, 97; F. S. Wright, 97; F. Sidebotham, 97; F. B. Stephenson, 97; R. D. Morgan, 97; R. H. Bruns, 96, and M. L. Wise, 96. In the professional class German was high in the Westy championship with 100; W. B. Darton, 97; E. H. Storr, Neaf Apgar, and J. M. Hawkins, 96 each.

On the third day there were 213 contestants. The program consisted of ten 15-target events, with the Atlantic City cup and $50.00 in gold to the contestant making high score on the 150 targets. The cup is shot for annually at the Westy's tournament, until won three times by the same man, when it becomes his property. It was first placed in competition in 1911, and was won by C. H. Newcomb on a score of 97 out of 100; in 1911 it was won by F. S. Wright with 145 out of 150; in 1912, Al Heil won with 144; in 1913, R. H. Bruns was the winner with 146; in 1914, W. Henderson won with 148. This year's contest resulted in a tie on 148 between F. S. Wright, of Buffalo, and W. Wolstencroft, of Philadelphia. In the shoot-off Wright went 20 straight, and won, Wolstencroft dropping one target. This gives Wright two legs on the cup, and another win will give him permanent ownership. Following the leaders came W. Henderson, W. M. Foord and W. B. Severn, with 147 each; C. M. Powers, 146; E. Hellyer, Jr., L. W. Colquitt and C. B. Platt, 145 each. Lester German had the hard luck to lose his first target, breaking his brilliant run which was 372 when the day's shooting began. He did not lose his nerve, however, but accounted for the remaining 149 targets of the program, giving him the high honors of the day, and the world's record of 499 out of 500 for the three days' average. With the close of the regular program, the contest for the special trophies offered for high scores made over each of the five traps was finished. The Sousa trophy for trap 1 was won by Henderson with 100 straight; Al Heil and J. C. Griffith tied for the Shanley trophy with 99 at trap 2, the former winning the shoot-off 19 to 18; on trap 3, F. S. Wright, E. N. Gillespie and R. H. Bruns tied on 98. In the first shoot-off Bruns dropped 3 targets and was out of the running; Wright and Gillespie each broke 19, and repeated the feat in the second shoot-off; in the third time up Wright won with 20 to 19, taking the Leahy trophy. W. Ridley won the Smith trophy on trap 4 with 100 straight. On trap 5 R. H. Bruns and Al Heil tied for the Westy Hogan trophy on 100 straight, but as Heil had already won the Shanley trophy he was ineligible to win this one, and it went to Bruns without a shoot-off. E. H. Storr was second high professional with 146; J. M. Hawkins and H. S. Welles, 145 each; H. L. Worthington, Ed Banks and Neaf Apgar, 144 each.

VIRGINIA STATE SHOOT

The Virginia State Trapshooters' Association held its sixteenth annual tournament at Richmond, over the traps of the West End Gun Club, on September 6 and 7. There were 145 different shooters present, most of whom shot through the entire program, and the tournament was one of the best ever held by the association. The feature of the tournament was the Interstate Association's Amateur State Championship event, consisting of the last 100 targets of the second day. This event was won by W. D. Runnels, of Staunton, on a score of 98. G. O. Lee, of Lynchburg, was a close second with 97. The next four trophies were won by the following shooters in the order named, after shooting off a tie on 96: J. R. Cumbie, Roanoke; H. C. Laird, Norfolk; M. D. Hart, Richmond, and P. M. Shelton, Bristol. Seventh trophy was won by R. A. Hall, of Staunton, on 95. The Five-men Team State Championship contest was a hot battle, Staunton and Roanoke having the field to themselves, and the former team winning by a score of 231 to 222, each of the Staunton men breaking 43 or better. The fight for high average honors was also a keen one. E. W. Ford, of Washington, the Maryland State champion, finished in first place with 339 out of 350 targets; W. D. Runnels, State champion, and C. H. Newcomb, of Philadelphia, winner of the national amateur championship, tying for second place on 336; R. A. Hall, third, with 334; R. D. Morgan 333; H. O. Laird 330; P. M. Shelton 329; S. O. S. Graham 328; W. H. Cochrane 327, and M. D. Hart 326. The professional race resulted in first place honors being divided between F. H. Husemen, of Washington, and L. S. German, of Aberdeen, Md., on 343; E. H. Storr, of Richmond, 341, and C. E. Goodrich 337. On the first day, with a program of ten 15-target events, E. W. Ford was at the top of the amateur class with 146, closely followed by W. Runnels with 145; then came C. H. Newcomb and R. A. Hall with 143 each. The professional division had L. S. German and F. Huseman in first place with 146 each; E. H. Storr 145, and W. H. Hall and C. E. Goodrich 143 each. The second day's program consisted of ten 20-target events. The amateurs were headed by R. D. Morgan with 194; C. H. Newcomb and E. W. Ford 193 each; J. B. Cumbie, S. O. Graham, R. A. Hall and W. Runnels 191 each. L. S. German and F. Huseman again finished at the top of the professional class, each dropping but three targets; E. H. Storr was a close second with 197; E. H. Storr 196, and C. E. Goodrich 194.

THE INTERCOLLEGIATE TRAPSHOOTING ASSOCIATION

The Intercollegiate Trapshooting Association was organized the latter part of September by representatives of Princeton, Dartmouth, Yale, Harvard and Cornell colleges. The purpose of the association is to "regulate intercollegiate trapshooting as a college sport." Stanley F. Withe, Harvard '14, was elected Secretary-Manager of the association. F. C. Huntress, Dartmouth '16, and H. L. Gordon, Jr., Princeton '15, are members of the Executive Council which will make arrangements for the intercollegiate championship shoot, to be held at Dartmouth. Teams from Harvard, Yale, Dartmouth, and Princeton will be entered, and Cornell, Penn State and Williams will probably be represented. There will be five men on a team, with one substitute allowed: 100 targets per man.

The interest in this contest has been greatly increased by the presentation to the association, by the Du Pont Company, of five solid gold trophies, to be given to members of the team winning the championship. The trophies are in the form of watchfobs, the pendant of which is a solid gold medallion, representing a clay target. Around the rim is inscribed "1915 Intercollegiate Trapshooting Championship," and on the reverse will be engraved the name of the winner and the scores of the competing teams. The design is the work of Stanley F. Withe, the secretary of the association, and is said to be the most artistic ever gotten up for a trapshooting trophy. In discussing plans for the contest, Mr. Withe is quoted as saying, "Few realize that in the last few years trapshooting has become established as a regular college sport, with interclass, intercollegiate and championship shoots between carefully coached teams. The fact that trapshooting has won a place for itself among the many activities of the college world is convincing evidence that this sport develops qualities which are not obtained in other forms of recreation. A steady hand, keen eye, delicate coördination between mind and muscle, and ability to act in fractions of a second are qualities resulting from continued practice at the traps which have commended it as an exercise and a recreation for college men."

Are you interested in a cup for your gun or fishing club tournament? Write us about the Field & Stream Trophy Cup.

FISH AND FISHERMEN

LEADERS IN THE 1915 PRIZE FISHING CONTEST

This list compiled from affidavits received up to September 30th only.

Brook Trout, Class B.

Mrs. Herbert Warren.
Emil S. Weisse.
Dr. Karl Christofferson.

Rainbow Trout.

J. C. Ward.
T. A. Ross.
F. C. Carson.
Dr. A. Vanderstolp.

Rainbow Trout, Fly Class.

G. E. Richardson.
F. E. Keenan.

Brown Trout.

I. E. Dickinson.
Robert McConnell.
George Burroughs.
Rev. D. Cochlin.

Lake Trout.

Charles H. Slater.
E. S. Williamson.
E. D. Calvert.
Joseph Pomelow.

Landlocked Salmon.

Henry L. Marsh.
George W. Poggenburg.
Ashley A. Smythe.
J. C. Dougherty.

Small Mouth Bass, Class C.

Dr. W. M. Pack.
L. F. Kunstman.
Carlton C. Williams.
Roy D. Miller.

Small Mouth Bass, Fly Class.

E. H. Coultas.
H. B. Christian.

Small Mouth Bass, Juvenile.

J. E. McCleary.

Large Mouth Bass, North, Class C.

Robert T. Ives.
Dr. Harry H. Hann.
A. R. Stryke.
Wm. J. McGonogal.

Large Mouth Bass, North, Ladies.

Mrs. Robert T. Ives.

Large Mouth Bass, South, Class B.

A. L. Cashwell.
Miss Byrdie Tapp.
H. E. Yelvington.
S. W. Dolive.

Large Mouth Bass, South, Fly Class.

T. D. Howard.
H. S. Newman.

Large Mouth Bass, Del., Maryland, Va., and W. Va. Division.

E. R. Lafferty.
George C. Schuler.
W. B. Catlett.
Herbert Firth.

Great Northern Pike.

William A. Klatte.
A. R. Thompson.
William A. Alexander.
C. J. Sager.

Muscallonge.

Karl Baackes.
Wm. A. Ralyea.
George A. Streeter.
H. D. Schall.

Wall Eyed Pike.

S. W. Pollock.
George Ault.
L. S. Carne.
Edward B. Cady.

Bluefish.

R. C. Graham.
Frank C. Speck.
Harry C. Esrey.
Peter S. Post.

Weakfish.

Frank C. Speck.
Frank C. Speck.
I. Westbrook.
V. Deane.

Weakfish, Light Tackle.

Charles F. Guhring.

Striped Bass.

William H. Hand, Jr.
C. B. Church.
Edward M. Slocum.
C. B. Church.

Striped Bass, Ladies.

Mrs. Charles S. Irish.

Channel Bass.

J. Maxwell Bullock.
S. J. Held.
Robert W. Tunis.
Theodore G. Empie.

Tarpon.

T. W. Magill.
Mrs. T. W. Magill.
T. W. Magill.
T. W. Magill.

THE LENGTH OF BAIT-CASTING ROD

FIELD & STREAM PUB. CO.:

Kindly let me know which length rod you consider the best for bass bait fishing, with minnow or small frogs.

I have read Mr. Henshall's book about the black bass, and see he advocates a rod 8 feet 6 inches long. Many years have passed since Mr. Henshall did active fishing, and maybe even his views have changed.

Ans.—For bait casting for black bass we would recommend a 5 oz. split bamboo 5 feet 4 inches long, 12 pound test line and quadruple multiplying bait casting reel. For bait fishing the outfit as outlined above is about right.—ED.

CONCERNING HOB-NAILS

By Robert S. Lemmon

The ordinary, soft iron, commercial hob-nail has been a pet aversion of mine ever since a certain day in July, years ago, when two of us were fishing a mountain trout brook, shrunken by drought and covered as to its submerged rocks with a treacherous and invisible slipperiness. That luck ordained the following incident should not have happened to me is entirely beside the point. I never cared much for that kind of non-skid treads, anyway.

Neither of us was wearing waders, for the warm weather made anything but a go-in-and-get-wet policy uncomfortable. Old shoes were the order, and my companion's were thickly studded, heel, sole and arch, with the usual brand of big hob-nails, somewhat worn. I've forgotten just how many of the things he was packing around, but I remember that he sounded like a suit of armor as he clumped across a big rick on the way to the stream.

In time we came to a long pool at the upper end of which, in an eddy behind a boulder, a good trout was rising. At the lower end a submerged shelf of rock sloped gradually for ten feet, then dropped abruptly into deep water. My friend edged out on this ledge to make a long cast for the rising fish. He had a hundred-dollar camera slung over one shoulder.

He didn't get the trout. Instead, he skidded down that deceptive slope and plumped into the deep water with enough commotion to scare most fish clean out on the bank. But he did get an almighty stiff bill from the camera man for draining and generally fixing up that high-grade picture machine.

Perhaps I'm unduly prejudiced against the big hobs that go in with a sledge hammer and come out by themselves (a voice: "You sure are!"), but a good while ago I got tired of skating around on them and sought a substitute to use in my wading shoes. Here is what I found, and the idea is offered now for what it may be worth as the conception of at least one trout crank.

Get a box of No. 6 round head, blued steel, wood screws, ⅜ or ½ inch long, a small awl and a screwdriver. Punch holes in the soles

and heels of your wading shoes with the awl, and turn a screw into each. Put about fourteen in each sole and six in each heel, placing them an inch apart around the edges and then using the balance evenly throughout the space thus enclosed. Screw them in solidly—it's easy work and won't take long.

Aside from their gripping qualities, which are at a maximum because the small bearing surface of the hard heads allows them to cut through the slime and engage the rock beneath, the great advantage of these screws is that they will not come out if properly inserted in the first place. Ordinary hob-nails are liable to loosen unless clinched on the inside, and clinching is a job for a regular shoemaker. The screws will stand considerable use before wearing unduly, and when they do give out it is easy to put in more where needed.

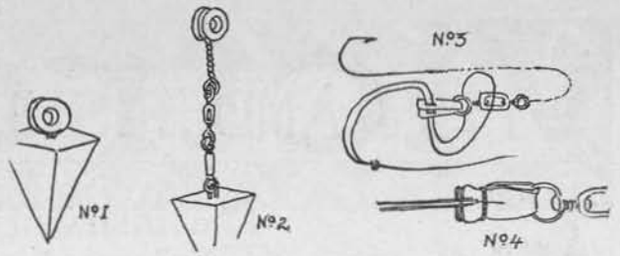
RIGGING FOR CHANNEL BASS

By J. Maxwell Bullock

I have read with great interest the very complete and instructive article by Herbert K. Savage on surf fishing and surf tackle. This article should prove a most excellent guide to those less experienced in surf fishing than the author. I note, however, that there is no mention made of a type of "rigging" for channel bass, which has become very popular in certain places. Perhaps Mr. Savage is not familiar with it.

It is commonly believed that the channel bass is, under proper conditions of sea, a rather dainty and diffident bait-taker, who rarely seizes the bait with the rush and savagery of the blue fish or even the less voracious weak fish. The writer's experience has been that given fairly quiet waters the channel bass picks his bait up rather suspiciously and is apt to carry it several yards before making up his mind whether he will take it or not. Sometimes he will play with it for quite some time and may take it fifty to one hundred feet before finally swallowing it. It is believed by quite a number of channel bass fishermen that many fish are lost through this peculiarity, as with the conventional type of "rigging" where the sinker was fastened rigidly to a three-way swivel, the fish would pick up the bait and upon finding the resistance, due to the weight, would immediately eject the bait, recognizing that there was something suspicious about it. Of course there have been many channel bass taken with this type of "rigging," but there have also been many lost.

If the writer is accurately informed Mr. A. F. Meisselbach was the first to recognize the deficiencies of the old style of "rigging" and as a result invented his "Bellfast" sinker. The idea of this sinker was that its cup-shaped end would bury itself in the sand and that the line instead of being rigidly attached to the stem was allowed to run freely through the eye, the result being that when the bass picked up the bait and started away with it there was no resistance, other than that which originated at the reel, under the control of the fisherman. There was, therefore, nothing to arouse the suspicion of the fish until he had thoroughly mouthed the lure and the angler determines to set the hook. The theory and practice of this idea of rigging immediately met with popular favor.



SHOWING METHOD OF RIGGING FOR CHANNEL BASS

The next variation, if my information is correct, was that devised by John Whatton, of Newark, N. J., which consisted of replacing the brass ring in the ordinary pyramid sinker with one of mother of pearl (No. 1). The latter material suggested itself to Mr. Whatton because of his former wide experience in the manufacture of buttons from this shell. This variation seemed to make an improvement, as the pyramid sinker seemed to have less tendency to roll with the tide-rip than the "Bellfast." The only difficulty with Mr. Whatton's variation was that of procuring the pearl rings and also because of the close connection between the ring and the top of the sinker. The slightest pull, due to the effect of the surf on the bait, had the tendency to dislodge the sinker.

Recognizing the value of both of these plans the writer has developed what he believes is an improvement in place of the pearl ring, which is difficult to purchase, as it must be made to order. He uses the adamant guides, such as are used on the cheaper rods, they can be procured from the manufacturers—Mitchell & Bissell Company, No. 251 Fourth Avenue, New York City. The writer used the No. 335, which cost approximately 5c each. These guides were wrapped in a twisted No. 20 soft brass wire, as shown in the sketch (No. 2), with a small swivel in the free end of the wire and this combination was attached to any ordinary pyramid sinker by the familiar connecting link. The total length from the eye of the adamant guide to the tip of the sinker was approximately two and one-half inches. The writer believes that this is an improvement, as the added length allows the sinker to become "sanded" through the mobility of the wire extension and the swivel prevents the line from becoming twisted around the guide and interfering with the smooth running of the line. In connection of "riggings" of this type and style, a change is necessary at the end of the fishing line; a loop should be formed of about six to nine inches, and to the end of the leader should be attached to a large barrel swivel, such as the No. 3.0 or No. 4.0.

The angler should then secure a piece of rawhide belt lacing, approximately three eighths of an incl wide. From this lacing he cuts a piece about three inches long and makes a slit lengthwise near each end, large enough for him to comfortably pass through his loop-line. When the time comes to rig up, he first slips the sinker over this line, allowing the line to run freely through the adamant guide and then passes the raw-hide through the free eye of the swivel and folds both ends together. Then the loop end of the line is passed through both slits of the raw-hide and the loop pulled through enough to allow the hook to be pulled through it (No. 3). The loop is then pulled tight and the rigging is complete (No. 4). The advantage of this method is two-fold, the raw-hide prevents the sinker from running down to the swivel with the possible breaking of the adamant guide by striking against the hard metal. Secondly, it forms a flexible attachment for the line.

All surf fishermen know that the line gives out first where it chafes against the hard metal of the swivel. By using raw-hide the loop of line becomes buried in the soft elastic fibre of the leather and is saved in a great measure from the chafing of the sand.

While no doubt to many of your readers this is a well-known method of rigging, there are perhaps those who are not so fortunate in their knowledge and it is to those that this suggestion is addressed.

WINNERS IN THE TACOMA, WASHINGTON, CASTING TOURNAMENT

Field & Stream Pub. Co.:

We are enclosing to you scores of our tournament held at Point Defiance Park, Sept. 27 and 28.

This affair marks the introduction of scientific angling to the Pacific northwest, and was a very successful affair.

You will note the high scores, some of which outclassed the International Tournament held in San Francisco.

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W. J. Bailey, Tacoma..		140	11⅗
C. R. Werner, Tacoma..		138	8⅕
B. B. Perrow, Tacoma.		118	1⅕
Fred Coon, Tacoma.....		86	8⅖
M. M. Clarke, Chicago.		79	11⅗
Ralph Hutchison, Tacoma		72	4⅖
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E. A. Throckmorton, Seattle		57	7
G. T. Dutcher, Tacoma.		31	

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A. C. McFarland, Portland		98.1
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E. A. Burghduff, Portland		95.4
R. B. Nason, Tacoma.....		95.2
W. J. Bailey, Tacoma.....		97.4
M. M. Clarke, Chicago....		97.2
E. A. Throckmorton, Seattle		94.2
G. T. Dutcher, Tacoma....		93
Ralph Hutchison, Tacoma.		93
Carl Coon, Tacoma.....		92.6
F. C. Harmer, Tacoma....		92.3
I. H. Hill, Tacoma.....		89.4
H. C. Comstock, Tacoma..		89.3
Ed. N. Watkins, Tacoma..		87.5
R. Vanderkinter, Tacoma..		87.4

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Name.	City.	Per cent.
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R. Vanderkinter, Tacoma..		98.10
W. F. Backus, Portland...		98.7
G. T. Dutcher, Tacoma....		98.4
J. C. Meyers, Portland....		98.4
A. B. Howe, Tacoma.....		98.2
Homer King, Tacoma.....		97.13
F. N. Peet, Chicago.....		97.12
M. C. Davies, Tacoma....		97.11
M. M. Clarke, Chicago....		97.11
William Cornell, Portland.		97.11
W. C. Block, Portland....		97.5
John Waddell, Grand Rapids		97.4
A. C. McFarland, Portland		97.4
B. B. Perrow, Tacoma.....		97.3
A. E. Burghduff, Portland		96.12
J. M. Ranney, Chicago....		96.7

Salmon Fly Distance.

Name.	City.	Ft.
J. C. Meyers, Portland.		117
F. N. Peet, Chicago....		117
John Waddell, G. Rapids		110
W. F. Backus, Portland		80
M. M. Clarke, Chicago.		79
W. C. Block, Portland..		77
E. A. Montague, Tacoma		62
Wm. Cornell, Portland..		61
G. T. Dutcher, Tacoma.		60

One-fourth Ounce Lure Distance.

Name.	City.	Ft.	In.
A. E. Burghduff, Portland		110	8¾
Dr. E. C. McFarland, Portland		110	2
W. C. Block, Portland..		109	2¾
F. N. Peet, Chicago....		108	3¼
W. F. Backus, Portland.		107	3⅕
W. J. Bailey, Tacoma...		96	7
J. M. Ranney, Chicago..		96	5⅘
M. M. Clarke, Chicago..		96	2⅗
R. B. Nason, Tacoma...		92	⅗
B. B. Perrow, Tacoma..		80	3
Wm. Cornell, Portland..		69	1¾
Fred Coon, Tacoma....		61	11⅘
C. R. Werner, Tacoma..		53	7⅘
G. T. Dutcher, Tacoma.		35	
Dr. Hutchison, Tacoma.		21	⅗
Fred Edwards, Tacoma.		19	6⅘

One-Fourth Ounce Lure Accuracy.

Name.	City.	Per cent.
F. N. Peet, Chicago.....		98.1
W. J. Bailey, Tacoma.....		98.1
Wm. Cornell, Portland....		97.6
J. M. Ranney, Chicago....		97.3
M. M. Clark, Chicago....		97.2
W. C. Block, Portland....		97
Dr. E. C. McFarland, Portland		96.3
W. F. Backus, Portland..		96.3
R. B. Nason, Tacoma....		95.8
A. E. Burghduff, Portland		95.7
G. T. Dutcher, Tacoma....		94.4
B. B. Perrow, Tacoma....		94.3
Dr. Hutchison, Tacoma...		91.4
C. R. Werner, Tacoma...		91.4
Carl Coon, Tacoma.....		87.9
Fred Edwards, Tacoma...		84.6

Flies in the Afternoon.

With the use of the lures in the morning competition, flies were the center of attention in the afternoon. In handling the fly with light tackle, F. N. Peet displayed his ability as a champion by making an average of 99.3, better than the record established in San Francisco, but not breaking a world record.

J. C. Meyers, of Portland, was accorded the honors in the distance event with fly, casting 10 feet beyond the best cast made by Peet. Meyers' best cast was 105 feet.

ANOTHER LEFT-HANDED BAIT CASTER

FIELD & STREAM PUB. CO.

Complying with the request of Mr. H. W. Hensen in his article on page 418 of the August number under the heading Fish and Fishermen, entitled "Left Hand Bait Casting," will say: I am right-handed in most things, but cast left-handed in both bait and fly-casting, and find my ability to do so quite an accomplishment, as it divides the work on the wrists, and, as most people cast right-handed, makes it easy to cast from either front or rear of a boat, and places no handicap on your companion. In fishing around a lake, standing in front with the shore-line on the right, my right-handed companion in the rear and myself so arrange our casts as to alternate, and each cast can be made in new territory. This, supposing you have a third party to row. One little tip right here, however, be sure the third party is a right and not left-handed caster, for in alternating the odd party is always allowed to fish and never row, as two persons casting from the same side cannot successfully work a shore-line. Also be sure to learn to cast overhand as well as underhand, so that should the third party be left-handed, enabling him to fish with the right-hander, you can do your share of rowing and still get in many a good overhand cast.

As to the knack of casting, I use my line-guides and reel-seat on the upper side, and thumb my line in casting and try to put my bait about a foot or two beyond where I think the bass may be, and draw the bait forward slowly, waiting to make the strike before changing hands. Do not have any slack line, or as little as possible, holding the tip close down to the water so that when you strike you can continue bringing him towards you by raising the tip and swinging around to the rear at the same time, will give you ample time to change hands without any risk of losing him through a slack line. Always keep the butt of your rod immediately in front of you so you can bring the free hand to the rod instead of having to move the rod over to the hand. This method will enable you to bring about one-half of your catch to the landing net or to your companion at the other end of the boat without doing any reeling in as fully fifty per cent. of your strikes will occur that close to the boat, except in calm water.

In fishing alone and casting from the boat while rowing or when anchored many of your tactics would have to be changed, and if you are able to average a fifty-fifty split with the bass under those conditions, you are a fairly good fisherman.

Experience and experiments, and then more experiences, are the only ways to increase the pleasure of this great sport. One or two successful trips usually hook a man for life, and I guess you have had them, if not, I hope you have them this summer.

THOS. E. COVINGTON.

HINTS FOR ANGLERS

Minnows can be kept bright and fresh in methylated spirits of wine.

To keep moth from feathers and flies pepper with white pepper; chopped tobacco-leaf is good, as also camphor.

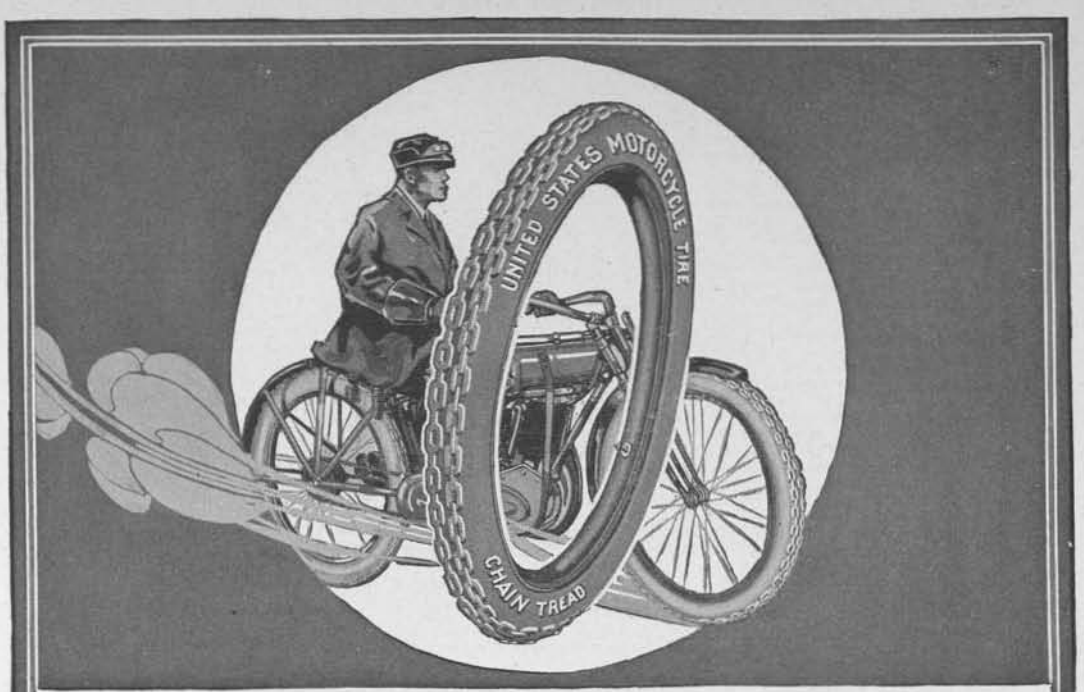
Never pack fish in wet grass or anything damp. Dry straw is a good thing; but fish, if possible, should be first wrapped in a cloth which has been treated with formalin. Gut the fish if not for preservation. — *Courtesy Anglers News.*

THE TARPON

By S. Imple Bell

The only titled ruler that has managed to keep his title and job, in the Western Hemisphere, is the Silver King. He has not only retained his throne, but adds new subjects to his court each season, truly a happy state of affairs for a monarch in this age of social unrest. Among his more ardent admirers he is known as Tarp, Tarpon, or even Br'er Tarp'n; while the highbrows dub him *Megalops Atlanticus*, which is as unsportsmanlike as using a bait with three treble hooks.

The tarpon is a native of tropical regions, and displays extreme reluctance towards the numerous invitations, which are annually extended by anglers, to make an extended sojourn in regions north of the Gulf of Mexico. Should one be finallly persuaded into taking the trip, he invariably insists on having an expensive traveling outfit from some taxidermist's shop. The taxidermists are uniformly successful in assisting the tarpon



A Motorcycle Tire Triumph

THE "Chain Tread" Motorcycle Tire was welcomed with enthusiasm by motorcyclists. From the date of its introduction, the popularity of the "Chain Tread" Motorcycle Tire has steadily increased. Built strong enough for automobile service, this famous tire gives phenomenal mileage on the speedy, lighter weight motorcycle.

The "Chain Tread" Tire for motorcycles has the same heavy service construction, the same wear-resisting rubber and fabric, and the same practical anti-skid tread, as the famous "Chain Tread" automobile tire which is the sensation of the automobile world.

Profit by the experience of the keen automobile and motorcycle manufacturers, who are increasing the prestige of their products by equipping the machines they make with "Chain Tread" Tires. You can buy "Chain Tread" Tires from good dealers everywhere.

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to retain his handsome appearance in spite of the change of environment, but they have not yet succeeded in discovering a germicide powerful enough to destroy the germs of "tarponitis," which lurk in every well-preserved specimen of this fish.

These germs attack the unwary angler who may happen within sight or hearing of the fish or its tale, entering his imagination and rapidly penetrating to his pocketbook. If the latter organ is in a lean condition the disease does not assume a dangerous condition, but should the wallet be in an obese condition, the germs become quite virulent and fill the whole system, producing about the same state of mind in regard to work that is characteristic of the hookworm. When the victim reaches this condition there is no other known cure than "havin' a try at 'em," a pleasant, if somewhat expensive, course of treatment.

One of the chief delights in angling for tarpon is the reasonable certainty that one will hook from seven to twelve different kinds of submarine souvenir fiends, each of which desires to keep the hook and about half of the line as a memento of the occasion; and, so winning are their weighs, few anglers are able to say them nay. Just after one has thus been dispossessed of his last hook is the tarpon's regular feeding hour, the hungry fish striving desperately to climb into the boat in their search for food. Only by constant vigilance can their assaults be frustrated, and the boat kept from being swamped by them.

The tarpon being so much larger than bass, trout, etc., requires correspondingly heavier tackle; hence, in Southern waters, the convenient flask of mellow Scotch gives way to the stone jug of hi-pressure thunder-dew. Don't fail to provide a good head-net for the boatman—it will tend materially to conservation of the bait—but see that there are no straws convenient.

No boat is properly equipped for tarpon fishing unless it contains an intelligent, active gaff. A really competent gaff should be able to work itself into a position to strike the angler's shin at least every other time he takes a step, when playing a fish, and should be just strong enough to trip him at such times, but not so strong that it will not break when he steps squarely on it, something that he will surely do just before he is ready to use it.

Entrancingly beautiful is the prospect spread out before the angler who, for the first time, visits the "Silver King's" domains. Stately palms wave him courteous greetings from their graceful fronds. The shore stretches out its glistening sands in gentle undulations as if inviting one to stroll along their reaches and hearken to the surf's marvelous monody as sung, uninterruptedly, since it was said, "Let the waters under the heavens be gathered together unto one place, and let the dry land appear," a mystic music that floods the soul, dissolves its cares and bears them out to sea. How beautiful the vast expanse of bluest waters that stretch away to meet the sky! How can the angler help being in a hopeful mood? But—alas!

Listen, all ye aspiring anglers! Give ear, ye who would seek pleasure in the concocting of fish stories of magnificent dimensions! and I shall expose to you the dregs of bitterness in this tempting chalice of apparent happiness. In these regions are many men of noble appearance—but they are literal minded; they possess many admirable qualities—but they have a show-me disposition when it comes to piscatorial questions, being wholly devoid of the finer angling instinct. These men have banded together to enforce their ideas in regard to the correct dimensions of a fish yarn; and they prescribe rules, regulations and rewards for those who seek to capture the Silver King. With much seeming friendliness they greet the visiting angler, and regale him with many expressions of confidence in his ability to land a big one, insomuch that he already has a vision of himself taking the record fish of the season. But when he lays in a goodly jug of bait, and engages a boatman who seems to be a discreet person, and is ready to fare forth to the fray, then these erstwhile good fellows throw off the mask of hospitality that has concealed their true nature, and proceed to demolish their victim's hopes of success. With no sign of compassion, they inform the hopeful one that "no fish stories will be considered unless accompanied by the fish, which must be officially measured if it wishes to be entered for the 'record'." Truly, all is vanity! How can the angler's fancy inspire his words if it be secured to an unromantic yardstick? How can his imagination soar to record heights if it be anchored to earthly facts with a cold, cruel steel tape? "Truth crushed to earth" may rise again, but anglers' narratives, while appearing even more robust, are in reality far more frail, and will not long retain their pristine beauty if subjected to such rough treatment.

Men, when our fathers went forth to the fields or streams in their day, did they carry a folding rule wherewith to verify their opinions of their prowess? I trow not. And, when father's father contended with the red man for the land, did not he, in recounting his deeds of valor, draw the "long bow" with marvelous skill? Who will answer me in the negative? Can any modern raconteur evolve a more weird brand of fiction than that which was in favor among the Puritans when they engaged in their favorite sport of hunting witches? No, indeed, no! Where, then, is our boasted freedom? And where the liberty that we inherited from our hardy forefathers if our privileges are so restricted in these later days. Why should we have laws to protect the fish when the ancient and most highly cherished rights of the fishermen are thus ruthlessly trampled under foot?

PHOTOGRAPHIC CONTEST

FIELD AND STREAM offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submitted. The prizes for next month will be: First Prize—Three years' subscription to FIELD AND STREAM. Second Prize—Two years' subscription to FIELD AND STREAM. Third Prize—One year's subscription to FIELD AND STREAM. For all others, 50c. will be allowed when used. Address all entries to Photographic Contest Department, FIELD AND STREAM, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO

Made by Harrison Cassard. 1A Kodak, Steinheil Orthostigmat lens, F.6.8. 1/250 second. Subject—Jumping Trout.

SECOND PRIZE PHOTO

Made by James D'Arcy. Folmer Schwing Camera, Bausch & Lomb Lens. Stop 8. 1/50 second. Subject—Ruffed Grouse.

THIRD PRIZE WINNER

Made by J. H. Murphy. Brownie Camera No. 2. 1/50 second. Distance 8 feet. Subject—Wild Bear Cub.

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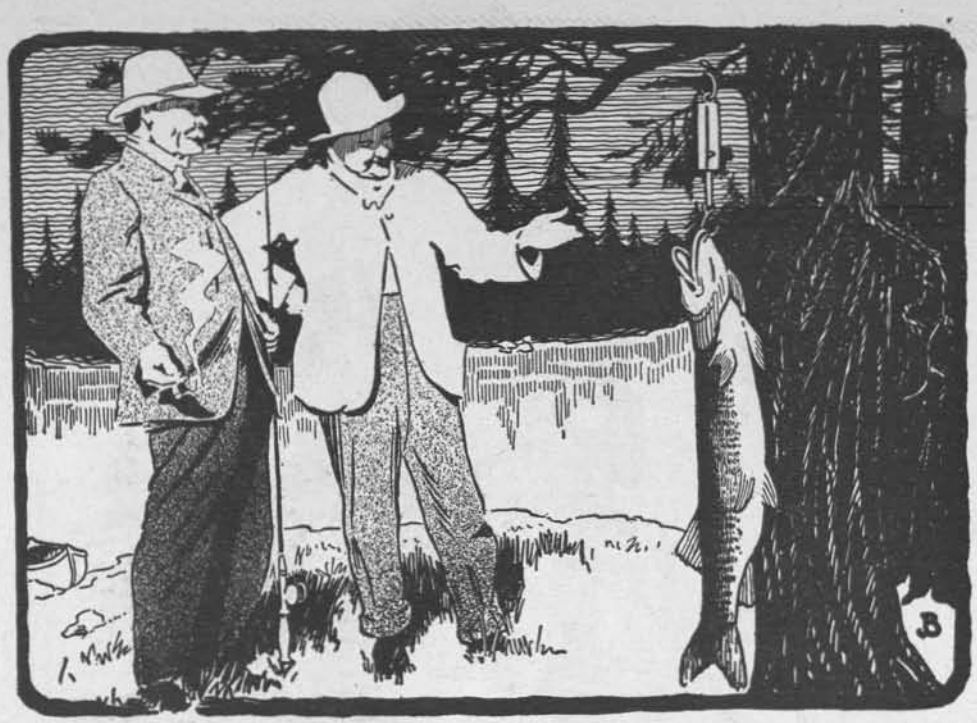


Field&Stream PRIZE FISHING CONTEST

MY OREGON RAINBOW

By W. T. Baldwin

Winner Second Prize, Rainbow Trout, 1914 Contest

During the season of 1913 my wife and I were induced to go to Upper Klamath Lake with a party of six friends from San Francisco. Upon our arrival at our destination, Rocky Point, we met a Mr. W. H. Cunningham, also of San Francisco, who was about to embark upon his return home after having had a very successful two weeks with the rainbows. Before boarding the launch, however, he took us to the camp billboard, a large yellow pine tree, and proudly pointed to a board conveying the information that the record rainbow for the season of 1913, to date, was one weighing 14 pounds, caught by W. H. Cunningham. Needless to say, there were at least eight persons very busily engaged for the next two weeks in trying to land a larger trout than the one caught by Mr. Cunningham, but the nearest approach to it was a 12-pounder landed by R. R. Richardson, of our party.

At the end of our vacation we started homeward thoroughly convinced that the 14-pounder must have been the largest rainbow in the lake, but we all agreed that such fishing as afforded by Upper Klamath Lake could not be surpassed, and it was understood that we would all make the trip again in 1914.

A year is a long time for eight persons to remain all of the same mind, so August 1, 1914, saw only two of the eight, my wife and myself, headed for Rocky Point. We made the trip by automobile this year, it being about a 400-mile drive from our home at Oroville, Cal., and after an enjoyable trip through the northeastern portion of California and the southeastern part of Oregon we landed at Rocky Point the fifth day out.

Rocky Point is a camp owned by Mr. and Mrs. C. L. Willson, and is a part of the Government camp grounds known as Recreation Camp, being about one mile from Harriman Lodge on Pelican Bay of the Upper Klamath Lake.

After greetings all around, I sauntered over to the pine tree for information on the subject of record catches. I found that the 14 pounder of 1913 was still at the top, but that Mr. Cunningham had again been there and had left with a 13½-pound rainbow for the 1914 record up to that time. Well, I thought, if Cunningham couldn't beat 14 pounds, then it was useless for me to try, so I fished along with never a thought of trying to beat the record, for my wife and I were bringing in nice catches every day which would average about 5 pounds apiece.

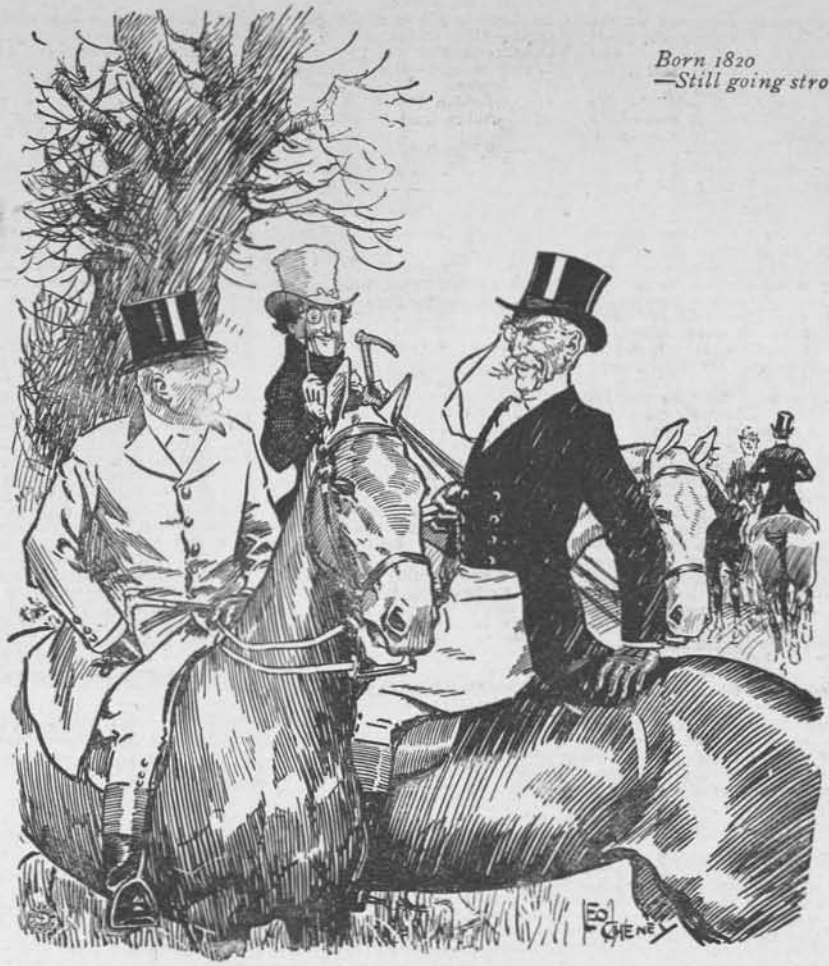
One day, in conversation with Mr. W. K. Gray, the guide employed by the Willsons, I told him that some day when he was not engaged with "tenderfeet" I would like to have a try for rainbow at the mouth of Williamson River, which was about eight miles from Rocky Point.

Thus on Friday morning, August 14th, just as the great red disk of the rising sun peeped over the eastern range of mountains, my wife, Gray and I left Rocky Point by rowboat propelled by an outboard motor, bound for Williamson River. One and three-quarter hours of delightful boating over the mirror-like surface of the lake, surrounded by the unsurpassable scenic beauty of the Cascades, brought us to the mouth of the noted river. My wife and I lost no time in dropping our lines astern. She opened the game by landing a 5-pounder and then one weighing 4¼ pounds, whereupon I was chaffed upon my lack of skill. I was entering into a lengthy explanation of my system of passing up the small fish, when, ZIP! my line tauted and my rod went almost double.

Mr. Gray, accustomed to an occasional snag, stopped the boat. "That must be a snag," said he.

"No," I said, "that was a strike and a dandy, but whatever it is it seems immovable."

The fish hung a dead weight,



Colonel Fox-Hunter: "How are you getting on with that new neighbour of yours?"

M.F.H.: "Oh, splendidly! He is a man of taste."

Colonel Fox-Hunter (surprised): "What! Has he your passion for antiques?"

M.F.H. (with finality): "He has. He stocks 'Johnnie Walker' Red Label in the non-refillable bottle."

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sulking. Standing up, I held a steady strain to the limit of the rod and line. Presently the great fish charged toward the boat and broke water, then the action became fast and furious.

"That's the record fish," "Don't lose him," "He's good for nearly thirty pounds," and similar exclamations came from my wife and Mr. Gray, but I was too busy manipulating that Abbey and Imbrie reel to notice anything but the fight that I had on hand.

Circling the boat a number of times in its mad rush for freedom, this mighty rainbow was certainly a sight never to be forgotten.

After what seemed an interminable time, I eventually succeeded in leading this beautiful big fish into the net and it was landed.

Mr. Gray took the time and reported 33¾ minutes' time required to conquer Mr. Fish.

My rod was a 5-oz. Heddon Dowagiac casting-rod. Kingfisher line, and a No. 3 spoon for lure. Abbey and Imbrie quadruple reel.

There was no use trying to fish any more, as we were all three too excited to do anything but talk of the fish and feast our eyes upon it, so we unanimously agreed that luncheon would be in order.

Just as we started for the shore a launch containing Messrs. Brown and Mack, and their wives, of Klamath Falls, hove in sight and we motioned for them to come alongside, and we asked them if they had scales with which to weigh our fish, Mr. Gray having had his scales dropped overboard by some excited fishermen the preceding day. They had no scales, but after looking at the fish, taking a picture of it, and congratulating me upon the catch, we separated.

We enjoyed a luncheon on the bank of the river, cooking a part of one of the fish that my wife caught, and, while eating, Mr. Bishop and family came along, and he also took a picture of the fish.

After trying our luck again and meeting with only fair success, we started homeward. We had not gone very far upon our return when we discerned Messrs. Brown and Mack coming toward us. They had gone back to their camp, about eight miles, making a sixteen-mile trip, procured scales and were returning with them. Gray, Brown and Mack weighed the fish and announced that it tipped the scales at 22 pounds.

Our return was quite a triumphal procession, as the news of our catch had been spread, and every boat that we met contained people who wanted to have a look at the fish.

The next day I sent the fish to Mr. J. B. Chambers, of the "Gun Store," at Klamath Falls, and he put it in pickle for display in his window.

I am looking forward with pleasure to my 1915 trip to the lake, but I do not expect to equal my catch of 1914.

Prize Contest Certificate Record.

Second Prize Rainbow Trout, 1914 Prize Fishing Contest.

Weight—22 pounds.
Length—33 1/3 inches.
Girth—21½ inches.
Caught—August 14, 1914.
Where caught—Upper Klamath Lake, Oregon.
Rod—Heddon Dowagiac.
Reel—Abbey and Imbrie quadruple.
Line—Kingfisher.
Lure—W. K. Gray spoon.

A WISE OLD BASS FROM OWL CREEK

By Harry J. Staunton

Winner Fourth Prize, Smallmouth Bass—Class B, 1914 Contest

On Saturday evening, August 8th, Harry McCullough, George Gueulette and the writer decided to go up West Owl Creek, camp for the night and try our luck fishing in the morning. My excuse for fishing on Sunday is that I can't get away any other time.

Arriving at a point about five miles from Mt. Vernon, we put up a shelter of willows and brush and after starting a fire turned in for the night. George and I were awakened shortly before daylight by Harry, who swore that he wouldn't stay another night in that country; that he had heard all sorts of howls and growls and had not batted an eye all night.

After a lunch and pot of hot coffee, we assembled our rods and started for the creek, it being then a little after daylight. Leaving the others fishing opposite camp, I went around a bend in the creek about a hundred yards below them to a deep pool at the foot of a riffle, and tying on a Heddon wiggler started to cast. That wiggler was the subject of a good many remarks the evening before, George saying that he did not see why I brought that thing along, that there were no sharks in these waters and no fish in its right mind would grab such a looking object as that, anyway. Nevertheless, when the post-office opened on Monday morning, George had an order on its way to Heddon Bros. for a wiggler. The creek at that point is about 75 to 80 feet wide and on the opposite side is a sycamore tree that was washed into the creek during high water. My first cast was over the roots (which are under water) at that tree, and as I started to reel in my bait it caught on a twig, and as I shook it loose I caught a glimpse of the side and tail of something that looked to me like a whale. Hurriedly reeling in my bait, I made a second cast over the same spot and my bait was no more than six inches under water, when I felt a terrific jerk. I pulled as hard as I thought my rod and line would stand, for I knew if he got among those snags church would be out, as I had an experience of that kind in the early part of June. He did not give me long to think it over, as he tried to bite a hole in the sky and throw all the water out of the creek at the same time. As he came down, by a hard pull, I brought him clear of the snags.

I read somewhere to "keep cool and let the fish get excited," but I think that is easier said than done. While he was churning and boiling the water and cutting up all sorts of capers, down the creek came George and Harry in an awful hurry, asking what was the trouble and why I had yelled so loud for help.

"Hold to him," shouted Harry, "there's your prize fish!"

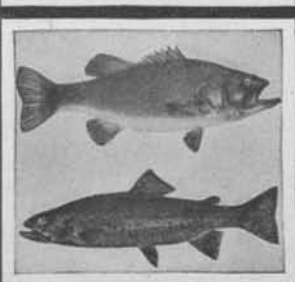
"Yes," I replied, "He's there, but not here."

All of a sudden he took a notion for my side of the creek, my line slacked, and I thought I had lost him. Running up the bank and reeling in slack as fast as I could when I felt my line tighten, and looking down there was my black beauty not five feet from the bank in about two feet of water. I evidently did not look good to him for he started on a mad rush for the opposite side, but by hard pressure I succeeded in stopping him when about in the middle of the creek, and there he sulked, staying in that spot without moving for fully a minute. Reeling in line as I went, I waded out about up to my hips when he started again, going up stream.

After a run of about twenty feet he stopped and slowly came my way, and when about ten feet from me he gave two or three flops, turned on his side and gave up the fight. By getting my fingers in his gills and thumb in his mouth I succeded in lifting him from the water and only ran four hooks in my hand, though I did not notice that until I got him out of the water. Harry said it was 4.20 when I left the camp, and as it was then 4.45, it took me about twenty minutes from the time he struck the bait till landed. I tried to persuade the boys to come to town with me to have him weighed and measured, but it would have taken old Satan himself to have got those fellows away from that pool. Taking my fish I started for town. On reaching a point about a mile below camp I met A. Silcott, F. Rollins and a gentleman by name of Rinehart fishing, and after considerable begging and coaxing induced Mr. Silcott, who had come up in his automobile, to bring me to town. Arriving in Mt. Vernon, we aroused Mr. Warren Davis and Mr. Harry Mahaffey, two members of our Fish and Game Club, the last named gentleman biting an amber pipe stem in two while looking at the fish, and finding Seiler's meat market open had Mr. Seiler weigh and measure the fish on tested scales, in the presence of Davis, Mahaffey and myself.

Prize Contest Certificate Record—Fourth Prize, Small-Mouth Bass, Class B, 1914 Prize Fishing Contest.

Weight—5 lbs. 10 oz.
Length—22½ in.
Girth—16 in.
Caught—August 9, 1914.
Where Caught—Owl Creek, Ohio.
Rod—Faultless steel casting.
Reel—South Bend Anto-Back-Lash.
Line—Cuttyhunk No. 9.
Lure—Heddon Wiggler.



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SPORTSMAN'S WORKSHOP

BUILDING A SPLIT BAMBOO FLY ROD

By George Parker Holden, M.D.

PART VII

We emphasize at once our hearty agreement with the plan advocated by Mr. Henry P. Wells, of fitting to the rod an independent grasp, chiefly for its value in preventing the rod from becoming permanently set or bent under unusually severe strain of casting or the playing of a large fish. With this arrangement, the whole rod may be rotated at the handgrasp ferrule, so that it may be used with the guides either underneath or on the upper surface, the reel always remaining seated properly, on the underside of the reelseat; and strain is thus transferred alternatingly from one side of the rod to the other.

A rod so built is increased in weight to the extent of the added pair of ferules which are necessary for the seating of the butt-joint within the handgrasp—perhaps three-quarters of an ounce. But it is weight in a good place; and, furthermore, this may be offset by the use of the extremely light, yet very serviceable, fly-rod reels that are available to-day, and by dispensing with the solid metal reelseat in favor of simple *reel-bands*. A metal reelseat is altogether unnecessary in the rod adapted for fly- and lighter bait-fishing.

We prefer not only the specially shaped and independent grasp, but we prefer it made of our common red cedar, rather than in cork—and, by the way, the cork kind is obtainable from the tackle-dealer in a finished state and variety of patterns. The cedar grasp is very light, is easily worked into shape, is of a pleasing color, takes a beautiful polish and does not show soil after use.

The pattern of handgrasp that we shall illustrate seems best fitted to the hand of any with which the author has had experience, and we shall, therefore, be at some pains to give its exact dimensions, and to explain just how it, with the reelseat, is built from one piece of wood.

You should, some months previously, have gone to the woods and chopped down a small cedar tree, which you had ripped into 1½-inch boards, and which have since then been seasoning against the time when you would be ready to make use of them. Your grasp you now proceed to carve out of a piece of this cedar, 1½ inches square and 10½ inches long.

The first thing to do is to bore a hole in the end that is to receive the female or socket ferrule, before any attempt is made at shaping. The ferrule size at the grasp, for a ten-foot rod, is 7/16 inch, but the hole must receive the outside ferrule, and its *outside* diameter is 15/32 inch. You will need for this job a drill-bit, which you can obtain with a square shank for use in a brace, in this diameter; the wood-boring bits are more coarsely graded in size than are drill bits. For the nine-foot rod the handgrasp ferrule is ⅜ inch, and you want a 13/32-inch drill-bit for boring.

Place the piece of cedar in the vise at such an angle that will enable you to sight conveniently along the bit as you bore; and bore slowly and as *straight* down the center as possible, to the required depth.

Fig 1

THE HANDGRASP

You want to find out just how nearly you have succeeded in accurately centering the hole. To do this, take your butt-joint, winding the end with thread, if necessary for a snug fit—or any straight stick that will serve, and thrust this into the cedar block, to the full depth of the boring. Now sight along your joint or stick and see if you have a proper alignment with the grasp. Most likely you will find that the present condition of affairs is as represented in Fig. 1—you have quite a decided angular deflection between joint and grasp, despite all your care to bore that hole straight. In order to correct this, by centering the joint in its socket, you must plane off the cedar block to one inch square, in the manner indicated by the dotted side lines of the illustration. You then sight up along another of the surfaces of the block, adjoining the surface first marked as shown, and plane again to straighten up the other two sides. Now your hole is centered, and grasp will line with rod, in all positions.

Withdraw the joint and you are ready to shape up your grasp. Cut a pattern out of cardboard or stiff paper to conform with the diagram Fig. 2; the diameters are as follows, to which you can gauge the finished grasp with a pair of calipers: B, 1 inch; C, ¾; D, 1 1/32; E, 11/16; F, ⅞. Distances are: A-G, 10½ inches; A-B, ⅞; B-C, ⅞; C-D, 1⅝; D-E, 2¼, and F-G, 3⅞. Lay this pattern on two opposite faces of the cedar block and trace the outline in pencil. Place the block in the vise and cut away the wood with a chisel, from A to F, down to the penciled lines. Then trace the outline on the two remaining surfaces, and cut away similarly. Next saw down the part from F to G to a full ¾ inch square. You now have the whole thing in the square.

Take your jack knife and whittle away the corners equally till the whole grasp is reduced from the square to an octagonal shape on cross-section. We next seat the female ferrule.

Before cementing this, get a winding-taper or check that fits nicely over the ferrule and up against its welt; fit this over the thin edge of the wood, around the mouth of the hole in the grasp mortising it in flush with the wood by filing a recess to receive

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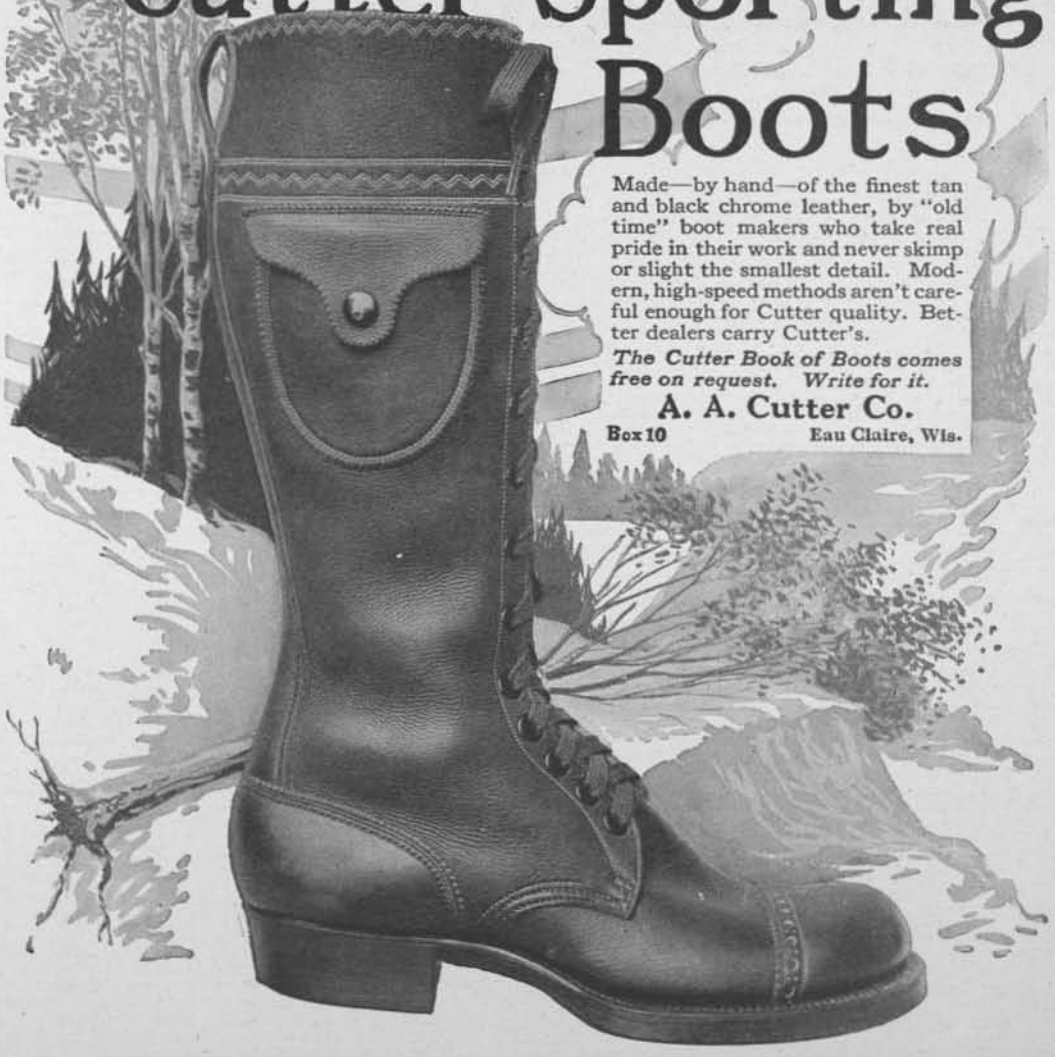

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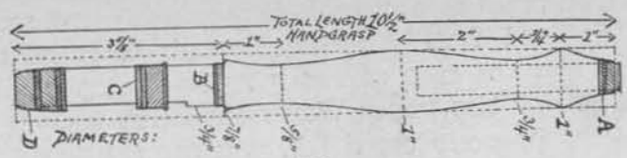

Fig 2

HANDGRASP AND REEL SEAT

it, and cement it in position. This will prevent splitting of the wood as you force the ferrule home.

You can now melt some cement, spread it evenly over the whole outside of the ferrule up to the welt, as you hold it over the flame with a small pair of pliers, taking pains the while not to get any *inside;* then thrust it into its hole, and by pushing down hard against the floor or up against the solid workbench or doorjamb, using your whole weight, force it home *quickly.*

Great care should be taken to have the hole positively accommodate the ferrule, though snugly, making use of a round or rat-tail file to enlarge the boring, if necessary to this end. The ferrule expands a bit on heating, and if the hole be too small the ferule will stick before being thrust the whole distance down into the grasp. Meanwhile the cement has cooled and thickened and the only way that you can now remove the ferrule without danger of injury is to split off the grasp, making it necessary to *begin all over again on a new one.* Be encouraged, however, in your perseverance to have the grasp right, by the knowledge that one grasp can be used for several different rods for the use of one angler.

Finally, round up the whole with the convex surface of a wood-hasp or a coarse file, followed by No. 2 and then No. 1 sandpaper; mount the reel-bands and fit the butt-cap.

The German-silver butt-cap and reel bands selected by the author are ⅝ inch, and were obtained from The T. H. Chubb Rod Company, of Post Mills, Vt., at a total cost of forty-six cents. Before cementing on the cap file a flat surface on what you have determined by the line-up shall be the reel side of the grasp, in order to seat the reel securely.

VARNISHING AND FINISHING

A good rod varnish has a maximum degree of elasticity and forms an efficient protecting coat against moisture. A varnish that dries too hard will soon crack under the flexion of the rod. The specifications are met in any of the best brands of spar varnish, such as "Valspar."

Varnishing should always be done in dry weather, preferably on a clear, snappy day, or a warm day with a little humidity, indoors, in a room whose air is as free as possible from floating dust-particles. A small camel's- or ox-hair brush, like we used for gluing (the same will do, if it was thoroughly washed out) suits our present purpose, likewise.

The author applies the first windings and initial coat of varnish soon after the joints are glued up and dry. No attempt is then made to flow it on, but care *is* taken to have it thoroughly brushed into and around all of the silk-windings, using short strokes of the brush in all directions. To insure a good flow, have the varnish warm while in use, by standing its container in hot water. A second application includes only the solid windings about the guides, ferrule-ends, etc. Two additional coats, covering all, are now flowed on carefully and evenly by brushing in long strokes lengthwise of joints. We now have the silk sufficiently protected to permit of rubbing down the varnish without injury to the windings. This we now proceed to do, *lightly and cautiously the first time* and with increasing vigor after each of the two or three following coats.

To rub down, use powdered rotten stone—from drug- or paint-store—on a soft rag wet with cold water; this makes a fine brown mud with which you scrub the joints lengthwise. When the rubbing is completed, rinse the joint thoroughly with cold water squeezed out of a small, fine sponge, and complete the cleansing by wiping with the sponge, damp. Then swish the joint a few times in the air to dry it.

In finishing the handgrasp, follow the filing by sandpapering—No. 1 paper, then No. 0—rotating the grasp forcibly between a fold of the paper held tightly in the palm of the left hand. After a good, smooth surface is obtained, apply water with the sponge, to raise the grain; when dry, make a second application of sandpaper and elbow-grease; now give two coats of varnish; rub down with powdered pumice stone and water; apply a third coat of varnish; rub with the wet rotten-stone or with linseed oil and rotten-stone; give it a fourth, last coat of varnish, very lightly.

For the last finishing touches, on both joints and handgrasp, rub with an old buckskin glove or piece of chamois skin, then with an old silk handkerchief; and, in conclusion, apply as much hand-friction with the base of your palm as your inclinations and perseverance will allow. The final result is that you have produced a smooth, mirror-like finish on all, that is not dulled by handling of the rod and whose luster is very durable.

THE END.

VARNISHING RODS

By Ladd Plumley

Winter is the time to prepare your tackle against the coming of another season. The slouchy guy leaves his rods near a steam pipe, where they will contort into angle-worm spirals and dry into match-stick brittleness. Of course, he never thinks of varnish. But there are others who treasure and respect their tackle. Even these sometimes forget that a coat of protection is needed by a rod just as much as it is needed by an angler.

A hairy "shedding" split bamboo, with the wrappings frayed and hanging, is a sorrowful object to the eyes of the neat fisherman. And when a rod has been neglected to the ragged condition, you can bet dollars to doughnuts that if the careless one gets caught out in a heavy rain the bamboo strips will have a tendency to separate as if they were the ribs of an opened umbrella.

There are many anglers who send their rods each winter to a tackle shop and have them looked over and varnished. But there are independent others, perhaps with lighter pocketbooks, who enjoy the winter angling pleasures that come from overhauling rods and other tackle. The pleasant pottering with tackle can never be looked upon other than as "off-season fishing." I defy a fellow, of a winter's night, to rummage out his rods and handle them without remembrances of woodsy days which chase every care away as a brown trout chases minnows at the tails of the pools.

Coach varnish has been recommended for rods. But it is a tediously-drying varnish and for myself I cannot find that it is any better than the excellent stander-off of moisture called "spar." And good spar varnish will harden "dust-proof" in forty-eight hours. Of course, however, it should not be handled for a much longer time.

For varnishing your rods you will need a flat, fairly stiff and not too-narrow brush. Three-quarters of an inch wide is about right. But before the rod is varnished it should be carefully cleaned. I use a soft cloth dipped in naphtha and go over the joints, so as to remove every hint of dirt. Then the joints should be wiped with a cloth dipped in thin oil. And, before the varnish is applied, the rod should be wiped perfectly dry with a clean rag.

You should choose a place to hang up the joints while they are drying. Those of us who live in apartments have little choice. I stretch a cord from nails in the picture moulding in my bedroom. Incidentally, I can mention, that the orders are, "No sweeping or dusting for three days." When I lived in the country I hung my varnished joints in a carriage house.

Do not use too much varnish. Better two coats at an interval of a week or so than one over-heavy coat. I give my own rods two thin coats every winter.

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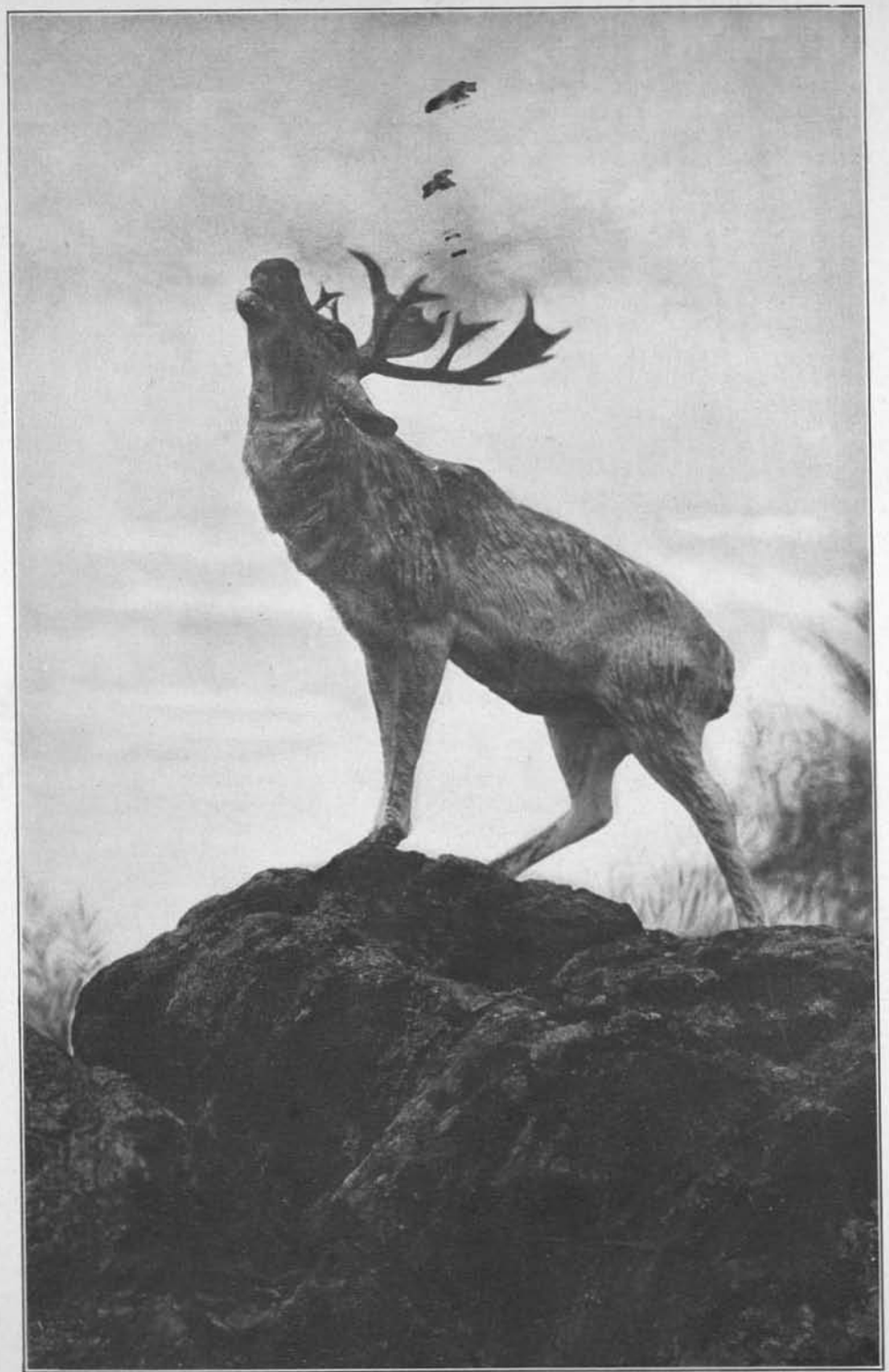

THE CALL OF THE NORTH

Photo by S. H. Parsons.

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FIELD AND STREAM

AMERICA'S MAGAZINE FOR SPORTSMEN

OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR DECEMBER, 1915 NUMBER EIGHT

BEAR HUNTING WITH HOUNDS IN COLORADO

By H. N. STABECK

A TRIP into the mountains of western Colorado, hunting bear with hounds, resulted in our bagging several fine animals, while experiencing all the thrills and joys of big-game hunting.

At Rifle, a small station on the Denver & Rio Grande Railway, I met John Teague and Fred Toland, the guides with whom I had made arrangements for the bear hunt. They had a good general outfit, a bunch of fifteen dogs—fox, wolf and blood hounds, Airedales and one bulldog, and a dozen pack and saddle horses. From Rifle we traveled west to Grand Junction, then southward through White River and beyond, making our first hunting camp twenty miles south of White River.

On our first day off the travel-worn trails we saw frequent signs of game, particularly a number of deer feeding about a mile away. With our field glasses we observed three coyotes that had surrounded the deer and were standing rigidly at watch over their prey. The outcome of this siege would undoubtedly be in favor of the coyotes if they were not molested. In order to get within gunshot, we had to cross a bad ravine, coming out in a half hour in plain sight of the coyotes, but too late to prevent another of the tragedies of the mountains. The three coyotes were devouring two fawns. With a lucky shot from the saddle, I made one coyote pay the death penalty he so richly deserved. An examination of the ground showed that the coyotes had stalked the deer from three directions. The deer had run in a circle until they were entrapped and hamstrung by the coyotes.

We pitched our first hunting camp late that night. Then for several days we hunted without any results, in so far as bear were concerned. On one of the days, however, to give the dogs a run, we started them on a fresh bobcat track. Within a short time they had the cat treed in a dead spruce. Teague had an order for a live bobcat and he resolved then to get this one. It had gone out on a low broken limb and Teague proceeded by climbing the tree, approaching the cat in monkey fashion. There was nothing for the cat to do but jump into the pack of ferocious dogs or stay and fight Teague, who meant to slip a rope around its neck. With the man so close upon it, the cat grew nervous and showed symptoms of preferring a chance with the dogs. Teague, a man of action, at once "seized

SIDE LINES

the bull by the horns." Rather, he seized the cat by the nape of the neck, and it looked as though he were in for an experience as harrowing as any of Jones', of African fame. The cat strangely resented such familiarity and expressed its indignation by using its hind claws to Teague's disadvantage. For a moment Teague was master of the situation. Balancing himself on the limb, he did a tight-rope stunt that would bring envy to a vaudeville star. But not one of that cat's lives was destined to be spent in a menagerie. There was a waving of arms, a yell, and Teague and the cat came flying through space. Out of a minute free-for-all, dogs, bobcat, and hunter, we picked up a dead bobcat and a sore and bleeding guide. The cat had sunk its claws deep into Teague's wrist and one of the dogs had lacerated his leg. We bravely endeavored to choke down our delight in the humor of the situation, while Teague gave vent to all the indiscreet language in him, but we broke down completely when his fury finally culminated in

"Laugh, d—n you, laugh!"

The day before we were to break camp to go across country to the North Fork of the Gunnison River we found a bear track not over three days old. The dogs had some difficulty cold trailing, so Teague and Toland followed up behind, to encourage the younger dogs until the bear was jumped. I was to climb, crawl, or walk up a snow-slide to the top of a mountain, where I could see Bruin if he attempted to cross the ridge. The slide was very steep and glary as ice. I dug my heels in and for two hours climbed steadily. I finally reached the top, where I encountered a wind that felt like a North Dakota blizzard. After building a fire and hugging it for some time, I heard the dogs and presently located them with the field glasses. They circled, going down the mountain and then up. I could hear them coming, closer and closer. Straining my eyes for the first sight of the bear, I was hoping that it would come over the ridge, when I glanced to one side and was amazed to see that bear, not fifty yards away, rising up on his haunches to take a look at me. Instantly I had my Savage sights lined up with a spot low on his neck and I pressed the trigger. Nothing doing! Pull as I might, I could not break the trigger nor discharge the rifle with the safety on. Before I could rally from my trance the bear was a hundred yards away. I kept a stream of lead going in his direction as long as I could see him, but, aside from dropping his haunches momentarily, he kept going as fast as ever. Three of the old hounds and one Airedale were only a few minutes behind the bear, with the rest of the dogs following. Their eagerness was revived when they reached the place where the bear had been punctured hard enough to draw blood. In a short time I could hear that the dogs had the bear at bay or treed, and I followed up to find that he had run into a cave. Toland and Teague were soon at hand. We tried to smoke Bruin out, but he would not budge. Then we tried sending the bulldog in. There was a growl, a rush into the cave, and the bulldog came tearing out faster than he had gone in, with a big gash in his face and his tail between his legs. Teague disliked to run

any chance of losing an Airedale, but finally decided to send one of them in, when he found he could not force a single one of the hounds into the cave. We, however, planned a campaign to guard the safety of the Airedale. I was to lie down on the ground about four feet from the cave entrance, where I could get a shot at the bear if he came out far enough to be seen. If for some unaccountable reason the bear did not stop when I fired, Teague, who was stationed above the cave entrance with a .22-caliber pistol (the only other firearm we had along), was to drop the bear in his tracks without filling my hide with stray bullets. Should the .22 pistol not have velocity enough to give the bear the necessary nervous collapse, we took the further precaution of stationing Toland at the opening of the cave with an axe, and instructed him to put the finishing touches on the bear, stopping his further progress as he came out of the cave without cutting holes in a perfectly good bear skin. When all arrangements were completed, the Airedale plunged into the cave, out again in double-quick time with the bear at his heels. The dog, with one lunge, landed squarely in my face. My rifle was discharged and the bear dropped without moving a muscle. I had gotten him right between the eyes. The boys remarked, "Some shot!" little knowing that I had not even seen the bear when the Airedale landed on me and jarred my hand just enough to pull the trigger at the psychological moment. He had a fine brown pelt and weighed about 350 pounds.

From this camp we moved to the North Fork of the Gunnison River, intending just before dusk to cross the river to a more desirable camping spot. It had been a warm day and the river was badly swollen. After some discussion, we decided to cross, Teague and Toland leading, while I was to drive the pack-horses into the river. When half-way across, Teague's broncho stumbled, lost his footing, rolled over, and was started downstream, and Teague, hanging onto the pommel of his saddle, got a ducking in the ice-cold water. The pack-horses all had the same difficulty in making the crossing, but finally landed on the other side about fifty yards downstream. Knowing that the temperature of the water was not far above freezing point, with apprehensions of a watery grave, I elected to remain behind and postpone crossing until the river had receded, which it would by morning. My supper consisted of what could be thrown across the river to me. Though a beautiful starlit heaven and all out of doors was my shelter for the night, my spirit did not find peace. The air was extremely cold, and several coyotes ventured to within a few rods of my campfire and kept up their howling until sleep was impossible. Then longings for home and mother crowded out any appreciation I might have felt for the grandeur of the Gunnison River scenery. However, I lived through the night and in the morning crossed the river without any trouble.

As the old dogs needed a little rest cure for their sore feet, we took only a few of the young ones out on our first day's scouting from this camp. Riding leisurely along, we were looking over the country

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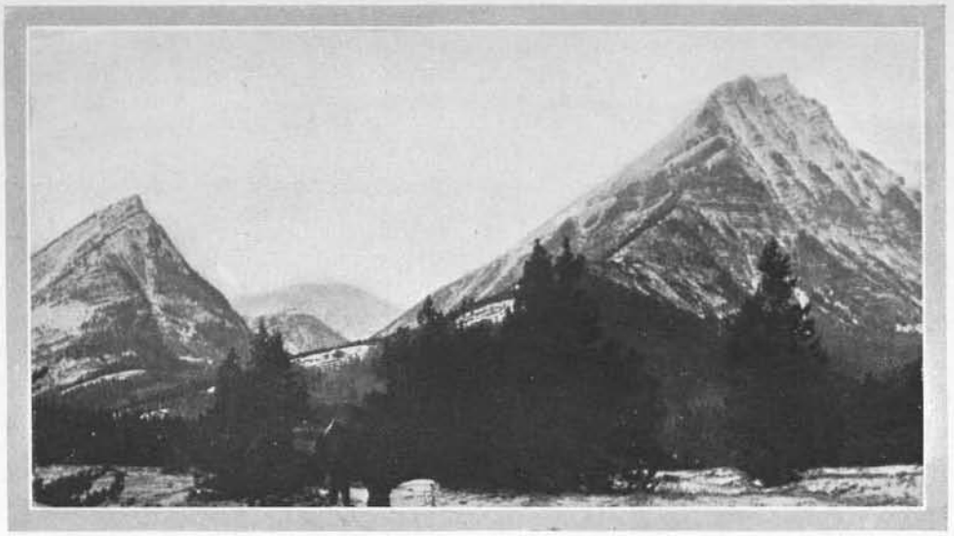


THE BEAR COUNTRY WE HUNTED

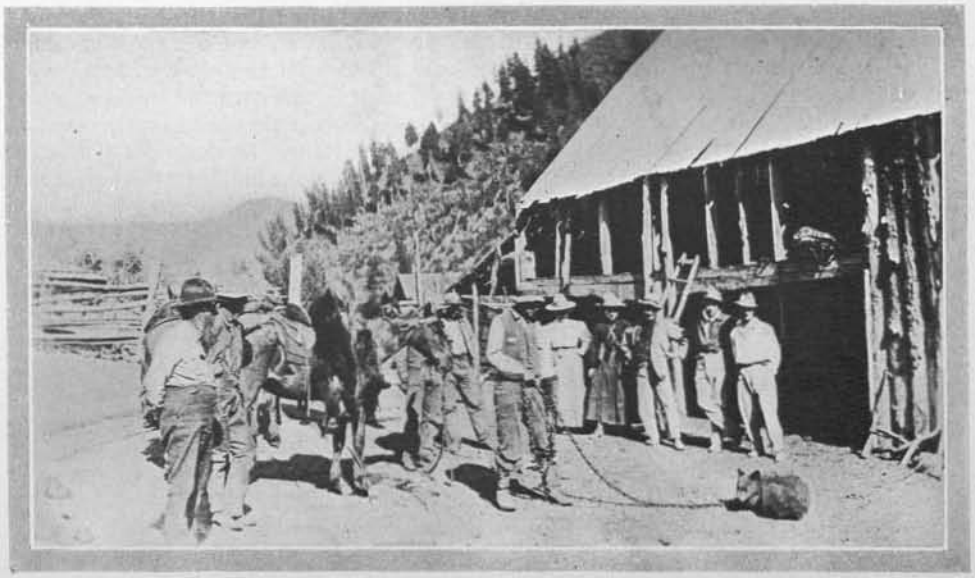
with more interest in the surroundings than in the pursuit of game when, as often happens in big-game hunting, the chance unexpectedly came. It was during a conversation on the subject of dogs. Teague remarked that if Badge (one of the young bloodhounds) ever bristled up the hair on his back while out hunting, it was a sure sign of bear or lion close by. No sooner had he spoken than Badge, uttering a low growl, came out from a clump of bushes with his hair standing on end. In an instant I was off my horse, just in time to get two hurried shots at a big black bear. The dogs set up a howl. My horse started down the slide on the jump, Toland after him. Teague was having troubles of his own, trying to stick to the saddle while his broncho was persisting in one of his old bad habits. Then the bear appeared in sight across the canyon 200 yards away, with the dogs at his heels. I pulled the trigger and already had a vision of his carcass rolling down the mountain-side, but there was only a click of the hammer. "Bum shell," I thought; pulled the lever, then the trigger. There was the same click, and it dawned on me that I had no shells in the gun. At this time Teague cautioned me not to shoot the dogs. After locating some shells in my hip pocket, with excitement bordering on buck fever, I shot at the hole into which the bear had disappeared, and struck neither bear nor dogs. After this shooting the dogs stopped. We followed the trail of a bloody footprint for a mile or more. Finally Badge gave tongue, started on the trail, and was soon out of hearing. After waiting an hour, we again heard the dogs and judged that they were close onto the bear. Getting the general direction in which they were coming, we rode to meet them, and a real ride it was, down an incline of forty degrees (more or less) as fast as our bronchos could jump. Later I was thrown from my horse by a limb that hung just low enough to catch me in the wind. Teague was pitched from his horse and in an outburst of fiery temper broke his rifle across his horse's head. When we reached the point where we expected the bear to cross our path, we met the dogs, hot on the trail, but we had missed the bear by less than a minute. The dogs could not be induced to go another foot after meeting us. Teague rechristened each and every pup with profane and undignified names, vowing that they would not get anything to eat until they had run the bear to the finish. However, we were forced to give up this lucky bear. A snow that night prevented our picking up the same track in the morning.

With a fresh snow, however, we were not long in locating tracks on an open slide. With the full pack of hounds, we had a bear jumped in a few minutes. She surely gave us a merry chase across the river, up to timber line, back again, straight away for several miles, then circling to within a half mile of camp. The bronchos Teague and I were riding showed signs of giving out after four hours' of furious riding. I volunteered to go back to camp for fresh horses and incidentally a lunch, while Teague remained behind and kept a line on the chase. I was back at the appointed spot in a short time with the best bronchos in camp, determined to get close enough to that bear to get in some shooting. The way we rode the windfalls and the creeks our bronchos took would make a steeplechase look like a stroll in the park. We would cut across lots and be almost up to the dogs, give our horses the spur, hoping to get within shooting range, only to see the bear across the canyon or on the next ridge, half a mile away. At four o'clock in the afternoon the young hounds, the Airedales and the bulldog were "all in," and only three of the old dogs were left on the trail. As we circled again to within a mile of camp I gave up the chase, as eight hours of strenuous riding had worn out my back and I felt, for the time, willing to give that bear and all others their freedom. My broncho dragged himself and his rider to camp, but I had been in only a few minutes when Teague announced his coming with a six shooter and a yell:

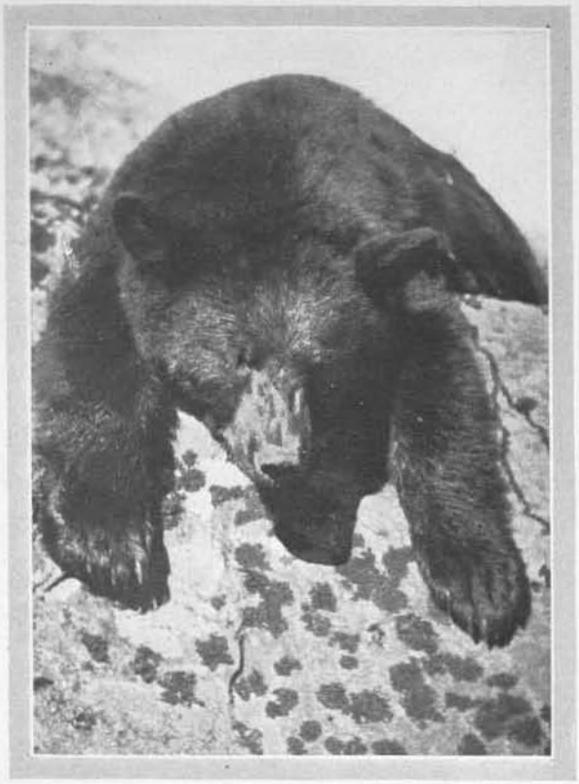
"A big brown bear! Got him up a tree! Toland and the dogs are waiting for you to come out and shoot him!"

There was nothing to do but pick up a fresh horse and ride the two miles to where the bear was perched up in a pine tree. One shot brought her down, a long-legged brown she-bear that weighed about three hundred pounds.

While we gave the old dogs a day's rest after this arduous chase, we took the young dogs out to locate bear tracks and also to amuse ourselves burning up ammunition at the numerous coyotes. About lunch time we heard a hound's bay from a distance. We noticed that Badge was missing. Teague guessed that the dog had picked up a deer or elk track, as he had given us more or less trouble in making this mistake. Teague's dander was up immediately and he lost no time in putting his horse on the jump in the direction of the truant hound. We followed and soon



A REAL LIVE TEDDY BEAR AT THE RANCH



THE LONG-LEGGED ONE

reached a hog back for which, from all indications, it seemed the hound was headed. We did not have long to wait before Badge, with a big bull elk almost fagged out ahead of him, came within fifty yards of us. That was the straw that broke the camel's back for poor Badge. Teague's temper was bad; a shot rang out, and Badge had made his last mistake. Teague quickly repented his hasty action, and Toland, ever the true and loyal friend, smoothed his comrade's troubled conscience by saying:

"The dog was a tramp and a criminal. He deserved what he got."

The elk, as though appreciating the situation, stopped, looked behind him, then at us, dropped his head and slowly walked away. There was no more hunting that afternoon, and no one ventured to make any comments on the happenings of the day.

It was while at this camp we started all the dogs on a grizzly. Anticipations of adding a grizzly to our bag spurred us on to ride hard and fast. We had no other thought than that the entire bunch of dogs must surely stop him. The day was drawing to a close when the chase brought us to the river, where we came upon the dogs trying to locate the point at which the bear had crossed. We worked until after dark, the dogs having drifted in various directions in search of the trail. We returned to camp with the theory that the bear had swum downstream and crossed or had come out on the same side, probably half a mile below, and that with the hounds we could pick up the trail in the morning; but our surmise was incorrect. Only four of the Airedales came back to camp that night. We returned to the last scene of action in the morning, but there were no dogs in sight or within hearing. We went down the river for miles, up again on the opposite side, and worked out in every direction, but we could find no sign of bear or dogs. We returned to camp that night to find that three of the young hounds and one old one had come in during the day. About nine o'clock in the evening the hounds commenced to come straggling in, so tired that they could scarcely drag themselves along. By midnight they were all in excepting the bulldog. We kept watch almost all night for him, as he had won the admiration of us all with his nerve and gameness; but poor Tige had evidently over-estimated his endurance, for he never returned. Either he had gotten lost or drowned in the treacherous waters of the Gunnison. There was a bare possibility that the dogs had stopped the grizzly and that the bulldog's nerve had been his undoing. A sorry-looking bunch, the pack were unable to stir for two days except to eat.

We next moved our camp further downstream, where we hoped to find another grizzly or larger bear. The first day out,

the dogs gave tongue to two fresh tracks, those of a big bear and a cub. We ran them for an hour and treed the cub. I decided that I wanted to take the cub home alive. He appeared to be a yearling and weighed about fifty pounds. He was out on a low branch of a dead spruce, on a side hill, where it was possible to reach him with a rope. We all took turns at throwing the lariat, often landing it on his head, but the little fellow would brush it off with his paw before we could tighten up on him. Teague finally got him around the neck and under one foot. It was as big a job to tie up the dogs, who were frantic to get at a bear of their own size. While we were pulling the cub out of the tree, he dropped over another branch and we had him hung up so that it was an easy matter to get his hind legs roped together. Just as we let him down on the ground one of the old dogs broke loose, and it looked as though he might finish the cub. Then it looked as though Teague would finish the dog before the tussle was ended. The dog, however, was tied up again and Toland and I stretched the cub out with two ropes. Teague, wearing two pairs of gloves and all the coats he could get on, attempted to secure his front paws and tie his mouth shut. After several lunges and a taste of how a little bear cub can use his claws. Teague had him foul, bound his feet, and ran a strap around his upper jaw, back of his long teeth and under his lower jaw, pulling it tight enough so that Teddy's teeth could do no damage.

Up bright and early next morning, we started up the canyon looking for the old bear whose trail we had quit the day before. We had not gone far when we jumped a big brown bear not fifty yards ahead of us. I got in two shots from the saddle, but failed to connect. The full pack of hounds lost no time and were soon crowding the bear, and inside of thirty minutes they had him stopped across a very deep canyon. Its sides were too steep to descend on horseback, so we waited for half an hour, thinking the bear would break away and come toward us. Unfortunately he did not. Teague and I concluded to try crossing the canyon on foot while Toland was sent several miles around with the horses. It took us two hours to reach the dogs. They had the bear backed into a rock crevice and we could get within twenty feet of it without being seen. The hounds were sitting on their haunches about fifteen feet from the bear, content with keeping up a continuous bark, while the energetic Airedales kept jumping into the bear's face and away again before he could claw them. The Airedales had doubtless kept this sparring up for two hours and a half. They were without a scratch, while the bear's nose and face were torn and bleeding. When I stepped forward to shoot, the bear was lying flat. He raised his head just enough to make a better target, I fired, and Mr. Bear was no more. He weighed about four hundred pounds, and his pelt was a good brown one. Toland soon arrived on the scene and, after skinning out the hide, we returned to the ranch, where I made arrangements to get my live bear and hides out and started on the homeward journey—back to civilization.

TROUTING ON THE GUNNISON

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Editorial, December, 1915

"I Took Along My Tents"

BY the time this page falls under your eye the hunting season for 1915 will have about come to an end. There will be a little duck and goose shooting left, and some sport with the southern quail, but, for most of you, the Big Trip is already a memory. The moose and the caribou hunters, the elk and mountain sheep trackers, have been to their far countries and are already back again to the cities; the fisherman was frozen out long ago and has denned up for the winter; and that big majority of us whose one big trip is after deer in the nearby mountains, or ducks in the lakes and bays of our home States, have been, seen and conquered—or missed—as the case may be. For many of us there was no Big Trip this year. Times were too hard; we couldn't afford it; took all our energies and then some to keep alive, with the whole world groaning under the burden of a great war. We feel fat and lazy and discontented, and half alive because we had no let-up this year when we could get away from work and war and all the other irritations that beset civilization, and, as a result, we are going into this winter's work without the usual "pep" that the fortnight in the woods under canvas always gave us heretofore.

Yet that little sentence that heads this chat has the power in it to avoid all this; did so for me, at any rate. Following my usual custom, I camped out once a month every month in the year, this year as for the last four of them. During all that time I have missed but two months, once when the Kaiser, his war, detained me in military confinement the while seven million soldiers were getting into line to tear and mangle one another with machinery; also once this year, when Wakonda smiled on me and it was not good to be away from the wigwam until a new member was brought to the tribe. But—all the rest of those months! . . . This month a year ago I took my tents along, stuck an express plaster on the canoe, and, with ten other Indians, went down a wilderness river, naked to the waist—Naked in November, if you *will* have an alliterative title! In December the same tent went South for ten days' quail shooting, and once more we slept on long-leaf pine browse, than which there is none better. In January I slept in an Indian teepee and enjoyed myself hugely, at ten above zero, weaving a red-and-black belt on an Indian belt-loom which I had constructed out of the raw materials at hand in the forest. In February I put in a day or so in a log cabin attending shotgun and revolver and horse-packing contests. March and April were spent without hitting the trail, for the reasons hinted above, but still I devised and experimented with a new tent which will be described for the benefit of the outdoor fraternity in FIELD AND STREAM in due time. In May we were out again, in the new tent, camped beside a little forest lake, casting for pike and pickerel. In June, in still another tent—a little one weighing a pound, that went over the cockpit of my sailing canoe—I went up to the Camp-Fire Club encampment on Greenwood Lake. I found the canoe in her crate at the nearest railroad station, put her overboard, hoisted the sails, hove in the guns and duffle, and sailed down the lake to the encampment, arriving under her own steam, the only member to arrive that way, in fact. There were four days of strenuous competition with all the weapons of the outdoors, from bows to big-game rifles, from fly-rods to firemaking sticks—and the June encampment went into memory, while the month of June, like all those before it, had furnished its own pep from those few days in the woods under canvas. In July we took the new tent, which was especially designed for winter work in deep snow, down on the beaches of Barnegat, surf fishing. Along went a friend and three boys, and we did both surf and bay fishing for three days in the open. As sand is very like petrified snow in the way it drifts and acts, this tent proved one of the best ever for sand camping.

In August I took along the tents and

went up for a three days' encampment with the Y. M. C. A. boys at Greenkill, in the Catskills. There were ninety boys, camped in big army tents, and they were eager to see something of a practical woodsman's equipment, to examine with their own eyes every detail that made for life in the forest, as selected by the dictates of experience. I never make any trip without bringing also rod or gun, for, like the dog and the sandwich, one never can tell—pieces of meat *have* dropped out of sandwiches before! In this case the piece of meat in the sandwich proved to be several big black bass weighing up to 4½ pounds that rose to my lure, after the boys had repeatedly assured me that there were "no fish whatever in Binnewater."

In September, the Kid and I and a friend took the other new tent down to Barnegat to keep a date with the channel bass, which are due there early in September. The tent was a dandy, the only cool and mosquito-proof structure that I have found yet for a hot, sandy beach. Our fishing hole was completely usurped by large flounders, of which some fifteen were taken, but next morning, after a wonderful sleep, I awoke to find myself looking right out to sea, where a beautiful dawn was in progress; also, on turning my eyes a little farther along the sweep of the beach, an angler busily engaged in a great fight with a large fish that was doing his best to pull him over to Europe. The angler had been fighting him for half an hour, having had the strike while it was yet dark, and we all piled out on the beach to be in at the death.

Late in September, the Kid and I took along the new tent and two packs weighing twenty and thirty pounds each, with full grub, cooking and sleeping outfits for two for a five days' trip. We made an early train to Pike County, Pa., arrived at a switch signal in the mountains where the train accommodatingly stopped, shouldered the packs and hiked four miles up Perry's Mountain through the timber. Along about eventide we swung down to a little forest lake, dashed out on the deep and took a bass for supper. Next morning the youngster landed two big ones for breakfast, and we explored Indian caves and fished still another lake, taking fifteen bass, all of which were returned, and one large pickerel, kept for supper. Him we ate, and, the next day being Sunday, we went swimming and sailing, to use up the time, and the following morning, after a last fish around the lake, we ate the last of the grub, packed the packs, and hit the trail for the home train.

In October—well, it is the end of October as I write—but three days from now the Kid and I and two friends will take along the tents and canoes and do a cruise up a little Jersey stream where there are ducks and the remnants of this year's pickerel. We will be gone four days, and the fun we will have with those ducks and fish will be some plentiful, I'm thinking.

And why all this unseemly eagerness to be forever infesting tents? Well, I'll tell you. It's the key to vigorous good health —to me—for one thing. You can get an astonishing amount of pep out of even three days spent in the woods or beaches under canvas, with a warm, cheerful campfire and good grub cooked with your own hands. I'm not so sure that a moldy shack with damp bedding and indiscriminate backwoods fare, cooked by the farmer's boy, would be as good, but I *am* sure of the other scheme. And the pep is distributed so fully over the year's work that it keeps away any protracted period of doldrums and staleness.

This little preachment is offered to show how one hard-working individual, not over-blessed with the world's financial emoluments, has managed to keep out of doors day and night for at least sixty days each year. And during these breathing spells in the battle for bread, one's physical energies are so completely brought into play that the muscles are kept up to the top notch of condition, the bodily organs restored to full efficiency, and the mind, relieved from all cares and stimulated by the keen pleasures of the outdoors, is invigorated for further effort when the return to business becomes necessary.

And that is the lesson of "I took along my tents"!

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TO THE DIAMOND HITCH WITH OUR OUTFIT

THE BLACKTAILS OF THE LOWER ROGUE

BY DENNIS H. STOVALL

THE wildest and most remote region that remains in America is the mountain forest district of the lower Rogue, southern Oregon. It is a primeval wilderness. And here the big game is found. In the deep gulches, the boundless forests of sugar pine and Douglas fir, and over the endless ranges whose limit is the horizon, where the Rogue and the Illinois boil angrily between sheer walls of stone, roam the Columbia blacktail deer, the brown and black bear, the lynx, the bobcat and the cougar. The real sportsmen who go into this region either hike or take a saddle pony. It is no auto-touring country, and it's a long, long ways from a barber pole.

Sure-footed ponies to carry the pack and grub-kit, and other equally sure-footed cayuses to ride, are the best means of getting into the region of the lower Rogue. Our party of five started from Grant's Pass, going as far as Galice, twenty-two miles, by stage. At Galice, which is an old-time mining camp, we met Alex, the "boss hunter," guide and packer, who was to take us into the wild. We transferred our outfit from the stage to the hurricane decks of Alex's ponies and mules. Then we struck the trail for the interior. The Government, through the aid of the Forest Service, has constructed a good trail down the Rogue from Galice, for the accommodation of its rangers, and, as the trail is open to the public, it is a welcomed pathway to such as we. There is a no more picturesque trail anywhere. The route winds here and there between cañon walls, and leads out over towering pinnacles. There are places where it rounds a point and hangs to the mountain wall. From these places we could glimpse the river, roaring and thundering over the rocks more than a thousand feet directly below. The cañon in these places seems but a deep slit in the earth, with the river flowing through.

But the wild country, the rough country, we found farther on, a whole day's journey farther on. The river makes a

detour to the right and misses Mount Reuben by a narrow margin. After the first day we found naught but an unbroken wilderness, and, after leaving the trail and striking back towards "Buck Camp," had to keep to the ridges or become helplessly lost. There are no roads, no paths, nothing but the backbones of the mountains to follow, with the river cañon for a guide. On the crest of these we would pause for rest and to gaze over the endless array of ranges, pine-clad and purple-hazed. These ranges are broken everywhere, and seamed in all directions by gulches and cañons, down the depths of which creeks and streams go babbling.

As we looked around us upon the unbroken expanse of smoke-blue ridges, upon a territory greater in extent than some Eastern States, we felt lost in the midst of a great mountain sea. The glittering snow-peaks that rise here and there are as whitecaps breaking the monotony of an ocean's endless blue. It was as if on all the earth's great surface we were the only living things; indeed, there were but few other human beings within all that limitless expanse. If we cried aloud, the only answer to our cries was the thousand echoes that awoke, startled, from the gulches. There was one big consolation: here was the camping ground—here was the haunt of the game!

And here, at "Buck Camp," as it is known, we halted and unpacked the animals. We were, according to Alex's most conservative calculation, "seventy miles from a keg of beer by the shortest route." This, however, didn't bother us, for there was knee-high grass for the cayuses and mules, and we knew there was game in the wilderness. The truth of this we later learned. The writer has talked with men who have hunted in every district in America: with men who have shot wild turkeys in Virginia in the old days, and with others who brought down antelope in the Rockies, but who declare emphatically that for real hunting, for big game, there is no place left that equals the pine-clad ranges of the lower Rogue. It is true that one must, to be a successful hunter in this region, bring down his game from long range. The condition of the country demands this. As to the law, it is prohibitory to kill more than five deer in a single season, and each of these must be bucks. The license and tags are secured of the county clerk of the county in which the hunter wishes to hunt, though this is not necessary, as a license given in one county is good for any county in the State. Five tags are given each applicant, the resident paying a fee of one dollar and the non-resident a fee of ten dollars for the hunting privilege.

That first night in camp we became intimately acquainted with a visitor we were not prepared to meet. He made his appearance deep in the night, while all of us were rolled up in our blankets and enjoying the sweet sleep of the mountaineer. He visited each of us in turn and left a cushionful of needle-pointed quills in exposed hands and cheeks. We all woke standing. Each man emitted a yell in his own particular key.

If you don't think a porcupine can hurt, just let one of them stick a dozen or so of his poison-pointed barbs in your cuticle. It is ten times worse than sitting down on a Canadian thistle. It just keeps hurting and smarting, like a hornet's sting, even when the quills are removed. The fellow that made all the rumpus scooted up a nearby sapling. We stirred up the fire, piled on some pitch, and, when we got a good light, brought him down with a single shot.

While talking porcupines, let it be said there are many of these animals in the Oregon mountains. They are harmless so long as you don't let them walk over you, as we did, and they are as large as the Asiatic or European porcupines. The one we killed weighed no less than forty pounds. He measured three feet without his stub of a tail.

"A porcupine in camp is a bully fine omen!" old Alex declared, as we rolled up again to finish the night.

"We hope so," the rest of us added, anxious to get some degree of comfort from the disturbance.

We ate breakfast in the dull gray light that precedes the dawn. It was the "dark of the moon," and the boss hunter said that the deer would be feeding early. When the moon is "light," so we learned, it is the habit of the blacktails to feed at

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"WE HAD TO KEEP TO THE RIDGES OR GET LOST"

night, lying low during the day. They do this as much for protection against cougars as to be safe from hunters. In truth, the cougar is the main destroyer of the Oregon deer. So numerous have become these predatory beasts of prey that the State now employs experienced hunters, with trained dogs, to run them down. It is hoped to by this means exterminate the brutes. It is estimated that a cougar will kill, on an average, from one to two deer a week. And he recognizes no closed season. The whole year is an open season to him. He worries the does during the rutting season, and slays the fawns before the little ones lose their spots.

We didn't take time to "dip and souse" the dishes that first morning in camp. We were off while the east was rosy, and before long came upon a trail of freshly made tracks.

"What did I tell you?" Alex reminded, as he stopped and examined the prints. "Them are blacktail marks, I'll bet a dollar ag'in a bird-cage. I knew that porky-pine would bring good luck."

None of us was going to bet against a sure thing. Anyhow, we were agreed as to the nature of the hoof-prints. The thing that concerned us most was to get the game.

Following the usual method of that region, Alex proposed that we stalk the bunch, part of the crowd making a detour when we reached a certain spot, so as to head off the game when it attempted retreat. So it was agreed, and a half mile farther on we made ready to divide. Ike and Bob were to go on round.

"Make a wide circle to the right," Alex directed, "and come up to the ridge at that saddle-back. Take a stand there and wait till we drive 'em down. We'll wait here for half an hour or longer; that'll give you plenty time to get round."

Ike and Bob moved away in silence, while Alex, Tom and I waited. When the old hunter rose and shook himself we knew it was time for us to start. We

dragged for half an hour down the slope, over the wet grass. Finally we came to a brush-covered knoll. As the growth was sparse we were obliged to lift our heads cautiously and peep over. Down there, about two or three hundred yards from us, and quietly feeding, were four does. This was a keen disappointment; moreover, we were absolutely certain that there must be bucks close by, for by the latter part of September, the season we were out, both the bucks and does begin to collect in herds.

True to our expectations, and after we had waited a little time, we saw the many-spiked crest of a fine old fellow raise above the growth. He was fifty yards or farther below the others. Immediately following his appearance, three others came to view.

But the best-arranged program will sometimes go askew. So it proved with us, for we unwittingly exposed ourselves to the does, and these, with a keen sniff, soon gave the alarm to the bucks. In an instant all were off in wild panic, a blurred, brown streak down the cañon. There was nothing to do but let them have it "on the fly." To do this we had to scramble to our feet and attempt as best we could to each select a buck. With eight deer all running in a close group it is hard for a hunter to tell "which from t'other," as Alex expressed it. And the very reason that we had no desire to injure a doe made our marksmanship poor indeed. Anyhow, we did that bunch no harm.

A moment later two shots were heard from off down the cañon. Then a regular fusillade followed, and we knew that Ike and Bob, both armed with auto-loading rifles, were giving it to them from their stand. We hiked on down, none of us speaking a word. As for myself, it didn't matter, for I had "shot after" deer before. But poor old Alex felt badly, though he said nothing. As the "boss hunter" of the party he felt that he had gone wrong, and this on our first day's hunt.

The exuberant yells of Ike and Bob caused us to lift our disconsolate heads. "We got three of 'em!" they shouted wildly, waving their hats. This fact served at least to make Alex's prophecy

THE FATAL SPOT

ring true, for we did have venison for dinner, though it was a big task getting those bucks to camp. We first tried carrying them, but gave this up and went after the pack ponies. It should be said to the credit of Ike and Bob that they let our failure pass without comment. As for Alex, he became at once determined to make good, and that night he advised that we "roll up" early, as we were to be on the trail next morning before the wood owls quit hooting.

Alex had us up so scandalously early the following day that we had to wake up the ponies in order to give them a new tether, and ate breakfast by the light of the camp-fire. Alex led out, and before daybreak found a trail. This time it was proposed that we scatter even more than we had the day before, and so divided into three groups, Alex, for reasons best known to himself, preferring to be alone. Before going out, however, he gave minute directions, laid out the trails, and

indicated landmarks that we were to keep in mind. We were to make our round and assemble under a lone hemlock on Peavine Mountain at two o'clock in the afternoon. This would give us time to make the return back to camp before nightfall.

As a matter of precaution, we each tied a red handkerchief round our heads. We didn't want any "mistook for a deer" tragedies to mar our sport. Two of the party wore red shirts, so there could be no possibility of mistaking them for game. It should be stated in passing that the number of tragedies that occur in the Oregon mountains every deer season, due in most cases to carelessness, has led the State game warden to insist that all hunters wear red coats or shirts, and that no shot be taken at a deer unless the deer is out from cover. To fire into moving growth or trembling fern, with the belief that it is a deer, is nothing short of a crime.

Tom and I were together again. We took a detour to the left, Ike and Bob to the right, while Alex came down the gulch we had been following. Our idea was to cover both low and high ground, as it is difficult to know sometimes just where or how deer will feed or range. To make matters a little more difficult, a dense fog dropped shortly after we separated, and we could not see more than fifty yards ahead. Once, while the two of us were tramping along, we heard a keen sniff and the heavy thumping of hoofs. We knew that two or more bucks were nearby, but as we could not see them, the fact was of no service. We did, however, get at once on the trail and began to stalk, hopeful that we might come upon them. We followed the trail for over an hour, and were led to the crest of a divide. Here we paused, for the fog began to clear swiftly and the sun peeped through. A slight breeze blew the mist clouds quickly aside, and, while we lay in hiding, a little vale was revealed just below. And in this vale, not two hundred yards from us, three bucks were feeding!

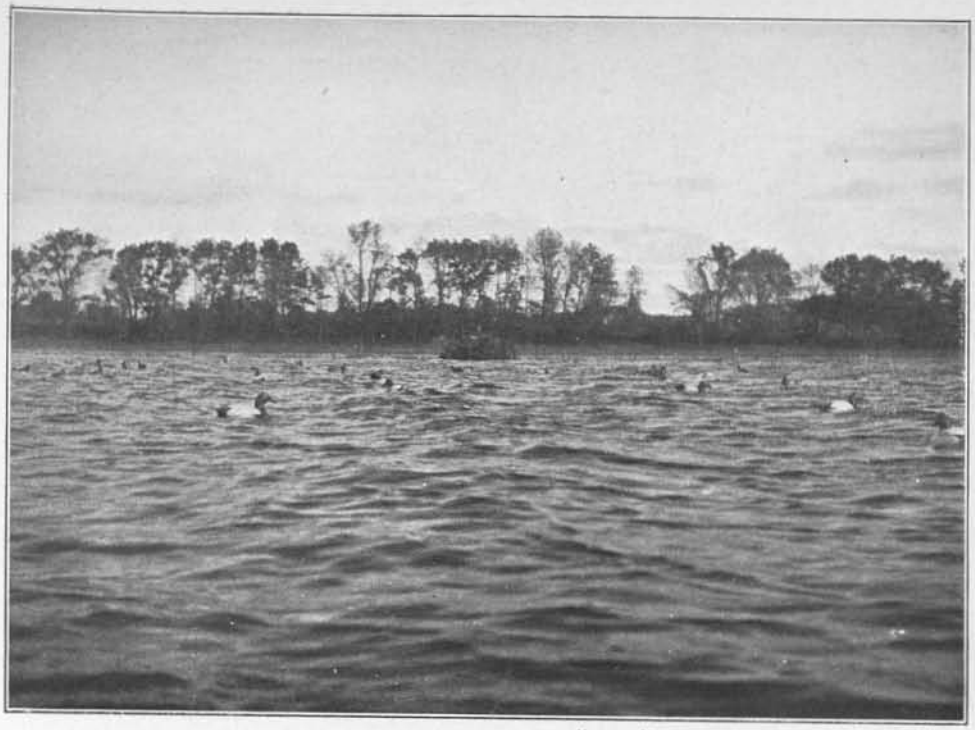
"Gosh!" whispered Tom excitedly, as we got our rifles into position. We took bead kneeling. I selected one to the right, in the order of our position, and we fired together.

Luck was with us, surely, for not one of those three bucks got away! Tom brought down two of them with a single shot. It is something that happens only by chance—two deer getting in line—but it happened for him. We were so keenly excited that we yelled exultantly; we thumped each other on the back; we threw up our hats; we barked like squirrels; we made every manner of noise, even to firing our guns in the air. And while we cut our didoes there came to us the distant crack of other guns, like the opening shots of a skirmish. We hoped that the other members of the party were faring as well as we.

Our hopes were destined to be fulfilled, for after we had drawn and hung up our game, returned to camp for three of the ponies, and moved on to the assembling place, we learned that Alex had killed three, "all by his lone!" Ike and Bob got two between them, and as we had one left from the day before, there were "nine of 'em hangin' to the pole" when we got them to camp that night.

We might have gone out another day, and still other days, and done as well, but we did not. Truly, we had killed enough, even though we had used but two days in real hunting, and had several others coming before the limit bag was reached. So we stayed in camp, rambled over the mountains, played and romped like happy schoolboys, enjoying every hour to the full.

In addition to the venison, we had trout in plenty and wild berries and hazelnuts and honey. Surely the fat of the land—of that wild, remote land—was ours and we fared like kings. Reluctantly we packed our kits and outfits for the return. Sun-tanned and bewhiskered, but feeling like real men, with the blood leaping in our veins, we dropped down from the higher ranges two weeks later and emerged upon the border of civilization. We had been to God's wonderland and were fully imbued with the bigness and wideness of it.



OUR FLEET OF WOODEN "CANS"

THE FASCINATION OF DUCK-SHOOTING

II

A Morning with the Canvasbacks

BY THEO. MACKLIN

A PLEASANT, thrilling, shrilling sound got through the kitchen door across the dining-room and somehow wound its way into our sleepy, dreaming minds. We had no more use for bed that morning. Four o'clock meant sizzling hot bacon, huge stacks of hot brown buckwheat cakes, with thick, dark syrup for sliding gear, and steaming-hot coffee that would warm up any amount of cold, raw wind or chill, damp drizzle. From the kitchen a low rumbling sort of voice gave us assurance that Zelmer, our host, was up and doing. He was mumbling over and over half aloud what a fool he had been the night before to let his blind to me for a paltry three dollars. "Blamed if this ain't the finest morning of the whole season," he'd blurt out, "with that white frost and the freeze just hard enough to break through with each step." Each time that sounds of his voice reached us I'd chuckle to myself what a lucky thing it was to have taken his proposition the night before.

For three days we had occupied different blinds on the lake, and to be sure we had plenty of ducks, but few of them were

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"I COULD SCARCELY GET TO THE LANDING QUICK ENOUGH"

canvasbacks. I caught a glimpse of ourselves returning home from the greatest canvasback spot in the State with only bluebills and mallards. It galled my pride and stuck on my throat till all I could do was think of a chance at toppling huge canvasbacks from the one good blind on the lake. It was Zelmer's own blind, located on a point jutting far out from the north shore. From the various blinds that we had been shooting from we had jealously watched Zelmer. Great flocks of the canvas-colored birds, rising from the lake with each gust of wind, would circle east and then, swinging north, would turn to fight down the southwest wind and rejoin their comrades among the rafts of feeding birds. Zelmer's blind was so situated as to be directly in the line of flight of the returning flocks. A raft of canvasback decoys anchored off the point lured each flock close to the water and brought them in gun-speaking distance. All this we had seen for three days. At first we had hoped to find a similar place of good luck elsewhere, but our hopes faded away. For two days I had hinted to our host that he should let us have the use of his blind for a day, but he could not see us at all. Zelmer's shooting had been too good. But Sunday came a warm, clear day and his luck changed. The birds lay in great rafts on the mirror-like lake and no one brought any to bag. That evening at the supper table I stumped him again in a joking way for the use of his blind. "I tell you what I'll do," said he; "you two can have the blind to-morrow for three dollars." But Monday was our last day, and as for shooting, we had to be ready for the drive to our train by ten o'clock. Three dollars for three hours of shooting did not look good to us, especially after such a luckless day. Zelmer had evidently concluded that a warm spell had set in that would stop the shooting for a while, and, rather than use his blind, would rent it. So we just debated and hesitated until our genial friend announced that his mind was changed and we could not secure his

"A BLIND OF WILLOW BOUGHS 'MIDST SCATTERED RUSHES"

blind for any price. But still in my mind I was bound to have one last chance.

By the fire that evening I touched him up on the subject again. He made fun of me and in a bantering way refused all offers but one, which was to hold good for ten minutes only. "You can come out alone and shoot in my blind with me until train time for three dollars. We'll divide our shoot," he said. At that he shut up like a clam. But before he could change his mind his proposition was taken, and to his surprise I delivered him the coin. Three dollars for three hours and one last big chance! I felt like a regular dare-devil. But it was all on and the money was spent.

And to think, now, as I plunged into heavy, warm clothes, hip boots and all, that it was an ideal morning for the canvasbacks—the sort of morning when they fly continuously—and that old Zelmer was bound to let me in that blind was a treat too great for expression. My three dollars seemed like three cents now and I felt like flying. It was no distance at all to the haypile for some dry hay for the boat. With each step snapping through the frost-covered frozen crust I could see in my mind, on the way I picked by the lantern light, a flock of heavy birds swinging low over the decoys.

You know just how you load up with breakfast and how rapidly you make tracks for the boat-landing when there is apt to be something doing. This morning in particular I recall little of that—it was all such a side issue. It occurs to me that breakfast and paddling to the blind were all a sort of hindrance. I can faintly recall dull patches of crackly wild rice-stalks as I pushed through, and here and there bunches of heavy reeds slipped past as so many weird, phantom-like forms in the dull gray light of morning. One after another unpeopled blinds were left behind, and then the one place of all on the lake came in sight. It was a wild scramble to get the decoys out. Don't you know that eager, anxious feeling about getting the wooden birds afloat before the first quack sounds close at hand—yes, before you

CANVASBACK BEAUTIES

scare even a single flock of beauties. We made record time I'll warrant you!

Ours was a blind that was a real blind. It was made of scrub willow boughs pushed into the shallow water and tied securely to a wire frame, so as to be quite rigid. It was no higher than the tops of the dark rushes in which it was built, and from a distance appeared as a dark clump in a stretch of more scattered ones. It was a double blind in which two boats were easily hidden. With one person to a boat it was convenient to lie down flat in order to hide more securely. We lost no time in getting quiet. We were due for an exciting time waiting until the sun should rise and bid us start the fun. But anyone who is familiar with canvasback hunting knows that an overgrown bump of patience and an equally large capacity for imagination are two very comforting qualities for one who wishes to shoot these wary birds. It was growing brighter. Out on the water we could hear the sounds of millions of feeding ducks. I say millions, because that is an estimated probable number. Lake Puckaway is known as the greatest canvasback feeding ground in Wisconsin. It is a shallow, flat-bottomed lake seven or eight miles long and two to three miles wide. Nowhere is the lake over five feet deep. Notwithstanding its shallowness, it is free from rushes except along the shores. Wild celery covers the whole bottom and consequently the birds find excellent feeding anywhere. They raft well out from shore, but in moving about the wind tends to swing them close to the more inconspicuous points of rushes. The southwest breeze which Zelmer insisted was rising with the coming day was just what we needed in order to get the best chances. Now and then a roar of wings meant that out across the water the canvasbacks were beginning to move about. As the scattered flocks passed the light in the east we felt the thrill of a real duck-shooting day boil up in us. And we had to make ourselves lie still and quiet, for any time the sun might peep forth and any moment ducks might whiffle into range.

Oh, crisp, beautiful October morning! The stars shone out sharp and clear, like so many brilliant lights in a wonderful dome. The breeze was changing to a brisk wind, rising from no one knew where—we thought it was just for us that hopeful morning. In the east a low, dark line on the horizon, above which the glimmer of brightness was growing stronger, showed that a bank of clouds was apt to overcast the sky by sunrise. Lying there in readiness, the imagination ran wild with me. I knew there were millions of birds not a quarter of a mile away. Would they come in to us? Why, sure! I could even see them coming then—one flock after another, flopping, whirling, setting their wings toward the decoys—but it was all in my mind. And from back of that bank of clouds some wonderful artist hand began splashing his colors on a canvas of gold. Flames of dark red shot out from the deep beyond and, ever deepening, changing and flitting about the colors, gave a moving picture all their own, for it was never the same before and will never be the same again. And then rose that dazzling face of fire to brighten each wave-crest with a dancing ray of light. The wind was still rising. Now and then a roar of wings reached us as a vast swarm of ducks rose into the air to circle about and drop back on the water again. We eagerly watched each repetition, hoping for the birds to come our way. The

edge of the nearest raft of birds looked like a bobbing, wavy line of white that sparkled in the sun.

"It is a full quarter of a mile away," suggested Zelmer, as he rose to a half-sitting position and peered out through the blind. Ducks were moving about everywhere, but all too far out to even make us think of shooting. But we still had hopes for the wind to grow stronger.

"Mark east!" said Zelmer so suddenly and unexpectedly that I fairly jumped to a sitting position and peered out over the decoys with eager delight. But no, the flock veered off to the south before coming close enough to sight our dummy flock.

"IN MY END OF THE BOAT WERE NINE"

"Blamed if they won't fly to us; maybe they'll swim in," whispered my companion. And, sure enough, the raft of birds had slowly come close enough for us to see the proud "bucks," as Zelmer called the drakes, rise on their feet to flap their short, strong wings. It was time we watched, too, for at least a thousand birds were headed toward us, coming at a rapid rate for swimming. Some would fly up and drop in front of the flock close to us. Some would dive and pop up like corks, always closer to the decoys. It was great sport, and oh, how one's heart thumps and jumps away while such a lively wild flock of birds deliberately makes straight into your fleet of decoys! You wonder if they will come close enough or whether, as a dozen times before, they will just come close enough to aggravate you and then take to their wings with a roar, so close that they splash water on the decoys and yet so far that you dare not shoot. But I kept watch of Zelmer. He was growing keener about the prospects every moment. Some of the closer birds had already reached the decoys and sat there motionless, their goose-like heads held straight out at the end of their dark, stout necks.

"When they rise," whispered Zelmer, "give it to 'em." And then he added, "Don't shoot until they stop coming in. If that whole bunch swim into the decoys we'll get a dozen sure." His voice was a-quiver with excitement. I knew that our chance must be unusual. Just then Zelmer looked around. The ducks had wheeled about like an army.

"No wonder!" said Zelmer, pointing to a boat of hunters poling along shore. And we "gave it to 'em," according to orders, for the whole bunch started up with a farewell roar of wings. My, such a sight! But we only retrieved three birds. The flock had not come quite close enough for us to shoot more.

Again we settled back for a test of patience. But not for long. The wind was beating up little whitecaps on the waves and ducks were scurrying in every direction. Every few minutes a strong wiffle of wings reached us and we could see a flock of northern birds with set wings swoop down toward the middle of the lake. It was keeping us busy watching the flocks to keep from missing our chance. It came. Not from the south, but from back of us. No warning, but a swish of wings and our guns flew into action. Two ducks hit the water, but there was no time for more shots. Zelmer started out after the cripples, for the birds were only winged. Crippled canvasbacks are extremely skillful at the art of diving. Often one chases them for an hour before finally getting the finishing shot. But when Zelmer started I knew he would bring them both back. He was great on retrieving. While he was gone, paddling out toward the big

raft of birds, flock after flock rose from the water and circled. As luck would have it, they veered away from him and many came right in to our decoys. When he came back there were four ducks to pick up among the decoys and two more in the rushes back of the blind. The birds were surely moving to our advantage!

But the time was flying. "Hang the train and going home!" thought I when Zelmer began hinting that my shooting would soon end. Just then, as we were chuckling about good luck, a whole army of big birds veered around toward us and sailed down right for the decoys. Closer and closer they came until their big blackish-red heads looked close enough to touch and their feet dropped to light.

I was fidgety. "Let 'em light; let 'em come!" said my shooting pal, and I did so, hard as it was. And some lit before we tore loose. My, how those birds did fan the air trying to get out of that place! We did some fast work, and when we were back in the blind again seven more ducks were numbered in our bag. It was eight-thirty and I had but a short thirty minutes of my treat left. But there was no time to lose. In the end of my boat were eight beautiful canvasbacks, and I wanted a few more before leaving.

"Get down if you want some more," urged Zelmer in excited tones, as I started to work my camera for some permanent visible impressions. And down I got. There right to one side and above the decoys were hundreds of them coming down. Beautiful, thrilling sight! We completed the picture by dropping three more right in front of the blind. Hardly had I poked my picture machine at a few more real pictures when again I was ordered to the bottom of the boat. I was only too glad to do so. A moment later the flock left toll of one great "buck" and two hens.

"Now," said Zelmer, "you take your birds and get for the house, or you'll miss the train." And I knew his words were only too true. But why should I stay longer? Ten fine, fat ducks—the king of all the water birds—I could scarcely get to the landing quickly enough! I as wild to show my partner what it was to take a pot shot at luck.

"SOME GREAT LUCK TO SHOW PARTNER"

THE AUTHOR AND A 19-POUNDER

WILD TURKEY HUNTING IN SOUTH CAROLINA

The Ways and Habits of Meleagris Gallopavo

BY D. J. HART

NORTHERN sportsmen know but little regarding that king of game birds, the wild turkey, and while many of us go to the North woods each fall for moose, caribou or deer, very few men ever give this noble game bird a thought, and, if so, would not think it worth while to travel a thousand or fifteen hundred miles to get into a region where turkeys are fairly plentiful at the present time. And yet, methinks, were they to try the fascinating sport in the Southland, the only place where it can be indulged in to any extent, one and all would ever after be enthusiastic in its support.

Turkeys will leave a certain locality if hunted too persistently with dogs, but if not hunted with dogs will patrol the same section of feeding grounds, in some instances covering several miles and taking from three days to a week to make the round trip. So long as a remnant of the brood remains, especially if the old hen turkey be the one to escape shot and bullets of various hunters during several months of open season on turkeys, firing into the flocks in different places on their round-trip feeding grounds will not keep them from going to the same places again on schedule time, but will make them approach the spot more cautiously each time and to become wilder and more alert as each unlucky member of the brood is picked off by a lucky hunter. The mother turkey will usually be the last one in the whole brood to be shot, if all are shot, for the simple reason that she has had more experience with hunters and knows better how to take care of herself and get out of shooting range as soon as disturbed; so a hen turkey several years old

INTO TURKEY COUNTRY UNDER THE BEARDED LIVE OAKS

will become much wilder and more cunning than any old gobbler. For the hens have been through many hair-breadth escapes each year with their broods, while the gobblers, after the flock breaks up in the mating time, during March and April, go off by themselves and keep pretty close to some particular hiding ground where they can get to cover quickly when alarmed. About the only time of year, if not baited, when they can be hunted with much success is in the gobbling time, during these same months; but as the closed season begins by the first of March, or the fifteenth, in most sections, not many of them are bagged by calling unless illegally hunted.

It requires considerable skill on the part of a hunter to call up a wary old gobbler, even in the mating season. A hen turkey's yelps must be imitated quite near to perfection, and the hunter requires lots of patience and staying qualities, for a cunning old bird will be several hours, sometimes, in coming a very short distance to get in range of the hunter in his blind, and during this time a single false note in the call, a slight noise, or a sight of the hunter would send the great bird into the air with the speed of a ruffed grouse, or scurrying into a nearby swamp, and another gobbler would have to be located if the hunter is to take a turkey home that day.

I have mentioned that an old hen turkey would get more wary and harder to approach than a gobbler, because of being obliged to look out and care for each year's brood during several months each season, while the gentleman turkey locates apartments for himself after the mating season and just looks out for No. 1. But I do not wish anyone to misconstrue the meaning of the above statement and think for a moment that an old gobbler is easy to approach or kill, for they are about the foxiest game I ever hunted and fully able to take care of themselves at all times. If they have been called to a blind several times in different years by calling or to get grain where baited, and have escaped the shot of the hunter in the blind or by their acute hearing or sight have discovered something wrong in the blind and thus saved their necks, they become very sagacious and hard to call up within shooting range.

In writing of the habits of any game animal or bird, or of the best methods to adopt in hunting them successfully, I long

since came to the conclusion it is not safe to make positive statements regarding either without naming the State or territory wherein you have found such conditions, for in different localities the same animals act differently and quite different methods are used to bring them to bag. I quite recently read a very interesting article on turkey shooting down in "Dixie," but the writer failed to mention what part of the South he was writing about; but I judge, by the way he described the hunt, it was in a hilly or mountainous country, for some of the methods used would not be apt to bring results if adopted in a flat and timbered country like parts of Florida or southeastern South Carolina, where there is lots of heavy timber and many swamps or sloughs with water from one to four feet deep, where the tall cypress, gum, poplar and magnolia trees abound, and nearly every tree is festooned with various vines and Spanish moss. Into these jungles far out of sight the turkeys go as soon as flushed from the feeding grounds in the tall pine timber that borders all these swamps or sloughs, and, as the country is about as level as a house floor, one cannot see a flock of turkeys when flushed longer than while they are rising from the ground and sailing over the tops of the tall pines nearest by, so it is next to impossible to mark down where the birds alight when flushed. All one knows is the general direction in which they started, but as they quite frequently change their course after clearing the tall pines, it is simply guesswork to locate them, and if by chance one did see where they stopped it would be about impossible to get into one of these swamps and call them up or shoot them. For this reason, hunting them with dogs in this section is not participated in to any great extent; in fact, it is not practiced at all in that part of South Carolina I am writing about. Hunting them with dogs, like baiting and roosting, is the quickest way to exterminate them, and of these three ways, hunting with dogs is the most disastrous to the turkeys and should not be indulged in. A few years ago ruffed grouse were hunted in the Eastern States with spaniels and many mongrel dogs that would bark and tree a brood of grouse, and a good dog that would bark continuously would at times hold a flock of eight to ten grouse in the trees until the hunter had shot the last bird. Now these practices have been discontinued in all these States, for it gave the birds no show, as their fear of the dogs and the

THE OLD GOBBLERS HANG ABOUT THE BORDERS OF THE SWAMPS

AN 18-POUND GOBBLER AND A 12-POUND HEN

noise of the barking was so much more than that of the hunter that he could stand in plain sight of the birds and shoot them at his will. This is true to some extent with turkeys. The reason why turkeys or grouse have this fear of dogs is the fact that they are hunted year in and out by foxes, skunks, wildcats and similar animals that prey upon the young turkeys and break up nests. Many a hen turkey is taken from her nest by such animals and devoured. So it is an inborn instinct with them to get into trees when disturbed by four-footed animals of this kind, where they know they are perfectly safe from the animals, but not from the hunter, who with rifle or shotgun usually gets several out of a good-sized flock.

It was my pleasure to spend the month of February, 1914, with Mr. Frank E. Johnstone, of Georgetown, S. C., on his plantation of several thousand acres, located on the coast between Georgetown Bay and the Santee River and adjoining several other large plantations and estates of a similar kind. It is a country that before the war was rich in agricultural wealth and teeming with waving fields of rice and cotton.

But little farming is done in this section at present, especially on these large estates and on this plantation. It is nearly all woodland and a large part of it heavy timber, old-growth long- and short-leaf pine, which grow on the dry soil, and cypress, gum, oak, etc., in the swamps. It is well stocked with deer, squirrels, rabbits, doves and such game, and an ideal home for the subject of this article, the wild turkey. Consequently turkeys are quite plentiful—in fact, much more so than I supposed they could be found in any State to-day. I have flushed three large broods in a single day, besides single birds and two and three in a bunch.

I found upon my arrival that the greater part of turkey hunting was done on horseback. They also call them as in other sections of the country, and sometimes roosted or baited them, but the last two ways were seldom employed and only when a sportsman had limited time and wanted turkey badly.

Upon being asked if I were used to riding horses, I informed Mr. Johnstone I had not been astride a horse since I was fourteen years old, and then only an old work-horse with a harness on to plow out potatoes in Vermont, where every ten seconds or oftener the plow point would strike a rock with such force the horse would be stopped instantly while I sailed right along until the tall hames of the harness caught me and kept me from going over its head. But I remarked I was no squealer in anything pertaining to hunting or fishing, and if with the Romans I would do as the Romans did. If South Carolina sportsmen hunted turkeys on horseback I would do the same—quite a broad statement for a gray-headed man to make, where the riding was done through the woods, dodging timber and jumping logs and ditches.

So the next morning Mr. Johnstone mounted his favorite horse and a pony was saddled for me. After a fashion I got into the saddle and we started off, Mr. Johnstone leading. All went quite well as long as the horses walked, but when his started into a lope and mine did likewise, if I had been blessed with two more hands I would have gotten on quite well. I needed two to hold onto the saddle and keep my seat, and my shotgun must be

carried if I did any shooting. I have no photograph to show how I looked on this ride, but should judge there was not much resemblance to Buffalo Bill. At last I got used to the motion and all went well until we came to a ditch some seven feet wide and two or three feet deep with water. Mr. Johnstone's horse walked through the ditch. I was a few rods behind and wished to catch up, so I dug my heels into the pony's flank to hurry her up, and it worked to perfection. She started into a run and made the ditch in a flying leap, and I hit the ground by the same method. As only a few scratches showed from this fall, I quickly got astride and Johnstone never knew I dismounted when I crossed the ditch.

As soon as a flock of turkeys are discovered—which in nine cases out of ten will be running, for they will almost always discover the hunters first—the horses are whipped up and put after them as fast as possible, so as to get up to them before they are able to get to the edge of a swamp, which they always head for as soon as started, and if the hunter is lucky he may get near enough to them before they flush or reach the swamp to get a running shot, but, if not, get a fair shot or two on the wing. It is certainly exciting sport, with one's horse on a lope or trot, dodging trees and limbs and at the same time handling a shotgun in the right manner to bring down a fine turkey. Some of the ponies used for this hunting get expert at it and seem to like the fun, and will get after a flock when discovered without reining, and the shooting does not disturb them in the least.

It is advisable to run into a flock as quickly as possible and to get into the middle of the flock if they are scattered somewhat, as they usually are, in order to confuse them and make them fly in various directions, as this will scatter the flock and give one an excellent chance to build a blind and after an hour or two to try calling, another exciting and sportsmanlike way of hunting them, where it all depends on the skill and patience of the caller if he gets turkeys or not. One should not call oftener than every five minutes, and should not get discouraged if he does not get an answer, for it is seldom

A FINE PAIR BEFORE BREAKFAST

a turkey will answer, even if coming to a call. The first notice a hunter gets that a turkey is coming is usually the turkey itself, which suddenly looms up within shooting distance as though dropped from the sky, although one has scanned the woods in every direction a second or two before. They will show up and disappear with less noise than any other game I ever hunted.

After a flock is well scattered, an expert caller might be able to get two or possibly three birds out of a large flock before they all got together again, at which time it would be useless to call. They have a remarkable instinct for getting together without calling each other after being flushed in all directions, and as they frequently fly a half mile, some of them might be a mile apart when they alight and all in heavy timber. Most always they alight on the tops of large pine trees when flushed, but usually roost in the cypress, gum or oak over water.

Along in the afternoon, Mr. Johnstone, who was leading the way, discovered a large flock of turkeys that were scratching under the tall pine trees about fifteen rods from the edge of a swamp, and as is usually the case, the turkeys saw us

at about the same time. As my pony was a slower walker than Mr. Johnstone's horse, I was usually two or three rods behind, a bad feature when two are hunting together. Upon seeing them he signaled me to hurry up and started after them in hot haste. It was all I could attend to to keep my seat and watch out for trees and limbs, so I only occasionally saw a glimpse of a turkey in a sort of moving-picture maze. As they were so close to the swamp they quickly reached its edge where all but two of them disappeared for good, but two gobblers that were some distance behind the bunch were running along the edge dodging in and out among the scrub palmetto and holly brush. As Mr. Johnstone was ahead he could see these two gobblers quite plainly, and he kept shouting to me to "Shoot! Shoot!" As I couldn't see them I didn't shoot. In fact, I was having all I could attend to to keep from shooting off the pony's back.

At last the gobblers headed straight into the swamp and we followed. They didn't flush until our horses stood in nearly two feet of water, when both rose at once not forty feet ahead of Johnstone's horse. As I was directly in line and behind him a rod or two I couldn't shoot without danger of hitting him, and as he was waiting for me, he didn't shoot as quickly as he should, and the turkeys got away. I did, however, take a shot as one of them was sailing over the big pine trees, but did no damage to Mr. Turkey. This was a fine chance, and had I been used to this kind of shooting, should have made a double on the wing of these two gobblers. It was, however, a fine sight and I was well repaid for my first day's hunting in South Carolina.

Mr. Johnstone hunted with me one more day, more to show me the country most frequented by turkeys than to get turkeys, as I intended to do most of my hunting alone, so I could take my time and study the habits of the birds in their natural haunts. I also wished to get photographs in their wild state, but unfortunately when the best chances to get fine pictures turned up, I had left my camera at the house, and this being the first time I ever carried a camera myself accounts for it. Never again would I leave it behind a single day. I did, however, have it along at one time, as the accompanying photograph will show.

In my travels over this plantation I had seen glimpses of several large gobblers in a strip of heavy old-growth pine timber along the edge of a dense cypress swamp, and made up my mind this was their hiding place and that they never wandered far from it. I wished very much to get one or two of these old birds, also to get photographs of them, so I built a good blind and scattered some rough rice on the ground, hoping some of them would find it and come again later on. It was also nearing the gobbling season, and I had hopes I could succeed in calling some of them up. I visited this blind for several days, but nothing showed up, although some very large turkeys had been there and eaten some of the grain. I could tell they were large by the long strokes in the leaves and needles where they had scratched. No flock had been there, just single turkeys coming together during the day's feeding.

Having had some trouble in killing turkeys with my gun, an open shooting one made for woodcock and grouse in the early fall, I borrowed Mr. Johnstone's gun one day and started for this blind near the big swamp. Unfortunately, Mr. Johnstone had been duck shooting three days before and had fallen into the water with his gun and had not taken it apart or cleaned it. When I reached my blind before sunrise I put two shells into the gun and closed it, but the top lever would not close on account of rust inside. I tried every way to get it shut, but to no use. I finally tied a string about the barrels at breech and thought with the string and holding tightly with my hand I would be able to shoot. I stayed in this blind until 10:30 a.m., then left it and hunted through the woods in other localities, but came back to the blind at 1:30 p.m., intending to stay until dark. I took out my turkey call and began calling, giving the best imitation of a hen turkey I was capable of. About half-past four I stood up in my blind (it was made high so I could stand in it), as I had got cramped by sitting so long without mov-

ing. As I looked out through the tall timber, I saw a large gobbler standing still and listening. I stood perfectly still long enough to see he had not discovered me, then silently dropped to my knees and gave one more call, then picked up my gun carefully and waited. I had a very small opening at the front of the blind where I could look out and see them if they came onto a certain strip of ground. In about ten minutes a large hen turkey stepped onto this strip, followed by two more large hens. I didn't care to shoot the hens, so quietly waited. In a few seconds a gobbler quite large stepped onto this strip and I brought the gun to my shoulder as carefully as possible. While doing this a second gobbler stepped in behind the other, where I could kill them both at one shot. I took deliberate aim and pulled, but the gun didn't fire. I pulled both triggers, but nothing happened. While this was happening, a third gobbler, much larger than either of the others, stepped in between the two. I shoved the safety back and forth, aimed and pulled, pulled and aimed, but no discharge. I then knew the trouble. The gun would not fire unless the lever was clear shut. Dear reader, can you imagine my feelings about this time? I took the gun in my lap and said some things not fit for printing, then looked out of my peek-hole again, and unbelievable as it may seem, five large gobblers, the smallest weighing eighteen pounds, stood in line not six rods away and five large hen turkeys between my blind and these gobblers. The sun was at my back and shining on them and a more beautiful sight I never expect to see again. I would have given one hundred plunks if my camera had been there, and half as much for a gun that would speak. I aimed again and pulled, and pulled, to no use. Then I pushed the safety back and forth recklessly, making a slight noise which the large old hen turkey heard, but could not locate. She instantly gave the warning, "Putt! Putt!" and every head went into the air, but as nothing was seen and nothing more heard, they didn't fly, but singly sneaked into the brush and disappeared one by one until only one remained, the smallest gobbler in the bunch. During this time I had been trying experiments with the gun. I found the safety would slip back about 1/16 of an inch when pushed ahead to fire, so I held this pushed ahead very tightly and tried to pull it off, the gun pointing into the air, but I pulled only on the front trigger. I looked out and saw this one remaining gobbler and on general principles aimed at him while I held the safety forward and pulled the rear trigger. Great Scott! There was a report and the gobbler was bouncing up and down on the ground!

Well, such are the experiences of a hunter! I had a beautiful eighteen-pound gobbler, all one ought to get in one day, and if my gun had been all right I might have potted three or four, and as I look at it now, I am glad the gun balked. All I am sorry for is that my camera was eight miles away and I lost the best opportunity I likely will ever have to secure a fine picture of ten large turkeys, five of them magnificent specimens of males and all of them old turkeys. There were no young turkeys in the bunch. I am not positive any of these turkeys came because of my calling, but am quite certain the calling couldn't have been half bad.

The quality most needed to make a good turkey hunter is patience. Then all time schedules should be discarded, for it is a waiting game from start to finish. I refer now to calling turkeys. I have lost chances to shoot several fine gobblers by getting discouraged and leaving my blind, when if I had stayed one hour longer I would have had good shots.

A Mr. Cummings, who accompanied me on this trip, and I were hunting one day on horseback and ran into two large flocks, scattering them quite a little. About two hours afterward, when near where I thought some of these birds went, I made a blind and called for an hour or so. None showed up or answered, and as it was a fine day to ride through the woods, we went back to our horses, mounted, and in about one-half hour cantered by this same blind, when a fine gobbler whirred into the air not ten feet from the blind. There is no question about this bird coming to my call. They come very slowly and stop frequently to listen and look the situation over.

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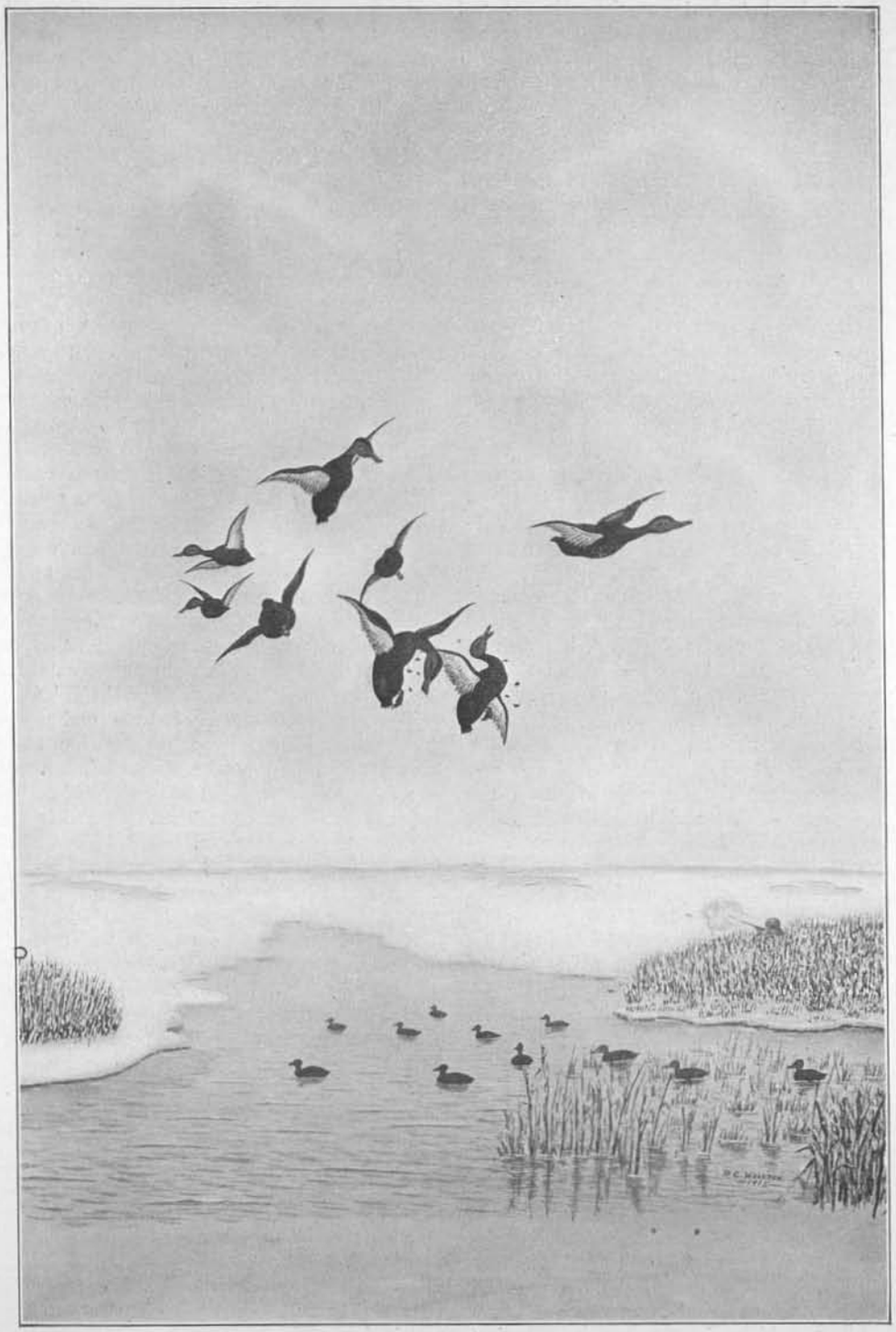

TO HIT IS HISTORY—

Drawings by Percy Wharton.

—TO MISS IS MYSTERY!

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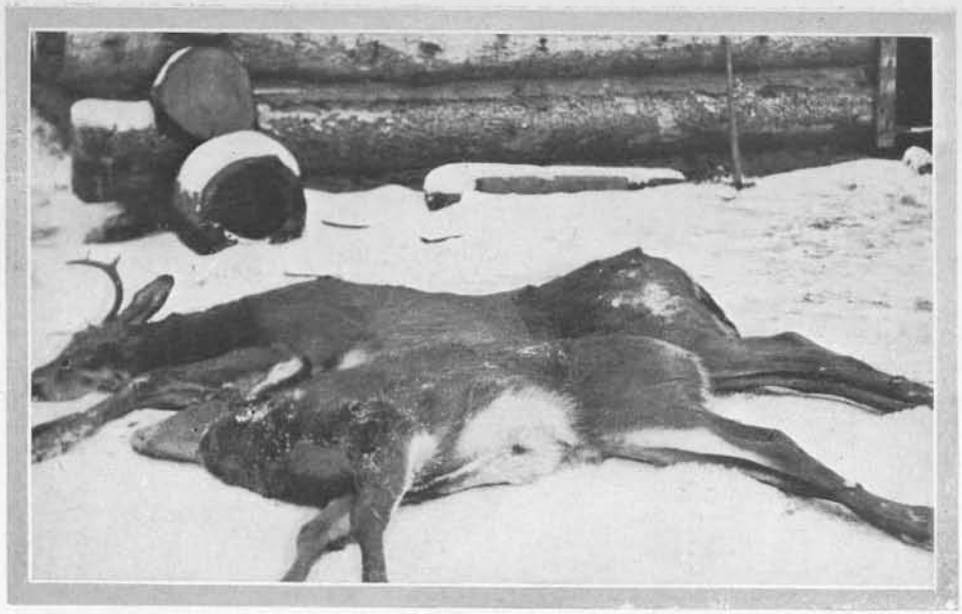


TWO BUCKS THE FIRST DAY

A DEER HUNT IN MINNESOTA

BY E. W. BOEMER

SEEING that there are quite a few other near-scribes telling you their experiences, I shall try to give you an idea of a fair hunting trip in northern Minnesota, to vary the location at least, if not the story itself. Fifteen miles northeast of Chisholm, Minn., on the iron range, was our hunt, while by far the most of your stories come from the Maine woods, Canada and the islands, such as Nova Scotia.

Yes, there are a lot of deer in Minnesota yet! On my trips out of camp, each day for five days, I never saw less than two and as high as eight, usually hunting only about six hours a day, morning and evening.

The first day of the season was just an average fall day, a very light snow on the ground from the night before, perhaps a quarter of an inch. Bill Powers, the crack shot of that part of the range; Ed Dumont, the little Frenchman, as tough as nails and the best man you could possibly get in the woods; and the writer started out from camp before it was light enough to get into the sights. We hadn't walked more than half a mile before Ed said, "I believe that is one standing on the hillside, about seventy yards away."

Did you ever have this happen to you? Well, we debated for five minutes and finally the animal moved enough for me to see its head. . . . Yes, I must have fired fully two feet over its shoulder. Just as it moved enough to spoil Ed's aim, he fired. He shot just after it started, but too late to hold fire. Bill just stood and laughed. No, we didn't kick him, but if we had gone back to the primitive, like some people are now doing in Europe, he would have got his.

That afternoon Ed got another shot at a big buck, but he didn't hit him. We heard him shoot and stood on the logging road for a few minutes to see if the deer wouldn't come towards us. In about ten minutes a small one came along with his

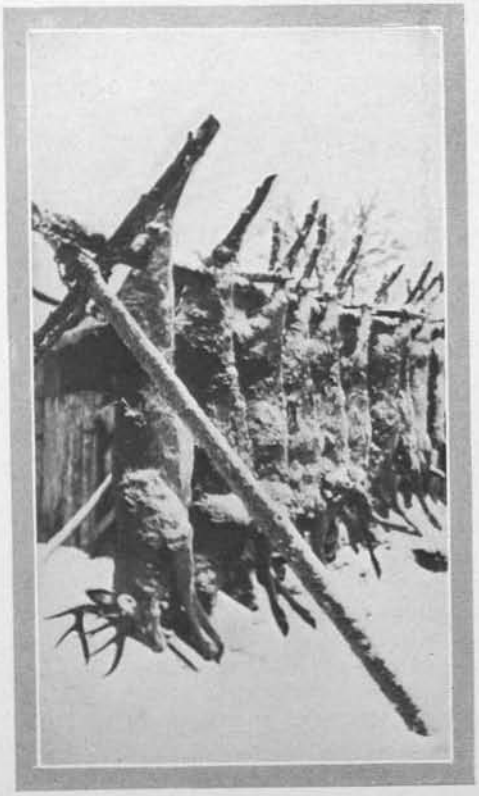
head to the ground like a dog following a trail. We saw him at about a hundred yards, coming towards us. He never saw us till he was right in the middle of the road and about seventy yards away. We never took a shot, for it was only a fawn. He stood and looked and I was mad because I had neglected to bring along my kodak. In a few seconds he started walking off as unconcerned as you please.

When we got back to camp we found that Henry Happel (yes, made in Germany) had shot one, a three-point dandy. There were eleven sports in his party, and they joined forces with us.

The next morning we made a drive and chased a big one to a Mr. Andrews, of their party, in fact almost running over him. He shot twice and missed, after which Mr. Deer began to run faster, when Andrews woke up and gave him a shot right in the shoulder.

At the same time a spike-horn came over the comparatively clear hill to within fifty yards of me and stopped behind a brush pile. I was looking very carefully, for one of the drivers had just shot a partridge, I later found out, and I thought he saw a deer. The first I saw of the deer was when I looked over that way and saw half of his left ear and all of his right one, including one eye, peeking out behind a small tree. I was on a tall stump and couldn't move sideways but very little, and he would move to the extent that I did, so I couldn't get a shot or see where his body was. I did not care to run the risk of hitting him in the face, so held my fire, thinking we would surely get him, as he was in the midst of three of us, and not over one hundred and fifty yards from any of us. In fact, we could see each other at that time. But—don't you know, he just disappeared—that's all there was to it—and we never saw him afterwards!

HANGING UP ED'S 8-POINTER

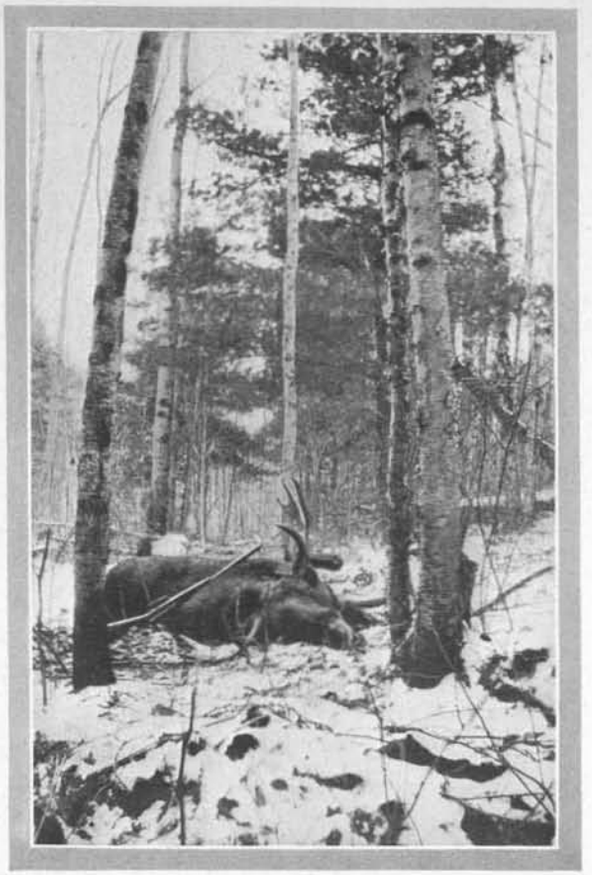


ONE FOR EACH MAN OF THE PARTY

This is the day that Bill got in some fine work. About dusk I told him to stand in a large clearing, to see if there were any deer "mooching," and I would take a large circle around it, about three hundred yards in the woods.

I had already gone around and was starting for camp, when, in one corner of the clearing, I thought sure there must have been a flock of deer, for I heard six shots in less than that many seconds. When I got there I found that Bill had dropped a spike-horn at a distance of 150 yards, hitting him five times, and at that it was almost dark.

The next day Ed got a fine shot at a fine five-prong buck and got him. We were sitting at the base of a large hill—Ed, Bill and myself—talking, when suddenly Bill whispered: "Don't shoot till he comes in that clear space!" Well, Ed did wait, and he got him high in the shoulders, but we finally found him, after a lot of hard work and some swearing on Ed's part for not dropping him at first.



A MOOSE WE GOT IN THIS COUNTRY LAST YEAR

And so it went. On the morning coming home we still needed one to fill out one deer apiece, so we told Mr. Lambert to walk in the lead, so as to get a shot in case there was one, for he was the only one who hadn't shot a deer so far. We had to walk about two hours to get to where the machines could reach us. About half way there Mr. Beaton and Mr. Andrews started ahead, saying there wasn't going to be any shooting anyway, for it was a nasty, rainy day.

They had just yelled at some hunters at another camp ahead of us, when from the bottom of a hill to the right two fine bucks started, one going over the hill and the other trying to circle around it. They came in sight of the men standing in front of the other camp in their way, and then stopped, bewildered. Of course, the fellows yelled for Mr. Lambert, who had to run about a hundred yards, and we with him to see the fun.

Then he started shooting and the buck started running in plain sight over a fine open space for about four hundred yards.

After the rifle was empty he filled it and the deer stopped to see what it was all about, I guess. Anyway, incredible as it may seem, he stopped. At the next shot down he went, but got up again; the next time he went down again, and up again. After that there was no more shooting for we hollered to Mr. Lambert that he was badly hit and not to spoil the meat.

Last year we shot the moose shown in the illustrations, and, believe me, there was some temptation for there were five in the bunch. But what would we do with three bulls?

AIREDALE, SETTER AND HOUND

BY WARREN H. MILLER

PART VII. THE DOG AND THE LAW

NEW JERSEY is known throughout the Union for its "Jersey justice," which usually consists in getting hold of the wrong man and punishing him with unexampled swiftness and severity. It is also known as the State of freak game legislation, where a hunter is forced by law to smear his deer with a load of buckshot, and the fisherman must carefully unscrew every treble hook from his lures on entering the State, even if he uses them only in States where class legislation in favor of one manufacturer of lures does not obtain. The State is also the possessor of the most unique and oppressive dog law on record. No other State has anything resembling it, for most Legislatures are chary about rushing in where angels fear to tread, and are careful about saddling their constituents with laws which become absurd the moment they are enforced. Here is the law in question: "If *any* dog is found running at large in the woods or fields, except during the open season now or hereafter provided for killing of quail, rabbit, squirrel, English or ring-neck pheasants, ruffed grouse, prairie chicken, wild turkey or Hungarian partridge, the owner, lessee or custodian of such dog shall be liable to a penalty of twenty dollars for each offense. It shall be unlawful for any person to go into the woods or fields with a hound or firearms, except only during the open season, now or hereafter provided for the killing the above-mentioned game birds or game animals, under a penalty of twenty dollars for each offense."

It looks on the face of it like a good law. Its weak point, however, lies in the words "woods and fields," which may be open to any construction the warden or justice of the peace chooses to put on them.

With a sensible game warden in the district and a justice who has some faint glimmerings of the term, such a law can work no particular harm; but suppose the warden happens to be a deputy more interested in collecting his share of the fine than in protecting the game, and the "justice" some irascible old curmudgeon who sentences strictly on the letter of the law? Here is the way it works out in practice:

Interlaken, the section of the State where I live, is a private residential park, completely developed, with water, sewers, gas, electric light, cement sidewalks and curbs, and the best roads (our own) in the State. It contains some fifty residences and is carefully restricted and posted against shooting, for we have many children playing about under the trees, and we like to see wild rabbits, squirrels and the like running about unmolested, even if they do make depredations in our gardens. The property pays taxes on some $400,000 worth of real estate, and all the State gives back in return is a few measly incandescent lamps. We furnish the roads and hire our own policeman. Owing to the impossibility of protecting our houses against petty negro sneak thieves with one night watchman, practically every house in Interlaken keeps a dog, for these four-footed policemen never sleep on the job and are always around the premises at night. These dogs, under city license, roam at large in the community, visiting among themselves, never straying far from the property, bounded as it is on three sides by Deal Lake.

Into this community comes the State, in the person of a deputy warden from Newark (not our own salaried warden of the district). He immediately classes the section as "woods and fields," for we have the trees and there are rabbits and squirrels about. He orders all dogs tied up at once, from December 15th to October

11th of the year following, and he arrests the owner of a couple of hunting dogs forthwith. The owner protests: his dogs are doing no harm. The law says nothing about hunting dogs; it says "dogs," and if his dogs are to be tied up, then every other dog in Interlaken must be tied up. This makes no difference with the deputy; the dogs were "at large"—that is, they were across the road on a neighbor's lot, and the owner was forced to drop his affairs and go with the warden before a local "justice." I went along, too, for I own hunting dogs, and what was decided in this case affected every other dog owner on the property.

We were ushered into the office of an old real estate, mortgage-and-loan and general insurance pettifogger, with a justice-of-the-peace sign on the side. His Nibs enquired what was the trouble, and the warden preferred his charge. "I found this man's hound running a rabbit, and his spaniel was with the hound. The fine is forty dollars for the two dogs."

"Where were the dogs when you saw them?" queried my friend.

"Over on the lake bank near your house. The hound was running a rabbit and the spaniel was barking with him."

"Did you *see* the rabbit?"

"No; but anyone can tell when a hound is running one."

"Indeed! I suppose you know that that lake bank is alive with water rats, and the hound runs them with as much excitement as any other animal. Judge, I think this case is at least entitled to clemency. The district is a private residential one, with all the dogs at large; they are not allowed to run any game, nor in this case was running any game proven——"

"I'd like to know by what right you come in here and sit in that chair beside my desk!" burst out the "justice" irascibly. "You are a prisoner brought before me on a serious charge. Get out of my office and stand over there behind that railing!"

My friend and I jumped up with alacrity, apologizing most humbly for having invaded the sanctity of the "court."

"Now, then, what have you to say for yourself?" snarled the judge.

My friend set forth his side of the case at some length. The justice paid him not the slightest attention, went out of the room several times, wrote some real estate and insurance blanks on his typewriter, called up on the telephone; and, in despair at getting any hearing from him, my friend turned to the warden to argue the case before him, hoping that he would withdraw his charges. The latter was stubborn; he wanted those fat pickings of half the fine, and he stuck fast on the fact that the dogs were "at large," two dogs, two offenses—forty dollars.

Finally matters came to a standstill and my friend appealed to the justice for a decision. That worthy looked up for the first time from his own affairs.

"I declare!" he began, shouting at my friend. "Your mouth hasn't been shut for the last hour! I want to know by what right you come into my court and make it a wrangling-place for your affairs? I simply can't get my work through with the clack of your tongue continually in my ears——"

"Why, judge!" exclaimed my friend in surprised amazement. "I'm simply trying to put my side of the case before you. I didn't come here; I was brought here by this warden, and had to leave important business to do it."

"You admit that your dogs were at large," snapped the justice. "Unless you can bring me an affidavit that they were on your personal property I see no reason why sentence should not be imposed. Two dogs, two offenses—forty dollars—and costs."

"Well, judge," I put in, "the intent of the Legislature is clearly confined to wild woods and fields, where hunting is done and game animals abound. This case is in restricted residential property, where none of the dogs are ever tied up——"

The justice turned sourly upon me. "You've no right to sit there and tell *me* what the intention of the Legislature is!" he snarled. "A Supreme Court Judge might, but you don't know, nor I. The legislators are drunk, usually, when they pass these game laws. I'm going by the letter as I find it. The law says 'dogs'—it says nothing about hunting dogs—it says 'at large in the woods and fields.'

Interlaken is woods, isn't it? You have the trees——"

I shut up. He might fine me for contempt of court or something if I dared say another word. Since when have the laws of this land permitted a minor justice to insult and berate citizens of good standing, denying them the right of free speech and denying them the faintest show at a hearing! But it is only too frequent with petty justices of the class of this party.

Our defense collapsed. My friend is a busy man, with no time to waste on appeals and court proceedings, nor can the game commission refund any fines, no matter how unfairly collected. He settled with the warden and we went home.

I immediately gave Pepper away to a friend who lived far back in the interior of the State. The deputy had ordered both him and Scout tied up for practically the whole year around, and I did not propose to lend myself to any such cruelty-to-animals scheme. Poor Pepper! His only fault was in being too ardent and good a hunter; but with that warden camping out on my property and watching his every chance to make a living off me by collecting a twenty-dollar fine every time Pepper jumped the privet hedge which separates my land from my neighbors, I couldn't afford to take the risk.

Scout I kept, but his continuous barking soon brought a notification from the neighborhood policeman that he would have to be quieted or disposed of. I beat him black and blue; in five minutes he would be barking for liberty again. The long-suffering wife nearly gave up in despair at the burden and anxiety caused by having Scout on her mind every minute, for the instant released he would bolt and run his head off in delight at regaining his freedom, requiring someone always to be around with him at such times and follow him wherever he went.

For, a further section of the law provides some relief from these intolerable conditions. It says, "and provided further that nothing in this act shall prevent any owner, lessee or custodian of any dog going into the woods and fields with such dog, without firearms, at any time of the year if such dog is not allowed to hunt or pursue game and if such dog is under immediate command and control of such owner, lessee or custodian." That means that I can take Scout out for a run if I go along with him, but that he cannot go down the street by himself to visit my neighbors' collie, terrier, spaniel and bulldog. In other words, he must be constantly on the mind of someone in the family, lest he get loose and the deputy haul me up for a fine. How long will I keep a dog under such conditions? I appealed to the State Fish and Game Commission for relief, and this was what I got:

"The Secretary laid before the Board a letter dated September 10th from Warren H. Miller, editor of FIELD & STREAM, to which the Secretary was authorized to reply to the effect that so long as Mr. Miller's setter dog was not running at large in the woods and fields contrary to the law there would be no prosecution and that it was not necessary to keep his setter dog tied up to comply with the law."

This may help other dog owners in the State, but it does not help me much, for the old question of what constitutes "woods and fields" in the intent of the Legislature comes up again. The deputy warden classes our residential section as woods and fields, and there seems to be no appeal from his decision. And as he is the one who imposes the fines, I must keep Scout tied up most of the time, lest he run outside of my property unknown to us—or, sell him, which I finally did, as we could not let him off the rope unless someone went with him. With a justice of the peace in our section who understood the most elementary meaning of the term "justice" there would be no trouble, as such cases would all be promptly thrown out of court and the warden discouraged from further activities along these lines. But as it is——

Looking at the matter broadly, in the interests of all the sportsmen of the State, it seems to me that the law as it now stands is too loose in its language. It must be amended so as to take the meaning of "woods and fields" out of the hands of spy game wardens and petty justices, for there are too many opportunities for

unjust arrests and graft to occur under the present law. As Jersey is unique in having such a law, let us see how the other States manage it, with a view of applying a remedy.

Practically all the Western States have but one dog law: that prohibiting the chase of big game with dogs. This does not include carnivorous game, which is classed as vermin. The common-law right of every man to keep a dog for protection and to let him go free so that he can exercise that protection when necessary is so inherent, so sacred, that these States feel that what little harm that may come to the game from dogs running unrestrained in summer is more than balanced by the good they do in keeping down tramps, preventing crime and outrage, and affording the citizens a sense of security for their homes when away on business. All this the bold State of Jersey sacrifices in behalf of that noble game animal, the rabbit.

In the great Eastern States of New York, Pennsylvania, Maine, Vermont, New Hampshire and Massachusetts there are no dog laws except those which prohibit hunting deer, moose and caribou with dogs. Their Legislatures feel that any further restrictions on dogs would be dangerous to the welfare of the community, which welfare should always be placed above that of the game; but the State of New Jersey rushes in and passes a law which makes it practically impossible to keep *any* dog if the warden chooses to rigidly enforce the law.

In the Northern Central tier of States —Minnesota, Michigan, Wisconsin—there are no onerous dog laws, the sole prohibition being against running deer with them, except that in Wisconsin there is a bird-dog law which prohibits bird-dogs on lands, *where game birds are known to frequent*, between August 1st and September 7th. This provision is wise, as it stops the marauding setter from plundering quail and grouse nests in midsummer, but it automatically exempts residential districts, farm vicinities, etc. Even at that a pinhead warden, backed up by a crooked justice, might work considerable graft.

A similar law to that of Wisconsin is found in both North and South Dakota, where no training of bird-dogs or running them at large in fields *known to be inhabited by game birds* is permitted from April 1st to August 1st—but no law requiring the tying up of every dog in the State from December 15th to the following November 11th is contemplated, as in Jersey.

No dog laws at all are found, so far as game is concerned, in Colorado, Tennessee, New Mexico, Rhode Island, Kansas, Indiana, West Virginia, Arizona, Nebraska, Ohio, Kentucky, Louisiana, Alabama, Illinois and Virginia. The habits of our furry friends call for a reasonable amount of liberty, and their value to mankind almost everywhere but in crowded cities, where police chase but do not catch criminals, is so great that fool restrictions on them, as in Jersey, cannot be gotten past the State Legislatures. Further, in the South the deer thickets are so dense and swampy as to make it impossible to conduct a deer drive without dogs, whence no restrictions on their use.

This about closes up the tally—all except Jersey, where, because of the bold, bad rabbit and the intrepid squirrel, all the dogs in the State, the money value of even a portion of which is greater by far than all the squirrels and rabbits the State could possibly pile up, are compelled to undergo a life imprisonment of unexampled cruelty—a punishment that we hardly inflict on our worst criminals. How would *you* like to be tied up by a chain to a kennel from December to the November following, with no chance for play or exercise—nothing in life to make it worth while? It's a wonder the Society for the Prevention of Cruelty to Animals does not intervene in Jersey to protect our dogs from the game laws!

I never point out a wrong without trying to suggest a remedy. Why not add the following to the existing law?—"And provided further that nothing in this act shall prohibit dogs under city licenses, or wearing a collar stamped with the owner's name, from being at large within city or town limits, or in residential districts, or on other lands not frequented by game birds and animals."

This seems to me fair to both game and

dogs. If wild game persists in visiting settled districts, farms in the immediate vicinity of the farm buildings, and gardens in residential districts, it is away from its recognized legitimate location, and if the dogs drive it out they are not only protecting property, but they are forcing the game to stay where it may be rightfully hunted. This will remedy two evils at once: it will remove the incentive from the man who now hunts around your back yard, just outside your property limits, with a loaded gun, regardless of whether or no your children may be playing about; and it automatically drives away the predatory rabbit who eats his value in lettuce and garden truck every morning, while the owner at present has no redress but to apply to Trenton for a permit to kill the rabbit. Right now there is such a rabbit around my garden. I do not wish to kill him; I much prefer to see him live and enjoy himself, and, so long as Pepper was around, he kept his distance. Now I have to kill him under permit or see my garden ravaged—a strange way to "protect" our wild life under the law! I might add that the feeling in Interlaken is so bitter about our burglar protection being removed by an officious game warden that this season every male in the district will shoot his limit of rabbits until the pests are cleaned out. We used to protect them, and liked to have them around, but when the game laws threaten our common-law rights to dog protection we will have to clean out our game as vermin, for our own protection. Only a few days before this was written I found all the screws gone from the hinges of one of my kitchen shutters. With Pepper gone and Scout tied up, it was easy for some backwoods nigger to try to break into my house.

All sportsmen of New Jersey who are interested in having the present intolerable law remedied are urged to write their assemblymen about it at once; the writer will see that the matter is brought before the State Fish and Game Commission. "I don't care if he *is* a hound, you gotta stop kickin' mah dawg aroun'."

(*To be continued*)

THE BLUE GROUSE AS A GAME BIRD

BY HARVEY FERGUSSON

IN the Rockies, from Oregon to New Mexico, "fool hen" is the common name for grouse. The Western cousin of the ruffed grouse, half again as large, and fully as intelligent by natural endowment, the blue grouse has absolutely no standing as a game bird. It has been his ignominious fate to be potted by sheepherders and cowboys, and even killed with rocks and bridle-reins. And all for lack of education. We are told that the pioneers of New England snared ruffed grouse with a noose on the end of a long stick. Even a young and foolish blue grouse would not be taken that way.

In some parts of the Southwest the education of the blue grouse has proceeded far enough so that his cognomen no longer fits. He has learned the important lesson that fluttering into a spruce tree at the approach of danger is not always a perfectly safe expedient. He is beginning to appreciate the advantages of staying under cover as long as possible and rising to confound his enemies with an explosive roar of his powerful wings. When he does take a tree, he conceals himself well, instead of perching on the end of a limb and stretching out his neck to be snipped with a rifle bullet. Hence men are beginning to take shotguns into the mountains when they want grouse, and it is only a matter of time until setters and pointers will be necessary, too.

In a trip across the New Mexico Rockies that lasted from early summer until October, I saw the career of the blue grouse from pin feathers to frying-pan. The chicks are hatched in the little upper canyons, where blue spruce and Douglas

THE FIRST BLUE GROUSE OF THE SEASON

fir and aspen make a thick, cool forest, broken by little glades where berries ripen and grasshoppers play. The cock is a belligerent, fussy, strutting spouse, but an absolute failure as a father. Before the brood is hatched he moves to an elevation about one thousand feet higher, and dwells alone throughout the summer in the dense forest of Englemann spruce just below timber line.

The chicks are very precocious and learn to fly when they are little more than half the size of a quail. The hen is a very solicitous mother at first. Before the birds are full-fledged, she feigns broken wing, risking her life with all the quality of a martyr. Along in July, when the young are as big as bob whites and well able to fly, she will take a tree at the first sign of danger, and cluck to them, exactly like a domestic hen. The young conceal themselves in the spruce trees so well that it is often impossible to find them even when you think you have marked them down.

By the end of August the birds are well grown, and when the covey is flushed the mother hurtles off through the trees, leaving her brood to shift for themselves.

The season in New Mexico opens September 1st. We were camped at that time near the crest of the San Juan Mountains, on the Carson National Forest. On the morning of the open season I put the shotgun together with feelings of anticipation, which were directed toward supper rather than sport, however. We had not been in grouse country for a couple of weeks before, but, having seen the birds flutter into the trees along the trail all summer, I did not expect much difficulty in either finding or in killing them.

The first problem was to locate their range. I tramped through about four miles of beautiful open spruce country, exactly the sort in which I had seen grouse all summer, without finding a bird. Then I worked toward the lower benches, and presently found myself on a burnt ridge with a heavy second growth of aspen and spruce about twenty feet high, and a ground cover of raspberry and wild pea vines. I had not gone a hundred yards, smashing brush like a logging team, when seven grouse blew up at my feet with a roar that made my blood jump. I took a snap shot at one about forty yards away through a rift in the timber, and missed him a yard. With the second barrel I

tried to reach the last bird through a cord of brush, and destroyed a lot of promising second growth, but nothing else. Those birds did not stop to perch on trees, either. They flew clear out of the country, so far as I could discover by searching for them.

Somewhat concerned about supper now, I went to another ridge with the same sort of cover and put up a bird within five minutes; but the brush was so thick and he rose so far away that I only heard his thrilling wing music. Thinking there must be more nearby, I dropped on one knee and peered along the ground. About thirty yards away a fine large bird was strilling along, hopping over down timber and turning its head from side to side exactly like a chicken.

Did I stride forward, flush the quarry and check it in midair? I did not. I took a long and thoughtful bead, and potted that grouse in his tracks. When one has been living on trout and bacon for a couple of months, and there is fresh meat in sight, the ethics of sportsmanship fade into absolute insignificance.

I put up two more birds before I got back to camp, and dropped them both. In open timber they were not very hard to hit, owing to their large size and straight flight, but in second growth they are very nearly safe. Their wing thunder is really impressive. Upland shooting probably contains no finer thrill than flushing a covey of blue grouse in late fall, when the birds are all well grown.

TYPICAL SPRUCE COUNTRY IN THE SAN JUAN MOUNTAINS

"ANTELOPE HUNTING IN MEXICO," BY WILL CHAPIN, IS THE TITLE OF A MOST INTERESTING STORY OF HUNTING OUR RAREST BIG GAME, THE PRONGBUCK. ONLY IN MEXICO AND LOWER CALIFORNIA IS HE NOW FOUND IN ANY NUMBERS AND HE THEREFORE CONSTITUTES ONE OF THE MOST PRIZED AMERICAN TROPHIES. STORY IN THE JANUARY ISSUE.

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"INTO THE BASE OF WHICH I HASTENED TO SEND A BULLET"

TARPON AND AMBERJACK IN FLORIDA

BY ARTHUR F. RICE

Secretary, Camp-Fire Club of America.

PHOTOS BY JULIAN A. DIMOCK AND A. F. RICE

I ALWAYS knew why the magnetic needle pointed to the north, for it indicated, in a general way, the direction where lay the trout streams of my youth, the lakes in the Adirondack wilderness and the rushing rivers of Canada; but I was never quite certain why the other end pointed to the south, and the phenomenon seemed worth investigating. Moreover, a man born in northern New England, where the climate has been aptly described as "nine months winter and the other three very late in the fall," always has in the back of his mind a notion that he will some time or other quit the snow and slush and biting winds of the northern winter, to revel for a time among the palms and orange groves of Florida.

So it happened that when the New York streets were glazed with ice and the whistles of the harbor boats blared through the marrow-penetrating fog, I gleefully checked my luggage to a point on the coast of Florida, where fishermen are wont to congregate and from which the hunter may sally forth with the reasonable expectation of bagging his wild turkey.

The transition, within forty-eight hours, from semi-arctic conditions, through the budding of spring and into summer itself, is a joy worth noting. The good, brown earth becomes free from snow; the long-leaf pine replaces its northern congeners; the eye is refreshed by the sight of the glistening leaves and bright red berries of

the holly, and bunches of mistletoe, like big bird's-nests, adorn the tree tops. Turkey buzzards soar on graceful wing, the whistle of the meadow lark is heard in the land and mayhap the keen eye of the sportsman detects the flight of a bevy of quail in last year's cotton field as the train rushes by.

The farther south one goes the more he perceives the effect of the warm climate upon man's activities. The people appear to have acquired somnolence and extreme deliberation of movement. The sides of the buildings and the veranda posts of the houses and country stores seem to have been erected not so much to sustain these structures as to afford leaning-places for our colored brethren and some of their easy-going fellow citizens of lighter complexion. But when we are about making a righteous but unfavorable comparison between this state of indolence and the rush and bustle of the north, we suddenly realize that we came down here to avoid strenuous activity and that the spirit of restfulness which pervades this sunny land is a very grateful thing. The slow-going mule and the "razor back" wandering leisurely about the streets somehow convey the comforting assurance that the trammels of northern existence are off and that we may relax our tension and loaf luxuriously.

And now along the edges of the cypress swamps or forests of live oak appears the first real evidence of the tropics, the fan-like leaves of the scrub palmetto, which further down will become big palm trees; and when the orange groves begin to show their symmetric lines and golden fruit; when the Cherokee roses perfume the air and the poinsetta, hibiscus and bougainvilla display their riot of color, we need not the liquid song of the mocking bird to inform us that we are indeed in the South at last.

When traveling through an interesting country with which one is not familiar, while it is desirable to have a final objective point, it is well to reach it by circumlocution and indirection, making short stops here and there and absorbing as much as possible of the character of each locality. On the West Coast of Florida one may well take his first view of the Gulf of Mexico from Homosassa or Tarpon Springs, or play a game of golf at Bellaire, or have a shore dinner at Pass à Grille, or sail down Tampa Bay to Braydentown and up the Manatee River, or down the coast to Sarasota. But if he is in quest of tarpon he will go as far south as Punta Gorda or Boca Grande. If he makes Fort Myers his headquarters he will find it a good place to radiate from—up the Caloosahatchie to Lake Okeechobee; down the river to Useppa Island, Punta Rossa, Captiva Pass, Sanibal Island and even to Marco, that Ultima Thule of fishermen; or south and east to the Everglades, the country of the Seminole and the alligator, the panther and the wild turkey, the flamingo, the rattlesnake and the white heron; a land of strange fruits and flowers and of such luxuriant vegetable and animal life that no man may see or know it all.

Having arrived at Fort Myers, we found everything we wanted excepting the things we came for! It was rather early for tarpon and the weather was so unfavorable that nobody could take one. The corridors and porches of the Royal Palm were filled with fishermen, roaming about like caged lions, glowering at their yachts and house-boats that idly lay at anchor and calling down anathemas on the wind that blew and blew forever in the wrong direction. However, one can always catch some sort of fish on the Florida coast and I had some fun with the channel bass and lady-fish, the former strong and gamy, the latter delicate but full of activity on light tackle, and excellent for the table. Then, too, there was much to study that was new; the tangled mangroves growing out of the water as thickly as corn-stalks in the hill, and from the stems of which, at low tide, one may pick oysters; the graceful fret-work of the sea-grape vines, sprawling over the white sands; the great beds of water hyacinths, that are fair to the eye but a pest to the navigators of narrow Florida waters; awkward pelicans, grotesque water-turkeys and wild ducks that almost feed from the hand near the docks and piers, where they are protected by law and custom, but become as wise and wary as usual when farther from the shore.

In the absence of good fishing I turned to shooting, only to learn, to my supreme disgust, that the game laws in Lee County had just been changed, the closed season beginning a month earlier than before; and so it was illegal to shoot turkeys, the very thing I was most anxious to get. Wandering disconsolately about the town, I spied some mounted alligators in a taxidermist's shop and asked him if there would be any chance of shooting one. He thought it very doubtful, but referred me to an old alligator hunter, who looked me over dubiously but "allowed" that we might possibly get one if I "wa'nt afraid of mud ner water," and agreed to equip me with a .38-55 Winchester. So I met him early the next morning and, going a few miles down the Caloosahatchie River in a little launch, we struck into the woods. He had brought with him the longest pole, of its size, that I had ever seen, measuring 35 or 40 feet. What he intended to do with it I hadn't the remotest idea, but figured that I was pretty certain to find out, and so asked no questions. About a mile from the river we came upon a very sluggish stream, with an occasional deep hole, running through an almost impenetrable tangle of vines and scrub palmetto, and here, on a muddy bank, he showed me the tracks and tail-marks of an alligator. Then he waded up to his waist into a rather deep place and began punching with the butt of his pole into the opposite bank, a foot or two under water, until he found a hole that he was evidently feeling for. Down this, at an angle of about 35°, he thrust the pole until it reached the bottom and only a yard of it was above the water. He made several vicious jabs without results and pulled his pole out, remarking, "No 'gator there."

He repeated this performance in a similar place farther down-stream, feeding the sharp-pointed pole down into another burrow and lunging at whatever might be therein. This time he found the owner at home and proceeded to make things uncomfortable for him, but repeated stabs failed to stir him out. Then he did a curious thing. Lifting the tip of the pole and placing it between his teeth he began a series of whining grunts, similar in sound to the short moose call when the game is near. After repeating this several times, and feeling what was going on at the other end of his telephone line, he began pulling the pole out and wading ashore, saying, "He's coming; get ready." In a moment the water boiled up and a long, black head appeared, into the base of which I hastened to send a bullet. Things were lively in that pool for a while, but finally we got the saurian out on the bank and the guide turned him on his back, severing the vertebra at the base of the skull and requesting me, meanwhile, to sit on his tail, which was making occasional wide sweeps, so that he could skin him out! This sounded reasonable enough, but it wasn't what could be called a really comfortable seat and after I had made a few sudden and ungraceful movements the guide cut a long, slender stick and ran it down the spinal cord, causing an immediate cessation of movement. "If you didn't do that," said he, "he'd likely smash your boat in two hours from now," which is to say that an alligator is only half dead after you have killed him.

I interrogated the guide as to the why and wherefore of the novel things I had witnessed, inquiring particularly as to whether his grunt was a love-call or a war-cry, and he told me that this was what they call "Gruntin' 'em out. He thought another 'gator was hurtin' 'im," he said, "an' he came out to fight 'im. When I grunted through that pole, which was right agin his body, he thought another 'gator was right on top of 'im." He pointed out a bad wound on the one I had shot. "You see he's been fightin'. There's another one in here somewhere bigger'n he is." I was satisfied with one, however, especially as I was wet to the waist and covered with mud. Aside from the novelty of this first experience, I would not select alligator hunting as a profession. During the dry season these men locate the alligator holes, which cannot be seen when the water is of normal depth. These holes or burrows are 30 to 40 feet deep and are always full of water. Here the alligators spend most of their time, as they can stay under water for twenty-four hours, if necessary, a film covering the nostril when they are immersed. If

"THE MECCA TO WHICH ANGLERS SHOULD MAKE AN ANNUAL PILGRIMAGE"

wounded, however, so that the water "leaks into them," they have to come to the surface. In seasons of drouth these alligator holes furnish the only fresh-water supply for the cattle that roam the woods, and laws have been passed preventing the shooting of alligators in some parts of Florida, so that this water supply may be continued.

As a result of this alligator hunt and because I didn't know anything about red bugs, I found myself well punished for anything I had done in Florida. I have been scorched by punkies, bitten by fleas, tapped by mosquitoes and poisoned by black flies; but all these are in the nature of recreation as compared with what one may suffer from the red bugs of Florida. You don't know when they are boring into you and you don't realize at first that, having "dug themselves in," they are still there! But the time soon comes when you discover that something has happened to you and all the lotions and antidotes known to the *materia medica* seem to be of little avail. The wise man, who has been stung before, prudently takes a kerosene bath if he is liable to cross the trail of the red bug. Months afterward, amid the snows of Montana, I was still aware that I had met and been worsted by these Florida pests. Nothing milder than the dash dialect can be used to adequately describe them.

I had learned, on good authority, that Long Key, the last station of importance on the East Coast above Key West, was a paradise for fishermen and, for once, I found a place where the good reports had not been exaggerated. It is charmingly located at the beginning of the over-sea railway, with the Gulf of Mexico two hundred yards from the station on one side and the Atlantic one hundred yards distant on the other. Here had been the headquarters of the engineers and draughtsmen when the miracle was performed of building about thirty miles of railway through the shallow waters covering the Florida Keys between this point and Key West. One's first impression on seeing an express train running apparently straight out to sea, is certainly a novel one. When the work was finally com-

"TEN TIMES THE BIG FISH LEAPED HIGH IN THE AIR"

pleted (it was nearly all washed away in the first attempt) a dozen or fifteen nice little cottages were left vacant on the snow-white coral sands among the cocoanut groves near the shore. The Florida East Coast Railway, in a moment of inspiration, decided to make use of these as adjuncts to a fine club-house, which was soon built, and, given these accommodations, it didn't take the fishermen a great while to discover that Long Key was the Mecca to which they should make their annual pilgrimage. I believe it to be the most delightful and restful place on either coast of Florida, especially if one desires, in the intervals of loafing, to have the best and most varied fishing that can be found. In the green waters off the coral reefs, or in the clearly defined current of the Gulf Stream that swirls along the coast near by, are glorious fish such as men read about but seldom find; the iridescent and gamy amberjack; the fierce barracuda, tiger of the sea; the graceful and valiant kingfish; the mustard-colored cavally, or yellowjack; the ponderous but toothsome grouper; the picturesque sailfish; the Spanish mackerel and, in season, the lordly tarpon, or "Silver King." And in addition to these are many strange and grotesque sea-rovers that one may happen upon any time, huge jewfish, wicked-looking sharks and great rays that often weigh hundreds of pounds. All these I have seen brought into the little dock at Long Key, not to mention the bone fish, dolphin, mullet, pilot fish, needle fish and many other varieties of the lesser sort. It is an absolute fact that when one gets a strike in these waters he does not at the instant know within ten guesses what is at the other end of his line. No one ever succeeds in landing all of these varieties in a single season, perhaps few have ever taken them all, for some of these, like the sail fish, the dolphin and, most beautiful of all, the bone fish, wondrously clad in silver mail, are very rare. Nevertheless, there is always the chance of landing the long-hoped-for prize—and what one misses one season he is likely to secure the next.

Among the nice things about Long Key is the sort of people one meets there, real sportsmen who write the books of the out-of-doors and know the game; and real sportswomen who are not afraid of the sun, or a plunging boat, or the salt-sea spray, or the sound of "Old Triton's wreathéd horn." The society dams at Palm Beach and Miami seem to catch and hold back the other sort and somehow nobody appears to miss them. Here I found that rare old sportsman, General Wingate, and Zane Grey, and Colonel Slocum, and Will Dilg and Fred Ellsworth, to all of whom I am indebted for many pleasant and profitable hours, both there and elsewhere. Of course, even where there is such royal fishing, certain places are better than others and, while one may take fish of some sort almost anywhere, the choice spots are the Hen and Chickens, Sombrero and Alligator reefs, located from ten to twenty miles from Long Key. If one is fortunate enough to be at any one of these places when the water is smooth, he may see a sight that he will never forget. Down through the clear, green water, to a depth of ten to twenty feet, the ocean floor can be distinctly seen, and here, growing on the coral reefs are symmetrical sponges, waving sea-weed and other submarine plants among which sail fish of various colors and in all sizes, singly, in pairs or in schools! If there is anything like it anywhere I have yet to find the place, and you can imagine what the fishing is like when the big spoon or the mullet-baited hook catches the eye of the hungry pack. As our launch passed one of these places, Zane Grey, Colonel Slocum and I all fishing from the stern, three forty-pound amberjacks struck our hooks simultaneously, and this time it was no calm sea that we were fishing in, but a tumble of white caps that pitched the big launch *Enterprise* on end and made it difficult to stand up without holding on. There were some new steps learned that day and to keep our lines from fouling each other and away from the propeller when the fish rushed, was more luck than good management. Finally, to the great relief of Slocum and myself, Grey's fish broke away and for forty minutes we pumped and reeled, lost

"THE MOST DESIRED PRIZE"

line and recovered it, until at last we had our fish alongside. When the Captain gaffed them there were at least a dozen other big amberjacks swarming about their crippled mates. The Colonel and I rubbed our wearied arms and wondered what we would have done if the fish had been twice at large, as they sometimes are.

On another occasion, with the same comrades, I had the opportunity of seeing what a big barracuda can do, and learned why these fish are called the "tigers of the sea" and are more feared by some than sharks. I had hooked a twenty-pound grouper and had him nearly up to the boat, when a barracuda, with a head

four or five inches wide, rushed in and struck my fish, cutting him in half as cleanly as if he had been hit with a cleaver. When the heavy structure and big backbone of a grouper of that size are considered, it is easy to believe that a very large barracuda, with his three sets of teeth, could as easily take a man's leg off. In fact, there are well authenticated instances where men have been seriously injured by these savage fish, and one must always be wary in taking the hook from them to avoid lacerated hands.

Of all the Florida fish, the tarpon is the most desired prize, but as they do not come in freely until April, the winter visitor may try in vain to hook one. Such had been my experience, but about the 24th of February last, that genial Florida rover, Joseph B. Dickson, who has several times had the honor of landing the first tarpon of the season, put into Long Key in his snug house-boat, the *Altomary,* and while calling on him I saw a tarpon lying on the deck, which he had caught the night before at the second trestle, about seven miles up the coast. That was a cure for lethargy, and the next night my daughter and I took a launch and started for the spot, arriving about nine o'clock—when the tide was beginning to run through the arches of the viaduct that separated the Gulf from the Atlantic. It was a glorious moonlight night and the soft air, the gleaming water and the exciting anticipation of taking our first tarpon made a delectable combination. Within fifteen minutes after the mullets had begun to spin, there came a little scream of delight at my side and the longer scream of the reel as the line ran out to a racing tarpon that had struck and been fairly hooked. For twenty-five minutes there was a pretty struggle. Ten times the big fish leaped high in the air, and each time it looked as if a fountain of silver had spouted from the sea. Refusing any assistance, but obediently following the advice of the Captain, pumping valiantly with the rod and reeling in until her stiffening fingers almost refused to work, the little fisherwoman at last won out and sank into her seat with a long sigh of relief as the dextrous gaff of the skipper brought the big, glistening prize aboard. Surely a night for a young woman to remember—especially as it was ascertained later that this was the first tarpon taken by a woman on either coast in 1915!

The following night we were at it again, and for the second time the gallant tarpon accepted the feminine bait, and the score stood two to nothing against the head of the family. It began to look as if the usual order of things had been reversed and paternal discipline would be at a discount; but the goddess of good luck, who has always been very kind to me in matters of this sort, took a hand in the game and tied the score. First came a medium-sized fish that made a wonderful fight and put me in training for the much larger one that followed and that tried both muscle and tackle to overcome. For one heart-breaking moment I thought I had lost him, for when gaffed and almost over the high stern of the launch, in a dynamic struggle he broke loose from the gaff and fell, with a prodigious splash, back into the sea. But the hook held, and he soon came aboard to stay. When I look up each day to this splendid fish, swimming on his mahogany panel above my desk, again I can hear the rush of the outgoing tide as it sweeps through the viaduct, smell the salt night air, with its tang and tonic, and see the silver geysers shooting up in the moonlight where this ocean athlete made his spectacular struggle to remain free.

Weary, but exultant, we beat back home against a rising sea and the flying spray. When the *Viking* dropped her anchor, the moon was low in the west and sent a lane of silver light across the gulf; the big palm trees rustled crisply in the tropic wind and a white line of surf rolled in upon the coral sands. The world seemed very beautiful to us.

THE MOST POPULAR BIG GAME ANIMAL IN THE COUNTRY IS THE WHITE TAILED DEER. "DEER HUNTING IN VERMONT," BY R. E. SMITH, IS NOT A CHRONICLE OF KILLING, BUT A YARN FULL OF GOOD RIFLEISTICS AND DEEROLOGY—COMING IN JANUARY

THREE POSITIONS OF THE LEFT-HAND GRIP: ARM EXTENDED, PUMP GRIP AND FORE-END GRIP

WHERE TO HOLD IN TRAP-SHOOTING

AN INTERESTING CONTRIBUTION TO THE TECHNIQUE OF THE SHOTGUN
BY AN EXPERT TRAP-SHOOTER

BY H. H. LAKE

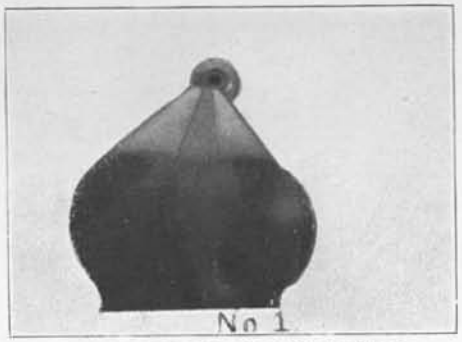
THE English gunmakers figure out the theoretical lead, holding dead ahead and making no allowance for swing, and reduce it to feet and inches, as follows, the figures given being based upon tests and computations on black powder:

For a bird distant	20	yds., lead	3 ft. 8 in.
"	25	"	4 ft. 9 in.
"	30	"	5 ft. 11 in.
"	35	"	7 ft. 2 in.
"	40	"	8 ft. 6 in.

The above figures are, of course, for crossing birds at right angles to the line of fire, and are based upon the average speed of a number of game birds.

As it would require a great deal of time, to say nothing of special apparatus, to obtain pictures of leads on live birds, giving the view along the barrel at the instant the trigger is pulled, we have had recourse to the humble but available blue rock, which is about as nimble as most birds anyhow.

Most of our own authorities either dodge the issue or generalize, reminding us that rapidity of swing and coördination of mind and muscle, speed of vision, and control of nerves, differing with each individual, combine to affect the precise amount of individual lead necessary to deliver the center of the shot charge on a fast angling or crossing bird or blue rock; also, that the individual lead again changes with varying distances; and our expert winds up and delivers his peroration by advising

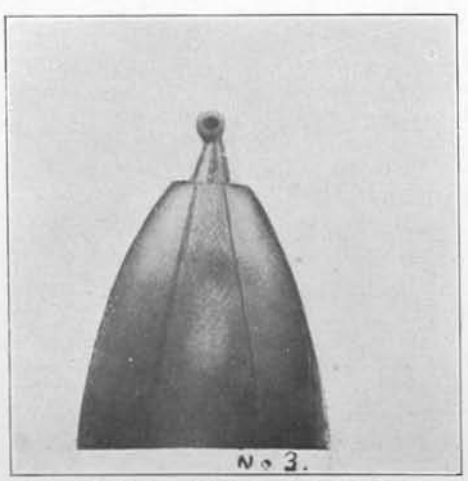


THE DOUBLE ON STRAIGHTAWAYS

us to go out and get the experience, which is beyond doubt a time-honored method of getting results.

Personally, shooting at the clays, I have made a number of experiments and calculations to determine the average distance at which I broke my birds when well into my shooting swing, after I have struck my gait and am accounting for a satisfactory number of birds, and I have fixed the average of my breaks at about 15 yards from the trap, or 30 yards from the muzzle of my favorite gun, which is a double, 30-inch barrels. I say 30, as the gun sticks out nearly a yard from the firing cleat in front of my toe.

It will be seen that my distance is a "medium" one; that is, I do not get them as fast as the champions who connect before the bird has flown 10 yards. Yet I do not poke and dally like the novice or slow shooter, who lets them get out to 40 yards or over before pulling trigger, dusting some through loss of velocity and losing some through pattern faults. I also have the advantage of a larger area of the black and orange circle to shoot at by taking it before it has reached the top of its flight and turned its edge toward me; and the bird at this distance is well within the pattern and breaking velocity of the shot.



SINGLE-BARREL TRAP GUN ON STRAIGHTAWAYS

It should be remembered that small shot fall off very rapidly in velocity as the additional yards are traveled; also that the speed of the target is deducted from the speed of the shot. I have seen a slow shooter, up against a fast trap-spring with a little wind to help the clay saucers along, dust target after target without breaking one in five, and finally quit, grumbling and swearing that the gun was at fault, or the shells were weak, or both. His aim was true and he knew it, but the rest of the trouble was a mystery, solved by the bystanders in a manner which did not tend to lessen his discomfiture.

Returning to the question of lead, I have attempted in the accompanying photos to show the view over my gun barrels of the relative position of the targets to my line of sight. The somewhat blurred view of the gun breech is optically correct, as any view of the breech is a blur at the time of shooting, when the gaze is, or should be, focused on the distant target.

No. 1 is the double gun, 2½-inch drop at heel, full pistol grip, on a straightaway rising bird, estimated distance 30 yards. The target is placed nearer, of course, for obvious photographic reasons. No shooting below with this gun, but a dead center if you want to smash the clay cleanly.

No. 2 is the double gun on a right quartering rising bird, generally conceded to be one of the most difficult of trap shots, except for a southpaw trap artist. The aim is still centered, but the line of sight projected to the right, and the photo is taken to represent the relation as visualized at the firing instant.

No. 3 is a pump gun, trap model, with elevated rib, drop 2 inches at heel, straightaway rising target. It will be noticed that the aim is just below the target,

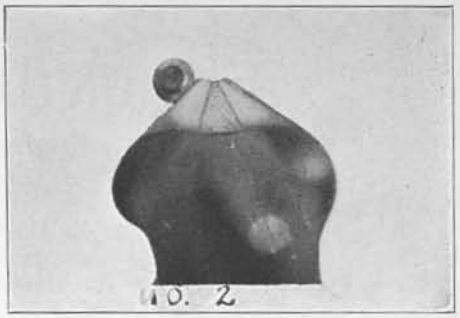
which is seen clear of the sight line. The reason for this is that the straighter stock and high comb result in the shot charge being delivered slightly higher than with the double gun.

No. 4 shows the single barrel of the pump gun on a right quartering rising bird. The target is still clear of the rib, but the lead is much greater than with the double. The reason for this is that for the writer, personally, the pump, with its long, straight stock and straight grip, does not seem to point as fast and readily as the other gun, coming on slower, though my percentage with either is about the same. There is also quite a difference between pumps and doubles in the grip and consequently the leverage of the left hand, and the writer's allowance with the pump is nearly double that of the twin tubes.

The last photograph shows the great difference in the grips of the left hand, which is the pointing hand, playing far the greater part in controlling the directing of the barrels. The middle gun is the one shown in photos 3 and 4, and is one of the popular pump guns built especially for clay-target shooting, single barrel with raised matted rib giving a straight, flat sighting line, fitted with the long, straight-gripped stock favored by many trap-shooters for this kind of work; stock 14¼ inches long. The grip of the right hand shows plainly the control given by this type of stock, and it will be seen that the left arm is extended almost straight, in order to reach the checkered walnut slide, which affords a purchase for that all-important left hand.

Contrasting sharply with the pump gun is the double at the bottom of the picture, a gun of standard or usual measurements —2½-inch drop at heel, stock 14 inches long, full pistol grip. With the left hand on the checkered grip of the fore end, the shooter's position is easy and natural, and he has easy and full control of his piece. Note the bend at elbow of the left arm, as compared with the pump gun.

The gun shown at the top of the picture is an English game gun, with a straight-grip stock unusually long, 15 inches. The extended position of the shooter's arm in handling this gun is due to the personal style of this shooter, who prefers to hold

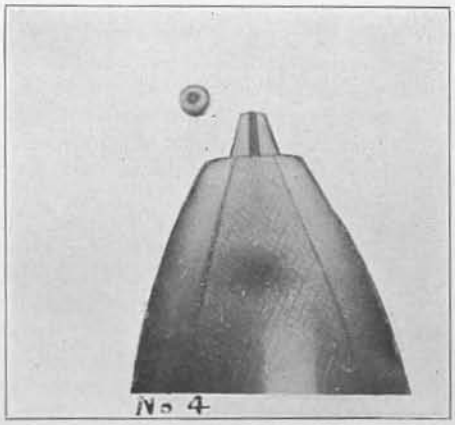


DOUBLE ON RIGHT-QUARTERING BIRDS

very far forward (probably on account of his long arms), and he has fitted a leather barrel protector on the barrels well forward of the fore end, and this forms his grip, ignoring the checkered grip on the fore end itself, which would bend his arm as much as the hold shown with the bottom gun.

Here are three guns, differing radically in measurements, all splendid shooters, but the man who can shoot one of these guns brilliantly is apt to find the going quite different with the other two. Many a shooter might add to his percentage at the traps or his success afield by experimenting until he arrived at the correct grips for both hands, which are to my mind almost as important as the stock dimensions.

Thus it will be realized that the gun, and the facility with which you handle any particular gun, is an important additional factor in determining lead.



SINGLE BARREL ON RIGHT-QUARTERING BIRDS

STILL-HUNTING FOOTGEAR

By Raymond S. Spears

THE moccasin which was worn by hunters of the Ohio Basin in those old days of wonderful woodcraft during and immediately after the Revolutionary War was made of buckskin, very soft and usually very thin. They were generally made by the "brain tan." The hair of the skin was taken off by soaking two or three days in a brook or "run," or in ashes, and then grained out with the back of a knife or a buffalo rib. Then the hide was saturated with the brains of the animal, dissolved in a little water, and worked dry. The Indian squaws chewed the brains into the hide with their teeth, even as it is done to-day in parts of Canada, and a buckskin made in that way, smoked over a fire from time to time, dries soft after it has been soaking wet.

From these brain-tanned hides moccasins were shaped. Probably the white men seldom chewed the brains into the skins, preferring to knead the skins with their knuckles, but they used the same kinds of skins and made the same kinds of moccasins, except that the whites did not spend so much time putting on beads and doing fancy porcupine quillwork.

Now, in dry weather and in cold snow these moccasins served very well. Several pairs of them drawn over the feet made excellent snowshoe pacs, and to this day in the Canadian fur country one finds the same kind of moccasins—not the same pattern, of course, but the same make of buckskin—used by the Indians, white and breed trappers.

But when it comes wet weather, the brain-tanned moccasin slimes up and the Ohio Valley hunters in their picturesque language declared that "wearing buckskin moccasins is a polite way of going barefooted." The water soaked through as through a cotton cloth, and it remains in the moccasins until dried out—and drying a moccasin is a delicate task if the skin has been faultily tanned or is got too near the fire.

The old woodsmen died young, even if they were not killed by Indians. The rheumatism which afflicted them, crippling them, was due to their footgear more than anything else.

But one thing the moccasin did permit, and that was silent walking. It was the still-hunter's footgear. For hunting it was the best, if we grant that hunting is for the purpose of approaching wary and suspicious game to kill it. It should not be forgotten that the chief game hunted in those days was man, and that failure to hunt properly, offensively and defensively, meant death to the still-hunter. Because moccasins were the very best footgear, hunters had to wear them, and the career of Lewis Wetzel, the most efficient Indian hunter of the 1780's, proves that the white man could hunt better than Indians. Wetzel wore moccasins, which he made himself while he sat by the fireplace of his friends' cabins, talking the gossip of the day.

The Indian moccasins wore out rapidly, and they had to be renewed just as the supply of corn and maple sugar, the supply of bullets and powder had to be renewed. They were as indispensable. The hunters could not get along without them, and long after the farmers and loggers obtained the famous oak-tan soles for shoes that "wore like iron," the hunters clung to the "polite way of going barefooted," because that was the way to approach and kill the game which was growing scarcer and wilder with each season.

On this subject T. S. Van Dyke, who put in print the last, utmost word on still-hunting, is particularly interesting. He says:

"The best of all moccasins are those of buckskin. As buying cannot always be depended upon—except buying poor ones

—one who expects to hunt much should learn to make his own moccasins. This is a very trifling matter for anyone of any ingenuity, and with a little practice such a one can soon make them as shapely as any he can buy."

There speaks the Last of the Still-hunters!

Buckskin is going the way of many old-time things. It is hard to get, and the tendency is to compromise in favor of one's feet—for we are all tenderfeet nowadays. Our moccasins have extra soles on them, and these soles are hard-tanned, so as to protect the feet from the twigs and edges of stones and other things which are uncomfortable to feel hard-pressed against one's soles.

But the fact is that extra-soled moccasins are great game-savers. People who purchase moccasins with stiff soles and delude themselves into the belief that they are Indian shod do not know the first rudiments of still-hunting, which means to go alone into the deer's own country, seek him, find him, and slay him by sheer knowledge of his habits and personal ability to approach him unseen, unheard and unsuspected—outwitting the game by silence, caution and skill.

This can be done only by knowing the game, knowing the country, and being equipped from head to foot with proper aids—clothes that do not attract attention by conspicuous color or lack of color, and feet that are silent in the leaves, in the moss, on the stones, and among the fallen twigs.

It is worth while to look at the paw of a wild animal and consider how soft and yet how tough it is. The great cats are the still-hunters of the wild; the bears are the shadows of the wilderness. In the light snow it is worth while to follow the tracks of wild life and see how they travel and whither they go, and what they go around and what they press through. Bear tracks are common enough in most still-hunting country to furnish a lesson to those who seek to be still-hunters. Follow a bear which has no suspicion of a lurker on his trail—that is a liberal education in the very important matter of using one's feet in the woods. Observe the fall of the toes first, the instinctive easing of the parts of the feet on sticks, stones; watch where the bear wades through mud in preference to going around through the brush. The bear doesn't like mud, and he goes through it on tiptoes—literally—but it is clear that even in mud he makes no sound, no splash, no cow-foot sousing. Consider that cats walk on their toes!

When Lewis Wetzel hunted in clammy moccasins, his life depended on the delicacy of his foot-fall. If one were to hunt deer and moose and other big game as Lewis Wetzel hunted Indians, success would be certain. There are no perfect substitutes in utter stillness for the soft buckskin moccasin, which must be renewed frequently.

There are, however, various opportunities for choice in hunting footgear. I used to make my hunting footgear out of cloth and the side of a rubber bootleg. I sewed woolen, or semi-woolen, cloth into the semblance of a shoe. On the bottom I sewed a piece of rubber the shape of the foot, and I carried plenty of needles and linen thread in case the sewing should rip. At first I sewed the rubber side out, and when I tried to go up a wet or snowy grade I would slip. But by turning the inner felt lining of the boot down I had a grip on the ground.

Naturally, my feet were objects of derision, but perhaps it is worth remarking that I saw more deer than any of my fellow hunters in the same territory. My home-made moccasins, which leaked everywhere except through the rubber sole, served admirably in still-walking. They were comfortable only in the sense that they led to hunting success. Nor were they lacking in certain service in protecting my feet, for the two or three pairs of heavy woolen socks within the woolen form kept my feet warm, even in melting snow in the swamps.

Then I tried leather pacs, the kind that some farmers use in plowing soft ground. Many farmers plow bare-footed, by the way, and these men would have no difficulty in still-hunting in proper footgear. The pacs were no improvement on the home-made rubber-bottom moccasins, so far as hunting qualities were concerned. The pacs generally stretched, and, as the

soles were thick and oily, they were clumsy to walk in. The foot slipped inside of them, and this not only hurt; it made one lunge as he walked—and lunging is not conductive to still-walking. The footgear should fit tightly to the two or three pairs of stockings drawn snugly over the feet.

A good, well-stretched pair of leather pacs, however, is next to the buckskin moccasin. If they fit the feet closely, so that one can feel the twigs through the bottom, and if they are not hard, scraping and scratching through the underbrush, they are better than almost anything else. They serve very well in many kinds of still-hunting, and I liked them when in boats, when I did not want to pound the bottom and sides with noisy soles of walking shoes.

Now, the problem which confronts the hunter in the matter of footgear is twofold: comfort versus service. It is very clear from the accounts of hunting adventure that large numbers of big-game killers are literally tenderfeet. They are afraid of hurting their tootsies. They even think their feet are hurt when they are not.

Instead of buying footgear with a view to still-hunting, they buy for comfort of their feet, or what they think is comfort. I think that most of them mistake mere unusual sensations for hurt feet. I know that after three years of shoes and thick soles I went forth in moccasins with but two pairs of thin woolen socks and a thin, soft leather skin outside, and I did not hurt my feet at all. The sensation was unusual, and my ankles felt unsupported, but there was no real hurt. This last fall, after two years without still-hunting, I went forth with a pair of rubbers and a pair of woolen socks and hunted up and down hard, rough ridges and knolls and swamps, and, though I weigh 210 pounds —stout!—I had no trouble with my feet. The one thing that I did think might be of service were some kind of ankle supports when I was on steep, stony, brushy side-hills.

It seems to me that people who are unused to the woods footgear of moccasins and thin, soft-soled footwear over-rate the danger of tender feet. For walking, it is a fact that one should have thick-soled shoes or short hunting boots. The strain of hundreds of miles marching is tremendous, and one must then care for the tendons of his feet. Blisters are certain without properly fitting soles.

But in still-hunting one does not walk hundreds of miles. There is no proper still-hunting that calls for more than a very few miles a day. I do not refer to the intervals between hunting grounds, such as one has when one goes from woodlot to woodlot, where one hunts a mile and then walks a mile.

In ordinary deer still-hunting one does not walk more than ten or twelve miles a day. In a great deal of the best still-hunting, he may not travel over more than six or eight miles. Certain it is that the ordinary sportsman, out for his two or three weeks, does not still-hunt more than eight or ten miles if he still-hunts properly. He may walk or ride a considerable distance to his hunting ground, but the actual still-hunting, requiring moccasins or other silent footgear, need be only a few miles—not enough to make trouble for tender feet in the slimsiest of foot covering.

Consider the fact that in hunting for pleasure, the pleasure becomes hard work after noon. In still-hunting it is not the distance traveled, the heights climbed, the ground covered that tires one; it is the intense observation, the steady, unusual alertness, the tense readiness for the appearance of game that brings fatigue. At intervals the hunter must relax—and, alas! the game often appears at that moment and destroys the mental equilibrium, forces excitement, kills the aim! It is not the feet that give out, but the knees, the back of the neck, the eyes, the heart, the head. After the first half hour or so of moccasin or pac or rubber footgear still-hunting, one forgets the tender feet. If one walks fast enough to bump his toes, he is not still-hunting; if he plods along, slipping and sliding, he is not still-hunting; if he hurries, if he goes fast enough to pound his feet, he is not still-hunting.

In fact, if a man walks fast enough to hurt his feet in any kind of soft soles, he is not still-hunting and he does not know what still-hunting is. I do not re-

fer to the preliminary walk to the hunting country nor the hurrying home late in the day, but to the hours when he is actually in the timber or burning, hopeful of seeing game, and advancing with every sense tense with expectant observation and seeking.

Too many hunters associate their trail-traveling with their hunting. For the trail, for the packing, the getting to the hunting country, shoes are desirable, and frequently indispensable. A cross between a hob-nailed log-driver's boot and an Indian's moccasin is not a moccasin, however. No footgear will serve equally well for tramping and for still-hunting. This is the point where so many men who go into the woods fail in their outfits. They buy "hunting boots" and moccasins with "extra soles," and they carry camp slippers. They try to get "all around" footgear, and this costs many a man his moose, deer, bear and other big game.

For still-hunting the footwear must be such that silent footsteps can be made in the green timber or on the hardwood. Since the perfect buckskin moccasin is now seldom available, substitutes must be had. A hard-soled moccasin is not a substitute for the buckskin moccasin. It is a substitute for a walking boot, the so-called "hunting boot."

Oil-tanned pacs without soles are pretty good, and this is the "moccasin" usually sold. They are rather slippery to walk in in a skim of wet snow, and, as a general thing, they stretch so that the No. 7 will serve very nicely for a No. 9 foot after a few days of service, especially in wet, good hunting weather.

If one must combine a certain amount of walking with his still-hunting, as in certain kinds of moose country, for example, there are several types of rubber-soled and leather-uppered rubbers. They are noisy under many conditions, and the best of still-hunting is not possible in them, but they serve very well—till the crisis!

Better still than these crosses between a rubber overshoe and a walking shoe are the ordinary rubbers which one purchases to wear on his leather shoes. These rubbers are thin, soft-soled, and very still in damp leaves. One feels the twigs through them well enough to avoid breaking most of them, and they protect the feet from points and edges.

In buying these light rubbers for hunting one must get them a good deal smaller than for one's shoes. I wear a No. 9 shoe, but a No. 7 rubber is plenty large enough for still-hunting in. One should try them on over the hunting socks, and get them tight enough so they will not slip on the heel or bulge out at the sides.

I have found that inside woolen pacs are very comfortable in these rubbers in very cold weather, and the rubbers serve very well in snow-shoeing and for walking in the snow over country roads, for they do not slip in the glaring runner tracks nor on the icy places. The rubbers are also much drier than buckskin moccasins and ordinary pacs as they are sewed.

They are not perfect, however. What is really needed is a thin sole and thin sides, but quite high uppers, which should be of some material which would shed water and snow, but permit ventilation. Rubbers and spats make a nearly perfect combination, except that in crossing swamps and in thin mud the wet comes through.

It is worth while to give the problem of still-hunting footgear a good deal of attention. Half the success of a hunting trip of the genuine still-hunting type depends on one's footgear. It is all well enough to think that one can stumble onto a tame buck even in thick-soled walking shoes, and one can do it sometimes. But the fact is, the more carefully one prepares his feet for still-walking the more apt he is to have an opportunity to pick the game he most desires. And to do this it is essential to differentiate between woods walking and still-hunting. Even if a thin, flexible sole did result in sore feet, isn't the game worth the pain? But the astonishing thing is that still-hunting in moccasins or rubbers does not injure the feet; if the feet are made lame or tender it is because of mere walking and stumbling along.

COACHING THE WINGSHOT

BY CHAS. ASKINS

CHAPTER V. TRIGGER TIMING

GETTING Captain Byas' consent and, of course, promising to make good all damages to machinery, we next day began our experiments with wheel and running targets. Pressing a couple of other darkies into service together with our own particular man, Jim, we had them start up the horsepower, this under the conclusion that man-power might be more easily regulated than mule-power. However, we quickly learned that when the great levers of the horsepower moved at ordinary rate, the big flywheel turned so rapidly that I couldn't time it. The black men were over-exerting themselves, too, and we knew they wouldn't hold out very long. Our next proceeding was to mount an old windlass used in well digging, the usual bucket rope being attached to the long arm of one of the levers. After some instruction, we managed to regulate the cranking of our heave-to men until the flywheel was turning one revolution per second pretty uniformly.

I now tacked a six-foot strip of paper on the wheel and painted a bull's-eye near one end of it. By some tinkering and plenty of boards, being assisted by our black helpers, one of whom was a pretty fair carpenter, we boarded the wheel up until it could be seen only through an aperture a foot and a half square. As might be surmised, the idea was to have J-C cover the aperture, and as the bull flashed into it he was to pull trigger as quickly as he could. There could be no such thing as beating the game much, unless by intuition, for the wheel was in shadow and my pupil couldn't foresee when the target was to appear until it was actually within the opening. The pattern would then be caught somewhere along the six feet of paper, depending on how prompt my man was on trigger. The wheel was turned toward us, so that the bull would come into view above the tubes, thus giving him fair warning, since a few inches of white would show ahead of the bull.

Of course, J-C understood what was expected to be accomplished by this experiment as well as I did by this time, and he was highly interested.

"Bet you a nickel to a dime I beat the pistol shot," he announced while I was pacing off the range. "I have done that before now in a sprinting match—just felt the starter was pulling trigger and couldn't stop—off I went. Some old devils would fool you though."

"We'll know about that shortly. My money would go on the wheel if you had to hit the black."

J-C was to stand at sixty feet from the wheel, and, allowing 900 feet as the average velocity of the shot over the range, we calculated the time of shot from gun to target as 1/15 of a second. Since the wheel was approximately 36 feet in circumference, we reckoned that during the time of the shot over the course the rim would move two feet and four inches. This distance, plus the time taken to pull trigger, plus the time of the shot up the barrel, plus the time of lock action and the explosion of the primer, would indicate where the shot should strike the paper.

It was evident that every 36th of a second meant a foot of wheel movement. The time of shot up the barrel has been given by one authority as 1/100 of a second, and one of our gun-builders gives the time of his lock as 1/625 of a second. Doubtless the average gunlock is a bit slower than this, and anyhow, for our purpose we intended to lump time up the barrel and lock-action together, granting them six inches of wheel movement. This gave us 2 feet 4 4/5 inches as time of shot over the range, plus 6 inches as time of

shot from pull of trigger to muzzle—a total of 2 feet 10 4/5 inches. By way of good measure, we made it 3 feet and placed a bar across the paper from which to measure trigger-pulling time.

Now, granted that shot velocity, time up the barrel, lock action, primer action, and wheel movement were regular, which we were obliged to take for granted, it was apparent that every foot the center of the charge struck above the three-foot bar meant one thirty-sixth of a second as the time of the trigger pull. An English ballistic engineer—I think it was Mr. Griffith—gave the time required for a fast man to pull trigger as 1/100 of a second, and for a slow man 1/25 of a second. We did not know, however, the conditions under which the tests had been made or whether or not they were at all similar to ours. The mind of the shooter might have had fairer warning in those tests, thus enabling him the more readily to translate thought into nerve action. Be that as it might, we were here to try the thing out for ourselves.

I knew that in the nature of things my pupil would show quicker nerve action than the average novice. He had been trained in college sports, and had the alertness of a good sprinter well accustomed to "key" himself to start with the pistol. Moreover, for the last week I had been consistently training him in the knack of quick and sure trigger pulling, and he was perfectly acquainted with the grip of his gun and the weight of his trigger pull. Under the circumstances, if a fast man, highly trained, could let-off in a hundredth of a second, I thought J-C could do it in not more than double that time.

We were both highly curious to observe the results, the experiment being as new to me as it was to him. With our assistants cranking steadily, I timed the wheel and all was ready.

"Now you watch me, Coach. Plump the black right in the center. Be up in the air then, won't you?"

When he had tried to sight on the fleeting spot as it passed the aperture, though, he changed his mind. "Hanged if there isn't some speed to that wheel, old man, take it from me."

"Ready, now, son; fire when the bull darkens the hole."

At the crack of his gun, J-C turned to me with a rueful expression.

"Missed it a mile! If I hit anywhere it was along about that bar. My trigger finger was anchored. I tried to pull and couldn't."

We found the center of his charge about two feet from the bar, indicating a trigger pull of 1/18 of a second.

A new paper was pasted over the shot pattern; I made a note of what he had done; the blacks started up the machine and we went to work again. From then on for twenty shots J-C gradually quickened his time until he was averaging about a foot or 1/36 of a second. I say average, for he sometimes varied as much as a foot. With practice he improved, however, and both of us were pleased with the practical utility of our time-testing device. After twenty-five shots we were obliged to desist since the work was tiring the lad—he began to slow up, also becoming more irregular. I now tried my own hand at the game, and while owing to long training I was a bit faster than J-C, I could by no means approach the 1/100 of a second standard. The best I could do was to average about a fiftieth of a second, though I pulled with considerable more regularity than my pupil, as might have been expected. Right then I came to doubt if any man could press trigger in 1/100 of a second under our experimental conditions. Whether we were right or the English ballistic expert we had no means of proving, but for our own work we necessarily took our own results as a basis for future calculations.

I kept J-C plugging away at the moving wheel for three successive days. In the end he showed a marked improvement in regularity, speed, and ability to stand up under the work. When he had developed about the same speed that I possessed, with nearly the same uniformity, we desisted.

One of the things I was interested in was to see if much shot-stringing developed at the distance. Our English authority, previously mentioned, in a similar but more practical wheel test, gives the stringing of the shot at forty yards as 12 to 16

feet. Our wheel was but eight inches wide, which did not permit the full round pattern to be caught, and at forty yards the entire charge would not enter the aperture; still we concluded that at twenty yards the bulk of the pellets struck the target in a body. A few belated pellets landed further up on the paper, but, upon the whole, we arrived at the belief that at the short range of twenty or twenty-five yards, the shot missiles following up the main body could do very little toward killing after the main charge had passed in front of the mark. It was our conviction, therefore, that this idea of a bird flying into a pattern which has been directed ahead of him is purely an active use of a brilliant imagination.

Some of the facts developed by our trigger-timing experiment were obvious to us both, indeed were pretty well known before we began. We knew beyond question that if the marksman was to pull trigger in quick and uniform time, his lock must itself yield with the greatest uniformity. All the trigger pressure except the final ounce or two must be put on before the finishing pulling movement is started. One of the reasons why a man cannot do his best work with a strange gun is that he is not able to mentally weigh the trigger pull but must allow a pound or two for safety, otherwise he is liable to get a premature let-off. The strange gun is almost certain to delay the trigger pull and give us slower trigger pulling time—no less certain to cause irregular time as well.

Not every gun lets-off with an exact weight on the trigger time after time, and its failure to do so is a grave fault. Where there is any play between trigger and sear, the trigger pull may vary owing to the depth or strength of contact between the parts. Some guns when cocked with a sudden jerk or with a surplus of energy will yield with a different pull from what they would if opened gently. Fortunately for J-C his Parker released the sear very regularly to a weight of four pounds to either barrel, as I had learned by carefully weighting and weighing the pull-off. Some guns will vary a half-pound or more from shot to shot and I have known others that were even influenced by the weather or by the heating of the piece when firing steadily.

Generally speaking, it is inadvisable to have the pull of trigger too light, not lighter than 3½ pounds unless the parts are made of the very best material and fitted with the greatest care. The very light pull-off is apt to have too little bearing; it may wear and gradually change, and it may betray a lack of stability from shot to shot. I have found that four pounds is light enough for any beginner, and I have seen ladies with delicate fingers who were so little sensitive to the weight of their triggers that they needed a five-pound pull. Most men require a trigger yielding at from 3½ to 5 pounds, rarely heavier and rarely lighter, though a highly trained shot at trap work where the weapon was at shoulder before the bird sprung might use 3 pounds.

The preferred weight of pull is much a matter of habit, for we can readily become accustomed to a trigger weight heavier or lighter, within reasonable limits, but it never ought to exceed five pounds, and it is foolish to try to shoot two or three guns with every one a different weight of trigger. The result must be a fatal irregularity in trigger-pulling.

From a long experience, I am led to believe that more men are handicapped in their wingshooting by a poor trigger or triggers than by poor shooting guns. The trigger may be not only irregular but it may creep or drag. Still worse than a dragging trigger, if anything can be worse, is a light pull for one barrel and a heavy for the other, particularly a heavy pulling first barrel and a lighter second. I believe that most men are well suited by an exactly similar pull for both barrels, but for my own use, having learned that when I miss with the first barrel or I am trying for a double, I grasp the grip with increased force and so feel the trigger less, I prefer a second barrel which pulls with half-pound more weight than the first.

The trigger pulling of the novice is also somewhat affected by his inability to place his finger to an exact position on the trigger. The gun trigger is a lever with the finger being given the long end; whether this finger comes in contact with the end of the lever or closer up to its fulcrum

makes quite a difference. The back trigger, by reason of its longer leverage and its deep incurve automatically settling the finger perfectly to place, is the easiest to pull, which facility furthers regularity of pull. One of the greatest advantages of the single-trigger is that it is the back trigger in shape, position, and leverage, all furthering uniformity of let-off. Additionally the rear trigger obviates that strain which often falls on the trigger finger, a prime source of premature and delayed pulls—not a man of us but could tell stories of pulling too soon due to a cramped or twisted position necessitated by the course of a wily bird. Contrary to common custom, in two trigger guns, the rear is the one which should be pulled first, this for the logical reason that when our piece recoils it drives back through the grip thus bringing the finger more readily in contact with the front trigger.

All this I made plain to J-C, though being keenly alive to what was going on, he apprehended most of it. I was gratified that he accepted my views without contention, for the youngster had really done considerable shooting on English driven game and might be supposed to have some ideas of his own. I continued the lecture:

"Wingshooting, my boy, so far as mathematics is concerned, is a simple problem. We have but to make two bodies in motion collide. The collision may be head on, rear end, or their paths may cross at the crucial instant, and so they would come together. The factors connected with the moving body, termed the target, now to be considered, are its size, rate of speed, and angle of movement with regard to the other moving body, the missile. If our target were as big as a balloon, if it moved slowly enough, if its motion were straight away or straight toward the gun, within easy range, it should be hit about all the time. The factors connected with the missile which must be given due consideration are, its velocity, the accuracy with which it is directed, and the means taken to start it on its way. The means of starting the missile on its course would include pull of trigger, action of lock, explosion of primer, and time of charge up the barrel, but for our present purpose we have merely taken the pull of trigger with its machine and human equation. The experiments we have just been carrying out had the sole purpose of making plain the factor of starting our missile or missiles on the way.

"If our missiles had lightning speed, if we started them on the way with the quickness of thought, if a man's judgment were infallible, if he had the gun pointing accuracy of a perfect machine, it might well be concluded that wingshooting would be no more difficult than striking bodies at rest. That shooting a wing is a beautiful game is owing entirely to our inability to reduce the factors composing its problem to an absolutely fixed basis. Human judgment is liable to err, human accuracy is limited, and the devices for starting our missile are perfected neither in human mechanics nor in machine mechanics. Which is as it should be, and for my part I could fairly wish that the factor of speed of mark were a more serious one than it is; I should like to have a game bird with equal size and double the speed of our Bob-white quail—curious to see what I could do with him, you understand. If the trap-shooter would invent a bird with a two-hundred-foot velocity over a two-hundred-foot range, and then take this bird at right angles to its course, what a splendid opportunity we would have for scientific gun firing.

"Let us return to our mutton instead of sighing for new worlds to conquer, for even as it is you won't find our American quail, dodging through the pines, any such goat as the English partridge winging steadily forty-five feet overhead. As we have seen, you lose one foot of target-moving time while pulling the trigger. This means that if the bird moved at the same rate as our wheel, and you gave him a certain lead as an allowance for time of shot over the range, you would have to add one foot for time taken to pull trigger. Since this one foot or one-thirty-sixth of a second which you lose permits the bird to fly one foot at a speed of thirty-six feet a second, at seventy-two feet a second he would cover two feet, and at one hundred feet a second, which many birds attain, three feet would have to be added to nor-

mal lead by reason of the time lost in pressing trigger. Not only that, but many have the habit of "dwelling" on the trigger, or the trigger itself drags, and this might imply a trigger-time of not faster than 1/18 of a second, permitting the target to cover six feet. Suppose we had to allow six feet for trigger pulling time, this in addition to a normal lead of from two to ten feet, how many birds do you think we should hit?

"The most natural thing for a beginner to do and what he will do if uninstructed in undertaking to hit a flying mark, is to pitch his gun ahead of the mark, check his piece there, and pull trigger when his bird has approached as nearly as he thinks it should to his line of aim. Such a thing as losing time, virtually losing lead, while pulling trigger probably doesn't occur to him. He may fire farther and farther in front until he does connect, but at that he has no logical basis for reckoning lead, for, as we have seen, the novice is no less irregular in his trigger-pulling than he is slow. His 'trigger-pulling lead' might vary from one to three feet, and he never could make proper allowance for such variation.

"The loss of lead due to trigger-pulling was, of course, discovered many years ago, way back in the days when the wingshot used a flintlock which fizzed and flashed and hung fire. Our crackshot of those old times quickly became aware that he could do nothing unless he carried his aim right along before the mark, and this principle holds good right now, though conditions are much more favorable for intersecting shots than they were then. However, it will always be difficult to strike a fast-crossing bird by snapping along his line of flight until the time comes when we can discharge our piece instantaneously, without an iota of variation in time.

"In our experiments with the wheel you were obliged to shoot with a still gun, and you had to intersect or snap, but now suppose that we had allowed a wide aperture to shoot through so that you could have carried your aim quickly upward with the bull, don't you believe that you would have come nearer to hitting it? That upward movement, my friend, would have been a swing. In the present stage of gun-firing, we have to depend on a system of swinging with the mark in order to negative trigger-pulling time, which system we have developed to such a point that it gains on lead, pulling for us like a willing horse in place of holding back like a balky mule. We will take up swing and its effect on lead in a forthcoming experiment.

"It might be thought that in straight-away, gently-quartering, and incoming birds, trigger time would 'cut no ice,' and as a matter of fact it is not so important and such birds can be snapped to advantage. For this reason, we have a school of wingshots who believe in no other method than snap-shooting, so far as quail and other ground birds which usually take a course away from the gun are concerned. Some birds must be snapped, some should be, and it is often a matter of judgment whether we should swing with a bird or snap him.

"Nevertheless, trigger-time is still a factor when we begin snapping at driving birds, for now we have to translate this trigger-time into terms of gun-movement. Granted that there is three feet between eye and sight, our gun-muzzle as we bring it to bear may be moving at the rate of but one foot a second, and yet at one hundred feet the sighting line will be traveling at 33 feet a second. For this reason, a loss or gain in trigger time might readily afford such an error as to insure a miss. Moreover, the gun might be moving and frequently does move at the muzzle faster than a foot a second. Regularity of trigger-time is of the utmost importance in 'driving' birds. Indeed this driver, especially when he is dropping downward 'onto the sight' is frequently the hardest of all shots for even a skilled marksman to take. His trouble may be partly due to poor judgment, but more often it is the result of bad trigger-timing. Automatically and from habit, he allows about so much gun-movement for trigger-pulling, and this time is cut short by the bird diving on to the sight."

(To be continued)

OUR TENTS IN THE YOSEMITE

DRY FLY FISHING ON THE MERCED

Fishing 'em Dry for Western Trout

By F. W. ADAMS

"LEAVE your fishing tackle at home," so read the otherwise attractive description of many delightful trips in Yosemite, issued by one of the large camps in the famous valley that every lover of Nature should plan to visit without fail. The advice may have been good in the days of heavy leaders, large flies and with such skill in angling as many of us knew as boys, "back on the farm."

However, I am delighted to say that I did not take kindly to the intended advice, taking a 3½ oz. hand-made lancewood rod, and my old trusty split-bamboo rod of 5½ oz. Although much too heavy, nevertheless it proved a good rod to have taken along.

For line I used the double taper F size with the 5½ oz. rod and an English enamelled flat casting line with my 3½ oz. rod.

For leaders I used a special gut, tied to order, 7-foot taper leader with the *finest* obtainable gut, and in addition a goodly supply of the finest gut I could purchase to replace the leaders lost through using ring fly hooks and breakage incident to getting snagged, as often occurs when using light tackle in any good trout stream, by some old wise chap that makes a swift dash for a sunken log and is too vicious to be checked with your light tackle. Too much attention to leaders can not be paid by any one desiring to get real sport out of the early evening fishing on any of the Yosemite streams, as they are as clear as crystal, requiring an invisible leader, and the rainbow trout feed in very still water in these streams in comparison to the Dolly Varden, also a sorry looking specimen they call "Eastern Brook," which has very little of the beauty of the Eastern brook trout so intimately associated with the earliest and most treasured memories of my boyhood in New England.

June 19th found us well equipped with

DRY FLY ON THE MERCED

flies tied to standard patterns on 10, 12 and 14 ring hooks, also with flies to gut, in standard patterns of which we found the one best bet was a Royal Coachman, No. 12 size, ring hook, with the Red Ant and Cowdung the other most successful lure, and, for me in future, ring hooks only!

On my first evening five o'clock found me on Tenaya Canyon stream, about a mile from its confluence with the Merced. There is one memorable thing about the crystal clear Merced: it is always *just* over the top of your wading boots, pulled to the highest, in nearly every riff you attempt to cross! The Tenaya stream may be waded almost any place you desire.

I was approaching a fine piece of water, a gentle breeze blowing upstream, making casting conditions perfect, when I heard the old familiar shout of "What luck?" I had just missed a beautiful trout by having the swift current drag my lead fly under a log, against which the current curled temptingly, an experience I have never repeated, for then and there I took off my dropper fly, replacing my lead fly with a Cowdung and have fished with single fly to leader ever since.

The Cowdung was my nearest imitation to the fly the trout were freely rising to in the pools above me. Again the hearty hail "What luck?" This time nearer. "Nothing much up to now," I replied, "have fished only one pool and lost a beauty under that log."

"Oh, there are no trout this far down the valley that are worth fishing for. You should have been with us last week up in the Tuolumne Meadows. We have just completed a 400-mile trip on horseback." Just then a ¾-pound trout leaped clear of the water and took my Cowdung fly as he came down *splash!* Not only did he take it; but you could bank on it he would take it just where the gentle current carried the fly down, nicely cocked, under the overhanging limbs of the shrubs that lined the stream.

The pool was perfect, with nice shelving beach, and when, ten minutes later, I drew him gently ashore there was an exclamation of delight from the visiting anglers on the high bank well back of me. The memory of that cast over that particular pool, just missing the overhanging bough and dropping lightly from a horizontal cast, has become a part, a fixture, in my choicest angling memories covering many years of fly fishing.

This beauty, who had been rising several times while I was adjusting my new cast, did not merely roll at the fly. He did not take it "on suspicion." He took it for keeps—"for better"; there was no "for worse" about it! He made a swift and sure answer to all my fears of how you are going to hook your trout after he has risen to the floating fly with all the slack line incident to this method of angling. He hooks himself, all you have to do is gather in the slack, and keep him away from snags.

And now I began fishing again. There was one false cast, and again my Cowdung was floating downstream, gliding with the current just like all the insect life that had been riding that particular

pool, ever since the rivers had been flowing in that valley. No wonder again there was a splash as the mate to my beauty fastened himself to my tempting lure.

Him landed and his neck broken, I held the pair up for the now interested spectators to see. "Sure is a nice pair," they said. "Say, can you spare us a few of those dry fly bugs."

I sure did, but regret they did not later report as good success as I had hoped they would. On I went, picking up a nice trout from the head of the riff, a Dolly Varden with large red spots.

Eight trout I took that evening, five rainbow and three Dolly Varden, all on the Cowdung without a miss. Dressing them and covering them nicely with leaves, I started for camp, just an easy walk, but I soon found that not all the mosquitoes are in New Jersey. However, my citronella oil proved too much for them and the evening was one of the most delightful in all my fishing experience.

That first evening when I stopped fishing on the Tanaya, while I was dressing my trout I felt that I had carved my name on about all the trout in the brook, and that I could come and get the rest any day I wanted them. My experience had proven to me that when conditions are right dry-fly fishing was as much greater sport than wet-fly fishing, as wet-fly fishing is greater sport than bait fishing, and besides at times it is the most killing lure.

The accompanying picture shows the writer fishing in the swift running water of the Merced River. This pool had been fished just as carefuflly as I knew how by the wet-fly method without a rise. Then, without changing tackle at all, I made a couple of false casts and dropped my Royal Coachman, fished dry, as lightly as possible, letting the current bear it just as it would take a natural fly with the least permissible drag from my tapering 7-foot leader. The false casts had been made to drop the fly so that the current must swung my lure over an old stump well hidden in the swiftly rolling stream.

My companion's attention was called to the cast by my saying, "This is a new

BACON AND TROUT

trick I have been perfecting during my frequent trips to the stream. Watch closely the dark water by the old sunken stump." There was a roll of a snow-white belly gleaming through the swift water, then all that remained to do was to pick up the slack and I was fast to a beauty Dolly Varden. There was a pretty fight to regain the shelter of the old stump, which was only too soon over and my beauty was guided to net, and so I shared the joy of conquest with my better half.

"Fine!" said she. "Isn't he a beauty! Let's not go back to camp this noon. These campers just above us will be glad to exchange a few slices of bacon for some trout. We will have broiled trout and bacon just as we used to Back East."

Thus another day of delightful memories was added to that long chain of outing days, stretching back to fishing days when a mere tot of a youngster.

DESERT GOLD

A NOVEL, BY ZANE GREY

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XIII

CHANGES AT FORLORN RIVER

THE first of March saw the federal occupation of the garrison at Casita. After a short, decisive engagement the rebels were dispersed into small bands and driven eastward along the boundary line toward Nogales.

It was the destiny of Forlorn River, however, never to return to the slow, sleepy tenor of its former existence. Belding's predictions came true. That straggling line of home-seekers was but a forerunner of the real invasion of Altar Valley. Refugees from Mexico City and from Casita spread the word that water and wood and grass and land were to be had at Forlorn River; and as if by magic the white tents and red adobe houses sprang up to glisten in the sun.

Belding was happier than he had been for a long time. He believed that evil days for Forlorn River, along with the apathy and lack of enterprise, were in the past. He hired a couple of trustworthy Mexicans to ride the boundary line, and he settled down to think of ranching and irrigation and mining projects. Every morning he expected to receive some word from Sonoyta or Yuma, telling him that Yaqui had guided his party safely across the desert.

Belding was simple-minded, a man more inclined to action than reflection. When the complexities of life hemmed him in, he groped his way out, never quite understanding. His wife had always been a mystery to him. Nell was sunshine most of the time, but, like the sun-dominated desert, she was subject to strange changes, wilful, stormy, sudden. It was enough for Belding now to find his wife in a lighter, happier mood, and to see Nell dreamily turning a ring round and round the third finger of her left hand and watching the west. Every day both mother and daughter appeared farther removed from the past darkly threatening days. Belding was hearty in his affections, but undemonstrative. If there was any sentiment in his make-up it had an outlet in his memory of Blanco Diablo

and a longing to see him. Often Belding stopped his work to gaze out over the desert toward the west. When he thought of his rangers and Thorne and Mercedes he certainly never forgot his horse. He wondered if Diablo was running, walking, resting; if Yaqui was finding water and grass.

In March, with the short desert winter over, the days began to grow warm. The noon hours were hot, and seemed to give promise of the white summer blaze and blasting furnace wind soon to come. No word was received from the rangers. But this caused Belding no concern, and it seemed to him that his women folk considered no news good news.

Among the many changes coming to pass in Forlorn River were the installing of post-office service and the building of a mescal drinking-house. Belding had worked hard for the post office, but he did not like the idea of a saloon for Forlorn River. Still, that was an inevitable evil. The Mexicans would have mescal. Belding had kept the little border hamlet free of an establishment for distillation of the fiery cactus drink. A good many Americans drifted into Forlorn River—miners, cowboys, prospectors, outlaws, and others of nondescript character; and these men, of course, made the saloon, which was also an inn, their headquarters. Belding, with Carter and other old residents, saw the need of a sheriff for Forlorn River.

One morning early in this spring month, while Belding was on his way from the house to the corrals, he saw Nell running Blanco José down the road at a gait that amazed him. She did not take the turn of the road to come in by the gate. She put José at a four-foot wire fence, and came clattering into the yard.

"Nell must have another tantrum," said Belding. "She's long past due."

Blanco José, like the other white horses, was big of frame and heavy, and thunder rolled from under his great hoofs. Nell pulled him up, and as she pounded and slid to a halt in a cloud of dust she swung lightly down.

It did not take more than half an eye for Belding to see that she was furious.

"Nell, what's come off now?" asked Belding.

"I'm not going to tell you," she replied, and started away, leading José toward the corral.

Belding leisurely followed. She went into the corral, removed José's bridle, and led him to the watering-trough. Belding came up, and without saying anything began to unbuckle José's saddle girths. But he ventured a look at Nell. The red had gone from her face, and he was surprised to see her eyes brimming with tears. Most assuredly this was not one of Nell's tantrums. While taking off José's saddle and hanging it in the shed Belding pondered in his slow way. When he came back to the corral Nell had her face against the bars, and she was crying. He slipped a big arm around her and waited. Although it was not often expressed, there was a strong attachment between them.

"Dad, I don't want you to think me a—a baby any more," she said. "I've been insulted."

With a specific fact to make clear thought in Belding's mind he was never slow.

"I knew something unusual had come off. I guess you'd better tell me."

"Dad, I will if you promise."

"What?"

"Not to mention it to mother, not to pack a gun down there, and never, never tell Dick."

Belding was silent. Seldom did he make promises readily.

"Nell, sure something must have come off, for you to ask all that."

"If you don't promise I'll never tell, that's all," she declared, firmly.

Belding deliberated a little longer. He knew the girl.

"Well, I promise not to tell mother," he said, presently, "and seeing you're here safe and well, I guess I won't go packing a gun down there, wherever that is. But I won't promise to keep anything from Dick that perhaps he ought to know."

"Dad, what would Dick do if—if he were here and I were to tell him I'd—I'd been horribly insulted?"

"I guess that'd depend. Mostly, you know, Dick does what you want. But you couldn't stop him—nobody could—if there was reason, a man's reason, to get

started. Remember what he did to Rojas! . . . Nell, tell me what's happened."

Nell, regaining her composure, wiped her eyes and smoothed back her hair.

"The other day, Wednesday," she began, "I was coming home, and in front of that mescal drinking-place there was a crowd. It was a noisy crowd. I didn't want to walk out into the street or seem afraid. But I had to do both. There were several young men, and if they weren't drunk they certainly were rude. I never saw them before, but I think they must belong to the mining company that was run out of Sonora by rebels. Mrs. Carter was telling me. Anyway, these young fellows were Americans. They stretched themselves across the walk and smiled at me. I had to go out in the road. One of them, the rudest, followed me. He was a big fellow, red-faced, with prominent eyes and a bold look. He came up beside me and spoke to me. I ran home. And as I ran I heard his companions jeering.

"Well, to-day, just now, when I was riding up the valley road I came upon the same fellows. They had instruments and were surveying. Remembering Dick, and how he always wished for an instrument to help work out his plan for irrigation, I was certainly surprised to see these strangers surveying—and surveying upon Laddy's plot of land. It was a sandy road there, and José happened to be walking. So I reined in and asked these engineers what they were doing. The leader, who was that same bold fellow who had followed me, seemed much pleased at being addressed. He was swaggering—too friendly; not my idea of a gentleman at all. He said he was glad to tell me he was going to run water all over Altar Valley. Dad, you can bet that made me wild. That was Dick's plan, his discovery, and here were surveyors on Laddy's claim.

"Then I told him that he was working on private land and he'd better get off. He seemed to forget his flirty proclivities in amazement. Then he looked cunning. I read his mind. It was news to him that all the land along the valley had been taken up.

"He said something about not seeing any squatters on the land, and then he shut up tight on that score. But he began to be flirty again. He got hold of José's bridle, and before I could catch my breath he said I was a peach, that he wanted to make a date with me, that his name was Chase, that he owned a gold mine in Mexico. He said a lot more I didn't gather, but when he called me 'Dearie' I —well, I lost my temper.

"I jerked on the bridle and told him to let go. He held on and rolled his eyes at me. I dare say he imagined he was a gentleman to be infatuated with. He seemed sure of conquest. One thing was certain, he didn't know the least bit about horses. It scared me the way he got in front of José. I thanked my stars I wasn't up on Blanco Diablo. Well, Dad, I'm a little ashamed now, but I was mad. I slashed him across the face with my quirt. José jumped and knocked Mr. Chase into the sand. I didn't get the horse under control till I was out of sight of those surveyors, and then I let him run home."

"Nell, I guess you punished the fellow enough. Maybe he's only a conceited softy. But I don't like that sort of thing. It isn't Western. I guess he won't be so smart next time. Any fellow would remember being hit by Blanco José. If you'd been up on Diablo we'd have to bury Mr. Chase."

"Thank goodness I wasn't! I'm sorry now, Dad. Perhaps the fellow was hurt. But what could I do? Let's forget all about it, and I'll be careful where I ride in the future. . . . Dad, what does it mean, this surveying around Forlorn River?"

"I don't know, Nell," replied Belding, thoughtfully. "It worries me. It looks good for Forlorn River, but bad for Dick's plan to irrigate the valley. Lord, I'd hate to have someone forestall Dick on that!"

"No, no, we won't let anybody have Dick's rights," declared Nell.

"Where have I been keeping myself not to know about these surveyors?" muttered Belding. "They must have just come."

"Go see Mrs. Carter. She told me there were strangers in town, Americans, who had mining interests in Sonora, and

were run out by Orozco. Find out what they're doing, Dad."

Belding discovered that he was, indeed, the last man of consequence in Forlorn River to learn of the arrival of Ben Chase and son, mine owners and operators in Sonora. They, with a force of miners, had been besieged by rebels and finally driven off their property. This property was not destroyed, but held for ransom. And the Chases, pending developments, had packed outfits and struck for the border. Casita had been their objective point, but, for some reason which Belding did not learn, they had arrived instead at Forlorn River. It had taken Ben Chase just one day to see the possibilities of Altar Valley, and in three days he had men at work.

Belding returned home without going to see the Chases and their operations. He wanted to think over the situation. Next morning he went out to the valley to see for himself. Mexicans were hastily erecting adobe houses upon Ladd's one hundred and sixty acres, upon Dick Gale's, upon Jim Lash's and Thorne's. There were men staking the valley floor and the river bed. That was sufficient for Belding. He turned back toward town and headed for the camp of these intruders.

In fact, the surroundings of Forlorn River, except on the river side, reminded Belding of the mushroom growth of a newly discovered mining camp. Tents were everywhere; adobe shacks were in all stages of construction; rough clapboard houses were going up. The latest of this work was new and surprising to Belding, all because he was a busy man, with no chance to hear village gossip. When he was directed to the headquarters of the Chase Mining Company he went thither in slow-growing wrath.

He came to a big tent with a huge canvas fly stretched in front, under which sat several men in their shirt sleeves. They were talking and smoking.

"My name's Belding. I want to see this Mr. Chase," said Belding, gruffly.

Slow-witted as Belding was, and absorbed in his own feelings, he yet saw plainly that his advent was disturbing to these men. They looked alarmed, exchanged glances, and then quickly turned to him. One of them, a tall, rugged man with sharp face and shrewd eyes and white hair, got up and offered his hand.

"I'm Chase, senior," he said. "My son, Radford Chase, is here somewhere. You're Belding, the line inspector, I take it? I meant to call on you."

He seemed a rough-and-ready, loud-spoken man, withal cordial enough.

"Yes, I'm the inspector," replied Belding, ignoring the proffered hand, "and I'd like to know what in the hell you mean by taking up land claims—staked ground that belongs to my rangers?"

"Land claims?" slowly echoed Chase, studying his man. "We're taking up only unclaimed land."

"That's a lie. You couldn't miss the stakes."

"Well, Mr. Belding, as to that, I think my men did run across some staked ground. But we recognize only squatters. If your rangers think they've got property just because they drove a few stakes in the ground, they're much mistaken. A squatter has to build a house and live on his land so long, according to law, before he owns it."

This argument was unanswerable, and Belding knew it.

"According to law!" exclaimed Belding. "Then you own up; you've jumped our claims."

"Mr. Belding, I'm a plain business man. I come along. I see a good opening. Nobody seems to have tenable grants. I stake out claims, locate squatters, start to build. It seems to me your rangers have overlooked certain precautions. That's unfortunate for them. I'm prepared to hold my claim and to back all the squatters who work for me. If you don't like it you can carry the matter to Tucson. The law will uphold me."

"The law? Say, on this southwest border we haven't any law except a man's word and a gun."

"Then you'll find United States law has come along with Ben Chase," replied the other, snapping his fingers. He was still smooth, outspoken, but his mask had fallen.

"You're not a Westerner?" queried Belding.

"No, I'm from Illinois."

"I thought the West hadn't bred you. I know your kind. You'd last a long time on the Texas border; now, wouldn't you? You're one of the land and water hogs that has come to root in the West. You're like the timber sharks—take it all and leave none for those who follow. Mr. Chase, the West would fare better and last longer if men like you were driven out."

"You can't drive me out."

"I'm not so sure of that. Wait till my rangers come back, I wouldn't be in your boots. Don't mistake me. I don't suppose you could be accused of stealing another man's ideas or plan, but sure you've stolen these four claims. Maybe the law might uphold you. But the spirit, not the letter, counts with us bordermen."

"See here, Belding, I think you're taking the wrong view of the matter. I'm going to develop this valley. You'd do better to get in with me. I've a proposition to make you about that strip of land of yours facing the river."

"You can't make any deals with me. I won't have anything to do with you."

Belding abruptly left the camp and went home. Nell met him, probably intended to question him, but one look into his face confirmed her fears. She silently turned away. Belding realized he was powerless to stop Chase, and he was sick with disappointment for the ruin of Dick's hopes and his own.

XIV

A LOST SON

TIME passed. The population of Forlorn River grew apace. Belding, who had once been the head of the community, found himself a person of little consequence. Even had he desired it he would not have had any voice in the selection of postmaster, sheriff, and a few other officials. The Chases divided their labors between Forlorn River and their Mexican gold mine, which had been restored to them. The desert trips between these two places were taken in automobiles. A month's time made the motor cars almost as familiar a sight in Forlorn River as they had been in Casita before the revolution.

Belding was not so busy as he had been formerly. As he lost ambition he began to find less work to do. His wrath at the usurping Chases increased as he slowly realized his powerlessness to cope with such men. They were promoters, men of big interests and wide influence in the Southwest. The more they did for Forlorn River the less reason there seemed to be for his own grievance. He had to admit that it was personal; that he and Gale and the rangers would never have been able to develop the resources of the valley as these men were doing it.

All day long he heard the heavy booming blasts and the rumble of avalanches up in the gorge. Chase's men were dynamiting the cliffs in the narrow box cañon. They were making the dam just as Gale had planned to make it. When this work of blasting was over Belding experienced a relief. He would not now be continually reminded of his and Gale's loss. Resignation finally came to him. But he could not reconcile himself to misfortune for Gale.

Moreover, Belding had other worry and strain. April arrived with no news of the rangers. From Casita came vague reports of raiders in the Sonoyta country—reports impossible to verify until his Mexican rangers returned. When these men rode in, one of them, Gonzales, an intelligent and reliable halfbreed, said he had met prospectors at the oasis. They had just come in on the Camino del Diablo, reported a terrible trip of heat and drought, and not a trace of the Yaqui's party.

"That settles it," declared Belding. "Yaqui never went to Sonoyta. He's circled round to the Devil's Road, and the rangers, Mercedes, Thorne, the horses—they—I'm afraid they have been lost in the desert. It's an old story on Camino del Diablo."

He had to tell Nell that, and it was an ordeal which left him weak.

Mrs. Belding listened to him, and was silent for a long time while she held the stricken Nell to her breast. Then she opposed his convictions with that quiet strength so characteristic of her arguments.

"Well, then," decided Belding, "Rojas headed the rangers at Papago Well or the Tanks."

"Tom, when you are down in the mouth you use poor judgment," she went on. "You know only by a miracle could Rojas or anybody have headed those white horses. Where's your old stubborn confidence? Yaqui was up on Diablo. Dick was up on Sol. And there were the other horses. They could not have been headed or caught. Miracles don't happen."

"All right, mother, it's sure good to hear you," said Belding. She always cheered him, and now he grasped at straws. "I'm not myself these days, don't mistake that. Tell us what you think. You always say you feel things when you really don't know them."

"I can say little more than what you said yourself the night Mercedes was taken away. You told Laddy to trust Yaqui, that he was a godsend. He might go south into some wild Sonora valley. He might lead Rojas into a trap. He would find water and grass where no Mexican or American could."

"But, mother, they're gone seven weeks. Seven weeks! At the most I gave them six weeks. Seven weeks in the desert!"

"How do the Yaquis live?" she asked.

Belding could not reply to that, but hope revived in him. He had faith in his wife, though he could not in the least understand what he imagined was something mystic in her.

"Years ago when I was searching for my father I learned many things about this country," said Mrs. Belding. "You can never tell how long a man may live in the desert. The fiercest, most terrible and inaccessible places often have their hidden oasis. In his later years my father became a prospector. That was strange to me, for he never cared for gold or money. I learned that he was often gone in the desert for weeks, once for months. Then the time came when he never came back. That was years before I reached the southwest border and heard of him. Even then I did not for long give up hope of his coming back. I know now—something tells me—indeed, it seems his spirit tells me—he was lost. But I don't have that feeling for Yaqui and his party. Yaqui has given Rojas the slip or has ambushed him in some trap. Probably that took time and a long journey into Sonora. The Indian is too wise to start back now over dry trails. He'll curb the rangers; he'll wait. I seem to know this, dear Nell, so be brave, patient. Dick Gale will come back to you."

"Oh, mother!" cried Nell. "I can't give up hope while I have you."

That talk with the strong mother worked a change in Nell and in Belding. Nell, who had done little but brood and watch the west and take violent rides, seemed to settle into a waiting patience that was sad, yet serene. She helped her mother more than ever; she was a comfort to Belding; she began to take active interest in the affairs of the growing village. Belding, who had been breaking under the strain of worry, recovered himself so that to outward appearance he was his old self. He alone knew, however, that his humor was forced, and that the slow burning wrath he felt for the Chases was flaming into hate.

Belding argued with himself that if Ben Chase and his son, Radford, had turned out to be big men in other ways than in the power to carry on great enterprises he might have become reconciled to them. But the father was greedy, grasping, hard, cold; the son added to those traits an overbearing disposition to rule, and he showed a fondness for drink and cards. These men were developing the valley, to be sure, and a horde of poor Mexicans and many Americans were benefiting from that development; nevertheless, these Chases were operating in a way which proved they cared only for themselves.

Belding shook off a lethargic spell and decided he had better set about several by no means small tasks, if he wanted to get them finished before the hot months. He made a trip to the Sonoyta Oasis. He satisfied himself that matters along the line were favorable, and that there was absolutely no trace of his rangers. Upon completing this trip he went to Casita with a number of his white thoroughbreds and shipped them to ranchers and horse-breeders in Texas. Then, being near the railroad, and having time, he went up to Tucson. There he learned some interesting

particulars about the Chases. They had an office in the city; influential friends in the Capitol. They were powerful men in the rapidly growing finance of the West. They had interested the Southern Pacific Railroad, and in the near future a branch line was to be constructed from San Felipe to Forlorn River. These details of the Chase development were insignificant when compared to a matter striking close home to Belding. His responsibility had been subtly attacked. A doubt had been cast upon his capability of executing the duties of immigration inspector to the best advantage of the state. Belding divined that this was only an entering wedge. The Chases were bent upon driving him out of Forlorn River; but, perhaps to serve better their own ends, they were proceeding at leisure. Belding returned home consumed by rage. But he controlled it. For the first time in his life he was afraid of himself. He had his wife and Nell to think of; and the old law of the West had gone forever.

"Dad, there's another Rojas round these diggings," was Nell's remark, after the greetings were over and the usual questions and answers passed.

Belding's exclamation was cut short by Nell's laugh. She was serious with a kind of amused contempt.

"Mr. Radford Chase!"

"Now Nell, what the——" roared Belding.

"Hush, Dad! Don't swear," interrupted Nell. "I only meant to tease you."

"Humph! Say, my girl, that name Chase makes me see red. If you must tease me hit on some other way. *Sabe,* señorita?"

"*Si, si,* Dad."

"Nell, you may as well tell him and have it over," said Mrs. Belding, quietly.

"You promised me once, Dad, that you'd not go packing a gun off down there, didn't you?"

"Yes, I remember," replied Belding; but he did not answer her smile.

"Will you promise again?" she asked, lightly. Here was Nell with arch eyes, yet not the old arch eyes, so full of fun and mischief. Her lips were tremulous; her cheeks seemed less round.

"Yes," rejoined Belding; and he knew why his voice was a little thick.

"Well, if you weren't such a good old blind Dad you'd have seen long ago the way Mr. Radford Chase ran around after me. At first it was only annoying, and I did not want to add to your worries. But these two weeks you've been gone I've been more than annoyed. After that time I struck Mr. Chase with my quirt he made all possible efforts to meet me. He did meet me wherever I went. He sent me letters till I got tired of sending them back.

"When you left home on your trips I don't know that he grew bolder, but he had more opportunity. I couldn't stay in the house all the time. There were mama's errands and sick people and my Sunday school, and what not. Mr. Chase waylaid me every time I went out. If he works any more I don't know when, unless it's when I'm asleep. He followed me until it was less embarrassing for me to let him walk with me and talk his head off. He made love to me. He begged me to marry him. I told him I was already in love and engaged to be married. He said that didn't make any difference. Then I called him a fool.

"Next time he saw me he said he must explain. He meant I was being true to a man who, everybody on the border knew, had been lost in the desert. That—that hurt. Maybe—maybe it's true. Sometimes it seems terribly true. Since then, of course, I have stayed in the house to avoid being hurt again.

"But, Dad, a little thing like a girl sticking close to her mother and her room doesn't stop Mr. Chase. I think he's crazy. Anyway, he's a most persistent fool. I want to be charitable, because the man swears he loves me, and maybe he does, but he is making me nervous. I don't sleep. I'm afraid to be in my room at night. I've gone to mother's room. He's always hanging round. Bold! Why, that isn't the thing to call Mr. Chase. He's absolutely without a sense of decency. He bribes our servants. He comes into our patio. Think of that! He makes the most ridiculous excuses. He bothers mother to death. I feel like a

poor little rabbit holed by a hound. And I daren't peep out."

Somehow the thing struck Belding as funny, and he laughed. He had not had a laugh for so long that it made him feel good. He stopped only at sight of Nell's surprise and pain. Then he put his arms round her.

"Never mind, dear. I'm an old bear. But it tickled me, I guess. I sure hope Mr. Radford Chase *has* got it bad. . . . Nell, it's only the old story. The fellows fall in love with you. It's your good looks, Nell. What a price women like you and Mercedes have to pay for beauty! I'd a d—a good deal rather be ugly as a mud fence."

"So would I, Dad, if—if Dick would still love me."

"He wouldn't, you can gamble on that, as Laddy says. . . . Well, the first time I catch this locoed Romeo sneaking round here I'll—I'll——"

"Dad, you promised."

"Confound it, Nell, I promised not to pack a gun. That's all. I'll only shoo this fellow off the place, gently, mind you, gently. I'll leave the rest for Dick Gale!"

"Oh, Dad!" cried Nell; and she clung to him wistful, frightened, yet something more.

"Don't mistake me, Nell. You have your own way, generally. You pull the wool over mother's eyes, and you wind me round your little finger. But you can't de either with Dick Gale. You're tender hearted; you overlook the doings of this hound, Chase. But when Dick comes back, you just make up your mind to a little hell in the Chase camp. Oh, he'll find it out. And I sure want to be round when Dick hands Mr. Radford the same as he handed Rojas!"

Belding kept a sharp lookout for young Chase, and then, a few days later, learned that both son and father had gone off upon one of their frequent trips to Casa Grandes, near where their mines were situated.

April grew apace, and soon gave way to May. One morning Belding was called from some garden work by the whirring of an automobile and a "Holloa!" He went forward to the front yard and there saw a car he thought resembled one he had seen in Casita. It contained a familiar-looking driver, but the three figures in gray coats and veils were strange to him. By the time he had gotten to the road he decided two were women and the other a man. At the moment their faces were emerging from dusty veils. Belding saw an elderly, sallow-faced, rather frail-appearing man who was an entire stranger to him; a handsome dark-eyed woman whose hair showed white through her veil; and a superbly built girl, whose face made Belding at once think of Dick Gale.

"Is this Mr. Tom Belding, inspector of immigration?" inquired the gentleman, courteously.

"I'm Belding, and I know who you are," replied Belding in hearty amaze, as he stretched forth his big hand. "You're Dick Gale's Dad—the Governor, Dick used to say. I'm sure glad to meet you."

"Thank you. Yes, I'm Dick's governor, and here, Mr. Belding—Dick's mother and his sister Elsie."

Beaming his pleasure, Belding shook hands with the ladies, who showed their agitation clearly.

"Mr. Belding, I've come west to look up my lost son," said Mr. Gale. "His sister's letters were unanswered. We haven't heard from him in months. Is he still here with you?"

"Well, now, sure I'm awful sorry," began Belding, his slow mind at work. "Dick's away just now—been away for a considerable spell. I'm expecting him back any day. . . . Won't you come in? You're all dusty and hot and tired. Come in, and let mother and Nell make you comfortable. Of course you'll stay. We've a big house. You must stay till Dick comes back. Maybe that'll be—Aw, I guess it won't be long. . . . Let me handle the baggage, Mr. Gale. . . . Come in. I sure am glad to meet you all."

Eager, excited, delighted, Belding went on talking as he ushered the Gales into the sitting-room, presenting them in his hearty way to the astounded Mrs. Belding and Nell. For the space of a few moments his wife and daughter were bewildered. Belding did not recollect any other occasion when a few callers had

thrown them off their balance. But of course this was different. He was a little flustered himself—a circumstance that dawned upon him with surprise. When the Gales had been shown to rooms, Mrs. Belding gained the poise momentarily lost; but Nell came rushing back, wilder than a deer, in a state of excitement strange even for her.

"Oh! Dick's mother, his sister!" whispered Nell.

Belding observed the omission of the father in Nell's exclamation of mingled delight and alarm.

"His mother!" went on Nell. "Oh, I knew it! I always guessed it! Dick's people are proud, rich; they're somebody. I thought I'd faint when she looked at me. She was just curious—curious, but so cold and proud. She was wondering about me. Dick has never written her that he's—he's engaged to me. I'm wearing his ring. It was his mother's, he said. I won't—I can't take it off. And I'm scared. . . . But the sister—oh, she's lovely and sweet—proud, too. I felt warm all over when she looked at me. I—I wanted to kiss her. She looks like Dick when he first came to us. But he's changed. They'll hardly recognize him. . . . To think they've come! And I had to be looking a fright, when of all times on earth I'd want to look my best."

Nell, out of breath, ran away evidently to make herself presentable, according to her idea of the exigency of the case. Belding caught a glimpse of his wife's face as she went out, and it wore a sad, strange, anxious expression. Then Belding sat alone, pondering the contrasting emotions of his wife and daughter. It was beyond his understanding. Women were creatures of feeling. Belding saw reason to be delighted to entertain Dick's family; and for the time being no disturbing thought entered his mind.

Presently the Gales came back into the sitting-room, looking very different without the long gray cloaks and veils. Belding saw distinction and elegance. Mr. Gale seemed a grave, troubled, kindly person, ill in body and mind. Belding received the same impression of power that Ben Chase had given him, only here it was minus any harshness or hard quality. He gathered that Mr. Gale was a man of authority. Mrs. Gale rather frightened Belding, but he could not have told why. The girl was just like Dick as he used to be.

Their manner of speaking also reminded Belding of Dick. They talked of the ride from Ash Fork down to the border, of the ugly and torn-up Casita, of the heat and dust and cactus along the trail. Presently Nell came in, now cool and sweet in white, with a red rose at her breast. Belding had never been so proud of her. He saw that she meant to appear well in the eyes of Dick's people, and began to have a faint perception of what the ordeal was for her. Belding imagined the sooner the Gales were told that Dick was to marry Nell the better for all concerned, and especially for Nell. In the general conversation that ensued he sought for an opening in which to tell this important news, but he was kept so busy answering questions about his position on the border, the kind of place Forlorn River was, the reason for so many tents, etc., that he was unable to find opportunity.

"It's interesting, very interesting," said Mr. Gale. "At another time I want to learn all you'll tell me about the West. It's new to me. I'm surprised, amazed, sir, I may say. . . . But, Mr. Belding, what I want to know most is about my son. I'm broken in health. I've worried myself ill over him. I don't mind telling you, sir, that we quarreled. I laughed at his threats. He went away. And I've come to see I didn't know Richard. I was wrong to upbraid him. For a year we've known nothing of his doings, and now for almost six months we've not heard from him at all. Frankly, Mr. Belding, I weakened first, and I've come to hunt him up. My fear is that I didn't start soon enough. The boy will have a great position some day—God knows, perhaps soon! I should not have allowed him to run over this wild country for so long. But I hoped, though I hardly believed, that he might find himself. Now I'm afraid he's——"

Mr. Gale paused, and the white hand he raised expressively shook a little.

Belding was not so thick-witted where men were concerned. He saw how the

matter lay between Dick Gale and his father.

"Well, Mr. Gale, sure most young bucks from the East go to the bad out here," he said, bluntly.

"I've been told that," replied Mr. Gale; and a shade overspread his worn face.

"They blow their money, then go to punching cows, take to whisky."

"Yes," rejoined Mr. Gale, feebly nodding.

"Then they get to gambling, lose their jobs," went on Belding.

Mr. Gale lifted haggard eyes.

"Then it's bumming around, regular tramps, and to the bad generally." Belding spread wide his big arms, and when one of them dropped round Nell, who sat beside him, she squeezed his hand tight. "Sure, it's the regular thing," he concluded, cheerfully.

He rather felt a little glee at Mr. Gale's distress, and Mrs. Gale's crushed I-told-you-so woe in no wise bothered him; but the look in the big, dark eyes of Dick's sister was too much for Belding.

He choked off his characteristic oath when excited and blurted out, "Say, but *Dick Gale* never went to the bad! . . . Listen!"

Belding had scarcely started Dick Gale's story when he perceived that never in his life had he such an absorbed and breathless audience. Presently they were awed, and at the conclusion of that story they sat white-faced, still, amazed beyond speech. Dick Gale's advent in Casita, his rescue of Mercedes, his life as a border ranger certainly lost no picturesque or daring or even noble detail in Belding's telling. He kept back nothing but the present doubt of Dick's safety.

Dick's sister was the first of the three to recover herself.

"Oh, father!" she cried; and there was a glorious light in her eyes. "Deep down in my heart I knew Dick was a man!"

Mr. Gale rose unsteadily from his chair. His frailty was now painfully manifest.

"Mr. Belding, do you mean my son—Richard Gale—has done all that you told us?" he asked, incredulously.

"I sure do," replied Belding, with hearty good will.

"Martha, do you hear?" Mr. Gale turned to question his wife. She could not answer. Her face had not yet regained its natural color.

"He faced that bandit and his gang alone—he *fought* them?" demanded Mr. Gale, his voice stronger.

"Dick mopped up the floor with the whole outfit!"

"He rescued a Spanish girl, went into the desert without food, weapons, anything but his hands? Richard Gale, whose hands were always useless?"

Belding nodded with a grin.

"He's a ranger now—riding, fighting, sleeping on the sand, preparing his own food?"

"Well, I should smile," rejoined Belding.

"He cares for his horse, with his own hands?" This query seemed to be the climax of Mr. Gale's strange hunger for truth. He had raised his head a little higher, and his eye was brighter.

Mention of a horse fired Belding's blood.

"Does Dick Gale *care* for his horse? Say, there are not many *men* as well loved as that white horse of Dick's. Blanco Sol he is, Mr. Gale. That's Mex for White Sun. Wait till you see Blanco Sol! Bar one, the whitest, biggest, strongest, fastest, grandest horse in the Southwest!"

"So he loves a horse! I shall not know my own son. . . . Mr. Belding, you say Richard works for you. May I ask, at what salary?"

"He gets forty dollars, board and outfit," replied Belding, proudly.

"Forty dollars?" echoed the father. "By the day or week?"

"The month, of course," said Belding, somewhat taken aback.

"Forty dollars a month for a young man who spent five hundred in the same time when he was at college, and who ran it into the thousands when he got out!"

Mr. Gale laughed for the first time, and it was the laugh of a man who wanted to believe what he heard yet scarcely dared to do it.

"What does he do with so much money—money earned by peril, toil, sweat, and blood? Forty dollars a month!"

"He saves it," replied Belding.

Evidently this was too much for Dick Gale's father, and he gazed at his wife

in sheer speechless astonishment. Dick's sister clapped her hands like a little child.

Belding saw that the moment was propitious.

"Sure he saves it. Dick's engaged to marry Nell here. My stepdaughter, Nell Burton."

"Oh-h, Dad!" faltered Nell; and she rose, white as her dress.

How strange it was to see Dick's mother and sister rise, also, and turn to Nell with dark, proud, searching eyes. Belding vaguely realized some blunder he had made. Nell's white, appealing face gave him a pang. What had he done? Surely this family of Dick's ought to know his relation to Nell. There was a silence that positively made Belding nervous.

Then Elsie Gale stepped close to Nell.

"Miss Burton, are you really Richard's betrothed?"

Nell's tremulous lips framed an affirmative, but never uttered it. She held out her hand, showing the ring Dick had given her. Miss Gale's recognition was instant, and her response was warm, sweet, gracious.

"I think I am going to be very, very glad," she said, and kissed Nell.

"Miss Burton, we are learning wonderful things about Richard," added Mr. Gale, in an earnest though shaken voice. "If you have had to do with making a man of him—and now I begin to see, to believe so—may God bless you! . . . My dear girl, I have not really looked at you. Richard's fiancée! . . . Mother, we have not found him yet, but I think we've found his secret. We believed him a lost son. But here is his sweetheart!"

It was only then that the pride and hauteur of Mrs. Gale's face broke into an expression of mingled pain and joy. She opened her arms. Nell, uttering a strange little stifled cry, flew into them.

Belding suddenly discovered an unaccountable blur in his sight. He could not see perfectly, and that was why, when Mrs. Belding entered the sitting-room, he was not certain that her face was as sad and white as it seemed.

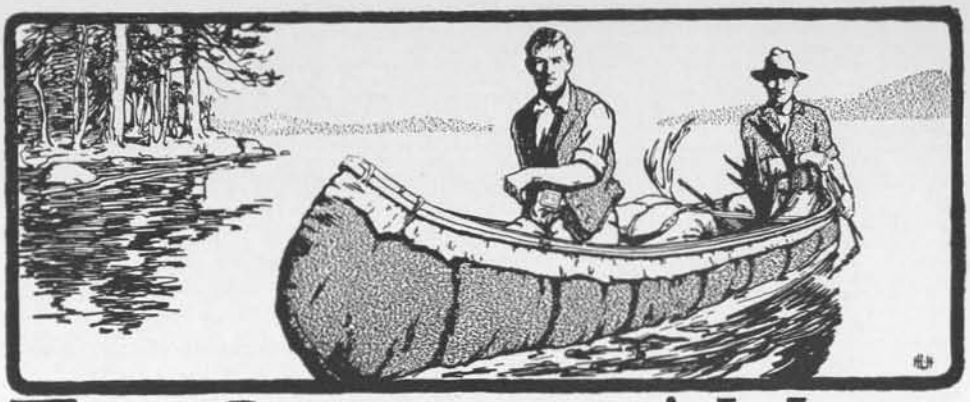
(To be continued)

BESIDE THE TRAIL

Waiting under the cold, gray sky,
On a frozen trail where the geese wing by.
Waiting for winter—the ice-winds sigh
Over the barrens brown.
Dreams are unbroken by the journeying car.
The wanderlust-road has wandered far.
We watch the light of the polar-star,
And dream of the distant town.

The starlight falls on a distant mound,
Where the silence of ages are camp't around.
We only can guess of the treasures he found,
In the lair of the northern-light.
Though silence has bound him, perhaps in dreams
He is back again on his native streams.
The cold wind gossips, and the white mound gleams,
Out there in the Arctic-night.

CHART PITT



The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, dogs, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

A FEW "BOILED DOWN" VACATION HINTS

Albert Marple

It is impossible for any one man to know all there is to be known in the line of vacation hints, and for that reason we would like to offer a few suggestions which we have gleaned from various sources —experience, observation, etc.

Few people know how to properly pack their camping outfit. I have found this an excellent method: Lay the bedding on the ground, extended full length, and fold so as to be not more than three feet in width. On one end of the bedding lay the pocket roll, containing clothes and toilet articles, and then roll it up inside the bedding. Fasten the entire roll with strong cord or straps and pull the dunnage bag over the whole thing.

Woolen socks are the best to wear in the mountains on any vacation. They are easy on your feet, keep out the heat and lose the heat of the foot six times as quick as does the cotton sock. White woolen socks are especially good for tramping trips. The same argument holds true with the woolen shirt. It is coolest on a warm day, keeping out the heat of the sun, and on a cool day it keeps the warmth of the body in.

A dandy waterproof match safe may be made by securing a six-inch piece of a discarded tube of a bicycle tire, which may be secured at any bicycle shop. Put the matches in this and tie up the ends. A perfectly waterproof safe results.

To waterproof a tent first secure two clean pails. Into each put two gallons of boiling rain water. In one of these dissolve one-half pound of sugar of lead; in the other, one-half pound of alum. When the liquid in each has stood until it is clear, pour the sugar of lead into a clean wash boiler and add the alum water. Let the mixture stand about four hours. Then pour the clear liquid into another tub or boiler, put in your tent and thoroughly immerse it, being particular that every spot is covered. Rub the goods well with your hands and work it all over. Rinse the tent, stretch it and hang it up to dry.

The best grease known for waterproofing shoes is made by securing from the drug store a cake of cocoanut butter and a small quantity of beeswax. Melt the butter and add the beeswax in the proportion of one part of beeswax to six parts of the butter. Warm the shoe thoroughly to open the pores of the leather and rub in the melted waterproofing while hot. Repeated warming of the shoe and application of this preparation will thoroughly fill the pores of the leather and also the stitching. The cocoanut butter when cold hardens somewhat like paraffine, but not sufficiently to seal the stitching. There the beeswax gets in its work.

A sure cure for foot blisters is to prick the blister with a needle, press out the contents and cover with hot zinc oxide.

A successful way to pack fish is to wrap them in several thicknesses of paper or grass in such a way that no ice can touch them. Place them in a wooden box, one that will allow the water to seep through when the ice melts, as nothing will rot fish quicker than to let them lay in water.

Here is a good way to dress trout. Dress a small trout by tearing out the gills with thumb and forefinger and drawing the insides out with them. In a large trout the gills should be cut free from the lower jaw and back of the head and a slit cut along the under side from head to fin. The insides are then drawn out by the gills, leaving the fish clean within.

A trout leader hint. For the trout, fly-rod leaders longer than six feet should not be used because of the danger of reeling the leader knot through the tip guide, thus locking the line. The six-foot leader is best for three flies, but for two flies, the preferable number, a five-foot leader is sufficiently long.

A satisfactory method of preventing attacks from flies and mosquitoes is to use oil of citronella. This should be rubbed thoroughly over one's body before going to the woods or before retiring. It may be used without causing any ill effects and is not unpleasant.

Unless a person is accustomed to

sleeping on the ground this should not be attempted. Burlap sacks filled with dry leaves make a good mattress. A light canvas hammock or piece of canvas stretched to a framework of saplings and suspended off the ground will prove an acceptable bed.

If in the region of the seashore do not endeavor to prepare a meal on the beach. One healthy gust of wind will blow enough sand into your "grub" to ruin it.

I find that a good way to keep fish is to scale, clean and behead them, then string them on a cord through their tails and hang them, body down, in a shady place which is dry and has plenty of breeze. Fish that have been lying in the sun for any considerable length of time should be thrown away. Ptomaine poison works in a mysterious way. Never put fish on a string to keep them in water until you start home. This is a very slow death for them. If you have no fish box or net, kill and bleed every fish as soon as caught. If treated in this manner the fish will be much more firm and palatable.

Care should be taken with the camp fire, and the camper should always scrape the ground free from all leaves and brush before starting the fire. After the meal is cooked make sure that the fire is entirely extinguished before leaving it.

HIS FIRST WILD TURKEY

A Reader

Conway had reached his twelfth year, and had bought himself a new 20-bore shot-gun, when I decided to take my annual outing trip in the month of November. Old Lunenburg County, with its picturesque hills, its vast forests, its numerous valleys, penciled here and there with its small streams and its half cultivated "low-grounds," presented the country of our choice for this memorable vacation.

A few hours' ride from the Eastern Shore of Virginia brought us to the hospitable home of our esteemed friend, J. M. Wood. When the train rolled in to the station, a glance from the car-window caught the familiar face of Mr. Wood, who was there waiting to give us that warm old Virginia welcome—so characteristic of the best class of men of this locality. After reaching this attractive home, meeting warm friends, enjoying a hot supper and chatting about past experiences in hunting wild turkeys and deer, we soon planned a turkey-hunt for the coming morning. Conway listened to these hunting stories with intense interest and delight, as Mr. Wood told of how many old gobblers he had merely wounded with the old-fashioned muzzle-loading shot-guns, when using cheap black-powder. Some of these stories were ludicrous indeed, and would lead the hearer to believe that to be sure of a wild turkey, after you had shot him down you had better see that his throat was cut even if he appeared dead!

The next morning, when the sun rose in the clear sky, two horses were saddled and put at our disposal. Little Conway, to my astonishment, leaped into the saddle of one of these—a beautiful, graceful, little mare, and rode off like a born horseman. As we passed over the hills and viewed the varied landscapes, the changing colors of autumn leaves, and caught the fragrant odors of the dying vegetation upon this crisp, frosty air, Conway exclaimed in his boyish enthusiasm: "Mr. Wood, this is simply ideal."

After a short ride, our dog, "Sport" (a handsome English setter, and the finest turkey-dog I ever saw), attracted our attention with a bark. "There!" said Mr. Wood, "he has flushed them." We immediately hurried to the spot and began to build a blind. While Conway and I were building this, Mr. Wood remarked: "I am afraid this is not a good flush. I think Sport has flushed only two scattered turkeys. You may go on and finish your blind, and I will take a wider range and see if I can get a better flush. If I succeed, you will soon hear from me." We had barely finished our blind when Mr. Wood returned and reported that he had gotten an excellent "flush" within less than a half-mile distant, and that we should go there and build our blinds. Of course, we took his advice. When we reached the place of the second "flush" we entered a body of woods called "old field pines," adjacent to a larger body of oak forest. Here, in these pines, upon the crest of a hill, we built our new blind; and Mr. Wood selected another place, about three or four hundred yards away, for his blind. When Conway and I had been resting in our blind for about an hour we were suddenly startled by the loud yelp of a turkey. "Hush! What is that," exclaimed Conway. "Isn't that a turkey? Father, get your yelper." I stopped him and listened. The sound soon came again, still louder, from the "bottoms" in front of us, apparently about two hundred yards away. I immediately took up my yelper and gave two notes. The turkey stopped his yelping, and Conway exclaimed in disappointment: "There! you have frightened him." I whispered: "Keep quiet and listen." A moment of silence—and then came a still louder yelp. I at once put my yelper to my mouth and gave a bolder yelp. Then putting it down, seized my gun. Conway followed my example with eager expectations. Another yelp came again and again, followed by a gobble. "Listen, he is gobbling," whispered Conway with much excitement. And before we could realize it the turkey was standing behind a pine tree, with only its tail exposed to our view, at a distance of only about twenty yards. A moment later, however, I found that the turkey had left this pine and was hurrying down the hill. Now was my last chance. I leaped up, and as the turkey appeared about forty yards away between the pine rows, I fired. At the crack of my gun I hurried from my blind, and to my delight, found my prize, lying upon its side, dead.

Mr. Wood soon came up as Conway was admiring the turkey. "Well, I'll declare! You have killed the old hen!" "Well, if it is, it is the largest hen I ever saw," I replied. "Old hen!" exclaimed Conway. "Why, Mr. Wood, he must be a gobbler, for we heard him gobble." "That makes no difference—an old hen often gobbles when she is calling her flock to her, and it is always a good sign that she is preparing to leave that locality. I make it a rule when I hear her gobble to send the dog after her and drive her out of the woods."

This ended our first day's sport.

(To be continued.)

TWO UNUSUAL EXPERIENCES

FIELD & STREAM PUB. CO.:

Your readers will perhaps be interested in two very interesting experiences that came to us while fishing on the Crow Wing Lakes, in Hubbard County, Minnesota, at Crescent Beach Camp, this summer.

Guide Emory Woods, known to many fishermen, was in charge of the boat and we were drifting down Crow Wing River to First Crow Wing Lake, casting for bass. The river is flanked on each side for the most part with a heavy growth of rice grass, but at this particular spot, there was a low bank, about a foot above the water, covered with red top.

On approaching a bend in the river, within about 30 feet of the bank, I looked around and saw what at first seemed to be a large boa constrictor, but, upon close inspection, it proved to be animals walking closely one after the other, their backs arching over the grass, making the appearance of a snake traveling. I at once asked the guide what in the world it was and he exclaimed, "That's a mother mink with seven of her puppies." They were walking as closely as they could, one after the other, and did not see us until we got within about 20 feet of them, whereupon they at once bunched around their mother, looked at us for a moment and then scurried off to a pile of logs, on which they again stood on their hind feet and looked at us and then hurried off to the woods.

Hunters and trappers in that country to whom we told the story said they had never seen such a sight.

A day later, while floating down the river in company with Mr. A. Inglis, of Lafayette, Ills., while casting for bass, we had another experience. He was using a floater and I was casting with a wobbler. We both cast at the same time and nearly at the same place, to the edge of the rice grass. Each got a strike. My bass broke water twice and made a fine fight. When Mr. Inglis got his about halfway to the boat, he exclaimed, "I have two on my hook." After considerable difficulty, I got my bass in the boat and it weighed 4¼ pounds. He got his two in the boat, a 4¼-pound bass on the tail hook and a 2½-pound bass on the belly hook, making a total of 11 pounds of black bass for the two of us in one cast.

C. L. BROKAW.

CONSERVATION

THE HORNADAY PLAN FOR GAME INCREASE

Millions of acres of our national forests now are utterly destitute of game worthy of mention. Over thousands of square miles in the West and the East you now can hunt till doomsday without finding a four-footed animal worth shooting as food. Vast opportunities to create a great annual supply of big game are being wasted by lack of intelligent and resolute action.

The Hornaday plan proposes an enormous increase in game that may legitimately be killed for food purposes. This can be secured without loss to any other industrial interests. All that is needed is a safe and sane law, honestly enforced, and a little patience in waiting for results.

The following basis has been agreed upon, informally, by the officers of the U. S. Forest Service, the Biological Survey and W. T. Hornaday.

(1) A federal law empowering the Secretary of Agriculture to select and delimit areas in national forests suitable for game sanctuaries. (2) These sanctuaries shall be established by Presidential proclamation. (3) These sanctuaries shall be so located that they will not occupy lands chiefly suitable for agriculture. (4) These sanctuaries shall be located where they will interfere to the least extent practicable with the grazing of domestic stock, especially the stock of actual settlers. (5) These sanctuaries shall be established with the approval of the Governor of each State concerned. (6) It is expedient to establish a large number of sanctuaries of medium size rather than a few large preserves. (7) The ideal condition would be a chain of sanctuaries which in time would restore game to all the intervening territory. (8) Administration will be vested in the Secretary of Agriculture. (9) Boundaries are to be settled after full consideration of all conditions. (10) Predatory animals are to be killed. (11) The object of these sanctuaries is to provide breeding places for game which will spread over adjacent territory, where it will be subject to the regular open season provided by law. This will prevent danger of overstocking the ranges. It will therefore not be the general policy to extend these sanctuaries.

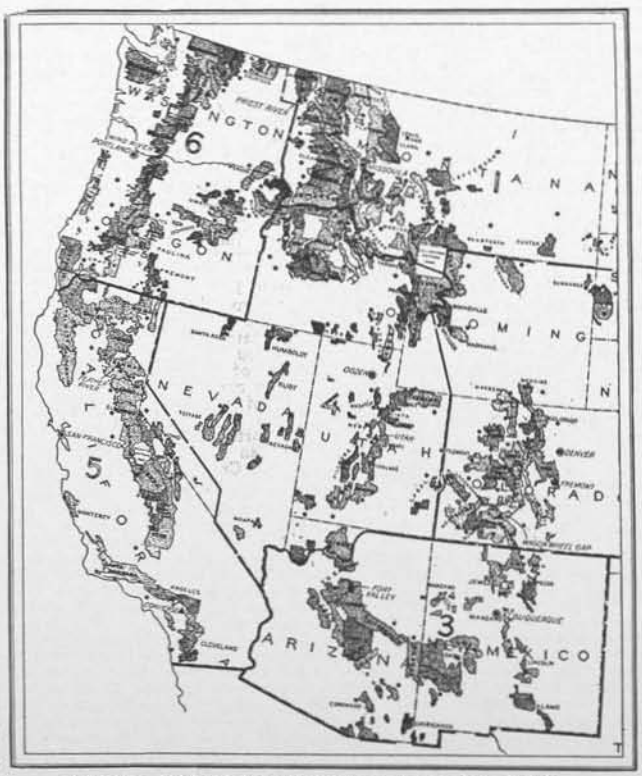
In addition to the above, it is to be understood that the final success of the plan contemplates strict regulation of the game that may and may not be killed annually, the same as obtains in the deer forests of Europe. A large stock of game must be kept alive so that the annual increase will yield a large food supply that will be permanent.

Now the question is: Is it worth while for the American people to take the trouble to make the increase in their annual food supply that this plan proposes?

Dr. William T. Hornaday, representing the Permanent Wild Life Protection Fund, calls upon the men of the West for definite and outspoken endorsement for his plan for the making of at least a hundred game sanctuaries on waste lands in national forests. He says that if enough Western men and women will ask their members of Congress to enact the idea into law, it will be done.

Heretofore, the exponent of this idea never has permitted his name to be attached to any bill or plan for the protection and increase of wild life. Now, however, he admits that there will be a distinct advantage in calling his program for the increase of game in national forests the "Hornaday Plan." The proposition needs a short and handy name that will fix its identity anywhere.

In Congress, the measure will undoubtedly take the name of the Senator who introduces the bill to carry the plan into effect. Just who will be chosen to champion this particular cause in the two houses is yet unknown. Even though the next session of Congress will have to consider many very serious questions concerning the national defenses, the raising of additional revenue and the repeal of the mistaken shipping law, there is no reason why a game measure of importance to millions of people should not have its day, and be passed.



NATIONAL RESERVED FORESTS WEST OF THE GREAT PLAINS

THE WORK OF THE MONTAGNAIS FISH AND GAME CLUB, FUNDS FOR THE CANADIAN RED CROSS SOCIETY

FIELD & STREAM PUB. CO.:

Possibly you may be aware of the movement on foot to secure

contributions to the Canadian Red Cross Society, a movement that was started by some of the members of an American hunting and fishing club, but which has since been taken up by a majority of the sporting clubs leasing preserves in Canada. Will you not bring to the notice of your readers the enclosed copies of circulars sent out in July to the clubs mentioned, to the end that some of our unattached American sportsmen, who have experienced Canadian hospitality, may be induced to assist in this good work? Up to date, twelve clubs have contributed $825 and many other clubs are helping or have promised to help in the near future.

Individual contributions may be sent to Mrs. Helen A. Sewall, President Canadian Red Cross Society, 60 Louis Street, Quebec.

A number of newspapers and many personal letters from hunting and fishing clubs and individuals testify to the appreciation of our Canadian brothers.

W. B. MILES, Secretary,
Montagnais Fish and Game Club.

DEAR SIR.—At a recent gathering of some of the members of the Montagnais Fish and Game Club, a discussion took place as to the advisability of collecting from our members contributions to a fund to be turned over to the Canadian Red Cross Society. As a result of said discussion we issued a circular, a copy of which is enclosed, and which states our feelings and thoughts on the matter. The response was most satisfactory; our check has gone forward and has been gratefully acknowledged by Mrs. Helen H. Sewell, President of Canadian Red Cross Society, 60 Louis Street, Quebec.

We realized that other hunting and fishing clubs with members residing in the United States, and holding leases on preserves in Canada, might feel as we did if the matter was brought to their attention, and so I take the liberty of addressing you, and trust you will see your way clear to bringing the matter before the members of your club, to the end that a good cause may be helped and that we may all in a slight way show our sympathy for the country that makes our clubs possible, at a time when she needs help.

Every hunting club with a preserve in Quebec has received a copy of this letter and the Canadian Red Cross Society awaits results.

Respectfully yours,
W. B. MILES, Secretary,
Montagnais Fish and Game Club,
390 Cherry Street,
New York City.

GREAT SUCCESS IN BRINGING BACK BIG GAME

A Revelation from British Columbia

Elk and Moose Return; Mountain Sheep, Goats, and Bears Become Plentiful; White-Tailed Deer Make New Records as a Game Supply

In 1906, following a memorable hunting exploration in the Elk River country, East Kootenay district, British Columbia, John M. Phillips and William T. Hornaday besought the government and people of British Columbia to make that region a game preserve. In it goats were plentiful, sheep could be found by hard hunting, one elk was seen in thirty days, but moose were totally absent.

In 1898 the Elk River Game Preserve was created, and Campbell J. Lewis was appointed its game warden. Of course all hunting in that region (of 550 square miles) ceased at that time.

A recent request from Dr. Hornaday to Warden Lewis for a statement of game conditions at this time in the Elk River Game Preserve elicited the following report:

REPORT OF GAME WARDEN LEWIS

"Your request for data on the East Kootenay Game Preserve comes at an opportune moment. I have just finished a partial patrol of its boundaries, and while I was well aware of a material increase of the wild things within its confines, in my wildest dreams I could never have imagined game so plentiful as it is at the present time on that game preserve. On our first day out—and please note we were not hunting, or taking any pains to conceal our presence—we saw twenty goats, five sheep and one black bear. No account was kept of feathered game, of which we saw a goodly number, chiefly sooty grouse. The other five days we were out we saw a proportionate number of that sighted on the first day of our journey, including six elk (wapiti) and one large grizzly bear.

"Our route of travel was by the way of Brule Creek (Avalanche Creek), taking in the heads of its various tributaries, and thence westward across the divide to Bull River.

"In your book, 'Camp Fires in the Canadian Rockies,' I remember your remarking on the incident of your meeting a bull elk. The occurrence at the time of your visit to this district was, no doubt, worthy of note. You will therefore be surprised to learn that such an occurrence to-day possesses for the traveler in the mountains a momentary interest.

"To give you some slight idea of the spread of the elk over the East Kootenay region, I may mention the fact of those animals having been seen on Sheep Creek, a few miles north of Ft. Steele. They have even been seen as far south as Rock Creek, three miles west of the village of Elko. Bull River, Fording River, and east fork of White River all have their quota of this splendid game. As a friend of mine recently remarked on visiting the upper Fording River, 'the valley country has no trails but elk trails, and these cut up the valley so that it reminds one more of a plowed field than anything else.'

"Moose have again made their appearance in the Elk River valley, and are wintering there in small bands of two or three. Last summer a cow dropped two calves in the vicinity of C. P. R. headquarters, about forty miles north of Michel. Quite a number spend the greater part of the summer on the big meadows of the west fork of the Elk River.

"Speaking of the west fork reminds me that a large number of sheep have found their way into the west fork basin. Formerly this country was considered devoid of animal life, but recent investigation has proved the contrary. Goats abound, sheep are fairly plentiful, while moose have evidently filed their pre-emption records. The moose in this bit of country came in from the head of the Palliser River, through a pass that I discovered while making recent investigations in that part of the district.

"Sheep are doing well in all parts of the district. Contrary to popular opinion, sheep have not the horror of railroads or steam whistles that they are credited with. As a case in point I may make mention of the fact of my seeing eight sheep on the mountain above Elko. This, mark you, was within sight and hearing of busy railway traffic. Another instance to prove that wild game can accustom itself to the sights and sounds of civilization is the fact of a band of sheep having been seen about three miles from Elco by two neighbors of mine who were fishing in the south fork of Elk River.

"It may interest you to learn that pin-tailed grouse are here to stay. Since the logging off of the forest lands in the southern portion of Fernie District, and the subsequent forest fires that from time to time have swept the logged off areas, pin-tailed grouse have found an excellent harborage in the tall grass and young undergrowth that has sprung up in the wake of the fires. They are now present in large numbers.

"Since we are on the subject of logged-off areas, I may as well introduce the subject of the Virginia deer. Grave forebodings filled the minds of many of our sportsmen that the cutting of timber, and the consequent restriction of the range of the white-tailed deer, would prove disastrous to the latter. Such a contention, while perhaps theoretically correct, is not borne out by the facts. Much of the deer range has been cut and burned away, it is true; but it cannot be said that the white-tailed deer is in any immediate danger of extinction. Close observation of this species of game has forced me to the conclusion that *the deer are gradually adapting themselves to a new habitat. Where formerly they descended in hundreds to the lower levels to winter, I now find them living through the winter months in the high fir forests on ground that from its natural inaccessibility cannot be logged for many generations. They are harder to get, without doubt; but they are there in myriads, if one is man enough to hunt them.*

In view of the effort now being put forth under the auspices of the Permanent Wild Life Protection Fund for a large increase in the supply of big game throughout the national forests, the report of Warden Lewis on the new habits of the white-tailed deer have deep significance.

SHOTGUNS AND RIFLES

MORE POWER IN THE SHOTGUN

Edward C. Crossman

Part I.

Probably I've got the instincts of a game hog. Probably you have not, and ergo cannot appreciate my feelings. A case in point was a recent trip we made to a certain California mountain lake, frequented by luscious canvasbacks and redheads.

Now, this lake, lying just 7,000 feet above the sea, which could be seen from the hills around it, is about six miles long, by a mile wide. A few miles from it is another, this one very shallow.

From the first bad weather in Northern California until these lakes freeze—three or four months, say—these magnificent and comparatively rare ducks loaf on these lakes by the thousands.

In good weather there is but one way to handle them—that is to frame up an entertainment for their benefit, get six or seven boats, and then row up the lake, driving the ducks ahead, until finally, nervous over the constant attention, and the approaching end of the lake, they rise and break back. The parties in the boats, and in the blinds built on rafts on the lake, then get shooting.

Let me say, before going farther, that after you've pulled a confounded sheet-iron floating bathtub a matter of five or six miles, you don't feel like overlooking any bets when the shooting starts, particularly when said shooting may last a total of perhaps 20 minutes. Twenty gauge, bah!

B. L. and I took 20-bores with us. I swear by the 20-bore, nor did experience with ducks within decent range and some without decent range do aught to alter my opinion of the little gun. The birds that came back low—wire-tails and spoonies—bumped against as many loads from the 20-bores as they did from the 12's around us. Also, brethren, put not your trust in factory 20-bore loads until you've tried out said factory loads in all combinations possible to get and know that you've got the best possible food for the little gun. Some factory stuff won't develop two-thirds the full efficiency of the little gun in pattern and penetration and evenness of work shot after shot—and you cannot afford to let anything undone that will serve to get all there is possible to get from the reduced bore.

B. L. and I hastily seized on to what factory stuff we could get, not having any duck loads framed up, as we had framed up our quail loads. The results were not pretty—but we'll pass on.

As I started to say, the big birds—the "cans" and their doubles the redheads, and the few others that mixed with them—didn't pull off any fool stunts of breaking through the line close to the water in returning to the clear end of the lake. They rose to a height they considered safe—one at which their casualties were not enough to be noticed—and at this height they went over the boats. Back a mile or so they dropped and hunted up new loafing places.

Regular flight there was none, feed in the way of plants abounded on the lake. Save for storms and the interruption of the boats, they would stay comfortably put apparently until the ice came.

Here was a case where the biggest gun was none too big—and smaller ones were too small in the proportion of their smallness. I didn't see all the guns used, but from the way some of those big ducks came out of the sky and then bounced on the lake, I suspect that full-grown 10's and buckshot must have been the program for some shooters.

Ordinarily, in these days of small-bag limits, the ordinary man can get full satisfaction in the course of his day's shooting, with the small 20-bore. Up to 50 yards I've never been able to see the difference between the 20 with loads accurately suited to its peculiar individual cases—and the ordinary 12-bore. Both kill ducks if you lead the duck the right distance, and after the duck is dead the manner of his taking off matters but little save as one gun is more pleasant to shoot than another.

But when it is a case of pulling them out of the sky or going without, I desire to say that I want a gun that will perform said sky-pulling stunt. Occasionally during the drives on the lake, a bird would suddenly shoot limply for the water far below. He'd hit so hard, he'd bounce. Then from the rest of the line would go a delighted yowl——

"Ya-a-a-a-y, what in ——— you shootin' over there, buckshot?"

I yearn to be the party suspected of using said buckshot. I hanker to be the recipient of the congratulations of a half-mile of rough-neck duck-shooters for getting them out of the blue empyrean.

Ordinarily I believe the average duck-shooter could not do much better with bigger guns and heavier loads than he does with his stiff 12-bore combination of 1¼ ounce of shot, and 3¼ drams of smokeless, so long as the shooting is at single birds. Beyond the killing range of that load, judgment of distance and consequent necessary lead is so hard that killing would begin to partake of the fluke order, not a fluky pattern that happened to catch the bird right at longer range than the gun's average ability, but a fluky combination of correct judgment of distance and lead and swing.

But time and again—like this lake-shooting—whole flocks of big ducks come over, and if your lead was anywhere near right, if you didn't connect with one, you'd stand a good chance of connecting with another. Here's the province of the bigger gun or load or both—when the ducks become educated, and fancy they know all there is to know about shotgun ranges. You know quite well that ducks will seemingly act as if they knew to five yards how far a gun would kill, and then will keep just outside of the danger space.

The days of the 10 bore are over. Lots of 10's flourish among our best duck-shooting citizens, but ask the factories or the gun dealers how many they sell in a year. The 10 is taboo at the trap. The stock of 10-bore shells in a store is about like the stock of 28-bore shells—and I cannot say anything worse about a stock of shells than this.

So the 10 bore is not the gun it was of yore. Ordinary citizens like to stay with a gun that can be used at the trap, and for which a decent choice of food is offered at the dealer's. It is a bit peeving to go into the store and find your choice restricted to two loads, one small shot, the other large. You can go about as far as those in charge of painting the old schoolhouse and who were told to paint her any old color so long as she was red.

Evidently the party departing from the fold of the 12 or the 16 or the 20 bore, all of which are well represented on the shell shelves of the average store, is going to get grief. He has to buy his shells in case lots to get anything worth firing at mudhens, and he's forever barred from the company of those that play at the traps so long as he uses that big 10 bore or 8 bore or whatever it is he uses.

Only the ownership of a lot of guns or the chance at oodles of good duck shooting, albeit hard duck shooting, can possibly justify any man in sinking his money in a bore larger than the 12. Also, you can do work with the 12 bore, specially prepared for the purpose, that you cannot get out of the 10 loaded with ordinary American factory loads. True, you can also load up your 10 to its full capacity by getting shells loaded to your order, but it is well to keep in

mind that the party with the 12 bore and shells specially loaded for it can shoot circles around the man depending on the stock loads for his 10.

Also, the man with the special 16 can outgun the man with ordinary 12-bore loads, although here the 12, with its many loads, can be loaded to nearer its full capacity right from the dealer's shelves.

For example—although, not owning a chronograph, I cannot quote figures—take the fastest load I can find for the 12 on the shelves of a big dealer—28 grains of powder and 1 or 1⅛ oz. of big shot. Then take a special 16-bore load used by Hedderly, one of the most skilled duck shots on the coast—a load of 3½ drams of powder, and ⅞ oz. of big shot.

At 60 yards that wonderful-shooting 16 will put as many pellets into the killing circle as a good 12 with the ounce load, and outpattern most 12's. By outpatterning I mean actually put more pellets in, not a greater percentage for the shot actually used in the load.

The velocity for the 16 is far higher than that for the 12, while bulk powder in the reduced bore gives better shooting than the heavy load in the 12. On tough birds, like cans, the 16 bore has it on the 12 by a considerable margin, and the more average the 12 the farther it falls behind, because that 16 is a marvel at holding pattern, in spite of very high velocity—and velocity is what kills when the birds are tough and heavily feathered. Actual test over too many years and too many birds for doubt has shown this 16 in the hands of its skilled owner to be capable of getting the limit more speedily than any 12 that has yet shown up on the club, and getting birds that the 12's pass up.

Of course, here is a case of a special gun and specially worked-out loads against ordinary 12's and ordinary loads, but the man desiring success has to pay for it with a bit of trouble.

But we can extend our 12 bores so far by special chambering and boring and loading that no 16 can hope to compete—in fact, lap them over into the 10-bore class with some to spare.

(To be continued)

A LETTER FROM DAN J. SINGER

FIELD & STREAM PUB. CO.:

Just back from sheep hunt. You will see by the enclosed clipping I had a good trip.

Of the several varieties of sheep, the *Ovis dalli* is found to have the smallest average base. Their curl of horn, however, is usually longer and makes a more graceful and complete turn.

In the Kenai range (where I hunted) there are very few 14-inch rams left; all mine showed 14 inches at the base. The best ram measured as follows: Base 14, curl 38, spread 23½. This, I think, is the best head that has been taken out of here in several years. My big ram of last year, showing a base of 17¼ inches, had a curl of only 34.

I saw a moose and am quite sure it would have measured 70 inches. He spent the whole afternoon within 400 yards of my tent. I am through with the moose family, so did not shoot.

In a few days I take the steamer to a town called Anchorage, which is at the head of Cook Inlet. This is what they call a tent town and does not show on the maps, as it has come up over night, so to speak. Here I am to meet a man, who will come over from Sunrise in his power-boat, and then coast down the Alaska Peninsula for brown bear.

The weather up to the present time has been extremely mild; in fact, the weather has been warmer on this hunt than any trip I have ever been on, with the exception of South America.

DAN J. SINGER.

Noted Hunter in from Lower Lake Country

Daniel J. Singer, hunter of national fame, is here, having just returned from Skilak Lake and Benjamin Creek with Tom Towl as guide. While out, Singer, who hunts only large game, got three mountain sheep, the largest of which had horns measuring 14 inches at the base, with a 23½-inch spread and a curl of 38 inches.

"We saw several large moose," said Mr. Singer, in speaking of his trip to-day, "but as I have some fine heads mounted we did not take any." This is not Singer's first trip to Alaska, although it is the first to this district. In 1913 he, accompanied by Judge Ford, hunted big game in the Cassiar district, and it was here that he secured the fine moose heads. It is of this trip he writes in his book, "Big Game Fields of America, North and South," which relates the most dramatic and interesting moments of all his hunting trips.

From here Singer goes to Anchorage to meet Nate White, who will take him down the Alaska Peninsula in his power-boat to hunt brown bear, the only species of big game which Singer has never been after.

HUNTING THE MYSTYK

By H. P. Sheldon

Pete and I had lost interest in skiis and webbed shoes to such an extent that we regarded these things only in the light of convenient equipment when it became necessary to get anywhere over the deep snow. Regardless of our earlier enthusiasm anent these aids to winter travel, a too constant association had robbed them of their charm and forced us to assume a most utilitarian standpoint. The proverb, "A quail a day for thirty days, etc.," and calculated to demonstrate the alienating influence of propinquity, as applied to the joys of the gourmand, is no less true of the rarities of recreation.

The time had been when a dash down a snowy hillside would furnish enough thrill to justify the toilsome climb upward; but it began to dawn upon us that there was as much climbing as there was sliding—and apparently a little more. Being of average intelligence we soon discovered that a balanced recreation was as essential to our spiritual equanimity as a balanced ration was necessary to our physical welfare.

THE "MYSTYK"

Cold weather and deep snow are excellent and pleasant things, furnishing as they do, a grateful contrast to the humid reign of Summer; but they cut one's schedule of pleasures badly and reduce the list of what one may do out of doors. The praiseworthy feature of winter, so far as I am concerned, is the fact that it prepares one to properly welcome spring.

The winter just passing was more unkind than any of preceding years. The snow as it came was invariably followed by rain, so there was always a thin glaze of crust spread over field and wood lot alike; it made tramping after rabbits, or just plain hiking for fun, a toilsome, noisy drudgery, vain as to rabbits and sterile as to fun. No matter how high the enthusiasm at the outset it was bound to fade under the constant strain of tinkling, crashing progress, and hard-fought, infinitesimal gains; so that we usually sought relief in a conventional return along the beaten path of an easy-surfaced logging road. The snow was not suitable to ski work; on the levels it was a treacherous, frictionless film, incapable alike of bearing one's weight staunchly, or yielding to it gracefully; while a glissade down a steep hill was an adventure fraught with interesting—and painful—incident sure to feaze even the more enthusiastic coasters.

We could still resort to our rifles and pistols for amusement, though they promised little enough as we were not equipped with even a passable indoor range, and orthodox range shooting under existing weather conditions was out of the question.

"If we could only patent some kind of a target that would be interesting like rabbit-shooting and likewise give us enough exercise to keep warm on, we'd have it about right," said Pete. "Trouble with ordinary range-shooting at this time of year is that you've got to go barehanded so blamed much. As far as I'm concerned there's two can'ts in my bright lexicon; I can't, with my left hand, fish a nickel out of my right hand pants pocket, nor I can't

REAR VIEW OF THE MYSTYK

stick a little, slippery wad of paper over a bullet hole with boxing gloves on."

"The running deer target which they had at Perry would be just the thing," I observed, "one of us could pull string while the other fellow shot, then reverse, and everybody keep het up."

My remark gave Pete the germ of an idea. "By grab," he ejaculated, "we *can* have a running deer target. Fix it up on skids and she'll slide over this snow like a drunkard to a campmeeting. And we'll get Lee, the lawyer, to come up and bust himself trying to hit it."

With that idea we repaired to the shop where with glue pot, hammer and nails we fashioned a cardboard animal, the like of which was never upon land nor sea. An archeologist might have mistaken the beast for some relic of prehistoric ages, except that the reverse side bore a glaring advertisement concerning So-and-So's biscuits.

As Lee pointed out, this legend advanced the critter past the age of protoplasm at any rate.

Pete advanced an opinion which, if not as learned, was at least descriptive. Said he, as he reviewed the result of our handiwork with an appraising, judicial eye, "Which it don't look like anything that I ever had the misfortune to meet. It might be a cartooley, or it might be a hoodan and live on mollusks and beer, or, again, it might be one of those curious dinguses which Stewart Edward White goes huntin' for. It's a 'she' all right, 'cause it looks like it could travel backwards or forwards, or up, or down, also, it looks as if she didn't know which way she was going herself."

We took the cue from the expert's opinion and "She" she remained until circumstances rechristened her.

The next day came bright and sunshiny but cold enough to make the pines, which clustered in the hill pastures, take on that deep blue color which, though it indicates present cold weather, also presages a thaw. The reflected light from the snow brought an involuntary squint to one's eyes and the crisp, still air touched the membrane of the nostrils like a breath of fire.

Nevertheless, it was a beautiful day, and we took "her" out to a suitable hillside and prepared to let her gambol. In selecting a hill we were at pains to find one with a smooth, steep slope and something answering the purpose of a natural "butts" to stop roving bits of ricocheting metal. It may be true that there are localities destitute of declivities where people are poverty-stricken of hills, but that is not true of Vermont. Mathematicians have explained that Vermont isn't a little State; she only looks small; if she were flattened out we'd have more area than the British Empire. To prove this contention they cite the incident of the agriculturist who fell off his farm three times during one forenoon. Anyhow, we can afford to be selective in the matter of hills. When a resident of the State wants a hill, he doesn't rush out and embrace the first ridge that comes along; he knows his business and inspects a limitless collection of hills, humps, ridges and hogbacks, until he finds one perfectly suited to his needs—be it hill, hump, ridge, or hogback in the classifications.

We found a hill that was perfectly adapted to the use of our lady friend and by simply breaking trail with skiis, we fashioned a runway for her. We planned to let "her" romp down the hill under her own steam, subject to fire as soon as she passed the danger flags, and to pull her to the stop again by means of a cord attached to the skids. Following which plan we derived a maximum amount of shooting and fun at a minimum expenditure of elbow grease.

Two hundred yards away, where the ridge swerved to form an obtuse angle, we fixed up a comfortable firing point with a blanket to lie upon while shooting and to keep such easily lost articles as cartridges, lubricant boxes, and film rolls for the kodak, from being buried in the snow.

Pete and I elected to stay at the runway and operate "her" while Lee went up to the firing point to wreak Krag vengeance upon the target. Presently, with his rifle in position, he gave us the "ready" signal, and I started the lovely creature on her gantlet.

She slid along tentatively at first, as if doubtful of her freedom, but gathered velocity as she neared the danger zone, whence she raced down the run, bearing the burden of our hopes and fears —Pete's and mine—Pete hoped the Lawyer would miss her, and I was afraid he wouldn't.

AND AFFORDS A NOVEL FORM OF PISTOL PRACTICE

Directly "she" sailed out of sanctuary we heard the crackling sound of the 220-grain bullet and saw a sudden geyser of snow spurt from the runway, then another, and another before the target slowed to a stop at the end of the run. From our place of observation, directly behind and a little above the course, it appeared as though the target ran perfectly smooth and was relatively easy to hit, so we were at loss to account for those chasms in the snow that marked the lawyer's shot-holes.

We had little time in which to cogitate this circumstance before the man on the blanket emitted noises calculated to inform us that he was ready for the return run. I laid hold of the cord intending to do a sort of ball-in-the-fountain stunt with the target and bring humiliation upon the lawyer, while Pete chanted a sort of vulgar litany, "Don't let him hit her—*don't* let him hit her"—and repeat. A sharp tug made "her" leap backward a clear ten feet but, alas, all the combined efforts of the frantic Pete and myself were unavailing to stir her another inch! With one dainty (?) toe under a tuft of bunch grass "she" paused, in an attitude of coy meditation, while the lawyer, base opportunist, plugged in five straight bull's-eyes on the nine-inch circle just abaft the contrary beast's mid-rib. In these unorthodox, decadent days I am powerless to define the exact radius of language beyond which is profanity; but, be the boundary as wide as it may, I'll still insist that Pete was outside it.

Chastened and cringing under the gibes of our one-time crony we went down and released her and pulled her back to where Lee could exult over the bullet holes, while we moved off to the firing point bent upon snatching victory from the slavering jaws of defeat.

"You shoot first," said Pete, suspiciously generous of a sudden, so I lay down and harnessed myself to the Springfield.

"Let 'er bubble," and bubble she did. In the first ten feet I abandoned all hopes of a sweet succession of bull's-eyes, also I found the reason for the lawyer's first three misses. Viewed from a position at right angles to the course "she" sailed swiftly, but *not* smoothly. It was a sermon on surmounting obstacles to see that target negotiate a hummock; "she" leaped ten feet when one foot would have sufficed. I managed to puncture the figure twice in the three shots I fired as the target slid down the declivity, but I only scored twice in five, as "she" backed up the slope. All lawyers are incipient politicians, and my poor showing was directly traceable to Lee's professional penchant for string-pulling.

Poor Pete fared no better than I in his initial attempt, and the fiend at the cord-end effectually protected the target on the return

trip—which fact moved the volatile Peter to revilings.

"I can't hit the cussed pasteboard," he raged, "not while that old darn fool down there is a-yanking it around like a louse in a lamp chimney, but I'll just bet you nine dollars that I could wallopse *him*."

"Think you're smart, don't you?" he inquired, as the lawyer approached, smiling a benignant smile. "Well, I don't. You'd never have hit 'her' if 'she' hadn't up and bogged down for you. I could tell your friends something about you if I wanted. 'Member the time you put on glasses every time you sat down to eat a ham sandwich, so's to fool your stomach into thinking you'd given it a full meal?"

I succeeded in parting them before blood had been shed, and presently each forgot his mortal insult in the interest engendered by the gambolings of the "Mystyk"—for we decided to rechristen her.

During the succeeding weeks the "Mystyk" has been led forth again and again, and with each run, our interest increases. The idea involves no expenditure, yet it gives one a chance to keep up his work with the larger caliber guns and takes one into the air at a time of the year when indoor pastimes are a bit too popular to be strictly healthy.

In constructing another snow target we should use a light, cheap steel-runnered sled as a foundation. With the advantage of steel-shod runners, the target would run easily in any condition of snow.

The idea can be applied successfully to meet the requirements of any arm, from the high-powered "sporter" down to the 22 pistol—with a lesson to be learned in each instance.

The snow furnishes an unfailing check for each shot—whether it be a hit or miss—and this is an advantage not to be ignored if one is delving in the problems of running shots. Our own scores have improved wonderfully since we first adopted this form of practice.

For the sake of competition we gave the target counters—the "bull" with a value of two, and the rest of the figure counting one.

The idea has certainly been of use to us, helping bridge the gap in the rifleman's calendar, which stretches between fall squirrels and spring woodchucks.

The lawyer put his finger upon the chord of our interest in "Mystyk" shooting when he said, "With a target like that a man can approximate any form of rifle shooting. For instance, suppose I wanted lion-shooting with all it's trimmings, I'd set my target, tie a piece of limburger up in the corner of my handkerchief, slip two Thomas cats—of interests inimical to one another—into a sack, and then I'd have it. Likewise, I am convinced that one who merely desires a bull's-eye doesn't necessarily get it every time he goes after it—at least, not the amachoor."

AUXILIARY CARTRIDGES IN THE .250-3000

FIELD & STREAM PUB. CO.:

I am informed by the Marble Mfg. Co. that they make auxiliary cartridges for shooting the .25-cal. Colt automatic and the .25-cal. Stevens short, rim-fire cartridges in the .250-3000 Savage. Would you consider the above cartridges accurate up to 100 yards, and would there be any danger of leading the barrel with the lead bullet of the Stevens short cartridge, due to the rather sharp twist of the rifling? Would you consider the factory shell reloaded with the Ideal gas-check bullet a better combination for short and medium range work? Is there any need for the "ammonia dope" when cleaning the .250-3000 after using standard factory ammunition, since it is claimed there is no metal fouling? Do you consider the various gold-bead front sights good for general hunting, rapid shooting, and under poor conditions of light? O. F. GOEKE.

Would prefer the Marble-Brayton auxiliary cartridge shooting the .25 Colt. Same would give 1½-inch groups at 40 yards, which is as far as one usually shoots small game. Would not be accurate at 100 yards. Avoid leading by prompt cleaning with nitro solvent oil. Would not use ammonia dope; too apt to rust up the works. Gold bead is good for both snow shooting and ordinary hunting conditions.—ED.

THE CARE OF THE GUN

Herbert K. Savage

All too soon will the gunning season be closed for another twelve months and the old gun be laid away for another long rest, broken now and then, perhaps, by a day's sport at the traps.

Many men, at the close of the season, treat their guns to a "lick and a promise," so to speak; they run an oily rag through the barrels and let it go at that, not even bothering to take down the gun and put it away in the gun-case. Some out-of-the-way corner seems to answer all requirements. Next season there will be spots of rust on the outside of the barrels, and the inside will be a sad spectacle. The slogan of such a man seems to be, "Oh, well, if she'll still kill, I don't care how she looks!"

Giving your gun, whether it be rifle, shotgun or revolver, the attention which it deserves is neither a long nor laborious task. Fifteen or twenty minutes' work will suffice to render it practically rust-proof during its enforced rest.

To thoroughly clean the barrel of your revolver or rifle run boiling water through it, or, better still, plug up the muzzle end with cloth or paper and fill the barrel full of the boiling water, which is easily done even with a solid frame repeating rifle, even though it seems impossible at first glance. Let it stand for about ten minutes, then pour out the water and repeat the process. The heat of the barrel will dry up most of the moisture after the water has been emptied out. Be careful not to allow the water to get into the mechanism of your rifle; use a small funnel and pour the water into the breech end of the barrel. Swab out the bore with a dry rag, until you are satisfied that all the moisture has been removed. Then grease or oil the inside thoroughly: any of the well-known gun greases will be found satisfactory. For my own guns, instead of grease, I use a nitro-solvent oil. Living as I do at the seashore, I use either the rifle or shotgun every clear Saturday, shooting at targets or clay birds along the beach. As I use the guns so frequently the heavy greases are not necessary, as the oil will keep the metal parts entirely free from rust until it has all been absorbed by the lining of the guncase, which will not be for several weeks at least. In putting the gun away for a long time, it will be found wise to plug the barrels. In the case of a take-down gun plug both muzzle and breech, and in a solid frame rifle plug the muzzle and fill the breech with a good make of gun grease. For the shotgun, use corks for plugs and for the rifle muzzle a greased rag.

There is on the market an anti-rust rope made of cotton, which when soaked with oil and placed in the barrel will cover the entire circumference of the bore with a thin film of oil and keep it in that condition. These ropes are made for rifles, shotguns and revolvers in all bores and in most calibres. A twenty-five-cent bottle of oil will just about saturate one of these rifle ropes, while for a twelve-bore shotgun two bottles will be needed to thoroughly fill the rope with oil.

In cleaning a revolver care should be taken to get all the powder residue from the front end of the cylinder, and the breech of the barrel, otherwise you may find that the cylinder does not obey the pull of the trigger and revolve as easily as it should. Run the swab through the cylinder as well as through the barrel, and wipe off the entire frame with an oiled rag. If you carry your side-arm in an open holster, be sure to punch a hole in the bottom of the holster to act as a drain, so that if you get caught in a storm and the rain runs into the holster, the muzzle of your revolver will not be submerged in a miniature lake.

When you clean your gun be sure to go over *all* the parts you can reach with an oily rag; for the more inaccessible parts a small camel's hair brush or a feather dipped in oil should be used. Care should be used that the mechanism is not flooded with oil. In a repeating rifle or shotgun too much oil in the mechanism will surely make it spatter your face and collar when you slam open the receiver. A stiff tooth brush will be found a great aid in scrubbing up your gun after a wet day in the woods or duck blind.

One time after a wet three days' duck trip, the barrels of my double gun, which were of Damascus steel, were badly tarnished. The water of Barnegat Bay, which is partly brackish in the upper reaches of the bay, turns most gun-barrels a peculiar shade of green wherever it touches, and these spots are very hard to remove. With a soft wet cloth and a light application of hand sapolio I took most of this rust off, a tooth brush and oil did the rest. After the operation the grain of the bar-

rels showed up beautifully, and I soon after sold the gun, which I had bought second-hand in a pretty bad condition, at a good profit.

A shotgun barrel is easily cleaned, unless it has been left untouched for some days during damp weather. Under these conditions the powder residue will cake and make cleaning difficult. In a case of this kind the boiling water treatment should be made use of. Lead streaks will sometimes collect in the muzzle of a full choked gun after a number of shots have been fired, due to the constriction of the pellets when leaving the barrel. In removing these take care not to scratch the inner polish of the barrel by a too vigorous scrubbing, as these scratches offer a foothold for further leading.

There is much more temptation to take apart the works of a shotgun than those of a rifle, but unless you are pretty sure that you know just where the various parts belong and their relation to one another, it is better to leave the cleaning of the locks to an expert gunsmith.

If you want to snap the hammers of your gun, drop in the shell chambers a couple of used shells with the exploded primers still in place. This will save your plungers from being broken off, as is likely to happen if snapped on an empty chamber.

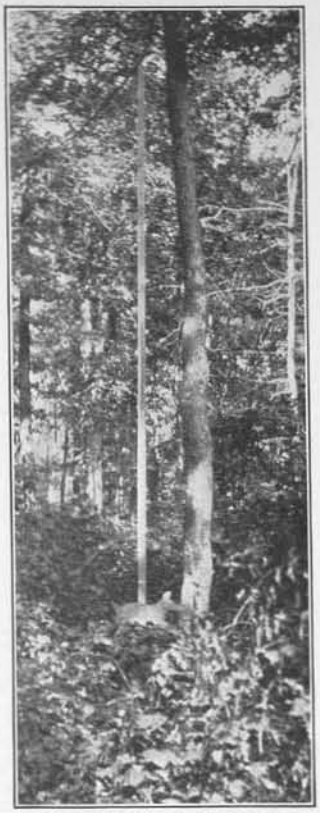
A man who takes good care of his guns will find much more pleasure in handling and using them, than the man who treats them carelessly and lets them rust.

The first will enjoy his hunting more than the other man, for to him the gun is not only a weapon of destruction, but a friend who has proved his worth under varying circumstances.

THE PENDULUM DEER

By Warren H. Miller

Quite by accident I discovered a means of getting a world of fun and good practice in rifle shooting—a running deer target that can be made in half an hour and will go a long way toward surprising you out of any notion that such an animal is easy to hit. We have a running deer at the Camp Fire Club matches similar to the animal at Bisley, the Camp Perry matches and at Los Angeles. He speeds along at the rate of 75 feet in six seconds, and not a few men in the club make "possibles" on him, that is five shots forward of his centerline. I myself have hit him four out of five at 100 yards, which score put me down ninth or tenth man, as two of them were haunches counting only 7, whereas the brisket shots count 10. The speed of the Camp Fire deer is about 8 miles an hour, which is what a deer will do through timber when not badly frightened, the kind of shot you get when "he won't stand still." How fast it really is, you do not appreciate until you get at close quarters, but it is in any case the real thing for big game rifle shooting practice, and many a sportsman on his way to the annual deer hunt would give a lot to have a day or so at just such a target.



THE PENDULUM DEER AT REST

The deer that figures in these illustrations is proportioned for reduced ranges, being 20″ long from nose to tail, 13″ from haunch to brisket and 5″ through the body. He was cut out of brown cardboard and first used standing, firing at 50 and 75 yards, only the first shot being allowed on three seconds' time. All the rest had to be got off just as fast as the lever could be worked and a sight taken. Practically all the army method, of slow, careful sighting, with the front sight traveling around the bull until that instant comes when the bull sits squarely over the sight for an instant and the trigger is squeezed off, is worthless in big-game shooting. Its sole usefulness is when you have a long-range shot at an unsuspecting animal. After that shot all the rest will be fired as quickly as a satisfactory sight can be had, for that animal will rarely drop in his tracks; even if mortally hit he bounds forward and may run a hundred yards unless stopped, and any other hit will simply set him and you off on the long wounded-animal trail—unless you can knock him down to stay before he gets out of sight. Now the eye is quick as a flash, and the arm muscles, if well trained, will bring the rifle sights into line with the raising of the piece; it is only the brain and trigger-finger that are slow. If the rifle is not fired the instant the eye sees the sights on a vital spot on the animal, a second sight must be had, and still another and another until the trigger-finger does its duty. Meanwhile the animal may move, or, if moving all the time as deer and bear are often encountered, there is no time to get any sort of a military sight.

With this deer, a party of four of us that were going to Maine and Pennsylvania after deer practiced with the idea of getting used to dull brown targets, the shape and vital parts of a deer, where to put the bead quickly where it would do the most good, and how to work the magazine quickly and smoothly, a feature that many big-game hunters overlook until the time comes when they want that whole magazine as quickly as it can be fired.

One man brought a .30-40 box magazine carbine; the second a .30-30 tubular magazine; the third a double gun, one barrel a sixteen guage and the other a .38-55, while I used my old favorite the .32-20 W. H. V. In addition to the deer we had a brown fox of about actual size, a profile snowshoe hare and a profile grouse, both full size and intended to be fodder for the supplementary cartridges of these rifles. The .30-40 and .30-30 used .32 S. & W. shorts in a steel supplementary cartridge, the .38-55 had reduced armory cartridges, while I had a pocketful of .32 S. & W.'s which can be shot direct in the chamber of the .32-20 without any supplementary cartridge at all. The deer was tried first at 50 yards and then 75, five shots being fired in a string, the first being a three-second aim and the rest as fast as the magazine could be worked. The honors were carried off by the .30-30 and .32-20, my own gun landing four out of five at the 50-yard and all five at the 75-yard range, principally because she was completely sighted in, had a receiver peep with large aperture, and I knew her of old. The other men were still in the stage of getting acquainted with their new rifles, the .30-40 man having just bought his and putting most of his shots high, and the .38-55 landing nearly 8 inches above the deer until he had had a short but earnest session with his sights. After that things went smoothly enough, though I do not remember a single magazineful that went off absolutely without jamming. This was due, for my gun, to dirty and unoiled magazine action, a part often neglected in favor of the bore, and on the larger guns often to not throwing down the lever full length. Working the magazine is just as much a practical part of rifle shooting in the woods as firing the gun—yet how many sportsmen spend any time at all running through a few magazinefuls until they get the hang of it!

But, both the deer and the fox were rather disappointing. They were too easy; they did not run the way game does, hit or not. The score stood for the deer; .32-20, nine shots; .30-30, six shots; .30-40, four shots; .38-55, none. On the fox at fifty yards everybody was in

with from two to four shots apiece; the grouse had his neck cut off by all the supplementaries at thirty yards, and the rabbit was all shot up at forty—there remained no more worlds to conquer. Then the Big Idea hit me; why not rig up a pendulum deer?

I tried it out next day at home. I had a 14-ft. strip of two-inch white pine moulding, and to this the deer was tacked with a thin cross piece behind him to keep him from twisting under air currents. At the upper end of this pendulum went a wire nail driven into a broom-stick handle, which latter was nailed to a tree trunk some sixteen feet above the ground, bringing the deer's back 2 ft. 10 in. above the forest floor. Next, a file weighing about 1½ lbs. was secured in behind the strip of pine for a weight, and the deer was ready after not over half an hour's fixing up. His first big swing was 18 feet and he did it in two seconds as timed by a stop watch. Going 18 feet a second in mid-swing he was some hard to hit, and gee! but that was an exhilarating sport! It had all the joyous fascination of wing-shooting, and it was the nearest thing to real big-game shooting, particularly Virginia deer, that I have ever experienced. The Kid and I took to it with real enthusiasm and established a score of two hits each out of five for a starter. As the shooting was done inside of city limits we used a hard-hitting, accurate air rifle, and reduced the range to 25 yards. The rules were that each swing counted a shot whether you shot or not. During the back swing you had to work the magazine action and catch your sights; no shots were permitted except at the center of the swing when his speed was about eighteen feet a second, for of course a pendulum slows up at either end and its total swing was only two seconds for the eighteen feet of travel. Fun! Lord, it was equal to wing shooting! We soon learnt that one has little time for fine sighting. You could not see the deer at all at the two ends of his swing; you caught a sight of him coming full speed through the bushes, picked him up and led him from a foot to eighteen inches ahead of the brisket, and whaled it to him! It took a long time to realize that you *must* lead a running animal a good deal. Eighteen feet a second is about 12 miles an hour, even that not half the speed of a badly frightened or hit deer, and the time it took the air rifle bullet to reach him was just about the time a high-power bullet would travel 100 yards, calling for an apparent lead then of not less than a foot, and better two feet.

At first we held just ahead of the brisket, with the result of haunch shots when they hit at all. The tendency to overshoot was also just as marked as it is with real game running, and the pendulum itself soon accumulated a number of shots in its shank above the deer, showing where many of the shots were going. Gradually we crept up to three out of five hits on the best strings, and finally I got his number and plunked him four times in four shots, the fifth being a blank. It did not do to hold somewhere ahead of him and let off when he approached the spot within a foot or two. You were *sure* that these were going to register a hit, but they didn't! But when you picked him up coming along hell-bent-for-the-election, swung along and ahead of him nearly eighteen inches—and were sure that you did it—you heard a satisfactory plunk, and later found the bullet hole in the brisket. My best score was 34; two haunch shots and two briskets (14 and 20) curiously enough the identical score that I made on the Camp Fire deer this summer, running at 100 yards, the rifle being a .35 Winchester.

Another thing: it took some practice to get your trigger-finger to let off promptly at command from the brain. Time and again your brain would say "Now!" in the rush of aiming and firing at that flying beast, and you could actually see yourself missing, the rifle still swinging ahead but the trigger letting off an infinitesimal fraction too late. Your brain, acting still quicker, would *see* that it was going to be a miss and was already forming an appropriate and forceful *Damn!* which would be out of your system before the rifle bullet would be heard zipping through the underbrush.

You may fondly imagine that you are going to hit that deer this fall, no matter if he goes past you through the woods on the dead gallop. This confidence is fostered by memories of scores that cause you to *know* you can depend upon yourself to make good at standing targets, however dim and ghostly they may be. But, if you want to know just how much you have yet to teach yourself on running targets, make one of these pendulum deer, like the one in this photo, get off 75 yards so that the time element enters into your shooting, and have at him with your hunting rifle! He swings about eight times before he slows down enough to require starting up again. It will not be that easy cinch that you had with those running deer and rabbits in the shooting gallery at 20 yards—not at all, Gertrude! And it's fun; gee it's the best fun with a rifle that you ever had!

NISKAYUNA RIFLE CLUB NOTES

FIELD & STREAM PUB. CO.:

Through the courtesy of Captain J. Scott Button, of the local militia, the use of the rifle range in the State Armory has been given the Niskayuna Rifle Club every other Friday night during the season of 1915-16.

The Niskayuna Rifle Club has a membership of 128 men and is anticipating a very lively Winter resulting in creditable scores considering the age of the club.

This organization has been running about a year and a half, and with this concession expect to be a factor in any small indoor league work.

CHAS. C. SLETER.

TWO NEW "HIT IS HISTORY, MISS IS MYSTERY" PICTURES

Just about ten years ago, John P. Burkhard, the former publisher of "Field and Stream," secured two exceptionally interesting duck-hunting scenes, done in water-colors and entitled "To hit is history—To miss is mystery."

These were published in "Field & Stream" about 1905. He had so many requests from "Field & Stream" subscribers to reproduce these in colors, that this was done, and 1,000 of them are now hanging in the dens of sportsmen in every part of the country.

These pictures made such a decided hit with our duck hunting friends of the old days that ever since I purchased "Field & Stream," in 1906, I have been trying to find the right man to paint a similar pair of pictures, as I found the old originals were sold and the plates were destroyed.

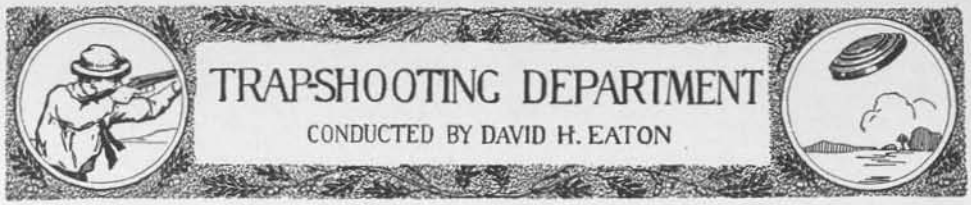
In this issue of "Field & Stream" you will find reproduced in black and white what we think are two of the finest duck pictures we have seen for some time. These pictures were done especially for us by Mr. Wharton, to carry out my idea of giving our duck-hunting friends another pair of pictures as good, if not better, than the old pair.

It costs a lot of money to enlarge these pictures, make four-color plates and reproduce them ready for framing, but if there are enough of our readers who would like to have them, we will have them reproduced in full colors and actual size.

If you would like a pair of these pictures, and will drop us a postal card, placing your order, if we get a sufficient number of orders within the next 30 days, we will have these pictures reproduced.

I will guarantee now that if we do reproduce them, they will be the finest reproductions that money can buy, and if you are not satisfied with them your money will be gladly returned.

PUBLISHER.



MIDDLESEX COUNTY TRAPSHOOTING ASSOCIATION

New interest in trapshooting was added hereabouts when the Middlesex County Trapshooting Association was organized last week. It consists of all the wide awake clubs in the county, among which are the Metuchen Rod and Gun Club, Sayreville Gun Club, New Brunswick Country Club, Dayton Gun Club, Milltown Gun Club, Perth Amboy Gun Club, and Stelton Gun Club. A conservative estimate places the total number of trapshooters represented in the new association at two hundred and fifty.

Arrangements have been made to hold four County Championship Shoots for both individual and team honors. The total number of birds in the complete program is 300 and will be divided as follows:

Sayreville, N. J., Oct. 23, 1915, 2 p.m., 50 birds.

Perth Amboy, N. J., Nov. 6, 1915, 2 p.m., 50 birds.

Metuchen, N. J., Feb. 22, 1916, 9:30 a.m., 100 birds.

Milltown, N. J., May 30, 1916, 9:30 a.m., 100 birds.

Aside from the County Championship Shoots, the different clubs will hold open shoots throughout the season, to which every trapshooter in the country is invited. The first of these will be held at Metuchen, Saturday afternoon, October 30th, at about two o'clock. The traps will be open for practice at one o'clock. The program includes both merchandise and sweepstake events and it is hoped that there will be a large turnout.

INTERCOLLEGIATE TRAPSHOOTING

Yale Holds the First Shoot

The first practice shoot of the year was held at New Haven Wednesday, when a large squad of shooters reported to Captain E. Lynam, Jr. The scores were unusually good for so early in the season and Coach Von Lengerke is confident of producing a team that will be a strong contender for the Intercollegiate Championship.

Beginners' Shoot at Cornell

The first student shoot at Cornell will be held October 23rd, when a beginners' contest will take place over the Lakeside traps. The beginners will shoot according to class, and trophies have been provided for the five highest shooters on the winning class team. G. T. Hecht, '17, is arranging the details of the shoot, and Samuel Walden, '16, will be on hand to instruct the new shooters.

Hill Gun Team Elects Officers

On Friday evening, October 8th, a meeting of all last year's members of the Hill Gun Club was held to elect officers for this year. J. R. Steers, Jr., was elected captain; B. B. McAlpin, Jr., lieutenant, and Arnold Wood, Jr., treasurer. Shoots this year will be held, as usual, once a week, on Monday afternoon.

Mercersburg Holds Practice Shoot

The first shoot of the year was held Saturday over the Mercersburg Academy traps, and a squad of 25 shooters came out. The election of officers was held and J. Woodward, '17, was elected president and E. Ball, '16, secretary. Professor Rutledge will act as coach and adviser.

KEEPING UP INTEREST IN THE GUN CLUB

In the course of time the cut and dried system of trap shooting becomes monotonous, and the performance largely mechanical. The really successful club is the one in which the officers introduce novelties from time to time, keeping the interest of the members active, and, consequently, the average attendance large. In clubs where the finances warrant it, valuable trophies are placed in competition in the spring, and provide interesting contests throughout the season, and this may be done in some degree by any organized club. Then to get away occasionally from the monotonous "pull," "bang," "dead" (or lost) of the ordinary shoot, a special event may be staged in which the conditions are entirely different. "Field shooting" or "sniping" is such an event, and never fails to be a popular one. The shooters start at 22 yards and walk towards the trap, gun held below the elbow, as when in the field, and the targets are thrown at the will of the puller. The target may be thrown at once, or the shooter may reach the trap before it is sprung. It is great sport and excellent practice for game shooting. Clubs having sufficiently large grounds might well install a "Joker" or "Bear" trap. All shooters know what this trap is, and as it seems likely to become a fixture at all big tournaments, practice at home might be worth while as well as entertaining. Tower shooting, practiced extensively in England, is another interesting style of trap shooting. In this the targets are thrown from a trap placed on a tower, or elevation, back of the shooter. The trap could be placed on the roof of the club house porch, thus saving the cost of a tower. In many clubs, starting out with the brightest prospects, the interest wanes after a few weeks or months, the members gradually cease to visit the grounds, and the club is added to the list of dead ones. The cause for this is that the members allow their enthusiasm for the sport to get the better of their judgment, and they "shoot" themselves out of the game. Trap shooting is a costly sport, and comparatively few of its devotees can afford to fire at an unlimited number of targets each week, or even each month; after the newness has worn off the average shooter begins to count the cost, and decides that he can get more pleasure, for less money, in some other way. If he shoots at 100 targets only, in an afternoon, it will cost him $3.60, and if, as is often the case when he gets in with a good crowd, he shoots at 200 targets, it will bring the cost up to $7.20, a sum which the majority of shooters have no right to expend on their weekly outing, and many realize this fact, and go to the other extreme by cutting out the whole thing. It is up to the club officers to consider this phase of the question, and they have an almost sure remedy in their power. There should be on each shooting day a regular club event at, say, 50 targets, shot in strings of 15, 15 and 20. This event should be shot first, and not rushed through but carried on leisurely, so that the entrants may stay in the game for a fair part of the afternoon and feel at the finish that they have had their money's worth of fun. The cost for such an event would be only about $1.60, comparing favorably with that of almost any other variety of outing, and the boys would have had a chance not only to shoot but to enjoy a social time with their fellow members. After the close of the club event, the traps would be open for any one who wished to burn up more powder. A member should never be urged to enter events, if he once declines. Every man knows the limit of his financial ability to take part in the sport, but very few care to come out frankly with "I can't afford it," and they should never be placed in the position where they are obliged to shoot or give that reason for their refusal. After one or two experiences of this sort they will answer by staying away from the club and quitting the game entirely.

P. R. R. GUN CLUB

The trapshooting contingent of the Pennsylvania Railroad employees living in Philadelphia have formed a club known as the P. R. R. Gun Club, with an active membership of 61, and the following officers: Frank Withington, president; I. W. Worthington, vice-president; John Peoples, secretary; J. B. Luny, treasurer; H. J.

Morgan, captain. The club has leased a tract of land at Moore, Delaware County, for a term of five years, and will hold its shoots there.

INDIANAPOLIS GUN CLUB SHOOT

Edmonson was high at the Indianapolis Gun Club's shoot on October 16, winning the Remy Trophy on a score of 99 out of 100. B. Remy was next amateur, 97, and Dixon and Watson were third on 95 each. Rollo O. Heikes was high professional with 98, Hymer second with 97, and Holoday third with 94. In the Stutz Trophy event, at 25 targets, distance handcap, Dixon at 22 yards and Mrs. B. Remy 16 yards tied on 25.

KANKAKEE GUN CLUB SHOOT

The attendance was good at the two-day registered tournament of the Kankakee, Ill., Gun Club, held on October 11 and 12. The first day's program was all 16-yard shooting; on the second day the handicap was 16 to 20 yards. F. A. Graper was high amateur on the first day with 145, Mark Arie 140, Chas. Schade 138, Max Kneusse 137. F. G. Bills and J. Grambun tied for high professional on 142 each, Cadwalader 141. On the second day Mark Arie was high with 146 from 20 yards; M. K. Mathewson, 19 yards, second with 141; Wm. Hayes, 17 yards, and L. C. Huckins, 18 yards, 140 each. F. G. Bills was high professional with 147, J. Graham 145, H. W. Cadwalader 142. The amateurs were headed by Mark Arie with 286 in the general average for the two days; M. K. Mathewson 275, Max Kneusse 274. The professionals finished with F. G. Bills at the head with 289, J. Graham second with 287, and H. W. Cadwalader 283.

ST. LOUIS TRAPSHOOTERS' ASSOCIATION

The annual merchandise shoot of the St. Louis Trapshooters' Association had 75 shooters entered in the program events. The scores were unusually low, owing to a strong wind blowing over the traps. J. D. Mollman, of Mascoutah, Ill., tied with W. S. Spencer for high amateur average on 92 out of 100, J. W. Bell 91, and there were several tied on 90 for third place. Art Killam was high professional as well as high over all with 94, L. Ebert 91.

CENTRAL ILLINOIS TRAPSHOOTERS' LEAGUE

The final shoot of the Central Illinois Trapshooters' League was held October 13 and 14 under the auspices of the Mt. Pulaski Gun Club, 52 shooters entering the events, and nine clubs of the league being represented. The program was 150 targets each day, a total of 300 targets. J. W. Bell, of St. Louis, Mo., tied with A. C. Connor, of Springfield, Ill., for high amateur honors on the first day on 143; R. G. Gayle, R. L. Holmes and W. E. Graham 142 each; E. K. Crothers, A. C. Buckles and O. Pearn 141 each. H. W. Cadwalader was high professional with 146, J. R. Graham 142 and A. H. Amman and Louis Ebert 141 each. On the second day J. W. Bell led the entire field with a score of 146. He also headed the field for general average with 289 out of 300, and registered runs of 54, 65 and 54. R. G. Gayle was second amateur with 144, E. K. Crothers 143. The professionals had H. W. Cadwalader at the top with 142, J. R. Graham and A. H. Ammann 141. R. G. Gayle, of Lincoln, Ill., was second high amateur with 286; E. K. Crothers, Bloomington, Ill., 284. H. W. Cadwalader, Decatur, Ill., led the professionals with 288; J. R. Graham, Chicago, 283; A. H. Ammann, Peatone, Ill., 282.

COATESVILLE GUN CLUB SHOOT

In the shoot of the Coatesville, Pa., Gun Club for the Coatesville Record Trophy, at 200 targets, Harry Minker was high gun with 188; P. J. Matson was second with 183, and Henry MacFarlane third with 182. The scores made in the 200 targets, with added target handicap, were counted for the DuPont Trophy. P. J. Matson, with his handicap of seven targets, made a total of 190, and nosed Henry Minker, with a total of 189, out of first place.

ELKTON, PA., GUN CLUB

Forty-one shooters attended the annual registered tournament of the Elkton, Pa., Gun Club, and in spite of hard weather conditions some good scores were recorded. The program called for 155 targets, and Wm. M. Foord, the well-known Wilmington, Del., amateur, tied with L. S. German, the equally well-known Aberdeen, Md., professional, on a score of 152; J. B. McHugh, an amateur of Wilmington, was second with 151; A. B. Richardson, Delaware State amateur champion, was third with 145. H. L. Worthington was second high professional with 146, and F. Slear, the cartoonist, was third with 145.

CHICAGO GUN CLUB

A strong wind spoiled what would otherwise have been an ideal day for trap shooting, but some very creditable scores were made at the Chicago Gun Club's shoot on October 10. The feature event of the day was the contest for the Edelweiss Gold Watch Trophy, at 100 targets, distance handicap. H. C. Snodgrass won from a field of thirty-two shooters on a score of 86 from 16 yards; W. A. Davis and J. V. Barto, each at 19 yards, and L. C. Huckins, 20 yards, tied for second place on 83. Mrs. Winkler, one of the two women contestants, had a chance to beat or tie Snodgrass after 80 targets had been shot at, but lost out in the last round, finishing with 80.

CINCINNATI, O., GUN CLUB

The "Good-Time" shoot held on the grounds of the Cincinnati, O., Gun Club furnished an excellent example of what may be accomplished in the sport of trap shooting when commercialism is eliminated and all idea of enriching a club's treasury is put in the discard. The promoters were Horace Bonser, aided by J. E. Schreck, Harry Meyers, Clic Sanford and one or two other enthusiasts. First the program was a short one, 10 targets, with a special at 50 targets. The cost was low, only $3.00 for the regular events, and in each a valuable merchandise prize given, the interests of the ordinary shooters being protected by a handicap of added targets, which was changed in each event if necessary. The expert amateurs were not forgotten, four high gun prizes being provided. For those who wished to take chances there were optional sweeps of $1.00 and $1.50 in the events. The special event was shot under a distance handicap of 16 to 22 yards, and the winner was presented with a handsome trophy. To still further enhance the pleasure of the occasion, everyone present was regaled with a "fish fry" and refreshments, topped off with cigars, and all without a cent of cost. As a result of the efforts of the managers, the shoot was the best from every point of view which has ever been held on the grounds, barring, possibly, the State shoot and the Post-season tournament, and these excelled only in the number of contestants. Fifty shooters went through the program, and every participant left the grounds perfectly satisfied and looking forward to the time when a similar shoot will be given. High amateur scores were made by H. Bonser, 97; M. J. Welsh and R. H. Bruns 95 each; L. Gambell and R. Dibowski 93 each, and H. J. Meyers 91. C. A. Young was high professional with 96; R. O. Heikes 95 and R. Trimble 92.

INTEREST SHOWN IN THE LAST BEGINNER'S DAY

The "Beginner's Day" shoots held by trapshooting clubs in all parts of the country during the latter part of the summer, brought many people to the traps for the first time, but a goodly percentage of these new shooters will keep in the game. A record of all the shoots gives the total number of participants as 6,784 men and 522 women.

SENECA, O., GUN CLUB

At a shoot of the Seneca Gun Club, Tiffin, Ohio, J. K. Taylor, the Newark, O., professional, broke 100 straight in the events, and "Pop" Heikes, another well-known Buckeye "pro.," finished three targets behind him. Comstock led the amateurs with 90.

SCHUYLKILL COUNTY CHAMPIONSHIP

In a shoot for the championship of Schuylkill and adjoining counties, John Rehrig, of Reading, Pa., and Curtis Strauss, of Pottsville, tied on 93 out of 100. In the shoot-off each broke 24 out of 25, and then Rehrig scored 25 straight to 24, and won. The contest was held at Tamaque, Pa., on the grounds of the Rod & Gun Club, on October 7.

POINTER PEDIGREES

Field & Stream Publishing Co.:

I have been referred to you for information regarding the registration of a pointer bird-dog.

Four weeks ago I got a female pointer pup six weeks old. The dam is registered, but the sire is not, although his owner has the pedigree of the litter, made out at the time he was sold. He was whelped May 26, 1906.

I would like to know if it is too late to register him.

I have known and hunted this dog for the past five seasons and would have him registered, if possible, in order to register my pup.

Since coming to Oklahoma I have owned several pointers, but as long as they were good shooting-dogs their pedigree didn't interest me.

The dog's owner gave me the litter pedigree yesterday. He has owned the dog since the dog was a puppy, so there is no doubt of his identity.

L. H. Johnson.

Ans.—Not too late to register sire of your pup. Three generations on both sides required. Registry number of dam is sufficient. Would suggest entering puppy in Field Dog Stud Book.—Ed.

AIREDALES AND IRISH TERRIERS AS HUNTING DOGS

Field & Stream Pub. Co.

Through the columns of your valuable magazine will you kindly answer the following inquiry: The comparison of hunting and other qualities between the Airedale and Irish Terrier. Also advise as to where information can be obtained in connection with securing a good Airedale and Irish Terrier, and what book you would suggest covering information as to care, etc. of dogs.

Wm. H. G. Neumann.

Ans.—The Airedale is bigger and heavier, and because of his part otter hound ancestry can be taught to make a good all-around hunter. The Irish is mostly a family and "earth" dog for small game. "The Airedale," by Wm. Haynes, and "All About Airedales," by H. B. Hera, are good books, both for sale at this office. See also "Airedale Setter and Hound," by Warren H. Miller, published in Field & Stream beginning with the January 1915 issue.—Ed.

PRIZES AT EASTERN DOG CLUB SHOW

The Pointer Club of New England, at a meeting held in Hotel Essex, Boston, Mass., September 27, 1915, voted to offer at the coming show of the Eastern Dog Club the following specials:

For American-bred Pointers, open to all: $5 for best novice dog or bitch; $5 for best limit dog or bitch; $5 for best open dog or bitch; $5 for best dog or bitch in American-bred class; $5 for best kennel (four or more).

Open to Members Only: $5 for best novice dog or bitch; $5 for best limit dog or bitch; $5 for best open dog or bitch; $5 for best dog or bitch shown by a lady member; $5 for best brace.

Vinton W. Mason,
Secretary.

Field & Stream Pub. Co.

I have just read the article written by "Oursler" on "Training the Bird Dog Pup," which appears on pages 369 to 372, and can agree with Mr. Oursler in what he says on page 369, with the exception of the correct manner in which to teach a dog to "Charge," as there is but one correct way and Mr. Oursler does not give it; he gives his idea, which is not a good one to apply to all dogs of all dispositions. There is one method that you can teach any pup or dog from three months of age to fifteen years of age to "Charge" or "Drop," as he says that they are bound to mind when once taught properly to "Charge" down, or lie down, whichever word is used. Some use "Drop," which is a good word if you intend to use it to put them to the ground either when by you or when near birds on point and you intend to make them or have them drop at shot.

His method used to have them "Toho" is very poor. His method to teach them to retrieve is very, very BAD, and only teaches a dog or pup to retrieve playfully or naturally, and should the occasion offer itself that you had to send your dog from 200 yards to a mile to retrieve, I think he would have some FUN trying his method on his pup or dog.

It is very, very easy to teach a dog to retrieve IRON, CLOTH, WOOD, Feather or Fur, if you know how, and almost an impossibility if you do not know how, for the reason that those who have never seen the effects of certain work on a pup or dog, if used from three to five minutes a day for from three to six days, could not believe that those efforts would produce what they will. I can make a dog from 10 to 15 years of age retrieve anything from both land and water, and when I tell him to, whether he wants to or not, he will do the business, but when trained under the natural or playful manner of retrieving they will retrieve when they feel like it and not when they do not so feel inclined, and most hunters want a dog that will go bring what they tell them to when they want them to, no matter under what conditions or circumstances. His method of "FETCH" Heel and Field Work is too far behind the times and a dog trained under those conditions might work and might not, but I would not think of using his method for training a dog of my own, and at the same time I will admit that dogs have been trained to do good work in many different ways, but there is one way to do anything and that is the best RIGHT way. His method of starting a pup to pointing is very, very bad, and I could easily prove it. No man should take an experienced dog along with a green pup to the field except for one thing, that is, to make him get out and hunt and range, get speed and endurance in him in trying to follow the older, experienced dog; but when it comes to using his nose, finding birds and pointing and holding them, there is where it is easy if you know how, and almost an impossibility if you do not know how. I can take a three-months'-old pointer or setter pup that has talent and make him stand a bird for hours, until he actually will drop down from exhaustion and never flush them. You can walk around him, pat and stroke him, step in front of him, over him, try to push him on the birds, and he will drop to the ground, will not get only so close, or I can make them put the birds up at command, but no such methods as Mr. Oursler advises can be used.

I can put them on point when they find the birds and go to town and leave them on point and go back in from two to five hours and find the youngster holding the same point, possibly will be down flat on his belly from exhaustion. However, I did not learn all this from books or articles of this class, but from association and experience with the fourteen thousand head of bird dogs which I have actually handled.

An article of this kind misleads the young sportsman who is expecting to buy a young pup or dog and train him, and should he have read this article, might possibly try to be guided by it. There are some things in his article which are quite good, but I do not understand why he should suggest some things which he has to those who may expect to train a pup or dog.

I am not saying how these things can be done, yet they can be done and very easily by one who actually knows how and has seen it done. P. I. Appleman.

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FISH AND FISHERMEN

DR. CHARLES FREDERICK HOLDER, NOTED NATURALIST AND ANGLER, DEAD

Dr. Holder died at his home in Pasadena, California, on October 10th. Dr. Holder was the founder of the famous Tuna Club of Catalina Island, and one of the greatest salt-water anglers of the United States.

From youth he was interested in natural history. He was appointed, in 1871, Assistant Curator of the Museum of Natural History in New York. He resigned in 1875 and was shortly after elected to the chair of zoology at the Throop College of Technology in Pasadena. He was the author of many books, among them being "Big Game Fishes of the United States," "The Lower Animals," "Big Game at Sea," and others equally well known.

Dr. Holder was a member of many conservation and scientic societies and angling clubs, holding office in many of them.

TUNA FISHING OFF MONTAUK

FIELD & STREAM PUB. CO.:

I have been a subscriber to FIELD & STREAM for a number of years and was especially interested in the article in this month's issue: "Trolling for Block Island Tuna," by C. K. Stillman.

My first trial of this sport was in the summer of 1909, and I have not missed a season since then.

Without wishing to take issue with Mr. Stillman, may I mention a few of my experiences?

The first fish that ever struck me found me entirely unprepared. The boatman, Tom Buckridge, Montauk, thought me absolutely crazy to attempt to land one of these fish with what he called a pole and shoe thread. On the way over from Montauk he had been explaining to me that the fishermen tried to avoid tuna because even with their heaviest bluefish rigs (hand lines) the fish took so many of the jigs that the operation was not a paying one. This does not apply to the large lines and spiral springs used at present at Block Island.

To go back to that first tuna: We had sighted a large school of them, the gulls playing over them in great numbers, wild and excited —in fact, that is how we first knew where the fish were feeding. I was seated in the stern of a 35-foot motorboat facing aft, but at this particular moment I was looking over my shoulder at these wonderful fish leaping and dashing like mad. They were between five hundred and six hundred feet (this is a guess at this late date) from us now, and I was waiting for the moment when we should pass them for the strike, when BANG!—I thought I was hooked to the end of a trolley car going at full speed away from me. I did not even have the click on my reel or the apron under my thumb on the spool (this was to have been done in the next minute—my entire interest had been in watching the fish, and I did not think my turn was coming so soon). It can readily be seen how little pressure was on the reel—nothing but my bare thumb—and the spool revolving so fast that that thumb felt as if it was up against a live coal. This reel was only a plain surf-casting throw-off with 200 yards of 18-thread line and not the large reel with drag click and brake which I use now. I learned a lot in the first few mniutes after that strike. Let me say here that prior to this I had never caught a fish over seven pounds on rod and reel. Buckridge stopped the engine and laughed at me while I had the worst fight (I can call it nothing else considering my equipment) with a fish I had had up to that time. After about twenty minutes I called to Tom to get the gaff and got the reply, "Good Lord, you won't need me for half an hour yet," but his prediction was not quite true, for in 35 minutes my first tuna—28 lbs.—came over the rail, and he is in my office now. I was patted on the back for doing something which my good boatman had considered impossible. I have fished with him many times since and have taken tuna from 18 lbs. to 70 lbs. This last fish was taken in an hour and 35 minutes with a Leonard split bamboo eight-ounce tip, Vom Hofe reel and 300 yds. of 21-thread line, the heaviest I have ever used, a plain bluefish squid (not cedar) five inches long, with four-foot wire leader. All the fish were taken near Block Island, and I have never had a strike that the fish did not come in the boat. This is possibly my luck, but nevertheless a fact, and is not meant in any sense as a boast—it has seemed to me almost that the fish hooked himself.

I have used nothing at the start but the drag on my reel, and this pressure is naturally not very heavy. My chief object has been to stop the fish on his first wild dash and then to play him as best I could until he came to gaff. With me there has been no difficulty in setting the hook, and for greater sport and pleasure I should advise the lightest rig possible. I have not gotten into the 3-6 class yet, but shall hope to some day.

I have spent two days at Block Island this season with not a sight of one of the big fish, but I hope to have another day or two in September. From this you will see that my fishing days are few and far between and the number of tuna taken naturally small.

This is a much longer article than I had at first planned, but I hope you will excuse the enthusiasm of an ardent tuna fisherman.

A. C. KALBFLEISCH.

WINNERS AND LEADERS IN THE 1915 PRIZE FISHING CONTEST

Winners.

Brown Trout.

First Prize—I. E. Dickinson, 6½ lbs., length 25 in., girth 13½ in. Caught in Cedar Rapids, Mich. Clark rod, Yawman and Erbe reel, enameled line, March Brown fly.

Second Prize—Robert McConnell, 6 lbs. 1 oz., length 28½ in., girth 16½ in. Caught in Tanaack Creek, N. Y. Mills rod, Takapart reel, Kingfisher line, Jungle Cock fly.

Third Prize—George Burroughs, 5 lbs. 5 oz., length 22⅞ in., girth 12¼ in. Caught in Gunnison River. U. T. K. bamboo rod, Featherlight reel, Kingfisher line, Jock Scott fly.

Fourth Prize—Rev. D. Cochlin, 5 lbs. 2 oz., length 24 in., girth 13 in. Caught in Boardman River, Mich. Montague Special rod, Leonard reel, Abbey and Imbrie line, Parmachene Belle fly.

Lake Trout.

First Prize—Charles H. Slater, 26½ lbs., length 38 in., girth 22½ in. Caught in Lake of the Woods, Ontario. Bristol steel rod, Meiselbach reel, Kingfisher line, Kidney Spoon lure.

Second Prize—E. S. Williamson, 26¼ lbs., length 40½ in., girth 24¼ in. Caught at Isle Royale, Mich. Samson rod, trolling reel, Cuttyhunk line, Hevenden trolling spoon.

Third Prize—E. D. Calvert, 25¾ lbs., length 42 in., girth 22½ in. Caught in Lake of the Woods, Ont. Bristol steel rod, Shakespeare reel, Kingfisher line, Phantom Minnow lure.

Fourth Prize—Joseph Pomelow, 25 lbs., length 36 in., girth 21 in. Caught in Schoodic Lake, Me.

Landlocked Salmon.

First Prize—Henry L. Marsh, 12 lbs. 2 oz., length 27½ in., girth 17½ in. Caught in Parker Pond, Me. Frost steel rod, Venus reel, Kelso silk line, small smelt lure.

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Second Prize—George W. Poggenburg, 12 lbs., length 28¾ in., girth 17½ in. Caught in Parker Pond, Me. Bamboo rod, Julius Vom Hofe reel, braided waterproof silk line, small smelt lure.

Third Prize—Carl S. Bean, 11½ lbs., length 33 in., girth 16½ in. Caught in Pierce Pond, Me. Bristol steel rod, Vom Hofe reel, Kingfisher line, Dark Montreal fly.

Fourth Prize—Ashley A. Smythe, 11½ lbs., length 31 in., girth 17 in. Caught in Sebago Lake, Me. Sampson steel rod, Vom Hofe reel, Kingfisher line, shiner.

Leaders.

Brook Trout, Class B.
Samuel H. McFarland.
Samuel H. McFarland.
Samuel H. McFarland.
Donald Parson.

Small Mouth Bass, Class C.
Dr. W. M. Park.
L. F. Kunstman.
Howard P. Miller.
D. W. Coultas.

Small Mouth Bass, Fly Class.
E. H. Coultas.
H. B. Christian.

Small Mouth Bass, Juvenile.
Herbert S. Chamberlin

Large Mouth Bass, Class C, North.
A. F. Bryan.
Lewis N. Thorne.
Robert T. Ives.
Charles E. Bahringer.

Large Mouth Bass, North, Ladies.
Mrs. Robert T. Ives.

Large Mouth Bass, Class B, South.
A. L. Cashwell.
Miss Byrdie Tapp.
H. E. Yelvington.
S. W. Dolive.

Large Mouth Bass, Fly Class, South.
Frank H. Lyon.
T. D. Howard.

Large Mouth Bass—Delaware, Maryland, Virginia, and West Virginia Division.
E. R. Lafferty.
George C. Schuler.
W. B. Catlett.
Herbert Firth.

Great Northern Pike.
William A. Klatte.
Dr. Wm. P. Abbott.
Samuel W. Warren.
A. R. Thompson

Muscallonge.
Karl Baackes.
John C. F. Rickfeds.
Wm. A. Ralyea.
George A. Streeter.

Wall-Eyed Pike.
C. W. Kelly.
S. W. Pollock.
George Ault.
L. S. Carne.

Bluefish.
R. C. Graham.
Frank C. Speck.
Harry C. Esrey.
Peter S. Post.

Weakfish.
F. W. Townsend.
Frank C. Speck.
John Fletcher.
Frank C. Speck.

Weakfish, Light Tackle.
Frank C. Speck.

Striped Bass.
William H. Hand, Jr.
C. B. Church.
Edward M. Slocum.
C. B. Church.

Striped Bass, Ladies.
Mrs. B. J. Davis.

Channel Bass.
Theodore F. Everett.
J. Maxwell Bullock.
S. J. Held.
Robert W. Tunis.

Tarpon
T. W. Magill.
Mrs. T. W. Magill.
T. W. Magill.
T. W. Magill.

THE CATCHING AND COOKING OF A TROUT

Harry L. Burdick

This trout lived in the Bitter Root River, in the Rocky Mountains of Montana. He spent most of the time I knew him pretty well up the West Fork, about a hundred miles above the mouth of the river proper. He did not seem to be engaged in very active life at this time, but appeared contented to be, for the most part, in the fairly swift water at the foot of a little fall where the West Fork, having for a quarter of a mile broadened out into a placid pool, gathered itself into deeper and swifter channels.

This pool I often fished, wading down the south side, which was shallow, and casting thirty or forty feet toward the north bank, under which the trout lay in the shelter of the brush, and in three or four feet of water. I confess to being one of those misguided persons who prefer fishing downstream. There were many trout in that stretch of several hundred yards—and there are many still there—and while I frequently caught eight or ten trout in covering the pool, I did not catch any which would weigh over three-quarters of a pound.

The foot of the pool was underlaid by a flat ledge of rock over which the water flowed towards the south bank of the stream and became at once a narrow, rapid current not over thirty feet in width. The bank at the foot of the pool, on the south side, was densely covered with willows, almost impossible to penetrate, and the deep water was, of course, under the bank. Approaching the swift waters, one had to wade the shallow waters of the pool in plain sight of the fish lying in the head of the rapid, which was not "quick water" enough to carry foam or to injure the eyesight of the fish who lived there.

I usually took two or three medium-sized fish from this rapid water, but never had a strike from any unusual fish until, after being in camp at the head of the pool for possibly ten days, it occurred to me that a big fish out of some of the deep holes would be very good baked. The rapid water referred to being the nearest deep water to camp, I waded out into the foot of the pool that evening and, keeping as far from the rapids as possible, let my flies be carried by the current to the shelter of the willows. I was using a Royal Coachman, tied on a No. 6 hook, the largest fly I had, and, with about forty feet of line out, let this fly be carried under the bank for a foot or so. I presume I had been allowing the current to play with the fly for several minutes when, on starting to reel in, with the intention of going below the rapid, I was surprised by a heavy tug, and away went my supposed victim, heading for the lower pool. I put on all the strain I dared, and a beautiful trout broke water. He looked very large, but before I had time to estimate his weight the line came back to me with but two feet of a six-foot leader attached—and my trout went his way.

After putting on a new cast I walked over the shelving rock to the edge of the deep water and looked over the fishing ground as thoroughly as possible. Under the willows and the bank the water appeared to be from eight to ten feet deep, with quite a swift current and several eddies, formed by boulders on the bottom and by holes in the bank. A fine-appearing place for big fish it was, but on casting down the line of willows as far as I was able, the best I could do was a couple of half-pounders, with no sign of any close relatives of my vanished fish. Home I went with my fish for frying, and a determination to be back at the same place daily until I had another chance to retrieve my laurels. Only a few days remained in which to succeed, for I must return to work. So, morning and evening, I gave my special bit of water a thorough trial for three days. I was careful to keep out of sight of the deep water as much as possible, and relied entirely on wet-fly fishing, not being expert enough to count on laying out forty or fifty feet of line and a dry fly. I generally caught two fish at each visit to the home of my trout—and one of them was sixteen inches long—but never was there a sign of my friend of short acquaintance. On the evening of the fourth day, to my surprise I could not get a rise of any sort. I fished with Brown and Black Hackle—Professor—and Major Pitcher—but with no result. After possibly ten minutes of endeavor I walked to the edge of the shelving rock, satisfied that, if the trout were at home, they did not want any lure in my possession.

I removed the cast from my line and was thinking of returning to camp when a fair-sized trout broke water not thirty feet from me, at the edge of the willows. I had a fly—new to me and donated by a friend—which resembled a grasshopper in color, and was mounted on a No. 8 hook. Attaching this fly to a three-foot leader, I cast it across the swift water about twenty feet, intending to get the line out gradually and take the trout I had seen. Before I had recovered my fly there was a swirl in the water and the immediate response to my strike was a strain which assured me that I was fast to a fish worth having. Down the stream we went, I naturally keeping on the shallow side, though even there the water got into my hip boots. After a run of perhaps thirty yards the fish turned back for the swift water and attempted to reach some haven under the willows. All the strain I dared put on the tackle, and the assistance of the current finally turned him, and

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To Retail Tobacco Merchants — If your jobber cannot supply Edgeworth, Larus & Bro. Co. will gladly send you a one or two dozen carton, of any size of the Plug Slice or Ready-Rubbed, by prepaid parcel post at same price you would pay jobber.

twice he came out of the water. As it happened I had no net, and I feared the landing, as the apparent size of my trout led me to believe he would break loose unless I used great care. I don't know how many minutes we contended, but finally he began to tire, and, working him into shallow water near a gravelly beach, I ran him out on the sand. Fortunately I jumped between him and the water, for in his first struggle on being landed he released himself from the hook.

I actually scooped him up in my hands and threw him ten feet back from the water, sat down, killed my fish and looked at him. I will not swear that he was my former antagonist, but he was enough like him to satisfy me. We had no scales in camp, but I measured him as soon as I got back there. Nineteen and one-half inches of black spotted mountain trout, and very fat. Then we prepared to eat him right away. This is the way I treat trout of his size in preparing them for the table, and you had best try it when you have the chance. Dig a hole in the ground a foot or more deep and large enough to hold your trout comfortably. Build a brisk fire over this hole and burn it to a bed of hot coals. Clean your fish and put inside him a couple of slices of bacon. Then take a sheet of wrapping paper—any coarse paper—and grease it thoroughly, so that it will not stick to your fish, and wrap your fish in the paper. Take an old gunnysack, wet it, and wrap your paper and fish in the wet sack. Shovel the coals out of the hole you have prepared, put in the wet sack and cover with ashes and embers, and build your fire again on top of it. This fish must have weighed several pounds. I cooked him forty minutes and on removing the sack and paper he appeared almost as bright in color as when he came out of the water.

The flesh, on removing the skin, was perfectly white and thoroughly cooked. With baked potatoes, biscuit, preserves and coffee there was more than enough for three of us. The best of it was I had my trout—or thought I did. Why he rose to the fly with me in plain sight is only known to him. Probably he wanted that particular fly—and he got it.

WOBBLING FOR BASS

Larry St. John

This will go down in history, piscatorially speaking, as the wobbler year. Dozens of new wobblers were put on the market this season and new ones are bobbing up every day. And the question naturally arises: Why? The answer is: Because they catch fish.

What is a wobbler? the uninitiated asks, which sounds almost like a foolish question to the experienced plug caster, and the answer:

A wobbler is a bait that floats until reeled in, when it dives beneath the surface and travels or darts, zigzag, from a few inches to several feet under the surface, depending on what kind of a wobbler it is and how fast it is reeled. Unlike underwater plugs, the wobbler goes deeper the faster you reel.

Why does it catch fish? Because of the wobbling motion. It is a good imitation of a crippled minnow or a badly frightened one, and arouses either or both the fishes' appetite or killing instinct. Before the wobbler was brought out the truly successful plug caster manipulated the tip of his rod so that his underwater plug had something like the erratic movements of the present wobblers. Now, the wobbler automatically wobbles and puts the beginner almost on an equal footing with the old hand.

Nevertheless, there is more to using a wobbler than just casting it out and reeling back. For instance, there are certain places better than others for wobblers, although we have taken fish on them under practically every condition of weather and water. Most lakes have at least a few beds of weed growth that is under water—celery, pickerel grass, etc.—and where this is found use your wobbler. The way to fish under these conditions is to let the boat drift over. If there are two in the boat, so much the better. Each can cast over his end, then diagonally out, and then straight ahead, thus covering all the water. This method means short casts and lots of them. Another condition common to many lakes is "patchy" bottom. Usually shallow water and spots of moss or other small weed growth. Try your wobbler here, no matter how shallow the water, and even if no one has ever been known to catch a fish here. Bass and pickerel both often come to such places, as they can lie under cover of the weeds and watch everything that passes the bare spots. We have caught bass in one foot of water under such conditions and changed the "natives'" ill-disguised grins of derision to "there ain't no sech animile" amazement.

Nor is the wobblers' usefulness confined to these particular conditions. They will catch fish in deep, open water. Yes, siree. All you do is to make long casts down the wind, hold the tip of your rod down and reel fast, so your bait travels deep. As soon as you feel any resistance, strike hard. If you don't, a swift-swimming fish may hit it from behind with sufficient speed to get enough slack line and get away. Don't believe the stories you hear about treble hooks not giving a fish a chance.

On weed-bordered streams and lakes a wobbler is used like any other artificial bait. You simply get out forty or fifty feet and cast as near the edge of the weed-bed as you can without getting snagged in the weeds. It pays to cast so your bait travels high in the air. It attracts the fish by the loud splash and it gives a fish that sees your bait in the air a chance to get under it. Remember, the eyes of a bass are near the top of his head for a reason—he feeds from the air as well as the water.

On fast streams, cast a wobbler diagonally across stream. It won't wobble with the current and it "acts up" against it.

The heavier wobblers usually travel with rather wide sweeps. Sometimes this is "good medicine" and at other times it is the jerky tail wobble that "gets 'em comin'." This you get with the smaller plugs. If you want your big ones to wobble more abruptly, simply remove the tail hooks. Wobblers that have two belly hooks do not suffer in hooking efficiency by doing this.

THE DUFFLE LIST

By Ladd Plumley

With a friend I once went trout fishing far down on Long Island. The trip was a week-end trip and limited to three fishing days.

My fly rod was devised with a separate hand-grasp and as useless without its handle as a jack-knife would be, and with no thought that a scrap of carelessness would spoil my sport, I did not make the hair-raising discovery that the handle had been left behind until my friend's rod was set up and, flies in place on the leader, he waited on the lawn of the fishing hostelry.

"Heavens!" I gasped from the open window. "Did you bring an extra rod? The handle of mine is back in a desk at home."

He had with him what he called his "sucker rod," a rod about as satisfactory to cast with as a mop handle. And with a dainty four-ounce rod, but buttless, at the hotel, I had to discontent myself with the mop stick.

That stupidity taught me a lesson, and if by a personal experience you have not learned your own, let the incident of the "sucker rod" soak all the way in.

Memory is as reliable as a frayed and fractured leader. At its best, memory is just reliable enough to make you depend upon its unreliability. So do not trust to memory. To make sure that every necessary article has been packed in trunk or grip, every camper, hunter, or fisherman should have carefully prepared written lists of the duffle. These should cover both long and short trips and should be systematically arranged under headings, such as "Clothing," "Fishing Tackle," "Supplies," etc., etc.

Do not wait until the beginning of the season to arrange and make up your lists. Choose a long winter's evening and give the matter your most earnest and undivided attention. Even at that you will find the lists will need careful revision and that in the first draft important articles have been omitted. So keep your lists near your hand for a time; do not consider them complete until you are absolutely sure that they cover everything, from money in dollar bills (for breakage of somebody's tenner in the woods) to an extra pipe and tobacco pouch for use when you leave one set of smoking things on rock, never to be found.

When you prepare for an unexpected trip, your lists will come in as handy as the handle of a camp frying-pan and will spare you that sort of red-hot floor-jumping dishevelment which is not unknown to the listless yet active packer of duffle. But as you place each article into valise or trunk, make sure that you duly check it on your slip.

Porter (reassuringly, referring to the case of 'Johnnie Walker'): "IT WILL BE ALL RIGHT BEHIND, SIR."

Traveller (nervously): MAYBE, BUT I'VE LEFT A CASE OF 'JOHNNIE WALKER' *BEHIND, BEFORE!"*

Porter: "BUT IT'S MUCH SAFER IN THESE NON-REFILLABLE BOTTLES."

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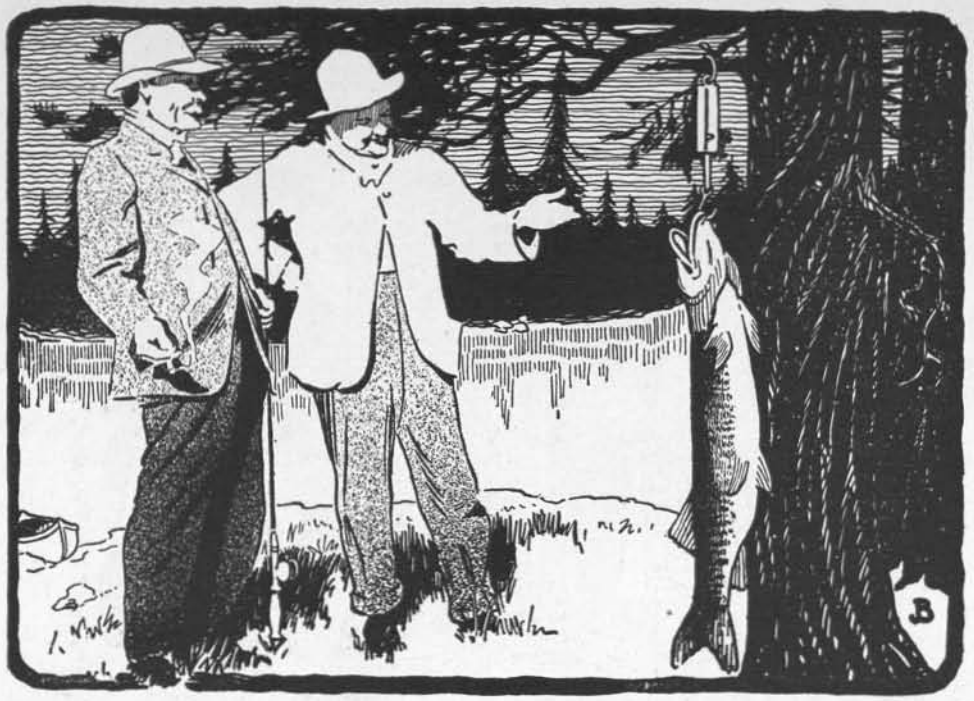

Field&Stream PRIZE FISHING CONTEST

THE LARGEST WEAKFISH IN NARRAGANSETT BAY

By Frank C. Speck, Jr.

Winner First Prize, Weakfish, 1914 Contest

It was still dark when my father and I, accompanied by two of our friends, set out for the fishing grounds on Sunday morning, Aug. 30th. We started from our summer cottage at Shawonet Beach, R. I., and had some difficulty in finding our way on account of the thick fog which hung over the bay. The fishing ground, known as the Ledge, is about four miles from our cottage. After sailing around for half an hour we finally reached the grounds and got ready our fishing tackle and bait. As the water was very calm, we decided to troll around with live bait, in hopes of hooking on to a large one. I did the rowing from the bow of the boat, while my father sat in the stern and let the lines out. After he had let out about seventy-five feet he gave me my pole, which I placed in the bottom of the boat. I put the click on the reel, in order that I might know quickly when I got a strike. After rowing around for half an hour I saw my line straighten out, and immediately the reel began to sing in great style. I quickly dropped the oars and took my pole. The fish started off on that grand rush which seems to be customary of all weakfish. This one, however, did not care about stopping. When I looked at my reel I began to realize that I must stop the fish or soon I would be out of line. My father also noticed that I was getting short of line, and said: "You had better hold up on him a little, or you will lose him." Acting in accordance with his suggestion, I soon brought the fish to a standstill. I then reeled in some of my line, which I might say was no easy task, in order to have plenty on my reel in case the weak should make another rush. Here is where I had judged the action of the fish, in one way, correctly; in another incorrectly. The fish did make a rush, but instead of going away from the boat, as I had anticipated, he came directly toward me. My line began to get slack, because I was unable to reel the line in fast enough. "Be careful there," cautioned my father, "or you will lose that fellow!" I realized the truth of what he said and redoubled my efforts in the attempt to get rid of the slack line. At last the line began to tighten. The fish seemed to stand still for a moment, then away he went. I kept my thumb pressed rather tightly on the reel, so as to tire the fish out. After running out about thirty feet of my line the fish slowed up a little and began to give some bulldog jerks, first from one side and then from the other. However, in between these small fights I was able to gain line on the fish, and soon I had him within ten feet of the boat. We were both able to see the fish now, and certainly it was a treat to see that large fellow swimming so near to the boat. "I guess that fish will make any that the rest of us have ever caught look sick!" remarked my father.

"Well, I should say that I could allow you a pound or two and then trim you!" I replied.

"I have the landing net all ready for you," said dad.

The fish by this time was beginning to get pretty weak. Now and then he would make a small rush, but it was not like those he made when first hooked. However, I let the fish tire himself as much as possible, so that I would have no trouble in landing him. I then brought him close to the boat and dragged him toward the stern, where my father was waiting with the net. In a very skillful manner he lifted that large fish into the boat. Neither one of us had ever seen a larger weakfish, and my father said: "If you intend to get any more fish like that we have to have a landing net made to order for you."

We caught two more fish and then we went home. As I jumped in the motorboat our two friends shook hands with me and congratulated me on my catch. One of the men asked: "Well, how much does the fish weigh?" Then there was sort of a guessing contest on the boat. One of the men said twelve pounds and a half, while the other two said about

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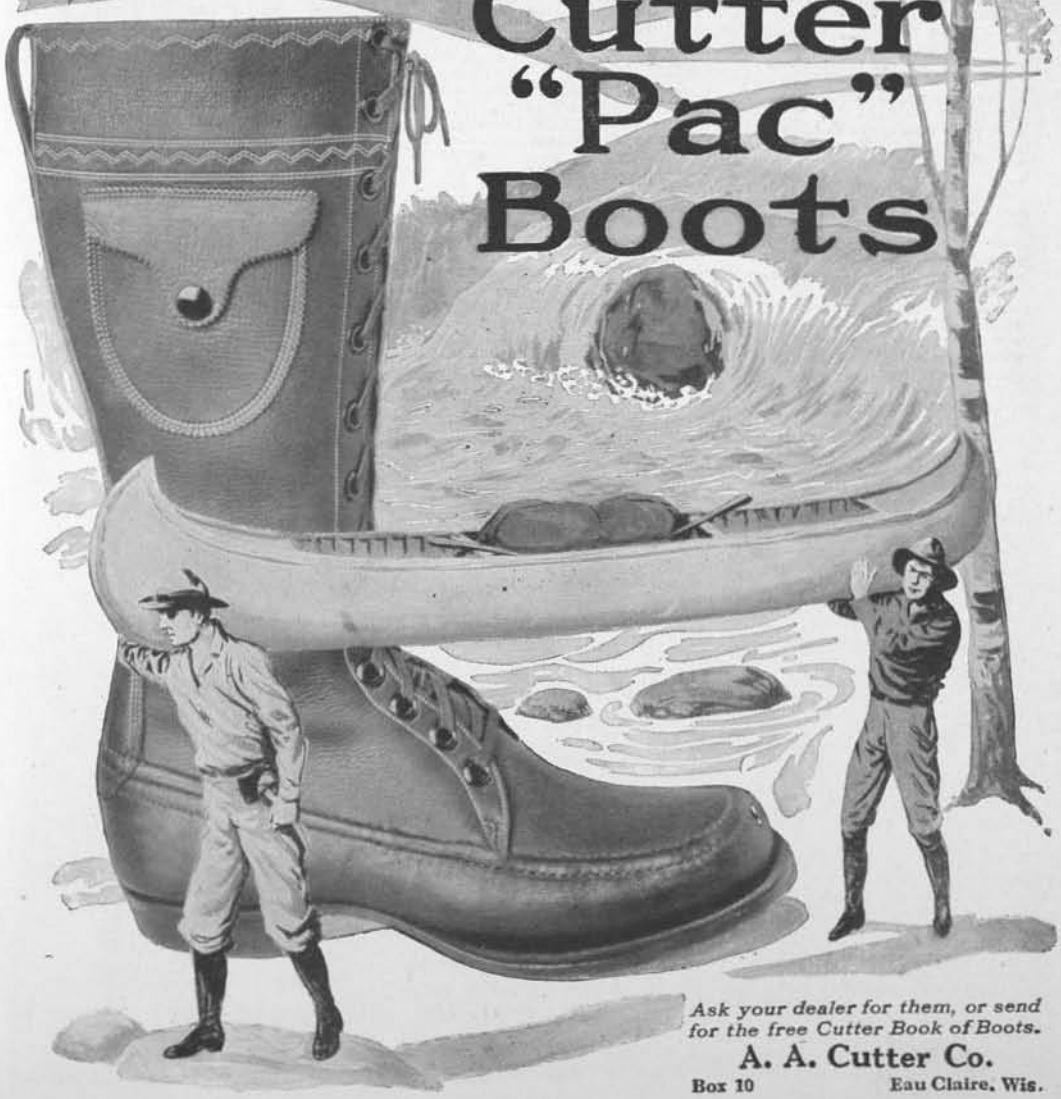

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thirteen and a half. As soon as we arrived home we got some scales and weighed the fish. "Fourteen and a quarter," said the man who was doing the weighing. "That certainly is some fish."

Prize Contest Certificate Record—First Prize, Weakfish, 1914 Prize Fishing Contest.
Weight—14¼ lbs.
Length—35 in.
Girth—18½ in.
Caught—Aug. 30, 1914.
Where caught—Narragansett Bay, R. I.
Rod—Montague.
Reel—Phenix.
Line—Cuttyhunk.
Lure—Live bait.

A PRIZE MUSKY FROM WISCONSIN

By J. C. Harding

Winner First Prize, Muscallonge, 1914 Contest

Dad and Ed and I always finish up the fishing season with a general round-up for muscallonge during the first half of September, and, although I knew just what the plans were to be, it was no less exhilarating to land at Plum Lake, August 29th, and find them waiting, ready to start for the "big ones" after a splendid summer with the "large" and "small-mouth." "Quality" and not "quantity" has been their guiding maxim—it should be adopted by all good sportsmen—and a string of ten red-eyes, totaling 30 pounds, with the smallest 2½ and the largest 5, was their best day's sport. Well, after a day or so with my family we started out, the three of us, with Herman and Mike, the guides, who realized that the next few days would mean business and were prepared to do and die, as they always were. The weather was abominable—cold and rainy, mostly, with an occasional let-up, when the wind would almost blow us out of the water; but we stuck to it for four days, with never a quitter to reckon with nor a musky large enough to keep. We fairly plowed up our old-time tried hunting grounds, but with weather and luck against us we returned home for rest and dry clothes and devoted a few days to the "small-mouth" with better success. In fact, this seemed to be the year for bass of both varieties. A 5-pound "large-mouth" cheered me up some, but the big one was still to be landed, and where he was no one could tell.

Over a year ago, on one of their jaunts, Dad and Ed had been filled to the brim by an affable stranger with stories of a small lake teeming with giant pike and pickerel (he knew, for he had caught them through the ice), and all summer long they had quarreled in all sorts of language as to whether or not they should fish this alleged paradise. Ed and Herman were for experimenting, but Dad edged away until they finally landed him by a suggestion that the lake was marshy about the shores and was probably black with ducks—and the open season only a day and a half away. Ducks will get Dad every time. Incidentally, it was suggested that the partridges were in prime condition, and they also wondered how my .22-hp. would really react on live animal tissue. So we packed our outfit for a night or two in the open in the old lumber wagon, tied two boats on the cart behind, and started on the eight-mile trip to Wonderland. The rain had preceded us; everything was wet and cold, and it looked like a poor day for the ducks, whatever else happened. Everything wild must have been indoors, and the trip was uneventful save for the flushing and slaughter of an old cock partridge, which threw some new light on the habits of these birds, for in picking up the remains you may imagine our surprise to find sticking out of his throat a half-swallowed garter snake, measuring in all about 12 inches long.

We made camp near *our lake*, had early supper, and the hunters dispersed to take in the evening shooting, while I patrolled an old road with the High Power. I was so intent on the anticipated fusillade from the duck pond that I missed my only opportunity for a shot at a "spike," and, returning to camp, found a sore bunch, who had seen no ducks to speak of, but discovered that the lake was mostly mud and an unapproachable pond of small size in the middle.

Well, the early morning found us up. The duck hunters tried it on again with no returns, and Mike and I started for Pickerel Lake, where we knew there were "muskies," because we had caught them there. A slight error in our bearings stretched a two-mile walk into a six-mile hike, but we finally landed all right, secured a boat from a shacker, put a slender piece of pork rind on the "No. 8 Skinner," and reached the only real bar in the lake about eight o'clock. A clouded sky and north wind, following the heat of the walk, nearly congealed me, but we went to it and worked the bar over and over again until about eleven, when we landed for a rest and fire and a lunch of cold bacon sandwiches. Nothing had come in so far save a 5-pound pickerel, which, enmeshed in a ton of weeds, gave promise of better things; but we resolved to stick to it until time to meet the rest of the bunch at three, ready to start for home. Over and over again we worked the bar, until the time warned us to give it up, when Mike said: "We will give it the once-over, and then good-bye for 1914."

As we reached the point of the bar where the water is deep, something struck hard and I set the hook for keeps, and, looking back, saw a large swirl and the fin and tail of a fish 70 feet away. Unconsciously I had let out more line than I intended to or could spare, if the fish were a large one. The fish did not show again, but fortunately we were out of the weeds and the deep water was our friend.

"What have you hitched to?" asked Mike.

"Oh, something about 15 or 18 pounds or larger," says I.

"A big pickerel, probably," says he, "or he would have been out of the water before now."

Some pickerel then, for he took off 15 or 20 feet of line and swerved far out on the left and back again to the right, and repeated once or twice, and then just sulked; but I couldn't budge him.

"Back up, Mike, until I can get some of my line back."

So back we went, with a repetition of the run and the big swerves. I stuck to him, however, resolved that I would make Mike eat it if it was a *pickerel*, though his cynical grin was not so broad as it had been. After about thirty minutes the enemy seemed to tire; the little Bristol had done its work; and, reeling up slowly while he still hugged the bottom, I thought it time to take a look, and ten feet from the boat I lifted him. The water was dark and it seemed as if he never would come up, but when he finally did we saw what a monster he was. No submarine would ever have any terrors for us after that experience. Mike really got interested for the first time, and as the big one, exhausted, lay on the surface water at last, he placed a well-directed shot from the .22 target revolver between his eyes. A great spasmodic dash and back he came—*ours*. Reaching down, Mike inserted his fingers just below the gills and drew him aboard.

"A big pickerel, eh, Mike?"

"The cigars are on me," says he. "Insult me all you want to; I deserve it. But he's a 40-pounder if he's anything, and I am ready to *quit now*."

We pulled ashore, ghost-danced around for a while, and then, borrowing a sack from the gentlemanly shacker, started for the rendezvous to meet the others. The two-and-a-half-mile walk with the "pickerel" over his back punished Mike sufficiently and all was forgiven. We found them fishing for bass in Dad's lake, near by, so we nonchalantly tossed the sack in the bushes and awaited their convenience. We overplayed the part, however, for it took only a few minutes for Ed's practiced eye to discern that something unusual had happened. So we finally drew out the sack, received congratulations and encomiums—and they mean something from Dad and Ed, who are by far the most successful "big musky" fishermen I know of—and after we had made a forecast of the weight Ed's trusty scales were produced, showing 40 pounds, even after two hours out of water. Homeward bound, perhaps you can guess what we talked about; but, anyway, it doesn't happen every day, and who wouldn't talk about it and have his picture taken with every kodak in the place? Maybe I wasn't some hero—for a while—with my little family!

Prize Contest Certificate Record—First Prize, Muscallonge, 1914 Prize Fishing Contest.
Weight—40 lbs.
Length—50½ in.
Girth—23½ in.
Caught—Sept. 7 1914.
Where caught—Upper Pickerel Lake, Wis.
Rod—Bristol.
Reel—Blue Grass No. 3.
Line—Von Lengerke and Antoine.
Lure—Skinner Spoon No. 8.

Prize Fish

1. Caught with "BRISTOL" Rod and copper wire. Two fish in right hand Speckled Trout, 2 and 2½ lbs. Three fish in left hand Lake Trout, 3, 3½ and 4 lbs.
2. 14-lb. Chinook Salmon caught with Bristol Rod in Lake Jumper by John Scott.
3. "How's that?" said Wallace Wright of Brookville, Ontario—"Most as big as the boy."
4. 7-lb. Bass caught with Bristol Rod by Harry Walker and father at Medina Dam.
5. 5-lb. Oswego Bass caught with Bristol Rod at Clearwater Lake by J. E. Hamilton, Wacoma, Minn.
6. A bunch of beauties caught with Bristol Rod No. 25 by A. E. Rehburg, Grand Lake, Mich.
7. 19¼ and 16-lb. Muscallonge caught by W. G. Armstrong, Columbian Conservatory of Music, Toronto, Ontario.

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SPORTSMAN'S WORKSHOP

HOW TO MAKE A FOLDING REFLECTOR BAKER

By Emery J. Newhall

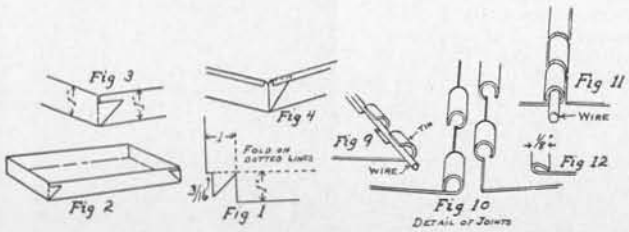
Few articles of camp equipment are more useful than the folding reflector baker. To be sure good bread can be baked in the frying-pan, but it requires considerable practice, and unless given constant attention the results are not always a success.

The reflector baker is easy to use, light and compact to carry, and will bake or roast anything that will go into the pan. They can be purchased from dealers in camping supplies, but are not at all difficult to make. Aluminum is the best material, but bright tin will do almost as well. The following articles are required: Some sheet aluminum or bright tin, a few feet of iron or steel wire about 3/32 inch to ⅛ inch in diameter, a piece of black sheet iron or steel for the baking pan, a hammer or mallet, tin shears, and a wire cutter.

Having decided on the size wanted, first make the baking pan. Take a piece of black sheet iron or steel about 2 inches larger each way than the finished pan is to be, and cut the four corners as shown in Fig. 1. Bend up the four sides 1 inch to form a shallow tray (Fig. 2), with corners folded like Fig. 3. Bend over the top edge about ⅛ inch, which will lock the corners as shown in Fig. 4, and leave a rounded edge. Wash the pan thoroughly, coat it with lard and put in the oven and bake. This will prevent rusting.

With the tin shears cut four pieces of tin or aluminum as shown in Figs. 5, 6, 7 and 8, making the projections about 2 inches long and from ⅜ inch to ½ inch wide, or just wide enough to bend around the wire as in Fig. 11. The length, "A," should be about ½ inch greater than the length of the baking pan, and the width, "B," about 1 inch greater than the width of the pan. The angle "C" is a little less than a right angle. Allow ⅛ inch on sides D, E, F, G for bending over as in Fig. 12, to give a smooth, rounded edge and additional strength. To make the joints, bend the projections around the wire as shown in Fig. 9. Figure 10 shows each opposite part of the joint, and Fig. 11 shows them joined together with a wire, forming a hinge joint.

The wire at joints "H" and "I," in Fig. 19, is cut off flush with the side, as it is to be left in



place, but at "J" and "K" the wires are finished with a ring (Fig. 18) at one end, so they may be easily withdrawn and the baker folded flat. The wire for the back hinge joint "L" (Fig. 17) is left long enough so each end can be bent at right angles to form legs "M" and "N" to support the baker.

For a rack to hold the baking pan, bend a piece of wire as shown in Fig. 13. The distance "O" is about 2 inches less than the length of the baker, and the distance "P" is about ½ inch less than the width "B." This wire is fastened to the bottom of the baker as follows: About ½ inch below the hinge joint, cut two slots with a chisel about 1 inch x 1/16 inch as shown in "RR" (Fig. 5). Bend two small pieces of tin as shown in Fig. 14. Fasten the wire rack in place by putting these pieces of tin around the wire and through the slots "RR" as in Fig. 15, and bending the ends over on the outside as shown in Fig. 16. In the end pieces (Figs. 7 and 8) make two small holes, "SS," so that the ends of the rack "TT" will just go through them. Care must be taken to make these holes at such a height that the rack will be level when baker is set up. To fold baker, points "TT" are slipped out of the holes "SS," and the rack will fold down against the bottom as shown in Fig. 5. Pull out the wires at "J" and "K" and the ends fold over against the bottom, the top (Fig. 6) folds against the ends, and the wire legs fold out of the way. Folding wire handles may be fastened to the top in the same way as the rack is fastened in place if desired, but if your outfit includes a 10-cent pair of cotton gloves as suggested by Editor Miller in "Camp Comforts," you can handle the baker while hot, and the handles will not be necessary. The baker and pan should be enclosed in a cloth bag.

To use the baker, a back log of some kind will be needed to reflect the heat of the fire. Make this by driving two stakes into the ground slightly slanting, and leaning a large flat stone or two or three small logs against them. Place the firewood against the back log, and use only small, dry stuff that will blaze up quickly and furnish a quick, hot flame. Put the baker together, grease the pan, mix the bread or biscuits according to recipe, and drop into the pan. Slide pan into baker, light the fire, which should blaze

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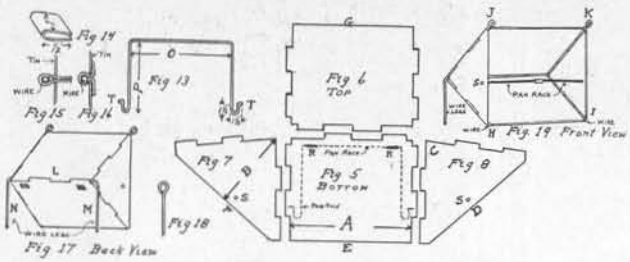
up high at once, and turn the open front of the baker towards the flames, adjusting the legs so that the pan sets level. The heat rays will strike the bright, slanting sides of the baker and be reflected up and down against the pan. Do not place too close to the fire at once, as the biscuits want a chance to rise. They will soon commence to brown on top, and if the front seems to be baking faster than the back, the pan can be reversed. Use an old pair of gloves for this, or you will surely burn your fingers. Have plenty of wood on hand, keep up the fire, and in



about fifteen minutes the biscuits will be done. Butter the tops and eat while hot.

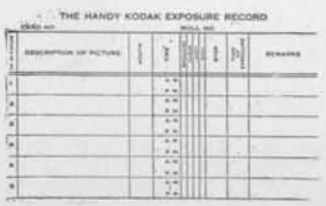
The slanting sides must be kept clean and bright in order to do good work. After once using the baker you will never go camping without one. It will take two evenings to make it, and will cost about 25c. in tin and 75c. in aluminum. The pan should be of black sheet iron or steel. My own baker is made of tin, and is intended for two men only. The pan is 5 x 8½ inches and bakes six large biscuits at a time. It weighs 1½ pounds, and folds into a package 9 x 8½ inches x ½ inch. Add a baker to your outfit and you'll be glad you did so. And you won't need to go on a long wilderness trip to find use for one, as those fresh, hot biscuits with tea, or a shortcake with fresh berries from the nearest berry patch, will taste just as good on a two days' camping trip within ten miles of home, as on a two weeks' trip to the big woods.

A HANDY KODAK EXPOSURE RECORD

By E. Everett Buchanan, Jr.

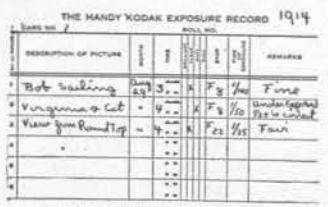
In using a kodak one often misjudges the proper time or light, and a result spoils a picture. If no note of this exposure is made the same mistake is likely to happen again. There are on the market several kinds of exposure records, either in book form or on sheets of paper. With a certain make of film a sort of record is furnished, which is not very satisfactory unless you develop your own pictures. The book form of records are clumsy and one does not always want to carry a book like that around with him.

After investigating and trying numerous records I decided to have one made to suit my own requirements. I drew up a form as shown in the illustration and had it printed on bristol board, size 5¾" by 3½". For some time I have been using them with much success.



BLANK RECORD CARD, SIZE 5¾x3½

When I start off, I take as many cards as I do rolls and carry the one I am using in my kodak case. As the record is made of cardboard, I can write on it while holding it in my hand. These cards also serve as a means of keeping your negatives in systematic order. Each card should be numbered, and when you get your negatives, put the number of their record card on the envelope. By keeping the cards and negatives for each year together you can easily look up an old negative.



CARD PARTLY FILLED OUT

As I use six-roll films entirely, I had my cards printed for six pictures only. If one uses ten or twelve exposure rolls I would advise having the cards printed on both sides, as a larger card would be too large for convenience.

PHOTOGRAPHIC CONTEST

FIELD AND STREAM offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submitted. The prizes for next month will be: First Prize—Three years' subscription to FIELD AND STREAM. Second Prize—Two years' subscription to FIELD AND STREAM. Third Prize—One year's subscription to FIELD AND STREAM. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, FIELD AND STREAM, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO

Made by Thayer Stevens. Eastman No. 1 Kodak, Junior Achromatic Lens, 1/50 sec. exposure. Bright light. Subject—Black Bear.

SECOND PRIZE PHOTO

Made by Lee N. Coffin. Goerz-Ango Camera, Dago F6.8 Lens, stop F16 , 1 sec. exposure. Strong sunlight. Subject—Leanto in the Big Woods.

THIRD PRIZE PHOTO

Made by C. A. Estey. Ensign camera, Anastigmat Lens F6.3. Bright light. 1/50 sec. exposure. Subject—Cow Moose.

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Edited by WARREN H. MILLER

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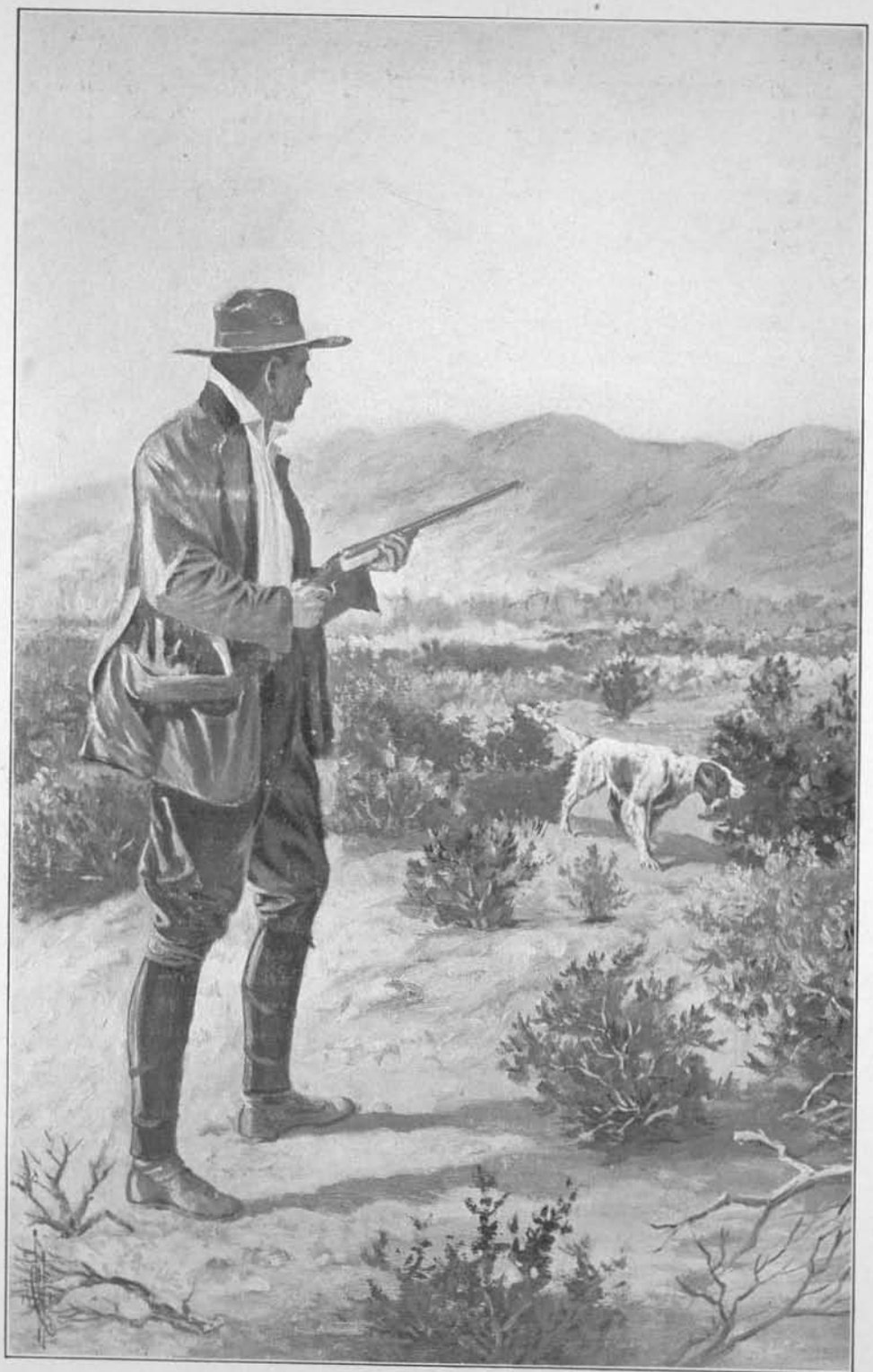

A WING SHOT IN THE SAGE

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FIELD AND STREAM

AMERICA'S MAGAZINE FOR SPORTSMEN

OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR JANUARY, 1916 NUMBER NINE

ANTELOPE HUNTING IN MEXICO

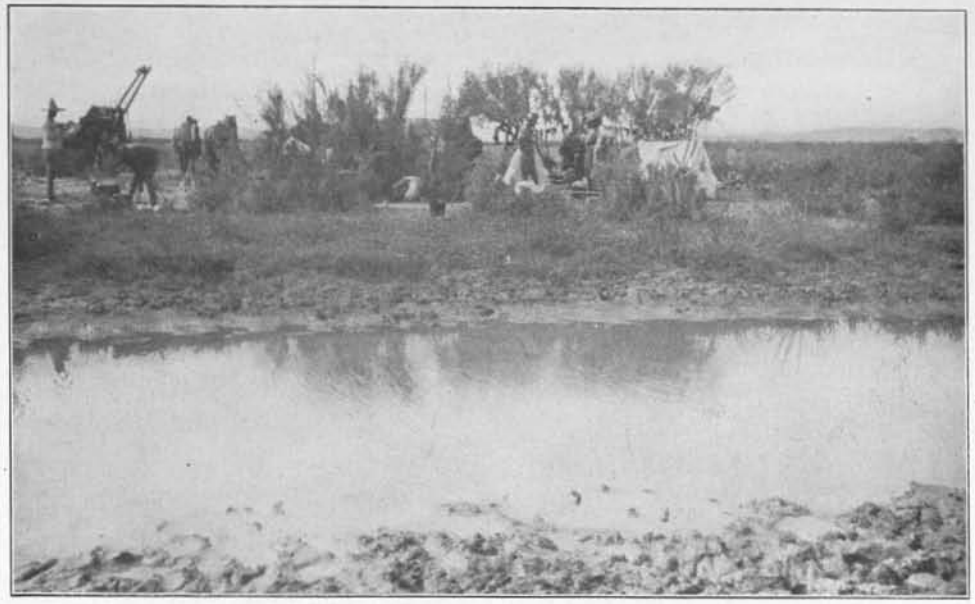
STALKING BIG BUCKS WITH THE "CAZADORA"

BY WILL CHAPIN

"HULLY Gee! fellers, that's nothing but sewage!"

Our party of five had been in the saddle since daybreak and just at dusk had halted for our night's camp at a water hole. During the whole morning we had been winding through the Sierra Madre Mountains, in eastern Chihuahua. About noon we had come to a high, big valley that stretched away as far as we could see in one direction, while on either side, from five to fifteen miles apart, ran two parallel ranges of hills. Seamed and scarred by rain and heat, they rose barren, rugged and forbidding, and nothing more desolate or depressing can be imagined. Their dull red tones, suggestive of burnt-out heaps of scrap-iron, doubtless gave rise to the name which the valley bears of Llano del Diablo. The floor of the valley was covered to a height of nearly three feet with a rank growth of gramma grass, varied with great islands of mesquite, whose green formed the only pleasing contrast to the dull monotony of dry tones on every side. The plain was covered with cattle of the long-horned variety, nearly wild, among them being many bulls of the kind used in the bull-rings of Mexico. Lithe, clean-built, active creatures, they menaced us repeatedly, but fortunately—for them—did not risk a charge.

Through this valley we had traveled all the long, weary hours of the afternoon in the intense heat, with the dry desert wind in our faces and with nothing to break our fast. We were hungry and tired, our horses were exhausted, and both animals and riders had settled down into a state of quiet, dogged endurance of discomfort, broken only by muttered objurgations from the "Kid." Now, the Kid was a strapping big fellow, six feet in height. He was not only the youngest member of the party, but this was his first hunt after big game, and, as he was fresh from the city, the last three days' experience in the desert had been a severe test of his manly qualities. The balance of our party were much older, had had more experience, and possessed the old hunter's philosophy of quiet endurance. The Kid had been learning fast, but he had not yet forsworn cussing and growling when conditions were not to his liking.



OUR CAMP AT THE WATERHOLE

Our guide had promised us good water for our camp that night, and, although the Kid was parched with thirst, he had reached that state where it required too much effort to moisten his lips and speak, consoling himself with the thought that he could drink his fill of water when he reached camp.

As we swung out of our saddles to the ground and saw before us on the bare floor of the desert a pool about twenty feet in diameter and not over four inches in depth, fouled and muddied by the range cattle, that fled upon our approach, covered with a green scum and full of pollywogs and wigglers, he gave utterance to the exclamation quoted.

"Wha'd ye expect?" said our guide. "There ain't any purling brooks in any antelope country I ever was in."

"All right," said the Kid. "If it don't poison the rest of you, I'll surely live through it."

While two of us scoured the brush for dead twigs for the fire and the guide started supper, the others picketed the horses and undid the packs. By the time these important details of camp life had been attended to the welcome cry of "Chuck's ready" from the guide brought us in a circle around the camp-fire, each to receive a plateful of venison stew, cornmeal flapjacks and a cup of strong coffee. Only those who have lived the life in the open can realize how such a meal is relished and the supreme satisfaction that envelops a man as, throwing himself against his saddle, he turns his feet to the fire, lights his pipe and smokes in silence, waiting for someone to start the round of stories and reminiscences that inevitably follow.

"Now, this is shorely good antelope country, fellers," said the guide after a short pause, "and ef we don't go buttin' round loose, we'll shore git some game.

"You chaps seem to savvy the business of hunting, all right, and I don't mean no offense in saying that in hunting these critters you got to be mighty keerful, all-fired quiet and must shoot powerful quick and straight. When one of these old bucks begins to hit the high places, going away from you, you ain't seein' 'em long and you've got to throw lead pretty fast.

"Youse fellers have got enough ammunition to seed this hull range, but I'm going to show you something that we use when we've got to git meat and we can't waste cartridges—for they cost fifteen cents a piece down here, you know."

He went over to his pack and, opening

a gunny-sack, took out a stuffed antelope head, the skin of the neck and shoulders being attached to it. Calling two of us, he made one bend forward with his hands upon his knees and the other place his head in the small of the first one's back, with his hands also upon his knees. Under the head had been rigged a hood which fitted down over the skull of the leader and covered his shoulders. Giving both guns to the foremost man, the guide instructed him how to use them as supports and to simulate the forelegs of an antelope.

"That's what the Greasers call a 'Cazadora,'" said the guide. "It's the ruttin' season now, and when you see an old buck galavantin' round in the open, jes sneak up as near's you kin and be sure and get his wind, for if he smells yer, he ain't goin' to take no chances, and'll light out *muy pronto*. Just study the crittur, and ef he seems a little scary when he sees ye, you act as ef you didn't want to make his acquaintance no how. Ef he's lookin' fer trouble, as most of 'em is jes now, he'll probably want to pick a quarrel before he finds out what yer are, and when he's near enough fer that, it's up to you to see that he don't get away."

An hour was spent in trying on the "Cazadora" and learning how to handle it under the guide's instructions, and then, rolling ourselves in our blankets, we slept the dreamless sleep of the hunter until we were roused about the middle of the night by the guide, whose: "Come, boys, it's time to git busy," brought us to our feet, each man ready for his share of the work necessary before starting.

By daylight we were in the saddle and riding down the valley against the wind in an extended line, each man about one hundred yards to the right or left of his neighbor. After traveling in this manner for nearly an hour we saw the two members of our party in the center suddenly rein up and dismount. Bringing the glasses into play, we could see, four hundred yards in front of them, a buck and two does, whose heads were just visible above the long grass. They were intently watching the three hunters on the right of the line, who had just come out into the open, while the balance of the party were still hidden from the game by the brush through which we had been riding. According to previous arrangement, those in the open were signaled to stop, while the two who had first discovered the game prepared to stalk it.

Tying their horses, they crawled to the left about seventy-five yards and advanced to the edge of the brush and disappeared in the long grass. Slowly and cautiously they crawled along, finally reaching a little clump of brush not over two feet high and one hundred yards in the open. The antelope had been circling

A BUCK ANTELOPE APIECE

OUR BIGGEST ANTELOPE—14-INCH HORNS 15 INCHES ACROSS THE TIPS

back and forth in the meantime, endeavoring to wind any possible danger, and their relative position was somewhat changed and there remained nothing but open country between them and the hunters, the grass being too short for cover, and the distance too great to make a sure shot.

A brief space was spent in properly adjusting the cazadora, and the next moment there stepped out from behind that bush probably the most unique-looking beast that had ever been seen by the animals of the plain. So thought a young long-horned bull, who had been quietly grazing a little to the front and left. With a snort he threw up his head and with eyes wide open and distended nostrils watched its progress. A low bellow, a tossing of the horns and a pawing of the dirt conveyed his challenge, and, as there was no response, he slowly approached, to the evident discomfiture of our comrades, who did not want to be charged in the rear or to make any motion that would frighten the antelope, who were watching them with the keenest attention.

We covered the bull with our rifles, fully determined that if he made an attack there would be one less bovine in that locality. He evidently reached the conclusion that the strange creature was harmless and finally went on with his grazing, occasionally lifting his head and giving a low bellow to intimate that he was still on guard. The antelope, however, were by this time intensely interested. They had at first merely glanced at what they supposed was "another Richmond in the field," but as the double humps and black back began to show above the short grass they maneuvered for a side view and for its wind. The hunters were playing the game, however, and as the old buck would make his little side runs, they would face him and he would get but occasional glimpses of the back. The head, neck and shoulders were all right, but those curious forelegs were evidently what bothered him. He would make short runs toward it, then stop and with a sudden whirl would swing round in a circle, then another sudden stop and another run, each one bringing him a little nearer to this curious stranger. Slowly the imitation buck moved forward, occasionally stopping to browse or to curiously watch the real antelope. Through the binoculars we could see the latter's mane erect and that he was all a-quiver with an excitement that the does did not seem to share, as their attention was centered on the three horsemen way out in the open to our right, who purposely continued to slowly move about. His curiosity increasing, he doubtless reasoned that, after all, it must be a buck seeking his bunch of does and accordingly charged straight toward the intruder.

Watching through the brush, it was with difficulty we restrained our temptation to shout a note of warning. Well we knew, however, that under that dummy head gleamed a pair of eyes that saw everything and that when the time came there would be an awakening.

It came soon, when the antelope was within a hundred and seventy-five yards. There was a slight motion as though the bogus buck had dropped to one knee. Slight as it was, it halted the antelope in full career. The curious front legs of the stranger seemed to unite, then

thrust themselves out toward him. With a snort he turned to fly, but it was too late. The first shot struck him full in the side, knocking him down. Immediately he was up and running as only an antelope can run. He had not covered fifty feet before there was another report and another and he pitched forward with a broken back.

And now a strange thing happened. Had the two hunters been amateurs they would have jumped to their feet, but they still maintained what, in military parlance, would have been termed their "formation" and were rewarded in a singular manner. Out of the brush, some three or four hundred yards ahead of them and to the right, burst a magnificent buck. He had evidently heard the report of a gun for the first time in his life, and he was either running in fear or from curiosity. We, of course, had no means of knowing whether he thought the simulated buck was real and was charging it, or whether, through fright, he was utterly unconscious of its presence. The pseudo buck seemed to sink into the ground and then, as the other reached a point less than a hundred yards from it, it suddenly split in two and the two rifles began to crack. The antelope was only hit once just as he turned, but that shot was fatal, cutting his jugular vein. He ran for fully one hundred and fifty yards, and, while going at full speed, plunged straight into a bunch of cactus and, turning a somersault over it, fell dead upon the other side. He proved to be the largest by far any of us had ever seen, and his horns, measuring fourteen inches long and fifteen inches across the tips, proved the finest trophy we secured.

Another day, while riding down the valley, we discovered a small bunch that we had evidently disturbed while feeding. As all but the Kid had secured a fine head, we mounted the cazadora upon him and he proceeded to stalk them. We had all dismounted and were sitting quietly upon the ground watching him as he circled off to one side to get to leeward of them. He had not gone fifty yards when there was a sudden baa-a-a-a and a fawn jumped to its feet immediately in front of us and ran after him. This fawn had evidently been hidden by its mother, who had fled upon our approach, and, seeing the head and horns above the grass, doubtless thought that its parents had returned and were looking for it. It seemed entirely oblivious of our presence and ran toward the Kid in a series of bounds. We could have instantly killed it, but it was such a pretty sight that not a trigger was pulled. It reached a point within twenty yards of him and suddenly stopped, evidently getting the strange scent of man for the first time in his life. Its little mane bristled, and then, after snuffing the air again and again, it started back for its hiding-place. It was within twenty feet of us before it discovered our silent and motionless group. With a baby snort, it stood as though made of stone, its beautiful eyes distended in astonishment. Fully a minute it watched us and then, after cocking its head first to one side and then the other, it slowly walked away, occasionally looking back with a sudden startled jerk of the head that was highly amusing. Again it made a short run in the direction

MID-DAY LUNCH IN THE DESERT

A VICTIM OF THE CAZADORA

it had last seen its supposed father, and then, doubtless remembering its mother's advice to hide, it sank down in the long grass. Its curiosity was too great for it to remain hidden long. Suddenly bounding to its feet, it came slowly toward us, so near that we could easily have roped it. As it stood watching us the guide sprang to his feet and clapped his hands. With a snort and a bound it turned to fly, and as it ran straight away from us it was interesting to watch it instinctively interpose the brush and cactus between it and the cause of its fear.

Another time three of us had ridden from daylight until the middle of the afternoon without any sign of game when we discovered a solitary buck some six hundred yards out in the middle of a large llano. Slowly riding toward him, we gained a third of that distance before he began to show signs of uneasiness. Dismounting, we tied our horses in plain sight to a mesquite bush and, hiding behind it, divested ourselves of hats, cartridge belts, canteens and all impedimenta. Hugging the ground, we crawled two or three rods to the left and found that, some two hundred yards nearer the buck, was a small bush about two feet high and the same in width. It was the only cover in sight and if we could reach it we could probably get a fair shot. The grass was not over fifteen inches high, and as he was intently watching in our direction, it would require our utmost skill and caution to gain its cover. An Indian could not have excelled what followed. Lying flat upon our stomachs, our very noses scraping the ground, each man straight behind the one in front, we would, in concert, first push our rifles ahead as far as possible and slowly drag ourselves up to them by our elbows.

With the fierce sun beating down upon our uncovered heads, the grass thrusting itself into our eyes and ears and our mouths full of dust, it was no easy task. Slowly and painfully we dragged ourselves along, our leader occasionally raising his eyes to the level of the grass for purposes of observation, and, after what seemed a full half hour, we drew up behind the cover of the little clump of brush.

Our buck had moved but slightly and was still intently watching the horses. A momentary pause to collect ourselves, and, drawing a bead at two hundred and fifty yards, we cut loose. Antelope always seem farther away than they really are and we overshot him, having misjudged the distance. Our second volley bowled him over, however, one bullet breaking his foreleg at the elbow, while another broke his hind leg at the knee close to his body. Upon examining him we found that there was a malformation in the shape of a fifth hoof with two perfectly formed toes attached to the skin where the hind leg joined the body, and, strange to say, the second bullet had struck it squarely, cutting it loose and it hung dangling from the hide. These freak formations are not at all uncommon, as later we shot another buck whose right horn was flat and bent outward, forward and downward somewhat like a ram's.

Our last day in the valley furnished us the most excitement of the whole trip. Having secured several fine heads, we had broken camp and started on our return. Some ten miles from camp we discovered three or four antelope out in the middle

of a small llano ahead of us. Instantly dismounting, three of us crawled to the edge of the brush, only to find by the time we reached it that they had moved some three hundred yards farther to the right. We saw that the other two members of our party had gained a much nearer position and cautiously crawled to where they were, hidden by a large bush.

The game had gone into the mesquite brush, which was here open and scattered, and we could see from their actions that they had winded us and were disturbed, not knowing where we were. At a given signal the five of us fired a volley and they immediately disappeared in the brush. Thinking they had gone for good, we stepped from behind our cover and stood discussing the advisability of following them, when, from the brush on the other side of the llano, some three hundred and fifty yards away and directly opposite us, came three antelope on the dead run. They were followed by four more, then by five, then another and still another bunch, until at last there were some thirty antelope running straight toward us. The sound of our firing had startled the scattered herd and they were running wildly. Then, indeed, there was mounting in hot haste. Such a scrambling for guns and loading of magazines has rarely been equaled! Had anyone been listening they would surely have thought a battle was taking place. Straight toward us they came, and they were within fifty yards before they seemed to see us. For a moment they ran hither and thither. We were shouting and laughing and firing just as rapidly as we could aim and pull the trigger. Right in the midst of all the excitement someone yelled, "For God's sake, look at the buck! Kill him! Kill the big buck!" Out of the brush where we had first seen the small group came a magnificent buck. With head and tail up, chest thrust out and eyes ablaze, he bounded into the open with an air that seemed to say: "What's the cause of all this disturbance? Who has broken up my happy home?" By this time the balance of the herd had straightened itself out and were running away from us like the wind. As the bullets began to sing around the old buck he concluded that he had better follow his harem. For four hundred yards he was in plain sight and, although the bullets plowed the ground all about him, he seemed to bear a charmed life, for he escaped unscathed. When we came to figure it up, we found that we had fired between ninety and one hundred shots, and on looking over the field we found we had wounded one buck in the neck.

Any two of our party, had they been alone, could probably have killed half a dozen out of the bunch. We had all gotten beyond the "buck" fever period years ago, and the only explanation of our poor shooting that I can offer is that our sights were all set to three hundred and fifty yards and the antelope in running towards us were constantly changing the range, so that we must have overshot them. We were glad that we had not killed any more, for we had all the meat and trophies we wanted. Such an exciting five minutes, however, rarely falls to a party of hunters.

Three days' journey took us back to the railroad, and, snugly ensconced in a Pullman, in our "store clothes," we were headed towards civilization. We were tanned to the color of Indians and were hardened and toughened by our experiences, and had forgotten that there was such a thing as brain fag and tired nerves.

The daily life in the saddle, the constant exercise and the freedom from all the conventionalities had given us a new lease of life. The contact with Nature in her larger aspect; the illimitable desert; the many nights in the open, when, wrapped in our blankets, we could gaze up into the heavens and see the pulsing stars that seemed to hang almost within reach; the bare, barren hills, mute testimonials of a time when Nature was in her most savage mood, had broadened our view and made us stronger and healthier in mind as well as body. That is the value of a hunting expedition like that we had experienced. The amount of game we had killed was a secondary consideration.

For seven weeks we had traveled together, and in spite of the trials and some hardships of the trip, it had given rise to friendships that will last for life.

Editorial

The Philosophy of the Outdoors

WHY is the Sportsman? It is a question that he himself is sometimes forced to scratch pate over. Why does he take trails that he positively *knows* lead him to hardship, danger, toil, fatigue, mental and physical anguish, and yet goes back time after time for a further dose of the same blessings. A city-bred man, who was for a very short time Game Commissioner of New York State, and has since added to his fame by certain peculiar experiments in prison reform, opened his first address to the assembled sportsmen of the State by generalizing upon the fact that it took all kinds of people to make a world, and that, while it was inconceivable to him personally that any man should wear himself out and endure all kinds of hardships merely for the sake of taking the life of some poor animal or fish, undoubtedly there *were* some people crazy enough to do this very thing, and that the Governor had appointed him to hear their complaints, if they had any to make. Needless to say he did not last long as Game Commissioner. He wasn't raised right: he hadn't the mental breadth of the sportsmen he so airily judged, or misjudged, and he made the mistake of thinking that all America was made and patterned after New York City, where the "God of things as they ain't" presides over the thoughts and actions of men.

For, the sportsman of America is not the odd and infrequent phenomenon that the short-term commissioner, judging from his city experience, had imagined him. The U. S. Biological Survey, which tabulates the sportsman along with other wild features of our broad land, computes that there are four and a half millions of him that take out hunting licenses yearly, and this takes no account of vast sections of the country where the natives never think of taking out a license. He represents a fourth of all the male citizens of fighting age in the country.

No; the outdoorsman has no need to feel derided and all alone when the pert city man pops the question, "Why is a sportsman?" He admits, with a cheerful grin, that there are hardships, delightful hardships—the snow and the rain, the insects, the adverse winds, the toilsome mountain slopes, the brambly thickets—but, while he reaches gropingly for the answer and may flounder in defense, he is quite sure that there is some big, firm foundation on which his reason for being a sportsman rests.

Why is rain in the woods a pleasant sound to the sportsman, while to the city dweller it is symbolical of desolation and dreariness? Why did our earlier poets, even Longfellow, who wrote "Hiawatha," clothe the woods with mystery and dread, while our outdoorsmen count them a region of real delight? Why did the novelist and the poet of earlier generations use the woods at night as his favorite stage for horrors, and why did he people the forest with gnomes and witchery and prowling, savage beasts? Ah, but these men knew not the Forest! They frightened their readers with a forest presided over by the "God of things as they ain't"; a fearsome place, entirely of their own imaginations. They, and the city man of to-day, were and still are in the ape age, the cave-man age, when man hid in the crannies of the rock to find shelter from the beasts and the weather, when the forest really was a terror to all but the strong. Even then the sportsmen of that day did not seem to take their "terror" very seriously; they brought us through those times somehow; but the city man of to-day cowers in his brick caves and crannies and is safe from imagined terrors of wild beasts, wind, rain, snow, and sunlight. No wild life for him.

Quaint old Col. Buffalo Jones used to proclaim, and devoutly believe, that "God gave to man dominion over all the beasts of the earth," and he proved it in his own person. The city dweller of to-day has dominion over—nothing. His landlord, his job, his grocer, his subway, his wife—all call him slave. For the sake of that sheltering cranny in the brick canyon of the city street, no inclination of his but

is hemmed and bound by fear of losing his burrow in the rocks. Is it a wonder that even he rebels sometimes against the restraint of it, the belittling self-confession of impotence? The day is fine; let us do thus and so. No; I'd like to—but—the office, the flat, the wife's shopping excursion of this evening, the club, the theater—a thousand artificial things that have nothing to do with the weather or Nature's inviting mood deny him; but, more than these even, his own impotence denies him. Of what avail his hours spent, in the name of exercise, in knocking a tennis ball about, or pushing a leather pigskin against his fellow man towards a defended goal, when these things will be of no practical use when once he is outside the pale of that protecting cranny in the city wall that he calls his home? Money cannot buy him the outdoorsman's liberty; it can hire him guides, but he had precious better not let himself get lost! It can buy him tackle and firearms, but he can do nothing with them; it can buy him transportation—where to but *away* from the sheltering niche in the cave town of civilization where nature and the wild things cannot get at him!

Turn the picture around and make that same man an outdoorsman. He now really has dominion over all the earth; freedom that no man can take away from him; skill with rifle and rod, knowledge of woodcraft, woods travel, horse, canoe, camp cookery, camp medicine—these that give him mastery—and daily he delights in proving his courage, his hardihood, all the battling qualities that make a man a man, in winning comfort and sustenance from nature.

He fears nothing in life. Mr. Moneybags is bent on ruining him, on stealing away his fortune: does he grovel and sell his soul for bread, like our friend the rock coney has to? or does he not rather keep his honor bright, and, if worst comes to worst, say with a happy sigh, "Oh, well, he's cheated me out of it all; now I'll go build that little log cabin somewhere up in the mountains and really live!" He fears not sickness; if disease and overwork threaten his life, he does not despair and blunder on to the end, but instead drops his affairs and betakes him to the forest in quest of moose, deer or elk, where he knows a sure cure awaits him. He fears not old age; no matter how the world of business has treated him, or rich or poor, he knows where to end his days in peace, and he "dreams of mighty ranges, and the silent mountain-meadows in the glory of the stars." He fears not Death; civilization may have molded religion into a terrifying and cruel doctrine and twisted God's word into an instrument of torture; but the outdoorsman knows! He belongs. Wakondah may or may not have made the awful Armageddon of man's self-destruction that the world stands aghast at to-day, but He surely *did* make the good green world of nature that the sportsman knows, that he spent happy days in; and he knows that Wakondah has a place for every least creature in it in His scheme of the hereafter. It is enough.

These be material benefits. The soul is not satisfied with a sense of self-reliance alone; there is a craving for the beautiful implanted in the breasts of all of us, whose yearnings will never be sated. Because of his nature the sportsman feels these yearnings the more acutely; none so humble amongst us but gets his major enjoyment, not from the game alone, but from the silent beauties of marsh and upland, of mountain and forest spread so lavishly on every hand. Scenes, never to be forgotten, of natural beauty crowd his memories; more of them hour by hour will unfold as new country is traversed. Is it not the anticipation of these as well as the pursuit of game that lures him afield?

Happiness, freedom, health; no fear of business failure; no fear of old age; no fear of death; gratification of the craving for the beautiful—why is the Sportsman? Pish! The question answers itself!

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THE ROD AND THE ALBACORE

THE BLUE ALBACORE OF CATALINA

BY

W. B. HAYNES

THE world's greatest fishpond is the Pacific Ocean, and Catalina is the easiest place to go fishing that I ever saw.

At most fishing resorts some little effort is required to select the place and get your guide, but at Catalina it is as if you are on a greased chute.

If you go to Catalina with even the slightest notion of going fishing, you will soon find yourself on the greatest body of water in the world with a bunch of sea-tackle in your hands taking orders from your guide.

All things are made easy for you at Catalina. It is even a down-grade walk from the hotel to the fish-wharf, and when you stroll out on the dock the Catalina guides are ready to offer you their boat and service for two anglers, bait and trolling tackle. The price is $5 for a half day, so you and your partner get out for $2.50 each.

For this it is permitted to let the big sea fighters, tuna, albacore and yellowtail try to tear your arms out by the roots.

As a fisherman from Ohio, it has been a notion of mine that I owned a Bethabara bait-casting rod that would give the sea and the contents thereof the "mackerel eye" without blinking.

This little Bethabara knew something of the way of a 'longe in his frenzy. It knew how to humor the first bolt-like rush of the cavalla in his Florida river, and, just before going to Catalina, it had landed a twenty-pound white sea bass in a glorious half-hour blur of events off San Diego, when four of us had each a white sea bass in tow, with the lines crossing and uncrossing like the ribbons of a May pole.

But the little rod never got away from the post at Catalina, as my Portuguese guide, Enos Vera, said: "Suppose you catch a gold-button yellowtail on that pole, and then you don't get the button? And for why? Because she's got a joint in it!"

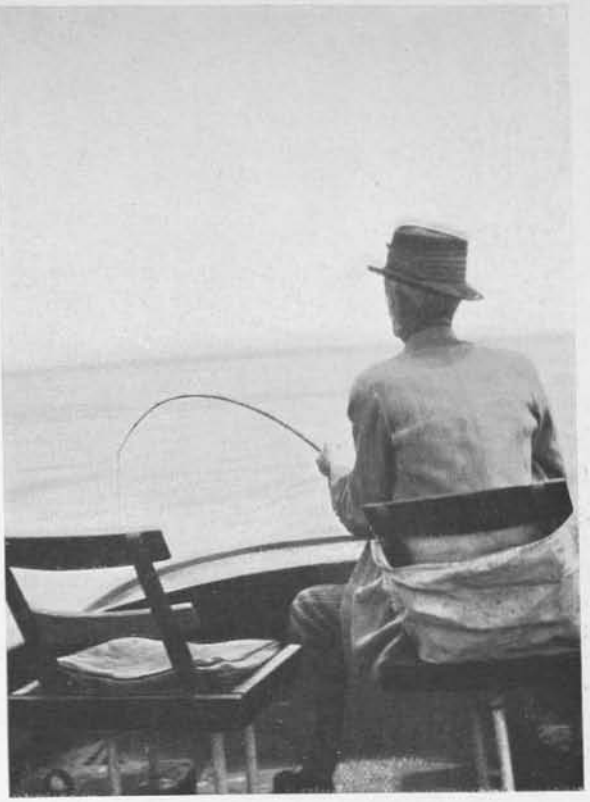
It seems that the Tuna Club specifica-

tions make a one-piece rod imperative if you want to take home a Tuna Club button, and this is one of the few fisherman badges that is not a joke.

I took the rod back to the hotel and Enos outfitted me with a 9-9 outfit, which is Catalina light tackle, and that means a 9-ounce rod and a 9-thread line.

The line looked too small to catch a big albacore on, as it was about the size we use for bass, and as we left the dock Enos asked me if we should try near shore for yellowtail or head out to sea for albacore. As I wanted the latter, we ran out about five miles, and there where the albacore live we trolled for two hours without a strike.

Finally Enos said, "I think that fellow way out there is fighting one." Three miles farther out a launch had stopped and was pitching in the swell, so we headed out to sea, to get in on it if the school of fish proved to be there.



PARDNER HARD AT WORK

Half-way out Pardner, who had been looking intently, said: "Yes, he's got one. The boatman just went aft to try and gaff. . . . There! He's missed him and the fish is making another run!"

Just as we drove down wind past the boat they took their fish aboard, and as I turned in my seat to watch I brought up with a jerk to fight my first albacore.

Enos shut down the engine. Pardner took in his trolling line and the fish and I tried to break the line.

Of course, it was my first fish, but I was conscious of an awkward helplessness I had never felt before. It was all right at first, when the struggling fish seemed to be coming toward me; then something happened and things started to settle, and the fish started running straight down.

Yard after yard the line left me, and the little leather pad belted around my lower chest that rested the rod-butt would not stay straight, as every vicious yank of the fish twisted it to one side, and a desperate sort of "hoochee-koochee" movement was necessary to bring it back in place.

The albacore now owned a working interest in 600 feet of line, and when more started to go, both the guide and Pardner comforted me with the reflection that I probably would bring up a piece of fish, as it was acting as if a shark had charge of the party. Often the sharks cut your prize in two as he fights deep down toward the bottom.

That ended my enjoyment for a while, as I pictured myself wasting time and strength on an ugly, slimy shark, and I went at that fish with a "Come to pa" attitude.

Yard after yard I fought back, and finally the guide said, "There he is!"

"The shark?" I queried.

"No," said Enos. "He is all right and a big albacore." A bluish fish with the vi-

THE GUIDE SAYS HE'S A SILVER-BUTTON FISH

cious mackerel-shaped tail came into view deep down, on his side, and working hard. As I reeled him up he fought on, a winking sapphire on the bosom of the Pacific.

Then ensued the finish with the gaff, and Enos lifted him in. Somehow I wanted Pardner to get the next one and let my aching arms unravel the bow knots the muscles had arranged themselves in for a half hour. There wasn't any use being grasping about catching these fish. Yes, it would be a fine thing if Pardner got the next one!

Enos spoke up: "You worked much harder than the fish did, and the next one will come easier. That's a bronze-button fish and he's almost big enough for a silver button."

The guides of Catalina will enter no plot to get you a Tuna Club button unless you earn it on the level with light tackle.

That ancient institution, the fish lie, doesn't work on the wharf, and the patron saint of some anglers, who, to parody Kipling—

"Sits in a sea-green grotto,
With buckets of lurin' paint,
And draws the things as it isn't,
For the God of things as they ain't."

couldn't catch a fish on heavy tackle and get the guide to say it was a 9-9.

Then Pardner got one and lost it, and I connected again.

Enos was right; the second fish came easier. And then Pardner hitched on, and, as he landed his fish, a small school of the graceful sapphire gems played around the struggling victim.

Just before we headed back to Avalon for dinner I struck my third fish, and, after bringing him into sight, Pardner couldn't stand the pressure and put in to try to get one of the several albacore that were playing around the candidate for silver-button honors, as the guide declared my fish to be.

My fish, with a side-long rush, tangled into Pardner's line, and in the mix-up that followed he took along the hook and several yards of line as a souvenir.

The next day we found the albacore ground swarming with the Jap fishermen who had come over from San Pedro to catch albacore for sale to honorable tuna cannery.

The Japs do not like the sportsmen who fish for fun, because the trolling boat goes past him and the albacore follows the moving object.

The sportsman does not like to see the Japs taking out the game fish by the ton. The little brown men locate the school and get them coming fast by chumming with cut bait. One Jap will scoop up water with a little cup on a long handle and throws it out in a splash, and this makes the school of albacore frenzied as they dash around looking for food. At this juncture out steps the "barnboss" Togo and lowers a fishing rig into the

water baited with live bait.

The pole is 10 feet long and 2 inches thick, with a line to match and a barbless hook to save time in taking off the fish, and he "hosses" out albacore as fast as you can believe.

The guides say, "No use to fish near the Japs, as they use live bait and have you beaten."

The canneries buy the fish from the Japs and sell them for canned tuna. Twelve canneries are now in action and the guides say the fish are running fewer every year.

Nothing fails like success. Make sport easy and you are headed for dead calm, and on the way back Pardner told of the old days, before the invention of the Rabbeth drag, and said that in those days you looked at your prize over skinned knuckles, and it occurred to me that if an albacore was as hard to land with an up-to-date Rabbeth attachment, then in the old days, with an ordinary reel, the man who landed one was a fisherman indeed!

WEIGHING IN ON THE TUNA CLUB SCALES

FLY CASTING

A sport that lures the angler on
  Amid the silvery glint and gleam
Of eddy cool, or silent pool
  Along the shady fishing stream.

The pastime with a thousand thrills,
  Where in their haunts the gamy bass
Bring keen delight to speed the flight
  Of golden hours that swiftly pass.

A pleasure that revives the soul
  Depressed by work and worry's sting,
For near the gleams of rippling streams
  Cares take their flight and Joy is king!

GEORGE B. STAFF.

THE AUTHOR AND SAM AT THE NOEL CAMP

THREE MEN—THREE DAYS—THREE MOOSE

BY J. F. REYNOLDS SCOTT

READER, has it ever been your good fortune to hear a bull moose coming to your call upon a frosty morning or evening, to sit in a canoe or crouch in a bog while his grunts get nearer and nearer, to have your spirits drop to the depths of despair when his answers cease for a time, to hear his horns again ring and rattle on the trees, to have your game come in sight and work up toward you —finally to fall to your rifle and so fill you with joy and satisfaction? If so, you may enjoy hearing of the taking of one such moose, as well as an account of the decease of some other members of his family. And if you should never have had such an experience, may Fortune in the future be kind and give you one such, for there are more concentrated thrills and greater satisfaction in such an affair than my poor pen can adequately describe. I was fortunate enough to have such an experience in October last at a Quebec club, an account of which I shall endeavor to give.

The trip, so far as I was concerned, commenced when Sam and I left Philadelphia on September 2d, and that night joined the rest of the party in New York. Sam, the assassin of pancakes, was my guest, and on the Montreal train we met the Major, his nine-year-old son Billy, Mac and his two guests, Jess and Bushy, of North Carolina. Our destination was the hunting and fishing club of which we were members. Let us call this club the "Mountain Club" and state that it contains 100 square miles more or less and lies just over the northwest corner of New Brunswick in the Province of Quebec.

To those who incorporate clubs the

provincial government wisely rents forest lands known as "Waste Crown Land," where one can obtain for a term of years the exclusive hunting and fishing rights over one's leased territory. There are many such clubs in Quebec maintained mainly by Americans, who improve the territory extensively; some of these clubs support huge establishments and estimate that their members bring into the country many thousand dollars annually. The Mountain Club, however, has a very small membership, and by careful conservation of its game, aided by similar tendencies on the part of the neighboring clubs, prides itself on the annual increase of fish and four-footed game. So, for that club we were all bound with great expectations as to fish and trophies. Of course, the talk in the smoking compartment that night was particularly of what we hoped to get, and until some of last year's photographs were displayed, I fear our guests were on the point of proposing us for membership in the celebrated club named for Mr. Ananias.

After several days in camp getting things fixed and shooting partridges, Sam came back from Noel Lake quite excited. On reaching that camp day before they had scared out a moose from the deadwater in front of it, and during the afternoon had seen two deer on the lake shore. His guide called that afternoon, and after dark two bulls were heard grunting, but they could not be induced to come out upon the shore, a cow only appearing. In order to add to Sam's thrills a bull and cow made off in the darknes snext morning as he opened the cabin door. It seemed to me that I might as well return with him and share some of the excitement, though as he was coming out in a few days, it was understood any bull that might show up should be his, and that afternoon found us, with my guide, Joe, calling regularly and in vain from an old lumber capstan on the side of the lake. Just after dark we heard a moose in the water across the lake and started for it in the canoe, Sam in the bow, myself in the center and Joe in the stern. When half way across we heard the grunting of a small bull to our right and changed our course for him, and a moment later heard the deep bass grunt of a large bull. The smaller fellow evidently realized that was no place for him and ran around the edge of the lake toward us, but away from the big one. By careful paddling Joe got us so close to the large one that I could smell him plainly, but could not see him in the darkness, and, recalling that I had noticed a little bank of fog at that corner of the lake just at dark, I stood up in the slow-moving canoe to be above it and made out the big white horns of the bull on the shore. They evidently showed up so well because of being just out of the velvet, and I could distinguish part of his body and also the fact that he was watching us. The grassy shore was then not more than ten feet away and the canoe was due to strike it in a moment, and figuring that such a noise would scare away our game, I covered the animal with my rifle and whispered to Sam that I would have to take him, since Sam could not see him. The canoe hit the grass with a soft thud, but still the moose remained motionless and not thirty feet away; so, resolved to give Sam every possible chance in getting his head, I poked him with my knee and whispered to stand up and shoot, at the same time lowering my rifle so he could rise. And while Sam was unsuccessfully trying to haul himself, his two pairs of trousers, three sweaters and a mackinaw into a position to see and shoot, the moose suddenly remembered a previous engagement and left in haste to keep it.

It was a disgusted crowd that climbed out of the canoe and into the Noel cabin that night, but we realized it was all in the game. Joe was so worked up that during the night he dreamt continually of hunting, and kept loudly calling my name, finally making himself heard above Sam's snores, and, in addition, I had the nightmare and started to scramble out of bed to the door. Next morning Sam refused, with much bad language, to get up for early hunting, claiming the evening was the only time he ever saw anything. At nine we all met at Lake Ouillette and had the men drive the mountain near there, while we covered the trail between two nearby lakes, but the result was nothing seen nor heard.

That night the Major went up to Ouillette and sat for an hour in a crow's-nest Mr. D., our club president, had built between three cedars overlooking a mineral spring much frequented by game. We heard a shot before dark, and were at Mr. D.'s when the Major arrived with a nice six-point buck, which delighted little Billy even more than his father. The youngster rushed up to the animal and, after affectionately patting it many times, was heard to inquire "Deer, is your soul in Heaven now?" Few hunters could answer that question.

The next night Sam and I decided we would watch from the same crow's-nest and have Joe call from there also, taking a chance on some bull being foolish enough to answer and come to the call that early in the season, it being but September 17th. About four o'clock we climbed the eighteen-foot ladder and had lots of amusement over Joe's face when he looked over the side and realized the distance to the ground; from that time on he never let go one of the supporting cedars, though he kept calling regularly. To our surprise and joy a couple of hours later we heard a bull answer, and all of us scrambled down the ladder and into the canoe. On going out into the lake we heard two bulls coming instead of one. The one we had heard first seemed to cut across in the direction of the other and bluffed him out of coming. It was Sam's first experience with a called moose, and the animal gave him plenty of time to realize the sensations, for he took three-quarters of an hour to come in, and, after hanging back in the brush a considerable while, came out only a little way into the water. By this time it was dark, but Joe and I could make him out plainly, the white horns helping to indicate his position on the shore. Joe had worked the canoe up within fifty yards of our game when the moose started to turn around and Joe whispered "Don't shoot," being evidently under the impresion that the animal was coming further into the water, when in reality he was turning around and leaving. So no moose was killed that night.

Next morning Sam and his guide called there at daylight, got an answer several times, but could not sufficiently interest that bull to come in. That day, the eighteenth of September, the Major, little Billy and Sam left for home; Bushy and Jess having gone a few days earlier, disappointed as to big game, but, as Jess remarked on pointing to a red squirrel, "We call those big game in our country, sah."

The day after the others left I started for Noel, resolved to try calling and to see if I could not have some amusement out of the myriads of moose Sam had claimed to be there. On Saturday night we called from the capstan without response and heard nothing after dark. Sunday morning just after my alarm watch went off at 4:00 I plainly heard a moose walking close to the cabin, therefore we quickly pulled on our footgear and replaced our knives—in the woods this is called dressing—and went carefully forth. A hundred yards across the small deadwater, in front of camp, a bull and cow could plainly be heard, the former making a big row by grunting and rattling his horns on the alders. Joe tried to lure this fellow out into the water by making gentle and persuasive calls with the barkhorn, but the bull kept up his racket and showed no signs of coming to us. We wasted a half hour on this gentleman until he left, about daylight, and then went out on the lake and called. Three moose answered and came a little ways, though this was but September 19th, and finally, at 7:00, we decided to go back for breakfast. Before doing so we crossed the dam to examine the place the bull had been when we first came out of the camp, and while there thought we heard an animal breaking brush a couple of hundred yards down the shore, where the canoe had been left. Joe called again, but the water running over the dam prevented our hearing much, so I decided to use the path that ran around the deadwater and try to surprise Mr. Moose, as this trail was well sheltered by little spruces. So well did I succeed that as I got to the point where we turned off to reach the canoe a large animal gave a jump near by and through the bushes I saw a cow's back and immediately behind her a bull having horns that I estimated were an average

A CANOE CATAMARAN RIGGED TO CARRY HEADS AND LUGGAGE

42 to 45-inch head. The animals were not thirty yards from me, but as this was not a big enough head to suit me, I lowered the rifle, though it was quite a temptation to shoot, and in about half a minute they got nervous and left.

We spent most of the day sleeping and reading in the cabin, except that I took a short walk after lunch and knocked over a grouse for supper with a rock. About 4:00 the call was again ringing out from the lumber raft, but no answer came to us. Toward dark we made out two moose on a little meadow at the far end of the lake, one a small bull, and just as they disappeared two more came out not far from them. The glasses showed up no good horns in the pair, but we decided to paddle down and look them over, anyhow. When we got there it was just dark and they had left, but back in the bush we could hear two small bulls barking away, and shortly a little cow came out and began to feed in the water further down the shore. After investigating her we headed for camp, running across the lake to have a look at a yearling bull fooling around in the water. Seeing eight moose in one day made us quite enthusiastic about Lake Noel, and we were encouraged by hearing some sort of an animal splashing around in the deadwater just before we turned in for the night.

At 4:00 next morning we were out in the starlight again, and on hearing nothing in front of camp, worked down back of the trees to the canoe. On coming out into the swamp, where one could see the length of the deadwater, we noticed a black object, and, after watching it for ten minutes, it coughed at us a couple of times and went out, evidently a cow. There was another moose in the water also, either a calf or small bull, but after watching it for a while we decided to waste no more time and worked the canoe silently up the outlet and into the lake.

It was just after daylight and the usual early fog was rising as we came out of the stream, when suddenly a moose's deep grunts were plainly audible, evidently from the other end of the lake. It was a half mile over to the other shore, but Joe shoved the big and heavy old canoe along pretty rapidly, and at about 300 yards I made out our game standing in a foot of water and taking his morning drink. The glasses showed a set of horns equal to the ordinary 50-inch spread, but not the shaped head I was after; my desire being to get a pair of thick, heavy horns with long points. Quickly deciding to take the

THE AUTHOR'S MOOSE—ONLY 46¾ INCHES, BUT FINE, LONG POINTS

animal and be satisfied with this moose early in the season, I took off my right glove, aimed for the bull's chest and at 200 yards fired. Judge of my astonishment to see the shot knock him completely over, putting his head where his tail had been the second before and landing him on his side with the hind feet throwing mud and water toward me. And judge further of my astonishment when, a moment later, the bull regained his feet and sprinted out of sight into the brush, though I gave him two more shots.

I shall not attempt to describe the day six of us spent tracking that animal, beyond mentioning that he bled profusely for the first two miles and then, after drinking heavily from a stream, the bleeding stopped as if by magic. We heard him a couple of times, and came to many places where he had fallen down from sheer weakness, but at 3:30 we were forced to give up on the top of a high hill and ruefully find our way back to Noel, a disgusted and tired crowd. As we went to sleep that night in the cabin there were more animals out in the deadwater frolicing around, but nothing was seen on hunting next morning.

For about a week after we moved over to Mr. D.'s main camp the weather spoiled the hunting, there being continual wind, hail and rain. The time was passed most pleasantly, however, in sitting around the fire, smoking, popping corn and telling stories, and in the evenings our genial president relieved us of our small change at vingt et un, though he claimed to be a beginner at it. As the weather improved, on the 28th I decided to go up to Sommet, which had only been opened up last year and from which a 61¾-inch bull had been taken, and sent Joe and Alex, Mac's guide, up there with a small stove; Joe and I getting there that night. We tried calling at the little bog, but it got so exceedingly cold our attention was turned to getting wood for the night, which we spent lying alongside the stove and keeping the fire going until we turned out at 3:30 to find everything white with frost, and, sitting in the canoe on Sommet, all the wood of my rifle frosted over also. We decided to go back and lunch at Canadaro that noon, and broke ice for a quarter mile in Metsebagot to reach the landing.

Mac had been hunting Ouillette and had gotten close to a bull there that morning; we "took the auspices" with his poker dice to see if he would get his moose before I saw him again next morning, and

they said he would. They spoke truly, for after getting no answer to our calls at Sommet that night and next morning we returned to Canadaro at 8:00. While mixing dough for a cake in the cook-shed I saw Mac coming down the trail shouting that he "had got him," but as we had heard no shot I congratulated him, not so much on killing the alleged moose, but on his disregard for the truth. It turned out to be true, however, and we all went up to Ouillette and found the moose a hundred yards back from the lake and dead as Cœsar. The head spread 50½ inches and had 17 points, and on cleaning the head it became apparent that some time in the past he had been shot in the nose. His right submaxillary bone had been broken close to the teeth and had never quite healed, so that the whole lower jaw had shifted over about an inch to the right. Strange to say, the upper jaw and nose had shifted to conform to the lower jaw, and, while there was no mark on the hide to show the path of the bullet, it was plainly evident in the nose cartilege. Mac was fortunate in getting his moose; he had seen a cow and bull at the same spot just after daylight, but could not get close to them, and after vainly calling until 7:00, had fished for a while from the canoe and was starting for the landing when Alex saw two moose down the shore. They turned out to be cows, but a bull could be plainly heard back in the bushes, so Alex gave what he names his "if you please" call and the bull came slowly out through the spruces to receive a 405 in the body.

That night I spent at Noel, seeing a small bull and hearing several bulls and cows the next morning, but getting no answers. Therefore I decided to go back, spend a night at Amtoddwasser and if we had no luck there to pull out for Racy and hunt there the four remaining days until the team came in for me. It was an awfully cold day and the prospect of a frosty night in a tent did not appeal strongly to me, but at Amtoddwasser Joe and I had last year called and killed our moose, and we both had great confidence in it. That afternoon found us there making camp and getting wood far up on the adjacent hillside, and it was 5:00 o'clock

JOE TOTED OUT THE ANTLERS

before we got down into the bog. As soon as we arrived at our old watching place a bull and cow could be plainly heard way down the bog. Joe gave one call and the bull answered, and almost at once we got a second and deeper answer from about the same spot. My watch showed it was 5:01, and for five minutes both bulls kept coming, then the smaller one evidently decided discretion was the better part of valor and dropped out. I moved out into the bog so I could get a good field of fire and took off a black mackinaw in order to be all olive-drab color and thus be less noticeable, meanwhile the bull kept on coming and answering in a way that gave one little chills of joy and excitement. Pretty soon the horns began to rattle on the trees, then silence for a moment, and all at once down at the turn in the bog, some 400 yards away, I saw the horns and knew he was a good head. After a long look all around he came along again, stopping to fight a little tree with his horns and always sticking close to the

spruces that bordered the bog. My mind was made up to get him as close as possible before firing and let this fellow get the full effect of the bullet, so, though I kept him covered with the rifle all the time, I did not fire even when he turned into the trees about 100 yards away. Finally I had a glimpse of one horn and part of the head at about 70 yards, but still did not fire, the animal then turned at right angles and disappeared. At my signal Joe put his horn close to the ground and gave a low call and the bull came out 60 yards away, and, fearing he might smell our tracks, I fired just back of his shoulder and gave him the second shot in the same place. This bullet knocked him down in the hindquarters and swung him around so that he faced me, just his head and chest showing out of the bushes, therefore I gave him a quick shot, aimed for the chest, and he disappeared. We heard him go a little way; the horns seemed to hit a tree; he made a sort of low moan and there was silence. Joe was crazy to run right in after the animal, and I nearly had to hold him to prevent such action, being resolved this moose should have time to be down and stiffen were he not already dead, besides have bought my experience with wounded moose last year at a spot within sight of where I stood when I shot the animal I have just described. Since we were satisfied this fellow was ours, Joe and I shook hands, quite a different performance from the Italian nobleman, the other year in New Brunswick, who got his moose and then kissed his guide on both cheeks. So back to the tent we climbed, packed up most of our stuff and started for Canadaro, where we vainly tried to bluff the others into believing we had had no luck. Our faces gave us away. Most hunting stories describe how the successful hunter celebrated his luck, so I shall confess my celebration—I took a bath.

Next morning Mr. D., his guide and Joe started at 3:00 for the scene of our adventure, and Joe called out a bull too small for the president's gun, but it was far warier than mine and escaped as its photograph was about to be taken. Mac and I arrived with our guides at 7:00 and were taken to my moose. He lay by a little tamarack, and must have been as good as dead when the first shot hit him. The head looked a great deal larger than it actually measured, 46¾ inches, but there were 19 long points and a small one, and it was exactly the sort of head I had desired. Three of the points were unusually long, over 15 inches, and I was well satisfied with it.

From sad experience I hesitate to state much about the effect of the bullets, having been severely criticised in the past by authorities, gun-cranks and others for printed statements of how the U. S. 1903 Springfield acted on moose, but as the U. M. C. umbrella-point bullet was used and it is comparatively new in the hunting field, I am about to take my life in my hands once more and describe what it did to this animal. The first two shots hit about six inches fairly back of the shoulder and not two inches apart, each being fired from a different angle, since the bull partially turned after the first shot. Together they made one hole five inches long, two inches wide and three inches deep; it looked as if a dynamite cap had exploded in the animal's side. The liver was all smashed up, all the "works" were in frightful state, and the opposite ribs showed that one bullet had struck there, while the other bullet had broken a rib. We could find neither bullet after diligent search. The third shot had just caught the animal's right shoulder, made a normal hole on entering and traveled some inches in distance at a depth of a half inch under the skin. It made a hole big enough for a man's two fingers where it came out and some four inches long. The moose traveled about 75 yards from where he was shot to where he fell, yet with these holes in him there was no blood trail. The bull I knocked over and lost bled profusely from the wound in his chest; we could not tell if the other wounds bled much or not. Nothing is claimed by me for or against either the rifle or U. P. cartridge; personally I am entirely satisfied with the former and pleased with the latter.

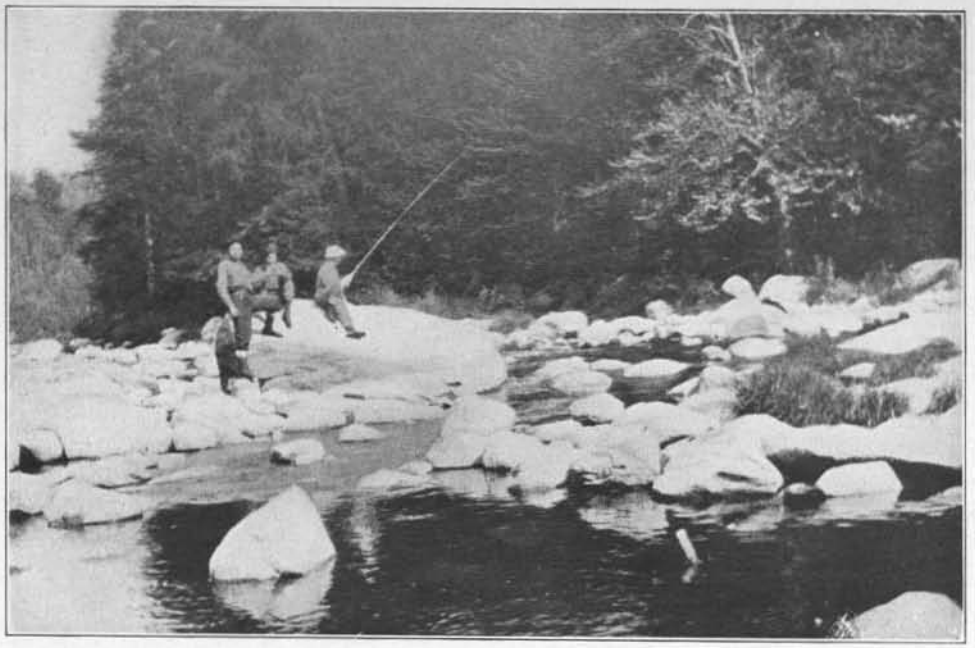
It always seems an anti-climax to continue a story after your game is killed, but I still have to describe Mr. D.'s moose. That evening he took his guide and Joe

ALEX AND JOE WITH TWO OF OUR TROPHIES

to a lake one mile back of Canadaro, and just before dusk Mac and I were playing double canfield when two shots were faintly heard. Mr. D. returned and reported that he watched from a little island in the lake. Joe got a bull out at the far end; Mr. D. decided that it was big enough to mount for his camp, since he had the club record head of 64½ inches and other good heads at home. Joe lured the animal to the shore a hundred yards away and its earthly cares were ended by a 45-70. It was quite a triumph for Joe to have called three bulls in less than 24 hours.

The four days remaining before the team came in for us were mainly spent in cleaning heads and hides and saving all the meat. The "operating table" back of camp became a very popular spot both for us and for meat birds. Alex was sent 26 miles to the nearest telephone to notify teamsters to come in for meat before it spoiled, and on his return reported seeing six good heads coming out from an adjacent club, the largest killed by a woman. The next couple of days we spent in separating our stuff and distributing it in the various camps, as well as packing up, and in so doing care was taken to avoid imitating the member who a few years ago sent out his baggage to Racy ahead of him and included in it his only pair of trousers, being forced to walk the intervening eight miles without those garments. Our crated heads and luggage were taken across the lake to the sled road on two canoes lashed together, and the men made a last trip to Amtoddwasser for the remainder of my meat. There Joe called again and got three bulls to answer, and as they all kept coming the men decided they did not care to stay for the battle royal and therefore withdrew. Our baggage, horns and hides were finally loaded on the sled, after thoroughly rubbing the horse's nose with kerosene to prevent his smelling moose, since that smell made him almost unmanageable, and October 7th found us once more plodding toward the outside world and picking up grouse along the way, having said farewell to Mountain Lake for another year.

And this is the end of my written moose story; the actual story never ends so long as memory lasts. The head will hang upon the wall, Joe's horn that called both last year's and this year's bull will have a place of honor near it, and the memory of that moose coming to the call and working up almost on top of us will remain so long as life may last.



A GLIMPSE OF STONEY BROOK

"MY QUEEN OF THE WATERS"

BY C. S. HARRIS

Winner, Third Prize, Brook Trout, Class A.

AS I had been chosen by the "Ruf Necks" for 1915 to arrange the trip, get the list of duffle, and look up a place to go, after a lot of careful study I decided upon "Crystal Creek Camp," in Fulton County, New York, where you are sure of a good time, lots of good things to eat, and brook and rainbow trout in the East Stoney and Crystal Creek, and perch, bass and pickerel in three lakes near there. My grandfather lumbered in this region, and I have been there off and on since a boy, so I know the country, and we did not need a guide. The club is composed of five members—three living in Renova, Pa., my brother in Gloversville, N. Y., and myself—and we go for an outing each year.

On June 7th, Albert McGarvay (Ikey) and Jesse Chestnut, of Renova, came to Buffalo and met me, and we started on our way; were met in Gloversville by my brother Frank. The same night our duffle had been sent to his home, as that was the last leg of our trip. We intended to take side trips from Crystal Camp, so we took pack baskets, provisions and tent, as you will see in the enclosed picture. We took the train at Gloversville at 10 a. m., arriving in Northville at 11 a. m., where we were met by our host with a car, and were taken to camp, arriving about 1 p. m., and after dinner, of course, went fishing. We were going to Bakertown, about 5 miles further, on the morrow. Bakertown is a clearing that was a settlement in the sixties, when my grandfather lumbered there, and the only cabin is one owned by some deer hunters, which is closed in the summer season.

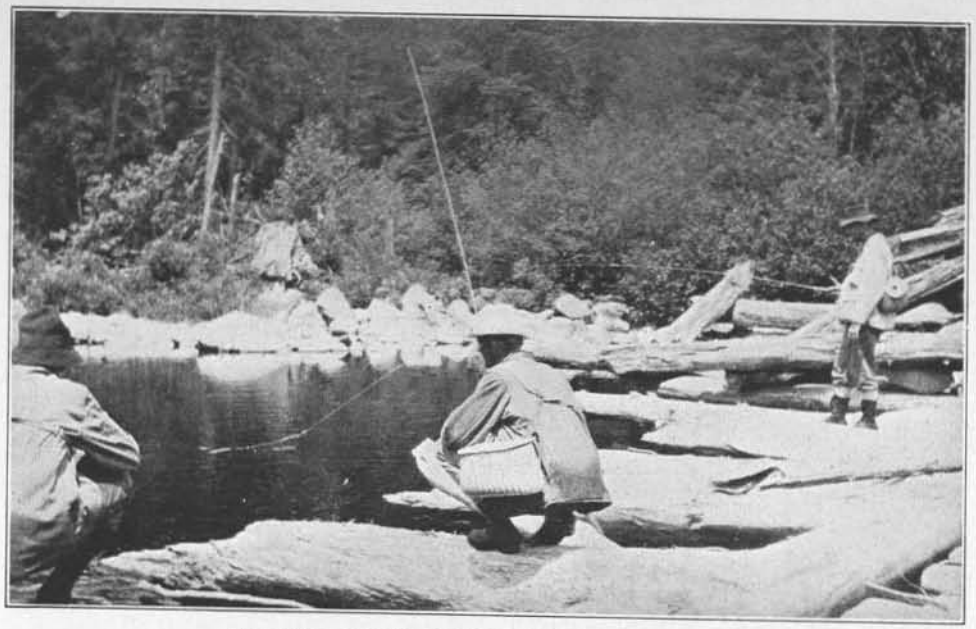
We left camp for four days' stay on Wednesday, June 10th, at 7 a. m., packed our duffle about 30 pounds to the man, and got to Dayton Creek at 9 a. m. Here we rested and caught a mess of trout for dinner, and got to Bakertown about 1

OUR SAFARI ON THE MARCH

p. m. We found the camp locked and windows bolted, so we pitched our tent, got firewood and made things ready for the night.

About 500 yards from our camp is the Bakertown dam made 50 years ago, when they used to flood the logs down. You will see "Ikey," Jess and myself in the right hand of the picture, standing on the apron of the old dam. There is a large pool there, and just the place for trout. As we were somewhat tired, we did not go fishing till about 6 o'clock. I went fishing above and Ikey and Frank below. As the wind was blowing, I did not get a rise; went down below and Frank had five dandy trout and Ikey none. Asked what they were taking. He said, "King of the Water," so I put on King and fished, but not a rise, and Frank was getting them at almost every cast till he had sixteen, ranging from 10 inches to 14 inches. I went over where he was, and behold, he was fishing with a fool fly with light body and dark wings, one I had never seen before, and I thought I had all the flies in the book. He lost it next day, so I had some revenge. Those trout fried in bacon grease with cornmeal flapjacks and coffee—my! how a man can eat! This is one ideal spot to camp. I don't know that I ever heard the birds sing so sweet, hardly any mosquitoes, and the balsam boughs make one forget the city. Saw three deer and lots of small game, and shot a mess of frogs above the dam.

In the afternoon of June 11th it started to rain, and we sat on the porch of the hunting camp, and played cards until about 5, when we made up our minds to get some fish to take back to Crystal Creek Camp. Well, Friday was always my lucky day. We put our rods together, and in the hurry I got my reel on the wrong side of the rod. We all went down to the pool below the dam, and fished till almost dark. Had caught five or six trout, when I made a short cast in the lower end of the pool where the water is about 6 inches deep. Saw a swirl of trout. I struck and the fight was on. The trout made a run straight for in under the dam, and I knew if I did not head it off, good-bye trout! So, I gave all the pressure I dared put on the light rod and turned it. My reel was on the wrong side, and I had three strong



THE POOL WHERE THE BIG FELLOW WAS CAUGHT

men giving me all kinds of good advice, so I had my hands full. I stripped the line and back came Miss Trout. I remember saying, "If I get this one, I will have it mounted." We had left the net at camp, and it was getting dark, so you can see the strain I was under. After about 10 minutes of play, I led the trout in shallow water and Frank waded out and put his fingers in the gills, and my beauty was landed. My, but I was proud! The trout, a female, was beautifully marked with red and gold. Truly a "Queen of the Waters." It had taken my dropper fly queen of waters, No. 8, and was hooked in the corner of the mouth. One hard pull, and it would have got away. Nineteen inches of live trout is some fish to handle on light tackle. The carbide lamp was light, and we went back to camp, where we weighed the fish, —3 pounds and 2 ounces. As we were leaving the next morning bright and early, we skinned it out and salted the skin, so it would be ready for the taxidermist. The trout hangs in my dining room and is a daily reminder of the great outdoors.

The rest of the trip was just as good, but that is another story.

PRIZE CONTEST CERTIFICATE RECORD, 1915 CONTEST

Third Prize, Brook Trout, Class A

Weight—3 lbs. 2 oz.
Length—19 in.
Girth—1½ in.
Caught—June 11, 1915.
Where caught—Bakertown Flow, N. Y.
Rod—Lancewood.
Reel—Abercrombie & Fitch, Bijou.
Line—Kingfisher.
Lure—Queen of the Water.

"SOMETHING NEW IN TENTS" BY WARREN H. MILLER. AN INTERESTING TENT FOR SNOW AND WINTER CAMPING DEVELOPED FROM THE ESQUIMO SKIN TENT. THIS ARTICLE, OF INTEREST TO ALL CAMPERS, TELLING OF MR. MILLER'S EXPERIMENTS WITH THIS NEW TENT AND HOW TO MAKE IT, WILL APPEAR IN THE FEBRUARY ISSUE

SNOW TRACKING

BY ELMER RUSSELL GREGOR

WINTER trailing is a delightful form of nature study which should make a strong appeal to every outdoor enthusiast. To know the tracks of the wild folk, and to be able to read the interesting stories they tell, is a worthy accomplishment. Trailing is not a difficult art. It is entirely a matter of careful observation. The woodsman studies the minute details which the "tenderfoot" ignores. To become expert, therefore, one must train the eye not merely to see, but to observe. The rest is largely a matter of practice. First learn the common trails in your locality, and then study them. The experienced trailer can tell the species of the animal, its sex, its approximate size, the pace at which it is traveling, where it has come from, what it is hunting, and where it is going—all from its trail in the snow.

But where shall we go to find these winter trails? Not far. After the first snowstorm we may find the tracks of the wild folk almost everywhere: in the city parks, at the border of the town, and still more plentifully in the woods and fields of the open country. Of course, the suburbanite has somewhat of an advantage over his city brother, but the latter need not fail for lack of opportunity. Wild life in its smaller forms is far more abundant than is generally known, and a short journey from city limits will introduce one to a host of charming wildwood neighbors.

There are a few important details connected with this delightful pastime which, if mastered, will save the novice many embarrassing blunders. In the first place the amateur trailer should make sure which way the creature has gone before he attempts to follow its tracks. The author has met more than one inexperienced woodsman industriously following a back-trail and unconsciously increasing the distance between himself and his game with every stride. To guard against this error, which is inexcusable even in a tenderfoot when following hoofed animals, the novice should study each track until he has convinced himself that he is following the trail in the proper direction. It is important to remember, therefore, that, with the exception of the rodents, the front feet of animals are larger than the hind feet. And as squirrels, rabbits, hares, wood-mice and other rodents travel by leaps and bounds and invariably place the hind feet ahead of the front feet, their trails, too, show the larger footprints in front. Claw-marks, when prominent, are a sure indication of direction. It may be well to mention here that the tracks of all male animals as a rule are larger and "stronger" looking than the tracks of the females.

Having determined the direction in which the animal has gone, the next thing is to learn the pace. In the case of animals which progress by jumping, it is quite simple—the longer the leap the faster the pace. Most other four-footed creatures use three distinct gaits: the walk, the trot, and the run or gallop. In walking, animals place the feet in a more or less straight line, the individual footprints being about equal distances apart. In trotting, the footprints are registered closer together, in pairs. The run or gallop shows the tracks in groups of four, the tracks of the hind feet being in front.

Of course, the trailer must be able to distinguish between fresh and old tracks. Dim and faded tracks and those filled with débris generally are several days old, while tracks containing fresh snow crystals or oily water have been made recently. In estimating the freshness of the trail one should allow for thawing, as a severe noonday thaw will fade tracks made the night before and make them appear several days old.

Finally, the essential point in trailing is the ability to recognize the different

TRACKS OF SQUIRREL AND WOOD-MOUSE

tracks. While this is mainly a matter of practice, a few hints may simplify the task for the beginner. Having come upon an unfamiliar trail, therefore, the amateur should form his conclusions largely from the conditions. For instance, the merest tyro should realize that tracks beginning and ending within a foot or so of a tree have probably been made by a squirrel. Again, it should be evident that tracks which pass under prostrate logs and penetrate small nooks and crannies must be those of one of the smaller woods creatures. I once encountered an enthusiastic tenderfoot rushing excitedly along an old mink trail, firmly convinced that he was rapidly overtaking a deer. He had failed to note that the tracks passed under obstacles which would have barred any animal larger than a cat. Remember, therefore, that trailing is an art in which imagination has little place. With these few suggestions in mind, let us study some of the common winter trails which may be found within the very borders of civilization.

As squirrels are abundant almost everywhere, their tracks are quite sure to be among the first to attract the attention of the amateur trailer. Squirrel tracks should be easily recognized. They are recorded in pairs—two long, narrow tracks in front, followed by two short, dot-like tracks. As already mentioned, the squirrel places its hind feet before its front feet, and as the former are the larger and "toe out," a glance at the trail will show which way the animal has gone. The footprints of the gray and the red varieties differ only in size, the tracks of the former being considerably larger. A squirrel trail never leads far, for the slightest sound will drive the timid creature to the nearest tree. Nevertheless, it is an interesting trail to follow, for this handsome rodent is an industrious forager, and at short intervals along the trail one will find "prospect holes" tunneled down through the snow to tap a hidden store of nuts which have been cached there earlier in the season.

On the same hunting grounds may be found the dainty, chain-like trails of the wood-mice and shrews. These hardy little woods travelers are abroad throughout the winter, and when the weather is severe and the snow is deep we may find their pretty tracks at the very door of the granary. These humble folk live a precarious existence, for their enemies are legion; hawks, owls, weasels, foxes, bobcats and minks are ever on the alert to snap them up. All too often, therefore, their trails end in tragedy, and by carefully studying the tiny footprints the skilful trailer may read the grim details written in the snow. The woods-mouse trail is composed of a series of shallow, cup-like depressions, each showing four tiny tracks, the larger two being in front.

In alder thickets and on briery hillsides the trailer will be sure to find the familiar tracks of "Molly Cottontail." The trail, which is composed of two long tracks side by side, followed by two short tracks, one

slightly behind the other, is known to every country lad in the land. The first tracking snow calls out an army of these eager young nimrods with their antiquated weapons and nondescript dogs, and for several weeks the nimble-footed cottontail is kept on the jump. In deep snow, cottontails pack down a series of paths or runs through their favorite feeding grounds. These, too, are familiar to the country lad, and he exacts heavy toll with his snares and "figure-fours," placed where the rabbits will be quite sure to blunder into them. The cottontail has many other enemies, and the trailer will find their tracks beside the trail. The fox, the mink and the bobcat are the trio most feared. Aware that a mink is on its trail, the rabbit seems paralyzed with fear, and unless it happens to be near its burrow it has but a poor chance to escape from its relentless pursuer.

In the real backwoods, where there are large isolated swamps with dense thickets of laurel and rhododendron, the trailer may still find the tracks of the cottontail's larger relative, the varying hare or "snowshoe rabbit." Like the weasel, the varying hare changes from brown to white at the approach of winter. Its trail may be distinguished from that of the cottontail by the size of the tracks, which are much larger and broader, and show the toenails, which seldom appear in the rabbit track. The varying hare is a prize worthy the efforts of the most skilful hunter, for it is almost as wary and as speedy as a deer. Once thoroughly alarmed it will run before a dog for hours, twisting and doubling on its trail and baffling its pursuer with many crafty tricks. When running at top speed this hare often leaps ten or twelve feet. It is a lover of the wild, unfrequented wastes where the foot of man rarely ventures, and, once the axe of the lumberman has despoiled its favorite haunts, it speedily deserts the locality. There are several stretches of "wild country" within one hundred miles of New York City where this handsome creature is still fairly abundant.

Along the shores of inland ponds and lakes, and in the marshes, often within sight of even the larger cities, the interesting dome-shaped lodges of the muskrat may be found. It is only upon rare occasions, however, that one will see the trail of the animal itself. Like its more famous relative, the beaver, the muskrat spends most of the winter beneath the ice. The entrances to the lodges are under the water, and the inmates rarely venture into the bleak, cold world above unless lured forth by a sudden midwinter thaw, or those first balmy days before the ice breaks up. At such times they emerge from a spring-hole and wander across the ice on a leisurely tour of inspection. Their broad, beaver-like tracks, which "toe out" from the line made by the tail, may easily be recognized.

TRACKS OF THE BOBCAT

Another interesting trail, although uncommon in midwinter, is that of the skunk. This unpopular neighbor rarely ventures from his snug retreat while the weather is cold and uninviting. A succes-

DOUBLE TRACKS OF THE MINK

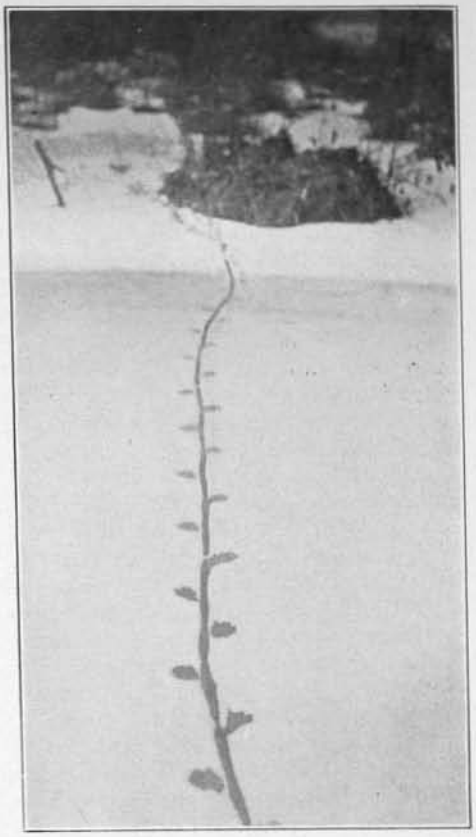
sion of warm, balmy days, however, sometimes entice him out. The skunk makes two distinct trails. The more common is composed of two continuous lines of footprints, each track close upon the one before it. The tracks, which are slightly larger than those of a cat, are broad and show the nail-marks very prominently. As there is no other animal which makes a trail anything like the walk trail of the skunk, which looks like two rows of holes in the snow, the amateur trailer should recognize it at sight. The other trail is made by the skunk when loping, and is also distinctive, as it shows three footprints, two usually in line and the third at the side. When this trail is encountered the individual tracks should be carefully studied, as the mink makes a somewhat similar trail. However, the size and form of the tracks, and the fact that in the mink trail the three footprints occur only at intervals, should make it impossible to confuse the two trails.

It is only when a tracking snow falls early in the autumn that one will find the winter trail of the raccoon. Its tracks are familiar midsummer features of the dusty country road, but at the first real hint of cold weather the raccoon, like its near relative the bear, goes into winter quarters in some hollow tree or rocky ledge. The trail of the raccoon is easy to recognize, for the tracks look something like tiny hand-prints. It is an interesting trail, for the sly 'coon is a mighty enterprising little chap, and his footprints are sure to lead the trailer a merry chase before they finally end at his winter abode.

The fox trail is fascinating. Unlike most wild creatures, this sly hunter seems to thrive within the borders of civilization, and his tracks may be found throughout the land. They often lead to the poultry yard, and the marks of fluttering wings beside his dainty footprints in the snow proclaim the success of his bold depredation. In every part of his range he is an outlaw with a price on his head, but in spite of man's constant efforts to exterminate him he survives and levies toll upon his enemies. His tracks may confuse the inexperienced trailer, as they somewhat resemble those of a small dog. There are many striking differences, however, and, once having learned to distinguish between the two trails, the careful observer should have no further difficulty. In the first place, the tracks of the fox are more pointed than those of the dog, and the pad at the rear of the foot is longer and narrower. Then the fox track almost always shows the nail-marks, while those of the dog rarely appear. Again, the stride of the fox is considerably longer than that of a small dog, and the trail is cleaner cut; that is, the fox does not drag its feet as the dog is apt to do. In walking, the dog moves with its body at an angle, and the tracks are out of alignment, but the footprints of the fox proceed in almost a straight line. The difference in the trails of the red and the gray fox is entirely a difference of size, the tracks of the red fox being much the larger. The

trailer may learn many valuable bits of woodcraft by following the tracks of some crafty old fox. They will lead him far afield, and at every stride he will find fresh evidence of that keen sagacity for which this animal is famous. He will learn how it stalks the grouse in the snug retreats beneath the evergreens; how it routs the cottontail from the briers and runs it down in open chase; how it steals through the forest as silently as a shadow, in the hope of surprising a wood-mouse or a shrew; how it watches patiently at an airhole in the ice until a muskrat appears; how it does many other things which are necessary accomplishments if one is to live successfully the life of the wilderness.

We are apt to associate the mink with the remote wilderness, and to find its trail close to the haunts of man is something of a surprise. This valuable little fur-bearer, however, is still quite plentiful, even near the outskirts of towns and cities. Its favorite haunts are the borders of woodland streams and lakes. The trail may be recognized from the footprints, which are recorded in pairs, with a third track added at frequent intervals. This is the distinguishing feature of the trail, and may always be relied upon. The mink is a persistent and skilful hunter, and its trail is well worth studying. Follow it along the edge of some ice-bound stream, and you will learn how the crafty little hunter depletes the supply of trout, chubs and suckers. The tracks show that he has ventured far out upon the ice to inspect every bit of open water, until he finds a shallow pool where there is an air-space between the water and the ice. Then in he goes and swims along to the next opening, where he crawls out, shakes the water from his glistening coat, and carries his prize to some retired nook to enjoy his meal at leisure. At other times we may find the trail winding through the open woods, or twisting through the intricate mazes of some isolated swamp. It turns aside to explore every brush-heap, approaches every log and penetrates into every dark nook beneath the drooping branches of the spruces. Then in an open space it joins the trail of a cottontail, and a hundred yards beyond we come upon the



THE TRAIL OF THE MUSKRAT

evidences of a tragedy. We see where the rabbit has been overtaken, and by following the trail to the roots of a fallen hemlock we find the remains of the savage feast. There is a possibility of confusing the tracks of the mink with those of its more common relative, the weasel. However, if the trailer will remember that the footprints of the latter are only about half as large as those of the mink, and that the weasel varies the length of its jumps, whereas the mink averages about the same distance at each leap, he should have little difficulty in distinguishing these trails.

To find the tracks of the bobcat it will be necessary to go farther afield, for this is distinctively an animal of the real backwoods, where settlements are few and far apart. This does not mean, however, that one must seek it in the pathless wilderness. It is quite common in the wilder

portions of the Catskills, in the mountains of Pennsylvania, in the Adirondack woods and in many other sparsely settled portions of our most populous States. The tracks of the bobcat are but enlarged editions of those of the house cat. The footprints are much more round than those of either the fox or the dog, and this characteristic should enable the trailer to recognize them at once. The bobcat trail is not clean-cut like the trail of the fox, for the bobcat walks with a shorter stride and places its feet wider apart. Therefore, while the fox trail shows the tracks in an almost straight line, the bobcat trail shows the footprints considerably out of alignment. It is only occasionally that the tracks of the bobcat show the nail-marks. Another characteristic of this trail is the line before and after each track, denoting the drag of the feet. In deep snow this is always prominent, and as the fox leaves only a slight mark near the track, the two trails may be distinguished by this important feature. The bobcat is a great traveler, and whoever sets out to track this creature to its lair is sure of an all-day hike through the roughest kind of country. It is well worth the effort, however, for the bobcat is an interesting chap, and to thoroughly know him the trailer must learn the incidents of his daily life from his trail.

The ambition of most amateur trailers is to find and follow the tracks of a deer. Fortunately, this desire may be easily gratified, for these splendid animals are becoming more plentiful each year. There is scarcely a wooded section of our country where they cannot be found. There is no need to describe a deer track, for even the novice will recognize it at sight. Having found the track, however, there is still much to learn. The experienced hunter can tell at a glance whether the animal is a buck, a doe, or a fawn, its size, and, if it has been wounded, the location of its wound. It is easy to distinguish between the tracks of a buck and a doe; as a rule the tracks of the former are larger and more blunt at the toes, and the stride is considerably longer. A buck usually drags its feet, while a doe steps clean except in very deep snow. The fawn trail may be instantly recognized by the small footprints. As a rule large animals make large tracks, and vice versa, but, like all rules, it has exceptions. A young buck often over-reaches, and his trail shows the smaller or hind footprints slightly in advance. On the other hand, an old buck always drags; that is, his hind feet do not quite reach the tracks of his front feet. With these exceptions, and in the case of a wounded animal, deer invariably tally their footprints. Following a deer trail is fascinating sport. Until the trailer has had at least a full season's experience, however, the chances are three to one that he will be unable to even come within sight of his game. A wise old buck is about the craftiest animal in the American woods. He is a master of strategy, and it requires an experienced woodsman to run him to earth. One of his favorite and most successful tricks is to back-track on his trail, and then jump off to one side to watch for his pursuers. The amateur trailer is greatly surprised to hear the deer crashing away through the undergrowth at his right, when the fresh trail continues directly ahead. Believing that he has stumbled upon a second deer, the excited hunter will probably rush along on the trail, only to find that it ends several hundred feet beyond. Then the truth may dawn upon him, and if he will stoop and closely examine the tracks he will learn the true nature of the clever deception. In following the fresh tracks of a buck, it is always wise to keep a sharp watch ahead and on both sides of the trail, especially where there is suitable cover for hiding.

In considering the common winter trails close to the borders of civilization, it seems necessary to mention the trails of the birds. These are of two kinds: first, those of the walkers or ground birds, and, second, those of the hoppers or tree birds. The tracks are very different. The walkers place their footprints one before the other, like most of the animals, while the tracks of birds which hop or jump are invariably recorded side by side in pairs. A bird trail rarely continues any distance. A famous member of this group is the ruffed grouse, whose fresh trail always lures one on with the hope of flushing the handsome fellow himself at the end of it.

WE THREE MEDICOS IN OUR WAR PAINT

A DEER HUNT IN VERMONT

BY R. E. SMITH

SO many deer stories contain the sentence "And at the crack of my rifle down he went," or "One shot did the business," that I feel almost ashamed to tell the story of my last deer hunt.

In fact, to be truthful, I have never but twice had the pleasing experience of seeing my deer drop at the crack of the rifle, and the old Savage has usually had to talk some time before my deer have been convinced that they were down to stay.

This last fall, in company with my regular deer-hunting companions, Drs. Wood and Hall, I was again successful, but only after I had placed some seven shots in my eight-point buck.

Our party left this city by automobile Saturday morning, the eighth of November, and driving some 14 miles to "the potato patch," the car was sent back to the city and we hiked up a wood road some four miles to the site of our old-time camp. The rest of Saturday and all of Sunday were employed in getting up our tent, cutting up firewood and putting things in shipshape for our ten days' stay in the woods.

Our tent was located in the same spot it has stood in for the past six years, in the midst of a valley of hardwood, between the ridges of spruce and pine, with a swiftly running, ice-cold trout stream on one side and on the other an ancient wood road that ran along through underbrush and heavy woodland until lost in a tangle of thickets well up on the side of the "Horseshoe," a steep ridge which shut in the mouth of our little valley, losing itself at each extremity in the base line of Piko and Killington Mountains.

Early Monday, the first day of the open season, we were up while the stars were still shining in the gray autumnal sky, and, after a breakfast of flapjacks and bacon (one that if eaten at home would have sent each medico post-haste for his medicine kit), we started out in the gray half light of the November dawn, each man for himself, and with no definite plan for the hunting, as deer hunting in Ver-

mont differs, I presume, from that found in any other part of the United States. The deer have no established runways, and as every hill has half a score of springs and ice-cold brooks, there are no regular drinking places. Then, again, the short open season, together with the comparatively small territory to be hunted and the large number of huntsmen, make deer shooting a very different proposition here than it is in the Adirondack or Maine forests or in the canebrakes of Virginia.

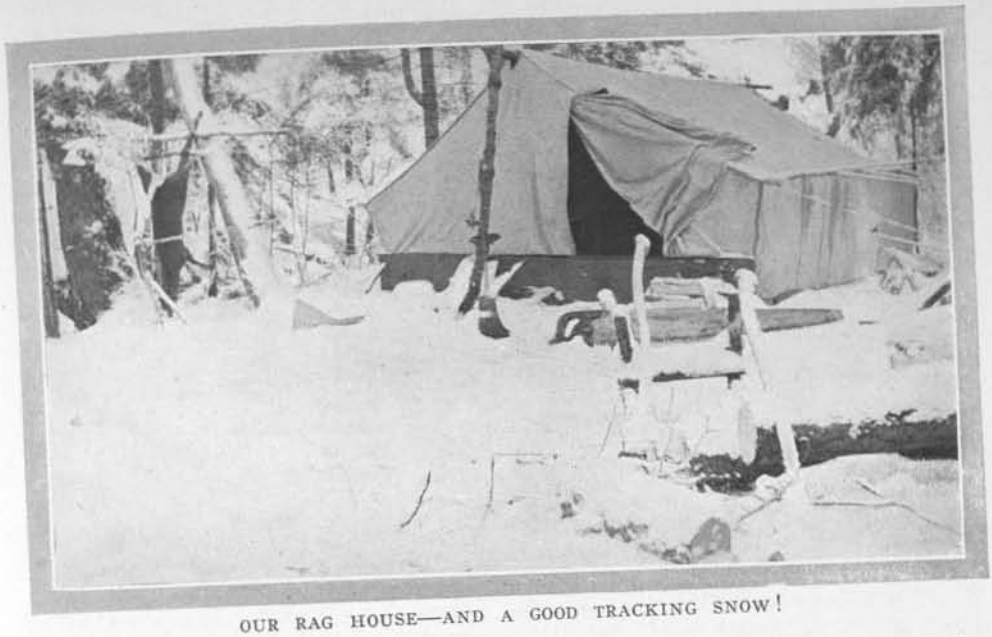
Stalking or still-hunting is the only method available for attaining anything save a chance shot. Even the most experienced stalker will find that most of his shots come to him unexpectedly from a deer crashing across his line of vision from some other ridge, while perchance the deer he is stalking so carefully will fall to the rifle of some other hunter on the plateau below or upon the hill above.

The one thing the Vermont deer hunter longs for is a tracking snow, for then the chances of a successful termination to his hunt are increased. A fresh deer track showing that there has at least been a deer in that particular section of the country recently, and even if the deer is never seen; where is the real sportsman who cannot raise at least an extra heart-throb over a fresh track?

Monday went by as did Tuesday and Wednesday, with nothing but experiences for the campfire, and never a buck in camp. Many "muleheads" had been seen, but as a deer must have at least three inches of horn to be legal in this state, the lady deer are safe, and apparently know it, as they are much less timid than the males. It is true that Dr. Woods, on his second day's hunt, had one glimpse of a head, but the head was so rapidly shifted to a "flag," and the flag to a memory, that not even a Johnny Baker could have scored a hit.

Thursday morning I started out from camp to comb the "Flat Iron," a patch of heavy woodland so named from its resemblance to that implement of domestic warfare, being formed by the junction of two brooklets, while the mighty ridge of the "Horseshoe" forms its base. I had been on the "Horseshoe" but a short time when in the newly fallen snow I came upon the fresh tracks of a small doe, where she had crossed the brook and daintily picked her way up the steep hillside, pausing at every half dozen steps to paw away the snow from the underlying moss upon which she was browsing. Having nothing better to do, I followed the trail and soon found where the still fresher tracks of a big buck had intersected that of the doe. The track of the buck followed along the doe's trail for several yards, then abruptly leaving it, swung off almost at right angles to her track, heading for the crest of the ridge. Reasoning that possibly Mr. Buck was of an amorous disposition and bent on attempting an assignation with Miss Doe by intercepting her on the peak of the ridge toward which she was working, I decided to act as chaperon; but in place of following the buck track as it swung off up the hill in a wide left-quartering to the track of the doe, I turned to the right and worked my way carefully to the top of the ridge. Here I turned in toward the course of the doe's tracks and, with the wind strongly in my face, walked as slowly as was possible toward a thicket of spruce and pine which appeared to me a likely place for a deer love affair.

Suddenly I heard to my left and down the hill the sharp snap of a breaking twig, and I immediately "froze" into a point as staunch as was ever taken by the best of bird-dogs. In a moment more I made out the form of a small yearling doe some 75 yards away and working up the hill directly toward me. Letting myself sink backward into a sitting position, I remained absolutely motionless. My line of vision being cut off by the crest of the ridge, my ears replaced my eyes, and the increase in the frequency of the twig-snappings told me that the deer was still following her original course. With almost uncanny suddenness the graceful form of the doe breasted the hill and stood facing me not ten feet away. There she stood as though turned into bronze; only the quivering of the nostrils and the heaving of the sides to prove that she was a living creature. After a time, as I made no move, scarce even daring to breathe, the doe took a step toward me and stamped. (I have heard it said that



OUR RAG HOUSE—AND A GOOD TRACKING SNOW!

only the male deer stamps, but many a doe has caused my heart to leap by this same stamping of her horny hoof.) As I still remained motionless she evidently decided I was some new form of stump, or at least was of no consequence, and went on, a picture of suppleness and grace.

With every half dozen steps, however, she would pause, look back, not at me but down the hill, switch her tail, toss her head and walk on. I was suspicious that she knew her affinity was on her trail, and remained motionless. Hardly had she passed out of my sight when I again heard the snap of a twig down the hill in the direction from which the doe had just come. Carefully raising myself to a half-sitting position upon my heels, I looked over the top of the ridge in the direction from which the sound was coming, and almost immediately I caught a glimpse of a dark body, and best of all—just the flash of a pair of antlers.

Scarce daring to even let my heart beat, I held my body motionless while my mind was working under a full head of steam. "If that buck follows the doe—ye gods! If that buck follows that doe, he will be within ten feet of me in as many seconds," and he was. Soon I could hear just below me the "blowing" of the buck as he snuffed the fragrance of his lady's footsteps, while the noise from the breaking twigs increased in volume. Suddenly a magnificent head shot into view not ten feet away; but before my buck-fever-shattered nerves could bring pressure upon the trigger of my gun or even bring it to position he was gone. As I sprang to my feet the buck was about 50 feet away and going straight down the hill from me as only a frightened deer can go. I opened fire, and as fast as hand could work lever, eye catch sight and finger pull trigger I sent shot after shot at that flying form as it crashed through the underbrush and heavier timber. When the magazine was empty and the deer out of sight, I sat me down in deep disgust. Never a fall, never a lowering of the "flag," never a stumble; yet, wait, he did stumble when he hit that old log a hundred yards down the hillside, and I can't recollect seeing an unhurt deer stumble before. So slipping six more 303's into the featherweight, I started down the hillside, following the 20-foot jumps of the deer. Never a drop of blood to cheer my eye, never a shortening of the mighty jumps to raise my hopes, but here—what's this? A patch of hair as big as my hand, but no blood. On twenty yards, and then another patch of

THE CAMP SNOWSHOE RACK, PLUS DR. WOODS AND A WARLIKE DEMEANOR

hair and then still another. Suddenly, a hundred yards ahead, I see a deer jump from behind a fallen tree and start away with "flag" gallantly pumping up at every jump, and instinct telegraphs to my brain and to my trigger finger that it must be my deer; for surely none other save a wounded deer would have stood the noise of the recent bombardment and still remain in that section of the country.

Again I pumped lead, and again, and again; three more shots added to the six already fired, and the deer goes out of sight through the trees, "flag" still high; but now from behind the tree whence the deer just jumped, at least 500 yards from where I first fired at him, I find a few drops of blood. With heart beating fast and with hopes raised high, I follow the tracks, finding now a constant flurry of blood drops, and more patches of hair where the last shots were fired. By this time I have reached the bottom of the hill and the tracks and blood-drops take me back up its steep side again. The jumps are shorter now, the blood more profuse; and there in that little clearing just ahead, across that fallen tree that was just too high for his failing powers, lies my buck—a magnificent fellow, with massive antlers almost black in color, and with a perfect spread; with dark sides and hocks, and a muzzle gray with years. Nine shots had been fired and seven hits registered; yet his gallant "flag" was never lowered and his pace never faltered.

One shot, evidently the first, struck two inches below the vent, ranging upward through the body, and lodged in the forward shoulder. Another shot had entered the lower abdomen, ranging upward. A third had passed completely through the body, just forward of the hips. A fourth, just back of the fore shoulders but too high to hit the heart, had torn through the lungs. A fifth had gone through the neck just too low to break the spine and just too high to sever the main blood vessel. A sixth had entered the fleshy part of the hip, inflicting a gaping wound some seven inches long, but superficial; while a seventh had passed just back of the fore shoulder and through the heart.

From where this deer was first hit to where he fell was, at the very least, 1,500 yards, and, with the exception of one wound, the hits were all vital. Yet, contrary to precedent, this deer never lowered his "flag" and never was off his feet in all that distance. The fault was not with the gun, for the bullets all penetrated well and mushroomed in the most ap-

proved manner, and I have had practically the same experience with other rifles and with other calibers. This experience is only one of many I have had showing the tremendous vitality of the white-tailed deer. One deer, I recollect, shot by a brother sportsman, was hit through the heart with a ball from a .45-90, yet that deer ran over a hundred yards and dropped stone dead, not a drop of blood being left in its body, having kept going as long as the heart kept up a single contraction.

But to return to my deer. First firing my signal to the other boys, announcing the death of a buck and the need of aid in getting him into camp, I proceeded to pull his rump downhill and remove the removables. There was no sticking the deer or cutting of its throat, to my mind a needless mutilation, when the deer is to be dressed at once, as will be done by every intelligent sportsman. A slit a foot long was made from the brisket up toward the breast bone in the mid-line. The vent was encircled with a knife, and, with my sleeves well up to the shoulders, my hand was inserted well up through the diaphragm, and the windpipe and food tube severed as high up as I could reach them. Then the entire contents of the abdomen and chest were pulled out with one motion through this abdominal opening.

By this time Dr. Woods had arrived from a neighboring ridge, in answer to my signals, and we proceeded to take the deer into camp. A stick was cut, some two feet long by two inches in diameter, and this was tightly bound to the antlers of the deer, close down to their roots, the ends projecting from each side of the deer's head and forming a serviceable handle. Then, with rifles slung over our backs, one man on each side of the deer grasping the stick, we started on the long, hard pull to camp.

We have tried all methods of getting deer into camp, and have found this the easiest. How many pictures you see of the proud hunter striding into camp with a ten-point buck across his shoulders! Have you ever tried it? Either the Vermont deer are larger than those found in other sections, or those poses are for effect only. I am not a weakling, standing some six feet tall and having pulled an oar in my college days; but I must confess that I have seen but few Vermont deer that I could even get onto my shoulders, to say nothing of carrying them from two to five miles through woodland into camp.

THE AUTHOR'S 8-POINTER

This deer of mine weighed 175 pounds dressed, after being hauled into the city, which surely meant 250 pounds of dead deer as he lay in the woods; and the task of even dragging such an animal through the woods for four miles, up hill and down dale, through brooks and over logs, through underbrush and over ledges, is no small task, even for two strong men.

It was late in the afternoon when we finally arrived in camp, and, after washing out the carcass of the deer with the cold water from the brook and hanging him, head up, proudly before our tent, we were ready for the hot supper Doc Hall had steaming on the little camp stove.

The next day Woods secured a fine head, and we returned to the city, well satisfied.

A PRIZE BROWN TROUT FOR 1915

BY D. COCHLIN

WE ran the little Ford out to the point of the lake shanty bluff. In logging days this point was the rendezvous of the river drivers. In the steamy air of the shanty was rehearsed the tale of the breaking of many a tangled jam. Little was thought in those days of fishing the Boardman, although it abounded in one of the finest of game fishes—the Michigan tri-color grayling, now almost extinct. Here the eye looks up and down the valley and beholds a mile of as fine trout water as there is in the State of Michigan. To a sportsman it is worth the trip just to take this view and speculate on the possibilities in the pools at each bend of the river, although fish are not so plentiful as formerly and more patience and skill are required to take them.

A 5-LB. 2-OZ. BROWN TROUT AND HIS CAPTOR

After lunch the only question to be decided is whether to go up or down stream. There is an evening's fishing in either direction and both are inviting.

A few flies began to appear on the water and it was time to return to the island pool, where we expected to try for the big one. A more ideal pool could not be imagined—a deep bend, a jam at the lower end, and a little island on the shallower side to cast from. Leaving my partners, I crossed over to this island. The hatch and flight of insects was on, and a number of good trout were rising. The artificial fly stood little chance in the midst of so much competition and no fish was hooked. At such times the fisherman's first chance is at the beginning of the hatch of insects, when there are as yet but few on the water. Then a trout can often be induced to take a fly. The chance is better when the hatch is almost over, and the big fish, who are the latest to start feeding and the last to quit, may take a try at your fly. The small trout, too, are then out of the way; like good children, they have eaten early and gone to bed.

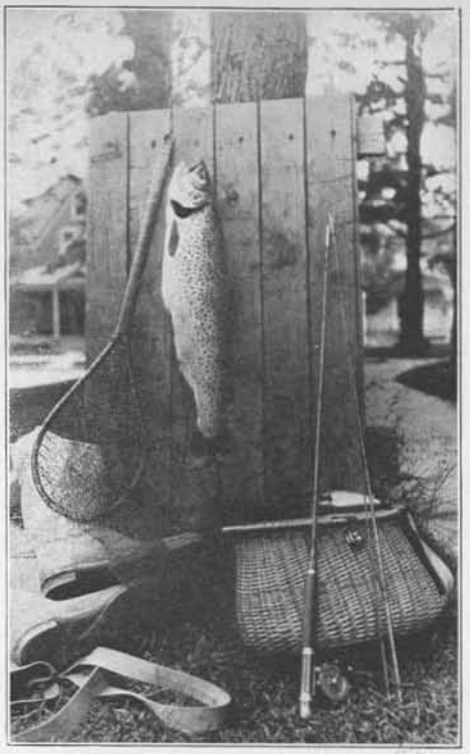
It was getting late, the exciting rises and splashes over the pool had ceased, and only three or four fish were left feeding in a satisfied and leisurely manner. We had about concluded that nothing was to be taken and that we might as well go to the bluff and wind up the Ford for the homeward trip. But, thinking that some fish might be ready for dessert, and that something with a dash of red in it might be appetizing, I replaced the pale evening dun with a Parmachene Belle. Years ago I had had excellent luck with this fly in

evening fishing, but of late years, since taking up dry-fly casting, have almost discarded it, and felt a little ashamed at using it since reading La Branche's denunciation of it. But there is something to be said in favor of fooling a wary fish with a fly that is not an imitation of any living insect.

It took a few casts to reach the spot where the fish were gently feeding, but when there I was immediately hooked to a good fish. Every rush was successfully stopped before the place of escape was reached. But the best I could do with my little four-ounce rod did not bring the fish within reach of my short landing net. So I called to the professor to come over and use his net. The river could be crossed in only one place. It was necessary to enter the river below and wade upstream some distance, avoiding deep holes and forcing a strong current. This is a ticklish job in the dark, even when one is familiar with the river bed, which the professor was not.

Now the strenuous part of the game was to manage my fish and at the same time steer a man across the river. In time he was at my side on the island and I pointed out the wake made by the fish. He maneuvered in the rear and made a dive, but away went the fish to the bottom of the pool. It took careful coaxing with the little rod to bring him back. A skilful dip this time brought him to shore. We made estimates as to length and weight, which proved almost accurate, and had hardly straightened ourselves up when a voice across the river called for help. The big one was hooked. "Work him to the mouth of the creek," I shouted as we made a mad dash down and across the river. Out of breath, we rushed up with landing nets and advice, only to be met by the fisherman's most regretful message, "He's off."

I returned a few evenings later to have a try for this king of the river. After most of the fish had quit feeding I selected what seemed to be the biggest fish and cast a pale evening dun right into his plate, which he took, and as soon as he felt the hook set, sank to the bottom and stayed there without a stir. By holding the line taut and sending a telegraphic note down by tapping on the rod, he made a furious rush upstream. Sulks and rushes alternated until he changed his tactics and led me a wild chase around the jam and downstream. The rushes in the open river exceeded in vigor and length anything in my experience. I was alone and wished often that the professor were there with his net. The king of the river is still there, and I hope to come back next year in the first place instead of the fourth.



THE TROUT AND THE TACKLE.

PRIZE CONTEST CERTIFICATE RECORD

Fourth Prize Brown Trout, 1915 Contest

Length—24 inches.
Girth—13 inches.
Weight—5 pounds 2 ounces.
Caught in Boardman River, Mich.
Rod—Montague City Special.
Reel—Leonard.
Line—Abbey & Imbrie.
Fly—Parmachene Belle.

FIELD ETIQUETTE

BY PAUL A. CURTIS, JR.

THERE is nothing that is of more importance to a man's success in the field than his respect and consideration for his shooting companions, and I know of no better way to quickly judge a man's full worth than to take him on a shooting trip. As one writer on the subject said, "The field is the touchstone of the man." Have you ever suffered having what was otherwise a perfect trip utterly ruined by one of the party, due to his greed for shots, carelessness as to the safety of others, grumbling at the luck or conditions, and shirking his share of the work in camp? I have been so unfortunate, but it served its purpose, for it made me a most careful judge of human nature.

TRIGGER GUARD UP—THE RIGHT WAY TO CARRY A GUN ON THE SHOULDER

Have you ever hunted under the most adverse conditions with a partner who remained cheerful and enthusiastic and took everything in good part, no matter what happened; who laughed when the weather kept you indoors day after day; who hunted cheerfully when the dogs worked badly or the birds were scarce and wild; who did his share of the work in the blind in zero weather and treated it all as a joke?

I have, I am glad to say; and that, though the luck was as bad as possible and everything went wrong from start to finish, the memory of the experience will always remain bright, due to the companionship of such a thorough gentleman.

Field etiquette is truly an unwritten law, recognized by a majority of sportsmen but unfortunately not put into practice by some. Almost anyone can become a good shot by practice, but true chivalry and courtesy are inherent.

I have heard European sportsmen speak disparagingly of American sportsmen's manners in the field. In Europe only the wealthiest can afford to shoot, while here the sport is free to all, from the humblest to the highest in the land, and this may be responsible for the apparent crudeness in our methods, for wealth, rank, and education undoubtedly give one the advantage to acquire a courteous manner. But I have seen our unlettered woodsmen show a finer feeling for the true ethics of field sport than many men of position who were considered to be irreproachable sportsmen abroad.

Show consideration for your companion. If he is young or inexperienced, place him where he will make the best of his shots and coach him tactfully, so that he may

increase his score. Be not chary of good information; remember that you, too, were young once and craved a better knowledge of the sport. You probably looked up to some older sportsman as he does to you now.

If your companion is less successful than you are, give him the choice and majority of the shots. You will both do better if you don't race for them. But if your companion is too eager and shoots out of turn, quietly remark: "Mine, I believe." This gentle hint will be sufficient with most men.

When the writer was young at the game he was very nervous and quick—and also an exceptionally good shot for his age. Eagerness often tempted him to take shots from older and slower hands that were not properly his. He quickly learned his mistake, but in the interim undoubtedly lost some excellent invitations he might otherwise have received.

When in a thick covert, do not flush the birds ahead of your dog without warning your companions. Promptly call "Point!" in a clear voice and await a reply. This gives your partners a chance to place themselves properly to take a possible shot, and warns them where to expect your fire from.

When a bird flushes, sharply call "Mark!" or, if you see the direction of flight, call "Mark right!" or "Mark left!" as the matter may be.

Do not command another man's dog except with his permission, and then carefully note the owner's method of handling. Also, use few words in commanding him, and speak sharply and distinctly, so that he will understand you. But never pass over a disobeyed command. Never shout at him and never run after him. The following simple commands are the approved ones in use among knowing sportsmen:

To make your dog range, Hie-on!
" " " " stand, Toho!
" " " " come to heel, Heel!
To go carefully, Steady!
To seek dead game, Seek dead!
When found, Fetch!

And don't neglect to spare a minute to praise him when he does these things well. No creature craves love and appreciation more than your dumb hunting companion. I have often got another hour's enthusiastic work out of a tired dog by a few kind words and a gentle pat.

As one man said, "Treat a dog like a man and you will have a noble animal.

FINGERS OVER TRIGGER GUARD—THE WAY TO CARRY GUN IN BRUSH

Treat him like a dog and you will have a poor beast that knows more than you do, for he knows what you say but you don't understand him." A dog asks for little besides someone he may love.

Don't shoot into a flock of ducks on the water; you have infinitely more chance of killing on the wing, for a duck on the water is like a well-planned battleship—the vital parts are well protected, except the head.

Don't shoot into the center of a rising covey and needlessly cripple a lot of birds. You will kill far more by picking out one from the right or left, as your position may be from that of your companion.

LEFT HAND EXTENDED, RIGHT FOOT BACK—FOR OVERHEAD BIRDS

You will not spoil his shot, and will not scatter the covey so much.

Do not waste your companion's time by insisting that a bird that you *thought* you grassed be picked up. And do not shoot at game at questionable distances and take the chance of needlessly wounding it. There will be far too many tragedies of the woods that you will never know of, due to careless shooting of game on your part.

The most important thing in field etiquette is to in no way take the smallest chance that will endanger the safety of yourself or your companions. Don't forget that you have a dangerous weapon in your hands, and that it is impossible to exaggerate your caution. Accidents occur every season that embitter the recollections of some sportsmen all the remaining days of their life. And if you have ever been seriously shot, as the writer has been, you will appreciate this more forcibly.

The pointing of a gun, whether loaded or positively known to be unloaded, at another should be a criminal offense. The man that knows where his gun is pointed may be surprised if it goes off by accident, but he is seldom disconcerted.

Never aim at game near a companion, as often, in spite of the greatest caution, a man is hit by an imperfect grain of shot which for some unaccountable reason flared off at what would seem to one to be an impossible angle from that of the aim.

Never under any circumstances get out of a boat, into a wagon, or over a fence with your gun loaded, and, whether in the gun-room or the field, never accept a gun from another for inspection without first breaking it open.

Most trap guns are made without a safety, which is decidedly wrong, for if one gets used to pushing off the safety as the gun is raised to the shoulder in trap-shooting, it soon becomes second nature to do so in the field, and there is then no longer any reason for carrying the gun with the safety off.

When shooting in thick cover and expecting a shot, carry the gun with the muzzle to the front and high, or gun vertical, the butt in close to the side, just above the hip, with the fingers of the right hand closed over the outside of the trigger guard. Then it is impossible for a twig or bramble to catch in the trigger.

If the gun is a hammer gun, carry in the same manner, with the thumb resting in front of the raised hammers across the false breech, on the plungers. The gun can then never be discharged by accident.

When carrying your gun over the shoulder, always have the trigger guard turned up, otherwise anyone walking behind you will constantly have the muzzle waving across his face. It is also quicker to bring the gun to bear on game from this position.

When waiting for approaching game, stand as shown in the picture, with the butt of the gun resting on the thigh with the muzzle high. It is a safe and comfortable position. And always load with the muzzle pointed towards the ground until the piece is locked; and in taking high overhead shots always carry the left

hand well forward, so as to get a completer control of the gun, and brace the right foot well back. It will steady the aim and also will absorb the shock of recoil.

One thing more on the handling of the gun: Don't become a pottering shot, or one that draws slowly on a bird and follows it around in its flight. Such a man may be a good shot, but he certainly never shoots in good form and is not a pretty shot. Furthermore, he is often a dangerous one, for in following the game on which his mind is concentrated he often shoots dangerously near to his companions.

Your really good shot invariably throws his gun to his shoulder at what he estimates is the proper distance ahead of the game, and pulls the trigger as the butt hits the shoulder.

WALKING UP A COVEY—MUZZLE UP AND BUTT UNDER ARM

Also, the pottering shot often deprives his companions of shots at single birds, because by the time he has fired and missed it is often too late for the others to shoot.

And there is an unwritten law that the shot properly belongs to the man in front of which the bird flushes. After he has missed, the others are at liberty to shoot, though it is often undiplomatic to "wipe the eye" of a touchy sportsman.

Lastly, don't be a "bore." If you have an off day—and the best shots do—don't make excuses for your misses; quietly admit your fault, and your companion and yourself will forget it quicker. And you will undoubtedly shoot better, too, if you do dismiss it from your mind.

There is little more that can be said upon the subject of field etiquette in a short article, but if you carefully look over the hints I have endeavored to give, you will see that, aside from courtesy, they one and all lead to greater proficiency in the sport.

In the field with good companions, lay aside all selfishness and be a sportsman in every action as well as in name. Unless this lesson be thoroughly learned one's society will never be missed.

A man may never gain a reputation as an expert shot, but by self-sacrifice, forbearance and considerate politeness he can acquire a reputation in the field as a gentleman that will carry him far in the great outdoors.

ANOTHER "SNOW STORY" FOR FEBRUARY, "IN THE HUNTING GROUNDS OF THE MICMACS", BY FRANK M. BUCKLAND, A HUNTER-PHOTOGRAPHER OF THE RIGHT BRAND. THIS IS A MOOSE AND CARIBOU YARN FROM CHARLEY CREMIN'S COUNTRY IN NORTHERN NEW BRUNSWICK THAT EVERY CANADA BUG OUGHT TO READ

COACHING THE WINGSHOT

BY CHAS. ASKINS

VI. Lead

WE were still to make use of the horse-power in our next experiment, which was to be with a running target. The machine had a broad leather belt running from the power wheel to the gin-house. I had often observed the rapid play of these belts and thought it quite feasible to mount a target on one.

Where the belt had once been pieced, we took out a section about six feet long, replacing with a similar length of old web-belting, this to prevent injury to valuable leather. To this webbed section we riveted a double piece of sole leather five feet long and two inches wide. Unearthing an old copper kettle that had been burnt out, we cut strips from this, an inch wide and five inches long, bent them at one end where they were to be fastened to the sole leather, and riveted a crosspiece through the middle.

These copper ears were placed in pairs about a foot apart. Into holes in the top of these posts we pinned double disks of sheet iron by means of a straight bar clamped into the disks and extending into the holes at either end. A projection was left on the lower side of the disks which rested against the crosspiece and helped to hold the targets erect, though they were also held friction tight. Near the machinery end, after the targets had turned the pulley-wheel, a bent bar of steel was so fixed that the fallen target gliding along it would be smoothly raised to an upright position.

We now had five targets, standing in a row about a foot apart. The idea of these separate targets was that if J-C failed to hit the one he fired at, he would connect with one of those farther back, thus plainly demonstrating his lead. The entire pattern could hardly pass between the disks since the interval was only about eight inches, though, of course, it was possible to strike two with one load.

It was my intention that this day J-C should in effect shoot with visible shot, so I had our men erect a board fence behind our running targets and one in front, just high enough so that it would cover the belt while clearly showing the metal disks above it. The fences were only about twenty feet long, but this length seemed to be sufficient to catch both barrels should we choose to do double-barrel work. The fences being freshly whitewashed, I believed that by watching closely I could perceive the impact of the shot and note instantly where it landed with respect to the target. Subsequently this surmise proved to be correct.

"We will try a few shots, my boy, by firing on the front target just as it passes the gun. We are going into the matter of lead now, or holding ahead to allow for the speed of the target and the time of the shot over the course. The idea is to demonstrate so clearly that an Englishman can perceive, that shooting with a still gun requires a certain lead, shooting with a gun snapped up to the line of flight requires a trifle less lead, swinging with the target cuts this lead a bit, and a rapid swing passing the mark, reduces lead very materially. We are to make a convincing demonstration provided you carry out instructions and your mind is open. We ought to close up the chapter of throwing the gun ahead of the target, stopping it and firing, to-day, because that system is inaccurate, irregular, and necessitates too much lead. We couldn't prove this halt so well on live birds or clay birds as we can here where the impact of the shot will be clear evidence. Let me say, now, while I think of it, that many a man has done the bulk of his killing with half of his pattern, uniformly sending the other half high or low, never suspecting until the truth has been accidentally brought home to him.

"A ninety per cent. trap shooter, a good shot, of course, was once at work in a misting rain. A friend stood back of him observing his marksmanship, and it occurred to this friend that just as the target was broken, he could see a faint, blue discoloration of the mist right around the

target. Highly interested, he watched more closely and became convinced that he was really seeing the shot strike their mark. More than that, he clearly noted that the bulk of the pattern, all of it but a few inches of the top, were time after time missing the target. Notwithstanding the marksman was breaking the bulk of his targets, he was, as regularly as he fired, throwing his patterns six inches low. He was told of his fault, and afterwards much improved in his marksmanship—so it is said—I never saw shot in flight myself and this is not my story. Whether this is a true yarn or not, I am bent on seeing that you center your target when you do happen to lead right.

"The experiments we are to undertake are, of course, much like your experience at the English 'shooting school,' except that they finished up with you and fitted you out with a gun in a day while we will keep on for a month if need be. In the end, when you have developed a fixed style of shooting, we will know whether your gun fits you perfectly or not, and if it doesn't fit, we'll make it. The trouble with 'try guns,' is that the instructor usually endeavors to fit a man who has no system of shooting—then when he does learn how to shoot his gun no longer fits. I am hopeful that the preliminary work we are doing will fit you to your gun, for it is far better to fit a man to a reasonable gunstock than to endeavor to fit an unreasonable, untrained novice with an unreasonable gunstock."

"The deuce! How can I remember all that? You ought to be in the United States Senate talking against time. Every time you cut loose though a new volume of Congressional Records would have to be issued. Let me shoot while you get your breath."

"All right, son, in a minute. Observe, please, that the range is to be the same as that we used when shooting at the wheel, and the time of the shot over the course will again be 1/15 of a second. The target is moving faster, however, and while the shot charge is on its way our targets, according to my calculation, should move four feet. I am going to grant you a time of but 1/50 of a second to pull trigger, for you will have fair warning now that your target is approaching the gun, and that will surely make a difference in trigger time. Shot time plus trigger time will assuredly throw you back of the rear target when aiming at the front one; mathematically you should fall behind that last target a foot, but seeing that you will be pretty liable to hold in advance of the leading target, just from habit, I think very likely you will strike the rear target. One thing, don't deliberately try to lead your bird—this is merely a little experiment to see how far your charge would fall behind when you are aiming directly at the mark with a *still* gun."

At the bang of J-C's gun not a target fell. I plainly saw the charge strike the white background behind the rearmost disk. The entire load had also gone high. Jim, driving his mules, yet keeping an eye rolling toward the targets, let out a great "whah! whah!" echoed by the other darkeys. It is human nature to laugh when a man falls down, nigger human nature anyhow.

"Holy smoke! Now what? Missed the house?"

"No, you didn't," and I pointed out a neat round pattern about a foot above the line on which the targets ran. "Fact is, son, I think you pulled about right. You were holding your gun a trifle loose, keeping an eye on the targets as they came along—a loosely held gun means high shooting, of course. Then, unless our figures are wrong, you should have shot just about as far behind as you did. I am pretty well on to this thing now, so just crack away as you like for a few shots and let's see what you can hit. All that I ask of you is that you shoot with a still gun, pointing it along the line and waiting for the targets to intersect."

"The dashed gun will shoot too high all the time, won't it?"

"Mighty apt to; you can point low now if you wish."

To the next shot the rear bird dropped quick as a flash.

"Who-oo-ah! Got de las' duck in de gang!" yelled the irrepressible Jim.

"Class is doing nicely this morning. You held about a foot in advance of the head bird, enough to eliminate trigger time, and six inches low—at that the

lower part of your pattern caught the bird—see!"

"The blithering idiot who said something about 'aiming at the stars' ought to 'a' owned this gun and he'd hit 'em!"

"Wait a bit. We will see the difference between shooting with a still gun and with a moving gun pretty soon—difference in elevation I mean. Now you know what the lead should be—four or five feet—let me see you hit the front bird."

Sometimes the lad did hit the bird aimed at and again he fell back from one to three birds. Do the best he could, he seemed unable to keep an even lead, varying it from a foot to two feet.

"Generally manage to get one out of the flock anyhow, don't I, Coach?"

"Something like shooting into a flock of driven partridges, hey?"

"Like what an old mossback's imagination tells him of driven game, my word for it."

"Any notion why you don't hit that front bird more often?"

"Well, there is a slight up and down movement in the running of the belt that bothers me, and maybe it is pretty hard to judge just exactly what is five feet; pretty long lead isn't it, but I believe the main trouble is that those little black whistlers catch me napping sometimes and get too close—I fancy if I jerked my gun ahead with them then, I'd do better."

"Your fancy is fully equal to a good Yankee guess in this instance. It certainly would tend to more frequent hitting if you hiked your gun in front of the target when you found it was pointed behind. We have seen plenty of this. You couldn't shoot real birds in this fashion anyhow, because about the time you expected the fowl to fly across the gun, the rascal would 'duck-out' and go along some other road. If that weren't enough, one or two extra feet would have to be allowed for time lost in pulling trigger, a foolish handicap where great study has been given to cutting down lead to the minimum."

Our running targets were working charmingly. As soon as J-C knocked one down it bobbed up again when it reached the elevating bar. My youngster was enjoying himself thoroughly, having but to reload his gun and fire as fast as he could, and he missed enough, too, to make the fun interesting. "Be a dandy game with a rifle," he declared; "shoot blazes out of the targets and fence, though, wouldn't it?"

"No doubt it would be better sport with a rifle, but it is too easy this way with a shotgun and we must remedy that. Instead of holding your piece with the muzzle pointed directly on the line of the belt, hold at the ground beneath—when the targets have reached the proper point, raise your weapon, intercept them and fire. If you can make close enough calculations, sweep the barrels straight upward, not at an angle back or forward. Lead enough to catch the forward bird."

I saw the shot crash into the whitewash in front of the leading target and low.

"Hey! That's a bad one! Missed the flock again! I held just as before—thought I did anyhow. Didn't fall behind the tail bird, did I?"

"Never mind where you shot. Try it again. Want to see how regular you are about it. Hold precisely the same if you can."

I was much encouraged to note that J-C could hold to a uniform delivery, for two more shots struck about where the first one had. The boy saw where his last load had gone himself.

"Aha! Shooting low and in front. Queer thing, that! Gun don't shoot high any more—shoots low—now what? Held just the same except the little ships sailed up before I was ready and I had to dash the gun in front of them and pull quick."

"Just so! Precisely! You couldn't intercept with that direct upward sweep of the barrels, for the targets came on too fast—exactly the thing that happens in the field. You can rarely intercept a bird that's close to you with a gun moving at right angles to the flight, and it is just as well you can't. Then you are practically eliminating trigger time, because you must get the gun off by the time it reaches the level of the targets and not afterwards. Your instinct or judgment tells you that pulling after you get on would be too late. You are half-snapping now, half-snapping because the work is half a snapshot and half a swinging shot. Killing style, too! You won't shoot low except for a few shots—get over that as

soon as you get the notion out of your head that you have to hold low with this gun."

The next charge dropped the second bird behind the leader, the bird being centered, as I could see."

"Dwelt on your aim that time, J-Clyde. Don't be caught napping!

"Keep your eyes on me; I'm onto 'em. Knock 'em cold, now, you'll see!"

He did. As fast as the birds flashed down, over went the leader. Ten times in succession that happened. "Try both barrels, hang you! I don't like to see all of them hit any more than Jim does. After you can do a thing with certainty you are wasting my time and some good ammunition. Hold on, though; I am not ready for two-barrel work yet. Don't put your gun to your shoulder—hold it down as you would when waiting for a quail to rise—be on time and don't shoot after the birds get past the background of boards; might land on the nigger or the mules."

The first time around the birds ran past and J-C didn't shoot at all. He simply grinned and took down his gun. Right then the youngster got a lesson in the time it takes a man to put up his weapon ready to aim—a lesson which would serve him in good stead when the mallards were coming in."

"There!" he grunted somewhat spitefully. "I know I fell behind, but I shot when they got even with me anyhow." He had shot behind—struck the third bird. "Have my gun up this time before the lively little rascals get out of the ginhouse—get that!"

Again the boy missed, but this time it was simply bad holding, due to hurry and the more complex gun-movements required.

"Didn't get it to my shoulder right," he muttered, "like to poked the butt under my armpit. It ain't so easy, but I'll get 'em!"

Get 'em he did, presently. After knocking down the lead bird half a dozen times in succession, he turned to me with a laugh.

"Do you know, Coach," he said, "I'm putting something over on you. You said to meet the birds, raise straight up on them, but I'm too late for that—got to travel along in a hurry to catch up. And another thing, I don't seem to be leading four feet, not over three; but I get there, don't I?"

"No question! But you are progressing too fast, and you are liable to forget—some day out in the field when you get rattled. Now this time you stop your gun still before you pull; I want to see what happens."

The succeeding shot dropped the third bird of the line.

"Ah! Come off, Coach! That's foolishness. Nobody would ever do that."

"Many a poor devil has, however. But you keep this in your head. Never stop your gun when you pull trigger, but carry through right on the line and keep up the movement until the little chap has safely tumbled into the grass. When you stop or check your gun it's chance work—chances all in favor of the bird."

A half hour more of steady work, in which J-C became more and more expert in gauging the speed of his mark, so that he could bring up his piece and catch his target precisely where he wished, and I called a halt on the half-snapping.

"That will do, powder burner; you're on. This half-snapping you have been doing is the correct style on quail, chickens, grouse, woodcock, and snipe—any bird that is tricky in flight, not too fast, and not too far away. For the very speedy birds, crossing at long range, a different system is demanded. You might readily surmise as much, for you have learned that you gained something on lead when you had to swing after the mark and then past it. That means shooting with a swing, and we will take it up very shortly now. At present I wish to impress on your callow mind that the half-snap has its uses and is not to be forgotten, not to be altogether displaced by a method of aiming which you will acquire later.

"The half-snap is a killing style of shotgun marksmanship in the uplands. Many men make no pretense of aiming in any other way—good shots, too. Many others in field shooting will combine the half-snap and the swing, snapping with the first barrel and swinging after the mark with the second. The old-time pigeon

shots—and no better marksmen have ever been developed in America—all used the half-snap for the first barrel and the swing on with the second.

"In passing, let me again warn you, though you surely have been warned a-plenty by our experiments, not to let the half-snap degenerate into the full-snap or direct intersection. If it had no other advantage, the half-snap is superior to the direct intersection, because it has a 'killing zone' about three times as long. Here is a little diagram to prove it. I heard Aunt Jane say young turkey for supper; come along."

We were at work bright and early the next day. J-C had become very fond of his gliding disks and I think would have been content to crack away at them by the hour. Time was passing and I was becoming keen to get at the quail myself; besides, Aunt Jane had given us a plain hint that a few birds would be welcome.

"Now, son, the first thing you are to attempt is the deliberate swing. You know what the lead is for those birds—four feet. When the targets come in sight, get your gun in front of them, but don't shoot. Swing along just four feet in front, pull trigger and carry your piece right along. Nothing to it, except don't check your gun as you pull trigger."

The lad took to this style of work like a veteran, and, after a few shots to get the hang of it, tripped the lead birds so uniformly as to make the work monotonous.

"That will do for the singles. Try doubles, John—I shall have to call you that if you keep on being a credit to Old John. Pull into the first bird quicker and try to get in the second barrel before the birds get past the background of boards."

The gun crashed out its bang! bang! in good time, but to the first barrel the second bird in line dropped, while the second charge passed in front of the lead bird.

"Missed both times!" grumbled J-C.

"Most natural thing in the world, else why should I be fooling away good daylight in coaching you? You were in too great hurry and did not lead far enough with the first; your second miss might be due to either one of several reasons. Seeing you had fallen behind with the first shot, the natural thing to do would be to try to make amends by getting a good deal farther in front for the second—you overdid it. Same thing has happened a million and one times to me. A dozen shots or so will put you right. Now, let me point out, too, that in order to catch up with that second barrel before the bird gets out of bounds, you have to swing after it very fast, which cuts down *apparent* lead automatically—something we are to prove before we quit to-day. Moreover, every foot that the bird passes beyond a position at right angles to the gun reduces the lead. See that, don't you? Whack away!"

My prediction proved true. J-C's training stood him in good stead, and after a bit of practice he got both the first and second birds while they were traveling across a space of twenty feet.

"That's good time, J-C—good enough for the Jones or Browns—a third of a second between shots—quarter of a second will be your standard by and by, but no hurry to reach it. Now try a few shots by half-snapping with the first barrel and swinging on with the next; you will find it quicker and easier.

"That will do, boy. Coming finely with the deliberate swing. This deliberate swing is not much good, anyhow, except theoretically, for in the nature of things, just by way of securing your lead and getting an aim, you are going to swing a lot faster than the bird flies. We are going to swing very fast now for the express purpose of cutting down that four feet of lead. Sweep your gun past the leading target this time—sweep it as fast as you can—and pull right on the front bird; don't lead it.

"That's doing nicely! You got the third bird, which shows you must have gained a couple of feet anyhow. But swing faster this time. Good! Got the second bird that time. Put on still more steam; make your gun just whiz past the bird. Hey, missed 'em all! Never mind; that's to be expected at first. Try it again. O. K. You swung fast enough to strike your target without intentional lead. Now you have the principle and if practice can make that swing uniform enough you can strike your bird without leading him."

(To be continued)

HER FIRST POINT—MR. WARNER'S POINTER PUPPY "SHOT" AT TEN MONTHS

AIREDALE, SETTER AND HOUND

BY WARREN H. MILLER

Chapter VIII. Field Training the Setter

AFTER the game warden broke up my kennel and the remaining dogs were sold, I was unable to give Scout, the setter, the personal field training that I had intended. Scout was one of those dogs that requires a good deal of common sense in his handling. Nervous as a witch, notional, and high strung, he needed sharp curbing in some ways and careful humoring in others. He was very prone to misunderstand your meaning, and very prompt to act on his own interpretation of your words. For example, it took him a long while to get "Hie on!" through his head. No matter how you intoned it (and it is the inflexions that you put into your voice, rather than the actual meaning of the words, that count with a dog), he would stop and look at you inquiringly, uncertain whether you were pleased at his galloping ahead or wished him to come back. On the whole I believe most thoroughly in the whistle in preference to the spoken word; dogs seem to understand it easier—at least, my three did. A short, sharp whistle through the teeth, pitched in one invariable key, always meant to them to stop short and turn and look at me, for I was making some change in my movements, like turning a corner or changing course, taking another fork in a road and the like. The dogs learned that that whistle always meant "Stop, Look, Listen!" for something of importance to them was taking place. In this way I never had any trouble in guiding them when out afield, in recalling them from the wrong road, or changing their course when ranging the fields. Another whistle, the same one invariably used when offering them their plates of food, meant "Come to Master, quick; he wants you!" And, as the whistle was deeply associated in their minds with Grub—Big Eats—they

THIRTEEN MONTHS' SETTER PUP ON POINT, TWELVE-YEAR POINTER BACKING

always came back pell-mell, if even only faintly within earshot of that whistle. A third whistle, a little low warble that even a human could understand, meant "That's all right; take a sniff or two and come on!" and was often used when they were puttering about in the woods, snuffing at a game trail or investigating this and that, and it did me the service of calling them off the business in hand to follow the greater business of getting on in the hike. All three dogs—Airedale, Setter and Hound—understood and obeyed these three whistles alike, and I used them much more than the speaking voice.

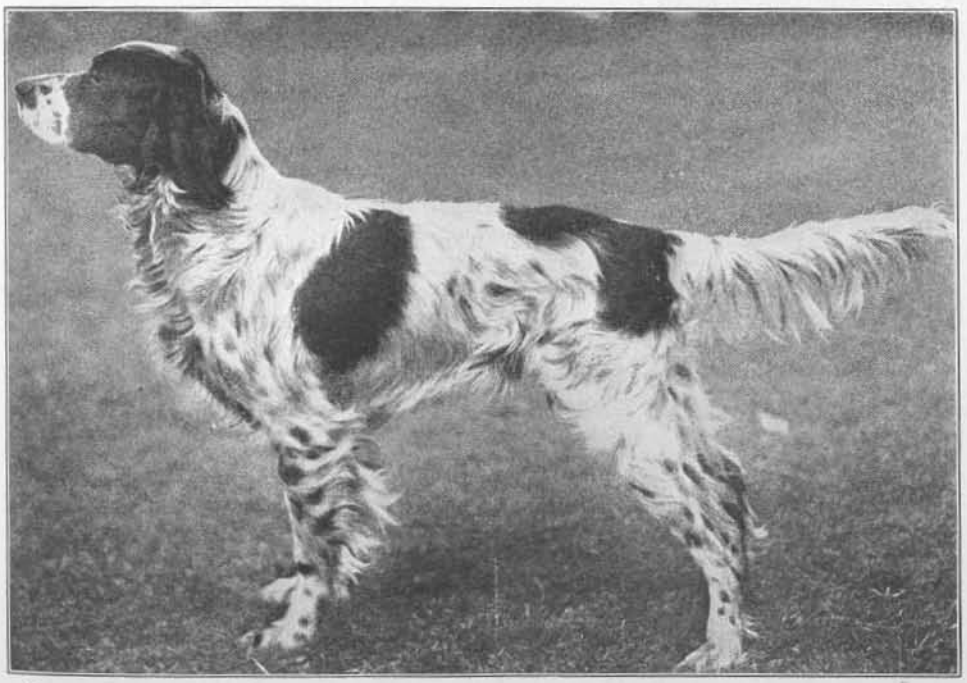
Most sportsmen, particularly city sportsmen who get out only a few times in the hunting season, require of a setter that he shall be a good family pet, a good, able watch-dog, and capable in the field of finding and pointing game, standing fast on point, and retrieving with reasonable efficiency. All the other fine points are well enough, but these three are the fundamentals and all that the city man really asks for in his dog. To get them you must have three qualities in the dog: (1) a nose, and hunting ardor for birds, (2) broken of bolting and chasing, also of gun-shyness, (3) knowledge of what to do when the order "Fetch!" is given.

The first and most important is the hunting spirit. Given that, you can train out faults and train in all the other details. Some puppies, like Scout the First, have it so strongly inbred that at three months they would point any and all birds and stand rigid on point, for some time, of their own natural instincts. Such hunting spirit is, however, usually gained at the expense of vitality, for the dog is so inbred of hunting ancestors of the same family that he is constitutionally unsound and is likely to be carried off by distemper. The answer to the dilemma is, of course, to make sure that both sides of the house, sire and dam, are equally good hunters yet of different families, to avoid inbreeding. Scout the Second was sound enough constitutionally, coming of two different stocks, but he was highly nervous and had no more natural hunting spirit than an Airedale. At eight months' age he noticed no birds, pointed nothing, and was just a pup, for all the world like a fox terrier. I saw that the first thing would be to arouse his dormant hunting instincts, and, to do so, let him chase and run in the fields to his heart's content, being present, of course, to oversee the work and see that he did no harm. At that, this also seems to be forbidden in Jersey, though what harm a puppy chasing larks and blackbirds in a field can do

is hard to see. The State seems to be the worst possible to raise dogs in, and as soon as I can move to another, where more liberal laws obtain, I shall do so.

However, letting him chase, while it promptly aroused the hunting instinct and soon made him notice and point all birds, opened up a question that has been hotly disputed before by dog trainers throughout the country. I was warned by some that it would ruin him as a hunting dog to let him chase, and assured by others that it was just the thing to do. Haberlein strongly endorsed my course of action, saying that letting the puppy chase awaked ambition and the desire to hunt, while any tendency to bolt would be taken out of him by the training to follow. He added that after training had begun no more chasing was to be allowed. Following his method, I firmly believe that I was on the right track, for the crux of the method of training is the *enforced* obedience to your will which the course of training inculcates in the dog, so that even his natural desire to chase is checkmated by your command to "Stop!" or "Charge down!" The dog has learned from the force collar that such an order it is not wise to disobey, and, no matter how eager he may be to chase, the fear of the consequences of disobedience is still stronger. This seems to me to be all there is to it, and I would far rather have a dog that is crazy to hunt and chase, and that I could hold back by my word, than one which has no inclinations to hunt worthy of the name, and is, in effect, merely a retriever.

However, the man to whom I sold Scout II sent him to a New York trainer, who, after a month's work on him, threw up his hands and declared the dog ruined by having been allowed to chase birds during his puppyhood. This trainer used no force collar, and as far as I can see devoted his whole attention to yard training in retrieving, "Charge down!" etc., which is only the beginning of the game. His contention that he never took a dog over six months old to train shows pretty well that the "education" of his dogs never got much beyond yard training. Anyone can teach a young puppy how to



"GIVE ME THE SETTER IF I LIVE WHERE THERE ARE MOUNTAINS FULL OF GROUSE OR GAMY QUAIL COUNTRY ABOUT MY HOME"

retrieve and to stop at command, and the breed of the dog doesn't matter; a fox terrier or collie will learn it just as well as setter or pointer. But that isn't making a hunting dog of him, in the essentials of finding and pointing birds, and standing fast when the birds flush; his young pups are hardly started, and all that I have seen come from him bolt and break point. You can imagine what Scout II would do with such training. Headstrong, notional and flighty, he needed a course with the force collar, for no dog was quicker to obey if he knew that a sure penalty was attached to disobedience; not yelling at him and a whipping when found back at the kennel, but instant checking and choking on the spot by the force collar. The dog would "charge down"—yes, when right by your side and in easy reach of punishment. I taught him that much myself. But let him get out in the field and see a bird, no matter of what kind, and you could yell "Charge!" at him until blue in the face without getting the least attention from him. He would obey out of desire to please you and fear of possible punishment when near you, but neither impulse was strong enough to check him when at liberty and out of reach.

Now, let us see how Haberlein's method of force and a reasonable amount of fear of his master would work in such a case. In the first place every order, from "Sit down!" to "Toho!" is *enforced by the force collar*. It is always present, and in use for the most trivial order. Why? Because the dog must associate every field order, all of which are important enough to be instantly obeyed, with the force collar, so that he never thinks of disobeying, being reminded by poignant memories of what that collar always did to him when he disobeyed. Not that Haberlein's force collar is a cruel instrument; I have one, and was intending to use it on Scout when the row with the game warden came up. It is a plain black leather collar with a tongueless buckle, so that it forms a slip noose, and it is armed on the inside with four plates containing thick, blunt stubs, which hurt when drawn tight roughly, but never lacerate or even abrade the fur. It is, however, enough of an instrument of punishment to make the dog respect it, and it is worn either with the spikes inside or reversed throughout the period of training and for some time after, so that the dog has a constant reminder around his neck that your orders are to be obeyed, and, if not obeyed, you have the power for instant punishment. Now, in a high-strung, headstrong dog like Scout II, his impulses are always violent and he acts on them at once. Fear of whippings and the like have no influence on him, compared with the overpowering emotion of the present—that is, a bird in sight to be chased—and the only thing is an instant and effectual punishing check. A plain collar will not suffice; it does not hurt, and he will simply pull his shoulder out of plumb straining against it and pulling the man at the other end of the cord nearly off his feet.

When the trainer proceeded to show off Scout's shortcomings to my friend, he took the dog out afield at the end of a cord. The poor dog was starved until his ribs stuck through like a hat-rack (he left me sleek and well-conditioned), and he had already chased and killed three chickens through sheer starvation. The first field bird that got up was greeted with a ravenous bolt to the end of his cord. The trainer checked him and made him "Charge!" which, of course, he could do, as the dog couldn't get away; but the minute Scout was let off his cord (by way of demonstration) he bolted after the first bird that got up, chased him out of sight, then another and another, until completely exhausted, and finally arrived back at his kennel, where my friend and the trainer found him. "I wouldn't take him another month for $50!" declared the trainer; "he has been ruined by being allowed to chase birds when a puppy."

My friend was much discouraged. To me the dog seemed simply to yell for the force collar—and something to eat. His owner decided to take him home and feed him up a bit and then send him to another trainer.

Now, to my mind, all that was the matter with Scout was a ravenous appetite and a complete lack of the proper training, and I believe that most dog trainers will bear me out. He has never been taught that

he *must* mind, no matter where he is, instantly. He had the hunting instinct strong, plus the appetite of a starved dog. His killing chickens proves the latter, for while with me he had ample opportunity to kill them, but, while he pointed them and worked up on them, he never attempted to kill them. Now that he is older and knows his powers better, and is dead hungry besides, of course he goes at them much more fiercely, with intent to kill, and it is a good sign, as any trainer will tell you. The hunting spirit is there; he has the speed and the blood and the quick, nervous organization that makes the good field setter; all he needs is a complete training under the force system. The collar should go on him from the start. No more romps; no field chasings; no liberty during the course. His very first step, on being led into the empty room or barn loft that is to be his training quarters, will be a fierce fight against the annoyance of the choking effect of that collar. He is too old to be cowed by it, but he will battle against it until convinced that the only way to avoid punishment by it is to stand still and await his master's commands. So far so good. Then comes "Sit down!" "Come on!" "Fetch!" "Let go!" "Hold it!" "Fetch here!" "Charge!" and "Up!" all of which yard training I taught him by a more humane method, as described in a previous chapter, but which did not stick, because there was then no force collar to inculcate in his mind the idea that he *must* obey or get severely pinched. Particularly "Charge!" needs the force-collar method; we have seen how he was taught by some other method and how much good it did when Scout saw a field bird and the impulse to chase came over him.

He would then be ready for the field, providing that he had learned all the previous lessons, omitting nothing, no matter how trivial, for it is all part of one course, the object of which is to get obedience from your dog—intelligent obedience, but not whimsical and indulgent obedience. That kind may work with some docile pointer bitch or spaniel, but not with a heady, rangy setter dog, full of energy and vim. In field lessons the force collar is still on him, with about fifteen feet of braided cord trailing astern. Now comes your whistle training of puppy days. He has not forgotten that "attention" note, and after a straight cast and he begins to range, give him the whistle to show that you are changing your course. And right about now will come your first trial of all that has gone before. A small field bird gets up and flies away. The dog instantly starts to bolt after it, and you sound your whistle and shout "Toho!" followed by "Charge!" If the fear of the collar is upon him he will stop like a shot. If not, you must connect that collar up with the new notion of liberty that is in his mind. He must realize that even at liberty you can still choke him with the collar. Attach a long rope of some fifty feet to the collar and turn it with the spikes in (it was worn with spikes out before, merely to remind him that it was still there). Keep up near him until another field bird gets up. If he again bolts, order "Toho!" or "Stop!" and at the same time bring him up hard with the force collar. A few days' trial, with vigorous spills for chasing field birds, will give him the idea that to chase them means punishment, swift and strong, with the collar. He is used to that, so it does not cow him or take the spirit out of him; that is why all the previous training was done with the force collar, to guard against that very thing. He learns that chasing fields birds is one of the things that master does not want done and will punish him for. This is infinitely better than the whip, which scares him to death and which he is more than apt to misunderstand, wondering what he is being punished for.

Now hunt up your first bevy of quail, still keeping him on the long cord. Presently, as you lead him to a place where they often "use," you see him begin making game. Call "Careful!" or "Steady!" so that he knows there is something doing. If his instincts are right he will presently come to a point. Now work up on cord, as close behind dog as you can get, stepping on it so that he can't break point. The pressure of the collar may remind him and hold him steady, but the chances are he will rush in and flush. The instant he does this, call "Charge!" and about

"GIVE ME THE AIREDALE IF I MUST LIVE IN A CROWDED, RESTRICTED STATE, AND I WANT AN ALL-AROUND DOG"

the same time the collar will throw him severely, for few dogs can withstand the temptation of a whole buzzing bevy of quail, and he has rushed after them full tilt. Haberlein advises this first lesson without gun, as the dog has enough on his mind as it is; also, it enables you to mark down easier. Walk them up again and repeat the lesson, ordering "Up here!" "Sit down!" and praise and pet after each rise of the birds. The idea is to let him get the notion that all this is part of the training course that has gone before, and that he is under orders every moment of the time. That makes the dog work to the gun, a most desirable quality. A whole afternoon, or two of them, devoted to flushing and marking birds, putting up singles, etc., will give him such a nose for quail and such a liking for the sport that he will have little interest for field birds from that time on. He will still point "stink birds," as the field sparrows are called in the South, but that is because they have a strong scent and he has not yet learned to distinguish it from quail scent. All pups have that failing, and nose practice alone will eradicate it. After a week or so of pointing stink birds and having nothing happen except a little measly sparrow fly out of a bush, instead of the familiar whirr of the quail and the roar of the guns, the dog will be as much bored at them as you are, and tries to distinguish between them and quail. Flip, Doc. Adams' pointer pup, got over it in one week's steady shooting.

The next lesson will be with the gun. Shoot at the next bevy and try to make a clean kill. Order "Charge!" while reloading gun, and then walk in carefully, with dog still dragging cord, on the lookout for singles. If none get up, then "Fetch dead bird!"

He may or may not remember this order, but by scratching around in the grass, with repeated orders and encouragement, he will get the idea and seek dead bird. If you find it first, do not pick it up, but call him over and see what he does. Scout II never attempted to mouth a dead bird while with me, but you must be on the watch for any signs of it, and if he tries to gulp or squeeze it, take him in hand at once with the force collar, repeating all the yard lessons of "Fetch!" "Hold it!" "Let go!" giving him the bird again and again, and jerking the force collar sharply if he attempts to bite the bird. Pocket it finally, and follow up the covey. Any refusal to pick up the next bird should be met with the force collar, repeating again and again the old lessons of the yard training school, for this is what all that was for. A week spent on this quail training is none too much.

Few setters are gunshy; it doesn't appear to be part of their inheritance. Both of my Scouts were brought up from earliest puppyhood on rifle and shotgun, and were always around when firing and practice were indulged in. Scout II *became* gunshy, for a short time, by seeing Pepper bolt at the report of a .35-caliber Winchester — some roarer! He saw Pep digging out for home and got frightened and followed suit. I at once took both dogs out to the trap-shooting field and let them be tied up while we went at every kind of practice, from supplementary to 12-gauge shotgun with the hand trap. Pepper jumped at every shot and was a long time getting over his uneasiness, but Scout soon sat up and took interest in the proceedings, and he lay down and slept while I used him for an elbow rest while firing the big rifle, prone. In the field he never bothered about the noise of the guns, but Pepper, after having his first rabbit killed over him this year, refused to hunt any more on those terms and even let another hound chase and round up a rabbit while he stayed near his master and took no part in the chase—an unusual thing for Pepper.

"AND GIVE ME THE HOUND IF I LIVE IN A WILD STATE WHERE THERE ARE BOTTOM LANDS FULL OF COON AND RABBIT"

The right cure for him would be a hunger strike—that is, *you* go on strike from feeding him!—until he no longer heeds a gun. When fat and well fed, he would readily refuse food if it meant firing a gun over him, but the first step in such a course would be 24 hours' fast, keeping it up for four days if need be, until his hunger overcomes the fear of the gun. He is to be chained to his kennel during the whole treatment, and meat is only fed him, bit by bit, firing the gun at each bit until the dog will eat, no matter how much racket is going on. At the least sign of fear, take pan away and go into the house, returning again after a short interval, during which time the dog has had time to reflect on how hungry he is. Put pan just out of reach, and feed one bit at a time, firing gun and dropping bit of meat simultaneously. A full dog will not eat under those terms, as his fear drives out thoughts of his hunger, but a hungry one will do so—if hungry enough! Continue lessons in field with cord and force collar, taking along food and shooting as you go, dog being, of course, dead hungry. It seems the best cure for gun-shyness. I have tried a number of other methods without effecting a permanent cure.

Other field faults are: Running away;

cured by long, light cord and force collar. Pointing and hunting rabbits; cured by tying dog to a bush with choke collar, getting beyond rabbit and flushing him, so he will run past the dog; latter bolts at rabbit and is spilled by cord coming up taut and choke collar punishing him. Breaking shot; most pups do this more or less, not a bad sign; cure, short piece of string with ring attached to choke collar; when dog is on point, slip up and snap on longer piece, which is tied to a bush. Walk in and flush the birds, and, as dog breaks point and rushes in, he gets spilled, and at the same moment you shout "Charge!" Repeat until cured, always calling "Steady!" and "Careful!" while on point, the tone of your voice showing the dog what you want. Flip was cured of this in two days afield. Climbing all over you; a common fault with setters, whose affection is so exuberant; cure, just step on his hind feet with your toe, at the same time ordering him down. All these matters are treated in such books as Haberlein's "Amateur Trainer" and Burette's "Modern Breaking," both inexpensive books, at much more length than I can go into them in the brief limits of this chapter.

By all means train your own dog. It is not hard, even for a busy city man. Suit your course of training to the particular dog. Some are docile and naturally endowed with the attributes which are wanted in the field dog; others are heady and wild, and require sterner methods. My own limited but varied experience with a number of dogs that I have owned taught me that no dog is hopeless unless he has not got the hunting instincts. If he has these—the stronger the better—I'll make a field dog out of him! Only, go slow and don't expect too much of a pup or a one-year dog. They will be foolish and disobedient, and will try your soul again and again, but that dog has thirteen years to live, and when he is but thirteen months or even two years old he is still a mere pup, and he can learn a lot as time goes by and he acquires years of wisdom. Get a dog that has blood, yet not too much of one strain; see that his forebears were noted hunters, and then set out to raise him and train him yourself, never despairing, shaking off discouragement, letting time do its work, and you may not have much of a dog in the first two years, because of the really limited opportunities that we have up North to give him any field training, but in time he will "arrive," and each year that you go South he gets better and more a credit to you and your training.

And remember that he is primarily your friend and chum and companion. He is *your* dog, with all his faults and virtues. Believe in him thoroughly and absolutely, because you know that "blood will tell." Don't lose your temper, nor sell him, nor fill him full of birdshot—he's *your* dog! You made his character what it is; what he knows and does not know about field work is your responsibility entirely, and when you feel like murdering that dumb animal, or beating him black and blue, or giving him away to the first passer-by for two cents, just have a session with *yourself* and see if it isn't really you that needs giving away, beating black and blue, and all the rest of it!

Airedale, Setter and Hound!—give me the Airedale, if I must live in a restricted, crowded State where there is little or no game, a surplus of game laws and restrictions of all kinds, and I just want a dog—one that can occasionally hunt or chase rabbits, squirrels, 'coons and 'possums, or mark for me an infrequent bevy of quail. Give me the Setter if I live where there are mountains full of grouse or woodcock near by, or there is gamy quail and rabbit country all about my home. And give me the Hound if I live in a wild State, where there is plenty of bottom land for 'coon and rabbits and the neighbors are not so many that every time he bells on a trail some nervous old woman of a commuter will send the policeman to warn me that my dog is making so much noise that he cannot sleep! For the hound *is* noisy. He loves to hunt, and he is out of place in a thickly settled neighborhood, where a thousand busybodies are rigidly protecting the one squirrel that remains in a dozen square miles of gentleman farm land. For the locality that I live in, my next dog will be an Airedale. Oh, you Blaze!

THE END

DUCKS, DEER AND BEAR IN FLORIDA

BY FRANK ADAIR

MUCH has previously been written of the hunting in the North woods, in Alaska, in the Rockies, and in foreign countries. Stories of moose-stalking for days over snow-covered hills and valleys, patient waiting for a shot at bear as it comes to its favorite salmon hole, and long rides after more dangerous and rarer game. Not so much, however, has there been said of the deer drives through the swamps and thick undergrowth of Florida, where the only means of jumping game is with a well-trained pack of hounds, and where the chances of a shot are certainly no more frequent than in the North woods.

It is for the purpose of showing the moose-stalker what keen sport can be had hunting with dogs in Florida that the experience of a two weeks' hunt there last December is here related. Most of the following is copied from a diary kept by the writer during those two weeks, the exceptions being comments on some phase of the hunt that needs to be explained in more detail than was done in the diary.

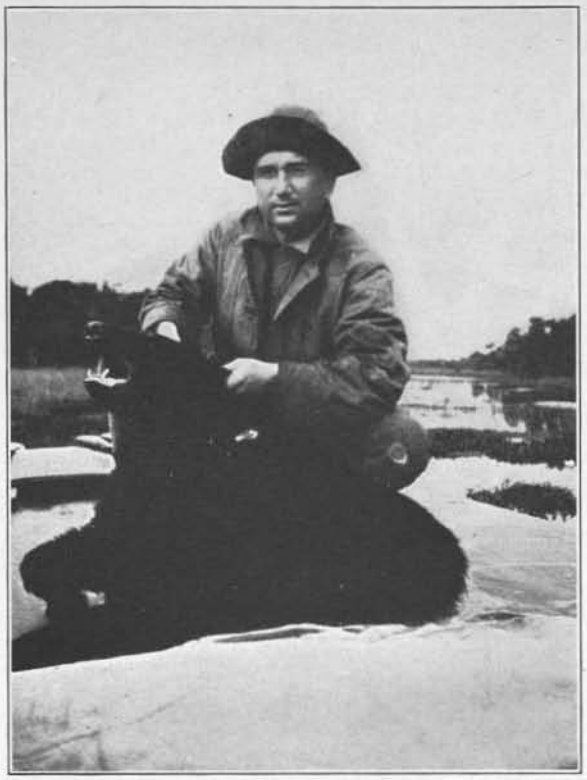
On the night of Thanksgiving, 1914, our party of four, consisting of Dr. Childs, Frank Adair, Clarke Frazier and Robert Gregg left Atlanta for Homosassa, a little village on the west coast of Florida, where our guides, boat and dogs were waiting. The boat, a thirty-five-foot gasoline-driven vessel, had been previously provisioned for a two weeks' trip. In addition to the food on board, we had tents for permanent camp, cots and chairs, and a well-equipped kitchen permanently arranged in the stern of the boat.

With the party were the four guides—Doc MacReynolds, George Smith, Jim Brown and Jim Croft—William, the chef, and Walter, the man-servant. We had some thirty dogs for deer and bear, and live decoys for duck.

We left Homosassa early on the morning of November 28th for a point some three miles above the village, there to make our first drive for bear in a swamp between the Homosassa River and Hall River.

The method of hunting bear in Florida is very different from the method used in the Rockies or in Alaska. Standers are placed at the various water-fords and other probable crossings in the scrub, while a guide with the dogs starts the drive from some given point. The chances are about equal that the game will jump and head for the thick scrub where it is impossible to follow as that it will head for the water or the more open spaces. Thus it was that our first drive was unsuccessful; although the driver jumped a bear shortly after the dogs were loosed, the game headed straight for the thick scrub and we came in empty-handed.

The next attempt, made on the following day, was more fortunate. We all took the same stands that we had occupied the first day, and the drive started at about the same point. The dogs jumped a bear within thirty minutes after they were loosed, and, led by a famous Rainey hound, Jack, the race started straight for Frank Adair. No doubt every hunter thinks his dogs run the best race and make the prettiest music, but if ever a race was run that beat this one, the oldest guide in our party failed to recall it. The race was run over a damp marsh in full hearing of most of us; so close did it sound that three of us were ready and waiting for the chance to shoot, and it is still a question as to whose heart beat the loudest, ours or the bear's. At any rate, the race headed straight for the river, across which stood Adair with his gun ready. The bear was pushed so closely by the dogs that it turned up the river at full speed and broke through the scrub almost on the edge of the river, offering a fair shot to the hunter. The first shot was a



AND NOT SUCH A SMALL FLORIDA BEAR, EITHER

little high, but the next was a clean bull's-eye through the neck, just ahead of the shoulder, and the day's sport was ended. Thinking it over now, months afterward, I believe we all lived days waiting for the shot, but the diary shows the total elapsed time, from the moment of starting the drive until the victorious shout of Adair announcing the result came down the river to us, was forty-six minutes.

The rest of the day was spent in celebrating our good luck, talking over the points of the hunt as only hunters can when they have come in with meat and a perfect pelt.

Our next objective point was some several miles down the coast, to reach which we had to go down the Homosassa River and out into the Gulf of Mexico, thence down to the mouth of the Chesehouiska River, where we arrived late the following day.

With the equipment we had, it was a very simple matter to move on short notice from one location to another, thus making it possible to get the very best sport. The game in Florida travels over a rather large range, and it was necessary for us to move in order to get the luck that we did. The only drawback to the arrangement was taking care of the dogs, for they could not be handled very comfortably on the boat. So in camping even for two days we had to make some sort of camp for the dogs, where they could range without running away and where they could get water, etc. As a matter of fact, our dogs had about the same care as our guns, for the success of the trip depended on them as much as on any other one thing. Some of these dogs were from the Paul Rainey camp in Mississippi and included his well-known bear-hound Jack, a fine deer-hound, Fred, and many foxhounds and Airedales. The Airedales would not only follow the lead in any sort of a race, but at times would even lead the pack.

Daylight of December 1st found all of us on duck stands, with our decoys loudly saluting the morn. We used English gray call ducks, mixed in with three wooden decoys, and found them very successful. Previous experience in Florida duck hunting had taught us that after the first hour of daylight shooting it was useless to stay on the stands, as the ducks would then leave the creeks and main river for the better feeding places far out into the Gulf. So after the sun was about an hour high we pulled back to the boat for breakfast and marked up the results of our effort. The first day's duck shooting amounted to some sixty-odd ducks, consisting of mallards, teals and widgeons. It so happened that each of us stood in a location where there were all mallards or teals or widgeons; hence the collection made a very fair showing.

The next two days were spent driving for deer, without any luck. The diary shows that the duck hunting was fairly

successful, but the major hunt developed nothing tangible except some very tired hunters at the end of the day, whose appetites were in no way impaired by the lack of fresh venison.

We then decided to travel farther down the Gulf to Stapleton Creek, which was supposed to be a very good deer country. The low tides made our traveling very slow, and it was with difficulty that we managed to crawl into the mouth of this creek over many oyster bars and rock shoals. In fact, we had to tie up outside until midnight, waiting for the tide to turn and enable us to reach the camping grounds.

A NEAT BAG FOR ONE GUN

The deer drive started the next morning shortly after seven o'clock, with the standers placed about two hundred yards apart on an old cedar road. It was nearly noon before the dogs headed the game towards the road, and even then the main pack turned back on a fresh trail while one lone hound kept on towards us. This time it was Dr. Childs who got the shot, and a mighty quick one it was. He was standing on the edge of this road, on both sides of which were dense, thick undergrowth, making it impossible for him to see anything except in the road itself. He heard the dogs coming and pointed his gun down the road on a level with the side on which he stood. The deer jumped into the middle of the road, about forty yards away, and before he could take a second leap, which would have meant safety for him, Childs shot him through the shoulder and our supply of fresh meat was augmented by venison. Frazier and Gregg both came in from their stands to see this deer and to congratulate Childs in the usual manner on his first deer. While standing there talking it over, a second deer jumped into the road not twenty yards away, but was gone before any of us could shoot.

The following day was spent driving for deer, but none of us got a shot. We then arranged to return to our old grounds in the Chesehouiska River, only farther up than the first stand. We celebrated that afternoon (while waiting for the tide) with a large banquet, the menu of which might sound interesting. We had venison, bear meat, duck, fish, fish roe, potatoes, rice, hot bread, fruit-cake, coffee and crème-de-menthe. There may have been something else, but the scribe was unable to write further, for self-evident reasons.

The next day was spent in preparing a more permanent camp for ourselves and for the dogs, as we expected to remain here for the rest of our stay. About three miles up the Chesehouiska River is a point well arranged for a camp, and we cleared off space for the tents, fixed up the dogs, and then made a fire.

From this point we hunted for several days, driving for deer and bear with some success. The early hours of morning were devoted to duck and the afternoons to fishing and squirrel hunting.

To illustrate the details of a deer drive in Florida, I will tell of one of our hunts, made just before leaving for home.

With seven men on stands and scattered over a territory of some four miles, Doc MacReynolds started the drive just back of the camp. This was about 7 o'clock in the morning. He drove for nearly three hours before the dogs headed in the direction of the standers, the previous deer having headed off in a direction where none of us were. Gregg was standing near an old water-hole where the game frequently came on their way to the marsh. Adair was about two hundred yards north of Gregg, and George Smith was the same distance west of the water-hole. The deer headed straight for Adair, who thought the shot was to be his and prepared for it. The deer must have scented him, however, for he veered off to the west, in the direction of Smith. Smith then cut in to get the shot, only to have the deer veer off from him and turn back in the direction of Gregg. Gregg moved over a few yards, to get into an open space, and stood waiting for the first sound of the game as it broke through the palmetto fans. He waited only a few moments when he heard the breaking brush and fans that told of the nearness of the deer. It leaped into the open space some forty yards away, and, just as he landed, Gregg shot, dropping the deer to his knees. Thinking the shot had done the work, he lowered his gun to see and to reload, only to find the deer on his feet and with one leap gone. A search quickly showed that the deer had run only a short distance, however, and had dropped for good. Even though Gregg stood in an open space, he could not have had a second shot, for the undergrowth is everywhere so thick in Florida as to make it impossible to get more than one quick shot. That is what makes hunting in Florida so sporty; you do not have time to calmly aim your gun and take a leisure shot. It means a shot from the shoulder almost without other aim than an instinctive pointing of the gun and a simultaneous pulling of the trigger, else the game is gone and the day's work unsuccessful.

In this instance the first dog did not arrive until some six minutes after the shot, showing the speed with which the deer had run.

On this same day we had a very queer instance of how a dog will trail a deer, once it has jumped. Smith heard the shot and went back to his stand to be ready for the next drive. He soon heard the dogs running farther to the west of him and ran over to get in the race. He found all the dogs but one, and it continued the new race. Following this dog, he saw the deer swimming down a creek, with the dog swimming some distance behind the deer and opening at every breath. The only way he could know the deer was ahead of him was by scent, further illustrating the fact that deer are trailed by the musk scent and not by footprints. The dog kept on this race for several miles, crossing three streams in the distance and finally lost the deer because of utter exhaustion.

Two days later we pulled anchor and returned to Homosassa, there to once more assume the garb of civilization and to depart for home. And now we can only talk over past experiences and plan for ones to come, though next December seems far away.

COMING IN FEBRUARY: "GAME FARMING FOR PLEASURE AND PROFIT", ONE OF THE BEST AND MOST PRACTICAL SERIES EVER WRITTEN ON HOW TO STOCK UP WITH OUR NATIVE GAME BIRDS AND HOW TO REAR THEM AND PROTECT THEM FROM PREDATORY ANIMALS

TAXIDERMY FOR THE SPORTSMAN

III. The Skinning and Field Preparation of Small Mammals

BY ROBERT S. LEMMON

ILLUSTRATIONS BY THE AUTHOR

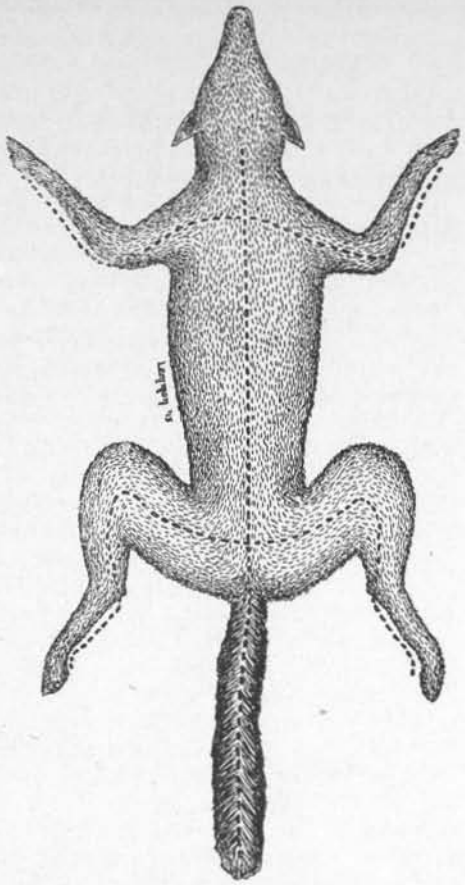
IN the course of our hunting trips it often happens that there comes to hand a particularly fine specimen of one of the smaller animals which would be worth mounting entire. It may be a fox, bobcat, otter, mink, or perhaps only an especially handsome black or fox squirrel. A big Canada lynx or a wolf, even, is not too bulky for the sportsman-taxidermist to tackle with comfort, nor for his den to hold with credit to both container and contained. The mere mounted head of such an animal is apt to be too small to give an adequate conception of its bearer's original quality, and to this extent it falls short of the complete mounted skin, or a rug with head attached.

In giving the following directions for field work on small mammals, I am aiming to annihilate several birds with one chunk of rock. More specifically, the skinning and preserving operations described may be followed up at home in one of several ways: mounting the animal entire; mounting the head and making a separate rug or wall hanger of the body skin; making a flat skin with only the attached head mounted, etc. The prime essential is to get the skin off and preserved in such shape that all of it can be used if desired. Future details of permanent preparation are easily worked out from this, for it is much easier to discard parts of a skin at home than it is to replace portions of it which were abandoned five hundred miles away in the middle of a spruce forest entirely surrounded by lonesomeness.

For present purposes the smaller animals may be divided into two general classes: those smaller than a fox, and those larger. Let us take up these separately, considering first the smaller class and selecting a squirrel as a representative type which will demonstrate practically all of the principles involved. The tools and preservative required are essentially the same as those described last month in the chapter on big-game heads: a scalpel, skinning knife, tape measure, arsenical soap, and a roll of absorbent cotton. A pair of fine-pointed surgical scissors will be convenient but not essential, and needles and stout thread will also be required, as will some salt and powdered alum.

When you are ready to begin work, lay the squirrel on his back on a board or other flat surface, and make a single opening cut from the center of the throat to the base of the tail. Use the point of the knife, edge up, to avoid cutting the hair, sticking it in at the throat and running it straight down the center of the chest and stomach. Do not go deep enough to penetrate the covering of the intestines, of which there will be little danger if you pay attention to the difference in texture between the skin proper and the inner lining which covers the abdomen.

When the base of the tail is reached, lay aside the knife and with the fingers loosen the skin on either side of the cut, pulling it with one hand while with the other you work at its junction with the flesh. In the case of an old, tough animal, some cutting will be needed to facilitate this loosening. Skin down both sides from the whole length of the cut until the shoulder joints of the fore legs and the hip joints of the hind legs are exposed. Disjoint the legs at these points and cut through their muscles so as to sever them



INCISIONS FOR SKINNING OUT SMALL ANIMALS

entirely from the body. Turn each leg inside out down to the foot, and remove all flesh from the bone. Cut the skin on the soles of the feet from the base of the middle toe to the heel, so that the foot can be cleaned and poison inserted. Then pull the legs back into place in the skin. After this is done, continue skinning around toward the back from both sides until all is clear from rump to neck.

The next step is to remove the bone and its surrounding tendons from the tail, for if these were left inside the skin it would be impossible to cure them; the hair would slip, and insect pests would find there the comfortable feeding and breeding ground for which they are always on the watch. Whatever may be the size of the animal, be sure never to neglect the complete removal of the tail bone.

In the case of foxes, raccoons and other animals with rather thick, fleshy tails, the skin must be slit along the under side from butt to tip, the bone removed and the skin opened out flat for curing. With squirrels, minks and others whose tails are more or less rat-like, the bone can be pulled out without cutting the skin. Let me illustrate:

For the squirrel under consideration, provide two straight, squared sticks about half an inch thick and six inches long. Skin down to the tail until the butt of its bone is exposed on all sides. Then slip one of the sticks across the rump between the skin and the body, and lay the other across the base of the tail on the under side. Work the two sticks down until they are opposite and parallel to each other, one on either side of the tail bone, which intersects them at their centers. In this position their adjacent corners should be close against the fold where the skin still adheres to the bone.

It is now a question of squeeze and pull. Turn the animal head end to the right, and take the two sticks in the left hand in such a way that you can grip them tightly together upon the tail bone, and at the same time pull in a direction straight away from the squirrel's body. Get a good, solid grip on the sticks, and a ditto one with the right hand on the hind quarters.

Now pull steadily and *hard*, as if you were trying to break a heavy cord. The edges of the two sticks, pressing against the fold of skin and not being allowed to slip over it, will force the entire tail skin off the bone, if you pull wisely and well. It is the same result, in a way, as astonished you when as a youngster you tried to catch the pet chipmunk by the tail, and in consternation saw him depart minus the ornamental part of said useful appendage, while you tearfully wondered whether it could ever be "put back on again" to cover that pitifully denuded pinkish bone.

When the tail is "slipped" in this fashion it, of course, is not turned inside out. At first you will think your efforts vain, yet when things do begin to move they move swiftly. But you must pull really

hard, and be certain not to let the sticks slip past that fold of skin. Incidentally, the fingers alone can sometimes be used efficiently instead of the sticks, but the effort is hardly worth while.

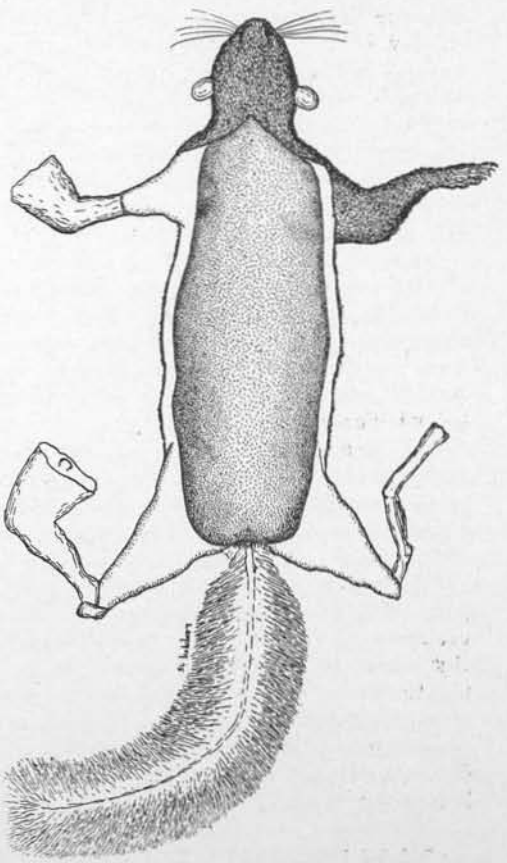
The skin is now entirely separated from the body as far as the nape of the neck. Turn it forward over the head, peeling it from the neck and skull as you would toward the ears. Cut these free close to the bone. When the eyes are reached, take pains not to cut their lids. Keep the knife against the bone as you cut around the eye sockets, and when the iris and pupil (the dark part of the eye) are easily visible, cut through the membrane which covers them and connects the skin proper. Reaching the jaws, cut the lips loose all along the bone, taking care not to slice them nor the roots of the whiskers. Cut through the nose cartilage where it meets the skull, thus severing the last connection between skin and body.

Now come the final steps preliminary to poisoning and drying the skin and skull. Sever the latter from the neck by disjointing the last vertebra and remove the brains through the opening thus made. Cut away the tongue and as much superfluous flesh as possible from about the jaws and their bases and take out the eyes entire.

Turning again to the skin, split the lips open on the inside and clean them, but do not clip away their inner skin, as it will be needed later on when you come to mount the animal and fill out the lips to their natural size. The cartilage at the bases of the ears must also be cut away close to the skin. In the case of foxes and other animals with larger, furred ears, each ear should be skinned out completely, as described last month in the chapter on big-game heads. Scrape and cut away all bits of adhering flesh from the inside of the skin, wash off the inner surface with clear water and sew up any accidental holes there may be. Then get the arsenical soap.

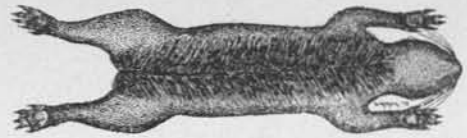
Mix the soap well with water until it attains the consistency of rich cream and apply it thoroughly over all parts of the skin, insides of the feet and the skull. Get a stick small enough to enter the skin of the tail and with it work some of the poison in there, too. When the skin has absorbed it, rub on fine salt and alum, mixed in equal parts. It is not necessary to put salt and alum on the skull, arsenical soap alone sufficing there.

Now come the filling and final shaping of the skin into the form in which it is to dry. Pull the leg bones inside the skin, coat them again with arsenical soap, wrap a little cotton around each to replace the muscles and pull them back into place. Get a springy, tough piece of wood the length of the tail, whittle it smooth and thin enough to go easily inside the skin and take the place of the bone, coat it with the arsenical soap and shove it in the full length of the tail. Fill out the head skin with cotton and sew up the opening cut from throat to tail, filling with cotton as you go. Do



SKIN PARTLY REMOVED AND LEGS SKINNED OUT AND FLESH REMOVED FROM BONES

DETAIL AROUND LIPS, EARS AND EYES



FOLDING UP SKIN, WITH TAIL LAID INBOARD

not stretch the skin; it should be filled to natural size only, or perhaps a trifle smaller. If sufficient cotton is not at hand for this, almost any other soft, dry material, such as dry grass, will do. The skull may be stored away in the center of the body skin, where it cannot get lost.

The position in which a small skin, such as a squirrel's, should dry is shown in one of the illustrations. The tail is laid along the under side of the body where it will be out of the way. In cases where the tail is not long enough to make this economy of space necessary, it may be left extending backward in a natural position between the hind elgs. Whether long or short, however, the method of laying out the skin proper is the same: it is simply placed belly down on a flat surface, the legs and head are posed as shown, and the whole thing is left thus until dry.

So much, then, for skins up to and including the size of a small fox. The next things to consider are those which come above this limit. Such specimens require some variations from the steps just described, and the first of these is the matter of measurements.

It is hardly necessary to measure animals smaller than a fox, because their skins as made up are a very good guide to the dimensions of the complete, mounted specimen. (Remember that I am *not* speaking now from the scientific standpoint, which demands very accurate measurements of even a mouse in the flesh.) But since, for several reasons, it is impracticable to make up a big skin as we did our squirrel, for example, future successful mounting calls for a record of the following dimensions, carefully made before any skinning is begun:

1. Length from nose to butt of tail when the animal is lying on its side.

2. Height at shoulder. To get this place the animal on its side and hold a straight stick perpendicularly against the back at the shoulder. Bend the forefoot and leg into position as if the animal were standing, and measure in a straight line from the sole of the foot to the stick.

3. Girth of body just behind front legs.

4. Girth of neck.

5. Greatest girth of forearm.

6. Distance from head of humerus bone to head of femur. (With the animal on its side, feel for the high points of the arm and thigh bones at shoulder and hip and measure between them.)

All of the girth measurements should be made quite tightly, so as to eliminate as nearly as possible any errors due to the thickness of the hair.

In skinning one of these larger animals the opening cut is made as before, only it must be extended to the end of the tail. Then take each leg in turn and slit it from the middle of the foot at the back to the main opening cut. Each of these incisions should run up the back of the leg to the knee or hock, as the case may be, and then gradually swing to the inside so that it joins the throat-to-tail cut exactly between the legs.

After poisoning with arsenical soap and the salt-and-alum mixture, the skin should be allowed to dry and then folded into conveniently small compass. The leg bones are left attached to the skin at the feet, and the cleaned skull, with cotton in the eye-sockets, is replaced in the skin to keep the latter in shape. Finally, tie the whole thing into a flat, squarish bundle and keep it out of the wet.

(*To be continued*)

"WITH DOG AND SLEDGE IN THE NORTHERN WASTES". A STORY OF SPENDING THE WINTER ON SNOWSHOES, IN THE HUDSON'S BAY COUNTRY FOLLOWING A TRAP LINE, IN THE FEBRUARY ISSUE

DESERT GOLD

A NOVEL, BY ZANE GREY

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XV

BOUND IN THE DESERT

FAR away from Forlorn River Dick Gale sat stunned, gazing down into the purple depths where Rojas had plunged to his death. The Yaqui stood motionless upon the steep red wall of lava from which he had cut the bandit's hold. Mercedes lay quietly where she had fallen. From across the depths there came to Gale's ear the Indian's strange, wild cry.

Then silence, hollow, breathless, stony silence enveloped the great abyss and its upheaved lava walls. The sun was setting. Every instant the haze reddened and thickened.

Action on the part of the Yaqui loosened the spell which held Gale as motionless as his surroundings. The Indian was edging back toward the ledge. He did not move with his former lithe and sure freedom. He crawled, slipped, dragged himself, rested often, and went on again. He had been wounded. When at last he reached the ledge where Mercedes lay Gale jumped to his feet, strong and thrilling, spurred to meet the responsibility that now rested upon him.

Swiftly he turned to where Thorne lay. The cavalryman was just returning to consciousness. Gale ran for a canteen, bathed his face, made him drink. The look in Thorne's eyes was hard to bear.

"Thorne! Thorne! it's all right, it's all right!" cried Gale, in piercing tones. "Mercedes is safe! Yaqui saved her! Rojas is done for! Yaqui jumped down the wall and drove the bandit off the ledge. Cut him loose from the wall, foot by foot, hand by hand! We've won the fight, Thorne."

For Thorne these were marvelous strength-giving words. The dark horror left his eyes, and they began to dilate, to shine. He stood up, dizzily but unaided, and he gazed across the crater. Yaqui had reached the side of Mercedes, was bending over her. She stirred. Yaqui lifted her to her feet. She appeared weak, unable to stand alone. But she faced across the crater and waved her hand.

She was unharmed. Thorne lifted both arms above his head, and from his lips issued a cry. It was neither call nor holloa nor welcome nor answer. Like the Yaqui's, it could scarcely be named. But it was deep, husky, prolonged, terribly human in its intensity. It made Gale shudder and made his heart beat like a trip hammer. Mercedes again waved a white hand. The Yaqui waved, too, and Gale saw in the action an urgent signal.

Hastily taking up canteen and rifles, Gale put a supporting arm round Thorne.

"Come, old man. Can you walk? Sure you can walk! Lean on me, and we'll soon get out of this. Don't look across. Look where you step. We've not much time before dark. Oh, Thorne, I'm afraid Jim has cashed in! And the last I saw of Laddy he was badly hurt."

Gale was keyed up to a high pitch of excitement and alertness. He seemed to be able to do many things. But once off the ragged notched lava into the trail he had not such difficulty with Thorne, and could keep his keen gaze shifting everywhere for sight of enemies.

"Listen, Thorne! What's that?" asked Gale, halting as they came to a place where the trail led down through rough breaks in the lava. The silence was broken by a strange sound, almost unbelievable, considering the time and place. A voice was droning: "Turn the lady, turn! Turn the lady, turn! Alamon left. All swing; turn the lady, turn!"

"Hello, Jim," called Gale, dragging Thorne round the corner of lava. "Where are you? Oh, you son of a gun! I thought you were dead. Oh, I'm glad to see you! Jim, are you hurt?"

Jim Lash stood in the trail leaning over the butt of his rifle, which evidently he was utilizing as a crutch. He was pale but smiling. His hands were bloody. A scarf had been bound tightly round his left leg just above the knee. The leg hung limp, and the foot dragged.

"I reckon I ain't injured much," replied Jim. "But my leg hurts like hell, if you want to know."

"Laddy! Oh, where's Laddy?"

"He's just across the crack there. I was trying to get to him. We had it hot an' heavy down here. Laddy was pretty bad shot up before he tried to head Rojas off the trail. . . . Dick, did you see the Yaqui go after Rojas?"

"Did I!" exclaimed Gale, grimly.

"The finish was all that saved me from runnin' loco plumb over the rim. You see I was closer'n you to where Mercedes was hid. When Rojas an' his last Greaser started across, Laddy went after them, but I couldn't. Laddy did for Rojas's man, then went down himself. But he got up an' fell, got up, went on, an' fell again. Laddy kept doin' that till he dropped for good. I reckon our chances are against findin' him alive. . . . I tell you, boys, Rojas was hell-bent. An' Mercedes was game. I saw her shoot him. But mebbe bullets couldn't stop him then. If I didn't sweat blood when Mercedes was fightin' him on the cliff! Then the finish! Only a Yaqui could have done that. . . . Thorne, you didn't miss it?"

"Yes, I was down and out," replied the cavalryman.

"It's a shame. Greatest stunt I ever seen! Thorne, you're standin' up pretty fair. How about you? Dick, is he bad hurt?"

"No, he's not. A hard knock on the skull and a scalp wound," replied Dick. "Here, Jim, let me help you over this place."

Step by step Gale got the two injured men down the uneven declivity and then across the narrow lava bridge over the fissure. Here he bade them rest while he went along the trail on that side to search for Laddy. Gale found the ranger stretched out, face downward, a reddened hand clutching a gun. Gale thought he was dead. Upon examination, however, it was found that Ladd still lived, though he had many wounds. Gale lifted him and carried him back to the others.

"He's alive, but that's all," said Dick, as he laid the ranger down. "Do what you can. Stop the blood. Laddy's tough as cactus, you know. I'll hurry back for Mercedes and Yaqui."

Gale, like a fleet, sure-footed mountain sheep, ran along the trail. When he came across the Mexican, Rojas's last ally, Gale had evidence of the terrible execution of the .405. He did not pause. On the first part of that descent he made faster time

than had Rojas. But he exercised care along the hard, slippery, ragged slope leading to the ledge. Presently he came upon Mercedes and the Yaqui. She ran right into Dick's arms, and there her strength, if not her courage, broke, and she grew lax.

"Mercedes, you're safe! Thorne's safe. It's all right now."

"Rojas!" she whispered.

"Gone! To the bottom of the crater! A Yaqui's vengeance, Mercedes."

He heard the girl whisper the name of the Virgin. Then he gathered her up in his arms.

"Come, Yaqui."

The Indian grunted. He had one hand pressed close over a bloody place in his shoulder. Gale looked keenly at him. Yaqui was inscrutable, as of old, yet Gale somehow knew that wound meant little to him. The Indian followed him.

Without pausing, moving slowly in some places, very carefully in others, and swiftly on the smooth part of the trail, Gale carried Mercedes up to the rim and along to the others. Jim Lash worked awkwardly over Ladd. Thorne was trying to assist. Ladd, himself, was conscious, but he was a pallid, apparently a death-stricken man. The greeting between Mercedes and Thorne was calm—strangely so, it seemed to Gale. But he was now calm himself. Ladd smiled at him, and evidently would have spoken had he the power. Yaqui then joined the group, and his piercing eyes roved from one to the other, lingering longest over Ladd.

"Dick, I'm figger'n' hard," said Jim, faintly. "In a minute it'll be up to you an' Mercedes. I've about shot my bolt. . . . Reckon you'll do—best by bringin' up blankets—water—salt—firewood. Laddy's got—one chance—in a hundred. Fix him up—first. Use hot salt water. If my leg's broke—set it best you can. That hole in Yaqui—only'll bother him a day. Thorne's bad hurt. . . . Now rustle—Dick, old—boy."

Lash's voice died away in a husky whisper, and he quietly lay back, stretching out all but the crippled leg. Gale examined it, assured himself the bones had not been broken, and then rose ready to go down the trail.

"Mercedes, hold Thorne's head up, in your lap—so. Now I'll go."

On the moment Yaqui appeared to have completed the binding of his wounded shoulder, and he started to follow Gale. He paid no attention to Gale's order for him to stay back. But he was slow, and gradually Gale forged ahead. The lingering brightness of the sunset lightened the trail, and the descent to the arroyo was swift and easy. Some of the white horses had come in for water. Blanco Sol spied Gale and whistled and came pounding toward him. It was twilight down in the arroyo. Yaqui appeared and began collecting a bundle of mesquite sticks. Gale hastily put together the things he needed; and, packing them all in a tarpaulin, he turned to retrace his steps up the trail.

Darkness was setting in. The trail was narrow, exceedingly steep, and in some places fronted on precipices. Gale's burden was not very heavy, but its bulk made it unwieldy, and it was always overbalancing him or knocking against the wall side of the trail. Gale found it necessary to wait for Yaqui to take the lead. The Indian's eyes must have seen as well at night as by day. Gale toiled upward, shouldering, swinging, dragging the big pack; and, though the ascent of the slope was not really long, it seemed endless. At last they reached a level, and were soon on the spot with Mercedes and the injured men.

Gale then set to work. Yaqui's part was to keep the fire blazing and the water hot, Mercedes's to help Gale in what way she could. Gale found Ladd had many wounds, yet not one of them was directly in a vital place. Evidently, the ranger had almost bled to death. He remained unconscious through Gale's operations. According to Jim Lash, Ladd had one chance in a hundred, but Gale considered it one in a thousand. Having done all that was possible for the ranger, Gale slipped blankets under and around him, and then turned his attention to Lash.

Jim came out of his stupor. A mushrooming bullet had torn a great hole in his leg. Gale, upon examination, could not be sure the bones had been missed, but there was no bad break. The application of hot salt water made Jim groan.

When he had been bandaged and laid beside Ladd, Gale went on to the cavalryman. Thorne was very weak and scarcely conscious. A furrow had been plowed through his scalp down to the bone. When it had been dressed, Mercedes collapsed. Gale laid her with the three in a row and covered them with blankets and the tarpaulin.

Then Yaqui submitted to examination. A bullet had gone through the Indian's shoulder. To Gale it appeared serious. Yaqui said it was a flea bite. But he allowed Gale to bandage it, and obeyed when he was told to lie quiet in his blanket beside the fire.

Gale stood guard. He seemed still calm, and wondered at what he considered a strange absence of poignant feeling. If he had felt weariness it was now gone. He coaxed the fire with as little wood as would keep it burning; he sat beside it; he walked to and fro close by; sometimes he stood over the five sleepers, wondering if two of them, at least, would ever awaken.

Time had passed swiftly, but as the necessity for immediate action had gone by, the hours gradually assumed something of their normal length. The night wore on. The air grew colder, the stars brighter, the sky bluer, and, if such could be possible, the silence more intense. The fire burned out, and for lack of wood could not be rekindled. Gale patrolled his short beat, becoming colder and damper as dawn approached. The darkness grew so dense that he could not see the pale faces of the sleepers. He dreaded the gray dawn and the light. Slowly the heavy black belt close to the lava changed to a pale gloom, then to gray, and after that morning came quickly.

The hour had come for Dick Gale to face his great problem. It was natural that he hung back a little at first; natural that when he went forward to look at the quiet sleepers he did so with a grim and stern force urging him. Yaqui stirred, roused, yawned, got up; and, though he did not smile at Gale, a light shone swiftly across his dark face. His shoulder drooped and appeared stiff, otherwise he was himself. Mercedes lay in deep slumber. Thorne had a high fever, and was beginning to show signs of restlessness. Ladd seemed just barely alive. Jim Lash slept as if he was not much the worse for his wound.

Gale rose from his examination with a sharp breaking of his cold mood. While there was life in Thorne and Ladd there was hope for them. Then he faced his problem, and his decision was instant.

He awoke Mercedes. How wondering, wistful, beautiful was that first opening flash of her eyes! Then the dark, troubled thought came. Swiftly she sat up.

"Mercedes—come. Are you all right? Laddy is alive. Thorne's not—not so bad. But we've got a job on our hands! You must help me."

She bent over Thorne and laid her hands on his hot face. Then she rose—a woman such as he had imagined she might be in an hour of trial.

Gale took up Ladd as carefully and gently as possible.

"Mercedes, bring what you can and follow me," he said. Then, motioning for Yaqui to remain there, he turned down the slope with Ladd in his arms.

Neither pausing nor making a misstep nor conscious of great effort, Gale carried the wounded man down into the arroyo. Mercedes kept at his heels, light, supple, lithe as a panther. He left her with Ladd and went back. When he had started off with Thorne in his arms he felt the tax on his strength. Surely and swiftly, however, he bore the cavalryman down the trail to lay him beside Ladd. Again he started back, and when he began to mount the steep lava steps he was hot, wet, breathing hard. As he reached the scene of that night's camp a voice greeted him. Jim Lash was sitting up.

"Hello, Dick. I woke some late this mornin'. Where's Laddy? Dick, you ain't a-goin' to say——"

"Laddy's alive—that's about all," replied Dick.

"Where's Thorne an' Mercedes? Look here, man! I reckon you ain't packin' this crippled outfit down that awful trail?"

"Had to, Jim. An hour's sun—would kill—both Laddy and Thorne. Come on now."

For once Jim Lash's cool good nature

and careless indifference gave precedence to amaze and concern.

"Always knew you was a husky chap. But, Dick, you're no hoss! Get me a crutch an' give me a lift on one side."

"Come on," replied Gale. "I've no time to monkey."

He lifted the ranger, called to Yaqui to follow with some of the camp outfit, and once more essayed the steep descent. Jim Lash was the heaviest man of the three, and Gale's strength was put to enormous strain to carry him on that broken trail. Nevertheless, Gale went down, down, walking swiftly and surely over the bad places; and at last he staggered into the arroyo with bursting heart and red-blinded eyes. When he had recovered he made a final trip up the slope for the camp effects which Yaqui had been unable to carry.

Then he drew Jim and Mercedes and Yaqui, also, into an earnest discussion of ways and means whereby to fight for the life of Thorne. Ladd's case Gale now considered hopeless, though he meant to fight for him, too, as long as he breathed.

In the labor of watching and nursing it seemed to Gale that two days and two nights slipped by like a few hours. During that time the Indian recovered from his injury, and became capable of performing all except heavy tasks. Then Gale succumbed to weariness. After his much-needed rest he relieved Mercedes of the care and watch over Thorne which, up to that time, she had absolutely refused to relinquish. The cavalryman had high fever, and Gale feared he had developed blood poisoning. He required constant attention. His condition slowly grew worse, and there came a day which Gale thought surely was the end. But that day passed, and the night, and the next day, and Thorne lived on, ghastly, stricken, raving. Mercedes hung over him with jealous, passionate care and did all that could have been humanly done for a man. She grew wan, absorbed, silent. But suddenly, and to Gale's amaze and thanksgiving, there came an abatement of Thorne's fever. With it some of the heat and redness of the inflamed wound disappeared. Next morning he was conscious, and Gale grasped some of the hope that Mercedes had never abandoned. He forced her to rest while he attended to Thorne. That day he saw that the crisis was past. Recovery for Thorne was now possible, and would perhaps depend entirely upon the care he received.

Jim Lash's wound healed without any aggravating symptoms. It would be only a matter of time until he had the use of his leg again. All these days, however, there was little apparent change in Ladd's condition, unless it was that he seemed to fade away as he lingered. At first his wounds remained open; they bled a little all the time outwardly, perhaps internally also; his blood did not seem to clot, and so the bullet holes did not close. Then Yaqui asked for the care of Ladd. Gale yielded it with opposing thoughts—that Ladd would waste slowly away till life ceased, and that there never was any telling what might lie in the power of this strange Indian. Yaqui absented himself from camp for a while, and when he returned he carried the roots and leaves of desert plants unknown to Gale. From these the Indian brewed an ointment. Then he stripped the bandages from Ladd and applied the mixture to his wounds. That done, he let him lie with the wounds exposed to the air, at night covering him. Next day he again exposed the wounds to the warm, dry air. Slowly they closed, and Ladd ceased to bleed externally.

Days passed and grew into what Gale imagined must have been weeks. Yaqui recovered fully. Jim Lash began to move about on a crutch; he shared the Indian's watch over Ladd. Thorne lay a haggard, emaciated ghost of his former rugged self, but with life in the eyes that turned always toward Mercedes. Ladd lingered and lingered. The life seemingly would not leave his bullet-pierced body. He faded, withered, shrunk till he was almost a skeleton. He knew those who worked and watched over him, but he had no power of speech. His eyes and eyelids moved; the rest of him seemed stone. All those days nothing except water was given him. It was marvelous how tenaciously, however feebly, he clung to life. Gale imagined it was the Yaqui's spirit that held back death. That tireless, implacable, inscrutable savage was ever at

the ranger's side. His great somber eyes burned. At length he went to Gale, and, with that strange light flitting across the hard bronzed face, he said Ladd would live.

The second day after Ladd had been given such thin nourishment as he could swallow he recovered the use of his tongue.

"Shore—this's—hell," he whispered.

That was a characteristic speech for the ranger, Gale thought; and indeed it made all who heard it smile while their eyes were wet.

From that time forward Ladd gained, but he gained so immeasurably slowly that only the eyes of hope could have seen any improvement. Jim Lash threw away his crutch, and Thorne was well, if still somewhat weak, before Ladd could lift his arm or turn his head. A kind of long, immovable gloom passed, like a shadow, from his face. His whispers grew stronger. And the day arrived when Gale, who was perhaps the least optimistic, threw doubt to the winds and knew the ranger would get well. For Gale that joyous moment of realization was one in which he seemed to return to a former self long absent. He experienced an elevation of soul. He was suddenly overwhelmed with gratefulness, humility, awe. A gloomy black terror had passed by. He wanted to thank the faithful Mercedes, and Thorne for getting well, and the cheerful Lash, and Ladd himself, and that strange and wonderful Yaqui, now such a splendid figure. He thought of home and Nell. The terrible encompassing red slopes lost something of their fearsomeness, and there was a good spirit hovering near.

"Boys, come round," said Ladd, in his low voice. "An' you, Mercedes. An' call the Yaqui."

Ladd lay in the shade of the brush shelter that had been erected. His head was raised slightly on a pillow. There seemed little of him but long lean lines, and if it had not been for his keen, thoughtful, kindly eyes, his face would have resembled a death mask of a man starved.

"Shore I want to know what day is it an' what month?" asked Ladd.

Nobody could answer him. The question seemed a surprise to Gale, and evidently was so to the others.

"Look at that cactus," went on Ladd.

Near the wall of lava a stunted *saguaro* lifted its head. A few shriveled blossoms that had once been white hung along the fluted column.

"I reckon according to that giant cactus it's somewheres along the end of March," said Jim Lash, soberly.

"Shore it's April. Look where the sun is. An' can't you feel it's gettin' hot?"

"Supposin' it is April?" queried Lash, slowly.

"Well, what I'm drivin' at is it's about time you all was hittin' the trail back to Forlorn River, before the waterholes dry out."

"Laddy, I reckon we'll start as soon as you're able to be put on a hoss."

"Shore that'll be too late."

A silence ensued, in which those who heard Ladd gazed fixedly at him and then at one another. Lash uneasily shifted the position of his lame leg, and Gale saw him moisten his lips with his tongue.

"Charlie Ladd, I ain't reckonin' you mean we're to ride off an' leave you here?"

"What else is there to do? The hot weather's close. Pretty soon most of the waterholes will be dry. You can't travel then. . . . I'm on my back here, an' God only knows when I could be packed out. Not for weeks, mebbe. I'll never be any good again, even if I was to get out alive. . . . You see, shore this sort of case comes round sometimes in the desert. It's common enough. I've heard of several cases where men had to go an' leave a feller behind. It's reasonable. If you're fightin' the desert you can't afford to be sentimental. . . . Now, as I said, I'm all in. So what's the sense of you waitin' here, when it means the old desert story? By goin' now mebbe you'll get home. If you wait on a chance of takin' me, you'll be too late. Pretty soon this lava'll be one roastin' hell. Shore now, boys, you'll see this the right way? Jim, old pard?"

"No, Laddy, an' I can't figger how you could ever ask me."

"Shore then leave me here with Yaqui an' a couple of the hosses. We can eat

sheep meat. An' if the water holds out——"

"No!" interrupted Lash, violently.

Ladd's eyes sought Gale's face.

"Son, you ain't bull-headed like Jim. You'll see the sense of it. There's Nell a-waitin' back at Forlorn River. Think what it means to her! She's a damn fine girl, Dick, an' what right have you to break her heart for an old worn-out cowpuncher? Think how she's watchin' for you with that sweet face all sad an' troubled, an' her eyes turnin' black. You'll go, son, won't you?"

Dick shook his head.

The ranger turned his gaze upon Thorne, and now the keen, glistening light in his gray eyes had blurred.

"Thorne, it's different with you. Jim's a fool, an' young Gale has been punctured by *choya* thorns. He's got the desert poison in his blood. But you now—you've no call to stick—you can find that trail out. It's easy to follow, made by so many shod hosses. Take your wife an' go. . . . Shore you'll go, Thorne?"

Deliberately and without an instant's hesitation the cavalryman replied "No."

Ladd then directed his appeal to Mercedes. His face was now convulsed, and his voice, though it had sunk to a whisper, was clear, and beautiful with some rich quality that Gale had never before heard in it.

"Mercedes, you're a woman. You're the woman we fought for. An' some of us are shore goin' to die for you. Don't make it all for nothin'. Let us feel we saved the woman. Shore you can make Thorne go. He'll have to go if you say. They'll all have to go. Think of the years of love an' happiness in store for you. A week or so an' it'll be too late. Can you stand for me seein' you? . . . Let me tell you, Mercedes, when the summer heat hits the lava we'll all wither an' curl up like shavin's near a fire. A wind of hell will blow up this slope. Look at them mesquites. See the twist in them. That's the torture of heat an' thirst. Do you want me or all us men seein' you like that? . . . Mercedes, don't make it all for nothin'. Say you'll persuade Thorne, if not the others."

For all the effect his appeal had to move her, Mercedes might have possessed a heart as hard and fixed as the surrounding lava.

"Never!"

White-faced, with great black eyes flashing, the Spanish girl spoke the word that bound her and her companions in the desert.

The subject was never mentioned again. Gale thought that he read a sinister purpose in Ladd's mind. To his astonishment, Lash came to him with the same fancy. After that they made certain there never was a gun within reach of Ladd's clutching, clawlike hands.

Gradually a somber spell lifted from the ranger's mind. When he was entirely free of it he began to gather strength daily. Then it was as if he had never known patience—he who had shown so well how to wait. He was in a frenzy to get well. His appetite could not be satisfied.

The sun climbed higher, whiter, hotter. At midday a wind from gulfward roared up the arroyo, and now only the *palo verdes* and the few *saguaros* were green. Every day the water in the lava hole sank an inch.

The Yaqui alone spent the waiting time in activity. He made trips up on the lava slope, and each time he returned with guns or boots or sombreros, or something belonging to the bandits that had fallen. He never fetched in a saddle or bridle, and from that the rangers concluded Rojas's horses had long before taken their back trail. What speculation, what consternation those saddled horses would cause if they returned to Forlorn River!

As Ladd improved there was one story he had to hear every day. It was the one relating to what he had missed—the sight of Rojas pursued and plunged to his doom. The thing had a morbid fascination for the sick ranger. He reveled in it. He tortured Mercedes. His gentleness and consideration, heretofore so marked, were in abeyance to some sinister, ghastly joy. But to humor him Mercedes racked her soul with the sensations she had suffered when Rojas hounded her out on the ledge; when she shot him; when she sprang to throw herself over the precipice; when she fought him; when with

half-blinded eyes she looked up to see the merciless Yaqui reaching for the bandit. Ladd fed his cruel longing with Thorne's poignant recollections, with the keen, clear, never-to-be-forgotten shocks to Gale's eye and ear. Jim Lash, for one at least, never tired of telling how he had seen and heard the tragedy, and every time in the telling it gathered some more tragic and gruesome detail. Jim believed in satiating the ranger. Then in the twilight, when the camp-fire burned, Ladd would try to get the Yaqui to tell his side of the story. But this the Indian would never do. There was only the expression of his fathomless eyes and the set passion of his massive face.

Those waiting days grew into weeks. Ladd gained very slowly. Nevertheless, at last he could walk about, and soon he averred that, strapped to a horse, he could last out the trip to Forlorn River.

There was rejoicing in camp, and plans were eagerly suggested. The Yaqui happened to be absent. When he returned the rangers told him they were now ready to undertake the journey back across lava and cactus. Yaqui shook his head. They declared again their intention.

"No!" replied the Indian, and his deep, sonorous voice rolled out upon the quiet of the arroyo. He spoke briefly then. They had waited too long. The smaller waterholes back in the trail were dry. The hot summer was upon them. There could be only death waiting down in the burning valley. Here was water and grass and wood and shade from the sun's rays, and sheep to be killed on the peaks. The water would hold unless the season was that dreaded *ano seco* of the Mexicans.

"Wait for rain," concluded Yaqui, and now as never before he spoke as one with authority. "If no rain—" Silently he lifted a speaking hand.

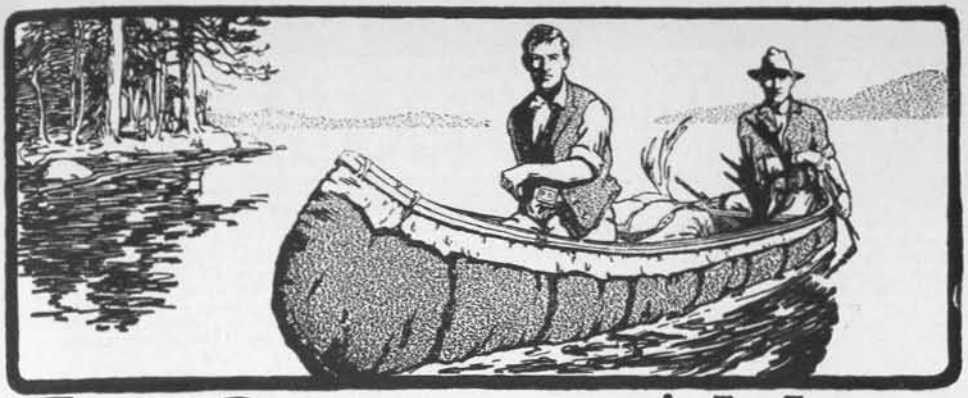
(To be continued.)

HUNGER GRIEF

A lone wolf calls when the darkness falls,
On the desolate barrens white.
He sounds his cry to the friendless sky,
Through the hours of the winter night.
The north-wind whines in the stunted pines,
Where the winter-drifts are piled.
The night is rife with the woes of life—
The hunger-grief of the wild.

The caribou flees when the muskegs freeze,
And the wild-geese southward go,
But the she-wolf's brood must search for food,
In the desolate wastes of snow.
Our curses fall when we hear the call,
Of the north-land's famished child—
He knows no rest from his bloodless quest,
In the grip of the greedy wild.

CHART PITT.



The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, dogs, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

IF LOST IN THE MOUNTAINS

Chas. J. Lisle

I read with much interest the authoritative article on "Condensed Foods for Camp Use," in the June FIELD AND STREAM, written by my old college friend Claude Fordyce. Believe me, he tells you some of the things a camper ought to know and heed about foods in general.

I'd like to see him go on a little farther and tell the individual camper just what he ought to have and always carry for his "very own" out in the mountains. He knows, I'm sure, and will probably tell it at some later time.

But as the shooting season is under way, when the hunters take to the mountains and forests for their annual hunt, I venture to forestall him and offer my own suggestions as to individual equipment. Some of the ideas came from hunting trips in Montana and Idaho; some from two years' hard soldiering in the Philippines; and some are the ideas of others who know.

No one but an experienced camper should ever go alone into the mountains without some condensed food in his wallet—and the experienced ones never need to be told, as they do it from force of habit. I shall tell you what I have for my own outfit, and offer that as a suggestion for others to make up their own assortment.

I have a light leather bag, or wallet, that I carry slung across the shoulder as one would carry a camera or a field glass. You don't want much stuff on your belt; it kills a man's endurance quicker than anything else to pack a lot of weight around the waist. The cowboys and pony messengers of the frontier, who packed one or two big guns and an armful of ammunition on their belts, were mostly in the saddle, where the spreading of the thighs in the saddle took the gun weight off the hips—otherwise they wouldn't have ridden as they did.

I have small, paraffined muslin bags for holding the various items of food. There is almost a half pound of raisins—one of the finest of condensed foods, and it requires no cooking. Pound for pound, there is perhaps no other food, ready for use, more valuable. Some might substitute dates, or figs, as do the Bedouins and Turks who perform such astounding feats of strength and endurance on this meagre fruit diet. There are four ounces of sweet chocolate, to be eaten as it is, or made into a hot drink. The sugar and the chocolate provide an easily assimilated food that acts so rapidly as to seem almost a stimulant—which it is not, but a straight food.

Four ounces of nut meats furnish a lot of easily digested, nutritious food; and half a pound of the best breakfast bacon—rind removed to save weight—would carry a man through a pretty strenuous trip without any other assistance. An ounce of coffee, an ounce of tea, four ounces of sugar, a few ounces of whole rice or wheat—and you have less than 40 ounces in all—though it would sustain a man for a week if necessary.

An ounce of the hardest paraffine candle, a roll of matches, a few bouillon cubes, a needle and thread, a piece of stout, annealed copper or steel wire—you will hardly believe how many unnamed uses one will find for this wire—a coil of fish line or other stout cord, a few large pins, a small file or two—one flat, one round—a small screwdriver, an awl point or two to set in wooden handles, a few cascarets, a dozen quinine capsules, a bit of absorbent cotton, medicated, a little mentholatum or vaseline, some pix-cresol or other effective disinfectant tablets, a small roll of cotton bandages, some adhesive plaster, a little vial of capsicum that is a pungent but powerfully efficient remedy for bowel troubles—all these will add hardly more than four ounces to the outfit. One will never go into the woods for a trip without needing some or all of these items. It's better to keep these "first-aid" helps with this emergency ration outfit, and to make the same rule regarding it that the army makes for the soldier and his rifle—they must never be parted.

An aluminum cup, holding a pint and weighing less than two ounces, is a sufficient cooking vessel for the derelict in the mountains who does not want to carry any excess weight.

While it isn't exactly food, one of the best little suggestions for the wilderness hunter is to always carry a few pitch pine shavings to

use in starting emergency fires. When I first went into the mountains, with an experienced guide, I laughed at the idea of carrying wood into the forest for a fire. But when we camped in two feet of snow, in weather 30 below zero, striking the deserted cabin after dark, and found not a scrap of other kindling within reach, those little pitch pine shavings looked mighty good. There is no oily rag, nothing else that I know, quite so effective as a few fat pine splinters for starting a fire in cold or wet or snowy weather. They can be carried without offense to any food products, where oils would spoil everything edible.

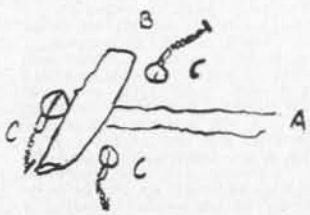
You can carry all this "safety first" stuff in a leather pouch over your shoulder and not have it weigh three pounds. One might add, say, a small pocketknife and some spare ammunition, and still the weight would be very small. Such an outfit would save many lives in the Western mountains and forests every winter; it would save hundreds if not thousands of hunters the heart-breaking feeling of "lost" without food or hope.

THE WOODSMAN'S WAY

By Polk Purdue

A good trapper never sets his traps for a fox near its hole. He lays a rail or pole across its trail, as shown in diagram. A is trail, B is rail or a pole, C, C, C are traps.

The fox will be walking along and when he comes to the rail or pole, he will jump over it. Then he will begin to walk around it. Finally he will come to where the



THE TRAPS IN POSITION

traps are set and you will have Mr. Fox.

Some hunters track a sheep, thinking it is a deer track. A sheep's track can be distinguished from a deer's in one or two ways. A sheep track is blunt at the toe, and a deer is sharp.

I tan hides by putting some salt, alum and hickory ashes on the hide. The next thing I do is roll the hide up when it has the solution on it, and put it away for forty-eight hours. Hickory ashes are to take the grease out of the hide. You can get them by burning hickory logs. When the forty-eight hours are over, take the hide and scrape the salt, alum and ashes off and all of the grease and meat will come off with it. After you have scraped the hide tack it upon the wall and let it get dry. It requires a week or so for it to dry thoroughly. After it is thoroughly dry rub it with pumice stone. The hide will be white, but if you want it a tan color rub it with some tallow.

HIS FIRST WILD TURKEY

Part II

By a Reader

The next morning we were ready again for the continuation of the hunt, feeling confident that as the old hen had been killed the rest of the flock would not get together until the following morning. Conway was more eager to go than ever, especially when I told him that he was to have the first opportunity to kill a turkey, should any come that morning to our blind. It is sufficient to say we left home just before day and reached our blinds while it was still a little dark. The sky was clear and the morning was quite cold and still. It seemed that every sound could be heard for miles in the distance. As light began to dawn the caw of a crow some hundred yards away reminded us of the old hunter's saying that this was the proper time to give our first yelp. I took up the yelper and gave several notes. This was soon repeated. And within a very few minutes, to our delight, an answer came from a hill to our left. Conway immediately got himself ready and in position. At that instant a grey squirrel came running down the hill within just a few feet of the blind and caught the little boy's attention. "There goes a squirrel," he whispered. "Let him go," was my reply. Another turkey was now answering, down the hill to our right. Moreover, just behind us in the top of a small pine tree within about fifteen yards of our blind was heard another considerable noise. This latter was supposed to be another squirrel, and we paid no attention to it while our excitement rose high and our attention was fixed upon those turkeys yelping from two opposite directions. Again the noise in the tree behind us continued a moment, followed with a loud crash. I turned around and found, to my surprise, that a large turkey was the supposed noisy squirrel. And that while he was moving about upon a dead limb, had broken it, and had fallen to the ground! The old fellow was walking stealthily away down the hillside as I peeped from the blind. Not wishing to interfere with little Conway's shot I allowed the old rascal to escape—the most accomplished spy among the turkeys of Lunenburg County.

It is sufficient to say that Conway did not see him; for his whole attention was absorbed in a large gobbler that was approaching from an opposite direction. This new fellow had arrived within about forty-five yards of us, and had simply startled us anew with one of his loud, thrilling yelps. What a picture! There he stood in all his glory—the prince of birds, with his large neck stretched, his magnificent bronze feathers shining in the rays of the rising sun, and his keen, suspicious eyes fixed upon our blind. Just a little out of range for a 20-bore gun and Number 6 shot. We had to stand motionless and almost breathless under this intense gaze. Can he be induced to come a little nearer? or will that keen gaze detect something wrong about the blind, or even penetrate the small openings between its bushes? This was the moment of extreme anxiety when seconds seemed minutes and minutes seemed almost hours. Every nerve seemed to be on high tension, and every artery seemed to pulsate more and more violently. Conway cautiously looked at me and then at my yelper to suggest another yelp; but a look from me told him that this was too hazardous. The slightest error in the note would be immediately detected. We waited, yes, still waited until the tension and anxiety became almost intolerable. Things cannot stand this way much longer. At last I decided to take the risk, and with trembling hand I placed the yelper to my mouth and cautiously made two very soft almost inaudible notes and the die was cast. Another second and a sharp crack from Conway's little gun revealed the success of my effort. A moment later and little Conway was seen about twenty yards in front of our blind, wrestling with the great gobbler. In his struggle to get hold of the turkey's legs, I could hear his repeated cry: "Come father, and cut his throat!" The gobbler was disabled and evidently making his last great struggle for life, but in this moment of exhilaration I obeyed the anxious boy's request, and we soon "finished him."

THE BIG BEAR KILLED BY B. H. HARRIS

FIELD & STREAM PUB. CO.:

Enclosed find photo of a bear shot in the Jo Mary Mountain region on November 14th, by B. H. Harris, who is a guide there. This bear weighed 350 pounds. The picture shows his height.

B. T. ROLLINS.

CONSERVATION

A PROTEST TO THE CONNECTICUT DEER LAW

Rev. Wm. De Loss Love,
President Connecticut
Humane Society,

Dear Sir:

Is it possible that nothing whatever can be done to arrest the inhuman slaughter of our deer? They are, or were, a valuable asset to the State, and from an economic standpoint, the present deer law is idiotic. Four hundred and five deer were reported killed during the first three months of the new law, and at the moderate estimate of 80 lbs. of venison to each animal, the land owners have secured 32,400 lbs. of nutritious, healthful animal food. Marketmen offer $20.00 per hundred for the carcasses, making $6,480.00 the value of the three months' slaughter, and yet the lawmakers themselves do not pretend to say whether the farmers may or may not lawfully sell their venison.

This law may be called a law of extermination framed in disguise. Why did the Connecticut Fish and Game Protective Association remain silent? Distant members were not even notified that such a bill was pending.

A good many years ago a representative of the Connecticut Legislature introduced a bill to abolish the protection then given the American Eagle on the ground that the eagles destroyed his poultry. While in all probability the gentleman did not know an eagle from a fish hawk, his wish was granted, and for some years the American Eagle was left unprotected by law when flying over our State.

If your Society would thoroughly investigate the facts and not rely on what some aggrieved land owners may tell you, the popular delusion that the deer of Connecticut have done great damage to the farmers' crops and his trees could easily be demolished.

This deer law is supremely unjust, but let that pass, its inhuman aspect is what concerns us most. It permits, yes almost demands, atrocious cruelty by those who exercise its privileges. Our wounded, crippled and dying deer together with those now rotting in the woods of Connecticut, undoubtedly outnumber those which have been reported to the Commissioners. How could one expect it would be otherwise?

Mr. A lawfully shoots a deer with shot, the deer falls, gets up and tries to escape. Mr. A wishes to capture the deer and kill it, but the moment he steps on the land of Mr. B, in pursuit of the wounded deer, he is violating the law, so the deer gets away to the woods, suffers and dies, and in due time will help to fertilize the soil.

The deer are as much God's creatures as are the sheep or the cattle and are entitled to the same humane consideration.

Is this deer law constitutional? I very much doubt it, and I respectfully make the request that the Connecticut Humane Society appeal to the Governor and ask him to suspend its operation. Should the Governor refuse or say that he is powerless to grant your petition immediate steps should be taken to determine the constitutionality of the law and to act accordingly.

Whatever may be the outcome of our present endeavors, this unrighteous deer law will be expunged from the Statutes long before its bloody stain can be effaced from the escutcheon of our State.

Very truly yours,
F. Powers.
Westport, Conn.

BOB-WHITE—HIS BREEDING, PROTECTION AND INCREASE

By E. A. Quarles

Director, Department of Game Breeding and Preserving

Courtesy American Game Protective Association

We know now how to breed quail successfully in small numbers—a few of us do at least, and it is the hope of the Association's newly-created Department of Game Breeding and Preserving, and particularly of its Committee on Quail Breeding to spread that knowledge from the Atlantic to the Pacific, by means of the symposium on the breeding of that species which follows and which has been composed under the direction of the Committee.

Scope of Department's Work

In the July *Bulletin*, under the direction of the Department's Committee on Ruffed Grouse Breeding, of which Dr. George W. Field, of Massachusetts, is chairman, there was printed what is believed to be the most comprehensive and authoritative article on the subject ever published. The article on quail follows and from time to time similar articles under the direction of the Department's various committees will appear in the *Bulletin*.

There should be several hundred quail breeders in the United States next spring, and it is hoped the State conservation commissions will take a liberal stand in the matter of allowing reputable citizens to trap a few birds for breeders this winter under the supervision of the local game warden.

Every sportsman cherishes the fond hope that some day we shall be able to produce quail by the thousands at comparatively small expense, as the ringneck pheasant is turned out to-day, and turn them out to stock millions of acres of untenanted covers. This dreamer seldom stops to consider that the close cultivation of fields that characterizes present-day farming has removed a large amount of quail cover from this country.

Gone are the old rail fences of our boyhood days with the trumpet vine, poison ivy and nondescript vegetation which accounted in large measure for the birds of yesterday. Our sportsman also fails to consider that, given good cover even, bob-white must have adequate protection and be shot with due consideration to the sparing of a stock sufficient to furnish breeders for another year. That is not possible in many sections of the country to-day, but with the spread of the gospel of the establishment in every community of a sanctuary for wild life as it is very effectively preached and done in Pennsylvania, Iowa and a few other States to-day, it may be possible in time to turn game birds loose with good expectation that sufficient will survive from year to year to furnish some sport to the man who cannot afford a club or private preserve.

A Word on the Scoffers

It is now known how to breed quail in small quantities successfully from year to year, and it would seem that one man at least can breed them in considerable numbers year in and year out, but the methods at present necessary involve so much detail and require so much construction that the cost is nearly prohibitive where quail breeding is attempted on a large scale.

There were those who scoffed when Donald MacVicar was having his own troubles introducing the ringneck pheasant into the East on the estate of the late Rutherford Stuyvesant at Allamuchy, New Jersey, and doubtless many a wiseacre allowed that it might be done in England, but it never could be done here. The Scotchman looked on failure only as an incentive to greater and more intelligent effort and, thanks largely to him, we turn out thousands of hand-reared ringnecks in this country every year. The scoffers have taken peculiar delight in prophesying failure for the quail experimenter, and now

that gentleman simply ups and does it. Now, of course, the retort, will be "but you can raise only a few every year," and that is practically correct but some fine day one of the hard-headed experimenters will learn how to turn the trick there.

We cannot breed grouse at all, practically speaking, and the scoffers at those who attempt it are legion. Some day, some time, that problem may be solved. What is the use, however; there always will exist the man who is willing to shove his hands in his pockets and say, "you can't do it," to the man who says, "but I will," and does it.

The Department's standing committee on quail breeding, national in scope, is composed of the following:

Malcolm Dunn, Chairman.
Arthur M. Barnes.
Helen Bartlett.
Amos E. George.
J. G. Halpin.
E. G. Liebold.
D. H. Selden.

Mr. Malcolm Dunn, the twenty-one-year-old chairman of this important committee, is the son of the superintendent of the New Jersey State Game Farm, Mr. Duncan Dunn. Without making invidious comparisons, it can b said that he stands in the front rank of the country's quail breeders. When a man can bring to maturity 300 to 500 healthy quail a year for three successive years he has fairly won the title applied to young Dunn, and he has done this in addition to very considerable other duties. Mr. Dunn's success is further testimony to the successful administration of game affairs that Chairman Ernest Napier and his associates on the Board of Fish and Game Commissioners are giving the State.

For the benefit of this symposium each member of the quail committee was invited to outline his or her method. The responses are given below in the order received, and it is believed that these, with the complete illustration of Mr. Dunn's method, which accompanies this article, compose the most complete, detailed and authoritative exposition of quail breeding that has ever been given. They furnish striking evidence, as did the article on grouse breeding in the July number of the *Bulletin*, of the valuable literature on game breeding that the Association's new department may be expected to create. Here follows Mr. Dunn's story as he told it to me:

PART I

Malcolm Dunn on Game Breeding

"I have been breeding quail three years, all my work in this line having been done on the New Jersey State Game Farm at Forked River. The species I have had to do with in that time are the bob-white and California quail.

"During my first year I employed twenty pairs of breeders and succeeded in bringing 300 birds to maturity. The following year I had thirty pairs of breeders and was fortunate enough to get 500 birds to maturity. My birds that year laid 600 eggs. This year, my third as a quail breeder, I have employed twenty pairs of bob-white and twelve pairs of California birds. We have to-day, practically matured, 150 bob-white and 200 California birds. The bob-white breeding stock furnished us this year which was very wild and too fat besides, and egg production suffered accordingly.

"Of the birds we raise each year all but enough to furnish breeders for the succeeding season are planted in covers throughout the State by the game wardens during the spring.

THE WINTER PEN

Winter Pen Construction

"We keep our adult birds during the winter in wire-covered pens (see illustration above), 150 feet square and 7 feet high. The sides are boarded up a distance of 3 feet from the ground. The boards are nailed vertically top and bottom to a piece of 2x3 and are 4 feet long, one foot extending beneath the surface of the ground as a protection against the burrowing of vermin. White cedar posts, placed 7 feet apart, are used. One-inch mesh poultry wire completes the sides of the pens and they are covered with 1½-inch mesh. The white cedar posts supporting the wire covering are 10 feet long (3 feet underground) and placed 14 feet apart. The wire itself is held up by cedar poles 4 to 5 inches thick and 16 feet long. The ends overlap and are lashed with wire as an aid in sustaining the weight of snow they may be called upon to bear.

"Board shelters are placed in two corners of the pen and brush and evergreen cover is afforded at frequent intervals, particularly about the post supporting the pen covering.

The Winter Ration

"We feed once or twice a day according to the severity of the weather and the condition of the birds, taking particular care not to have them too fat during the breeding season and thereby cut down egg production. Spratt's chick grain is the principal food employed and two or three times a week we give a wet mash consisting of Spratt's number 12 pheasant meal with a little chick grain and crissel mixed in. The three ingredients are scalded separately and then mixed, the pheasant meal constituting the bulk of the mash, the other two ingredients making about 10 per cent each of the whole. Occasionally, ant eggs are added to the mash. These are scalded separately.

"A plentiful supply of fine, chick-size oyster shell and mica crystal grit is kept constantly before the birds, care being taken to see that both shell and grit are of the finest sizes obtainable.

Menace of Dead Birds

"Here I should digress a moment to warn the prospective breeder to remove dead birds from the pen promptly and burn them. Maggots from the carcass of one dead quail can work a havoc that the beginner in quail breeding can scarcely realize.

"It is well to change the ground as frequently as possible in quail breeding. We allow 30 square feet to each bird in penning the adults in winter and find this ample. In the spring when the birds are mated and placed in the breeding pens, which I shall discuss in a moment, the winter pen is sown with oats and mixed grass and later ploughed and allowed to rest till the following winter. Spreading the soil with lime would be an extra precaution, but probably a wise one.

(*To be continued*)

SHOTGUNS AND RIFLES

POINTED VS. ROUND-HEAD BULLETS

By Virgil G. Duncan

Until recent years almost all the endeavors of firearms manufacturers to improve their arms have been along the line of increasing the efficiency of their ammunition. They have continually used the same projectile, metal-cased, round-headed, with a high sectional density. One result of the late wars in the Far East is that a projectile shall have a very low trajectory and great penetrative power.

The purpose of this paper is to give the result of certain firings conducted by the author with pointed and round-headed bullets. In general the pointed bullets were found to be from 20 to 30 per cent less in weight, the sectional density consequently was smaller, resulting in an increase in range, lower trajectory, greater hitting capacity and piercing power.

A few cartridges were loaded with military rifle powder No. 15. It was found that the driving part of the bullet did not fit tight enough, but in spite of this defect the advantage gained by the pointed bullet was added to. The gas pressure was but slightly increased above the normal charge and greater accuracy was obtained. Using pointed bullets in the Springfield and military No. 15 powder the muzzle energy was increased considerably, but the recoil was prohibitive.

The superiority of the pointed bullets over those with a rounded head cannot be questioned. The weight of the bullet is less, thus permitting a greater number of rounds to be carried per man. The powder charge is increased from 30 to 40 per cent, giving a greater initial velocity, hitting and piercing power. The danger zone is increased about 200 yards and the time of flight is lessened. This will prove of great advantage under unfavorable atmospheric conditions. Even at 200 yards the bullet, in spite of its lessened weight, has sufficient stopping power to be effective. At short range, in consequence of its greater energy, it proves its superiority over the round-headed bullets in the thickness of steel plates, wood and sand pierced. The crumbling effect it has on stone and brick walls is much greater than that of round-headed bullets. When firing from worn-out barrels, keyholes were less frequent and dispersion was not nearly so marked as when using the round-headed bullets.

The appended table gives the result of the experiments conducted with pointed and round-headed bullets:

Cartridge.	30 U. S. Springfield 1903.	30-40 U. S. Krag.
Accuracy 500 yards—		
Mean horizontal.	4.7	5.8
Mean vertical ...	4.2	5.1
Penetration at 100 yards—		
In fir	39.5	34.2
In sand	12.25	11.46
In masonry	3.1	2.5
Penetration at 500 yards—		
In fir	26.2	15.0
In sand	9.5	8.4
In masonry	2.0	1.75
Boiler plate—		
100 yards	.40	.15
500 yards	.01	.0

It was the mathematical Germans that discovered the ballistic fact that they could whittle down their 215-grain army bullet to a 154-grain sharp-pointed bullet and still retain most of its original properties. A sharp-pointed bullet has increased velocity over a similar round-headed one, and this means, in turn, that its flight is flatter, hence an error of several yards may be made in estimating distances and still bag the game. This means that if the rifle is sighted to score a bull at 500 yards and the object aimed at is wrongly estimated, being 200 yards, the bull will still be in the danger zone. Light bullets fall off considerably, due to air resistance, and consequently cannot hold up for long ranges.

Just a few words as to the effect of sharp-pointed bullets on big game. The effect of round-headed bullets on game is too well known to be further discussed. Let us take the Springfield, for instance. The weight of the bullet is far back of the point and, propelled at the rate of 2,700 feet per second, it is easily upset, and when so upset it spins, whirls, gyrates and plays the role of the devil in general. When the bullet tears through tissues it sometimes acts as a rip-saw, cutting and slashing the flesh throughout its erratic course. These bullets will not readily break up when passing through flesh, and will not mushroom. The long, heavy, metal-cased Krag bullets cut clean holes and rarely give the ripping effect so characteristic of the sharp-pointed bullets. Shooting big game with pointed bullets is sure and speedy death, while with the round-headed ones the game may be lost.

SIZES OF SHOT FOR THE 20-BORE

Field & Stream Pub. Co.:

I have been converted to the 20-gauge gun and would like to have your expert opinion on two points:

First—For a given kind of game should a size smaller shot be used in a 20 than is usually used in a 12? For example, I have been using No. 7 shot in my 12 for rabbits. Would No. 8 be better to use in the 20-gauge?

Second—Is there any reason for not shooting "pumpkins" (balls) in a shotgun? Does it do the gun any harm?

Dr. Henry B. Davis.

Ans.—One size smaller for the 20. We advise 7½ for rabbits, 8 for quail and 6 for duck. Round ball, if shot much in shotgun, will open up the choke.—Ed.

MORE POWER IN THE SHOTGUN

By Edward C. Crossman

Of late there has grown up a new cult among the wild-fowl shooters of England. Departing from the old game of the puntgun, mounted on swivels on a boat, or the huge single barrel 4 bores or the ponderous double 8 and 10 bores, the wild fowl seeker is beginning to work out his salvation with the 12, specially bored and chambered to lambaste the spots off ducks so far out that that you can't tell whether they are ducks or bilious spots in front of the eyes. There's no patent, nor anything in climate or British gun-making that makes impossible the use of these ideas by the Yankee gunner.

These big 12's are called—with the usual British love for hog Latin—Magnums. Magnum, in case you don't know, means great.

These guns are chambered for 3-inch cases, as opposed to the usual American chambering of 2¾ inches, and the usual English game-gun chambering of 2½ inches. This is the first departure from even the English pigeon gun, corresponding to our own duck or trap gun. Then the guns are bored for the use of big shot, 4's and larger. They are made heavy—from the English standpoint—that means 7½ to 8 lbs. or the average weight of the American gun used for trap, ducks, etc. Such guns are heavy only when compared to the English game-gun, weighing from 6½ to 7 lbs.

Then these guns are loaded with various unholy combinations that we rarely shoot over here, and that we never find in stock. They are not dangerous, because the Englishman is even more conservative about his shooting irons than we are.

I handled one of these guns recently, a 32-inch barrel double hammerless weighing just 8 lbs. and feeling as if it weighed about 7½. For it there were various loads designed to get all out of it that was in it.

It was built for 1½ oz. of BB shot, in front of 3½ drams of bulk smokeless, but its owner has shot the same powder load, and 1⅜ oz. of smaller shot without anything but satisfactory results. The barrels were heavier over the choke to stand the strain of the big shot loads, but otherwise it looked like any other 8 lb. gun.

I noted one letter from an enthusiast owning such a gun, claiming to have put into a square a foot across 14 pellets of No. 5 shot, at 80 yards, several of which went through the wood.

Now if you'll look through any American cartridge catalogue, you'll find that the heaviest 10-bore load listed uses but 1¼ oz. of shot, manifestly a ridiculously small load for the 10 bore, and, of course, less efficient than the special 12 magnum loads.

Using large shot, the only sizes safe to use in such large quantities, the velocities obtained at the muzzle are quite high, but excess speed is not necessary with large shot, for the reason that they hold their velocity much better than do small shot, and thus hit amply hard enough to get into the life of the bird. The problem is not to get velocity, as the designers of our 10-bore ammunition seem to fancy, but to get enough large pellets into the pattern to insure hitting at the long ranges. So our Magnum 12 bores will outshoot our ordinary 10-bore loads.

Therefore, if, as our English friends have shown us, we can use safely 1½ oz. of large shot, in front of 3½ drams of powder in our 12 bore, we have little occasion to go the 10 unless our shooting is extraordinarily hard and then we must be prepared to develop special loads, with heavier gun and increase of recoil, to give any appreciable advantage over the Magnum 12 bore. That is, to beat the special 12-bore load, we must work up a 10-bore load that is also special—the Magnum 12 bore has already lapped over into the province of the 10 with the usual food.

The beauty of our Magnum 12 bore is that we get 10-bore power with a gun of reasonable weight, with a gun of 12 bore and, therefore, shooting any of the many loads in stock, and with a gun that can be used at the trap in the season when ducks are not available. Ten bores cannot be used in any trap shoot, save for practice alone.

True, we have 3-inch chambers, but this need worry no one. In the first place the 3-inch chamber was the standard for years among American makers of double guns for pigeon shooting. Such old-timers as Harvey McMurchy shot 3-inch casings exclusively in their great pigeon matches, and they continued the long case into the days of the blue rock—the clay pigeon—with just as good results.

The coming of the pump-gun drove out the 3-inch case. In the double gun, a case 4 inches long was as easy to handle as one 2¾ inches, but not so in the repeating shotgun. Longer cases meant longer receivers, longer bolts, longer carriers and longer magazines. As long as the usual loads with fair wadding could be put into 2¾-inch cases, the pumpgun people could not see the still longer case, with the added troubles in the gun's mechanism. Quietly the word went out to their professional shooters and those receiving a little bonus even for shooting their shells to cut out the long case and boost the 2¾ inch. The dealer could not carry two lengths of case in addition to all the other combinations he had in stock, and so it came about that the 3-inch case, not fitting the pumpgun, had to go. At that it is a far better case for big loads than any 2¾ inch. You can wad to a sufficiency a 3-inch case, you never can the 2¾ inch if you've got in lots of powder and lead.

So the man seeking the traps with his Magnum 12 bore has but to specify 3-inch casings in ordering his favorite trap load, and the extra room will be filled up with wadding to the comfort of his shoulder and the benefit of the gun's shooting.

Or he can fire the regular garden variety of 2¾-inch case in the 3-inch chamber without any bad results whatever, save in opening up very slightly his pattern. Careful count would be necessary to show the difference, if any actually existed.

It is well to remember that the loads listed by a factory do not at all represent the full efficiency of that particular gauge. We have no proof laws, and we have with us a lot of shoddy trash of unknown strength.

To play safe, the factories load for the cheapest and poorest of these guns, which is hard on the good ones. That 10-bore load, for example, safe in anything with a 10-bore hole through it, compares pretty poorly with the English 10-bore load of 1½ to 2 oz. of shot, driven at high velocity by large loads of powder. The man owning a well-made, first-class double gun, costing $50 or over, can well look beyond the factory catalogues if he desires to get more out of his gun than he is getting. He may get as much better results as his good gun varies from the cheap, single-barrel, pot-metal, malleable iron trash that also shoots the cartridge for which his gun is made, and that sells for about $6.00 per each.

No doubt American factories feel that in their load of 28 grains of powder and 1⅛ oz. of shot they have gone the limit in speed. But compare this with the special duck gun made by one of the best-known English gunmakers—a 12 bore weighting 7½ lbs. and bored to fire 32 grains of powder and 1¼ oz. of large shot, English makers seek no damage suits and would not sell this gun did they regard it as being any possible source of trouble. It is well to note that the heaviest trap load for the 12-bore gun as put up by our factories is 26 grains powder, 1¼ oz. of shot. It is, of ccurse, small shot, nor would shot of small size be safe with the loads mentioned for the British gun, because smaller shot give higher pressures.

(To be continued.)

A NEW INDOOR RIFLE TARGET

There has recently been invented and placed on the market a new form of indoor rifle target. This permits of the location on the target of each shot being seen by the shooter as well as the spectators, without their moving from the firing line. This target was invented by a man greatly interested in target shooting, and who had organized a rifle club in his home town. The inconvenience of having to walk to the target to locate his shot set him to thinking, and the result of his experiments was this spot-light target.

By an arrangement of lights the bull's-eye is made transparent and when the bullet strikes the target by an ingenious arrangement the bullet hole is "spotted" so that it may be seen from the other end of the gallery.

There is a backstop attached to the target frame, which is set on rollers, so that there is no danger of the bullet penetrating the wall in back of your target. An old loft or room in a factory or even a long shed may be turned into a shooting gallery by the use of one of these targets, and that without the slightest danger to spectaor or passerby.

In these times of wars and rumors of wars we believe that every able-bodied man should know something of rifle shooting. If he can make a good score with a small caliber rifle, and is used to the handling of a gun, he will certainly be of much more value to his country in time of war than a man who is ignorant of the handling of arms.

RIFLE SIGHTS AND HOLDING

Part I

By Warren H. Miller

Rifle shooting for the woodsman is such a very different thing from rifle shooting for the military man that almost from the start it requires a totally different training. Summed up, the woodsman's training must enable him to hit swiftly moving game at comparatively short ranges. This game, deer, moose, elk or bear, will be going at top speed, except for possibly the first shot, and his progression will not be a straight line like a bird's flight but a series of bounds, and furthermore the view of him will not be against a skyline but against a checkered gray background constantly interrupted by tree trunks, bushes, rocks and ravines. It takes the highest order of marksmanship to hit such a mark at 100 yards. Captain Carver, of glass ball fame, couldn't do it with any certainty, for it is infinitely harder than hitting balls and pennies in the air. Sighting and holding for woods shooting requires adaptation to the purpose intended and is entirely different kind of shooting than hitting a bull's-eye after a slow, careful aim at a long range target, which is the essence of military rifle training.

The sights of your hunting rifle are of the first importance, for more misses are due to inadequate sights than anything else. A good

sure holder. proud of his record on targets, and confident of getting into an eight-inch bull every time at two hundred yards, will miss a real bull as big as a locomotive clean at eighty, simply because when he raises his rifle to fire he either cannot see the sights plainly and accurately against the dim figure of the game, or is unable to get enough time to refine his aim so as not to miss. Conversely the crack game shot will make a disgraceful score in a military match, thereby losing the last shred of his reputation. These things have happened time and again within the experience of all of us, and it is generally traceable to sights and holding, nothing else. Both men will tell you that they "shot rotten," but as a matter of fact they shot as well as they knew how, and missed—because the game was a new one to them.

The sights of a rifle are like the lens and crosshairs of a surveyor's transit, the most important things on the rifle, for they are what you aim with. Lots of poor sights are sold on game rifles, most of them theoretically good, but mighty mean things to pick up a bouncing deer with. The most important is the rear sight, for it controls the whole aim. A plain flat bar, devoid of any notch whatever, is often advocated as the best rear sight on the theory that the eye naturally finds its center, but the minute error that the eye is sure to make in locating that exact center means a miss every time at any range at all. The flat bar, with a silver centerline, or mother-of-pearl triangle showing the center by its point, is, on the contrary, one of the best sights made, for it permits exact centering by the eye and at the same time has the great advantage of the flat bar sight, namely cutting off exact amounts from the front sight. For, anyone can make a good line sight, that is, hit vertically above or below the bull (a sure miss with game) but it takes a marksman to make it an exact range shot horizontally, and this is easiest done by a rear sight that enables the front sight to be cut coarse or fine with accuracy and clearness of vision.

For this same reason all the deep notch sights are hard in the woods. On a target, in the open, they are very fine, for the aid they give in drawing down the bead into the center of the rear notch, but in the woods, with the animal scratching gravel as fast as he can hoof it, you can't see the front sight in the notch with any clearness, so you raise it up in your anxiety to know that it is well centered and yet still have an eye on the game, hold low and pull trigger—with the result an overshoot. No, you want a rear sight that will let you see all around both sides of the front sight, will let you know by the amount of it that you are cutting off just how fine you are drawing, while the centerline on the rear bar gives your eye a center to work to A shallow notch in the rear bar, one rather wide so as to see lots of daylight on each side of the front sight, is nearly as good as a white centerline, for the eye quickly notes and corrects any discrepancy between the daylight on one side of the front sight and on the other. In a dim light, or wuzzy background, this advantage disappears and again we get back to a white centerline. This latter in its turn is not all heaven and angel harps, for if your front sight is silver or ivory it will blur right in with the rear white line, making it hard and slow work to cut off just the right amount of front sight. The remedy for it of course is to stop the white line or triangle about a thirty-second inch below the top of the bar, giving you a black edge for a cut-off. Another advantage of this form of rear sight is that it will not let the front sight fool you and make you shoot "off the

A FOLDING REAR SIGHT WITH WHITE TRIANGLE

light." In the woods all square edged front sights and all beads show a light point or line of light on the side the light is coming from. As this shiny point goes down into the dim depths of a deep notch the eye naturally takes it for the sight's center and you so hold, with the result of placing your bullet several inches away from the mark on the side opposite from where the light is coming. The flat rear bar lets you see this line of light in its true relation to the center of the sight, and that so clearly that even in the hurry of a running shot at big game you will make no such mistake. When the sun is shining brightly, however, the flat bar sight is apt to have a mirage or glare on it and then its best substitute is a very wide notch, with knife edges to cut out glare, in which the whole front sight is seen. The eye easily lines it up centered correctly, and, for any shot, where you want to see all you can of the animal it is a very easily aimed and accurate sight. Both of these sights, mounted together on one slot-pedestal, both folding flat on the barrel at will, can be had in one combination sight.

Another theoretical advantage that does not work out very well in woods shooting is to have the rear sight as far back as possible, to get a long distance between sights. The advantage is discounted by the fact that the eye cannot then see both sights *and* the game, because the focus differs for the rear sight and the front sight and game. Front sight and game are both clear enough, because the front sight is so far away from the eye (about two feet ten inches) that it is as it were, in the "universal focus" of the eye, but the rear sight is a hopeless blur. To avoid blurring, two remedies are devised, the peep sight through which the eye looks, and the forward placed notch. The latter consists in simply placing the rear sight notch well forward on the barrel, eighteen inches from the eye instead of the old-time twelve or fourteen inches, so that it is quite clear and the eye sees all three things, rear sight, front sight, and game clearly, the rear sight being only a little blurred, with such a rear sight as the flat bar and centering triangle this slight blur makes no practical difference as all three can be seen with plenty of clearness enough to center accurately and draw the right front sight, and for quick shots on running game in dim light its advantages far outweigh the disadvantages of the short distance (sixteen inches) between front sight and rear sight.

Remains the peep. To my mind it is up and away the quickest thing to get a rifle on the game that there is. At first I used to try to center the front sight in the peep aperture, and so lost many a good shot for lack of time. The last shot so lost was the rare great horned owl which I had a shot at on the Lumbee River trip. The owl that makes the familiar deep hoot in the woods at night is the barred owl, not the great horned species, the latter being much rarer. This individual flew into a cypress swamp ahead of the canoe and my partner at the stern backed the canoe for all he was worth to let me get a shot at him. I whipped up the rifle and soon settled the bead on his breast, but the rear aperture did not exactly center, and while I was adjusting this the canoe was whirling around, making me turn more and more to the left. Then tree branches got in the way, and while trying to get the front sight on him, in true center, in a clear view, and then the canoe turned so much as to permit no more corkscrewing of my body, and, by the time that was straightened out, the current had taken us much farther down stream and more trees intervened, so we had to let him go. Lieut. Whelen told me on one of his visits that any old center with the peep sufficed, so long as you saw the front sight through it and had its bead on the game; even off center well to one side would not make a difference of over an inch at ordinary game ranges. I knew that, with a small and distant bull'seye, centering in the peep made all the difference between "possibles" and an indifferent score, but a little shooting with the peep aperture more or less out of center with bead showed that this difference was not enough to pay for the time wasted in trying to center. An ordinary tang peep of 1/32 in. aperture will let you see a mountain goat at one hundred yards entire, besides the whole front sight and part of the barrel it stands on. yet the total possible error in off centering will be less than a 64th-in. out of the centerline of the barrel. The total throw of the bullet, then, would be 1½ inches off center at 100 yards. Using

this peep and paying practically no attention to the rear aperture one can slam the front sight on or ahead of the game just as quickly as arm can move and eye catch sight.

The only disadvantage of the peep is that in dim lights there is a perceptible interval before the pupil of the eye can expand enough to see through it clearly after being set for the surrounding illumination. Any big game rifle in which the owner puts his confidence should be well supplied with sights for all contingencies and there is no reason in the world why a couple of folding sights can not be put forward on the barrel *and* a folding tang peep on the stock, giving the user open sights for quick sighting in dim lights at short range, and a tang peep for slow, accurate, long range work in any light or quick work at long range in good light.

(*To be continued.*)

KILLING RANGES OF THE 12 AND 16 BORES

FIELD & STREAM PUB. CO.:

I would like any information you could give on the shooting powers of the 12-gauge and 16-gauge shotguns.

J. G. BLAINE LOWERY.

Ans.—The 12 is considerably more powerful because of the larger number of pellets in the pattern. Both guns have about the same velocity and penetration. Effective ranges 40 and 35 yards, giving about the same pattern at the respective ranges.—ED.

A GUN FOR DUCKS AND QUAIL

FIELD & STREAM PUB. CO.:

What do you consider the best all-around, general-purpose shotgun? I can only afford to own one, and want to hunt ducks and quail principally. What price and weight?

H. E. JOHNSON.

Ans.—12-gauge, 30-inch barrels, right modified, left full choked. Weight about 7½ pounds if gun is to be used more for ducks than quail. If for quail principally, then 28-inch barrels, right cylinder, left full choked, weight 7 pounds 6 ounces. A good gun may be bought for $25.—ED.

CARE OF THE RIFLE

By L. E. Eubanks

A true sportsman loves his gun and takes pride in caring for it. Because a few good marksmen have been known to handle their pieces recklessly and neglect their care does not justify the practice. The instruments of our pleasure are certainly entitled to fair consideration, and return our kindness by better service. Care of a gun pays; if one has no sense of the ethical, no refinement of character that prompts "a square deal" to the gun, he will find that even selfish enjoyment demands some effort. He cannot long continue neglect and haphazard methods without deterioration of skill and loss of fellow sportsmen's respect.

The habit of waiting several days to clean a rifle is utterly ruinous. Too many hunters let the fatigue of the day's chase cause this, and wait until they want the gun again before cleaning it. A dry cleaning does little good, merely removing the black carbon fouling. The residue of smokeless powder remains to corrode and ruin the gun, unless a nitro-solvent oil is employed.

Use cotton flannel for wipers, little squares called "patches" in the army. If your gun is one that can be cleaned from the breech, open it, remove the bolt, place the muzzle on an old newspaper to save the floor, and clean first with a few dry patches. This brings out the carbon fouling. Next soak a patch with nitro-solvent oil and swab the bore several times. After oil-swabbing the muzzle and chamber, put the gun away to sweat over night. The futility of dry cleaning alone is proved next day when one finds the bore coated with a reddish substance the oil has drawn out of the steel. This must be cleaned out, repeating until a patch comes out dry.

No shooter's outfit is complete without liquid vaseline. Oil the bore with it thoroughly. As Kephart has pointed out, vaseline is thick enough to stay where one puts it, yet cannot gum up. Any thin oil runs, and is sure to leave the upper parts of the gun unprotected. If the gun is to be put away for some time there is nothing to equal mercuric ointment as a rust preventive. Some authorities recommend an oil wick in the barrel and this is customary when rifles are put away in armories for several weeks. The practice of corking to keep out dust cannot be advised because it imprisons a certain amount of moisture which may develop rust. Every precaution is to be taken against this destroyer rust, for when a gun is once spoiled by it restoration is practically impossible. The only sure cure is a new gun.

Regarding the nitro-solvent, you can make it for less than it costs already prepared. Dr. W. C. Hudson gives this formula:

Kerosene oil free from acid	2 fluid ounces
Sperm oil	1 fluid ounce
Spirits of turpentine	1 fluid ounce
Acetone	1 fluid ounce

Several substitutes for nitro-solvent are used. Perhaps the least expensive is the well-known mixture of soda and water. Use washing soda, and mix till the water will take no more.

The best "medicine" for the gun-stock is linseed oil. Here is one point whereon advisers agree. The wood should be well dried first, then coat after coat of the oil rubbed in. It gives a beautiful finish and fills the pores of the wood, preventing absorption of water in case the gun gets wet. Any oil beats none; in emergencies soldiers use whatever they can get, though military regulations call for linseed oil. A piece of buckskin makes a fine polisher. It is unnecessary to dip it in the oil every time; one thorough soaking will keep the polisher moist enough for months. Do not polish the blued parts of the gun, but be sure to keep all the points of friction oiled with some thin lubricant that does not gum up. Too much oil is nearly as bad as none; it catches dust and sets up a gritty friction that is highly injurious to the gun.

Lastly, never blame the gun for faults that are really the shooter's. Your gun may be in perfect order and you may be "in form"; but if the weapon does not "fit" you, the best results will not be attained. Start right with a gun that suits your build, lengh of arm, size of hand, etc. These are details better determined by a good gunsmith. Never shoot the gun when the bore is wet nor use a wet bullet. Many old marksmen do not know that wet bullets nearly always go wild, but experience has proved it many times. Look well to your side of the business before you blame the gun.

OUR DUCK SHOOTING SHACK

By Raymond E. Manchester

Duck shooting is not the pleasure of the wealthy alone. Although the large marshes are in great part controlled by the clubs, there is still enough of the free out-of-doors to offer the ordinary mortal shooting room.

Three things will tempt a duck—shelter, food, and other ducks. Unless you can offer these things you will not get shooting, except by accident. To get shelter, one must get into a bay or a growth of grass; to get food, wild rice must be provided; to get ducks, either wooden or live decoys must be put upon the water. If you cannot find a spot offering the first two requirements, why not make one.

We found a bay offering splendid shelter, but little food, so we planted wild rice for two years, and in the meantime built a camp of bark and small poles. This sort of camp is not difficult to construct if one has a definite plan. We first set poles in the ground four feet apart to form a square 16 x 12. These poles were from two to five inches in diameter, and from seven feet in front and back to ten at the gable ends.

Across the two longest poles a ridgepole was placed, and poles were also placed in front and back upon the top of the seven-foot poles. Then from the ridgepole to the sides were laid smaller poles as closely as they would fit. This formed the foundation for a roof. Upon this foundation bark was placed over-lapping. It proved an effective way to shingle. The side walls were made by cutting long, thin poles and weaving them in and out on the uprights. By care and hard work we made a very close wall in this way. Upon the inside we placed heavy building paper which made our camp almost air-tight. On the outside we tacked branches as thickly as they would stay. This made a cover for the place as well as a protection from the wind. For the floor we went back to civilization and brought five dollars' worth of lumber. For two windows, bunks, stove, chairs, and table, we spend the grand total of $18, which when divided between us made a very cheap camp.

We made three blinds of branches—one on the point and

ARE YOU STUMPED?

Ask Field and Stream's INFORMATION BUREAU for the answer. Information on hunting, fishing, guns, tackle, camping and trail equipment, dogs and all other matters pertaining to the great outdoors. Write our SPORTING AND VACATION PLACES BUREAU about the ccuntry you have planned to visit on your next trip.

two back in the bay. In front of these we planted rice. Instead of following the usual method of sticking branches into the ground we planted small bushes. Over these blinds we pulled the branches together to form a sort of roof. Here again, we were laughed at. Most hunters depend upon an ordinary canvas coat and hat to give them shelter. But these men do not know how many ducks were frightened away by unnatural surroundings.

Our first day's shooting was one I think we all will remember. Certainly I shall. The sun came over the high eastern banks of the lake in perfect splendor and found us well located in our blinds. Soon the birds were moving. First scattered bunches, then long strings of them. To see them cut across the sun, low over the water, was worth all the hard work the building of the camp had meant for us. Out on the water the decoys were bobbing lightly, occasionally turning with the wind. What a picture for a man who has any red blood at all!

Suddenly there came a splash, and then another over to the left. Hardly had I turned my head when I heard Bob's gun. The first ducks were in. It was only a few minutes before four redheads came into my decoys, and I, all nerves of course, shot too soon, getting only one of them. But there was no time for regrets. Before I had picked up the bird I had shot there was shooting at my right.

So it went for a full hour. I shot six ducks and gave every one a fair chance—that is, I did not shoot them in the water. The other two fellows shot four and five respectively. By eight o'clock we were eating bacon and eggs, and by nine were in the offices.

During the season we spent at least half our early morning hours outside the man-made world. We found that the time from five until eight in the morning became the most important part of the day. We looked ahead to the shooting so much that the evening seldom found us out. We were either early in bed or out at camp telling of the ducks we almost shot.

Where is there a man with half a head who could not follow our example. The camp-house might not be the same, the general plan of procedure might be different, but the getting out of doors is possible for all. It puts life into the tired flesh, snap into the brain. In fact, it generates energy which goes into the day's work to an extent that would amaze one who has never given it a trial. The getting of ducks is a secondary consideration. The outing is valuable if a duck never comes within range. Try it this year, you who are merely existing and do not know the great outdoors.

UNKEL DAVID'S LETTER

DERE FELDE & STREME,

Yore idee to putt me & Sar An in as rezzydent soopervizer of a Dellywair duk klub, was a reel insperashun, for we was boath in redoosed flesh & app to git moar so where we was at—espeshully after owr naybers deeklared war & reefoozed to arbytrait. You knoe how it is in them Noo Jerzy towns where welthy bizness men like me erekt pretenshus manshuns & gorrojes with skreened winders too keep owt the bugz. They awl kep chikkens but us—Plimmuth Rox, Loowellins, Erly Yorx & uther fine denommynashuns; but the saim dident apeel to Sar An (hoo is still mi beluved wife & seems doo to reemane so sum konsiderbel time). Sar An sais chikkens is pore proppity where awl yore naybers has set in the gaim with pat hands; & soe she put in a tunnup patch & fixt her mowth for tunnup sallud—whitch I bakt her up in the dooing of it. It is a fakt knone to the Eddytur of this grate reelijus maggyzeen, that no proddukt of koolinerry skill is at the saim time moar dellykit & satisfakterry to the appytite than a haff bushil of tunnup tops biled with a smoakt hog-jaw or a hunk of salt poark that's the pewr kwill & no leen. The seed sprowted rite now—& them fine chikkens was there reddy to pull when the seed pusht. I expostylated, first with the chikkens & then with the reetired kaffay keepers & preechers, hoo showed a apptytood ekwil to a basebawl empire for dodjing brix & tin cans; but they meerly kakkeld & come bak for moar tunnups. I sed they wood have to bild fenses, & they toald me the saim. I sais "I'll shore bild if I see mi tunnups kross the ded line & ketch yore chikkens. Uther wize I'll taik the case to the Soopreem Coart." Whitch I wood have did, but the chikkens eet up awl the Peepul's Ekzibbet Number One (No. 1). A onnist man of modderit meens don't stand no hak in a law soot with kappytul.

It was rite then that this duk klub proppysishun brot us three (3) skware meels a day. Awlsoe what smawl itims of likker that the dood sportsmen leeve in the bottels when they're reddy to be putt in their littel by-by's for the nite. It is a wize pervizion of the Fedderal Gaim Law that onlie men with munny may own stok in gaim perserves & shooting klubs. Uther wize there wood be a cheeper kwality of likker drunk & moar of it owt of the bottel. If there aint enuff to go arownd we pull an uther kork & the remnunt goes to yore Unkel David

I was sum sorry that you shipt Sar An rite away after me instid ot holding her for futher orders as per mi rekwest. I had fownd that I cood ekonymize by engajing a kompleet foarce of wimmen to kondukt this bizness, even to paddeling the duk botes; but the first thing Sar An did was to maik war medisen with a ate (8) gaje Jon Hennery Smith & Western, & awl she left of the orijinel krowd was a old mammy nigger hoo yoost to nuss Jorje Washington when he was a littel shirttale boy with his pokkits full of firekrakkers. Sar An sed it was did for the saik of owr reppytashun, whitch shoze how smawl a ekskoos wimmen need ta maik a eksibishun of their selves.

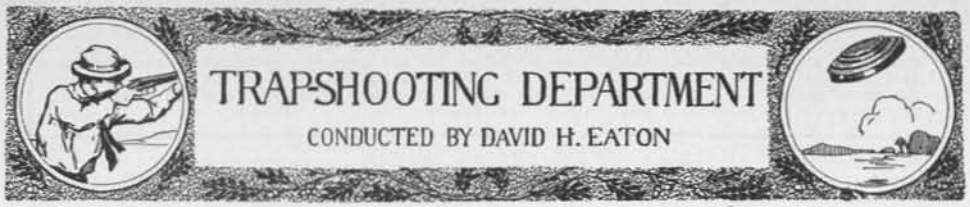
You askt me to repoart hoo was the lucky man the first day of the seezun, & I think it was Izzy Stinekamp, the ponnbroaker from Jerzy Citty. I coodent say for shure, bekos I dident stay awaik till the gaim was throo, but he got awl mi chipz & sum uthers. The boys dident shoot none, eksept that the gaim warden putt a kwart or so of twelve (12) gaje lodes in the heeting stove to sellybrate filling to a three (3) kyard strate flush. Abowt midnite Konrad Shmitt deeklared war agin the Alleys & dug a rifel pitt for hisself in the bak yard, where he cood Hokk der Kizer withowt breeches of nootralizzum. He was jently brot into kamp by two (2) niggers & will be awl rite for the next kampane.

Hurraw! The duk flite is heer. Our old nigger Mammy has just swopt uther groseries to the pastyoor of her church for a cuppel of fat white Peekings rite from the Artik sirkel. Heer2-4 he has supplide us with marsh chikkens & watter tukkeys, whitch he caut at nite sum where, & I never eet a better line of poaltry. But theze duks enkurrije me a heep. There was a flok floo over the klub hows yisterdy & we have reezun to antissypate uthers. A enthoozyastik spoartsmen from Kos Kob, whitch is in Konnettykut, tawks of putting his battry in akshun to-morroe. In uther respekts awl is normul.

P. S. It is a cawze of regret that the Eddytur is not heer to assist in the obsykweez. I have tried to eksplane to him the bewty of a wild duk that is kookt propper, whitch the menny-foald dooties of his offiss is betwixt him & the reel thing.

Moar P. S. Up to dait Yore Unkel is rite smart ahed on the poaker graim—moastly cash munny, thoe he alsoe has three (3) shairs of stok in the duk klub, a nohammer gun, sum cordyroy britches & two (2) pare of red-lether boots that come cleer up & ty with a shoo-string. Sar An is ankshus for sum of the wimmen klub members to appeer arownd the soshul borde, so she can instrukt them in brij whist. Meenwhile I am

Trulie yores
UNKEL DAVID.



TRAP-SHOOTING LEAGUE

The formation of leagues by trap-shooting clubs which are located in the same section is one of the greatest aids in spreading and maintaining interest in the sport. The Central Ohio League is an example of the value of this kind of co-operation, and Pennsylvania has several leagues which are a direct benefit to their members. Another strong league has been formed, composed of the clubs of northern New Jersey. The league idea is growing, and the time is not far distant when every State will have one or more of these associations of trap-shooting clubs. When this point is reached there will, undoubtedly, not only be a keener interest in the sport among the active devotees, but very many new men will be attracted to the traps.

INTERURBAN LEAGUE

The shoot-off of ties to decide the winners of the three high individual trophies of the season of the Interurban League of gun clubs was held on the Chicago Gun Club's grounds, November 7th, the fine weather bringing out a field of 67 contestants. Dr. E. H. Powell, of the Valparaiso, Ind., Gun Club, and R. C. Millen, of the Evanston Gun Club, were tied for first on 226 out of 250 targets, counting their five best scores for the season. The tie was shot off at 50 targets, Powell standing at 18 and Millen at 19 yards, their handicaps for the season, and resulted in a tie on 44. In the first string of the second shoot-off each broke 24 out of 25, but in the second string Powell had the best of it, breaking 24 to Millen's 22, and won the first prize on his score of 48 to 46, the latter taking second trophy. F. E. Probert, of Hammond, and W. Engelcke, of Evanston, were tied on a total of 225 out of 250, and shot off for third prize, the former at 20 and the latter at 16 yards. In the first string of 25 Engelcke was one to the good with 22 to 21; in the second string Probert went to the front with 22 to 19, and won the shoot-off 43 to 40. The prizes were presented to the winners by President W. A. Davis; first, a Waltham gold watch, presented to the league by the Du-Pont Powder Co., to Dr. Powell; second, a silver tray, presented to the league by the Western Cartridge Co., to R. C. Millen; third, a $15.00 merchandise order, given by the league to F. E. Probert. The feature of the day was the special contest of the Interurban League of Gun Clubs for a silver loving cup presented by the Hercules Powder Co. Only three clubs were represented by full teams, and Valparaiso carried off the honors, C. Sheets, 48; R. Gossett, 45; S. Friedheim, 45; Dr. Powell, 43; C. E. Hershman, 41; total, 222. All shot from 16 yards except Powell, who stood at 18. Evanston Gun Club, 220, and Chicago Gun Club, 216.

SOUTH JERSEY CHAMPIONSHIP

The championship of South Jersey is held by F. A. Priestley, of Camden, N. J., who won from a field of twenty competitors after a keen contest. Conditions were adverse to high scores, as a young gale caused the targets to perform all sorts of stunts in their flight. The match was one of the most exciting in the history of this annual South Jersey affair. The winner was not decided until Priestley had shattered the last target of his last 25. At the close of the third string, Lloyd Wright, of Medford, was one target ahead with 68 out of 75, and C. B. Platt, of Bridgeton, was tied with Priestley on 67. Wright dropped six in his last string, and Platt four, giving him a lead of one target. This meant that Priestley, who was in the last squad, could miss but three to win, and four to be in a tie with Platt. He dropped his 8th, 16th and 20th targets, winning on a score of 89. The other prizes went to Platt, 88; Eright, 87; Henline, 86, and Kling, 84.

MIDWINTER HANDICAP ANNOUNCEMENT

An event looked forward to by the trapshooters with pleasurable anticipation is the Midwinter Handicap tournament, held at Pinehurst, N. C., under the auspices of the Pinehurst Country Club. The beautiful surroundings as well as the large money purse and list of valuable trophies, always attract a big field of the best amateurs from all parts of the country, and there is no reason to believe that the ninth annual tournament, to be held on Jan. 17-21, 1916, inclusive, will fall short of previous years, but rather that it will exceed them all in point of attendance. The program is similar to those of past years; $2,700 in added money and trophies is promised, with $350 guaranteed to the winner of the Midwinter Handicap event on the fourth day, Jan. 21, in addition to the trophy. The winner of the Preliminary Handicap, on Jan. 20, is guaranteed $150, and also receives a handsome trophy. The program consists of 200 targets each day, shot in eight strings of 15 and four of 20 targets each, on the first and second days, and seven strings of 20 and four of 15 targets each on the last two days. The Preliminary and Midwinter Handicap events are each shot in the last five 20-target strings of Jan. 20 and 21, respectively. The total entrance on each of the first two days is $20.00, with optionals totaling $20.00 on each day. On the third day, $20.00 and $10.00 optionals; fourth day, $10.00 and $20.00 for the Midwinter Handicap, total of $30.00, with $10.00 optionals. Jan. 17 is practice day, with a program of ten 20-target events, entrance $2.00 in each, and $2.00 optional sweep in each event. A gold medal will be given for high amateur average in the regular 16-yard events (600 targets). A trophy will be given for high amateur average for the entire program of 800 targets. There will be four special trophies in the Preliminary Handicap, and the same number in the Midwinter Handicap. These are the President's trophies for high score in the first class in each handicap. Governor's trophies for high score in the second class. Secretary's trophies for high score in the third class, and Captain's trophies for high score in the fourth class. The shooters will be divided into four classes, according to scores made in the first 500 targets of the program. The scores made are tabulated, highest at the top, and then divided into four equal classes, or sections, commencing at the top. If these should be one score over an equal division it will be added to the fourth section; if two over, to the fourth and third; if three over, to the fourth, third and second sections. If the dividing line comes between the scores, leaving an equal number on each side, they will all go in the upper section; if the division shows a majority of tie scores in one section, all the scores will go into the section. The winners of the Preliminary and Midwinter Handicaps are not eligible to win any of the special trophies, and the runner-up in these events will be awarded the special trophy. Winners of special trophies in the Preliminary Handicap will not be eligible to win one of the special trophies in the Midwinter Handicap. No man can win two of the special trophies. The entrance fees given above include the $1.00 for the Squier Money Back System.

CHICAGO GUN CLUB

The fifth annual club championship event was shot on Nov. 14, and was won by Mrs. A. H. Winkler. A qualifying round at 25 targets was shot and the sixteen high guns were paired off for elimination rounds at 25 targets each. In the final round Mrs.

Winkler and D. E. Thomas tied on 21, the former winning the shoot-off 23 to 22. Her scores for the event were: 25-24-23-21, and 23 in the shoot-off. Out of 200 targets shot at during the day she broke 186. In the weekly club event at 50 targets, A. H. Winkler was high with 50 straight; Mrs. A. H. Winkler and D. E. Thomas tied for second on 49.

STARVED ROCK (ILL.), GUN CLUB

The tournament on Nov. 7 had 29 shooters, twenty going through the program of 150 targets. Alex Vance, of Capron, Ill., was high amateur with 146; C. M. Powers, Decatur, Ill., 143; and C. A. Omen, Princeton, Ill., 140. F. Bells was high professional with 146. J. R. Graham, 134. The cup score at 50 targets, distance handicap, was won by Patt (19 yards) after shooting off a tie on 48 with M. Kneussl (22 yards), the former scoring 22 to 21 out of 25 targets.

INDIANAPOLIS GUN CLUB

Watson was high amateur at the shoot on Nov. 6, and made his first win on the Remy trophy with 97 out of 100. B. Remy, 95; Moller and Klein, 94 each. Eastman was high professional, with 99. B. Remy won the Sutz trophy at 25 targets, with 25 from 22 yards. Tripp and Jenkins each at 20 yards, Klein at 18 yards and Smith at 16 yards, tied on 24.

CHATTANOOGA (TENN.) GUN CLUB

The President's trophy was won at the shoot on Nov. 6 by George Linn, with 86 out of 100, including his handicap of 2 targets. J. R. Higgins was second with a total of 83. High score in the Du Pont trophy was made by Keith Webb, 24 out of 25.

AMBIA (IND.) GUN CLUB

C. H. Peck was high amateur at the shoot on Nov. 4 with 144 out of 150; C. C. Hickman 142, and Robinson 138.

INTERCOLLEGIATE SHOOT

The first championship match held under the auspices of the Intercollegiate Trapshooting Association was shot over the traps of the Princeton Gun Club, Oct. 23, five-men teams of Cornell, Yale, Dartmouth and Princeton participating. The race was a close one, Yale finally winning by 5 targets. The scores of the winning team were: Lynam 75, Lewis 83, Chisholm 83, Casselberry 53, Tayler 73; total, 366. Cornell, 361; Princeton, 333; Dartmouth, 284; Ryan was high man for Cornell with 79. Caesar made high score of 78 for Princeton, and Hoard led the Dartmouth team with 77. Each member of the winning team received as championship trophies, a solid gold watch fob, the pendants of which were replicas of clay targets.

ARIZONA STATE TOURNAMENT

The State shoot was held at Phoenix under the auspices of the Arizona Sportsmen's Association, on Nov. 15, 16, 17. The attendance was not large. Good scores were made by many of the contestants. H. P. De Mund, of Phoenix, won the championship of the State of Arizona for the third successive year, breaking 49 out of 50. He also won the Interstate Association's Amateur State championship with 98 out of 100, and was second high amateur for the entire shoot. On the first day, J. F. Dodds was high amateur, with 195 out of 200; H. De Mund, 190; D. Morrell, C. H. Nash, T. L. Edens and N. A. Howard, 188 each. D. W. King led the professionals with 197; Guy Holohan, 191; C. H. Knight, 188. On the second day, C. H. Nash, of Los Angeles, Cal., was the star of the day, leading the field with a score of 204 out of 210. Second high amateur, J. F. Dodds, 202; N. A. Howard, 199. The professionals were headed by Guy Holohan, with 203; C. H. Knight and Ed Mitchell, 201 each; H. E. Poston, 199. Long runs were made by D. W. King, 81; G. E. Holohan, 64; L. R. Mellus, 64; E. L. Mitchell, 63; C. H. Nash, 53; C. H. Knight, 58; N. A. Howard, 70. The tournament was brought to a close at noon of the third day, N. P. De Mund being high amateur, with 227 out of 235 targets; J. F. Dodds, 225; N. A. Howard, 221. H. E. Poston was high over all, with 232; second high professional score being made by D. W. King, 225; Guy Holohan, 219. The high professionals for the three days were: D. W. King, 619 out of 645; H. E. Poston and Guy Holohan, 613 each; Ed Mitchell, 604. High amateurs: J. F. Dodds, 622; H. P. De Mund, 621; C. H. Nash, 611.

Du Pont long-run medals were won by D. W. King, 120, the longest run of the tournament; C. A. Haight, 63; G. E. Holohan, 64; L. R. Mellus, 64; E. L. Mitchell, 63; W. S. Heflin, 68; C. H. Nash, 53; H. P. DeMund, 73, and F. M. Gold, 55. The silver cup for high professional average was won by D. W. King, Denver, Col. High men in the Interstate amateur championship event were: H. P. De Mund, Phoenix, 98; Dell Morrell, Phoenix, 95; W. E. Mullen, Ray, Ariz., and T. L. Edens, Phoenix, 94 each; H. Heileman, Phoenix, 92; W. Heflin, Phoenix, 90; Ray De Mund, Phoenix, and F. M. Gold, Williams, Ariz., 88 each.

EAST VS. WEST

A championship race between the East and the West is being talked of, and such an event would create national interest in trap-shooting circles. The dividing line would be the Mississippi River, those living east of the Father of Waters shooting for the supremacy of the East, and those beyond it flying the colors of the West. The Eastern men whose work this season entitles them to consideration are: Woolfolk Henderson, Lexington, Ky., winner of the G. A. H. and single and double championships in 1914, with .9755 per cent of 2,700 targets; F. S. Wright, Buffalo, N. Y., .9646 per cent of 3,455 targets; R. H. Bruns, Brookville, Ind., .9632 per cent of 1,250 targets; A. B. Richardson, Dover, Del., champion of his State, 96 per cent of 3,025 targets; Walter Behm, Esterly, Pa., .9508 per cent of 4,285 targets; E. A. Randall, Portland, Me., .9545 per cent of 1,320 targets; C. H. Newcomb, Philadelphia, Pa., National Amateur Champion, .9533 per cent of 4,600 targets, and W. M. Foord, Wilmington, Del., .9527 per cent of 2,350 targets. The West has P. Baggerman, St. Louis, Mo., with .9679 per cent of 3,900 targets; F. Troeh, Vancouver, Wash., .9632 per cent of 1,900 targets; William Ridley, What Cheer, Ia., .9630 per cent of 2,300 targets; D. J. Holland, Springfield, Mo., .9619 per cent of 2,000 targets; J. R. Jahn, Davenport, Ia., .9614 per cent of 2,100 targets; and P. O'Brien, Portland, Ore., .9548 per cent of 1,350 targets. Two five-men teams could be selected from these shooters, being so nearly equal in skill that the difference would be infinitesimal. What a battle royal they would put up to the finish.

AVERAGES FOR 1915

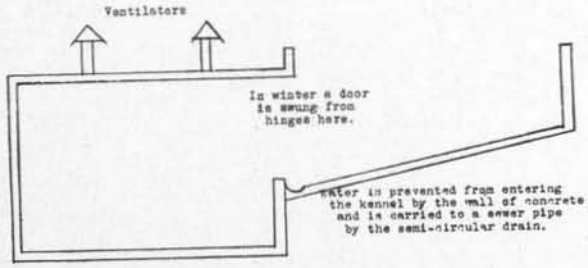
The leading amateurs and professional shooters of the country have been doing phenomenal work this season, as the following averages will show. These figures include scores made in 265 of the Interstate Association's registered tournaments. Woolfolk Henderson, of Lexington, Ky., is leading all amateurs with the remarkable average of .9724 per cent., or 1,653 out of 1,700 targets shot at. Close to him is S. A. Huntley of Omaha, Neb., with .9669 per cent., or 3,916 out of 4,050 targets shot at. William Ridley of What Cheer, Ia., is third, with .9644 per cent., or 1,736 out of 1,800 targets. A. B. Richardson, Dover, Del., 2,434 out of 2,525 targets, or .9639 per cent. F. M. Troeb, Vancouver, Wash., 1,830 out of 1,900, or .9632 per cent. F. S. Wright, Buffalo, N. Y., 2,844 out of 2,955 targets, or .9624 per cent. J. R. Jahn, Davenport, Ia., 2,019 out of 2,100 targets, or .9614 per cent. E. F. Forsgard, Waco, Tex., 1,057 out of 1,100, or .96 per cent. There are 202 amateurs whose average is 90 per cent. or better. In the professional ranks 90 have made 90 per cent. or better. W. R. Crosley, O'Fallon, Ill., leads, with 3,221 out of 3,300, or .9760 per cent; C. G. Spencer, St. Louis, Mo., .9725 per cent. of 4,400 targets; L. H. Reid, Seattle, Wash., 2,334 out of 2,400 targets, or .9725 per cent.; C. A. Young, Springfield, Ohio, 2,998 out of 3,085 targets, or .9717 per cent.; L. S. German, Aberdeen, Md., 2,988 out of 3,095 targets, or .9686 per cent.; Art Killam, St. Louis, Mo., 3,723 out of 3,850 targets, or .9670 per cent.; J. R. Taylor, Newark, Ohio, 3,621 out of 3,755 targets, or .9643 per cent. Mrs. Ad Topperwein, San Antonio, Tex., has broken 1,576 out of 1,640 targets, or .9610 per cent., and ranks tenth in the list. There are about 500 amateurs who have shot at 1,000 or more registered targets, and about 160 professionals.

UNDERGROUND DOG KENNEL USED IN COLORADO

Carroll E. Williams

Underground dog kennels constructed entirely of concrete are in use now in Colorado. The climate in this state is extremely warm and very cold in season. Consequently the greyhounds kept for hunting coyotes suffer greatly from the heat if not properly housed. One of the largest kennels in the state is on the Rocky Ford cantaloupe farm, and it was here that the first underground kennel was built.

The kennels are built into the ground somewhat like caves or dugouts. From the surface an incline leads to the floor of the kennel, which is about six feet square and built to accommodate four dogs. The incline is so constructed that rain and water cannot reach the floor. A semi-circular drain connects to a sewer pipe and carries away all rain and water. The roof of the kennel is below the surface of the ground and ventilators placed so as to keep out moisture and let in fresh air for the dogs.



BREAKING A STUBBORN DOG

DOG DEPT., FIELD & STREAM:

I own a handsome, lively bird-dog puppy six months of age, whose dam and sire were both excellent field dogs. However, his breeding is half English setter and half pointer, and therefore one of my friends calls him a dropper and says he is by no means likely to turn out well. Will you tell me whether or not that opinion is well founded?

I have been reading the Airedale, Setter and Hound articles with interest. My dog learned to sit down and to charge very quickly, but I have had little success in teaching him to retrieve. I have tried at least forty times in all to get him to take the pad at the word "fetch," but he soldom does it without having his lip pinched. He just stubbornly shuts his eyes and remains inattentive. Would it be advisable to use the force collar with him?

WM. W. ALLEN.

Ans.—The cross of setter and pointer is called "dropper." If both dam and sire have been good, active workers afield on birds, the offspring, as a rule, make fairly good workers, too; but for future breeding the dropper is worthless —various reasons, hunting instinct run out. The time required to train a dropper will be fully as much as taken up by a thoroughbred; one who, when trained, commands a price, if desired to be sold while a dropper, seldom gets an offer at anything near former.

Retrieving.—"Would it be advisable to use the force collar with him?" The question is also the answer. "Shuts his eyes and remains inattentive"—that's it exactly. By use of force collar he will be made to open his eyes and take notice suddenly—in fifteen minutes he will fairly snap at object to grab it to prevent punishment and henceforth obey promptly at the word.

ED F. HABERLEIN.

CURE FOR GUN-SHY PUP

FIELD & STREAM PUB. CO.:

As I am a steady newsstand reader of your valuable magazine and have read many pieces of yours concerning dogs, I thought perhaps you could give me some advice.

What I wish to ask you is this: How would you go about breaking a gun-shy pup? The pup is not much afraid of a gun, but still after you fire it once on a trip out he keeps his eye on you afterwards. He doesn't run home, but slinks back.

If you will be kind enough to give me what information you can I am sure it will be greatly appreciated by me.

BERNARD L. SWEENEY.

Ans.—Your pup is not very gun-shy compared to most of them that are addicted to the habit. He simply needs more accustoming to gunfire. Tie him up alongside of you when practicing with rifle or shotgun. Don't pay any attention to him, but keep on shooting, occasionally resting gun or arm over his back when firing. He soon learns that there is nothing to be scared of. Lick him quick if he tries to run away when in the field.—ED.

A DISEASE OF THE BACK

FIELD & STREAM PUB. CO.:

We have a young hound that has something the matter with his back. When he stands he has to keep walking or lay down, and when he lays down his muscles twitch all the time.

ALBERT A. MOORE.

Ans.—Probably a case of chorea left over from an attack of distemper. Try treatment for chorea or dispose of hound and get another.—ED.

GOOD BREEDING IN A SETTER

FIELD & STREAM PUB. CO.:

I have a setter pup, thoroughbred, seven weeks old, and have been advised to have the end of its tail cut off so that it will hold straight when the dog is pointing.

Kindly advise if there is any truth in this, also when tail should be cut, and if it should be done by a vet.

A READER.

Ans.—Upcurving tail in a setter is a sign of poor breeding. We never heard of docking the tail to cure it. If your dog is of good blood his tail will stand straight, either somewhat pointing up at a slant or straight out in line with backbone when he points.—ED.

TRAIN-SICK DOG

Being a reader of FIELD & STREAM I would like to know if you could inform me as to the cause of my setter getting sick. When I take him on train he works for about two hours then he gets so sick that he lies down. He has the symptoms of a dog with blind staggers, and he is never in that condition only when I take him away. I am sure he is not affected with worms in any way. Do you think this trouble could come from his nerves? If you can enlighten me in any way or refer me to any one, please do so.

THOMAS L. WILLIAMS.

Ans.—Your dog is evidently train-sick and nervous. Probably did not digest food from nervousness while on train. Do not use him afield until at least a day after the train journey.—ED.

FISH AND FISHERMEN

WINNERS IN THE 1915 PRIZE FISHING CONTEST

The following is a complete list of all the winners of 1915, with the exception of the Tarpon, Large Mouth Bass, Class B. Southern Division, and the Southern Large Mouth Bass Grand Prize, Ladies', Juvenile and Special Honor Fly Classes, which do not close until December 31st.

Brook Trout, Class A

First Prize

Caught by William Allen, Johnstown, Pa.
Weight—4 lbs. 7 oz.
Length—22 in.
Girth—11 in.
Caught—June 20.
Where—Upper Dam, Me.
Rod—Thomas.
Reel—Cummins.
Line—Abercrombie and Fitch.
Lure—Jock Scott fly.

Second Prize

Caught by Louis A. Ditt Verner, Portage, Wis.
Weight—4 lbs. 1 oz.
Length—21 in.
Girth—13½ in.
Caught—April 15.
Where—Corning Creek.
Rod—Bristol steel.
Reel—Shakespeare.
Line—Kingfisher.
Lure—Royal Coachman fly.

Third Prize

Caught by C. S. Harris, Buffalo, N. Y.
Weight—3 lbs 2 oz.
Length—19 in.
Girth—11½ in.
Caught—June 11.
Where—Bakertown Flow, N. Y.
Rod—Lancewood.
Reel—Abercrombie and Fitch.
Line—Kingfisher.
Lure—Queen of the Water.

Fourth Prize

Caught by Chester A. Minds, Ramey, Pa.
Weight—3 lbs.
Length—18 in.
Girth—11½ in.
Caught—June 24.
Where—Cranberry Lake, N. Y.
Rod—Lancewood.
Reel—Rubber.
Line—Kingfisher.
Lure—Royal Coachman.

Brook Trout, Class B

First Prize

Caught by Sam H. McFarland, Chicago, Ill.
Weight—6¾ lbs.
Length—25½ in.
Girth—15½ in.
Caught—Sept. 9.
Where—Nipigon River, Ontario.
Rod—Leonard.
Reel—Hardy Bros., Perfect.
Line—Von Lengerke and Antoine.
Lure—Fly.

Second Prize

Caught by Sam H. McFarland, Chicago, Ill.
Weight—6 lbs. 2 oz.
Length—24¼ in.
Girth—15 in.
Caught—August 28.
Where—Nipigon River, Ont.
Rod—Leonard.
Reel—Hardy Bros., Perfect.
Line—Von Lengerke and Antoine.
Lure—Durham Ranger fly.

Third Prize

Caught by Sam H. McFarland, Chicago, Ill.
Weight—6 lbs.
Length—24 in.
Girth—14 in.
Caught—Sept. 6.
Where—Nipigon River, Ont.
Rod—Leonard.
Reel—Hardy Bros., Perfect.
Line—Von Lengerke and Antoine.
Lure—Durham Ranger fly.

Fourth Prize

Caught by Donald Parson, Youngstown, Ohio.
Weight—5 lbs. 14 oz.
Length—24¼ in.
Girth—15¼ in.
Caught—Sept. 26.
Rod—Leonard.
Reel—Mills Neversink.
Line—Mills Intrinsic.
Lure—Dashwood fly.

Brook Trout, Ladies

Caught by Mrs. Herbert Warren, New Haven Conn.
Weight—5¾ lbs.
Length—25 in.
Girth—13 in.
Caught—August 30.
Where—Moosehead Lake, Me.
Rod—5 oz. bamboo.
Reel—Hendrix.
Line—Enamel silk.
Lure—Parmachene Belle.

Brook Trout, Grand

Caught by Albert C. Wall, West Orange, N. J.
Weight—8 lbs.
Length—23 in.
Girth—15 in.
Caught—July 10.
Where—Little Codroy River, Newfoundland.
Rod—Forrest.
Reel—Name unknown.
Line—Name unknown.
Lure—Silver Doctor, No. 6.

Rainbow Trout

First Prize

Caught by J. C. Ward, San Francisco, Cal.
Weight—17 lbs. 6 oz.
Length—33½ in.
Girth—20 in.
Caught—July 6.
Where—Upper Klamath Lake, Oregon.
Rod—Split bamboo.
Reel—Meisselbach Tripart.
Line—Cuttyhunk.
Lure—Wilson Copper Spoon.

Second Prize

Caught by T. A. Ross, Butte, Montana.
Weight—15 lbs.
Length—31¼ in.
Girth—17½ in.
Caught—June 15.
Where—Big Hole River, Montana.
Rod—Home made.
Reel—Light surf casting.
Line—Saline.
Lure—Live minnow.

Third Prize

Caught by F. C. Carson, Butte, Montana.
Weight—14 lbs. 8 oz.
Length—31½ in.
Girth—19 in.
Caught—July 4.
Where—Big Hole River, Montana.
Rod—Heddon.
Reel—Redifer.
Line—Kingfisher.
Lure—Live Minnow.

Fourth Prize

Caught by Dr. A. Vanderstolp, Grand Rapids, Mich.
Weight—13 lbs. 14 oz.
Length—34½ in.
Girth—19½ in.
Caught—May 1.
Where—Big Pine River, Mich.
Rod—Thomas.
Reel—Meisselbach.
Line—Saline Enamel.
Lure—Superior Colorado Spinner.

Rainbow Trout, Fly Class

First Prize

Caught by G. E. Richardson, Sault Ste. Marie, Ont.
Weight—9 lbs.
Length—27¼ in.
Girth—14½ in.
Caught—July 31.
Where—St. Marys River.
Rod—Mills.

Reel—Pennell.
Line—Kingfisher.
Lure—Stone Fly.

Second Prize

Caught by F. E. Keenan, Gunnison, Col.
Weight—8½ lbs.
Length—26 in.
Girth—15½ in.
Caught—August 27.
Where—Gunnison River, Col.
Rod—Split bamboo.
Reel—Featherlight.
Line—Saline No. G.
Lure—Royal Coachman No. 4.

Third Prize

Caught by G. E. Richardson, Sault Ste. Marie, Ont.
Weight—8¼ lbs.
Length—26 in.
Girth—13¼ in.
Caught—July 26.
Where—St. Marys River.
Rod—Mills Standard.
Reel—Pennell.
Line—Kingfisher.
Lure—Stone Fly.

Fourth Prize

Caught by G. E. Richardson, Sault Ste Marie, Ont.
Weight—8¼ lbs.
Length—24½ in.
Girth—14¼ in.
Caught—July 26.
Where—St. Marys River.
Rod—Mills Standard.
Reel—Pennell.
Line—Kingfisher.
Lure—Stone Fly.

Brown Trout

First Prize

Caught by I. E. Dickinson, Bellaire, Mich.
Weight—6½ lbs.
Length—25 in.
Girth—13½ in.
Caught—June 6.
Where caught—Cedar River, Mich.
Rod—Clark.
Reel—Yawman and Erbe.
Line—Enameled.
Lure—March Brown Fly.

Second Prize

Caught by Robert McConnell, Napanock, N. Y.
Weight—6 lbs. 1 oz.
Length—28½ in.
Girth—16½ in.
Caught—April 19.
Where—Tananack Creek.
Rod—Mills split bamboo.
Reel—Takapart.
Line—Kingfisher.
Lure—Jungle Cock fly.

Third Prize

Caught by George Burroughs, Ouray, Col.
Weight—5 lbs. 5 oz.
Length—22⅞ in.
Girth—12¼ in.
Caught—July 26.
Where—Gunnison River.
Rod—U. T. K.
Reel—Fratherlight.
Line—Kingfisher.
Lure—Jock Scott.

Fourth Prize

Caught by Rev. D. Cochlin, Traverse Cilty, Mich.
Weight—5 lbs. 2 oz.
Length—24 in.
Girth—13 in.
Caught—June 28.
Where—Boardman River, Mich.
Rod—Montague Special.
Reel—Leonard.
Line—Abbey and Imbrie.
Lure—Parmachene Belle.

Lake Trout

First Prize

Caught by Charles H. Slater.
Weight—26½ lbs.
Length—38 in.
Girth—22½ in.
Caught—May 10.
Where—Lake of the Woods, Ont.
Rod—Bristol.
Reel—Meisselbach.
Line—Kingfisher.
Lure—Kidney Spoon.

Second Prize

Caught by E. S. Williamson, Duluth, Minn.
Weight—26¼ lbs.
Length—40½ in.
Girth—24¼ in.
Caught—July 13.
Where caught—Isle Royale, Mich.
Rod—Sampson steel.
Reel—Trolling reel.
Line—Cuttyhunk
Lure—G. Hevenden Canandaigua trolling spoon.

Third Prize

Caught by E. D. Calvert, Rainy River, Ont.
Weight—25¾ lbs.
Length—42 in.
Girth—22½ in.
Caught—May 15.
Where—Lake of the Woods, Canada.
Rod—Bristol.
Reel—Shakespeare.
Line—Kingfisher.
Lure—Phantom Minnow.

Fourth Prize

Caught by Joseph Pomelow, Brownville, Me.
Weight—25 lbs.
Length—36 in.
Girth—21 in.
Caught—June 29.
Where—Schoodic Lake, Me.
Rod—Bristol.
Reel—Hendryx.
Line—Kingfisher.
Lure—Archer Spinner.

Landlocked Salmon

First Prize

Caught by Henry L. Marsh, Rochester, N. Y.
Weight—12 lbs. 2 oz.
Length—27½ in.
Girth—17½ in.
Caught—July 5.
Where caught—Parker Pond, Maine.
Rod—Frost Otter steel.
Reel—Venus.
Line—Kelso silk.
Lure—Small smelt.

Second Prize

Caught by George W. Poggenburg, New York City.
Weight—12 lbs.
Length—28¼ in.
Girth—17½ in.
Caught—July 15.
Where—Parker Pond, Me.
Rod—Bamboo.
Reel—Julius Vom Hofe.
Line—Braided silk waterproof.
Lure—Smelt.

Third Prize

Caught by Carl S. Bean, Caratunk, Me.
Weight—11½ lbs.
Length—33 in.
Girth—16½ in.
Caught—Sept. 29.
Where—Pierce Pond, Me.
Rod—Bristol.
Reel—Vom Hofe.
Line—Kingfisher.
Lure—Dark Montreal.

Fourth Prize

Caught by Ashley A. Smythe, Dorchester, Mass.
Weight—11½ lbs.
Length—31 in.
Girth—17 in.
Caught—July 16.
Where—Sebago Lake, Me.
Rod—Sampson steel.
Reel—Vom Hofe.
Line—Kingfisher.
Lure—Shiner.

Small Mouth Bass, Class A

First Prize

Caught by J. M. Cantey, Columbia, S. C.
Weight—8 lbs.
Length—27 in.
Girth—18 in.
Caught—April 30.
Where—Crystal Lake, S. C.
Rod—Riverside steel.
Reel—Expert Casting.
Line—Gold Seal No. 17.
Lure—Ultra Minnow.

Second Prize

Caught by Arthur Lowe, New Haven, Conn.
Weight—6 lbs. 8 oz.
Length—23 in.
Girth—16 in.
Caught—April 18.
Where—West Pond, Conn.
Rod—Abbey and Imbrie.
Reel—Redifor.
Line—Kingfisher No. 6.
Lure—Heddon Expert.

Third Prize

Caught by N. D. Seldomridge Hinton, W. Va.
Weight—6 lbs.
Length—24 in.
Girth—16 in.
Caught—April 12.
Where—Greenbriar River.
Rod—Sampson steel.
Reel—Meisselbach.
Line—Cuttyhunk.
Lure—Heddon Dowagiac.

Fourth Prize

Caught by H. C. Long, Lexington, Ky.
Weight—5 lbs. 15½ oz.
Length—23½ in.
Girth—16½ in.
Caught—April 13.
Where—Lexington, Ky.
Rod—Split bamboo.
Reel—Bourne and Bond.
Line—Irish linen.
Lure—Pflueger Spinner.

Small Mouth Bass, Class B

First Prize

Caught by A. T. Gibbes, Columbia, S. C.
Weight—7 lbs. 2 oz.
Length—24¼ in.
Girth—15 in.
Caught—August 11.
Where—Crystal Lake.
Rod—Riverside steel.
Reel—Revonoc.
Line—Invincible.
Lure—Buel No. 1.

Second Prize

Caught by Gorman A. Bussard, Hagerstown, Md.

Weight—6 lbs. 4 oz.
Length—22½ in.
Girth—16 in.
Caught—July 18.
Where—Potomac River.
Rod—Heddon.
Reel—Shakespeare Perfect.
Line—Mills Standard.
Lure—Stone Cat.

Third Prize

Caught by C. F. Pascoe, Montreal, Canada.
Weight—5 lbs. 9 oz.
Length—21 in.
Girth—15½ in.
Caught—August 11.
Where—Brown Lake, Quebec.
Rod—Sampson steel.
Reel—Shakespeare level winder.
Line—Kingfisher.
Lure—Small frog.

Fourth Prize

Caught by W. C. Horton, Brattleboro, Vt.
Weight—5 lbs. 8 oz.
Length—22 in.
Girth—15½ in.
Caught—August 1.
Where—Sunset Lake, Vt.
Rod—Bristol.
Reel—Make unknown.
Line—Crimson Beauty.
Lure—Frog.

Small Mouth Bass, Class C

First Prize

Caught by Harry D. Sarver, Glens Falls, N. Y.
Weight—7¾ lbs.
Length—22 in.
Girth—18½ in.
Caught—Sept. 19.
Where—Crosseth Pond, N. Y.
Rod—Split bamboo.
Reel—Abbey and Imbrie.
Line—Enameled silk.
Lure—Live frog.

Second Prize

Caught by Dr. W. M. Pack, New York City.
Weight—6 lbs. 12 oz.
Length—22¾ in.
Girth—16½ in.
Caught—August 23.
Where—Brewster, N. Y.
Rod—Union Hdw. Co. steel.
Reel—Meisselbach.
Line—Kingfisher.
Lure—Double spinner.

Third Prize

Caught by L. F. Kunstman, Chicago, Ill.
Weight—6 lbs. 3 oz.
Length—23 in.
Girth—15 in.
Caught—Sept. 6.
Where—Lulu Lake, Wis.
Rod—Steel casting.
Reel—Meek.
Line—Kingfisher.
Lure—Home made minnow.

Fourth Prize

Caught by Howard P. Miller, Wyalusing, Pa.
Weight—6 lbs.
Length—23 in.
Girth—15½ in.
Caught—Sept. 25.
Where—Susquehanna River.
Rod—Home made bamboo.
Reel—Pflueger Buckeye.
Line—Kalamazoo Expert Casting.
Lure—Stone catfish.

Small Mouth Bass, Fly Class

First Prize

Caught by E. H. Coultas, New Bedford, Mass.
Weight—5 lbs. 8 oz.
Length—20¾ in.
Girth—16¼ in.
Caught—August 23.
Where—Lake Winnepesaukee, N. H.
Rod—Bristol.
Reel—Abbey and Imbrie.
Line—Kingfisher De Luxe.
Lure—Red Ibis Fly.

Second Prize

Caught by H. B. Christian, Neversink, N. Y.
Weight—4¾ lbs.
Length—22½ in.
Girth—12 in.
Caught—July 14.
Where—Sheldrake Lake, N. Y.
Rod—Mills Standard.
Reel—Featherlight.
Line—Intrinsic.
Lure—Fly.

Small Mouth Bass

Juvenile Prize

Caught by Herbert S. Chamberlin, Washington, D. C.
Weight—5 lbs. 8 oz.
Length—22¾ in.
Girth—13¾ in.
Caught—Sept. 9.
Where—Goose Creek, Va.
Rod—Bamboo.
Reel—Fly reel.
Line—Saline enamel.
Lure—Mad Tom.

Small Mouth Bass

Grand Prize

Caught by J. M. Cantey, Columbia, S. C.
Weight—8 lbs.
Length—27 in.
Girth—18 in.
Caught—April 30.
Where—Crystal Lake, S. C.
Rod—Riverside steel.
Reel—Expert Casting.
Line—Gold Seal.
Lure—Ultra Minnow.

Large Mouth Bass, Northern Division, Class A

First Prize

Caught by Harvey F. Fisher, Portland, Oregon.
Weight—10½ lbs.
Length—23 in.
Girth—20½ in.
Caught—July 13.
Where—Columbia Slough, Oregon.
Rod—8 ounce.
Reel—Hendricks.
Line—Kingfisher.
Lure—Luminous tandem spinner.

Second Prize

Caught by H. B. Christian, Neversink, N. Y.
Weight—8 5-16 lbs.
Length—18¼ in.
Caught—July 14.
Where—Sheldrake Lake, N. Y.
Rod—Mills Standard.
Reel—Featherlight.
Line—Intrinsic.
Lure—Fly.

Third Prize

Caught by Hi Henry, Spokane, Wash.
Weight—8¼ lbs.
Length—23 in.
Girth—18½ in.
Caught—April 19.
Where—Hayden Lake, Idaho.
Rod—Montague City.
Reel—Shakespeare Level Winding.
Line—Gladding Invincible.
Lure—Live Minnow.

Fourth Prize

Caught by H. B. Christian, Neversink, N. Y.
Weight—7 lbs. 15 oz.
Length—24 in.
Girth—17 in.
Caught—June 28.
Where—Sheldrake Lake, N. Y.
Rod—Mills Standard.
Reel—Featherlight.
Line—Intrinsic.
Lure—Fly.

Large Mouth Bass, Northern Division, Class B

First Prize

Caught by Albert White, New York City.
Weight—7¾ lbs.
Length—23 in.
Girth—18 in.
Caught—July 31.
Where—Rye Lake, N. Y.
Rod—Sampson Steel.
Reel—Takapart.
Line—Robert Ogilvy.
Lure—Decker plug.

Second Prize

Caught by George Kreeger, Sheridan, Mich.
Weight—7 lbs. 10 oz.
Length—23¾ in.
Girth—17½ in.
Caught—August 1.
Where—Sheridan, Mich.
Rod—Sampson steel.
Reel—Rushmore.
Line—Kingfisher.
Lure—Shakespeare Float.

Third Prize

Caught by E. E. Mirick, Worcester, Mass.
Weight—7 lbs. 9 oz.
Length—22 in.
Girth—17½ in.
Caught—July 26.
Where — Cranberry Meadow Pond, Mass.
Rod—Home-made.
Reel—South Bend Anti Back Lash.
Lure—Heddon No. 150.

Fourth Prize

Caught by C. D. Chisholm, Chippewa Falls, Wis.
Weight—7½ lbs.
Length—23¼ in.
Girth—17½ in.
Caught—July 27.
Where—Lake Hallie, Wis.
Rod—Heddon.
Reel—Takapart.
Line—Invincible.
Lure—Heddon No. 1,600.

Large Mouth Bass, Northern Division, Class C

First Prize

Caught by A. F. Bryan, Stevens Point, Wis.
Weight—8¾ lbs.
Length—24 in.
Girth—19 in.
Caught—September 4.
Where—Buck Lake, Wis.
Rod—Triumph steel.
Reel—Monarch.
Line—Kingfisher silk.
Lure—Rush's Tango Minnow.

Second Prize

Caught by Lewis N. Thorne, East Orange, N. J.
Weight—8 lbs. 6 oz.
Length—26¼ in.
Girth—19 in.
Caught—September 29.
Where—Estling Lake, N. J.
Rod—Abbey and Imbrie.
Reel—Reditor.
Line—Kingfisher.
Lure—Frog.

Third Prize

Caught by Robert T. Ives, Philadelphia, Pa.
Weight—8 lbs. 4 oz.
Length—24½ in.
Girth—17¼ in.
Caught—August 25.
Where—Blackwood, N. J.
Rod—Heddon.
Reel—Shakespeare.
Line—Kingfisher Special.
Lure—Moonlight No. 1 Bait.

Fourth Prize

Caught by Nat. J. Kline, North Webster, Indiana.
Weight—8¼ lbs.
Length—24 in.
Girth—18 in.
Caught—August 31.
Where—Webster Lake, Indiana.
Rod—Bristol.
Reel—Shakespeare.
Line—Silk.
Lure—Wilson Winged Wobbler.

Large Mouth Bass, Northern Division, Ladies' Prize

Caught by Mrs. Robert T. Ives, Philadelphia, Pa.
Weight—5 lbs. 8 oz.
Length—21½ in.
Girth—14½ in.
Caught—August 11.
Where—Union Lake, N. J.
Rod—Heddon.
Reel—Shakespeare.
Line—Abbey and Imbrie Lake Shore.
Lure—Chippewa Skipper.

Large Mouth Bass, Northern Division, Grand Prize

Caught by S. Lyndon Chase, Madison, Wis.
Weight—3 lbs. 14 oz.
Length—18⅛ in.
Girth—13⅜ in.
Caught—August 8.
Where—Madison, Wis.
Rod—Vom Hoff.
Reel—Vom Hoff.
Line—VonLengerke and Antoine.
Lure—Grizzly King.

Large Mouth Bass, Northern Division, Grand Prize

Caught by Harvey F. Fisher, Portland, Oregon.
Weight—10½ lbs.
Length—23 in.
Girth—20½ in.
Caught—July 13.
Where—Columbia Slough, Oregon.
Rod—8 ounce.
Reel—Hendricks.
Line—Kingfisher.
Lure—Luminous Tandem Spinner.

Large Mouth Bass, Southern Division, Class A

First Prize

Caught by J. Morton Clark, Liberty, Indiana.
Weight—14 lbs. 12 oz.
Length—29 in.
Girth—23¼ in.
Caught—April 11.
Where—Mascotte, Fla.
Rod—H. M. Hunt, split bamboo.
Reel—Shakespeare Marhoff.
Line—Kingfisher.
Lure—Heddon Silver Minnow.

Second Prize

Caught by Davis Moon, Dunnellon, Fla.
Weight—14¼ lbs.
Length—29½ in.
Girth—23½ in.
Caught—February 15.
Where—Bear Hammock Lake, Fla.
Rod—Bristol.
Reel—K. K. Special.
Line—Abbey and Imbrie, Lakeshore.
Lure—Heddon Dowagiac Minnow.

Third Prize

Caught by J. F. Mayer, Eustis, Fla.
Weight—13½ lbs.
Length—28 in.
Girth—22 in.
Caught—February 27.
Where—Beachman Lake, Fla.
Rod—Home-made.
Reel—Vom Hofe.
Line—Cuttyhunk.
Lure—Live Minnow.

Fourth Prize

Caught by W. E. Gray, Ocala, Fla.
Weight—13 lbs.
Length—26½ lbs.
Girth—20½ in.
Caught—February 17.
Where—Orange Lake, Fla.
Rod—Imperial.
Reel—Tripart.
Line—Abbey and Imbrie.
Lure—Heddon Dowagiac Minnow.

Large Mouth Bass, Va., W. Va., Md,. Del. Division

Caught by E. R. Lafferty, Richmond, Va.
Weight—9 lbs.
Length—24 in.
Girth—17½ in.
Caught—August 22.
Where—Mirror Lake, Va.
Rod—Heddon No. 10.
Reel—Meisselbach Free-spool.
Line—Kingfisher.
Lure—Heddon Bluehead Minnow.

Second Prize

Caught by George C. Schuler, Wilmington, Del.
Weight—8 lbs. 2 oz.
Length—23½ in.
Girth—18¼ in.
Caught—July 4.
Where—McDonough, Del.
Rod—Barret, Lancewood.
Reel—Expert.
Line—Irish Linen.
Lure—Heddon Dowagiac Minnow.

Third Prize

Caught by W. B. Catlett, Richmond, Va.
Weight—8 lbs.
Length—25 in.
Girth—17¼ in.
Caught—July 10.
Where—Sweet Hall, Va.
Rod—Heddon.
Reel — Shakespeare Level Winder.
Line—Classic.
Lure — Dowagiac Speckled Floater.

Fourth Prize

Caught by Herbert Firth, Wilmington, Del.
Weight—7 lbs. 13 oz.
Length—22½ in.
Girth—15½ in.
Caught—July 10.
Where—C. D. Canal Lakes.
Rod—Lancewood.
Reel—Shakespeare.
Line—Cuttyhunk No. 9.
Lure—White Dowagiac Minnow.

Great Northern Pike
First Prize

Caught by W. A. Flinn, Greenwich, Conn.
Weight—32 lbs. 1 oz.
Length—49 in.
Girth—19 in.
Caught—September 23.
Where—Green Lake, Quebec.
Rod—Bristol Telescope.
Reel—Abercrombie and Fitch.
Line—Abercrombie and Fitch.
Lure—Corbatt Spoon.

Second Prize

Caught by Lieut. J. D. Benes, Chicago, Ill.
Weight—25 lbs.
Length—50 in.
Girth—16 in.
Caught—July 8.
Where—Koontz Lake, Indiana.
Rod—Home-made.
Reel—Tripart.
Line—Kingfisher.
Lure—Dowagiac Minnow.

Third Prize

Caught by William A. Klatte, Chicago, Ill.
Weight—24¾ lbs.
Length—46 in.
Girth—20 in.
Caught—September 2.
Where—Lake Buckatobon, Wis.
Rod—Von Lengerke and Antoine.
Reel—Von Lengerke and Antoine.
Line—Kingfisher.
Lure—Jamison Spoon and pork rind.

Fourth Prize

Caught by Dr. William P. Abbott, Duluth, Minn.
Weight—23 lbs.
Length—47¼ in.
Girth—18 in.
Caught—August 23.
Where—Grand Lake.
Rod—Rainbow steel.
Reel—Vom Hofe.
Line—David Harum.
Lure—Spinner and frog.

Muscallonge
First Prize

Caught by Karl Baackes, Chicago, Ill.

TOUGH and trail-proof as a moosehide moccasin—and much easier on "civilized feet." Heavy enough to stand the stab of snags and the rasp of rocky roads—but not stiff enough to chafe or tire you. Water shedding, too—in Cutter Boots properly cared for, you can slosh all day through swamp or snow, yet come to camp dry footed. What more can you ask of footgear, you who hunt or hike, heeding the Red Gods' call?

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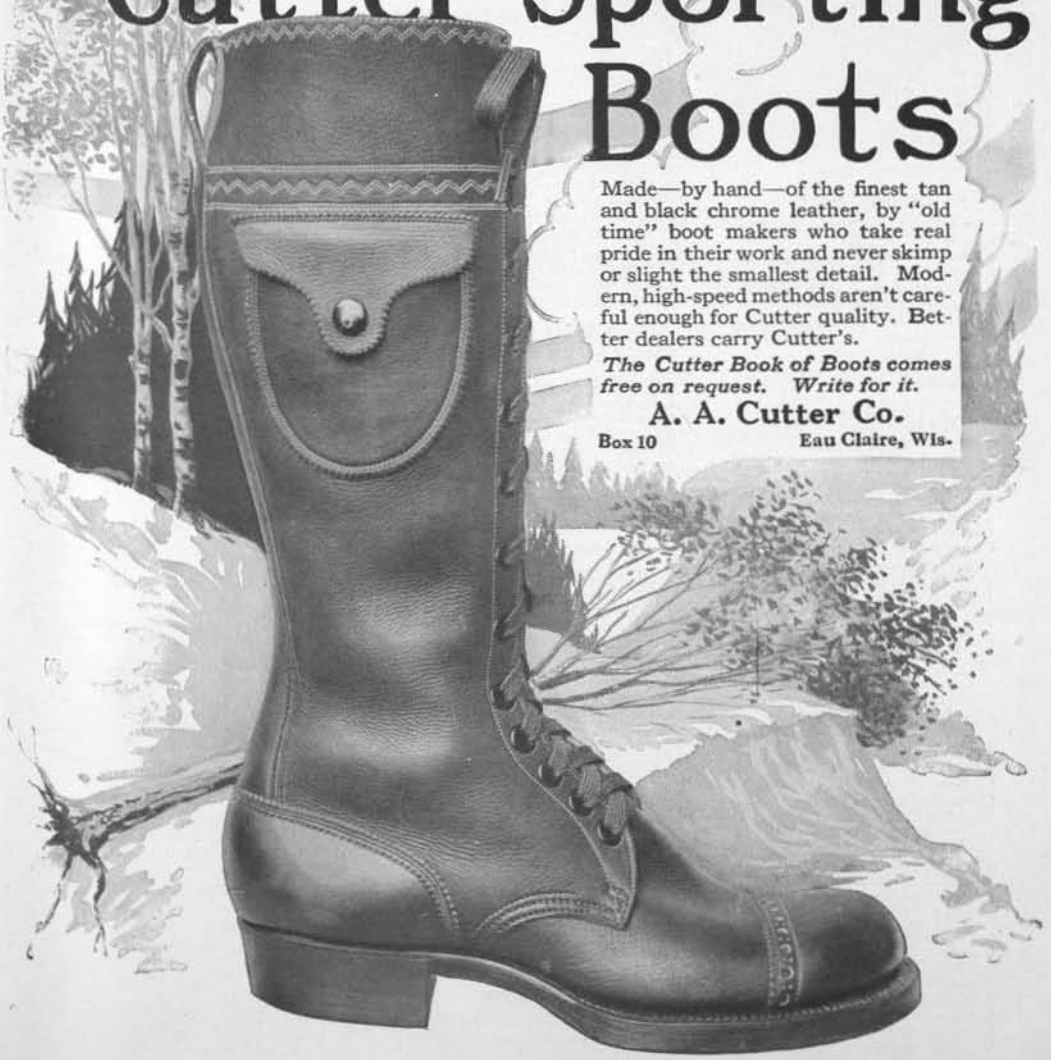

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Box 10 **Eau Claire, Wis.**

Weight—48 lbs.
Length—47 in.
Girth—22 in.
Caught—June 7.
Where—Lake Content, Wis.
Rod—Bristol.
Reel—Von Lengerke and Antoine.
Line—Kingfisher.
Lure—Skinner spoon.

Second Prize

Caught by John C. F. Ricklefs, Chicago, Ill.
Weight—44¾ lbs.
Length—51¼ in.
Girth—25½ in.
Caught—August 14.
Where caught—Boulder Junction, Wis.
Rod—Bristol.
Reel—Blue Grass.
Line—Invincible.
Lure—Live bait.

Third Prize

Caught by Dr. A. H. Peck, Chicago, Ill.
Weight—41 lbs.
Length—49¾ in.
Girth—24⅞ in.
Caught—September 6.
Where—Lac Vieux Desert, Wis.
Rod—Bristol.
Reel—Pennell.
Line—Kingfisher.
Lure—Skinner Spoon.

Fourth Prize

Caught by William A. Ralyea, Buffalo, N. Y.
Weight—40 lbs.
Length—48 in.
Girth—24⅛ in.
Caught—August 21.
Where—Lake Nipissing.
Rod—Bristol.
Reel—Shakespeare.
Line—Otselic No. 18.
Lure—Star bait.

WALL-EYED PIKE

First Prize

Caught by C. W. Kelly, Chicago, Ill.
Weight—14 lbs. 8 oz.
Length—29½ in.
Girth—19¾ in.
Caught—September 28.
Where—Papoose Lake, Wis.
Rod—Split bamboo.
Reel—Von Lengerke and Antoine Expert.
Line—Black Warrior.
Lure—Hildebrandt Spinner and minnow.

Second Prize

Caught by S. W. Pollock, Hinton, W. Va.
Weight—11¾ lbs.
Length—31 in.
Girth—17 in.
Caught—September 3.
Where—Greenbrier River, W. Va.
Rod—Bristol.
Reel—Meisselbach.
Line—Whirlpool.
Lure—Heddon Minnow No. 151.

Third Prize

Caught by W. H. Lawrence, Chicago, Ill.
Weight—11½ in.
Length—34 in.
Girth—21 in.
Caught—September 23.
Where—Kilbourn, Wis.
Rod—Valley.
Reel—Shakespeare.
Line—Kingfisher.
Lure—Heddon Dowagiac.

Fourth Prize

Caught by George Ault, Chicago, Ill.
Weight—10 lbs. 4 oz.
Length—32 in.
Girth—17 in.
Caught—June 2.
Where—Big Twin Lake, Wis.
Rod—Bristol.
Reel—Hendryx.
Line—Kingfisher.
Lure—Peper spoon and live minnow.

BLUEFISH

First Prize

Caught by R. C. Graham, Newark, N. J.
Weight—13 lbs.
Length—34 in.
Girth—17 in.
Caught—July 6.
Where—Manasquan Inlet, N. J.
Rod—Home-made.
Reel—Atlantic.
Line—15-thread Cuttyhunk.
Lure—Squid Bait.

Second Prize

Caught by B. C. Fincke, Short Hills, N. J.
Weight—10 lbs. 13 oz.
Length—34 in.
Girth—16¾ in.
Caught—July 11.
Where—Highlands, N. J.
Rod—Abbey and Imbrie.
Reel—Meisselbach.
Line—Abbey and Imbrie.
Lure—Moss bunker.

Third Prize

Caught by Frank C. Speck, Auburn, R. I.
Weight—9½ lbs.
Length—30½ in.
Girth—16½ in.
Caught—July 24.
Where—Narragansett Bay, R. I.
Rod—Frost and Co.
Reel—Vom Hofe.
Line—Kingfisher.
Lure—Live bait.

Fourth Prize

Caught by Harry C. Esrey, Ventnor City, N. J.
Weight—9 lbs. 1 oz.
Length—32½ in.
Girth—16½ in.
Caught—July 8.
Where—Margate City, N. J.
Rod—Lancewood.
Reel—Atlantic.
Line—12-thread Ashaway.
Lure—Butterfish.

WEAKFISH

First Prize

Caught by F. W. Townsend, Providence, R. I.
Weight—11¾ lbs.
Length—34 in.
Girth—16½ in.
Caught—September 4.
Where—Narragansett Bay, R. I.
Rod—Split bamboo.
Reel—200 yard.
Line—Cuttyhunk.
Lure—Live shrimp.

Second Prize

Caught by Frank C. Speck, Auburn, R. I.
Weight—11½ lbs.
Length—24½ in.
Girth—17 in.
Caught—August 21.
Where—Narragansett Bay, R. I.
Rod—Frost and Co. 5½ oz.
Reel—Vom Hofe.
Line—Kingfisher, 9 thread.
Lure—Live bait.

Third Prize

Caught by John Fletcher, Great Kills Staten Island.
Weight—11 lbs.
Length—37 in.
Girth—17 in.
Caught—August 12.
Where—Sandy Hook, N. J.
Rod—New York Sporting Goods Co.
Reel—Julius Vom Hofe.
Line—New York Sporting Goods Co.
Lure—Shedder crab and blood 33—F & S worm.

Fourth Prize

Caught by Frank C. Speck, Auburn, R. I.
Weight—10 lbs. 14 oz.
Length—34 in.
Girth—17 in.
Caught—August 15.
Where—Narragansett Bay, R. I.
Rod—Frost and Co. 5½ oz.
Reel—Vom Hofe.
Line—Kingfisher 9 thread.
Lure—Live bait.

WEAKFISH

Light Tackle Prize

Caught by Frank C. Speck, Auburn, R. I.
Weight—11½ lbs.
Length—34½ in.
Girth—17 in.
Caught—August 21.
Where—Narragansett Bay, R. I.
Rod—Frost and Co. 5½ oz.
Reel—Vom Hofe.
Line—Kingfisher 9 thread.
Lure—Live Bait.

STRIPED BASS

First Prize

Caught by William H. Hand, Jr., New Bedford, Mass.
Weight—55 lbs. 2 oz.
Length—51½ in.
Girth—30 in.
Caught—August 11.
Where—Cuttyhunk, Mass.
Rod—Hand-made.
Reel—Vom Hofe.
Line—Abercrombie and Fitch, 21 thread.
Lure—Live eel.

Second Prize

Caught by C. B. Church, Cuttyhunk, Mass.
Weight—50 lbs.
Length—50½ in.
Girth—30 in.
Caught—September 4.
Where—Vineyard Sound, Mass.
Rod—Abbey and Imbrie.
Reel—Abbey and Imbrie.
Line—Hall 15 thread.
Lure—Live eel.

Third Prize

Caught by Edward M. Slocum, New Bedford, Mass.
Weight—47 lbs. 2 oz.
Length—49¾ in.
Girth—31⅛ in.
Caught—August 28.
Where—Vineyard Sound, Mass.
Rod—Home-made bamboo.
Reel—Edward Vom Hofe.

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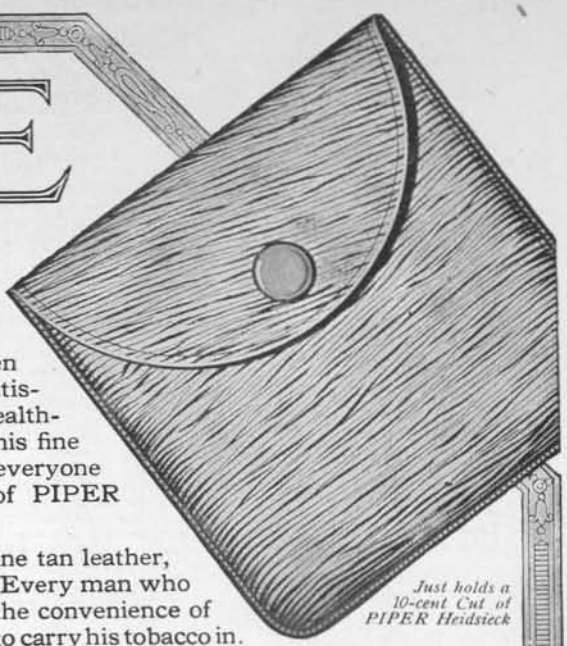

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THE AMERICAN TOBACCO COMPANY
Room 1169, 484 Broome Street - New York City

Line—Thos. J. Conroy, 18 thread.
Lure—Live eel.

Fourth Prize

Caught by C. B. Church, Cuttyhunk, Mass.
Weight—44 lbs.
Length—50½ in.
Girth—27 in.
Caught—August 31.
Where—Vineyard Sound, Mass.
Rod—Abbey and Imbrie.
Reel—Abbey and mbrie.
Line—Hall 15 thread.
Lure—Live eel.

STRIPED BASS

Ladies' Prize

Caught by Mrs. B. J. Davis, Long Branch, N. J.
Weight—33 lbs.
Length—43½ in.
Girth—25 in.
Caught—June 27.
Where—Elberon, N. J.
Rod—J. H. Wortman.
Reel—Edward Vom Hofe.
Line—Armstrong No. 15.
Lure—Squid bait.

Channel Bass

First Prize

Caught by Theodore F. Everett, Manasquan, N. J.
Weight—61¼ lbs.
Length—54 in.
Girth—35¾ in.
Caught—October 8.
Where—Barnegat Inlet, N. J.
Rod—Greenheart.
Reel—Meisselbach.
Line—Armstrong.
Lure—Mullet.

Second Prize

Caught by J. Maxwell Bullock, Philadelphia, Pa.
Weight—55½ lbs.
Length—49½ in.
Girth—29 in.
Caught—July 5.
Where—Corson's Inlet, N. J.
Rod—Landman split bamboo.
Reel—Julius Vom Hofe.
Line—Ashaway 15 thread.
Lure—Menhaden.

Third Prize

Caught by S. J. Held, Philadelphia, Pa.
Weight—49 lbs.
Length—48 in.
Girth—29 in.
Caught—July 2.
Where—Brigantine Beach, N. J.
Rod—Split bamboo.
Reel—Edward Vom Hofe.
Lure—Shedder crab.

Fourth Prize

Caught by Robert W. Tunis, Philadelphia, Pa.
Weight—47½ lbs.
Length—47 in.
Girth—29 in.
Caught—September 6.
Where—Barnegat Light, N. J.
Rod—Gerhart.
Reel—Mermaid.
Line—28 lb. test.
Lure—Shedder crab.

DEFINITE PREPARATIONS

Ladd Plumley

For the fisherman, winter should not be a hibernating time of vacuous rest. Rather it should be the period of preparation for the coming of the next season's pleasures.

Preparation of tackle and duffle is all right and necessary, but these are but a portion of the things which should have our thoughtful care. And there is no part of the preparatory doings for a fishing trip more important than the obtaining of the most complete and exact information, and in all possible detail, regarding the place of the campaign against the game.

Once an angler foolishly arranged a trip without taking the precaution of seeking the latest information concerning the longed-for woodsy paradise. True, he had read a book which told moss-grown and ancient legends of the mighty fish of those famous waters and of the delectable, far-reaching and primeval forests.

Think of the lover of classics attempting to discover the city of Troy in all its pristine glory, or of Daniel Boone's eyes resting upon the present environs of Cincinnati, which he had been told was a good bear-hunting locality. "Like that only a sight worser," as replied the Canadian stage driver, when asked if there were any fleas in Cape Breton. For when the credulous angler and his friend stepped to a platform at a station on the Rangeley Lakes and asked advice of a man who had lived in the region from infancy, this was what was chucked 'em:

"Folks don't hit th' river nowadays, not from this side. When I was shin-high to a moose, they did. Anyhow, there ain't a mite of use goin' way in there for trout. Plenty of pickerel but no trout. Besides, a big lumber company has cut th' whole darn face off them mountains and built a million dollar dam which piles back the river for miles and miles, and yet more miles. Once they cotched all-fired big square-tails where nowadays you'll find nothin' but lumber chutes and saw mills.

"Why in Sam hill," he added, "you fellers should have come way up here, without looking into things, is about as much of a strangeness as if I should go down to N'York, expectin' to find it th' same 'twas when Paw took his weddin' trip with Maw!"

Long before the season opens up get into correspondence with the guide you propose to engage. Have him write you concerning the sport of the last season; tell him to give you the names of the sportsmen who then employed him. Then call on these sportsmen or write to them, and thus obtain every scrap of available information. Or if you are thinking of a fishing outing at a boarding house or farm near a trout stream, which you know little about, spare not letter-paper, ink and postage until you know as much as can be dug up.

Postmasters in rural districts are generally fishermen, and if supplied with addressed and stamped envelopes, will aid you a lot against a proposed trip to unknown waters. The same can be said of station agents, as it can be said of most hotel keepers and country doctors. If you get busy in a practical way you will be amazed with the information that you will obtain. And many of the big tackle houses have salesmen who will gladly answer questions.

Do not consider your proposed trip as really definitely arranged until you have gained almost a creelful of exact data.

It is a century-worn tale, but it has its lesson. Asked an old gentleman, who had been fishing vainly for a half day beside a pool in a meadow, "Son, is there good fishing here?"

"Th' fishin' is good," replied the boy. "But th' fish must be powerful little, 'cause there wasn't no water here before last night's rain."

BEST BASS AND PICKEREL BAIT

FIELD & STREAM PUB. CO.:

Kindly answer in your next issue what is the best bass and pickerel bait. I understand from a guide that the larvae of the dragon-fly is the best ever. What do you think about it?

OTTO HORNICH.

Ans.—It depends on the water and kind of fishing. Helgrammites, as the larvae of the dragon-fly are called, are excellent for bait fishing for bass in 6 to 10 feet of water. Casting for them with bait casting-rod and red fly with pork minnow is good sport, and if bass are small and easily frightened, fly-fishing with standard bass flies will take them when the larger lures will not.—ED.

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If you are at a loss as to what sort of tackle is necessary for trout, bass, salmon, muscallonge, tarpon, tuna, surf or other kind of fishing, write our INFORMATION BUREAU. Are you undecided as to what calibre rifle or bore of shotgun is best suited to your needs, write us. Are you having trouble with your dog? Do you want to visit some certain section of country this year on your vacation, a section which is entirely new to you? We will gladly answer all such questions. We have a fine INFORMATION BUREAU in connection with our SPORTING AND VACATION PLACES BUREAU which is always at your service. Just drop us a line stating your troubles and we will answer by the next mail.

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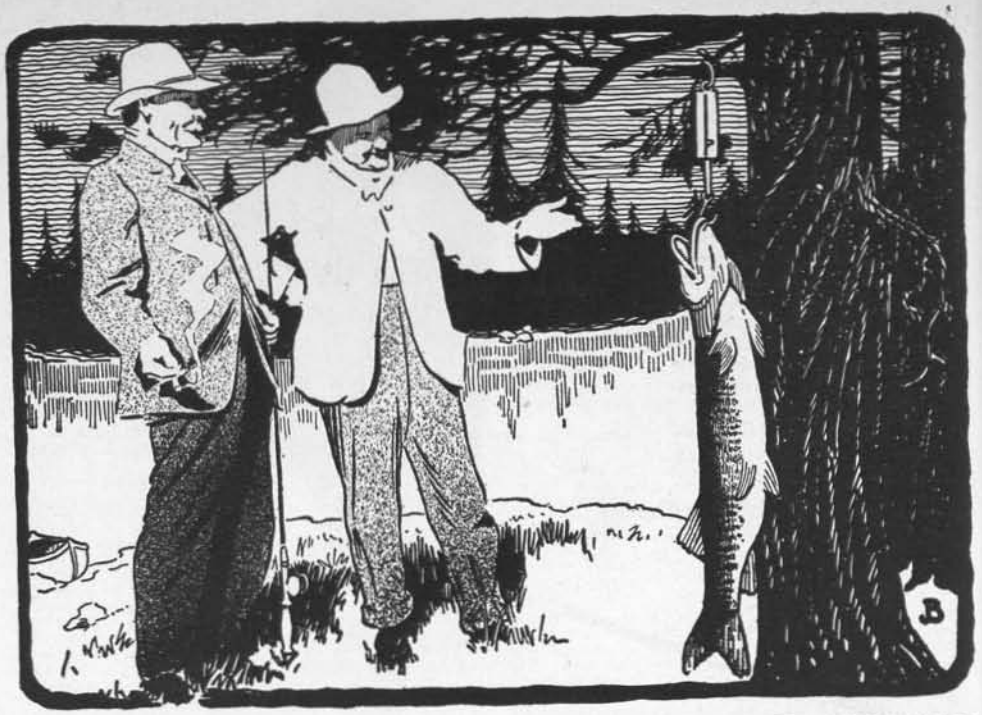

Field&Stream PRIZE FISHING CONTEST

MY HOUSTON RIVER TARPON

By W. Ashby Jones

Winner First Prize Tarpon, 1914 Contest

My first glimpse of the big tarpon was in the early part of the Spring of 1913 while cruising down the west coast of Florida. One night we dropped anchor at Chatman Bend, where, about a week before, I had caught the record tarpon for 1913. I had noticed that there was a river about a mile north of where we were anchored and decided to explore it. Bright and early the next morning we started, Tillet, my guide and myself, in my fishing launch. Soon after entering the river, I noticed two small bays on the left which looked like good places for tarpon. The engine was stopped and Tillet poled in, in order not to frighten the fish. In the first bay we did not see anything, but the second bay was alive with tarpon—hundreds of them. Rods were gotten out and lines cast; we expected every minute to have a strike. The fish were rolling all around us—we could nearly put our hands on them—but we did not get a single bite. After about an hour of fruitless casting I looked towards the head of the bay and saw a tarpon which looked to be all of eight feet long. We started after him and followed him all over the bay. Time and time again he swam right over the bait but would not touch it.

The tide then started to ebb and all the tarpon left the bay, dropping down into the river. The bays were so shallow that they were nearly dry at low water. Tarpon go into these shallow bays on the flood tide and leave just as soon as the tide starts ebbing.

Tillet and myself returned to the houseboat and I informed my wife of the size of the monster, and she decided to have a try for him. After the flood tide had started in good, we each took a boat and a guide and started after the big fish; I was ahead and made for the bay where I had seen him that morning; he was there all right, but it was impossible to get him to bite. My wife had stopped and anchored just where the bay joins the river. Just before sunset I saw the big fellow roll near my wife's boat and called to her to look out. In about a minute I saw that she had a run and a few seconds afterwards saw the monster go into the air. He had taken the bait but failed to hook. That was the last seen of the tarpon, and the next day we started for Fort Myers.

In 1914 I arrived at Fort Myers February 1st, but did not start fishing until the latter part of March. On April the 1st we started on a two weeks' cruise down the coast on our houseboat *Suitsme*, expecting to go as far south as Shark River and work back. Just as we were passing Chuckoluskee I noticed a houseboat anchored, so we ran in pretty close. Tillet and I boarded the fishing launch and ran alongside and found that the houseboat was owned by a friend of mine and that he was aboard. "Have you had any luck?" I asked. "Why," he said, "I caught the record-breaker yesterday—over seven feet long." When asked why he was not fishing that day he replied that the fish were all gone. I invited him to get under way and we would show him lots of fish. He declined and we returned to our houseboat and started on our way.

Tillet kept repeating, "Seven-foot fish is hard to beat." At last he said, "Mr. Jones, let's stop at Chatham Bend and see if that big tarpon that Mrs. Jones jumped last year is still there. If he is and we can land him we will have the seven-foot fish beat a mile."

I had been thinking about that fish for twelve months past and was perfectly willing to stop and have another try at him. So we anchored in Chatham Bend about four o'clock in the afternoon. A few minutes later we started in the launch for the bays where we had seen the big tarpon in 1913. It was high tide. Tillet poled through the first bay without seeing anything. When we entered the second bay we stopped and surveyed the surroundings and

Prize Fish

1. 5 lb. Small-Mouth Black Bass caught on a "BRISTOL" Rod at Laurel Lake, Pa., by Benj. H. Dittrich, of Honesdale, Pa.
2. Lake Fly Fishing with a "BRISTOL" when the Bass were running good.
3. 42½ lb. Salmon caught by A. E. Burgdoff. Won prize of "BRISTOL" Rod.
4. A big "un caught on a "BRISTOL" by our old friend "Jack."
5. Bull Trout too big for the basket. Caught with a "BRISTOL" Rod on Watches River by Volney Taft of No. Yakima, Wash.
6. 34 lb. Lake Trout, 41 inches long, 25-inch girth, caught on a "BRISTOL" Rod at Chaffey's Lake, Ontario, by H. C. Austin.

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MR. JONES'S PRIZE TARPON

Tillet and I both saw him at the same time and each exclaimed, "There he is." Our three rods were out in a jiffy.

Mr. Tarpon just rolled and wallowed all over the bait, but "nary a nibble." He went out with the tide and we did not see him any more that day.

The next morning we got an early start and as we were crossing the bar in front of the river we ran into a large school of tarpon. They were as thick as bees and all large fish. We haited the hooks and soon had them overboard. Talk about hard luck, we jumped five beauties, all over six feet, but did not hook a single one. Tillet was nearly in tears and I was not much better. About one o'clock Mrs. Jones joined us and said that she would give a demonstration of how to catch tarpon. But her efforts after an hour were fruitless—and then Tillet said: "Let's go and try for that d—— fish in the cove." I agreed, but both of us were feeling blue when we stopped at the first bay. All of a sudden Tillet exclaimed, "Mr. Jones, did you see him; he is as big as a horse." We immediately stopped the boat and cast just ahead of where we had seen him rise. I know that bait had not been out two minutes when the line started and I knew he had taken it.

I let him have about ten yards and then struck. In an instant he was in the air. The hook stayed and the battle was on. The first run he made was clean across the bay. He never stopped until he struck his nose against the bank. There he lay quiet under the Mangoes. I expected every minute that he would foul the line in some of the roots and break it, but it was lucky, as no foul occurred.

Tillet was backing the launch and I was taking in the line. The tarpon lay quiet until we got within thirty yards of him when he started for the river. He wanted deep water and intended to have it. I did not intend that he should, and you ought to have seen that battle. He would get nearly to the river channel when I would stop him and pump him back to shallow water. He only made three clean leaps, but several times threw his head and shoulders out.

Soon after Mrs. Jones rowed up to watch the fight. "Why don't you kill him? What are you waiting for? Thought you would kill any tarpon in fifteen minutes," were the taunts she flung at Tillet and myself. My wife was jealous of our apparent success and I told Tillet not to pay any attention to her. At last we both got tired—the fish and I—and while the tarpon rested on his side and I on my back Tillet gaffed him.

"Hold him up, Tillet, and let me look at him," I said. "Nothing doin', Mr. Jones, it would take a derrick to lift this fish," replied Tillet. "He is a big one and don't you forget it."

When we reached the houseboat, we laid the tarpon out on the stern deck and the tape line showed that he was 7 feet 5 inches long, and about three inches of his tail worn off. The fish was a male and very poor.

Guess his age? I should say about one hundred years. I was using an E. Vom Hofe Greenheart rod, 14 oz. tip, short butt; a Silver King reel No. 4/0 made by J. Vom Hofe; 21-thread linen line; 10/0 still fishing hook; piano wire snood and half mullet bait. I used no drag on my reel, but did use two thumbstalls.

BRINGING HIM TO GAFF

This fish won for me a beautiful silver loving cup presented by the Tarpon Fishing Club of Fort Myers, for the largest tarpon taken in Florida for the season ending June 1, 1914.

Prize Contest Certificate Record
First Prize Tarpon, 1914 Prize Fishing Contest.

Length—7 ft. 5 in.
Caught—April 5, 1914.
Where caught—Houston River, Fla.
Rod—Vom Hofe.
Reel—Julius Vom Hofe.
Line—21-thread linen.
Lure—Mullet.

PHOTOGRAPHIC CONTEST

FIELD AND STREAM offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the others submitted. The prizes for next month will be: First Prize—Three years' subscription to FIELD AND STREAM. Second Prize—Two years' subscription to FIELD AND STREAM. Third Prize—One year's subscription to FIELD AND STREAM. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, FIELD AND STREAM, 331 Fourth Ave., New York City.

First Prize Photo. Made by Major R. R. Raymond. No. 3 Folding Pocket Kodak. Distance 20 feet. Time 1-100th second. Subject—White Tail Fawn.

Second Prize Photo. Made by Thomas Denny. 3-A Folding Pocket Kodak. Stop 63; 1-25th second. Subject—Blue Grouse.

Third Prize Photo. Made by F. M. Root. 4x5 Conley Camera. R. R. Lens. Stop 64; 2 seconds; shady woods. Subject—Woodcock.

SOME TITLES FOR NEXT MONTH

With Dog and Sledge in the Northern Forests;—In the Hunting Grounds of the Mic-Macs; — Spaniels for Sport;—Barracuta Fishing on the East Coast.

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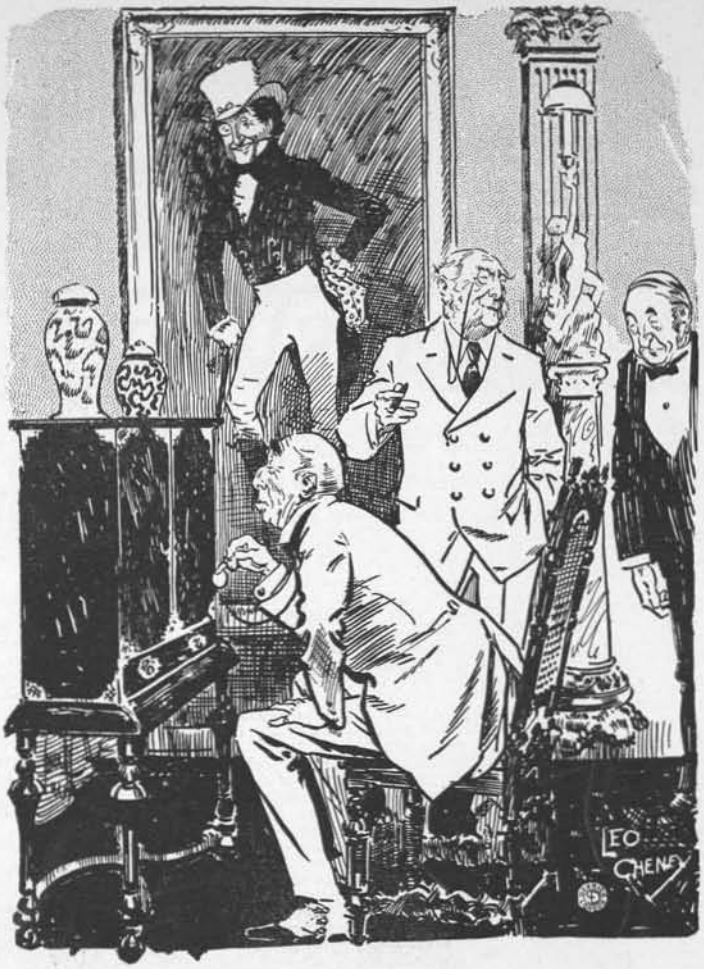

Visitor (critically examining an antique bureau): "THERE IS NO DENYING THE CHARM OF OLD THINGS WHEN THEY ARE GENUINE—SOME ONE SHOULD INVENT 'NON-REFILLABLE' ANTIQUE FURNITURE."

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SPORTSMAN'S WORKSHOP

LEATHER WORKING FOR THE OUT-O'-DOORSMAN

By Claude P. Fordyce

PART I

Tanning and Curing Methods

Leather working is an interesting bit of handicraft, and one can make many useful articles for himself from the product he has prepared as well as attaining skill in repair work which is a helpful vocation in any home.

In most cases we must rule out the procuring of hides as the profits of hunting or trapping, but at most any meat market one can get at a nominal price cowhides from beeves which are to be used as our food supply. Occasionally also one may get from other sources the skins of some of the smaller animals which he can tan with the fur on.

In curing a fresh, or as it is called a "green" hide, we must either dry it perfectly by stretching and tacking on to the side wall of a barn or shed out in the drying air, or by rubbing common salt into it well so as to take up all the moisture, for otherwise the hide would decay. Curing is mainly employed to temporarily preserve the skins until it is convenient to tan them.

In transforming green animal hides into leather certain chemicals are employed to combine with the fibers of the skin in such a way as to keep them from decaying or to make them soft, pliable and of good durability. As the hide comes from the butcher one side is covered with hair and the other side with some fat and shreds of muscle. To prepare it for the tanning solution the hair must be removed and the flesh side scraped well to remove every bit of flesh down to the skin itself.

A cured hide must be soaked in warm water for 24 hours or until it is just as soft as a green hide. First it is "fleshed" by stretching upon a wall and the flesh parts peeled off with a knife taking care not to cut through the hide at any place. Then if the hair is to be removed, the skin with the hair side up is thrown over a smooth-peeled log or rounded board and one end is tacked down. Seating yourself at one end you take a flat piece of metal with a square such as a flat file with one square edge filed smooth, and pressing it down hard on hair and hide and pushing it from you peel off the hair and thin skin covering in which the hair grows. This removes the surface of hair, the outer skin with its little grains, and hence this step in the preparation of the hide for tanning is called "graining." The fleshed and grained hide is now ready for the tanning solution.

Numerous successful tanning receipts are in use, some very simple and others requiring a number of chemicals to be put up by the druggist. We will consider only the simpler ones with the mention of one more complicated because of its excellence in producing a good leather. An empty water tight, wooden candy bucket, or an old barrel is the best receptacle for the solutions.

OIL TAN LEATHER SOLUTION

Shave a bar of common yellow laundry soap into a pail of hot water and dissolve. Now put in the fleshed and grained hide and keep it there until you can squeeze water through it which simple test shows that tanning is complete. Then remove it and wring it out as dry as you can and hang in the sun to dry. It can then be oiled with neatsfoot oil or old butter. Allow it to hang out for two days more, and then with a brush and warm soapsuds wash out all the oil that you can. Wring out and hang up to dry. Now it is pulled and rubbed while drying to break up the fibers, for if this is not done it will dry hard. The rubbing is hard work, but you should be persistent and you will be able to get the article as soft as a chamois skin.

This method produces a leather similar to the Indian tanned buckskin. If you do not like the oil in the leather you can smoke it by building a small wigwam out of bark and hang the skin up in it after the first drying and build a smudge or smoke of hardwood, being careful not to get too much heat.

CHROME TAN METHOD

This furnishes the lightest, most durable and waterproof leather or fur tan that we have, and it is a leather suitable to most all purposes, such as the making of moccasins, mittens, shoe laces, etc. Since the formula calls for a rather difficult list of chemicals it is advisable to have your druggist put up sufficient amount so it can be diluted, as follows:

Chrome alum crystals, 2½ pounds.

Sodium carbonate crystals, ½ pound.

Copperas crystals, ¼ ounce.

Common salt, ½ pound.

When you get this home mix it in a wooden bucket with one gallon of water. Now when you wish to tan a hide take one part of the above stock solution and twenty parts of water and immerse the green hide in it for half a day. Then wring out, and while it is drying work between the hands so it won't dry hard.

In tanning furs we must flesh the hide as above directed, but omit the graining process which would remove the hair. Furs for rugs or rabbit skin robes are prepared in this way:

FUR TAN PASTE

Take of common salt, ¼ pound. Alum, powdered, ¼ pound. Borax. 1 ounce.

Add just enough hot water to melt the above and then when cool add enough sawdust or corn meal to make a thick paste. Spread this thickly on the fleshed side of the hide. Fold the skins over to the middle where they meet, then roll from the head end toward the tail end into a compact roll. Put

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Don't hibernate. Don't be a bear. Start the New Year right. Get a gun and get out in the open. Fill your lungs full of the crisp healthy air. Develop your arm, your eye and your aim. Get your share of the sport of sports. Try your skill with the frisky clay pigeons. Begin

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in a cool place for a week, now and then unrolling and sprinkling it to keep it wet. Then scrape off the tan paste. If it is a thick skin reapply another coat of paste, roll up and leave for another week. Now scrape off the paste, clean and rub between the hands while it is drying to make it soft. This method does not waterproof the leather, so keep it in a dry place.

Since the preparation of shoe sole leather is very difficult and takes a long time no method will be given here. For shoe repair work procure piece of sole leather and other supplies from a shoemaker.

A NOVEL FISHING CABINET

FIELD & STREAM PUB. CO.:

I am sending you a photograph of my fishing cabinet which I fitted up myself.

This is a bookcase with all but the two bottom shelves taken out. I bought some green velvet and covered the bottom shelf and let the velvet hang down so as to hide the bottom. In one side of the bottom I keep hooks, old corks and other things which I do not want to show. On the other side I keep FIELD AND STREAM and other sporting magazines.

I fitted this cabinet with two racks. The top rack is cut out with a big saw to receive the rods, and the lower rack has holes bored in it the proper sizes for the rod butts.

CHARLES F. SPEORL.

THE OUTDOOR SCRAP BOOK

Compiling a Sportsman's Library

By H. A. Giddings

In every number of FIELD AND STREAM and similar magazines the reader finds articles upon certain subjects which he desires to preserve. A clever way of doing this and of compiling in time a complete sportsman's library is as shown.

Remove the staples from the magazine, take out the pages containing the articles which are to be preserved and throw away the rest. As nearly all magazines are of a standard size the pages may be bound together with very little trimming.

After a sufficient number of articles have accumulated they may be bound together at a nominal cost by any book-binder, with a fly leaf bearing a typewritten list of the contents. The writer calls such a collection of articles his "Outdoor Book." Those illustrated are bound in soft, brown leather, flexible covers. Another good way is to bind them in green cloth, stiff covers.

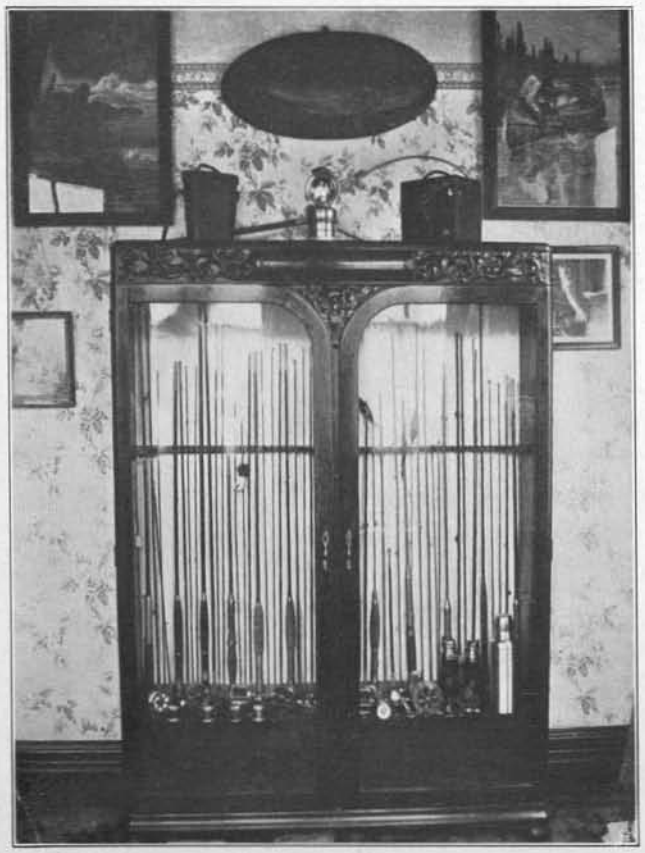
THE SCRAP BOOK

The contents of one of the volumes, illustrated, is as follows:

The North Woods Guide.
The Emergency Pouch.
Photographing for Results.
Hunting Togs.
Outfitting for Newfoundland Salmon.
Easier Eating in Camp.
The Camp-fire.
The Web Trail.
Pinch Packing.
The Small-bore Shotgun.
Shelter and Beds in the Winter Camp.
How Shotguns Shoot.
Using the Army Automatic.
Field Taxidermy.
Playing and Landing the Salmon.
On a Moc-and-Pac Footing.
Going Alone.
Over the Portage.
On Fishing the Salmon Pool.
First Aid in Camp.
Checking Stocks.
Your Kodak as a Big Game Camera.
Hunting Caribou at Thirty Below.
Trail Accessories.
The Happy Medium in Cameras.
The Chef on the Trail.
Squaw Wood.
Gathering Bait at Night.
Woodcraft Tips Worth Knowing.
Concentrated Foods.
Relaxing Your Bamboo Rod.
How to Hit Things with Your Rifle.
The Casual Cartridge Case.
War Bags.

Here and there on a part of a page or one side of a page is a part of some other article but in reading the book one ceases to notice it. After a number of these books have been compiled and bound the owner will have quite a complete sportsman's library containing articles by authorities on various subjects, which are thus preserved and may be referred to as occasion arises. Otherwise, they would become lost or a large quantity of old magazines would accumulate.

Short stories may be bound in the same manner, a library of selected short stories being in time accumulated.



MR. SPEORL'S BOOKCASE FISHING CABINET

Owing to the space taken up by the list of Prize Fishing Contest Winners we have been obliged to omit several articles from the Fish and Fishermen columns.

FEBRUARY 1916 PRICE 15 CENTS

FIELD AND STREAM

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HARD GOING—TWELVE DOGS AND ALL HANDS IN HARNESS

sunset, all hands must make the most of the short twilight minutes. Snowshoes are kicked off and used as shovels. A space only large enough to accommodate the members of the party when stretched at full length, side by side, is scooped out to a depth of three or four feet. Some of the men fell nearby trees, and a three-foot barricade is built to windward. While the others are scattered about the woods felling and gathering firewood, the guides carpet the interior of the camp with spruce boughs. Then, as the firewood comes in, they pile it in front of the shelter, crib fashion, the full length of the camp. For kindling, the top of a dead spruce cannot be beaten, and quickly the huge pile of resinous wood is lit, at both ends and in the middle. In a few minutes there is a roaring blaze, breast-high, that drives one back to the bottom of the camp. With his mittened hands he is forced to shield his frost-bitten face from the terrific heat, and yet, at the same time, his back, exposed to the north, is freezing. When a sufficient quantity of wood has been gathered for the night—and one must not neglect to include a supply for the breakfast fire—the drivers drop their axes and give a little attention to their dogs, now well cooled off and shivering in their harness. The wearied brutes are released from the laden toboggans and tied to convenient trees, out of reach of each other. Were they allowed to roam untethered there would be but little sleep for the traveler. The night would be one continual battle amongst the savage brutes, and when wolf blood surged uppermost tripper and guide might easily fall prey to the half-starved "huskies."

And so every team is provided with dog chains. A few spruce boughs are cut for each animal to lie upon. Some of the huskies disdain to make use of such luxuries, but stretch out in a snow burrow instead. Their thickly furred pelts prove adequate protection from the cold. And cold it was, that third night out on the Lonesome Trail. Raynor had both hands frozen through their being left exposed, and Morris' nose, if left unprotected for two minutes at a time, turned a ghastly white. For five days in succession it froze thus and then had assumed such glowing proportions as to contain sufficient heat to resist the frosty attacks.

For supper each of the famished dogs received his two pounds of fish—frozen hard as the ice on the river whence they were taken. Two of the drivers showed a little consideration for their teams by partially thawing out the food before the fire. But Old Jimmie, hoary-headed driver

of many huskies, threw the frozen fish to his team just as he took it off the sled.

"My dogs have good teeth," he explained. "Besides, dey have nothin' else to do now till the mornin' fire."

Whilst the camp was in course of construction we had stood nearby, knee-deep in the snow, shivering, and impatiently watching the operation. But now, the fire a-going, we crowded in before the blaze, and, after a few minutes of warming up, proceeded to get supper. The evening meal differed very little from those eaten during the day, but in deference to conventionalities we always termed it supper. Our bags were brought into the enclosure and the cook and his outfit were given first place. One man filled the big tin kettles with snow and set them on the fire. To escape a scorching, he handled them with a four-foot pole. A dozen bannocks were stuck up to thaw before the blaze, while the cook heaped up the frying-pan with a frozen mixture of baked pork and beans. The "bannock" takes the place of bread in the North, as the "sourdough" did in the West, and is simply flour and water mixed into a dough and baked in a frying-pan. Before taking the trail we had made ten dozen of these bannocks, and they had simply to be thawed out when they were ready to be eaten.

"Get busy, lads!" came the cook's cry. Each man turned from nursing blistered feet or tortured limbs to receive a bowl of steaming beans. With this, and a bannock apiece, we reseated ourselves on the bags and proceeded to "get busy." The tea pail coming to the boil, a handful of leaves were thrown in, and, after being put back on the fire for a few minutes, was set in our midst on the boughs. The mugs and the sugar bag were then produced. While the tea is yet too hot to be drunk the hand holding the mug must be kept in a deer-skin mitten to protect it from the cold. This may seem incredible—many stories of that clime do until one is "up against them."

But then what feasting! The beans are well mixed with cinders, the tea has a strong flavor of spruce, and the half-thawed bannocks have each a "bone" in them yet. But what of it? We had appetites and digestions to match the fare; and besides—we were one day nearer home.

While thus busily engaged, our Cree friends, drivers and guides, proceeded with similar operations. They occupied both ends of the shelter, while we took up the middle. To judge by the sounds

BREAKING AWAY FOR THE MORNING'S START

of crunching and gnawing that came from many directions outside of the camp, our canine companions were likewise engaged, ravenously struggling with the Hayes River whitefish.

As each man cleaned out bowl and mug he tossed it back to the cook, who buried them in turn in the depths of his bag of mysteries.

Then the never-failing pipe was produced, thawed out, filled, and lit with a brand from the fire. Never did tobacco taste as did that first after-supper pipeful, as, stretched out on the boughs, we inhaled its soothing fragrance. Morris was not a smoker and there was mingled envy and longing in his tone as he glanced from face to face and remarked:

"A pipe is sure some pain-killer."

At this juncture there was not a man of the party but was ready and willing to roll up in his eiderdown and forget the morrow's trials and labors. But a most necessary duty had yet to be performed before the welcome warmth of the blankets could be ours. All footgear must be changed and clothing thoroughly dried. One of the most essential requisites of the "musher" in that freezing clime is dry clothing, and especially so on the feet.

"Ye best look well after your feet," cautioned Old Jimmie on the first night out. "Them is the only things that'll carry ye t'roo." And not many days later "feet" became a very painful subject to all of us. Fresh fuel was thrown on the fire and long poles were stuck into the snowbanks, reaching their lengths well out over the blaze. On these mittens, moccasins, socks and duffles were hung, and carefully watched throughout the drying process to prevent their scorching and subsequent loss.

"BILIN' TH' KITTLE" AT NOONDAY

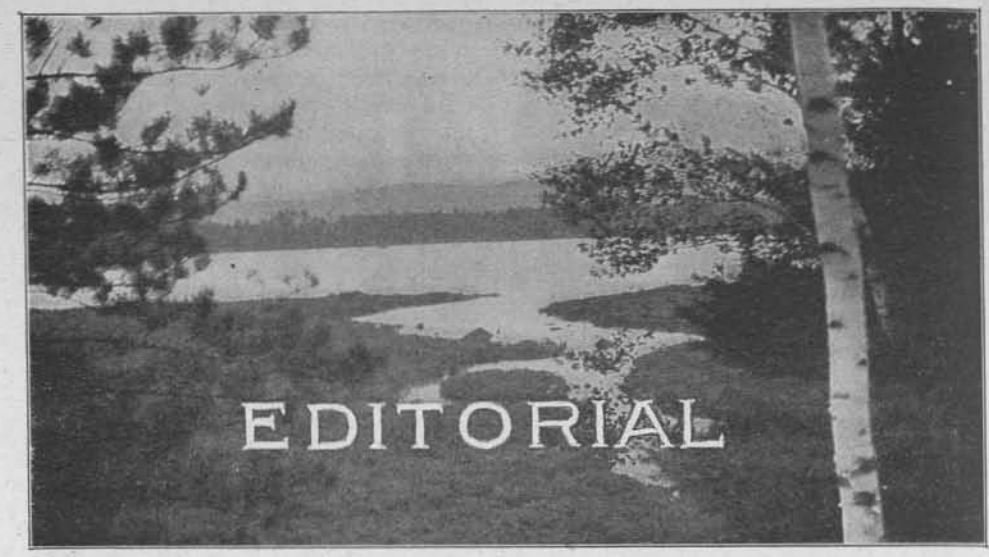
This was the hour in which tongues were loosened, and the incidents of the day's tramp were gone over in pantomime and jest. Not many days later the jests were turned to curses and maledictions on the country, the snowshoe and the pitiless, experienced agents of the corporation who outfitted a party of "greenhorns" and sent them forth on the "Lonesome Trail" with man-killing footgear warranted to cripple all who wore them.

By the heat of the fire dry duffles and moccasins were hastily put on and slackly tied, so as not to stop the circulation in the feet and limbs that were already in various stages of swollenness. One by one the men rolled up in their eider-

downs, which we had sewn up into the form of bags. Into these each put such mittens or moccasins as were still damp. If the heat of our bodies did not dry them, they at least prevented them from freezing. Pulling woollen caps down over face and ears, we crawled feet first into the bags and pulled the coverings up and over us, enveloping even the head. After one has grown accustomed to half-suffocation, this arrangement is found to be almost comfortable; it is necessary to prevent the face from freezing, as well as preserve the warmth of the body by retaining it within the bag. Make an opening no larger than the size of one's fist for a very few minutes only and you let in a quantity of the penetrating, frosty air that takes the natural heat of the body a quarter of an hour to overcome. Of course some opening must be left at the top of the bag to permit of the sleeper's breathing; but the steaming breath, blown out through a tiny aperture, is at once converted into frost that covers the head of the bag and that of its inmate. At times that nearest to the source of heat melts and trickles down the face and neck of the sleeper, proving most discomforting.

Now and again throughout the long dark hours I sacrificed warmth for a peep into the glorious northern winter night. The fire had gradually dropped down to a heap of glowing coals and from coals to graying ashes, the cold and the darkness slowly replacing the flickering flame and ruddy glow. As the firelight faded, objects showed dimly, grew even more distinct, the heavily snow-laden cedars and the arrow-shaped spruces pointing to a gray, starlight sky. The dying spit and crack of the graying coals grew fainter; a huskie, back of the shelter, rose with a whine, shook himself with a twinkling rattle of frosty chain-links; to the right an ill-tempered mate growled his annoyance at the disturbance. The last red spark gave up its tiny flare, and looking overhead I watched the aurora of a northern winter spread its soft, filmy flashes across the sky. Like a giant spectral hand reaching down from the unconquerable North, it stretched beyond the zenith. The tiny, flickering stars shone less radiantly between its fingers; their light and very life it seemed to absorb. Portentous of the cold, cruel hand-clasp of the North, thought I, as a sudden sharp pain pierced my exposed nasal organ, and hastily snuggled back into the eiderdown.

MAKING CAMP



The Winter Camp

TO understand the fascination of winter camping you must take yourself in hand and roll back the sands of time until you arrive back at your own boyhood—at the age of nine. You may at present look askance at the beautiful blizzard, at the whirling flurries of snow, but I'll warrant you you did not so when a boy! Then, you welcomed it with delight, put on skullcap, dressed up warm, and rushed out to revel in the white snow, forts, igloos—oh, the ecstatic snow! And then, next morning, when the sun rose bright and clear, you rustled out your skates, slung them over your shoulder and joined the crowd bound down across the snowy fields to the pond. Ah, but the air was biting and cold! Eyes watered, noses ran, and the very keenness of it choked your breath!

While the others plowed on in suffering silence, you had the Great Idea—why not reach the pond through the woods? Longer, but anything would seem better than these wind-swept fields. Like most Big Ideas, it was received with scorn by the detachment; but you, being an independent cuss, push off to the right and head for the woods. Bucking the northwest wind, it seemed that you never *would* reach them, but, with ears roaring and breath coming short, you finally make their lee.

And then came the big surprise. How warm and peaceful and cheerful it is in here in the forest! You can hear the wind roar and see, far up in the blue sky, the ice-clad twigs of the taller trees whipping and flashing about in the sunlight, but down here there is little wind and the sun's warmth is potent.

Before you lies a deep ravine with a little stream, a mere runnel, trickling down under arches and shelves of snow and ice. Eventually it will flow into the pond, so you decide to follow down its banks. How beautiful the winter woods! Down the vistas of that ravine are still arches of snowy tracery, every twig and limb picked out in pure white. The woods turn out to be full of winter birds. Goldfinches in busy flocks pick at the burrs of the bare sweet gums; junkos, flocks of them, are making a fat living off weed seeds that strew the snow surface; a downy woodpecker cheeps from a dead sapling; a chickadee, upside down on a twig, explodes in riotous cheerfulness; there's a sparrow here and a sparrow there—the woods are all alive!

And it is warm in that ravine. You know well that it is 26 out on the plain, but here—why, there is positively a miniature thaw in progress in certain shelving banks of that ravine, with tiny icicles, jeweled drops of water sparkling in the sunshine, and, lo, a bit of green where

some unconquerable moss or weed still puts forth a leaf.

Here is a clump of persimmons, the fruit purple-black and luscious from the winter frosts. You doff skates and muffler and shinny up, and for some time you are yet another bird in the forest trees.

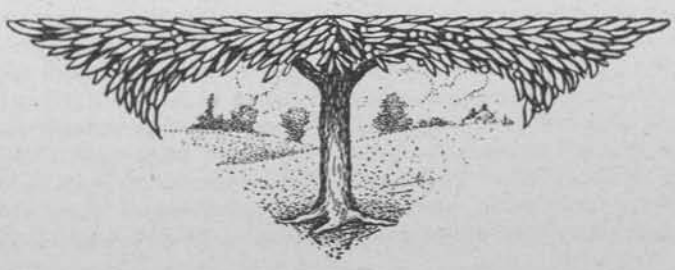
Here are tracks in the snow. A squirrel went here; yonder he went up a tree and there's his nest in that knothole. A deer-mouse ventured forth here along the bank; here molly cottontail crossed the ravine by devious ways, and later a fox trotted by this way.

Presently the ravine opens out into a flat bottom, and there is ice everywhere between the bunches of dead grass and thickets of alder, rose, and catbrier. Joy! Skating in the woods! On go the skates, and, following this lead and that, you come out to the delta of willows at the upper end of the pond, and soon you are launched on the main pond and have rejoined your comrades.

There, in that little story, is the soul of the fascination of winter camping. If a boy of nine can appreciate all that (and I know he can, for I was that boy), how much more can a man of forty, with his sensibilities so much greater, his capacity for enjoyment so much keener. While the boy has skates only and must be home by nightfall, the man has snowshoe, ski, toboggan, dogs, rifle and camping equipment to use and enjoy. He can travel far and see much. Instead of denning up in the house in winter and enduring colds, grippes and all the ills attendant upon lack of exercise and fresh air, he sallies forth of a week's end with pack on back and snowshoe on foot. There are hawks and crows for the .22 or .32; there is the endless beauty of the silent forest; there are lovely little ponds in the laps of the mountains, where one skates on virgin ice, and there is the zest of making camp in the snow, cooking yourself a bully meal with your own hands, and then at night you step out of the snug tent and view overhead the dark dome of heaven pricked out in fiery constellations that burn with a brilliance never seen in summer. Orion is getting up in the east; the Charioteer fills the northeast sky; Cassiopeia hangs overhead, while Cygnus and Lyra bear to the west. All your old friends are there; only the group around the Pole is lacking, for the Great Bear is now below the treetops.

So long as you keep in the woods the going will be mild and comfortable, for the trees are bare, the sunlight abundant and the wind filtered down to a mere breeze. In our Middle States, really cold winter days mean about 24 to 28 degrees in the day and 16 as a minimum at night. In the woods this night temperature will prevail, because the cold of space radiates down through the treetops, and it is well to camp high, to avoid damp vapors from stream or brook. But in the daytime the temperature in the woods will be from 6 to 10 degrees warmer than the plains, because of the shelter the trees afford. Any good sleeping-bag, or four thicknesses of good blanketing over and under, will take care of any night where the mercury runs down to 16; below that in the countries where such temperatures obtain the air is usually so dry that the actual heat robbed from your system is about the same.

Such a sleeping rig should not exceed 10 to 14 pounds weight, and the closed tent to go with it may run four pounds. Then a light, simple cook-kit and some ten pounds of grub, and you are ready for your little trip. Rest assured it will do you more good than the same time spent cooped up in the house. 'Tis a great bracer to help along one's winter work.



IN THE HUNTING GROUNDS OF THE MIC-MACS

BY FRANK M. BUCKLAND

IN a review of some twenty hunting trips in the pursuit of big game, the month of October, 1913, stands out as perhaps the most memorable in the enjoyment of the trip and the variety of game secured.

Charles Cremin's hunting territory of northern New Brunswick was the region selected, and for a guide and companion Jim Turner, one of the finest of woodsmen, with whom I had spent a previous November in the Serpentine region.

Here let me say just a word as to Mr. Cremin and his ability and knowledge in the handling of a sporting expedition. To my mind the north woods of Eastern Canada at the present time offer no better big game hunting than is to be found in his territory, and certainly no man who will give greater thought and care to the comforts of a sportsman than will he.

Weather has to be reckoned with upon any hunting trip, but October, 1913, could not have been bettered in this respect. An occasional rainy day but offered variety, while one night of an unusually heavy wind only added to the enjoyment as we listened snug in our cabin, near the caribou barrens, to the roar of the falling trees in the forests about us.

"Heavy going to-morrow," said Jim as he pulled at his corncob pipe. "Have some chopping to do on the trail to get through the blowdowns."

And in truth the trail presented an unusual appearance when we started up the mountain-side at daybreak. Giants of the forest that had weathered the storms of many winters lay twisted and torn from their foundations in every direction, and it was only after some heavy axe work that we, leaving a cleared trail behind us, finally reached the barren grounds at the summit of the caribou hills.

Away to the northwest the waters of Upsalquitch Lake sparkled in the early sunlight, while upon all sides stretched the gray, moss-covered ranges, glistening with the jewels of frost now rapidly melting under the warmth of the rising sun.

"We'll try the lookout on Roger's Hill for a while," advised Jim. "And if the caribou ar'n't stirring we'll swing up Birch Brook after that bull." This last in reference to an enormous bull moose we had sighted two days before as he trotted across a distant barren away beyond gun shot, and disappeared in the woods from which emerged the spring waters of Birch Brook.

Although I love every part and parcel that goes with the make-up of a hunting trip, I freely admit a certain partiality for the less strenuous methods of hunting. Such as the long, silent wait incidental to moose-calling, when with the sense of hearing strained to the uttermost, one crouches in a canoe or on a secluded shore, listening for a response to the weird call sent echoing across the waters and up the distant mountain-side. That long-drawn, plaintive call of the cow moose for her mate, can only be successfully imitated by a birch-bark horn in the hands of an expert guide. Next to this more or less hazy method of hunting comes the restful enjoyment of watching the barren hills for caribou.

Having stationed ourselves upon the highest point of Roger's Hill in the shelter of a wind-break of spruce boughs erected some days before, we surveyed minutely the barrens which fell away from our position to the treetops in the valley of Birch Brook, then commenced again as the tree growth thinned out up the slope of Keim's Hill and the gray rock and moss-covered summit stretched away to the northward. For a time no sign of life appeared other than the distant sweep of a great eagle's flight, far above the waters of Upsalquitch.

THAT PUGNACIOUS CARIBOU BUCK

Jim is a man of few words especially during the actual pursuit or possibility of sighting game. Although in our present position, any creature moving upon the barrens would have come within the range of our vision long before any sound of our voices could have carried to that distance. Nevertheless we spoke but seldom, the wild beauty of the scenery being in itself alone sufficient to satisfy every sense.

Depending entirely upon our sense of sight to locate any movement of life upon the barrens, it was some time before the sound of distant blows as of two clubs striking together was borne in upon us.

Jim sat up and listened.

"Do you hear anything?" he inquired.

"Nothing but the wind whistling through the blind," I replied, and with the words but just uttered I became aware of the sound of far-away blows. A sound at least unusual in this place, far removed, as we were certain, from any human being other than ourselves.

We scanned every exposed portion of the barrens and at last located the source. In an open glade well up on the distant mountain-side, near the edge of the thinning forest, we distinguished the forms of eleven caribou, appearing with their white rumps and necks at that distance as no larger than rabbits. Nine of the herd were feeding contentedly, these we afterwards found to be the cows, while two bulls were engaged in a desperate encounter for the possession of the herd. Backing away from each other a few paces the bulls would charge together head-on, the crash of their striking antlers coming to us as the strange blows which had at first attracted our attention.

Closely scrutinizing every foot of the ground between us and the fighting bulls, Jim planned the line of approach for our stalk of the distant game. In the meantime one of the bulls, wearied by the contest, had turned tail and fled, closely pursued by the victor straight up the mountain-side, across the barren, both animals disappearing over the crest. We waited and in less than five minutes the victorious bull reappeared again in sight and rejoined the herd of cows.

Being satisfied that the herd would remain in about its present position for some little time, with Jim in the lead, we commenced the stalk for a position within rifle range of the feeding herd. Taking advantage of every possible obstruction to the sight of the animals, we at last

SOME OF OUR GAME FROM THE MIC-MAC COUNTRY

gained the wooded valley of the stream and made more rapid progress.

Over an hour had elapsed before we were satisfied that we had gained a point upon the opposite mountain-side in fair proximity to the game. We were, however, much nearer than we had suspected, for upon working our way through the underbrush and into the next open glade we came face to face with the nine cows, each one with head raised looking intently in our direction, having heard our approach while we imagined that we were still at some distance from where they were located. But among the cows there was no sign of the bull. The wait was not long, however, before he appeared and without notice.

That night at the cabin in talking over the method of his appearance, Jim and I could arrive at but one conclusion. The bull, still heated by the late combat, had withdrawn into the woods from the open glade wherein fed the cows. Upon hearing our approach he undoubtedly imagined that the defeated bull had returned, and without warning charged from the woods straight into the open and directly toward us. Realizing instantly that something was wrong, the surprised bull put on the brakes, his fore feet plowing deeply into the moss and dried grass, then whirling simultaneously with the frightened cows he dashed for the open summit of the hill.

I pressed the trigger as the herd turned, firing from the hip. Nothing dropped. I waited an instant until the bull separated slightly from the cows, and getting a snap sight fired again, but it was not until the third shot that he staggered and fell, well out on the open barren away from the edge of the woods. A good head with fourteen points and doubly valued to me as a memento of the fight we had witnessed and the excitement of the long stalk across the valley and up the mountain-side.

Several days after getting the caribou we secured a bull moose with a head of forty-four inches spread and eighteen points, with a symmetry that satisfied the more than exacting requirements of Jim. The manner of his killing was as follows:

A wet, foggy night followed by a morning during which the mists hung low upon the mountains and rested like a blanket upon the wild meadow near the head of Upsalquitch Lake. Within fifteen minutes after leaving camp we emerged upon the edge of the meadow. A typical forest meadow, upon which, interspersed with the

bogs and muck-filled water-holes, grew tangled masses of rankly matted grass, while at isolated intervals the misshapen trunks of long dead trees reared their leafless branches, appearing through the heavy mist like great gray spectres.

Well out upon the meadow we found him, together with a cow and a full-grown calf. The three shadowy forms seen through the fog, appearing as more gigantic by far than any moose had ever grown, and the head of horns as he raised it from his feeding appeared of enormous proportions. Even though we gave full consideration to the trick of the mist, we knew it to be a head well worth having.

My shooting was wild in the deceptive fog, but after six shots and much knee-deep floundering through the muck and water for a better position he fell and a moose trophy was added to the bag.

Although two deer are allowed upon the New Brunswick hunting license, I told Jim at the start of the trip that no deer were to be killed unless for food in case of extreme necessity. It is needless to say that such necessity did not arise, although four more than fair opportunities presented themselves for securing bucks.

The climax of the trip came upon the last day at the barrens. We had planned to start up river upon that day, but wishing to have one last look at the barrens we climbed the mountains at daylight, not so much in the hopes of game, but still there was always the possibility of bear of which we had seen much fresh sign.

Having satisfied ourselves with the wonderful view, which though always the same, as a whole, is ever different in detail, we commenced the descent. We descended from the main summit and, though still on the barrens, crossed a narrow valley and climbed to the crest of a lower range. As we walked forward, our footsteps making hardly a sound in the spongy moss, we reached the spot where the mountain-side fell gradually away to the distant treetops below. There before us not fifty paces from where we stood was a black bear feeding unconcernedly upon the ants in a decayed log which he had torn to pieces.

Although his head was turned toward us, the bear was so intent upon his meal

THE AUTHOR AND HIS TROPHIES

that he had not seen our approach, hidden as we had been by the hill's crest. The distance was so small that I aimed for his head, the bullet striking so far down upon his snout that no damage was done other than the breaking of his jaw-bone. The bear raised his fore paws and clawed at the wound as he might have done at a bee sting.

Throwing in another shell I fired, again at the head, the bullet, as we afterwards learned, striking well back in the brain. He fell without a struggle, in a heap, as one might have dropped a wet rag. It was the quickest kill in my experience with big game, and is usually the case, I have since learned, as the result of a successful brain shot.

So ended our hunting for the trip in so far as actual game is concerned, but as I recall the wonderful beauty of that wild north country the trophies in themselves stand out as minor incidents.

THE WINNING WESTERN BROWN TROUT

BY GEO. BURROUGHS

Winner Third Prize Brown Trout, 1915 Contest.

WHEN I read in the "Reelijus (Idiots) Maggyzeen" about some fisherman who is a real "bug," I secretly hope that he is as crazy about fishing as I am.

For the last five years I have spent the greater part of the summer on the Gunnison River, near Iola: the best water on the Gunnison.

The river above Iola is one long riffle for about three miles; while it is mostly riffles, below there are many deep holes. This season, five big trout, 5 to 8½ pounds, were caught in one stretch of water of three miles. The big one at the railroad bridge is still there.

Although all of us like to catch big fish, I can't see any special honor in catching them with big hooks.

The big fish—trout of more than two pounds—while it takes more time to play them, they are slower.

I believe that a trout of four or five pounds, if a really good fighter, hooked in good water, should always get away. I think that fully half of the trout, weighing two pounds or more, that I have caught would show but little fight.

The 26th of July I was around the hotel or the store, as it was windy and looked stormy all day. It was raining most of the time in Kezar Basin or on Willow Creek, only a mile or two away, but there was scarcely a drop of rain on the river.

The best fly fishing is in the evening, early dusk, when the trout are feeding on the surface.

About 6:30 the wind stopped blowing. I put on rubber boots and fish sack and with my rod started for the river. My landing net, I D L No. 2, is the handiest rig I have seen. The handle is about six inches long with a piece of leather in place of the hook to loop over button. Another piece of leather sewed to top of sack to which I fastened the button. When wading one end of net is in the water, and though I can easily and quickly unfasten net with one hand, it is seldom necessary.

I started fishing at the upper pier, straight across the meadow from the hotel.

The piers are log cribbing filled with rock, made to protect the bank from being washed by the current.

I had cast only a few times when it started to rain. The shower lasted only three or four minutes, during which I got a strike that I hooked. The fish went downstream and toward strongest current; he got away.

Went about 75 yards up the river; fishing down, didn't have a strike until I got to the pier again. Had one strike there, caught a one-pound rainbow; was using No. 10 flies. I didn't make another cast, but changed leaders, putting on night flies, as it was getting dark. The leader was one that I had tied, Marana gut from T. H. Chubb Rod Company, Dead Chicken No. 4 for dropper, Jock Scot No. 2 on point.

Just as I started up the river bank again R. R. Urquhart, of Denver, had come out from the hotel and commenced fishing at the pier.

Fishing with night flies is something that many trout fishermen learn on the Gunnison. Bright-colored flies tied on No. 4 hook are generally used; Silver Doctor is a big favorite.

I went up the river about 100 yards and fished down. Nothing doing. When within about 30 feet of the pier Bob went a few feet above me.

Out from the pier I got another strike, a lighter touch than when I was using No. 10's. I hooked him.

It took no time for the fish to go 50 or 60 feet out and downstream, although I was holding hard, the tip well up. I couldn't move him, I was pulling hard; straight pull; tip turned to the left; tip to the right. I thought that if he was behind a rock I ought to have felt the leader strike it. In about one minute—that is a long time—he gave me about a foot of line; two or three turns on the reel. I didn't try to get him any closer, but walked down to the pier and out upon the pier, eight or ten steps; reeling in, keeping the line taut. I said to Bob, "I've got a big one hooked."

GEO. BURROUGHS AND 5 LB. 5 OZ. WESTERN BROWN TROUT

The only landing place close by was a gravel bar just below the pier.

Again it took about one minute to move him, then he came readily enough. I took about a dozen turns with the reel, then began stripping the line in with my hand. When within 15 or 20 feet of me the fish made another run of about 50 feet further downstream, taking all the line in my hand. Knowing that I couldn't work him against that current, I didn't try. I intended to land him at the other pier about 200 feet below.

Walking along the path, I reeled in, keeping the line tight as possible. At the boards, about half way between the piers, he was close in, but I didn't stop as I was leading him without any trouble. When in the shallow water above the lower pier he broke water for the first time.

Until then I would have guessed the fish to weigh two pounds, but when I saw him I thought, "You're as big as I ever caught (3 lb.) and I'll save you if there is a possible chance!"

He went straight out 25 or 30 feet. I waded in. I worked him within about 15 feet of me, reeling in the line, then out he would go 20 or 25 feet. After playing him that way four or five times, I had his head at the edge of the water. Putting the net under him, I only turned him over his tail on the bank. Before he was fairly in the water I had the net in front of him. Catching the net frame with the other hand, I carried the fish to the bank; a big square-tail trout, known as Brown Trout, Loch Leven, and German. When I had my hand in his gills I hollered to Bob, "I've got a prize winner."

I carried him up to Bob, and after flashing his light he said, "Jimmy, that sure is some fish. You should pack it in ice and send it to the Denver *Post*." The *Post* gives cash prizes for trout caught in running water on fly, and weighing 5 pounds or more at the office of Denver *Post*.

The fish was only hooked in the membrane of the mouth, but would not tear out. 8:50 p. m.

After we had guessed his weight several times, from 5 pounds to 8 pounds, I asked Bob how long it took to land him. He said about ten minutes.

Seeing a light in one of the stores, I wanted to weigh the fish, but the light

was gone before I had crossed the meadow. I took the fish to the hotel and put it in a big dishpan; I filled the pan with water and set it in the milkhouse. The next morning the breakfast bell rang (6:30) before the stores were open. About 7 o'clock the fish weighed 5 lbs. 5 oz., measured 22⅞ inches in length, 12¼ in girth.

Big fish for mine. Next year I hope to hear of some other brother catching that biggest one that is still at large.

PRIZE CONTEST CERTIFICATE RECORD, 1915 CONTEST

Third Prize, Brown Trout

Weight—5 lbs. 5 oz.
Length—22⅞ in.
Girth—12¼ in.
Caught—July 26, 1915.
Where caught—Gunnison River.
Rod—U. T. K. bamboo.
Reel—Featherlight.
Line—Kingfisher.
Lure Jock Scot fly.

A SONG OF THE NORTH

Sing ho! for the Northern Forests, when the sap begins to run,
And the mantle of snow melts off the earth beneath the glad spring sun.
Then the lakes will burst their icy bonds and once again be free,
A-brimming the rushing rivers all down to the Southern Sea.

But oh! for the forests in autumn when they blaze with crimson and gold,
And the aster smiles in the wooded aisles as the nights grow still and cold.
High up in his rocky fortress the red fox barks in his den,
And the evening fires are lighted in all the houses of men.

But ah! the forests in winter, when the world is dressed in white,
And frostily gleams the great North Star through the long and radiant night,
And no sound mars the stillness of the twilight's rose-leaf glow,
But the muffled beat of our moccasined feet through the endless trails of snow.

And hard and fast we've followed the swamps and thickets through,
The jagged trail of the hungry wolf, or the wandering caribou.
Within our lodge the ingle fire casts warmth and cheer and glow,
Through the little white-draped window far out upon the snow.

Without the stars are all alight in the splendid azure dome,
Oh, this is the place in all the world that I would call my home.
Oh life! Oh love! how changed we are, you tread the distant shore,
Where the echoes of a mourning world can reach you nevermore.

With the city's grime and heat I wander day by day,
With feet that ache to tread the wild I walk the weary way.
Oh, dark mysterious forests, here I have loved to roam,
My longing heart is breaking to turn again toward home.

M. G. T.

A LOAFER'S GLORY FOR ANGLERS

BARRACOUTA FISHING ON THE EAST COAST

BY LEONIDAS WESTERVELT

FOR fortunate vacationists solely on pleasure bent, perhaps Long Key, Fla., provides as much keen sport, and wholesome life in the open, as any of our winter resorts. One may catch fish to one's heart's content (without having to lie about them, afterwards), sail, swim, stroll, laze in the sun, and arise next morning on pins and needles to do it all over again.

At least, Will and I found life at the Flagler Fishing Camp that way; we had been there a week, and wanted to stay a year; so far as we were concerned, snow-bound New York wasn't on the map.

During the past two days we had taken to kodaking just to give the fish a little rest. Will, with his Eastman "pocket edition," and I with my superior, grown-up 3¼ by 5½ 3A, had snapped about everything in sight, except one pretty girl who, resisting all our wiles, refused to be handed down to posterity on a kodak card.

"Well," said Will, as we stretched out on the sand with our pipes for a sun bath, "I guess we'd better put kodaks aside, and take up fish-rods again; there's nothing left to photograph except"—and he cast a longing glance over his shoulder at the coy miss.

"Put your kodak away if you want to," I grunted; "I haven't finished, by any means. I'm going to have a snap-shot at a tiger to-morrow morning; I want to send him home on a post card to ——"

"Never mind to 'which one,'" cut in my chum, cruelly. "If you want a picture of a tiger, you'll have to go with Teddy on his next jungle trip. There are no tigers here; only sharks, and—a dear!" This with another over-shoulder glance at the same vision in Panama hat and dotted muslin.

Ignoring Will's outrageous pun, I calmly refilled my pipe. "You've left your imagination at home," I alleged; "I don't mean a jungle tiger, but a *sea* tiger; a huge barracouta worthy of that nickname. Plenty of great gray fellows are floating

CAP, AND WHAT THE SHARK LEFT HIM

over the reefs out there, just waiting to have their photographs taken!"

Will cut in again, with a look of disdain; "Of all woodeny unattractive pictures," he said, "I think a row of dead fish hung on a line is about the worst. Fish out of water look the dubs they are."

"Who said *dead* fish," I interrupted. "I want a picture of a *live* fish, in the water where he belongs. I think I'll make him pose with my hook in his mouth, and line attached."

Will tried to squelch me with one of his characteristic looks. "What do you intend to do," he snorted; "put on a diver's outfit, and call on your sea tiger with a kodak under one arm and a waterproof flashlight under the other?"

"No, I'm going to play the fish up to me."

"Snap him floundering on top of the water, and he'll look about as natural as a Seminole Indian in a dress suit."

"I told you," I insisted, "I'm going to photograph him in the water, not on top of it; or rather, I'll let you photograph him, after I've persuaded him to pose naturally."

The next morning happened to be one of those days fishermen love. The sunshine was obscured by fleecy clouds just enough to prevent shadows, and a capful of palmy breeze from the southard made a ripple fine for trolling.

One is apt to grow lazy at Long Key; indolence somehow lurks in the very air; but by nine o'clock, Will, the Captain and I were dancing over the miniature waves, in our staunch sea-going launch, *Water Lily*. We headed straight for the well-known "Reefs," about six miles off shore. Will and Cap had stout tuna rods fitted with huge reels, holding about seven hundred yards of No. 18 line. My rod was of English make, somewhat lighter than theirs, and very supple. I had a Vom Hofe reel, and about six hundred feet of line; a long piano-wire snood was attached to the end. For bait, we used live grunts—lively little fish, common in the region. I also insisted on bringing my kodak and found a safe corner for it aboard, from which I could grab it up instantly.

On our way out to the reefs we trolled for king fish, playing out from two to two hundred and fifty feet of line. By good luck we struck two "schools," and by the time anchorage was reached, had eight fine silver fellows slapping about in our fish-box. These king fish grab the lure greedily, making a big to-do as they leap out of the water many times, to a height of twelve or fifteen feet. They soon tire, however, and give in quickly. Those we caught averaged about eight pounds.

On arriving at the reefs, we threw out our kedge anchor in about sixty feet of water. Peering over the side of the launch, fairyland loomed up below. The water was a delicate shade of blue, and so clear we could see the waving seaweed and shadowy fish almost as well as in an aquarium—and what an aquarium was here, resplendent with color, teeming with life! The gray of the wonderful coral formations blended harmoniously with the brilliant anemones and vari-colored graceful sea-fans and sea-ferns—rich in their soft shades of yellow, purple, brown. Fish were everywhere, hundreds of them, darting quicker than the eye could follow; resting on the bottom, inert; lurking ghostlike beneath coral ledges; floating tranquilly near the surface, where sunlight silvered the water. We saw huge groupers; sluggish pale gray fellows, barred with

dark brown, sulking down among the rocks; amber-jack, alert, strong, silvery, with goggle eyes and ample mouths; graceful cavallas; wily old wolf-like barracoutas, fierce and treacherous as sharks, some of them at least four feet long. Then there were hosts of smaller fish; snappers, blow-fish, mullets, spade-fish, and many I didn't know by name.

SOME KINGFISH

Will and Cap, with true fisherman instinct, hardly wasted a moment before throwing off their coats, and baiting up with live grunts. I, tearing myself away from this wonderful piscatorial study, followed suit. The fun began at once. The fish were rampant in their voracious rushes for our lures. I had never seen anything quite like it before. Cap's bait had hardly sunk two feet, when a magnificent kingfish, gleaming in the sunlight like molten silver, rose and "struck" hard. The rod stiffened; the reel screamed, as Cap "braked" with the powerful thumb-piece. In a lightning rush, Mr. Kingfish made for deep water, jumping twice, three times, fifteen feet in the air; shaking drops of water from him like diamonds. Three hundred, three hundred and fifty feet of line ran out, then the "king" slowed up. Cap had him well in hand, when suddenly the pole relaxed; the line slackened. I won't repeat what Cap said. He reeled in sulkily and removed the kingfish's head and about two inches of its body from his hook. A shark, with a single snap, had appropriated the rest.

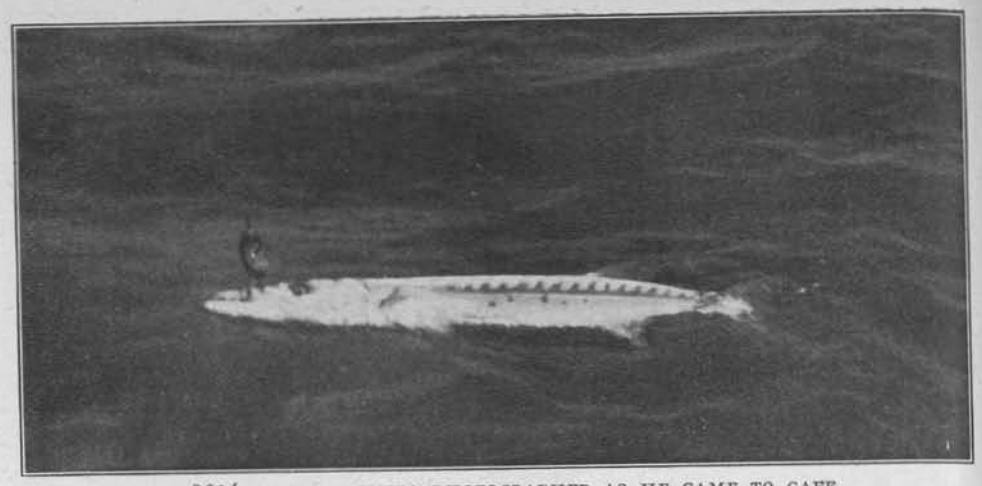
Meanwhile, Will, with his methodical industry, was having fine sport. He landed a twenty-pound grouper, and then had a very pretty but short battle with a kingfish; handling it easily and neatly, he soon brought it to gaff. This fish weighed fourteen pounds. But we were all after the really big fellows we could plainly see lurking below. Cap soon hit on a shrewd scheme. One fisherman would bait up and cast over, while the other two, with baited hooks in hand, waited for the psychological moment. As soon as a small or medium-sized fish grabbed the line, the lone fisherman would gradually "play" it toward the launch, when, lo! many of its much larger brethren, imbued either by curiosity or cannibalistic instincts, would follow their unfortunate hooked and floundering little brother to the launch side. Then came the moment for the two anxiously waiting fishermen to let their lures fall very gently into the water; there would usually be a snap, a splash, and one, or both, would have big fellows "on."

We had been following this method for some time, when I saw a huge, long, lead-colored shadow—in my excitement it looked like a submarine—glide from under a ledge, and very slowly float toward a small cavalla floundering and splashing on Will's hook, close to the launch.

"Let him splash," I stage-whispered; "don't move!" And very gently I let my little grunt slip into the water by the side of the hooked cavalla. I did not have to wait an instant; the long shadow gave a downward dip, and "things happened" quicker than I can write; there was a swirl, a snap; then the water "boiled" and my reel screamed, as the big fish tore straight away for deep water.

"A fifty-pound barracouta!" yelled Will, almost dropping his rod in sympathetic thrill. "Steady, steady! Don't let him turn!"

Then came a roar of laughter from Cap. Inadvertently I had taken off my leather



A 26½-LB. BARRACOUTA PHOTOGRAPHED AS HE CAME TO GAFF

belt and butt-rest to readjust them, and now I was in a nice pickle. My rod bent almost to breaking point, and without a butt-rest to support it, dug me, at every crazy lunge of the fighting fish, just below the waist line. Some men have no charitable forbearance; Cap and Will laughed, roared, while I chasseyed from one side of the launch to the other, half doubled up, and uttering unpleasant epithets between jabs from the rod-butt. The barracouta, occasionally breaking water, made for the open channel until about three hundred and fifty feet of line had run out. Once during the onrush I tried to turn him by pressing hard on my emergency thumb-brake; the friction was so great, however, I feared the line might part, so quickly gave the big fellow his head again. Finally I managed to check him, and for several moments we both rested. He sulked, apparently not knowing just what to do; but this was only a trick; when I guardedly reeled in a few feet of line, towing Mr. Barracouta a little nearer, like a flash the wily old buccaneer dashed off again, at an angle; if I hadn't been on the *qui vive,* he certainly would have taken advantage of slack line, and escaped.

The fight continued for thirty-five minutes; at least so Cap said later. I was kept so busy, it seemed about ten minutes to me. When that fish wasn't careering all over the bay in mad spasmodic rushes and jumps, he was under a rock or sharp reef, thinking up some new diabolical trick to try to "put over" on me. My nerves were a-jump, and my arms nearly pulled out of their sockets by the time Mr. Barracouta began to tire. Foot by foot, I regained line. In he came, still contesting every yard. At length he was only twenty feet from the launch, and Cap with the gaff stood ready. But, remembering my vow of the previous day, I determined to get a picture of that barracouta at the risk of losing him. The sun, by a great piece of luck, was directly behind me, and bright noon rays struck the water a-slant. Carefully maneuvering and half coaxing my fish, I managed to veer him round to a spot where the sun's rays shone over him just right. At this moment the barracouta was swimming at a depth of about five feet. Though tired, he was still alert, and had plenty of fight left in him. Will, anticipating my object, was ready with the camera, and the picture he snapped, as proved later, more than fulfilled our expectations.

My barracouta was exactly four feet two inches long, and weighed a trifle over 26½ pounds. I had him mounted, and he hangs on the wall of my den, with the framed photograph below. I often wonder if the old fellow suddenly came to life, whether he wouldn't, in a burst of barracouta pride, strenuously object to *my* hook and line showing in *his* photograph!

ON THE TRAIL OF SIR REYNARD

By W. DUSTIN WHITE

FROM a clump of young pines which lay at my left as I worked up the side of the Shackford hill the sound of old Foxy's voice came intermittently—just an occasional yap of encouragement as she nosed out the cold trail of Sir Reynard. It was a mild, sunny morning in early winter. Three or four inches of snow had fallen two or three days previous—an advance guard from the icy north—but now a south wind was blowing and on its wings came the balm of Indian summer, back for a farewell call. It was an ideal day for fox hunting. There was snow enough for good trailing but not enough to interfere with the running of the dog or the game. The wind was from the south, which meant a moisture-laden air in which the scent held well. Besides it was an ideal day to be out of doors.

Consequently I had hurried through breakfast, got inside my mackinaw coat, grabbed my gun and been literally towed across the pastures on the lead chain, attached to the other end of which was my old hound, Foxy. It is usually the best plan to keep the dog on the chain until you get in the near vicinity of the hill on which you intend to take your stand, otherwise he is liable to take a wandering trail that might lead off on a half day's chase. I was just getting through a barbed wire fence when old Foxy forged ahead with a pull on the chain that came very near taking me off my feet and taking out a length of the fence on my pants leg at the same time. She stuck her nose in a small depression in the snow, sniffed a moment, went on to the next one, sniffed again, elevated her muzzle and voiced her discoveries with a deep bay.. I unhitched the chain and she was away, while I worked on toward the top of the hill.

The higher I climbed the more extended became the view and finally I could see the dog as she came out of the pines and worked into a hay field. Evidently the fox had been mousing in the uncut aftermath and it took the dog half an hour to cipher out his wanderings. Then the trail led across a lumber slash and down into the Shackford sugar-place which lies on the south side of the hill. By this time I had topped the hill and presently there floats up from the woods a great burst of baying—the sweetest music the fox hunter can hear for it tells him that the fox is jumped. Then follows the steady yap, yap, yap as the dog follows the warm trail, round and round, back and forth through the woods.

Keeping my eyes on the edge of the woods, I worked carefully down to a little knoll that is my favorite stand on that side of the hill. The topography of the hillside made it quite natural for the fox to pass this stand and I had previously paced off the distance to certain stumps and bushes, establishing a "dead-line" for the fox at what I considered the maximum killing range of my gun. This saves me from the worry of estimating the distance when my nerves are all a-tingle with the excitement of the chase.

Down in the woods the chase goes merrily on. Now they are on this side, then on the other and at last the fox slips out of the fringe of evergreens on the pasture side of the woods and lopes along up the side of the hill some forty rods from my stand. Part way up he pauses and plays back and forth on an outcropping ledge that has been blown bare of snow, then sits down on a little knoll to rest a bit and watch the back trail. He must have left a crooked trail for old Foxy to cipher out down in the woods, for it is some little time before she appears. The scent is evidently stronger out in the open for the dog barks with renewed vigor. The fox passes over the hill and out of sight.

"I KEPT FOXY ON THE CHAIN UNTIL NEAR THE HILL WHERE I INTENDED TO TAKE MY STAND"

Foxy rapidly eats up the plain trail, pauses but a moment at the ledge and she, too, passes over the hill.

At such times it is hard for the hunter to decide just what to do. The fox may simply circle the hill and soon be back past my present stand, but there is also the possibility of his descending the other side of the hill, crossing the brook and the road and going up on to Birch Hill.

That was exactly what did happen, for by the time I had gained the top of my hill the dog was nearing the top of the other hill and the fox had already passed out of sight. Then the dog, too, goes out of sight.

This brings a little lull which is not altogether unwelcome, for while the chase is within sight or hearing one has neither eyes nor ears for anything else. The view which is spread out around the Shackford Hill would in itself repay one for the climb to its top. To the west we catch the gleam of ice-locked Tickle-meoced Pond through the trees, and the eye follows the contour of the eastern Y of the Green Mountains northward and lingers in the notch where Symes Pond lies between steep wooded slopes. On the east the hill falls away more rapidly, in cultivated field and farmland, to the Connecticut River, which, as yet unfrozen, stretched a black line across the snow-covered land, and beyond there arose row upon row of wooded hills, which culminated finally in the glistening peaks of the White Mountain Range.

But while I am seeking out certain little details of this view, which I have seen again and again, but which never grows old, I become conscious of old Foxy's steady "Ow, ow, ow," as it floats across the valley. Faint it is from distance, but it grows steadily louder. Scanning the opposite hillside, I finally make out the racing forms as they zigzag back and forth across an old field, along a pasture wall, through the woods and back, and at last out of sight under my own hill. Louder and louder grows the voice of the dog, drawing up along the far side of a ridge that juts out from the main hill. When it is almost time for the fox to appear in sight I glance at my gun and loosen the glove on the right hand. But no! The fox has swung back down the hill and enters the woods on the north.

Here the chase continues while I am kept constantly on the alert, for my stand is but a short distance from the edge of the woods, and should the fox appear at that point it would be a case of quick shooting. One can get but little idea of the whereabouts of the fox from the voice of the dog, for there may be nearly half a mile of crooked trail between the two. No, sir, if you would be a successful fox hunter you must have some knowledge of fox lore and the runways in your locality, use your best judgment, and keep your wits about you. When the fox was ready to leave the woods he came out very near where he went in, turned and came up

over the ridge, and floated down through an intervening hollow, out of sight, but headed straight for my stand.

As I slip off a glove I notice that my hands are shaking like leaves. It is the one exciting moment in the whole day's work for me. A hundred thoughts muddle my brain. Will the fox keep straight on toward me, or will he swing back down the draw? Perhaps he will come out on that ledge, twenty rods away. Would I be better on the other side of the fence? It is hard to keep still, but what else could I do? Then the fox glides into view and my nerves all vanish. Nearer and nearer he comes, at a steady lope, veering slightly, so as to pass my stand about eight rods from it. When he is directly opposite, I raise the gun, take one look at him along the barrel, press the trigger, and the heavy charge of Deadshot and single B's does the rest. Meantime old Foxy continues to voice her knowledge of the crooked trail down in the woods. The fox must have been leading her by quite a little distance, and it is some minutes before she arrives. Then we head across the fields toward home and dinner.

"ONE OF THE CHIEF CHARMS OF OUR NORTHERN FOX HUNTING IS THE FINE WILD COUNTRYSIDE"

* * *

This little story, being the account of one of my recent hunts, will, it is hoped, give the reader some idea of our old-fashioned fox hunting as practiced on the hills of New England. It is a subject which has received but little attention from the sportsmen writers of recent years. Books and magazine articles devoted to the hunting of sly reynard are few and far between, and those few deal, almost invariably, with that form of hunting which is in vogue in the Southern States. It resembles our Northern hunting about as much as black resembles white, except perhaps in its call upon its devotees to the life of the open.

In the first place, the Southern hunters use large packs of dogs, while we hunt with a single hound, or possibly a pair. They follow the hounds upon horseback, while we travel on foot, taking our stand upon some high ground overlooking a likely runway as soon as the game is put up. The Southern hunter seldom shoots his fox—does not want to, and would consider it unsportsmanlike—while the Northerner prides himself upon his ability to stop the game at top speed.

The Northern hunter, to be successful, should have a fair knowledge of his hunting grounds. This will enable him to locate the most likely runways and to decide which the fox will be most likely to use when the chase is on. He should also have some knowledge of the habits of the fox, and, most important of all, a knowledge of the workings of his hound and skill in his management.

Since the hound plays the leading part it is well to give some care to the selection of a suitable animal. The first chapter of a little book entitled "The Fox

"MEANWHILE OLD FOXY CONTINUES TO VOICE HER KNOWLEDGE OF THE CROOKED TRAIL DOWN IN THE WOODS"

Hound," by Gen. Roger D. Williams, is devoted to a summary of the good points of a hound, and will prove a valuable aid to the beginner who is choosing his first dog and is well worthy of the attention of any old hunter. The nearer 100 points your hound will score the better he will probably prove in the field. Pure blood and good breeding are essential. The feet are probably the most important points in his make-up. They should be round and compact, not flat and loose. Another point—and Williams fails to discuss this—is the voice. It may not be highly important in the pack hound, but makes all the difference in the world with the single hunter. Some hounds bay with a prolonged "O-o-o-o-ow," uttered at irregular intervals, while others yap continuously, "Ow, ow, ow," at every jump, as long as the scent is warm. The long baying has a musical ring and sounds well, but a fox will usually play much better in front of the steady yaps. The former, uttered now a long distance off, then close at hand, has a tendency to frighten the fox and keep him on the jump and running in long circles, while if the dog barks continuously the fox always knows just where he is and will take things more leisurely and be more likely to pass within range of the hunter.

The Northern single-hunting hound requires a far more systematic training than the Southern pack hound. He should be taught to follow at heel, to come at call by voice or horn, to get in or out of vehicles at command, and if he has the ability to find his own way home when the chase is over, his handling will be much easier.

"Never make a companion or a pet of a hound," says Williams, and it is probably a good rule to follow, although I have never tried it to find out. I like dogs just because they are dogs, and I flatter myself with the thought that they like me, too; consequently I make a companion of every dog I have anything to do with, and a field dog, too, if I can. I presume that too much petting would be likely to breed jealousy among pack hounds, but for our Northern hunting, the better the hunter and hound understand each other the better their success should be, and certainly the more enjoyment they can get from the days afield.

My own hound, Foxy, is a bright, intelligent dog and the pet of everyone, and I fail to see how it interferes with her work afield, and in some ways I think it an advantage. For instance, if no foxes are put out within a reasonable length of time, old Foxy takes my track and follows it up to my stand, where she tries to tell me that it is no use. If conditions appear favorable and I wish her to continue the hunt, I have only to give the command and away she goes. She never goes home

without me. But if I decide that there's nothing doing and start for home while she is away in search of a trail, she takes my track when she comes across it and usually overtakes me before I arrive.

The gun you use for fox hunting should be a large bore —10 or 12 gauge. A double barrel or repeater is preferable to a single and it should be well choked for long-range work.

One of the chief charms of our Northern fox hunting lies in the enjoyment of the fine wild country on which it is practiced. The great white winter landscape that lays on every side of your hill glistens and sparkles in the rays of the sun, while the air that is furnished you is of the kind that makes one glad he is alive. But this air is quite liable to be in motion, so don't forget to wear plenty of clothing, and, if the snow be over a foot in depth, you need snowshoes.

"THEN WE HEAD ACROSS THE FIELDS TOWARDS HOME AND DINNER"

BASSETT VS. BEAGLE

BY WALTER DEARING

IN discussing the merits of the beagle as compared with other rabbit hounds, I don't think that many people will contradict the statement that he is the rabbit hound par excellence. The only dog that could presume to dispute his supremacy in the realm of rabbit hunting is the bassett hound. But the bassett hound is comparatively little known in America; besides which he is not as well fitted for the variegated character of the country through which an American hound is called upon to wend his way in pursuit of bunny. His crooked little dachshund-like legs and long, narrow body do not recommend him very strongly for a rough country, and the beagle can outfoot him ten to one. There are three varieties of bassett—the smooth-coated, straight-legged bassett; the rough-coated, semi-crooked-legged; and the rough-coated, crooked-legged. But it is the two latter varieties that have the most adherents. Friends of the bassett hound often make the bold claim that he is the superior of the beagle in every way, but on what grounds they base their claims I fail to see. The bassett is larger than the beagle and that may give him the superior powers of endurance that his followers claim for him, and we are told that his short, crooked legs will stand a tremendous amount of strain, and no doubt they will. But will his short, crooked legs be of great service to him in negotiating the very rough country over which he would

often be compelled to plough in chasing the American cottontail? Could he beat the straight-legged beagle at this kind of work? I doubt it. Any short-legged man who has tried to "hoof it" over a rough country alongside of a long-legged country farmer knows the disadvantage under which he has labored in trying to keep up with his space-eating companion. Now, a dog doesn't need to have the legs of a greyhound in order to save an unnecessary expenditure of nervous energy in working over rough sections, but it will take a barrel full of proof to convince me that the short legs of the bassett do not compel him to exert enough energy in a long, hard day's work over rough ground to more than offset any superior powers of endurance that his larger body may give him over the beagle. Besides, he is totally lacking in speed. Too much speed is, of course, undesirable, but a certain amount of it is necessary in trailing the cottontail. Over a short stretch of hunting territory the bassett undoubtedly possesses the same advantage that the dwarf beagle has over the standard; he works so slow that the rabbit takes his time about moving. As to the superiority of the bassett's scenting powers, I have too much respect for the opinion of the many impartial judges who have conceded him that advantage to dispute the matter. But the beagle is certainly no slouch at puzzling out a cold scent, and I doubt if the bassett hound can have enough ability in that direction to overcome the other advantages of the beagle. If the bassett ever becomes popular in America and succeeds in proving himself a better rabbit hound than the beagle, I shall be glad to take off my hat to him, but until that time "I'm from Missouri." It should be remembered that the reputation of the bassett has been built principally on his work in England and France, where the character of the hares and the country over which they are hunted is very different from the character of hares hunted and the country covered in America. The bassett would certainly be outclassed by the beagle in hunting the American fox, or the coon. In the latter sport he would be useless, as his most ardent admirers admit that he lacks courage, while the courage and ability of the beagle in following the coon have been proved time and again, and he often holds his own against the best coon dogs in Kentucky, where a good coon hound is held in the highest esteem.

For my part I can see only one thing that could check the ever-growing popularity of the beagle, and that is not the rivalry of the bassett, but a loss of interest in rabbit shooting. But while there still are those who can see no sport in hunting the cottontail, their numbers are rapidly diminishing. The rabbit is becoming the principal game in so many sections of the country that the fame of the beagle seems destined to spread more and more as the years go by, and the time may not be far distant when even those who have been the loudest in decrying rabbit hunting may come to see the error of their ways; I cannot see how it can be otherwise. How can any man who loves a good dog fail to derive the keenest pleasure from following the beagle and watching the persistency with which he dwells on a cold scent, or the skill with which he follows the winding labyrinth of twists and turns that the cottontail makes as he warily pursues his devious way through the woods or across the meadow land. Even the dogless hunter, who prefers to wander about minus a canine chum to guide his search for game, would change his habits and become a beagle convert if given a chance to watch the little hound as he catches sight of the flash of brown fur that tells him that a rabbit has just leaped from behind some nearby cornhill, or gets a glimpse of the white-tailed little cabbage destroyer as he dashes out from behind a dense patch of undergrowth; or, discovered in the open, circles with great leaps, well ahead of the hound until, perhaps, he comes within range of that trusty old double gun and comes to the end of his last run.

TAKING A RECORD JERSEY COAST TUNA

BY JACOB WERTHEIM

FOR the last few years I had heard stories of big tuna (or, as they are termed here, "horse mackerel") being seen in large numbers off the Jersey coast. I have personally seen two—one of 650 pounds and the other of 350 pounds—caught in the pound nets in front of my house at Deal Beach. I had also heard of several small ones—80, 70 and 40 pounds, respectively—caught on rod and reel by such well-known anglers as Fred Alexander, M. Scheer and Joseph Cawthorn.

During my various trips off Seabright, chumming for bluefish, I have seen these fish jumping, and once I saw a dory (attached to a fishing smack), while chumming for blues, land one of about 100 pounds on a hand line.

This year I had the good fortune to meet that well-known angler and writer, Mr. Zane Grey, in Florida, who caught the prize-winning 90-pound tuna of 1912 off Seabright, and he advised me how to try for them, what tackle to use, etc., and, most important of all, recommended as guide Sam Johnson, a Seabright fisherman, locally known as "Horse Mackerel Sam," due to his well-known fondness for and skill in catching tuna. Early this summer I arranged with Sam to let me know as soon as tuna were running, and three weeks ago he excitedly informed me that he had just landed a beauty of 450 pounds on his hand line.

Next day I was off with him in his dory at Seabright. He had arranged with his brother fishermen that as soon as any one of them found a tuna in his "slick" they were to hoist an oar with a coat as a signal. We had hardly reached the fishing fleet when one of them hoisted the signal, and we were soon with that boat. We tied our boat to theirs, and at once I was both thrilled and gratified to distinctly see numbers of great big fellows swimming close to the boat, weighing, it seemed to me, from 300 to 1,000 pounds. I got out my heavy tarpon rod and 9/0 Edward Vom Hofe reel, equipped with 900 feet of 39-thread line, 9-foot wire leader and large bluefish hook. After putting on half of a fat bunker, out went my line, and up to my throat went my heart when I actually saw a great big fellow grab my bait. In a second Sam untied my boat and Mr. Tuna dragged us off. I had him on for about twenty minutes when with a mighty heave something parted, and with a sigh I reeled in, to find that a kink in the wire had parted same.

We baited a new hook and wire and in five minutes I had another strike. This one must have been a monster fish. He never stopped going and parted my line like thread.

Again we baited and again I had a strike, but this one was poorly hooked and got off in two or three minutes.

This ended my first day's tuna fishing, and I felt that I never could land one.

The second day I again found a boat signaling, but the fish, which I again plainly saw close to my boat, would not take my bait, although they eagerly snapped at the pieces thrown over. They seemed to know that my bait was not quite right. Just as I was ready to quit I had another strike, and again my new 39-thread line parted.

On the third and most eventful day I put on a brand new line, and taking some new 15/0 hand-forged steel hooks attached to 12 feet of thick piano wire, tried it again. This time, however, I was equipped with a new contrivance, like a harness, over both shoulders, converging in front in a hanging leather strap, to which a metal catch was fitted, which could be hooked to a metal arrangement

attached to the front crossbar of my reel. This, attached when the butt of my rod was inserted in my leather waist belt, permitted me to drop my hands and assisted me materially in handling and landing my fish, and allowed me to rest when tired out by putting on my heavy drag. Thus equipped we made our third day's attempt, and again we sighted the familiar oar signal. In less than five minutes a big fellow struck me, and less than five minutes later, after he took out 400 feet, my new line parted. I was indeed discouraged, but Sam said to try them again, and on went another new line. After ten minutes I had a strike, and off we went to sea at a great clip. I braced myself, and with my shoulder and waist belt held him on his first rush of about 300 feet and got back some line, Sam continuously encouraging me. I said, "No, Sam, it's no use. I'm sure I'll never land him." But I kept on trying hard to hold him. With my rigging I prevented him from sounding and kept him on top, or nearly on top, of water. After what seemed to me an eternity, his rushes grew weaker and less frequent. I was once able to see his back near my boat, but he was again off. By this time I had him within 100 feet, and kept him there until I was cheered by seeing him circling slowly on top of water.

"Now you've surely got him," said Sam.

"No, I'll never get him," cried I. But I got him finally close enough to the boat to say to Sam, "Now gaff him!"

"No," said Sam, "I won't gaff him, because you will want to mount him, and I don't want to disfigure the fish." I didn't care whether he hurt him or not and insisted that he should use the gaff, but no, Sam was determined to have his way. So I was compelled, willy-nilly, to play the fish to a standstill and get him close enough to my boat for Sam to grab the wire leader and raise his head above water. He kept him that way from five to ten minutes (he said), but it seemed an age to me. Sam then gently inserted my big gaff hook from beneath through his mouth. We started our engine and thus towed him to shore, a trip of about six miles. We had been towed about three miles from where he struck.

MR. WERTHEIM AND 286-LB. TUNA CAUGHT OFF SEABRIGHT, N. J.

Every angler can imagine how happy and proud I felt. Sam said he would weigh about 300 pounds and he was pretty nearly right, for when we got him on the big scales of the Seabright Fish Company he showed 286 pounds; length, 7 feet 2 inches; girth, 46½ inches.

THE BASS CAUGHT WITH A RUBBER BUG

By E. H. JONES

Winner Third Prize Large Mouth Bass, Northern Division, Class C, 1914 Contest.

FOR the greater part of my life I have spent my vacation seasons and week-ends on some stream or quiet lake where the jar and noise of the city were forgotten and the silence and peace of the great outdoors gave new energy to the tired and overworked mind and body. Fishing for the mighty muscallonge and the gamy bass is, to my mind, the most delightful and refreshing of outdoor pastimes. I have met with varied success in all sorts of lakes and streams in Wisconsin and Michigan, as well as in my own State; but the best fight I ever had was with the bass entered in the FIELD AND STREAM 1914 Contest.

OLD MIKE, NEARLY EIGHT POUNDS OF FIGHTING BASS

For the past seven years I have spent my vacations at W. H. Tuohy's Eagle Springs Lake Resort, near Eagle, Waukesha County, Wisconsin; a four-hour ride by train and auto from Chicago. This is one of the most beautiful lakes I have ever seen, and is just teeming with bass and pickerel. There have been many large fish caught in this lake, but there was one that for years had been hanging around a certain bog fringed with lily-pads, where fishermen of all kinds had cast their various lures and brought tales of a weak line or something else that caused them to lose the biggest bass they had ever seen. Mr. Tuohy always told them that they had been fooling with Big Mike and that there wasn't a line strong enough to land him; which gave them a little consolation.

Early in the season I had a glimpse of the big fellow and made up my mind to get him. But he would not take any of the various lures that were tried and I had about made up my mind that it was useless to waste any more time. But one day I saw in a window of one of our sporting goods houses a white rubber bug-shaped lure and I bought two of them. I proceeded to paint one of them with printer's ink, which sticks to rubber, a beautiful bright brown on the back, shading to yellow on the belly with a dash of red on the wings. It looked like a big June bug when finished. On the twenty-second of August I had been trying one out and had more strikes than on any other lure, which satisfied me that there was some-

thing about the rubber bug that was attractive to the fish.

That night after dinner I showed the bug to Tuohy and told him I was going out to get his friend Big Mike. He said, "I will go with you." So off we went just before dark. He rowed me over to about one hundred feet from the bog and I threw the bug over into an open hole between the lilypads and the bog and with a mighty rush he took it the instant it touched the water, and the battle was on.

Three times the handle of the reel slipped out of my fingers, as he made his runs back under the bog, and Tuohy finally said, "Can't you get him in?"

Said I, "If you want to see him, row the boat over there, I can't pull him through the lilypads."

He rowed over and I played the big fellow fully ten minutes before Tuohy could get the boat close enough to attempt to land him. I tried to pull him up, but he had gotten himself so tangled in the weeds that I couldn't budge him. Tuohy reached down until his shoulder and half of his head were under water and finally got his hand into the fish's mouth and lifted him into the boat by the gills. After the weeds were cleaned away he asked me if I knew what I had. I told him I had the biggest bass I ever saw. He said it was the biggest one ever caught in that region.

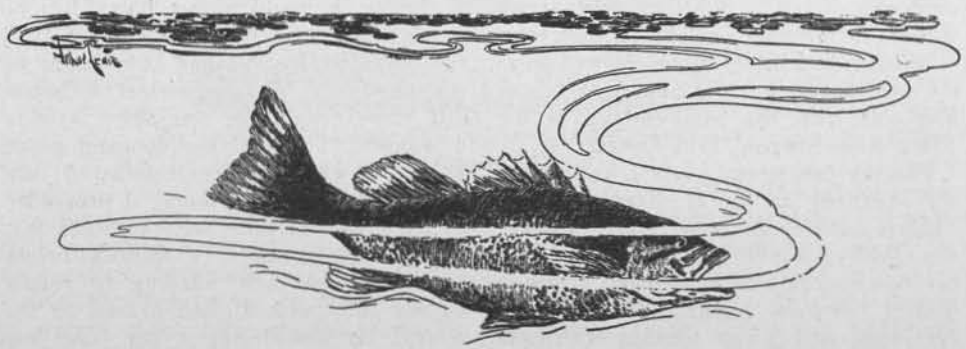
The excitement over, I started to throw out the bug again, but Tuohy said, "Fishing is over for to-night, and, damn you, if you get another strike I'll tip the boat and you swim or walk home."

I had the big fellow mounted and have him in my office as one of my most treasured possessions. He weighed 7 pounds, 14 ounces; was 23½ inches long; 7½ inches from back through to belly and 16½ inches in girth. The rod was a home-made single-piece bamboo; the reel a Talbot; the bait Burke's Bug and the line a No. 5 Amacoy.

PRIZE CONTEST CERTIFICATE RECORD 1914 CONTEST

Third Prize, Large Mouth Bass, North, Class C

Weight—7 lbs. 14 oz.
Length—23½ in.
Girth—16½ in.
Caught—August 22, 1914.
Where caught—Eagle Springs Lake, Wis.
Rod—Bamboo.
Reel—Talbott.
Line—No. 5.
Lure—Burke's Bug.



SEVEN PRIZE-WINNING COCKER SPANIELS

SPANIELS FOR SPORT

BY WILLIAM HAYNES

Author of "The Merry Little Cocker," "Practical Dog-keeping," etc.

ILLUSTRATIONS BY A. C. WILMERDING, OF THE WATNONG KENNELS

ANYONE is justified in spinning a theory that the sporting spaniels should be used for sport, and I am always grateful to Snuff for a practical demonstration of the soundness of this hypothesis. He was the first spaniel I ever shot over, and, in many respects, he had more real, true common bird-sense than any dog I ever saw.

Snuff was a little red cocker. Much scrambling through Adirondack thickets had stripped his silky coat down to the length of a beagle's, and wind and weather had faded it sadly; but, despite his ragged jacket, he was a young gentleman of parts. His pedigree was as long as the Moral Law, and it fairly bristled with illustrious names. His daddy and his two granddaddies were bench champions, and back in the sixth or eighth generation was good old English stock, cockers that had doubtless been real sporting spaniels.

Had Snuff been taken indoors, fed up to sleekness, and religiously groomed for a couple of months—how he would have hated it!—he would have been then very fit to show, and he had the quality to step gaily into a sawdust ring among very good company and give a creditable account of himself under a most critical bench-show expert. In this, too, he confirmed a pet theory of mine that field ability and bench quality are not necessarily incompatible. I shall always have a warm spot in my heart for that dog.

Snuff was the best dog I ever hunted on partridge. He belonged to a young engineer who was putting a lumber company's private railroad through the rough country between the Adirondacks and the St. Lawrence River. This was twelve years ago, and partridges were then plentiful. From personal investigation, Snuff knew the country for miles around, and what he did not know about partridges and their ways was not worth while

WATNONG FLOSS, JEANE AND NETTIE

for any dog to know. Early morning or dusk, hot weather or cold weather, rainy days or dry days, he instinctively hunted the likely places. He understood perfectly that when you were shooting a .22 rifle you wanted the birds treed and that with a shotgun you would take them on the wing.

Bob Delage swore in voluble half-breed French and with painful disregard of sex, "By gar! zat Snoof she tak' you *toujours* in ze open countree wid ze shotgun, so zat mabe so you get good shot. *Quel chien! Il parlera demain* (What a dog! He'll talk to-morrow) sure 'nuf, by-'an-by." This was pretty extravagant, but his owner's modest, "Snuff's a pretty good little dog," did not do him full justice.

Since the days of Snuff, I have seen other spaniels in the field; over in England, where for over five hundred years they have been a recognized sporting-dog, and where field trials for spaniels are held regularly; among the Connecticut hills, and down in the Carolinas. The more I see of them in the field, the more I wonder we Americans do not use them more generally.

Only a fanatic could claim that under all hunting conditions a spaniel is the ideal shooting-dog. In the Southern quail country, for example, though they have shown me fair sport, they are not as good a dog as a setter or a pointer. We have, however, plenty of good shooting country where a spaniel shines. In the small, hilly fields north and east of Virginia the spaniel is a capital quail-dog. From bitter experience many of us know a fast, wide-ranging dog, a joy forever in the South and West, is more hindrance than help in close country. Here, however, a spaniel is at his best. For woodcock, snipe, or partridge a well-broke spaniel, with a good nose and the necessary hunting experience, can be confidently backed against any dog.

Quite contrary to expectation, few sportsmen can complain of the spaniel's lack of nose. Their scenting powers have not been impaired by disuse, and little Snuff's truly remarkable bird sense is very generally shared by his brethren. To these advantages the spaniels add docility and intelligence, and they can be broken to a high state of perfection. Moreover, a spaniel that is wild and headstrong is as rare as one that is surly and snappish, nor are they so commonly gun-shy as their reputation would indicate. Finally, they, are all natural retrievers.

In the field the spaniel's merry and business-like way of working weaves a spell 'round any man who does not regard the dogs merely as bird-finding machines. He is never one of those deadly serious workers, nor is he one of those flippant dogs that persist in regarding the whole hunt as a frolic. He is like the man who sings at his work: he thoroughly likes his work and makes a sport of it, but he appreciates nicely that it is serious business.

Because of the spaniel's disposition, though his training differs in nowise from the setter's, still he requires slightly different handling. He is an active, nervous little busybody and unless firmly checked will hunt anything and every-

thing. But unless checked kindly he will be cowed. Spaniels are more finely strung and sensitive than their larger cousins, so they can be trained to a higher state of perfection, and by the same token, they can be more easily spoiled. Many persons habitually think of spaniels as being gun-shy. This is a greater reflection upon the trainer than the dog.

By all means take your spaniel in hand early, and it is best to buy a puppy not over three months old. Lead-break him and yard-break him by the time he is six months old. With so many capital books on training it is not necessary to go into all the details of a field education here, but whatever is your favorite system, remember that punishment must be meted out to a spaniel in homeopathic doses. He is not hard-headed, and he will respond quickly to correction. Do not, of course, coddle him, but remember that kindness accomplishes more than kicks.

CH. "MATTERHORN" RETRIEVING A WOODCOCK

Do not take your spaniel afield till you have him under perfect control. In his exuberance of spirits he will run riot, and you must keep him down or he will be hunting three or four fields beyond you, a bad spaniel fault, or he will contract the rabbit-chasing habit. Let him find birds and then make him let you flush them. Pet him and show your approval of his stanchness, but do not shoot over him the first time out. Let him get the idea of hunting before you actually hunt, but when you do shoot, shoot to kill, and let him retrieve. Properly handled he should not be gun-shy, but if, by test at home, you find he is so, do not take him in the field till broken of this provoking trouble. Many owners take the time-honored precaution of firing a light charge as a signal for meals during the dog's puppyhood. This is wise, for gun-shyness is a hard habit to correct. Once developed, one must go back and accustom the dog to firing about his home, especially at mealtimes. Start about fifty yards away from the dog and each day come a few yards closer to him.

Spaniel pups grow quickly and are well developed when a setter is still in the loose-jointed, rollicking stage. At seven weeks they should be independent of their dam, but do not hurry weaning, for the best food for the youngsters is their mother's milk. When first weaned they should be fed five times a day—first thing in the morning and last thing at night, besides the three regular meals. Most dog-owners make the curious mistake of feeding puppies too seldom and grown dogs too often. The rule for the youngsters is "little and often." At three months spaniel pups should have a good dose of vermifuge, and now the early morning meal can be left off. In six weeks the late supper can also be discontinued, but till ten months or a year old a pup should have three good meals daily. When fully matured feed but two meals, or more accurately just a snack in the morning and a solid meal at night. Spaniels have a tendency to put on flesh, and by seeing they are not stuffed and by giving them plenty of outdoors exercise this must be prevented.

Above and beyond the spaniel's hunting

"LONA REX," A FIELD-BROKEN SPANIEL

ability, he has other recommendations. The spaniel family are quite the aristocrats of the dog race. For centuries they have hobnobbed with the great ones of the world. Long association with gentle folk has made the spaniel a gentle dog, and he is to-day an ideal house-dog. His small size is an obvious advantage indoors, and his quick adaptability enables him to fit himself into any household. Without being boisterous he is a bright, spunky dog, and his disposition is a mixture of affection, chivalry, and good faith. His cleverness makes him an intelligent companion for the "grown-ups" of the family, and his gentleness makes him an ideal playmate for the children. Finally, he is a good watch-dog, and he is no tramp.

The length of the spaniel's pedigree insures that his exact origin should be a mystery. Less than a century is long enough to obscure the exact origin of the Airedale: what can be expected of a breed that is found sculptured on ancient Roman monuments? The breed's birthplace was probably somewhere in the East. From Greece they migrated to Italy and from there to Spain. Via France, they finally reached England, and our spaniels are the English varieties of the old Spanish stock. From the original Spanish spaniels each country in Europe has made not only its own sporting spaniels, but also its own setters and toy spaniels as well. The spaniel family, therefore, has many different varieties. Count Henri de Bylandt's great work, "The Dogs of All Nations," describes twelve sporting spaniels, nine different setters, and seven toy spaniels. Here are twenty-eight distinct breeds bred from the original stock, to say nothing of the English retrievers, the Labrador dogs, the Continental brabets, and our own Chesapeake Bay dogs, in all of whose veins spaniel blood flows.

Of the English sporting spaniels the leader in numbers and in popularity is the merry little cocker, smallest and keenest of the family. The field spaniel is larger, heavier, and longer than the cocker, but the two are close kinsmen. In fact, in early shows weight was the sole distinguishing mark, and a cocker by eating a heavy dinner might thereby transform himself into a field spaniel. Of the general cocker type are the less common springers, Norfolk and Welsh spaniels;

RETRIEVING LESSONS WITH A PIGEON

while even heavier and decidedly more lumbersome than the field spaniel are the Clumber and Sussex spaniels.

There are, of course, no field strains, comparable to well-known setter families, among American cocker spaniels. Except Mr. A. Clinton Wilmerding, of New York, no spaniel-fancier breeds for hunting, and while his Watnong cockers, notably his Watnong Matterhorn, have given good account of themselves in the field and on the bench, still his is an isolated case.

The present-day cocker is descended from the English dog Ch. Obo, bred by Mr. James Farrow. He, with his grandson Rivington Signal and his great gandson Toots, founded the best English black strains and improved the type of the parti-colors. Obo blood came to America in Obo II and his brother Hornell Silk. Most of Obo II's get were black, but he sired some reds, while his brother sired many parti-colors. Obo Jr. and Miss Obo II were others of this family who crossed the Atlantic and laid the groundwork for our present-day strains. Canada has always been famed among dog-owners as the home of good cockers, and in Woodstock, Ontario, three men, Messrs. James Luckwell, George Douglas, and George Dunn, with three stud dogs, Ch. Black Duke, Black Dufferin, and Black Knight of Woodstock have done much to give the Dominion its cocker-spaniel reputation. Of the older-established American strains the Swiss Mountain, founded by Chs. Ono and Middy, has long been prominent, while Mr. H. K. Bloodgood's Mepal Kennels and Mr. George Geer's Brookside Kennels have been responsible for many good dogs, and one can be sure that cockers bearing these prefixes to their names are "bred in the purple." Among the parti-colors, Mr. T. H. Payne has his famous Midkiff strain going back to those two sterling black and whites, Chs. Romany Rye and Blue Bells II.

The field spaniel unfortunately is not well represented in America. Mr. Marcel Viti, of Philadelphia, long their friend and supporter, has not been active recently. His Wealdstone Kennels, Mr. Rowland P. Keasby's Saybrooks, and Mr. Geer's Brooksides are the only well-established strains we have of this neglected variety.

Which of the sporting spaniels will prove best for our American shooting? The cocker and the field spaniels are certainly the most likely applicants for the position. Fads and fancies among the bench fanciers have made our American cockers smaller and cobbier than the type still maintained in England. Though there is no gainsaying their beauty, still, if this beauty is only skin deep, we will have to return to the English type to make the most of the dog as a true sporting spaniel. On the other hand, the field spaniel is big enough as he stands. Whether or not, as the saying his, his long back would "break in two" over our rougher country is yet to be proved. Just as we have developed our wiry, whirlwind setter out of the more stolid, slower English dog, so it is possible we may have to develop a spaniel of distinctive stamp.

There is certainly a place for the spaniel among our field dogs. The sportsman, especially in the East, will find that he fills this order. Somebody has called the beagle "everyman's hound." Some day the spaniel may be everyman's bird-dog.

MY PRIZE MANASQUAN BLUEFISH

First Prize Bluefish, 1914 Contest

By A. KUBLER

MR. KUBLER'S 15-LB. BLUEFISH AND 21-LB. BASS

ON Sunday, June 27, a good day, I decided to take a little fishing trip. Overlooking my tackle, finding it in good condition, I started for Point Pleasant.

At Point Pleasant I met several of my friends, all good fellows and first-class fishermen, telling me no fish of any account caught all day and the prospects for the night did not look any too bright as a big storm was heading from the East; but with it all, I took the chance, finding my favorite spot near the Manasquan River, hoping it would blow over, but instead it came on like a hurricane.

It kept up thundering and lightning till morning, when we gave up. The old story—fishermen's luck. Tired out, we went into "Ralph Borden's Hotel" for a bite—breakfast—a welcome call.

After supper Mr. Borden handed me a lantern, saying: "Stay to-night and I'll *bet you will get a record bass.*" I tried white worms all day with no result; changed to skinner and shedder, but they only brought in "skates." This won't do, so here goes a nice, big squid for a *big one*. Well, he came with a bang. It being very dark, the only way I could guide myself was by the tip of the pole and amount of line I had on the reel. After playing him ten minutes, started him towards "Inlet." About two hundred feet away I met our old sport, Al Walters, expert shark fisherman. "Have you got one?" he said. *"Yes,* the fish of my life," I answered. "Good, *good,"* says he, "I'll pull in and get the lantern. Gee whiz, you've got a whopper, see the tip jump, keep him going, we'll follow him to the Battery if he don't let up, he's some fighter."

"I'll take it out of him in a few minutes more." "Aber nit"—Mr. Fish woke up, but his fangs were weaker. Giving him lots of time, I waited till a nice big breaker came along, lifted him over it and he flopped on the beach a dandy—dead as a door nail!

The next thing to do was to put him on the ice, so that when I got him into Ralph Borden's fishing shack there met a notary, Mr.——, who weighed, measured him and made out the affidavit. It surely was a happy moment when I signed my name. Then changing my tackle I went out to get his mate; got a strike, but a bass, not so game as "Mr. Blue." After playing him for fifteen minutes, brought him in, a nice fish, another dandy, weighing twenty-one pounds. My last bit of bait I cast out to get a last one; to my surprise, hooked another bass soon as my sinker struck. I knew I had a good one by the way he fought; played him till within eight feet of the beach. As I was about to lift him over he ripped out and "Good-night!"

COACHING THE WINGSHOT

BY CHAS. ASKINS

VII—Swing and Lead

J-C and I had gone to our room after breakfast to map out the work of the day, as usual. The lad surveyed his muscular figure, as he turned front and rear to the fire, and then broke out:

"Gad, Coach, if you don't give me some real work pretty soon, walking or riding, I'll be out of condition—getting fat."

"I'll walk you so hard shortly that your shanks will become as lean as those of a North Carolina mountain nigger. But to-day we are to take the old "carry-all" and go up to town for a clay-bird trap which some friends of mine have agreed to loan me. A day or two with the clays will be enough, and then the open fields, the Bob-whites and the woodcock for us. Let me see, this is the twelfth of November; the quail season has been open since the first of October, but, between you and me, nobody has any business to shoot quail in the South before the middle of November, especially when the season lasts until March. We'll be ready for the birds in three days."

Having been retained in a neighborhood lawsuit, the Captain had the previous evening submitted the case to J-C and to me. Of course, I took the position of the opposing counsel and the argument waxed, waxed and accumulated with increasing fervor until after midnight. Then the exasperated J-C, who had been acting as judge, decided to throw the case out of court, it being the greatest piece of tomfoolery he had ever listened to. Our host, still provoked by that decision, refused to go to town with us—was altogether too busy looking up fresh authorities and new precedents.

"It takes a nigger an hour to do the simplest job, J-C, and that's about how long Jim will be in currying the nags and hitching them up. I mean to utilize the time in giving you an off-hand lecture on swing and lead. I know that you have learned a good deal about both in our work with the running target, and lead will be brought home to you emphatically to-morrow when I get to spinning the saucers at the rate of a hundred feet a second, but lecture time will soon be over. Be patient a few days longer, and the extent of my preaching will be to cuss you when you miss and—cuss you twice as loud when I miss myself.

"Here I have a diagram which I will use to illustrate. You see it has reference, not to clay-bird work, but to bird-shooting. I have used the duck, not only because he is one of the few birds which can fly one hundred feet a second, but he is also the bird which is most apt to pass the gun at right angles, as shown. What you fail to remember of all the pointed things which I shall say now will be brought home to you later when you get among the mallards and teal.

"Your experience with the wheel and with the running target, your previous wingshooting practice, no less the ordinary good sense for which I give you credit, prove to you that shot in flight are not as fast as lightning. If we are aware of how fast the mark is traveling when passing the gun, and we know the time of the shot from muzzle to target, it is the simplest of mathematical problems to calculate how far the fowl would fly while the shot were en route. To this distance we would have to add trigger

time, provided we fired with a still gun, but our past experiments have put a quietus on wingshooting with a still gun, so we will not go into that again.

"The *mathematical* lead which a marksman would have to give a bird is something few shooters fully realize. Even the most experienced gunner, owing to his style of swinging, to the fact that very long shots are usually taken at flocks, or to other reason, rarely has a definite idea as to the precise number of feet a bird would have to be led in order that shot and mark should reach a given spot simultaneously. He may know exactly where to hold for a kill, no doubt does know, but he doesn't figure this lead in feet, but rather pulls when he *feels* that he is far enough in advance. When he misses the first-rate shot rarely attributes his failure to faulty lead, but, in charity to his own judgment, ascribes it to lack of pattern and power in his gun—all the gun can then do is to kick him back, and that's the end of it.

"Here is an example or two, proven by plain figures: A duck, flying at one hundred feet a second, crosses the gun at sixty yards. The average velocity of shot over a sixty-yard range we will take at six hundred feet second (velocity would, of course, vary with the initial velocity and the size of pellet). It follows that the bird must fly one foot while the shot travel six, and he must, consequently, wing thirty feet while the shot are on the way to him. At the given velocity of shot and mark the lead at twenty yards would be ten feet; at thirty yards, fifteen feet; at forty yards, twenty feet, etc. No use in disputing these figures, for they are truthful, as the problem is stated.

"Of course, the shot would travel much faster over the shorter ranges than the given six hundred feet second, thus materially reducing the lead; but it is no less true that they would travel slower at ranges beyond sixty yards, proportionately increasing the lead. The English claim that a punt-gun, loaded with a pound of S. S. shot, will account for single duck regularly at one hundred yards, but even if the weapon could be handled from the shoulder no man could do wingshooting with it at the distance, because the estimate for lead is quite beyond the powers of anyone. Granting the big shot an average velocity of five hundred feet, the lead must be sixty feet.

"Keeping in mind that sixty-foot lead, and it would be greater still with fine shot, the majority of us will readily admit that a man will do well not to become ambitious to do his wingshooting at a hundred yards. As a matter of fact, sixty yards is about the maximum practical wingshooting range, though many birds are killed farther. If any of us kill a passing duck (single) at seventy-five yards, and we are honest about it, we must admit that luck played an important part. Compact flocks are a different story.

"Perhaps the majority of waterfowl, in flight shooting, are killed between thirty and forty-five yards. At the latter distance, in less degree at the shorter range, a wide space must be left between bird and point of aim. Not every man who considers himself a wingshot can stop a bluewing teal, flying down wind at forty yards—a good shot will fail part of the time and a poor shot all the time—both from the same cause, incorrect lead.

"Now we will all admit, the most skilful as well as the beginner, that this matter of estimating distance and lead frequently 'gets our goat.' We will all admit that if we could kill our bird by shooting directly at him, we'd do a devil of a lot more execution. Some crack marksmen assert that we can pull directly at the bird and hit him, but that sort of thing has seldom happened to a number of us. Nevertheless, I believe that this rule is fairly universal: The greater the skill of the shooter, the less lead he finds necessary. How can this be? How can one man send his shot directly at the mark, while another must aim ten feet ahead? You know the answer yourself, it's swing. Can we explain scientifically how swing can eliminate lead. Such is the object of this lecture and the mathematics that go with it.

"The range of the further bird is one hundred feet, the middle one seventy-five feet and the nearest fifty. The heavy black lines at the apex of the tri-

angle represent the gun, or, rather, distance, from eye to gun-muzzle, which is taken at forty inches. The segment of circle gives the muzzle swing, and the distance from the perpendicular line to the dotted line to the left indicates the movement of gun while the trigger is being pressed. The line of flight is the course of the bird through the air. The line of swing is the line caused by the point of aim intersecting and traveling with the line of flight. The distance from center of fowl to star shows the normal or mathematical lead in the case of either bird. The distance from 1 to 2, as shown on the dotted line at 3, shows the gain from swing. The distance along the parallel lines at (4) indicate the gain of line of swing on line of flight, due to angle.

"In this discussion I have allowed the birds a flight speed of one hundred feet a second, the maximum for any except a very few species. The shot charge I have given a calculated velocity of nine hundred feet over the one-hundred-foot range, nine hundred and fifty feet over the seventy-five-foot range and 1,000 feet over the fifty-foot range—shot velocities, of course, vary with the load, and I had to assume something.

NORMAL LEAD

"If the upper bird has a speed of one hundred feet a second and the shot a velocity of nine hundred feet, the bird must be covering space at a rate one-ninth as great as the shot, hence while the missiles traverse one hundred feet, the bird wings eleven and one-ninth feet. Not considering swing or the gain or the loss due to trigger-pulling time, this must be the lead given the fowl if the shot are to meet him. The middle bird is flying at the same rate, but the shot have retained more of their initial velocity, so the lead for him is seven and nine-tenths feet. For the lower bird, with a shot velocity of 1,000 feet, the lead is five feet.

"Now, remember that this normal lead of ours is the real lead; it is the actual distance that gun will have to be pointed ahead of that bird when the charge leaves the muzzle. Ballistics have informed us definitely how long it takes shot to travel a hundred feet, and even the speed of the bird has been pretty accurately timed, though I might add that it is only on rare occasions that a duck or any other bird flies as fast as a hundred feet a second. As to that, if the bird winged slower, we wouldn't have to make so much allowance, but we sure couldn't hold right at him and kill. The logical way to beat lead would be to have a missile velocity of about 5,000 feet, whereupon if the pattern spread four feet, the bird's two feet of travel wouldn't do him any good. The little shot acceleration we have been able to secure by increasing powder and reducing shot, a couple of hundred feet at the outside, cuts neither ice nor lead appreciably.

"But, while it can't be disputed that the shot *must* be sent as far ahead of the bird as he can fly while they are on the way to him, it is equally true that many of our very best duck shots simply pull in front of the bird or about his head and make no other allowance for lead whatever. This has been a known and acknowledged and undisputed fact for many a year. The effort of theorists, scientists and shooters has been to explain an admitted fact, and this was formerly found somewhat difficult. A generation or so ago the sporting press was full of wild theories as to how shot could get several feet ahead of the spot at which they were aimed. The most plausible theory held that, in giving our piece a rapid side-swipe with the bird, we communicated a lateral motion to the shot equal to the rate at which the muzzle of the gun was moving when the lead left it. In proof of this contention, tossing a stone from a railroad train in motion was cited, etc. According to this theory of communicated lateral motion, if the bird were flying one hundred feet a second and the muzzle of the gun was swung at one hundred feet a second, the lateral motion given the shot would carry them right along with the bird.

"Of course, we all know now that if the gun were swung with a muzzle speed of one hundred feet a second or two hundred feet a second, the motion communicated to the shot would be centri-

fugal, they would be sent off at a tangent, with an acceleration of speed directly in proportion to the rapidity with which the gun was swung. If a man picked up his gun by the grip and swung it as he would a golf stick, he might increase the velocity of his charge several hundred feet—but he couldn't produce any lateral movement. Even if we could communicate lateral motion by the swing of the gun, at the ordinary rate of aiming gun-swing, from five to ten feet a second, the gain would be but from six inches to a foot instead of eleven feet.

"At last science and psychology came to our aid and gave us the true explanation, for, of course, the thing was explicable. Psychology taught us that a man doesn't instantly turn thought into action, though to every evidence of his senses he may have done so, and science has proved that it takes time for a lock to act, a primer to explode and for the shot to move up the barrel to the muzzle. The greatest proportion of time lost is due to translating thought into action. The translation of thought into accomplished action we have heretofore termed trigger-pulling time. Now it remains but to see what happens when the gun is swinging rapidly while the trigger is being pulled. We will take trigger time added to lock time and time up the barrel and call it all the fortieth of a second. To the mind of the shooter nothing happens in this fortieth of a second, but to the mind of science a dickens of a lot might happen in this length of time. All we have to do now, by way of fully explaining how swing gains on lead, is to prove what happens during this fortieth of a second.

"Of course, we all know that if the gun is swung right along at an even pace with the mark there is not going to be any gain from swing. We know that the gun must be swung faster than the bird flies if there is to be any gain, and it is only reasonable to believe that the faster the gun-muzzle moves, the greater the gain. If the bird were distant one-hundred feet, flying at the rate of a hundred feet a second, and the gun-muzzle were swung with this same rate of a hundred feet a second, the line of swing ought to travel about 3,300 feet a second, or eighty-two feet in the fortieth of a second —some gain, that—if we tried to shoot to the west we'd land our charge due southwest. That's quite too fast, isn't it, son? Well, then, how fast can we swing the muzzle of a shotgun while taking an aim over it?

"Take another glance at the diagram. The lower bird is distant fifty feet and is flying at the rate of a hundred feet a second. Birds at this given rate of speed and distance have been shot a thousand and one times, therefore our problem is a practical one. Now let us look at the ordinary speed of swing when this bird is killed. Almost every experienced duck shot throws up his weapon behind the mark and then swings rapidly after it until he overtakes it. This would imply a swing faster than the flight of the bird, and I believe the line of swing should have double the speed of the bird in any instance. We thus have a speed of swing in shooting at this bird of two hundred feet a second, which gives us a muzzle swing of thirteen and one-third feet a second. This rate of muzzle swing will be taken in this diagram as the standard used in shooting at all three birds. It is evident that if a muzzle swing of thirteen and a third feet gives us a line of swing of two hundred feet a second at fifty feet, the rate will be three hundred feet second at seventy-five feet and four hundred feet at one hundred feet. Now for the effect of such speed of swing on the aim.

"The normal lead for the lower bird we have found to be five feet, and the gain of swing on lead is also five feet in the fortieth of a second. Looks like we would just land on him by holding right at him, don't it? But hold on! In that fortieth of a second the fowl has been doing something himself, has flown two and a half feet, and therefore the 'swinging lead' is two and a half feet. We would have to give that fowl some lead, you see. But if we had a fifteen-inch spread of pattern and held just in front of that bird's head, he being fifteen or twenty inches long, we'd probably kill him."

"Look here Coach," J-C interrupted,

"if we can gain half the lead by swinging at the rate of thirteen feet a second, why not swing a little faster and gain more?"

"That is a very pertinent question, my lad, and presently we will give some reasons for not attempting an extremely rapid swing. It is true, however, that we can make swing gain the full lead if we try. Swing our gun, at the muzzle, with a speed of twenty feet a second gives us at fifty feet a 'line of swing' of three hundred feet a second. Three hundred feet a second means seven and one-half feet in the fortieth of a second, the precise lead demanded if we are to center our mark, keeping in mind the two and one-half feet which the fowl flies while we are pulling. Now, keep those figures in mind: A bird flying at one hundred feet a second, crossing the gun at fifty feet, will be killed without *conscious* lead, if we swing the muzzle of our gun at the rate of twenty feet a second. In other words, we didn't give the duck any lead at all; just shot at him."

"Makes wingshooting mighty simple, doesn't it?"

"So it seems, but I have always found a fly in the honey. Going to the duck at seventy-five feet, using the same muzzle swing, gives us a line swing of three hundred feet, gain seven and one-half feet. The normal lead we have found, as noted on diagram, to be seven and three-fourths feet, to which must be added the two and one-half feet which the bird would fly while we are pulling trigger, a total of ten and one-fourth. Deduct from this the seven and one-half feet of gain from swing and we have left a necessary calculated lead of two and three-fourths feet—not much different from the distance we held ahead at fifty feet, you see. The normal lead for the upper bird is eleven feet, and the gain from swing is ten feet. Eleven feet plus two and one-half feet of flight during trigger time gives us thirteen and one-half feet, less ten feet of gain, leaves us three and one-half feet as the distance we think we shot ahead. That three and one-half feet is about the lead a good shot would give a duck at one hundred feet, too, son, and three and a half feet doesn't look like such a tremendous space at a distance of one hundred feet as it does right in front of your eyes—hence the claim: 'I don't lead; just hold in front.'"

"What's the use in being satisfied with half a loaf when you can have the whole cheese? I want to shoot right at 'em!"

"All right, boy. You may change your mind later. But a muzzle swing of twenty feet a second gives us a speed of swing at seventy-five feet of four hundred and fifty feet a second, gain in the fortieth of a second eleven and one-fourth feet. The normal lead being seven and three-fourths added to the two and one-half of 'trigger-time flight' gives us but ten and a fourth—see how it is? Aim at the bird's tail and get him. At one hundred feet, with the given rate of muzzle swing, we would gain fifteen feet, and actually have to hold behind the bird to kill him."

"Looks dead easy, don't it, Coach? Think I'll be able to pull it off?"

"What, pull off behind? You sure will many a time, but if you mean pull behind and land your charge in front—well—you'll have to go some, my boy. If you ever acquire the knack of shooting entirely without lead, merely swinging in front of the bird's bill, whatever his distance and rate of speed, you'll be able to do something that I never could with any regularity. As a matter of fact, I consider wingshooting without lead the most difficult of all gunnery, rifle or shotgun. I have never seen it accomplished to perfection except by the professional shot—professional duck shot, I mean, not trapshot. The man who shoots day after day, bagging from fifty to two hundred birds daily, for six months in the year, can take his passing fowl without allowance for lead—few others can.

"Just look at this thing a little more closely. We got that upper bird by holding a length in front, swinging along his line at the rate of four hundred feet a second, but suppose we had swung at the rate of only two hundred feet a second, where would we have landed then?—several feet behind, of course. Suppose that for the next shot we took longer in pulling trigger, say the thirtieth of a second, where would the charge have gone? Well out in front, sure as fate.

What if the bird had been loitering, flying at the rate of but fifty feet a second—shot had gone so far ahead that he'd hardly have heard 'em whistle.

"If a man could regulate his speed of swing by the distance and velocity of his mark, the farther off the bird and the faster its gait, the more rapid his line of swing, having, in addition, perfect uniformity of trigger time—presto! no calculated lead for him. Again, if a man had a rapid swing and a deliberate trigger-pull, the one perfectly balancing the other, he would be under no necessity of giving a conscious lead. Shooting with a swing is a good deal like pitching a baseball accurately: it depends on a well-timed release. You swing your arm and when the hand reaches a certain point you open your fingers and let the ball go. If you release precisely at the right time, you cut the plate—if you release too soon, you hit the batter in the ribs and he throws his bat at you. Your release must be timed to the small fraction of a second or you'll get a ball called on you sure.

"Is it so difficult as all that? Why, look here! A variation in trigger time of one one-hundredth of a second, line of swing four hundred feet second, would throw your charge four feet farther ahead or four feet farther back. Don't you think it quite possible that you might vary your trigger time the hundredth of a second. Yes; it is possible for you or for me, either—no less possible for the best shot that ever lived, if he had a strange gun or a trigger that varied the least particle in its weight of let-off.

"Another thing: I have found that the closer the bird is to me, the faster I will naturally swing my gun. When the mark is close and moving rapidly across, you simply have to swing in a hurry or never catch up—being obliged to do so, of course, you do. On the other hand, bird being at a distance, a slow muzzle-swing will readily catch up and pass the mark—hence, being perfectly human, you swing slower. Optics have something to do with retarding the swing at long range, too, you will find. So long as gun and mark travel along at approximately the same rate, you can aim nicely, but flash the gun at a four-hundred-foot-a-second rate past a stationary mark and you can't hit it at all—you tried that. Slowing up the swing because the mark is *apparently* not traveling fast is just the contrary of what we should do, if swing is to replace conscious lead.

"For myself, I have been pretty content to swing fast enough to about cut mathematical lead in two; a bird which, according to time of shot over the course, would require a lead of ten feet, I swing on fast enough to kill with a lead of five feet. This is not the perfection of shotgun marksmanship, but it has given the best results with me. Every man is a law unto himself about his swinging and his trigger-pulling. One man, as we have seen, can swing so rapidly, with such excellent uniformity in both trigger time and swing, that he needs no other lead. Another man, who may be a good shot, too, finds it wisest to move his piece right along in front of the mark at the same rate it is going, with a deliberate swing, striking his bird by making the full mathematical lead. A shooter who lacks uniformity of trigger-pull will surely do his best work with the deliberate swing, trigger time then being no factor.

"I guess, after all, the lead a man gives his bird is pretty much a matter of training and practice. We make up our minds which style suits us or suits our degree of skill, and then we practice that system until we have it down pat. If a marksman has perfect control of his nerve action, and is naturally a fine mechanic, so that he can repeat a performance with machine-like fidelity, and he has an opportunity to shoot, and does shoot, from ten to fifteen thousand ducks a year, he should be able to absolutely eliminate conscious lead. Failing in any one of these qualifications, I suspect that he will have to hold ahead—just how much ahead is something that experience alone can teach him.

"There is Jim with the rig. Let's get off for that trap now. I am keen to see you do some missing."

"But I can hit some of 'em. I know, because I have tried it. You'll see!"

(*To be continued*)

WINDWARD SIDE OF "PERFECT SHELTER TENT," WITH DETACHABLE SIDE CLOTH

Note mosquito bar sides and front, author's caribou-skin packsack sleeping bag and 19 oz. rubber raincoat

WITH KNAPSACK AND RIFLE

By WARREN H. MILLER

IT *sounds* fascinating, that ideal of a foot-loose and free hiking trip through the mountains with rifle or rod and one's complete camping outfit on one's back, and, in a way, it *is* easy. Anyone can go light—but to go light AND RIGHT is one of the arts, requiring the utmost knowledge and study of conditions. Anyone can go light—roughing it and enduring hardships—for a short time, say, three days, but how about two weeks or a month of it?

Here are a few of the conditions that must be provided for if the cruise is to be of indefinite duration and to be a pleasurable experience rather than a species of punishment: The weather will change—you will get everything from bitter cold, rain, snow and hot weather; they all occur in almost any two weeks of spring or fall in our climate; your food must be nourishing, palatable and good for your body to assimilate, yet light—that is, your cooking outfit must boil, bake, fry and stew; your pack must weigh altogether less than thirty pounds, except at the start, where thirty-five for the first few days is permissible; you must have a tent to live in at night, and your sleeping accommodations must be warm, cool, comfortable and not bulky; you must have light at night; provision against sickness and accident; and change of clothing, because of wetness, perspiration, burning up and the like; all this must go on your back or about your person and be light enough so that carrying it fifteen miles a day in the mountains is no hardship.

Many hands make light work, so that, in a party or four or more, all these matters are so subdivided among the members of the party that almost any modern camping equipment is ample. But suppose the party is but two, or a lone hike? The writer's habits of hitting the trail often at all months of the year have led him, during the last four years, to devise a one-man outfit that meets all these conditions and seems worthy of description in some detail for the benefit of others.

I have but two packs: the January pack and the June one. One is used from November to April and the other from May to October. They both weigh about the same when I start out, from thirty to thirty-five pounds, and my own weight is 130, height five feet eight inches; strong for my weight, but a lightweight, a cold-frog, easily fatigued and quickly susceptible to poorly cooked food. So much for the human equation. To meet the demands for comfort in the wilderness of my wretched body I have been forced to do considerable experimenting, scheming and devising. Yet time and again I have set off into the mountains with one or the other of those packs, taken along a friend and have spent from five days to a week fishing, hunting or timber-cruising in most enjoyable fashion, with no fatigue and no harrowing hardships. Yet I have had more than my share of stern weather conditions to face.

Almost invariably the friend has showed up with a bulky sleeping-rig weighing not less than fifteen pounds, a duffle-bag, weighing as much more, crammed with his personal effects, no means of carrying it, and no reserve to carry his share of the outfit. If he could carry just his share of the grub alone I would not kick, but as soon as he gets out of the range of porters, autos, teams and canoes he begins to make heavy weather of it, and because of *his* duffle the trips often cost double the intended expense. As a rule the best way out is to fit him up with one of my own outfits and leave his stuff at the house.

To begin with the weather. Half of the tyros do not seem to realize that, while the weather may be fine and dandy when starting out, it will most likely be mean within two days from the start of the trip, and, as Dave Abercrombie used to say, "What's the weather got to do with it, anyway!" No one proposes to den up and halt the trip just because the woods are wet or it is drizzling, though I usually make myself comfortable in camp in a hard rainstorm, unless same is only a thunder shower. But the candidates show up with no raincoat, light khaki coat and trousers, no hat that will keep rain out of the neck and off the shoulders, and then expect to duck for shelter at the first sign of storm.

Tied up with this consideration is that of getting through the train trip and city connections without looking like the wild man of Borneo. No one likes to look conspicuous or bizarre in making one's train, yet at most little jumping-off places the facilities for changing city clothes—and disposing of them when changed—are limited, not to say absent. My rig, winter or summer, has boiled down to a gray woolen suit, the coat of which was once of a standard double-breasted city suit, and the trousers are all-wool homespun, rather thin-cut lower down so that they will fold easily inside one's hunting-boots. I long ago discarded the army breeches; they are no good to sleep in, and the cuffs are a nuisance, particularly if you are wearing larrigans that come not much higher than your shoes. Going to the train I wear the above-described suit with the trousers pulled down *outside* my hunting-boots, sport a linen collar and shirt, a red leather four-in-hand tie presented to me by a cowboy friend, a Stetson hat and a green woven-wool skating vest. Except for the hat, I look about the same as anyone else in city duds and attract no particular attention.

I never check the packsack; its straps and buckles are too apt to be ripped off by our baggage-smashing gentry. I once saw it going by on a trunk truck, down the station platform, buried under a mountain of suitcases and trunks, and when it was transferred to the baggage-car the baggage-man just looked at its tag, disregarded the handle by which I always carry it in the city, grabbed one of the straps and yanked the whole pack bodily from under all those trunks! I set my teeth and *hoped* that it would be handed to me at the jumping-off place ready to carry. Luckily it did get through all right, the strap held under that big brute's full strength—but never again! Another thing: no matter how much assured that your pack is or will be on your train—have you ever gotten off at some lonely shack beside the rails, one of those with one telegraph operator for general factotum, and had the train go on without

your baggage being handed out? Next train is next day, and it will be up on that one surely, the man assures you as he locks up the station and goes home, leaving you in a fine frame of mind!

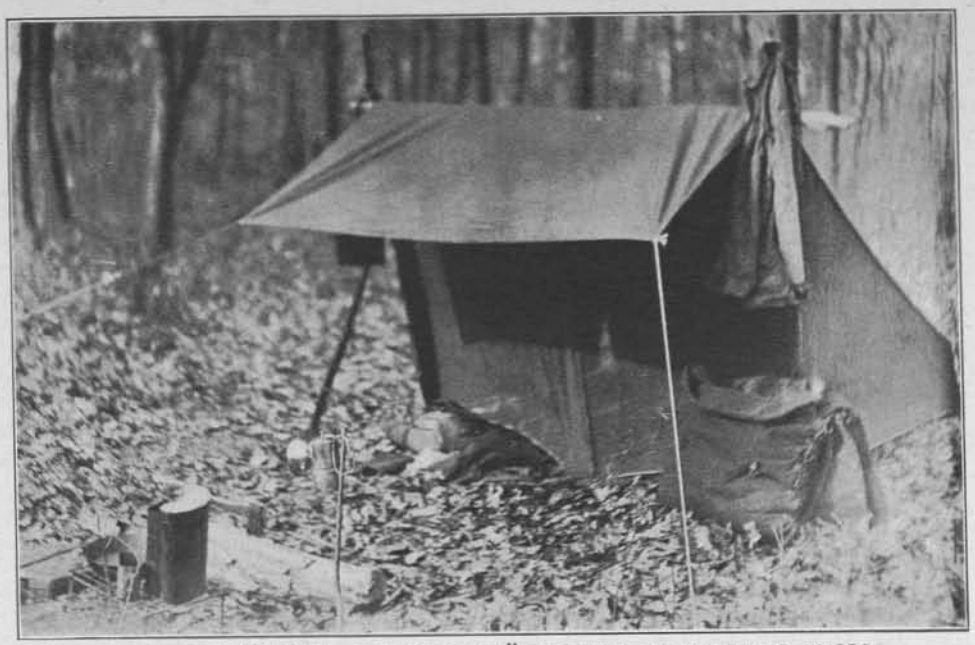
No. I have a regular shawl-strap to go around my packsack, and I take the pack right along in Pullman or day-coach, just like any suitcase, and then I *know* it will be there at the jumping-off place! In dead of winter I add a mackinaw coat to the above outfit, but all through the hunting season and the spring trouting the gray double-breasted coat is ample. I never wear it on the trail, the wool vest alone is plenty; coat is good at night or in rain or biting northwest wind. The footgear I wear on all these hiking trips is the high cruiser moccasin. I do not object to the sixteen-inch height, it never binds my legs the way they say it will, and it is much handier in getting through briers and deep bogs than any lower boot. The pair is light, and I always tie the laces in a flat knot over the instep before lacing up higher. Otherwise the tension caused by the calf muscles will steal lacing from over the instep, making the boot tight there, or sometimes it is just the other way and the instep steals from the calf, binding the muscles of your leg. A flat knot over the instep obviates both troubles.

On leaving the train I shoulder the pack and hike for the nearest timber. A temporary stop is made here, trousers are tucked into the boots and relaced, the linen is taken off and stowed in a small bag in the pack and my flannel shirt comes out of the latter and is put on, also belt-axe and hunting-knife. Using the same leather necktie, I am ready for the trail. In a hot spell the rig is uncomfortably hot, but at that it is better than the painfully sunburned legs that my friends sport after a hot day, and better than the discomfort of sun on khaki trousers which offer no protection against it. If it comes on to rain I get the "fairy" rubber coat out of the pack and put it on. It weighs nineteen ounces and takes up about as much room in the pack as a pair of socks. It is a very hot coat and in a cold, icy wind or thrown over one at night, is a very acceptable addition to one's clothing. It protects you from rain down to about four inches above the knees. The boots take care of everything below the knees and the remnant I let get wet; the trousers being wool, this is no great hardship. Meanwhile my friends are shivering in their clammy army khaki breeches, and want to stop and build a fire. Several times I have fished, rowed or cruised right on through a thunder squall that half filled the boat, wearing that little coat and letting the wool trousers get wet around the knees; they dried out without my knowing it later. Wool protects you from cold; it also protects you from heat, which is not so well appreciated, and in an open boat in the hot sunshine I would rather have wool trousers and be warm than khaki and be hot.

This rounds up all the trail clothing, except what to take for a change. One needs, of course, night-socks and bed-slippers for the sleeping-bag, and a wool toque to pull over your head for a night-cap. With head and feet comfortable you can sleep soundly even if the bed is hard; without them cared for, no bed will bring sleep. I confess also to a little down pillow a foot square that always gets into my pack. Almost any mountain of browse, boots, socks and extra clothes will answer for the basis of a pillow, but it is apt to be uncomfortable on one's face and ears unless topped off by the little pillow aforesaid.

For the rest of the change, one more pair of socks and a pair of wool underdrawers is sufficient for a week's trip. Any catastrophe that involves wetting you to your undershirt calls for a general drying-out fire. But wet pants and underdrawers are the natural concomitant of almost any day in the woods, and if the former are wool they will dry on you without discomfort if you can pull on a dry pair of underdrawers and dry socks underneath after the tent is pitched and all the chores are done.

So much for the clothes on the back-pack cruise. You will note that most of them are worn on you from the start, saving much bulk and weight in the pack to be carried to the jumping-off place. Now, about sleeping outfit: I use my own design of packsack sleeping-bag, in which



LEE SIDE OF "PERFECT SHELTER TENT," SHOWING MOSQUITO-BAR WALLS
Carbide lamp and kidney-shaped cook pail in foreground.

the pack is the upper surface of the sleeping-bag laced up along its sides to a mattress to make a pack 28 inches square with a 20-inch flap. When unlaced and straightened out this pack makes a covering six feet four inches long, and, as its lining of wool batting and mackinaw is 34 inches wide, you have considerable flap to hold in on each side. The bottom piece is a long, seven-foot by 30-inch mattress filled with wool batting, its underside being of waterproof canvas so that it can be thrown right down on damp or snowy browse. This wool lining was originally about a quarter inch thick, being intended to put down on a pile of browse, but as picking any quantity of the latter was a nuisance, I first tried a stick bed, which was an improvement, but weighed three pounds, so I finally added enough wool batting to make my under mattress an inch thick. As the wool is very light, it only made the mattress weigh a pound more; the original weight was three pounds—adding the wool to make it thicker brought it up to four pounds, which was better than carrying even a three-pound stick bed additional. At that point I have rested the case, for, unless the ground underneath the tent is *all* rocks, it is plenty comfortable enough with a hollow scooped for hips and shoulders and a few leaves or pine needles thrown in to take off the rough edges, so to speak. The cover or packsack, I might add, weighs four pounds in single mackinaw wool lining and waterproof backing for the June pack, warm down to about 36°; four and a half pounds in caribou skin for the January pack, warm down to zero.

The total weight of the sleeping outfit is then about eight pounds; a good wool quilt or fur bag will weigh the same and can be stowed in a duffle-bag and carried in a harness, so I do not claim anything very much for my scheme but compactness. A wool quilt bag, six feet by thirty inches by twenty-two inches, at the foot, can be made up by anyone who can run a sewing-machine, buying light, fine-woven material like sateen or galatea and laying out the wool bats between the sheets, quilting them and then sewing the two quilts together all around except two feet left open for a flap. Such a bag will weigh about five pounds and will be warm and comfortable for cold-weather

camping (which is the cream of it, if you will believe me!). This bag and your tent could go in an eight-inch tump-bag, with cook-kit, provisions and other duffle in a similar bag, and with a leather harness to carry them side by side, you would have a light trail outfit quite as good as the one I am describing. Only, limit the weight of your sleeping outfit sternly to eight pounds, for there is no fun in breaking your back with a heavy load.

Now for a tent. I would set its limit at three pounds, and its capacity two men, or three at a pinch. A light A-tent, Forester, Hudson's Bay or Blizzard is a good one for two. For three I have lately devised one that I call, with becoming modesty, "the Perfect Shelter Tent." It was born of the following considerations: If you want a perfect sleep you must get all the forest air into your lungs that the law allows, yet keep out of drafts. Just try the difference between that drowsy, stuffy feeling with which you awaken in a closed tent with airtight and watertight walls and the springy, elastic, exhilarating feeling that you experience when arising from a night slept in the open—*such* a sleep!—and you will grab after that sensation thereafter as one of the desirables of the trip. Many experienced campers, mailmen, timber-cruisers and woodsmen that I know scorn a tent except as a shelter to keep off dew and rain, and their caterpillar-like forms are apt to be stumbled on in almost any hollow in the leaves about camp after retiring hours, each in his fur or wool sleeping-bag, just as close to nature as he can get.

I approve of all this—except for the wind! Many a night have I slept in the vicinity of Abercrombie, whose thunderous snores filled the atmosphere as he slept the sleep of the truly just with nothing over him but a tarp stretched between four stakes, and the icy blasts caressing the outside of his sleeping-bag! I admire that—all but the drafts, but I prefer the comfort of having a den sheltered from the wind, where the fire heat can form a hiatus of good cheer and one can spread one's sleeping-bag therein upon retiring and breathe the mountain air—

THE TENT MAKING GOOD ON THE SUMMER SAND DUNES

Shady, cool and flyproof by day; breezy and mosquito-tight at night. Stoppel kit, aluminum bake pan and kidney-shaped cook pail in foreground.

THE AUTHOR'S WINTER SLEEPING OUTFIT

Caribou skin packsack sleeping bag laced to wool mattress, bed socks, bed slippers, pillow and skull cap.

minus those breezes which make it too much of a good thing!

And so I was led to devise the Perfect Shelter Tent. You ask three things of a shelter tent: protection from rain, wind and insects. The roof of this one was made of two pieces of waterproof army shelter clothing, thirty-three inches wide and eight feet three inches long. This was sewed up and hemmed top and bottom, giving a sheet five feet four inches wide by eight feet three inches long, weighing three pounds—and it would hold water in bags! Grommets were put in along the front and back and two of them a foot up from the back. Deducting this foot, you have seven feet three inches for the slope, which, for a rise of four feet six inches at the front, would give a horizontal floor line of six feet three inches. Now, four feet six inches is just the width of fine-mesh mosquito netting, or you can get it in hospital gauze (which keeps out punkies) by sewing up one and one-half widths of the latter. I chose the mosquito stuff, because one does not often have punkies trying to break in after sundown, while mosquitoes are indefatigable. Two pieces were cut out of the bolt of four-foot six-inch mosquito cloth (which cost 25 cents). They were one foot high at the back, four feet six inches at the front, six feet three inches long, and the full width was continued to make half the front of the tent, or two feet eight inches more. These pieces were sewed under the side hem of the roof and edged along the bottom with double gray tape to give the mosquito-blind strength and to have something to which to fasten tie tapes.

Then the tent was set up. Two two-foot stakes were cut and driven in for the back of the tent, the bottom grommets tied to them and the ones a foot up the back were tied above them on the same stakes. Two front stakes five feet high were cut and put in six feet three inches from the rear stakes, tying the bottom ties of the mosquito-blind to their feet and the front grommets of the roof up as high as they would go—four feet six inches. These front stakes were then guyed out, bringing the tent roof nice and taut, the side pegs were driven and tied and the tent was up. We had, in effect, a sheltering, rainproof roof, and all the sides and front of mosquito-blind. An airy, comfortable tent, not drafty, for the netting killed that, and *such* a sleep as you pulled off in that tent! For an ordinary rain in the woods it worked all right and rode out several thunderstorms, for the rain simply rolled down the outside of the netting, but for a driving rain or a gale of wind it needed a light side-piece. This was made of brown galatea, weighing altogether six ounces, and it was provided with snap buttons at every six inches, male half on the side-piece and females on the tent, under the edges. This side-piece could go on either side that the wind happened to be coming from. Finally we added a verandah cloth across the front of the tent, bringing the total weight up to three pounds twelve ounces, and this tent was out with me four times this fall, sleeping two men and a husky boy in plenty of comfort, and it had rain, storm, gale and sharp, cold weather to try it out. The snap buttons you can get at any notion counter in a dry-goods store and sew on yourself wherever needed. We used six more of them to snap up the

front edges of the mosquito-blind, but generally it was closed by simply pinning the bottom flat with a rock.

Coming now to cooking and provisions, I was some time getting together an outfit for one man or two men and a boy. Each carried knife, fork, aluminum nine-inch plate and cup in his pack as part of his personal outfit. That left the cooking outfit, for boiling, baking and frying for three, up to me. In order to lighten the pack on your back as much as possible it is well to subdivide wherever feasible, putting axe and knife on your belt and hanging the cook-kit by its own strap if possible. So the first acquisition was a 25-cent tin kidney-shaped beer-growler, holding three quarts, which I spied in a city department store. This article was originally intended for the nefarious purpose of rushing the can of a Sunday morn,—you know—under your coat, hooked to your suspenders. Not even a city cop could be expected to look unconcerned if you appeared out of the speak-easy door brazenly carrying a three-quart pail of beer; but the Lord's day takes no particular count of thirst, and so the kidney-shaped growler had to be invented to keep Satan out of mischief. Along comes The Forester in the shape of yours truly. He knows nothing of beer and its ways, but he *does* know mulligan, and here is just the container for it! All it wants is a canvas bucket to go in, with a strap riveted to the bucket and you have a big part of your kit nicely tucked away under your arm and in no way interfering with the pack-straps or with woods-going. So I sewed up a kidney-shaped pail of brown watertight canvas, such as all camp buckets are made of, to fit over the growler, riveted on a school strap with buckle to adjust the height and there you were! —three quarts of mulligan or boiled spuds or rice or soup for three hungry men, and a camp water-pail to boot! In this beer growler went all the smaller provision bags, coffee, tea, salt, baking-powder, beef capsules, cocoa, cornmeal, dried soup powders—in all about three pounds of grub and container.

THE COOK KIT FOR TWO MEN AND A BOY

Three-quart kidney-shaped mulligan pail, 9-in. fry pan, stopple kit and grate, and aluminum baking pan.

The second accessory to this kit was the Stopple cook-kit. It is too well known to need any description here. It gives you a quart container for boiling coffee, tea and cocoa in, a wire grate for all sorts of fire duties, obviating entirely any pole or dingle-stick; two fry-pans of the right size and shape to fry fish or pop corn in, and two big pint cups to boil fruits and have a man's-sized drink of coffee out of. It carried all the accessory forks, spoons, mop-sticks and the like, and went in the other fellow's pack.

Third article, the aluminum baker. No, this is not the well-known reflector baker; the smallest made is far too large for a trip of this kind. I discovered this one in a sporting-goods store, an aluminum pan with flat cover and folding handle which snapped over the cover to hold it on. It is nine inches long by six inches wide and an inch deep, nicely dished and intended by its makers, I believe, for a fry-pan. A worse one would be hard to conceive of, for the aluminum handle would be too hot to hold and too heavy to let go of without tipping the pan over. But as a baker it would be a star. Aluminum has three times the conductivity of steel. It will not scorch things because the heat is not localized, but spread all over the surface of the metal from the point of

reception from the flame. In that baker I can make a cornbread cake that will melt in your mouth and be all in size that three men can gorge. Or, I can set a squaw bread biscuit dough in it and turn out a fine, well-risen biscuit that goes mighty fine for breakfast. Grease both interior and inside cover of pan, fill half full of dough or batter, set on grate over a bed of coals, and build a flourishing fire on the cover. In ten minutes open her up and take a peek—golden brown underneath—needs a bit more browning on top—flip her over on grate and bake upside down for five minutes more and then set pan aside until wanted. Out of it will hop one fine cake—no less!

Fourth article; a seven-inch Boy Scout frying-pan with folding handle—for flapjacks. You can make them in the Stopple pans, but they are usually busy with fish, eggs, bacon or pork cubes, and you want another pan for the flaps. Then, a deep 7-inch tin mixing pan for batters and doughs; three shallow dishes for soups and mulligans; three flat pie plates to cover these, and the cook kit is censused.

Here is my grub-list for a man and a boy (eats more than the man) for four days in the mountains: 1 lb. bacon, 1 lb. salt pork, 1 lb. rice, ½ lb. butter, ½ lb. lard, ¼ lb. coffee, 1 small can evaporated cream, 1 box beef capsules, 1 lb. self-rising buckwheat flour, 2 lbs. flour, 1 lb. corn meal, 1 lb. sugar, 2 oz. baking powder, 2 oz. tea, 2 oz. salt, 1 doz. eggs, 1 lb. prunes, 1 lb. dates, 1 lb. apricots, 1 lb. cheese, 1 lb. smoked beef, 4 potatoes, 4 onions; total, 18 lbs. Enough to live well, even if we caught no fish; but, with the Kid along, this is impossible; he caught all we could eat, fine black bass. On the next trip, where we had another man along, we added one-third to all of the above and came out fine, though the sole fresh meat shot or caught was three unlucky blackbirds, which fell to a shot from the Kid's 28.

Our breakfast menus were: coffee, flapjacks, bacon, omelette, and stewed fruits left over from the night before, usually fish besides, all we could eat, caught before breakfast that morning. For lunches we usually had a feed of dates (nearly equal to meat in protein), cheese, smoked beef, and, if a fire was built, cocoa and squaw bread. The Kid was adept at that; it was his specialty, and he generally made one at the breakfast fire and set it aside for the midday lunch.

It never pays to fill up your stomach in the woods during the midday stop. The Indians' way of two meals every sun is plenty and after a few days in the open you do not care for more. I often take along Ry-Crisp Swedish whole-wheat bread for lunches. It is delicious when toasted and very sustaining. It comes in flat crackers 12 inches in diameter and will keep fresh indefinitely. Squaw bread is simply biscuit dough flattened out and baked in the frypan, tipping up for browning on top as soon as the bottom is firm and crusted. A cup of flour, a heaping teaspoonful of baking powder, a lump of lard as big as your thumb worked into the flour, add just enough milk water from a cup into which a bit of evaporated cow has been poured, a pinch of salt, and you mix up a dough with your spoon, keeping your hands away. Bake at once.

The big meal of the day is, of course, at nightfall, when the day's hunting or fishing is done. For the first day I usually bring along a pound of steak to tide over the gap before the rods or guns get to work. The Stopple grate is set up and a fire started with the quart container in its bracket in the grate and the three-quart growler on the grate; in fact, I also stand the Stopple container there too, in the curve of the growler, to get the heat better. An onion, two potatoes, some rice, some chunks of meat, a big pinch of celery salt are started in the growler for a mulligan, and rice is put in the container, a small grab to each man to a quart of water. This under way, I mix my batter for the corn bread; one cup flour, one-half cup corn meal, two heaping teaspoonfuls baking powder, ditto sugar, one-half teaspoonful salt; mix all thoroughly in pan and add a beaten egg and enough milk water to just make it pour slowly. Add finally a thumb of butter, melted; stir vigorously and pour into greased baker. On the grate with it; pick out all flaming brands and put them on cover; add more sticks until you have a bright fire on top; maintain a bright bed of coals under the

grate, and in ten minutes the cake will be ready to look at. If coming along nicely and under side brown, capsize on grate and leave five minutes more. Set aside in its pan until ready to serve. The two Stopple pint cups are filled with water and set on the grate. In one goes mixed prunes and apricots, with a liberal dose of sugar, and it is allowed to stew; the other is set off as soon as it comes to a boil and a pinch of tea for each man steeped in it. A beef capsule to each man is next stirred into the mulligan and grub is then served —mulligan, steak or fish, rice, corn bread, tea, and fruit for dessert. You'll never have intestinal troubles with that grub!

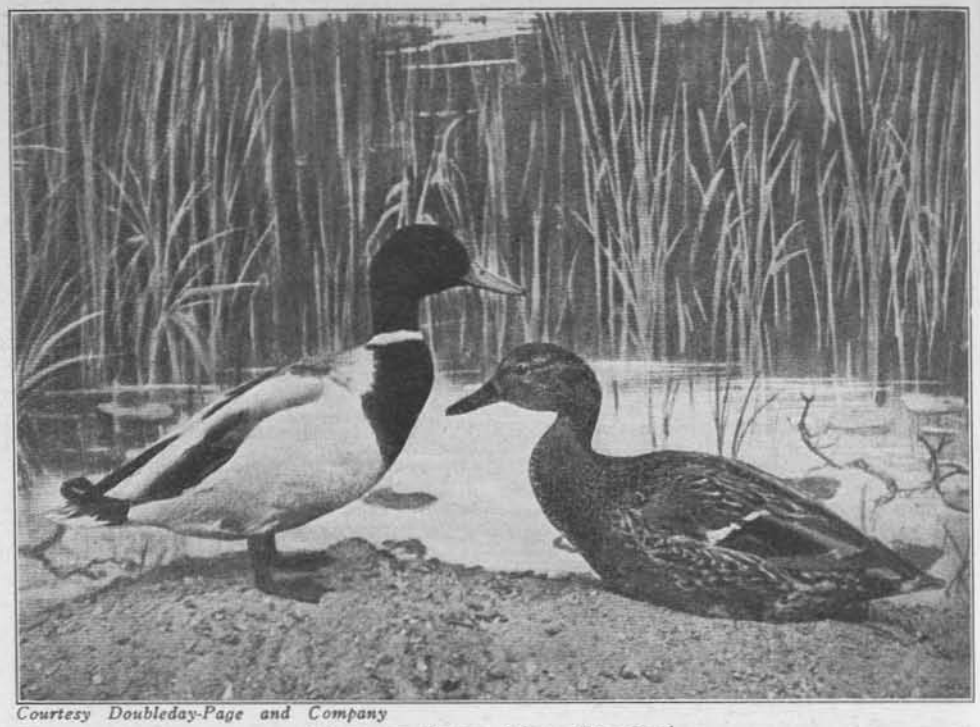
How do I carry it? Well, enter here three friction-top tins that used to hold carbide, the pound size. Cleaned and scalded, they are ready for butter, lard or suet, and bacon. The expeditionary pork goes in another 3 x 5-inch friction tin, and fourteen fresh eggs are broken into another, where they carry very well, considering. I have resurrected whole yolks out of that can after four days of trail. Most of this shaken-up egg is fine for one-man omelettes. Beat to a frazzle, add a drip or two from the cow can, and then into the hot greased frypan with the liquid. Let stand a few minutes, until brown underneath, flop over and serve. The secret of having them fluffy is plenty of beating. Vary by breaking in little strips of shredded smoked beef. For a somewhat longer camp I take along an Arcadia tin which holds a pound of codfish meat—wonderfully acceptable after a diet of fresh meat and fish. Another variant is rice and pork cubes. Dice the pork, boil in frypan for ten minutes, pour off water and fry lightly; tip the whole works into the rice pail and serve. Great eats!

After cookie resumes his pipe and partner washes up, it is time to break out the carbides and look to the sleepin's. There is no use talking half the evening and then turning in on a bed of rocks and stubs. These are all taken out of the tent after supper, hollows dug for hips and shoulders, the floor tarp spread, or, if none, leaves and browse strewn down to cover the indecent nakedness of the soil.

I might put in here a postscript about the Kid's axe. It was given him by Dwight Franklin, whom all FIELD AND STREAM readers will remember as an original outdoorsman, and seems to have been an ice axe at one time in its history. It has a cutting edge and pick point and is the handiest ever in a rocky country, where tent-stakes are always running into unsympathetic rocks somewhere down in the bowels of the earth. The axe was a great clear-the-way with its pick point, and it weighed but one pound. As the Kid's job was tent-stakes, light firewood and the like, this axe filled the specifications for him. Speaking of firewood, once you have tried trash wood, like pine, cedar and spruce, against hardwood like blackjack, chestnut oak and white oak, hickory and maple, you will say hard things to the man who dares approach your cook-fire with an armful of trash. It is all the difference between a meal that takes over an hour to prepare and one that is ready in thirty-five minutes. I've seen the same pots that refused to boil over a whole bed of pine coals, boil like Sam Hill over a few embers of blackjack, and when the pots are cold on the grate and you want to see some bubbles right smart quick, break up a twig fire of dry oak or blackjack and see how soon the steam begins to shoot out from under the lids!

These hiking trips have been approaching standardization with me during the last four years. At first they *would* run into weight, and you staggered under a load in spite of your best planning. With the equipments as they stand now I can count on picking up a pack that will not go over thirty-two pounds when I start out, and the Kid finds that twenty pounds is about right for him. As for the Littlest Boy, his pack weighs just six pounds and includes his raincoat, sleeping bag, toilet kit and some tackle, and it all goes in an old cartridge bag, costing a dollar, whose straps have been rearranged to make a shoulder harness. We never think of leaving *him* behind on our summer camps!

NEXT MONTH: "THE ESQUIMO TENT" BY THE SAME AUTHOR



Courtesy Doubleday-Page and Company

MALLARD DUCK *(Anas Boschas)*

OUR AMERICAN GAME BIRDS.—I

Reprinted from the Nature Library

Length—23 inches. Male—Head and neck glossy green, with white ring like a collar defining the dividing line from the rich chestnut breast; underneath grayish white, finely marked with waving black lines; back dark grayish brown, shading to black on lower back and tail. Four black upper feathers of tail curve backward; rest of tail white, black below. Speculum or wing bar rich purple with green reflections and bordered by black and white. Bill greenish yellow with gutters on the side.

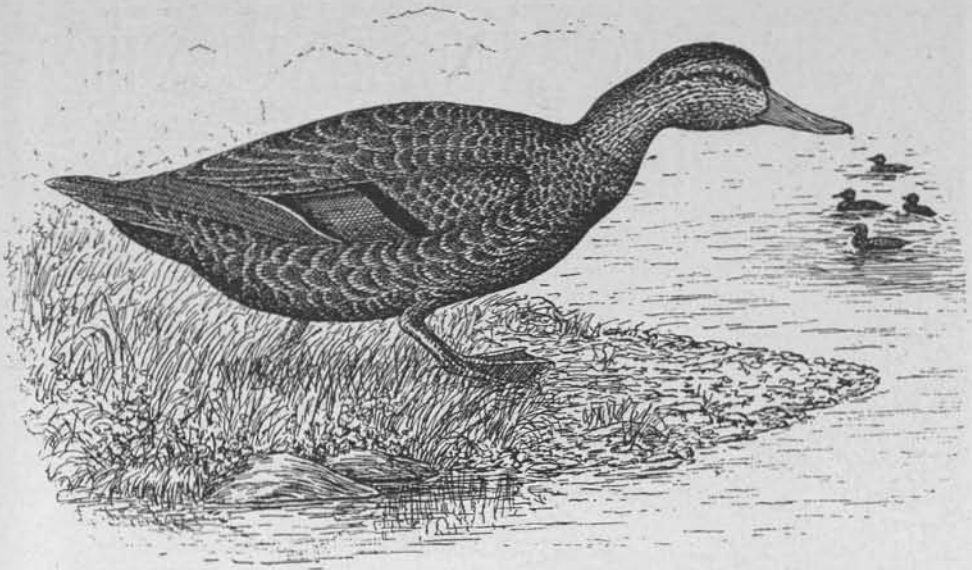
Female—Plumage generally dark brown, varied with buff; breast and underneath buff, mottled with grayish brown; wings marked like males.

Range—Nests rarely from Indiana and Iowa and chiefly from Labrador northward; winters from Chesapeake Bay and Kansas southward to Central America. Rare in New England.

Season—Winter resident in Southern States; a transient visitor or migrant, during the winter months, at the North.

Notes—The familiar quack of the barnyard duck. Nests—On the ground. Eggs—Six to ten, about 2.35 inches by 1.65, yellowish drab, variable.

Flight Marks—Size of the black duck; the green head and white ring around neck identify the male; female similar to the black duck, but body lighter in color, with wing markings like those of male; speculum or wing patch bordered both before and behind with a white bar.



Courtesy Massachusetts Board of Agriculture

BLACK DUCK (*Anas Obscura*)

OUR AMERICAN GAME BIRDS.—II

Reprinted from the Nature Library

Length—22 to 23 inches, same size as mallard. Male and Female—Resembling the female mallard, but darker, without white anywhere except on the wing linings; violet blue patch or speculum on wings, bordered by black; a fine white line on that of male only. General plumage dusky brown, not black; lighter underneath than on upper parts, the feathers edged with rusty brown. Top of head rich, dark ashy brown, slightly streaked with buff; sides of head and throat pale buff, thickly streaked with black. Female paler yellow. Bill greenish. Feet red.

Range—Eastern North America, west of the Mississippi Valley, north to Labrador, breeding southward to the northern parts of the United States.—A. O. U.

Season—Resident in the United States, where it nests; also winter resident, from September to May; most abundant in autumn and spring migrations.

Notes—A quack resembling that of the mallard. This is the call of the female; the male has a more reedy cry.

Nest—On the ground in a wet meadow, on the border of lake or stream, in the rushes, or sometimes under a bush on a hillside.

Eggs—Six to about twelve, pale yellowish drab or buff, more or less dingy, about 2.40 by 1.75 inches.

Flight Marks—Large size, dusky color and silvery white lining under the wings which shows in flight. May be distinguished from the female or young of the mallard by the absence of white wing bars.

Editor's Note.—These are the first two of a series of twenty-four brief natural history notes on our game birds. Two will appear each month. The material is from the Doubleday-Page Nature Library, except the Flight Marks, which are from E. H. Forbush's "Game Birds and Wild Fowl," telling the sportsman what the bird looks like in flight.

American Quails or Partridges

OUR American quails or partridges differ in size from the partridges and quails of Europe. They are smaller than the old-world partridges and larger than the little migratory quail. The five genera and thirteen species found in North America are all handsome game birds, excellent in the field and on the table; one of them, the bob-white, I regard as the best game bird in the world.

There are many forms of bob-white, which have been classified as sub-species by the ornithologists. Some of these inhabit Mexico. Within the United States we have two species, the ordinary quail or partridge of the Northern States and the masked or black-throated bob-white, which is found in limited numbers in southern Arizona and more abundant in Sonora, Mexico. The sub-species are the Texas bob-white, a somewhat smaller bird and lighter in color than the Northern form, and the Florida bob-white, which is much darker and somewhat smaller than the Northern bob-white. They all, including the masked bob-white, have similar habits, lie well to the dog and equally well on the plate, and they all sound the cheery notes, "Bob-white," in the mating season. Our birds are more similar in their appearance and habits to the European partridges than they are to the old-world quails, which are migratory. In Virginia and the South the birds are more often called partridges; in the Northern States they are called quail. The use of the word "quail," however, is becoming common in parts of the South, because many Northern men and clubs now have quail preserves in the South, where the shooting is good, always, because the birds are properly looked after. Now that we are introducing the gray partridge of Europe, the term quail, applied to our indigenous species, may be useful to distinguish the birds.

The other American quail are the California mountain and valley quail, the Gambel's quail, a bird somewhat similar in size to the California valley quail, the two forms of the scaled quail, and the peculiar Mearn's quail, which resembles somewhat a little guinea-hen. These Western and Southwestern quail all are

Editor's Note.—This is the first article of the series "Game Farming for Pleasure and Profit," the material for which was loaned us by the Hercules Powder Co. Every sportsman should get posted on this subject and learn how easy it is to increase his available game supply. The series will cover, in addition to Quail, Grouse, Pheasant, Wild Ducks, Wild Game foods and the destruction of vermin.

handsome birds and they are very good to eat, but often they run before the dogs, and they are not, on this account, such desirable objects of pursuit as the bob-white.

Our quail are monogamous. They build their nests on the ground and lay numerous eggs. One pair of any species and its progeny would produce five or six million birds, at a low estimate, in eight years if there were no losses; so that it is evident that these birds quickly can be made tremendously abundant, as the gray partridges are in Hungary, by looking after them properly. This means simply to check or to reduce, as far as possible, the losses due to their natural enemies and to climate; to stop the entire destruction of the covers and the loss of natural foods; to protect the birds against fires, floods, and illegal destruction (especially during the nesting season).

I have visited many places where these matters have been attended to, and at some of them the birds were fully as abundant as it was desirable to have them, and they remain plentiful, although thousands are shot every season. Many quail clubs quite near New York have purchased and introduced the quail on lands which they rent for this purpose, and they have excellent shooting and will continue to do so until the increasing population makes it impractical to have game of any kind so near a large city. The annual dues in some of these clubs are only $10 or $15, and the sport and the food obtained are well worth the money. In many places there would be no birds, and, of course, no shooting without such industry.*

*Quail shooting is prohibited in Ohio, in New York, excepting Long Island, and is prohibited or restricted to short seasons and small bags elsewhere. These restrictions must be increased everywhere if the laws prohibit profitable quail breeding.

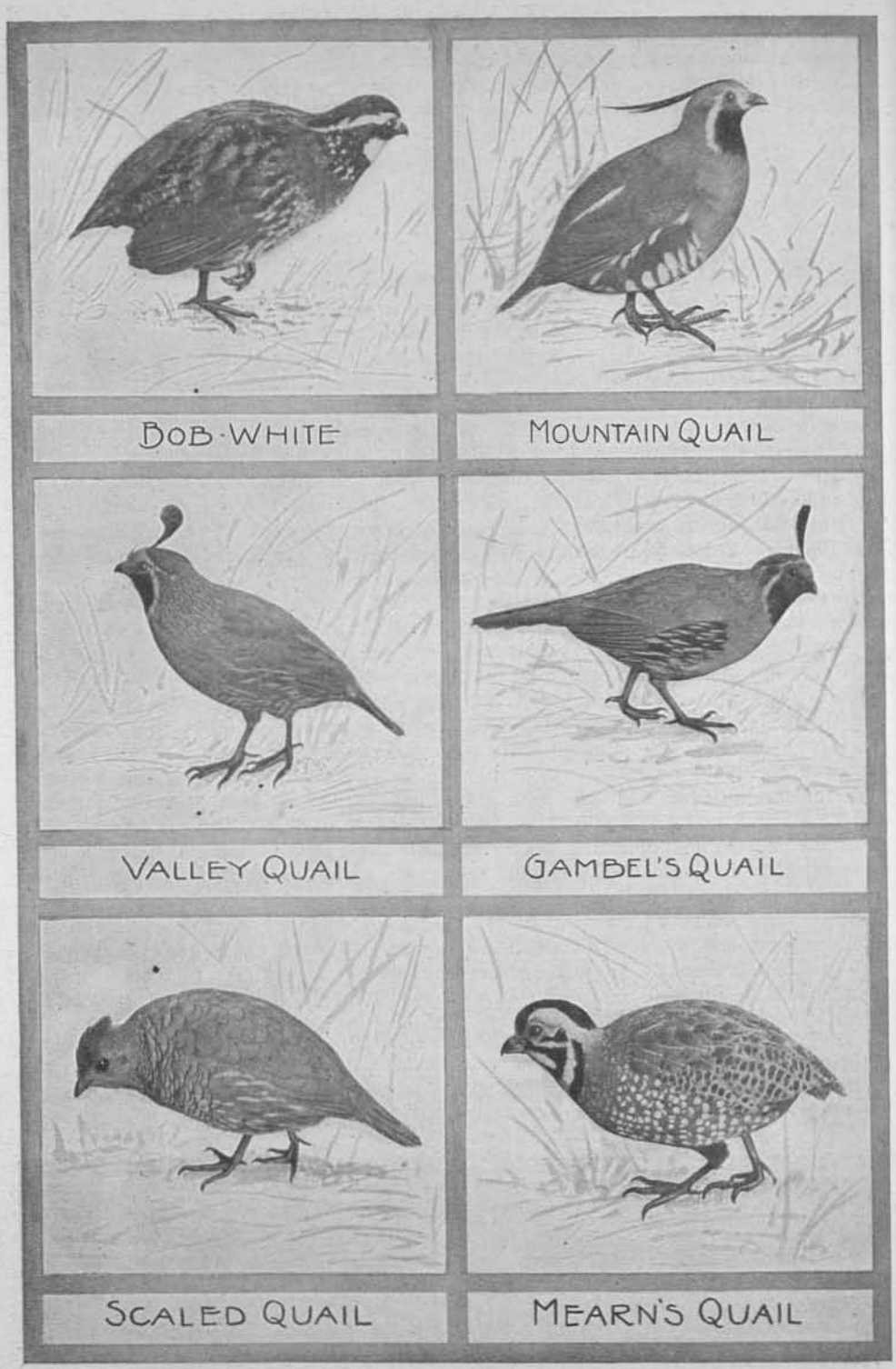
The mountain partridge, the plumed partridge, and the San Pedro partridge, the three species popularly known as California mountain quail, are so much alike that they may be regarded as the same for sporting purposes. They are larger than the bob-whites and are easily distinguishable by the plume of long, straight feathers. The length of the plumed partridges is about 10 inches; bob-white is about 7¾ inches.

I did not find these birds very abundant anywhere in my rambles in California, but Elliot says the mountain partridge is rather abundant in the Willamette Valley, Oregon, and common in parts of California. The plumed partridge inhabits the drier regions of the interior and only approaches the seacoast in the southern portions of its range. The San Pedro species inhabits the San Pedro Mountains, Lower California.

The flesh of these beautiful big-game birds is palatable and, although they do not perform as well before dogs as the bob-whites, they are well worth preserving as objects of sport and for food. Like other upland game birds, they have vanished rapidly and they are extinct in many places. Something more than shooting them, even under laws providing for short seasons and small bags, is necessary to save them from extinction. Game-keepers easily could keep them fairly plentiful and could preserve, at the same time, the big dusky grouse, the band-tailed pigeon, and many California valley quails on properly protected areas. A regulated market should supply the funds to support the needed industry.

The food of the young is largely insects. Later the birds eat berries, many seeds and buds, and Elliot says they eat grain when obtainable. This is a useful hint

A Future Covey of Quail.


BOB-WHITE
MOUNTAIN QUAIL
VALLEY QUAIL
GAMBEL'S QUAIL
SCALED QUAIL
MEARN'S QUAIL

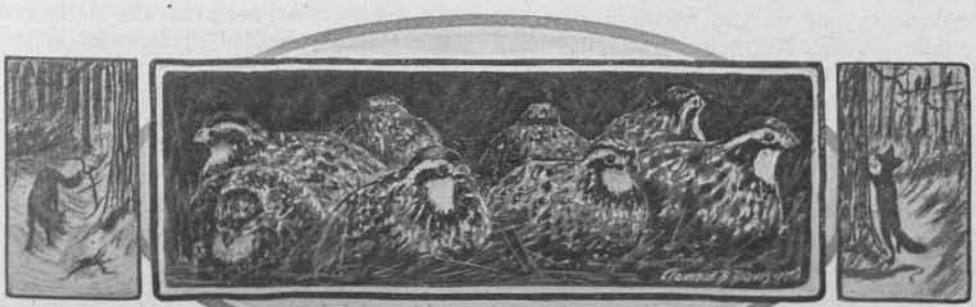
for game preservers, who should always see that the game has plenty of food. The nests of the plumed and mountain partridges usually contain from eight to ten or twelve eggs.

Valley quail or partridges and the California quail are much alike in size and markings. The valley quail is somewhat paler in color and inhabits the interior of Oregon, Nevada and California, south to Cape St. Lucas, the California species being more a native of the coast regions. The food habits of both are similar to those of the other quails.

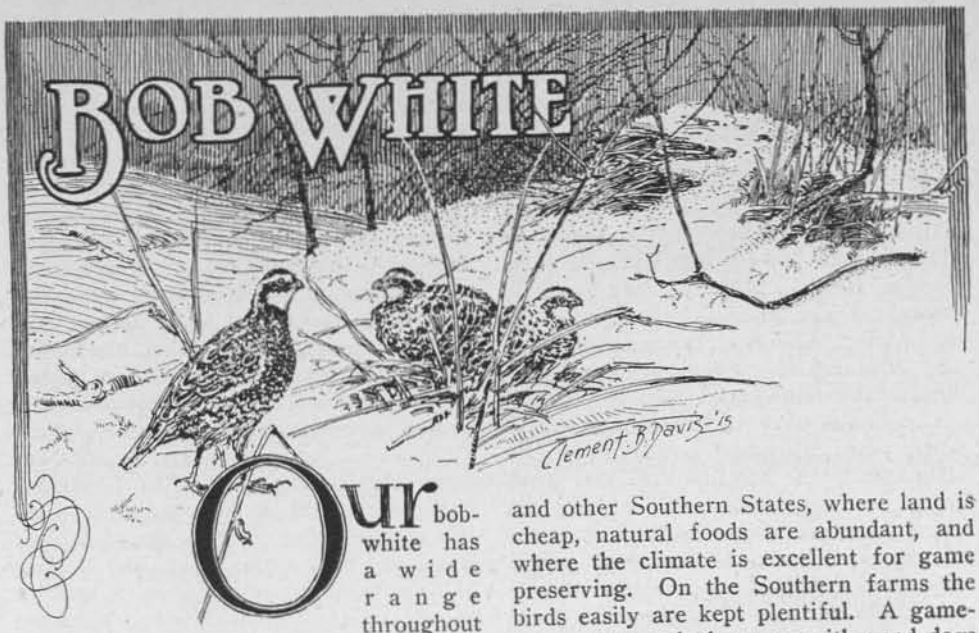
Complaints have been made that these birds, when abundant, are injurious to vineyards. In addition to the seed, grains, berries, buds and insects, the game preserver might well plant a lot of grapes as an additional food supply for them. No doubt they would eat raisins in Winter, as pheasants and other game birds will, and condemned raisins or raisins of the cheaper grades might be used to advantage on game farms and preserves.

Although these birds are found abundant in warm climates, they also thrive in mountainous regions, and they can stand a lot of cold and snow if they have plenty of food and grit and are protected from the furred and feathered enemies referred to elsewhere. They run before the dogs, but when scattered they often afford good sport. I found them tremendously abundant some years ago, when from thirty to fifty covies often were observed dusting themselves in the roads in an afternoon's drive.

Gambel's quail is a beautiful game bird, somewhat similar to the California valley quail, but it has the same fault and often relies on its legs when the sportsman would prefer to see it use its wings. The range includes parts of California and thence east through Arizona and New Mexico to western Texas. A few years ago thousands of these birds were shot for the markets, and since no one protected them against the snakes, hawks, and their other numerous enemies they quickly became extinct in many places and were threatened with extinction everywhere. On some big quail ranches in Arizona and New Mexico, in charge of competent game-keepers, these birds might be made and kept far more plentiful than they ever were, and such industry will pay as soon as birds from game farms can be sold for propagation and the shooting so produced can become an attraction to sportsmen for that district. It is to be hoped that the breeding of these birds will be undertaken before it is too late. These birds, like the other Western and Southwestern partridges, are runners, but they are said to afford considerable sport when they are scattered; like the others they are very good to eat. The lands they inhabit support many cacti, which afford protection from their natural enemies but which are bad for bird dogs. In addition to other enemies, including wolves and snakes, the Gila monster is said to dine on this partridge.



"JUGGING"



Our bob-white has a wide range throughout the United States from southern Canada to the Gulf States, and westward to the Great Plains. It has been introduced in Colorado, Utah and as far west as California and Oregon. In a California State report, a few years ago, it was stated that the birds first liberated disappeared, excepting in one place, where they were protected from their natural enemies.*

It would not be surprising if our shooters will be supplied with an abundance of quail in Oregon and other Western States, since the people are enterprising and they seem to understand the value of practical game preservation.

From Massachusetts north, in New England, and in the northern parts of most of our Northern States the quail suffers much from the severe winters and it is not so easily kept plentiful. But stock birds have been trapped in cold, mountainous regions and held in barns until spring with very little trouble and with very good results, and some birds easily might be preserved for sport in all of the Northern States. The big quail preserves are, for the most part, in the Carolinas and other Southern States, where land is cheap, natural foods are abundant, and where the climate is excellent for game preserving. On the Southern farms the birds easily are kept plentiful. A gamekeeper once asked me, as with good dogs we strolled over his grounds, where thousands of quail had just been shot, if I did not think he had too many birds. Undoubtedly he had and his decision to "thin them out" before breeding season was correct. I regretted that the birds lost in the "thinning" process could not be legally marketed for propagation. Soon, however, I predict there will be many game farms in the South and they surely will make a lot of money until the business is overdone.

Many experiments have been made with the artificial breeding of bob-whites. The birds lay, even in small pens, and although it is generally believed that the males and females have decided preferences in the selection of their mates, pairs have been arbitrarily mated, often, and the hens usually lay fertile eggs, and persist in laying when the eggs are stolen. Mr. Herbert Job secured over seventy eggs from one quail and the Massachusetts Commission secured over a hundred eggs from one. Several times as many eggs as are laid in a wild state can be counted on, and artificial breeding would seem to be inviting to sportsmen and to commercial game farmers. But the experiments thus far have resulted in many losses of young birds by diseases and no one has succeeded

*Mr. D. Baldwin, one of the State Game Commissioners of Montana, says in *The Game Breeder's Magazine* that twenty-four bob-whites were purchased in Kansas by a few sportsmen, before it was illegal to sell birds for breeding purposes, and liberated in the Kalispell valley. He estimates there must be from fifteen to twenty thousand quail in the valley.

in producing large numbers of good, healthy quail.

The hand-rearing of these birds is not necessary, since quickly and inexpensively they can be made to swarm on protected areas, when breeding wild, and wild-bred birds are the best for sport and for food. I am inclined to predict that in America, as in England and on the continent of Europe, the artificial breeding of quail only will be attempted in a comparatively few places, in order to try and help out the wild-breeding birds which for any reason do not seem to thrive.

The quail is fond of farming regions, especially where wheat and the other small grains are cultivated. It thrives in the South on cow-peas and many other foods which are plentiful. It is quite as important to see that the foods the birds require at different seasons of the year are plentiful, and that they have proper covers and protection, as it is to see that the enemies are controlled. Good shooting depends on a proper attention being given to all of these matters.

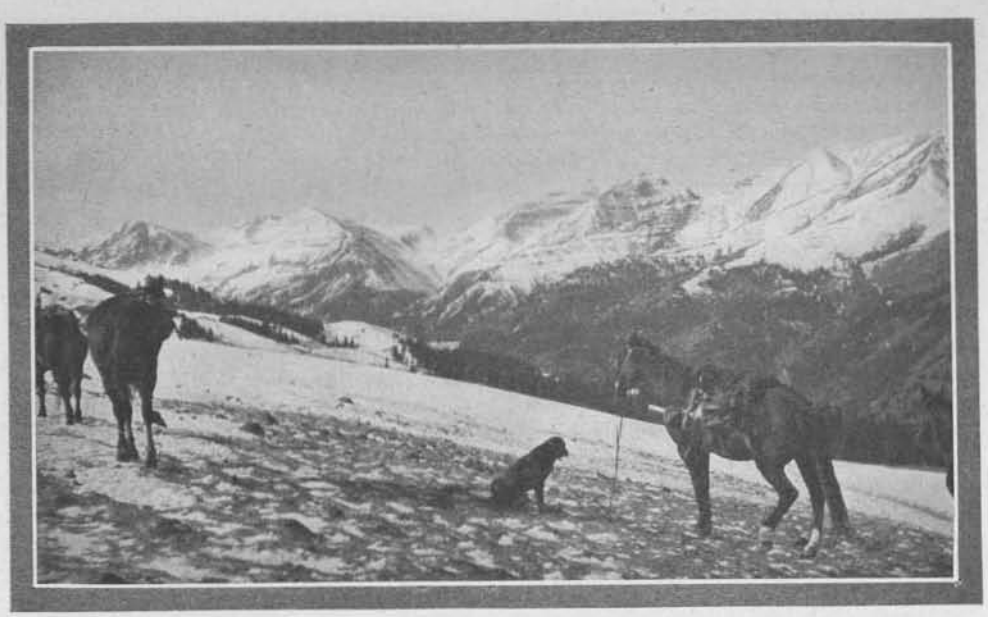
Briars, both berry and flower briars, the blackberry, the wild rose and many others, make safe and attractive covers and they also furnish much food. The young quails live largely on insects found in the fields and woods. Later they eat many berries and the seeds of plants, including weeds. In the fall they glean the stubbles for the grain lost at the harvest, and in winter they often live on sumac, wild-rose hips and other plants which are seen above the snow. At this season many birds will perish unless food be supplied. A little corn, served with grit, at various established feeding places will save hundreds of birds during a severe winter. Mr. H. J. Montanus, of the Middle Island Club, near New York, informed me last winter that their quail were feeding regularly at many established feeding places, at some of which several covies came to dine together.

HUNGER-GRIEF

A lone wolf calls when the darkness falls
  On the desolate barrens white.
He sounds his cry to the friendless sky
  Through the hours of the winter night.
The north wind whines in the stunted pines,
  That beckon and nod like ghastly fans.
The night is rife with the woes of life—
  The hunger-grief of the famished clans.

The caribou flees when the muskegs freeze,
  And the wild-geese southward go.
But the she-wolf's brood must search for food
  In the desolate wastes of snow.
Our curses fall when we hear the call
  Of the northland's famished child.
He knows no rest from his bootless quest,
  Mad with the hunger-grief of the wild.

CHART PITT.



A GOOD VIEW OF THE GREYBULL RIVER COUNTRY

A SHEEP HUNT IN WYOMING

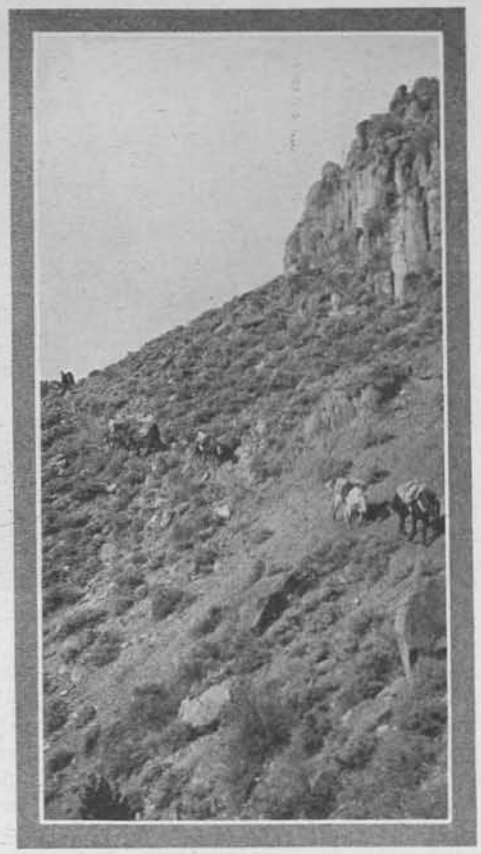
BY BRONSON C. RUMSEY

TWENTY-ONE years ago, as a boy, I saw the Rocky Mountains of Wyoming for the first time. My father, together with Mr. W. A. Wadsworth, of Geneseo, N. Y., and Mr. Geo. Bleistein, of Buffalo, N. Y., were going on a big game hunt in Wyoming and asked me if I wanted to go along. Needless to say it took very little urging, as my father had never missed an opportunity to inculcate in me a love for the wilds and outdoor life, and this trip put the finishing touch to my education along these lines, as I have since made 15 hunting trips in the grand old Rockies, and have finally chosen them for my home, living and working on one ranch for the past eight years. On this first trip we had old "Jim" McLaughlin as guide and "Milt" Benedict cook, each hard to beat in their respective trades. This year, in October, old "Milt" was helping me gather the crops on the ranch; Indian summer days were at hand; the big-game season was in full swing, and, as usual, "I got the fever again." "Let's hurry up with this crop business and go off for a sheep hunt, Milt, what do you say?" "It's a go with me."

A week later found us one afternoon, tired and hungry, 60 miles from the ranch with the pack outfit, en route for one of my old hunting camps on the Greybull River. We had been traveling steady for three days trying to get away from the tracks of range cattle and had hardly done so yet. We had just left the main trail and were climbing a steep hill, I in the lead and "Milt" bringing up the rear with the pack outfit.

"For God's sake, Bob, look at the rams!" came bellowing from below me. When I heard the word "rams" I didn't stop for any questions. I was off my horse in a jiffy, pulled my rifle out of the scabbard, but of course it had a rag tied around the breech to keep the dust and dirt out until we got to the hunting country, and was also unloaded. I know I worked faster than I ever did

in my life, but by the time I was ready to shoot there were six white rumps disappearing over a ridge about 200 yards off. Of course I did the fool thing and took a flying shot without aim. I say without aim, because I forgot, in my excitement, to put my rear sight in position. There we were, out for sheep and they right in our pack outfit! Then the same old story! We were not on the lookout, because "we didn't expect to see game here"! I guess we have all been up against the same thing many times, you and I, reader, and missed many a chance at fur or feather because of the unexpected that usually happens in hunting more often than not. And it's the hunter who always hunts, even until he puts foot in camp, who has the "best luck" as we call it, whereas, as a matter of fact, it's but the reward for eternal vigilance. That night, as we smoked our pipes around the fire, the only consolation we had was the fact that we knew there were sheep in the country. Next morning I started out to locate these sheep. It was about 5 in the afternoon, on my way to camp, having seen nothing all day, that I sat down on a little hill for the hundredth time, I guess, to give the country a parting sweep with the glasses. Ninety-nine times was useless, but not so the hundredth. For there, across a canyon, about three miles off, were six rams! Back to camp I hustled to lay out a plan of campaign.



OUR PACK TRAIN HITTING THE TRAIL

"MILT'S" RAM AND MINE

Next morning we packed up and moved camp to a spot from which we could get to the place where the rams were last seen with much less effort.

It was noon when we left our new camp with enough "grub" in bags, strapped on our shoulders to last a couple of days, as

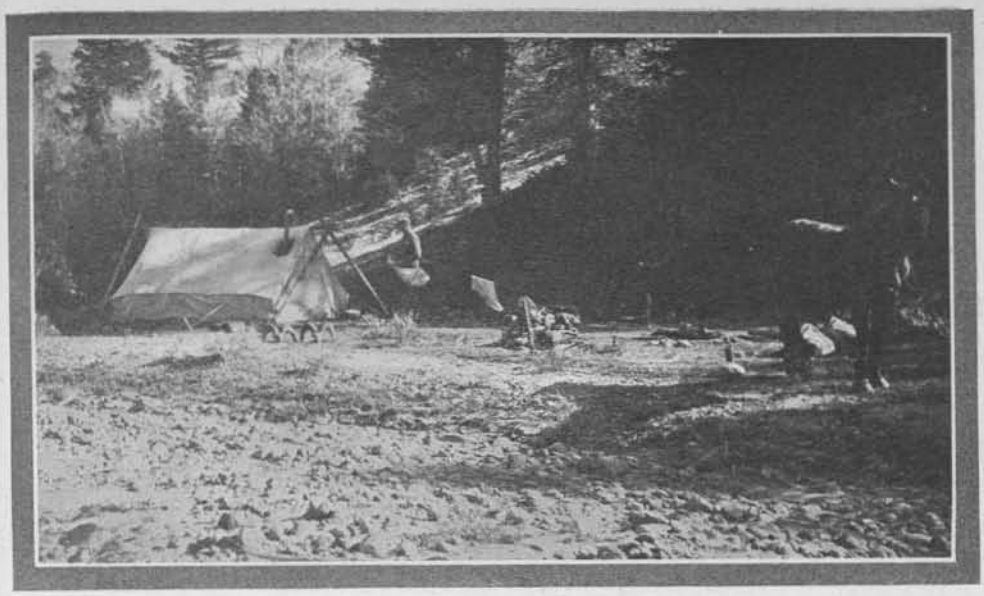
THE AUTHOR'S FINE RAM

we intended to "hit the trail" of these rams and stay with it until something happened. After climbing for about three hours we found their tracks and followed them over ridges, down gullies, up ridges again, through timber with snow up to our knees, in many places. It was about half an hour before sundown when we came to a point of rock from which we could look up a long draw, stretching nearly to the top of a mountain. It was now my turn.

"Look, 'Milt,' there are the rams! Here, take the glasses!" Taking them, he saw the rams about half a mile above us on the grassy or south side of the ridge feeding. We mumbled and sputtered "buck-fever" talk to one another for a minute, the result of which was that we were immediately on our way up the north side of the same ridge.

As we had less than an hour before dark, we didn't stop for many "breathers," badly as we needed them, and one needs many at an altitude of 10,000 feet, with rams ahead! We climbed until we thought we were about opposite them. Crawling to the ridge we looked over. They were still above us. Marking a spot opposite them this time, we made for it as fast as our lungs would permit. Here we rested until we were as calm and collected as we knew we ever would be under the circumstances. We then crawled once more to the crest of the ridge, very slowly raised our heads and looked over, and there, about 150 yards off was a fine ram staring straight at us! All we could see was his head, neck and part of his breast. The rest of his body was over a little rise of ground. We saw nothing of the others, but knew they must be just behind him. Why was that sheep looking at us, and how did he know we were there? There was a strong wind blowing from them towards us, and we were on the opposite side of the ridge. It was absolutely impossible for him to smell or hear us. He must have seen us when we raised our heads so slowly over the ridge that you might say we hardly moved them at all. Or it might have been an instinctive feeling that something was wrong somewhere, and that the "times were out of tune." I have seen this several times while watching elk, and noticed their uneasiness while watching them, though they never could know of my presence.

"Let him have it," I whispered to "Milt." "I've got the long-range gun—a Ross—and can turn loose when the



OUR CAMP IN THE SHEEP COUNTRY

others start running." Old "Milt" raised on one knee and let her go! Simultaneously I stood up and saw rams running in every direction. "Milt" started on the run for his ram, muttering something which I never understood. Immediately my eye landed on a black looking thing, all horns, about 200 yards off, "hitting the trail" like a whirlwind! I turned loose! He still kept going. I started cursing myself for shooting like a fool, getting rattled, etc., all the time I was reloading, a remarkably short time, to be sure, but can't an awful lot of thoughts whiz through a fellow's brain at such a moment? Next shot was better, for he started rolling down the hill and I after him, 20 feet to the jump! He was dead when I got to him, the way it should be.

This having to give a final shot to a splendid, gamey animal to put him out of his misery, when he is trying to crawl away from you with his mangled body, robs such an adventure of all its sport for me. Kill if we must and will, but let's see to it that it be quickly done. It leaves a much better taste after it is all over.

I then realized there was somebody else that was tickled besides myself, for "Milt" was yelling and beating the air with his hat. He had practically dropped his ram in his tracks, with a neck and lungs shot.

I will here leave what remained of the day to the imagination of the reader. He knows how we traveled on air as we turned our steps toward camp; that we arrived hungry, but not tired, and that the old campfire and the overhanging pines heard far into the night all about how it was done, many times over.

"MOOSE HUNTING IN THE SNOWS OF MANITOBA," BY J. MOOREHOUSE, GIVES SOME NEW WAYS OF MOOSE HUNTING IN COUNTRY THAT TO MOST AMERICAN SPORTMEN IS NEW. COMING IN MARCH.

DESERT GOLD

A NOVEL, BY ZANE GREY

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XVI

MOUNTAIN SHEEP

WHAT Gale might have thought an appalling situation, if considered from a safe and comfortable home away from the desert, became, now that he was shut in by the red-ribbed lava walls and great dry wastes, a matter calmly accepted as inevitable. So he imagined it was accepted by the others. Not even Mercedes uttered a regret. No word was spoken of home. If there was thought of loved ones, it was locked deep in their minds. In Mercedes there was no change in womanly quality, perhaps because all she had to love was there in the desert with her.

Gale had often pondered over this singular change in character. He had trained himself, in order to fight a paralyzing something in the desert's influence, to oppose with memory and thought an insidious primitive retrogression to what was scarcely consciousness at all, merely a savage's instinct of sight and sound. He felt the need now of redoubled effort. For there was a sheer happiness in drifting. Not only was it easy to forget, it was hard to remember. His idea was that a man laboring under a great wrong, a great crime, a great passion, might find the lonely desert a fitting place for either remembrance or oblivion, according to the nature of his soul. But an ordinary, healthy, reasonably happy mortal who loved the open with its blaze of sun and sweep of wind would have a task to keep from going backward to the natural man as he was before civilization.

By tacit agreement Ladd again became the leader of the party. Ladd was a man who would have taken all the responsibility, whether or not it was given him. In moments of hazard, of uncertainty, Lash and Gale, even Belding, unconsciously looked to the ranger. He had that kind of power.

The first thing Ladd asked was to have the store of food that remained spread out upon a tarpaulin. Assuredly, it was a slender enough supply. The ranger stood

for long moments gazing down at it. He was groping among past experiences, calling back from his years of life on range and desert that which might be valuable for the present issue. It was impossible to read the gravity of Ladd's face, for he still looked like a dead man, but the slow shake of his head told Gale much. There was a grain of hope, however, in the significance with which he touched the bags of salt and said, "Shore it was sense packin' all that salt!"

Then he turned to face his comrades.

"That's little grub for six starvin' people corralled in the desert. But the grub end ain't worryin' me. Yaqui can get sheep up the slopes. Water! That's the beginnin' an' middle an' end of our case."

"Laddy, I reckon the waterhole here never goes dry," replied Jim.

"Ask the Indian."

Upon being questioned, Yaqui repeated what he had said about the dreaded *ano seco* of the Mexicans. In a dry year this waterhole failed.

"Dick, take a rope an' see how much water's in the hole."

Gale could not find bottom with a thirty-foot lasso. The water was as cool, clear, sweet as if it had been kept in a shaded iron receptacle.

Ladd welcomed this information with surprise and gladness.

"Let's see. Last year was shore pretty dry. Mebbe this summer won't be. Mebbe our wonderful good luck'll hold. Ask Yaqui if he thinks it'll rain."

Mercedes questioned the Indian.

"He says no man can tell surely. But he thinks the rain will come," she replied.

"Shore it'll rain, you can gamble on that now," continued Ladd. "If there's only grass for the hosses! We can't get out of here without hosses. Dick, take the Indian an' scout down the arroyo. To-day I seen the hosses were gettin' fat. Gettin' fat in this desert! But mebbe they've about grazed up all the grass. Go an' see, Dick. An' may you come back with more good news!"

Gale, upon the few occasions when he had wandered down the arroyo, had never gone far. The Yaqui said there was grass for the horses, and until now no one had given the question more consideration. Gale found that the arroyo widened as it opened. Near the head, where it was narrow, the grass lined the course of the dry stream bed. But farther down this stream bed spread out. There was every indication that at flood seasons the water covered the floor of the arroyo. The farther Gale went the thicker and larger grew the gnarled mesquites and *palo verdes,* the more cactus and greasewood there were, and other desert growths. Patches of gray grass grew everywhere. Gale began to wonder where the horses were. Finally the trees and brush thinned out, and a mile-wide gray plain stretched down to reddish sand dunes. Over to one side were the white horses, and even as Gale saw them both Blanco Diablo and Sol lifted their heads and, with white manes tossing in the wind, whistled clarion calls. Here was grass enough for many horses; the arroyo was indeed an oasis.

Ladd and the others were awaiting Gale's report, and they received it with calmness, yet with a joy no less evident because it was restrained. Gale, in his keen observation at the moment, found that he and his comrades turned with glad eyes to the woman of the party.

"Señor Laddy, you think—you believe—we shall—" she faltered, and her voice failed. It was the woman in her, weakening in the light of real hope, of the happiness now possible beyond that desert barrier.

"Mercedes, no white man can tell what'll come to pass out here," said Ladd, earnestly. "Shore I have hopes now I never dreamed of. I was pretty near a dead man. The Indian saved me. Queer notions have come into my head about Yaqui. I don't understand them. He seems when you look at him only a squalid, sullen, vengeful savage. But Lord! that's far from truth. Mebbe Yaqui's different from most Indians. He *looks* the same, though. Mebbe the trouble is we white folks never knew the Indian. Anyway, Beldin' had it right. Yaqui's our godsend. Now as to the future, I'd like to know mebbe as well as you if we're ever to get home. Only bein' what I am, I say, *Quien sabe?* But somethin' tells me Yaqui knows. Ask him, Mercedes. Make him tell. We'll all be the

better for knowin'. We'd be stronger for havin' more'n our faith in him. He's a silent Indian, but make him tell."

Mercedes called to Yaqui. At her bidding there was always a suggestion of hurry, which otherwise was never manifest in his actions. She put a hand on his bared muscular arm and began to speak in Spanish. Her voice was low, swift, full of deep emotion, sweet as the sound of a bell. It thrilled Gale, though he understood scarcely a word she said. He did not need translation to know that here spoke the longing of a woman for life, love, home, the heritage of a woman's heart.

Gale doubted his own divining impression. It was that the Yaqui understood this woman's longing. In Gale's sight the Indian's stoicism, his inscrutability, the lava-like hardness of his face, although they did not change, seemed to give forth light, gentleness, loyalty. For an instant Gale seemed to have a vision; but it did not last, and he failed to hold some beautiful illusive thing.

"Si!" rolled out the Indian's reply, full of power and depth.

Mercedes drew a long breath, and her hand sought Thorne's.

"He says yes," she whispered. "He answers he'll save us; he'll take us all back —he knows!"

The Indian turned away to his tasks, and the silence that held the little group was finally broken by Ladd.

"Shore I said so. Now all we've got to do is use sense. Friends, I'm the commissary department of this outfit, an' what I say goes. You all won't eat except when I tell you. Mebbe it'll not be so hard to keep our health. Starved beggars don't get sick. But there's the heat comin', an' we can all go loco, you know. To pass the time! Lord, that's our problem. Now if you all only had a hankerin' for checkers. Shore I'll make a board an' make you play. Thorne, you're the luckiest. You've got your girl, an' this can be a honeymoon. Now with a few tools an' little material see what a grand house you can build for your wife. Dick, you're lucky, too. You like to hunt, an' up there you'll find the finest bighorn huntin' in the West. Take Yaqui and the .405. We need the meat, but while you're gettin' it have your sport. The same chance will never come again. I wish we all was able to go. But crippled men can't climb the lava. Shore you'll see some country from the peaks. There's no wilder place on earth, except the poles. An' when you're older, you an' Nell, with a couple of fine boys, think what it'll be to tell them about bein' lost in the lava, an' about huntin' sheep with a Yaqui. Shore I've hit it. You can take yours out in huntin' and thinkin'. Now if I had a girl like Nell I'd never go crazy. That's your game, Dick. Hunt, an' think of Nell, an' how you'll tell those fine boys about it all, an' about the old cowman you knowed, Laddy, who'll by then be long past the divide. Rustle now, son. Get some enthusiasm. For shore you'll need it for yourself an' us."

Gale climbed the lava slope, away round to the right of the arroyo, along an old trail that Yaqui said the Papagos had made before his own people hunted there. Part way it led through spiked, crested, upheaved lava that would have been almost impassable even without its silver coating of *choya* cactus. There were benches and ledges and ridges bare and glistening in the sun. From the crests of these Yaqui's searching falcon gaze roved near and far for signs of sheep, and Gale used his glass on the reaches of lava that slanted steeply upward to the corrugated peaks, and down over endless heave and roll and red-waved slopes. The heat smoked up from the lava, and this, with the red color and the shiny choyas, gave the impression of a world of smoldering fire.

Farther along the slope Yaqui halted and crawled behind projections to a point commanding a view over an extraordinary section of country. The peaks were off to the left. In the foreground were gullies, ridges, cañons, arroyos, all glistening with *choyas* and some other and more numerous white bushes, and here and there towered a green cactus. This region was only a splintered and more devastated part of the volcanic slope, but it was miles in extent. Yaqui peeped over the top of a blunt block of lava and searched the sharp-billowed wilderness.

Suddenly he grasped Gale and pointed across a deep, wide gully.

With the aid of his glass Gale saw five sheep. They were much larger than he had expected, dull brown in color, and horns. They were looking in his direction. Remembering what he had heard about the wonderful eyesight of these mountain animals, Gale could only conclude that they had seen the hunters.

Then Yaqui's movements attracted and interested him. The Indian had brought with him a red scarf and a mesquite branch. He tied the scarf to the stick, and propped this up in a crack of the lava. The scarf waved in the wind. That done, the Indian bade Gale watch.

Once again he leveled the glass at the sheep. All five now were motionless, standing like statues, heads pointed across the gully. They were more than a mile distant. When Gale looked without his glass they merged into the roughness of the lava. He was intensely interested. Did the sheep see the red scarf? It seemed incredible, but nothing else could account for that statuesque alertness. The sheep held this rigid position for perhaps fifteen minutes. Then the leading ram started to approach. The others followed. He took a few steps, then halted. Always he held his head up, nose pointed.

"By George, they're coming!" exclaimed Gale. "They see that flag. They're hunting us. They're curious. If this doesn't beat me!"

Evidently the Indian understood, for he grunted.

Gale found difficulty in curbing his impatience. The approach of the sheep was slow. The advances of the leader and the intervals of watching had a singular regularity. He worked like a machine. Gale followed him down the opposite wall, around holes, across gullies, over ridges. Then Gale shifted the glass back to find the others. They were coming also, with exactly the same pace and pause of their leader. What steppers they were! How sure-footed! What leaps they made! It was thrilling to watch them. Gale forgot he had a rifle. The Yaqui pressed a heavy hand down upon his shoulder. He was to keep well hidden and to be quiet. Gale suddenly conceived the idea that the sheep might come clear across to investigate the puzzling red thing fluttering in the breeze. Strange, indeed, would that be for the wildest creatures in the world.

The big ram led on with the same regular persistence, and in half an hour's time he was in the bottom of the great gulf, and soon he was facing up the slope. Gale knew then that the alluring scarf had fascinated him. It was no longer necessary now for Gale to use his glass. There was a short period when an intervening crest of lava hid the sheep from view. After that the two rams and their smaller followers were plainly in sight for perhaps a quarter of an hour. Then they disappeared behind another ridge. Gale kept watching, sure they would come out farther on. A tense period of waiting passed, then a sudden electrifying pressure of Yaqui's hand made Gale tremble with excitement.

Very cautiously he shifted his position. There, not fifty feet distant upon a high mound of lava, stood the leader of the sheep. His size astounded Gale. He seemed all horns. But only for a moment did the impression of horns overbalancing body remain with Gale. The sheep was graceful, sinewy, slender, powerfully built, and in poise magnificent. As Gale watched, spellbound, the second ram leaped lightly upon the mound, and presently the three others did likewise.

Then, indeed, Gale feasted his eyes with a spectacle for a hunter. It came to him suddenly that there had been something he expected to see in this Rocky Mountain bighorn, and it was lacking. They were beautiful, as wonderful as even Ladd's encomiums had led him to suppose. He thought perhaps it was the contrast these soft, sleek, short-furred, graceful animals afforded to what he imagined the barren, terrible lava mountains might develop.

The splendid leader stepped closer, his round, protruding amber eyes, which Gale could now plainly see, intent upon that fatal red flag. Like automatons the other four crowded into his tracks. A few little slow steps, then the leader halted.

At this instant Gale's absorbed attention was directed by Yaqui to the rifle, and so to the purpose of the climb. A

little cold shock affronted Gale's vivid pleasure. With it dawned a realization of what he had imagined was lacking in these animals. They did not look wild! The so-called wildest of wild creatures appeared tamer than sheep he had followed on a farm. It would be little less than murder to kill them. Gale regretted the need of slaughter. Nevertheless, he could not resist the desire to show himself and see how tame they really were.

He reached for the .405, and as he threw a shell into the chamber the slight metallic click made the sheep jump. Then Gale rose quickly to his feet.

The noble ram and his band simply stared at Gale. They had never seen a man. They showed not the slightest indication of instinctive fear. Curiosity, surprise, even friendliness, seemed to mark their attitude of attention. Gale imagined that they were going to step still closer. He did not choose to wait to see if this were true. Certainly it already took a grim resolution to raise the heavy .405.

His shot killed the big leader. The others bounded away with remarkable nimbleness. Gale used up the remaining four shells to drop the second ram, and by the time he had reloaded the others were out of range.

The Yaqui's method of hunting was sure and deadly and saving of energy, but Gale never would try it again. He chose to stalk the game. This entailed a great expenditure of strength, the eyes and the lungs of a mountaineer, and, as Gale put it to Ladd, the need of seven-league boots. After being hunted a few times and shot at, the sheep became exceedingly difficult to approach. Gale learned to know that their fame as the keenest-eyed of all animals was well founded. If he worked directly toward a flock, crawling over the sharp lava, always a sentinel ram espied him before he got within range. The only method of attack that he found successful was to locate sheep with his glass, work round to windward of them, and then, getting behind a ridge or buttress, crawl like a lizard to a vantage point. He failed often. The stalk called forth all that was in him of endurance, cunning, speed. As the days grew hotter he hunted in the early morning hours and a while before the sun went down. More than one night he lay out on the lava, with the great stars close overhead and the immense void all beneath him. This pursuit he learned to love. Upon those scarred and blasted slopes the wild spirit that was in him had free rein. And like a shadow the faithful Yaqui tried ever to keep at his heels.

One morning the rising sun greeted him as he surmounted the higher cone of the volcano. He saw the vastness of the east aglow with a glazed rosy whiteness, like the changing hue of an ember. At this height there was a sweeping wind, still cool. The western slopes of lava lay dark, and all that world of sand and gulf and mountain barrier beyond was shrouded in the mystic cloud of distance. Gale had assimilated much of the loneliness and the sense of ownership and the love of lofty heights that might well belong to the great condor of the peak. Like this wide-winged bird, he had an unparalleled range of vision. The very corners whence came the winds seemed pierced by Gale's eyes.

Yaqui spied a flock of sheep far under the curved, broken rim of the main crater. Then began the stalk. Gale had taught the Yaqui something—that speed might win as well as patient cunning. Keeping out of sight, Gale ran over the spike-crusted lava, leaving the Indian far behind. His feet were magnets, attracting supporting holds, and he passed over them too fast to fall. The wind, the keen air of the heights, the red lava, the boundless surrounding blue, all seemed to have something to do with his wildness. Then, hiding, slipping, creeping, crawling, he closed in upon his quarry until the long rifle grew like stone in his grip, and the whipping "spang" ripped the silence, and the strange echo boomed deep in the crater, and rolled around, as if in hollow mockery at the hopelessness of escape.

Gale's exultant yell was given as much to free himself of some bursting joy of action as it was to call the slower Yaqui. Then he liked the strange echoes. It was a maddening whirl of sound that bored deeper and deeper along the whorled and caverned walls of the crater. It was as if these aged walls resented the violating

of their silent sanctity. Gale felt himself a man, a thing alive, something superior to all this savage, dead, upflung world of iron, a master even of all this grandeur and sublimity because he had a soul.

He waited beside his quarry, and breathed deep, and swept the long slopes with searching eyes of habit.

When Yaqui came up they set about the hardest task of all, to pack the best of that heavy sheep down miles of steep, ragged, *choya*-covered lava. But even in this Gale rejoiced. The heat was nothing, the millions of little pits which could hold and twist a foot were nothing; the blade-edged crusts and the deep fissures and the choked cañons and the tangled, dwarfed mesquites, all these were as nothing but obstacles to be cheerfully overcome. Only the *choya* hindered Dick Gale.

When his heavy burden pulled him out of sure-footedness, and he plunged into a *choya,* or when the strange, deceitful, uncanny, almost invisible frosty thorns caught and pierced him, then there was call for all of fortitude and endurance. For this cactus had a malignant power of torture. Its pain was a stinging, blinding, burning, sickening poison in the blood. If thorns pierced his legs he felt the pain all over his body; if his hands rose from a fall full of the barbed joints, he was helpless and quivering till Yaqui tore them out.

But this one peril, dreaded more than dizzy height of precipice or sunblindness on the glistening peak, did not daunt Gale. His teacher was the Yaqui, and always before him was an example that made him despair of a white man's equality. Color, race, blood, breeding—what were these in the wilderness? Verily, Dick Gale had come to learn the use of his hands.

So in a descent of hours he toiled down the lava slope, to stalk into the arroyo like a burdened giant, wringing wet, panting, clear-eyed and dark-faced, his ragged clothes and boots white with *choya* thorns.

The gaunt Ladd rose from his shaded seat, and removed his pipe from smiling lips, and turned to nod at Jim, and then looked back again.

The torrid summer heat came imperceptibly, or it could never have been borne by white men. It changed the lives of the fugitives, making them partly nocturnal in habit. The nights had the balmy coolness of spring, and would have been delightful for sleep, but that would have made the blazing days unendurable.

The sun rose in a vast white flame. With it came the blasting, withering wind from the gulf. A red haze, like that of earlier sunsets, seemed to come sweeping on the wind, and it roared up the arroyo, and went bellowing into the crater, and rushed on in fury to lash the peaks.

During these hot, windy hours the desert-bound party slept in deep recesses in the lava; and if necessity brought them forth they could not remain out long. The sand burned through boots, and a touch of bare hand on lava raised a blister.

A short while before sundown the Yaqui went forth to build a camp-fire, and soon the others came out, heat-dazed, half blinded, with parching throats to allay and hunger that was never satisfied. A little action and a cooling of the air revived them, and when night set in they were comfortable round the camp-fire.

As Ladd had said, one of their greatest problems was the passing of time. The nights were interminably long, but they had to be passed in work or play or dream —anything except sleep. That was Ladd's most inflexible command. He gave no reason. But not improbably the ranger thought that the terrific heat of the day spent in slumber lessened a wear and strain, if not a real danger of madness.

Accordingly, at first the occupations of this little group were many and various. They worked if they had something to do, or could invent a pretext. They told and re-told stories until all were wearisome. They sang songs. Mercedes taught Spanish. They played every game they knew. They invented others that were so trivial children would scarcely have been interested, and these they played seriously. In a word, with intelligence and passion, with all that was civilized and human, they fought the ever-infringing loneliness, the savage solitude of their environment.

But they had only finite minds. It was not in reason to expect a complete victory against this mighty Nature, this bounding horizon of death and desolation and de-

cay. Gradually they fell back upon fewer and fewer occupations, until the time came when the silence was hard to break.

Gale believed himself the keenest of the party, the one who thought most, and he watched the effect of the desert upon his companions. He imagined that he saw Ladd grow old sitting round the camp-fire. Certain it was that the ranger's gray hair had turned white. What had been at times hard and cold and grim about him had strangely vanished in sweet temper and a vacant-mindedness that held him longer as the days passed. For hours, it seemed, Ladd would bend over his checkerboard and never make a move. It mattered not now whether or not he had a partner. He was always glad of being spoken to, as if he were called back from some vague region of mind. Jim Lash, the calmest, coolest, most nonchalant, best-humored Westerner Gale had ever met, had by slow degrees lost that cheerful character which would have been of such infinite good to his companions, and always he sat brooding, silently brooding. Jim had no ties, few memories, and the desert was claiming him.

Thorne and Mercedes, however, were living, wonderful proof that spirit, mind, and heart were free—free to soar in scorn of the colossal barrenness and silence and space of that terrible hedging prison of lava. They were young; they loved; they were together; and the oasis was almost a paradise. Gale believed he helped himself by watching them. Imagination had never pictured real happiness to him. Thorne and Mercedes had forgotten the outside world. If they had been existing on the burned-out, desolate moon they could hardly have been in a harsher, grimmer, lonelier spot than this red-walled arroyo. But it might have been a statelier Eden than that of the primitive day.

Mercedes grew thinner, until she was a slender shadow of her former self. She became hard, brown as the rangers, lithe and quick as a panther. She seemed to live on water and air—perhaps, indeed, on love. For of the scant fare, the best of which was continually urged upon her, she partook but little. She reminded Gale of a wild, brown creature, free as the wind on the lava slopes. Yet, despite the great change, her beauty remained undiminished. Her eyes, seeming so much larger now in her small face, were great black, starry gulfs. She was the life of that camp. Her smiles, her rapid speech, her low laughter, her quick movements, her playful moods with the rangers, the dark and passionate glance, which rested so often on her lover, the whispers in the dusk as hand in hand they paced the camp-fire beat—these helped Gale to retain his loosening hold on reality, to resist the lure of a strange beckoning life where a man stood free in the golden open, where emotion was not, nor trouble, nor sickness, nor anything but the savage's rest and sleep and action and dream.

Although the Yaqui was as his shadow, Gale reached a point when he seemed to wander alone at twilight, in the night, at dawn. Far down the arroyo, in the deepening red twilight, when the heat rolled away on slow-dying wind, Blanco Sol raised his splendid head and whistled for his master. Gale reproached himself for neglect of the noble horse. Blanco Sol was always the same. He loved four things—his master, a long drink of cool water, to graze at will, and to run. Time and place, Gale thought, meant little to Sol if he could have those four things. Gale put his arm over the great arched neck and laid his cheek against the long white mane, and then even as he stood there forgot the horse. What was that dull, red-tinged, horizon-wide mantle creeping up the slope? Through it the copper sun glowed, paled, died. Was it only twilight? Was it gloom? If he thought about it he had a feeling that it was the herald of night, and the night must be a vigil, and that made him tremble.

At night he had formed a habit of climbing up the lava slope as far as the smooth trail extended, and there on a promontory he paced to and fro, and watched the stars, and sat stone-still for hours looking down at the vast void with its moving, changing shadows. From that promontory he gazed up at a velvet-blue sky, deep and dark, bright with millions of cold, distant, blinking stars, and he grasped a little of the meaning of infinitude. He gazed down into the shadows,

which, black as they were and impenetrable, yet gave a conception of immeasurable space.

Then the silence! He was dumb, he was awed, he bowed his head, he trembled, he marveled at the desert silence. It was the one thing always present. Even when the wind roared there seemed to be silence. But at night, in this lava world of ashes and canker, he waited for this terrible strangeness of nature to come to him with the secret. He seemed at once a little child and a strong man, and something very old. What tortured him was the incomprehensibility that the vaster the space the greater the silence! At one moment Gale felt there was only death here, and that was the secret; at another he heard the slow beat of a mighty heart.

He came at length to realize that the desert was a teacher. He did not realize all that he had learned, but he was a different man. And when he decided upon that, he was not thinking of the slow, sure call to the primal instincts of man; he was thinking that the desert, as much as he had experienced and no more, would absolutely overturn the whole scale of a man's values, break old habits, form new ones, remake him. More of desert experience, Gale believed, would be too much for intellect. The desert did not breed civilized man, and that made Gale ponder over a strange thought: after all, was the civilized man inferior to the savage?

Yaqui was the answer to that. When Gale acknowledged this he always remembered his present strange manner of thought. The past, the old order of mind, seemed as remote as this desert world was from the haunts of civilized men. A man must know a savage as Gale knew Yaqui before he could speak authoritatively, and then something stilled his tongue. In the first stage of Gale's observation of Yaqui he had marked tenaciousness of life, stoicism, endurance, strength. These were the attributes of the desert. But what of that second stage wherein the Indian had loomed up a colossal figure of strange honor, loyalty, love? Gale doubted his convictions and scorned himself for doubting.

There in the gloom sat the silent, impassive, inscrutable Yaqui. His dark face, his dark eyes were plain in the light of the stars. Always he was near Gale, unobtrusive, shadowy, but there. Why? Gale absolutely could not doubt that the Indian had heart as well as mind. Yaqui had from the very first stood between Gale and accident, toil, peril. It was his own choosing. Gale could not change him or thwart him. He understood the Indian's idea of obligation and sacred duty. But there was more, and that baffled Gale. In the night hours, alone on the slope, Gale felt in Yaqui, as he felt the mighty throb of that desert pulse, a something that drew him irresistibly to the Indian. Sometimes he looked around to find the Indian, to dispel these strange, pressing thoughts of unreality, and it was never in vain.

Thus the nights passed, endlessly long, with Gale fighting for his old order of thought, fighting the fascination of that infinite sky, and the gloomy, insulating whirl of the wide shadows, fighting for belief, hope, prayer, fighting against that terrible ever-recurring idea of being lost, lost, lost in the desert, fighting harder than any other thing the insidious, penetrating, tranquil, unfeeling self that was coming between him and his memory.

He was losing the battle, losing his hold on tangible things, losing his power to stand up under this ponderous, merciless weight of desert space and silence.

He acknowledged it in a kind of despair, and the shadows of the night seemed whirling fiends. Lost! Lost! Lost! What are you waiting for? *Rain?* . . . Lost! Lost! Lost in the desert! So the shadows seemed to scream in voiceless mockery.

At the moment he was alone on the promontory. The night was far spent. A ghastly moon haunted the black volcanic spurs. The winds blew silently. Was he alone? No, he did not seem to be alone. The Yaqui was there. Suddenly a strange, cold sensation crept over Gale. It was new. He felt a presence. Turning, he expected to see the Indian, but instead, a slight shadow, pale, almost white, stood there, not close nor yet distant. It seemed to brighten. Then he saw a woman who resembled a girl he had seemed to know long ago. She was white-faced, golden-

haired, and her lips were sweet, and her eyes were turning black. *Nell!* He had forgotten her. Over him flooded a torrent of memory. There was tragic woe in this sweet face. Nell was holding out her arms—she was crying aloud to him across the sand and the cactus and the lava. She was in trouble, and he had been forgetting.

That night he climbed the lava to the topmost cone, and never slipped on a ragged crust nor touched a *choya* thorn. A voice had called to him. He saw Nell's eyes in the stars, in the velvet blue of sky, in the blackness of the engulfing shadows. She was with him, a slender shape, a spirit, keeping step with him, and memory was strong, sweet, beating, beautiful. Far down in the west, faintly golden with light of the sinking moon, he saw a cloud that resembled her face. A cloud on the desert horizon! He gazed and gazed. Was that a spirit face like the one by his side? No—he did not dream.

In the hot, sultry morning Yaqui appeared at camp, after long hours of absence, and he pointed with a long, dark arm toward the west. A bank of clouds was rising above the mountain barrier.

"Rain!" he cried; and his sonorous voice rolled down the arroyo.

Those who heard him were as shipwrecked mariners at sight of a distant sail.

Dick Gale, silent, grateful to the depths of his soul, stood with arm over Blanco Sol and watched the transforming west, where clouds of wondrous size and hue piled over one another, rushing, darkening, spreading, sweeping upward toward that white and glowing sun.

When they reached the zenith and swept round to blot out the blazing orb, the earth took on a dark, lowering aspect. The red of sand and lava changed to steely gray. Vast shadows, like ripples on water, sheeted in from the gulf with a low, strange moan. Yet the silence was like death. The desert was awaiting a strange and hated visitation—storm! If all the endless torrid days, the endless mystic nights had seemed unreal to Gale, what, then, seemed this stupendous spectacle?

"Oh! I felt a drop of rain on my face!" cried Mercedes; and, whispering the name of a saint, she kissed her husband.

The white-haired Ladd, gaunt, old, bent, looked up at the maelstrom of clouds, and he said, softly, "Shore we'll get in the hosses, an' pack light, an' hit the trail, an' make night marches!"

Then up out of the gulf of the west swept a bellowing wind and a black pall and terrible flashes of lightning and thunder like the end of the world—fury, blackness, chaos, the desert storm.

(To be continued)

TIME TO OVERHAUL THE TROUT TACKLE SOON, BOYS! "TROUT FISHING FOR THE TYRO," BY ERNEST W. BROCKWAY, IS AN EXCELLENT ARTICLE ON HOW TO START IN—COMING IN MARCH

The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

TEN THOUSAND MILES BY CANOE

This trip is being made for "Field and Stream" in the interests of Forest, Fish and Game Conservation

Black River, Michigan.

MY DEAR MR. WARNER:

We have settled down into winter quarters—a log cabin nest in the woods. This may seem a strange departure from the plans of two canoeists who left New York last summer to circle the eastern half of the United States. But it is only one of the milestones in our journey.

As you know, Charlie Marcell and I started with our dog Patsy in June in a 20-foot canoe to cruise up the Hudson River, through the Erie Canal and Great Lakes to Chicago, down the drainage canal and Illinois River, following the Mississippi River to the Gulf of Mexico, around through the waters cutting the toe of Florida to the Atlantic, and up the coast back to New York. It seemed to some a rash undertaking for two landlubbers fresh from Wall Street to venture on a 10,000-mile trip in an open canoe through sometimes treacherous waters, but the artificial city existence had begun to pall. The spirit of the outdoors was in us. We wanted life, health, and happiness, and we have found them all. Our path has been beset with difficulties, trials, and threatened disasters, and it has meant hard physical work, for it isn't the lazy life, but we have also had glorious days; have fished and hunted and camped—slept under the stars and in our tent—cooked over campfires, and all the while for six months been pumping the tincture of ozone into our lungs.

We knew nothing about navigating. No one had taken a like trip before in a craft of this kind, so we had to dope out the equipment as best we could. Our preparation was as careful as possible,

THE WINTER QUARTERS OF THE VOYAGERS

but we found it sometimes crude and not equal to all occasions. We had not gone far before a big part of our duffle was chucked overboard, for luxuries cease to be luxuries when they become burdens. On one-night camp stands it is no time to have along something you think might come in handy, but you don't know when. Problems unexpected have arisen, but it is a satisfaction to have met them successfully and to learn through the school of experience. When we struck Lake Erie we found it was a different proposition from the Erie Canal. The sudden and violent storms make it treacherous at times, and this year brought an unusual succession of them which drove us in time and again. Four times from as many different camp sites we thought we would make Cleveland the same day, as it was a nice day's run, but it took two weeks. That is one of the reasons we are tying up for the winter in Michigan. Instead of getting through Lake Erie in two weeks, as we had expected at the most, it took seven. We began to debate the possibility of being so long delayed that the upper lakes would be frozen before we could get through, and decided in that event to look for a cabin some place in Michigan and camp for the winter, spending the time hunting, trapping, fishing through the ice, etc. That didn't sound so bad, and the more we thought about it the more the idea appealed to us, with the outcome that we decided to do it whether it became necessary or not. We were glad we did, for by the time we had reached upper Huron the blows had become more frequent and the weather was getting cold. So we ran into Cheboygan and after cruising around through the inland lakes and rivers picked a place that seemed to be ideal for our purpose—an attractive spot on Black River, a few rods from Black Lake.

So here we are in our wilderness nestled in the trees—our

MESSRS. HURTY AND MARCELL AND THEIR POWER CANOE—OFF ON THEIR 10,000-MILE TRIP.

traps are set and the woodpile growing. We have been feeding upon partridges, ducks, rabbits and muskrats (don't shy at the last, for it is a real delicacy), and we are all the time getting what we sought when we sailed away up the Hudson. There hasn't been one moment since we started when we have regretted the undertaking, and the past has made us more eager to go through the waters ahead of us, always changing in character, and alive with new interests. When we push on in the spring we are planning a side trip up the beautiful St. Mary's River to the Soo and along the shore of Lake Superior a way, lured by the tales of wonderful trout fishing in those wild northern streams.

We have the confidence of old sea mariners now, for we have already done what we were told we couldn't. It is still ringing in our ears about wrecks on Lake Erie, and cold feet at Buffalo, but neither has happened. We love the life. It hasn't all been fun at the moments when the breakers were dashing completely over the canoe, or when we were crossing Saginaw Bay with the waves so high they seemed to get between us and the sky, or when we had to go overboard in the cold water of upper Huron to save the craft and outfit, but they all gave a tingle to sound nerves and a laugh afterwards, and we were glad of the experience. It was like the Irishman who liked to have a toothache because of the "plisure whin it sthopped."

But it isn't necessary to know beforehand now to do a stunt of this kind. It was all new to us, but we learned as we went along and took lessons from mistakes. Many rough edges have been smoothed by taking the benefit of the experience of veteran campers and outdoor men like Capt. Warren H. Miller, whose work "Camp Craft" has been of valuable assistance by showing what he would do and how to do it under like conditions. It is packed as a textbook with some by Kephart and others, and while they do not deal with cruising they have been useful beyond measure in solving camp problems.

JAMES C. HURTY.

FOR WATERPROOFING AND SOFTENING LEATHER

EDITOR FIELD & STREAM:

In your November issue of F. & S. Geo. W. Graham asks for a formula for waterproofing leather boots and shoes. For this purpose I find axle grease best, and for softening leather, either boots or shoes or harness I use kerosene; neither of the above will injure leather, the kerosene will evaporate and leave leather as soft as when new.

I know whereof I speak, having spent about twenty years of my life making boots and shoes, made them for butchers, fishermen, and rivermen. I still have a pair of hip boots which I made many years ago, they have seen hard service and are still waterproof and soft.

WM. BRADFEED.

PREPARING A FUR SKIN

FIELD & STREAM PUB. CO.:

After skinning a fur-bearing animal and you have stretched the skin, what is next necessary to do to the skin before you can sell it to a dealer?

J. D.

Ans.—Salt it in field. Keep in cool, dry place out of sun. Pickle in solution of 10 per cent sulphuric acid, one quart salt, one gallon water.—ED.

AN OPPORTUNITY FOR A QUAIL SHOOTER

DEAR MR. WARNER:

About a year ago I wrote a friend of mine in New York asking if he should happen to know anyone who would like to invest $5,000 at 6 per cent on a good place in North Carolina as security, with shooting privileges as well, to let me know. That such a party would have the exclusive privilege of hunting on a 1,000 acres additional. It just so happened that there was a party inquiring for such a place with shooting privilege in the South and he was referred to me, and the deal was closed at once.

As both parties were highly pleased, I thought in your position you might know of someone who would like to have a mortgage on 180 acres of my land, 50 acres under high state of cultivation, with two tenant houses, barns, etc., the rest in woodland. Fifty acres is rented this year for $350.

I need $3,000 at 6 per cent for five years, and if you should happen to know of any such person I would appreciate your referring him to me at once, as I would like to make some arrangement immediately.

In addition to the mortgage on this land as security, the investor would have the full hunting and fishing privileges on this land, and on all the lands I have a privilege to hunt on, which, you know, this year amounts to about 15,000 acres.

WAYNE MCNEILL.

NOTE.—If anyone is looking for shooting privileges in North Carolina and wants some real good quail shooting, it might be worth their while to take this matter up with Mr. McNeill, as I have just returned from a week's hunting trip with Mr. McNeill, and hunted over a part of this 15,000 acres, and can assure you that the quail hunting will be all and more than you expect. The ground was very dry, for they hadn't had any rain for a month and a half, and it was almost impossible for the dogs to work, but under these conditions we put up over 5 to 15 coveys a day on one strip and 4 coveys in a little strip of pine not over 300 yards long.

The fact that we hunted from Mr. McNeill's house on foot, and the entire five days' hunting was done within a radius of four miles of the house, and most of it in sight of the house, will give you an idea of the shooting Mr. McNeill offers someone who would like to make this investment.

E. F. WARNER,
Publisher.

CONSERVATION

BOB-WHITE—HIS BREEDING, PROTECTION AND INCREASE

By E. A. Quarles

Director, Department of Game Breeding and Preserving

Courtesy American Game Protective Association

PART II.

The Breeding Coop

"The breeding stock is paired up arbitrarily the last week in March and placed in pens. These consist of a coop with a wire-covered run in front and one pair is placed in each coop. The coop is 3 feet square, 3 feet high in front and 2 feet in the rear. The roof is 4 feet long and 3 feet 7 inches wide and a door 2 feet square is placed on one side. In front is placed a solid sliding door 14 inches wide and 15 inches high and immediately above it is a ventilating hole 14 inches long and 8 inches wide which may be covered with fly screen wire or ½-inch wire cloth.

"The coop is constructed of ¼-inch boards and the roof is covered with roofing paper and has a 5-inch overhang at the front. Inside the coop coffee sacking is hung 3 inches under the roof to prevent the birds from injuring themselves in case they attempt to fly. A roost and small evergreen branch are placed inside each coop, together with a drinking fountain, grit and charcoal.

"The wire run in front of the coop is 8 feet square and 3 feet high. Nailed around the bottom is a strip of roofing 17 inches wide to give added privacy to the birds. The framework of the pen consists of 2x2 stuff and inch-mesh poultry wire is used on both sides and top. There is a gate 2 feet wide and 3 feet high in the middle of the front side of the run and on the opposite side is an opening of the same size which is placed against the front of the coop and gives the birds free ingress and egress from the run to the coop. Small evergreen boughs are placed in two corners of the run and the hen quail usually lays her eggs under one or the other of these. Unlike the bob-whites, the California birds do better when an equal number of cocks and hens are placed in one pen during the breeding season. We placed our twelve pairs of Californias this year in a pen 50 feet square, selecting a bit of scrub pine ground and placing piles of evergreen and brush in it.

Constituents of Laying Ration

"On April 15th a laying ration is started. The birds are fed twice a day regularly, a wet mash in the morning and chick grain at night. The mash is the same as previously described, the only difference being that it is now fed daily instead of two or three times a week. Lettuce should be given and cabbage, the latter broken up, so that the birds may better handle it. Twice a week we give soaked beet pulp. Be sure that you do not overfeed and get your breeders too fat.

"Our California birds started laying this year on April 30 and stopped July 15th, though we found an occasional egg in August. Five of the hens averaged 40 eggs for the season. The first eggs were laid by the bob-whites May 11th and they had ended by July

BOX FOR CARRYING NEWLY HATCHED CHICKS TO REARING FIELD

1st, though we found an egg every once in a while for a month or six weeks following. Eggs are gathered three times a week, two being left in the nest to prevent its being abandoned. It is essential that the breeding pens be approached as seldom as possible and only by the person who does the feeding. He should dress the same always when he is engaged in this work and should approach the pens quietly. It is well to accustom the birds to a food call, a soft whistle makes a good one, and this should be given whenever the pens are approached to quiet the alarm of the quail.

Seabright Bantams for Mothers

"Seabright bantams are used by us for incubating the quail eggs. They make excellent mothers and they have clean legs, a big advantage in keeping lice off the young birds and avoiding scaly leg. We do not allow the quail hen to do any incubating and, of course, we get a larger egg production from her than is usual in the wild state, owing to the fact that we are robbing her of her eggs regularly and this stimulates her to continued efforts to acquire a clutch with which to begin incubating.

"Twelve to fifteen eggs are given the bantam, according to box for incubating. There are six nests to a row and each row is 8 feet long. The top of each row serves as the bottom of the one which rests upon it. Into each nesting compartment is placed a sod which just fits the space. This is inserted grass side up, but the under or dirt side is hollowed out a bit at its center so as to form a slight depression on the grass side when the sod is located in the box. This depression is lined with soft, dried grass or short, soft hay, thus forming a nest.

"The setting hen should be dusted with insect powder before being placed on the eggs and twice thereafter, but the third time should not be less than four days before the hatch is due.

"The period of incubation is 24 days, and it is our practice to let the chicks remain in the nest twenty-four hours after the first egg pips or longer, if the chicks are not thoroughly dried out by that time.

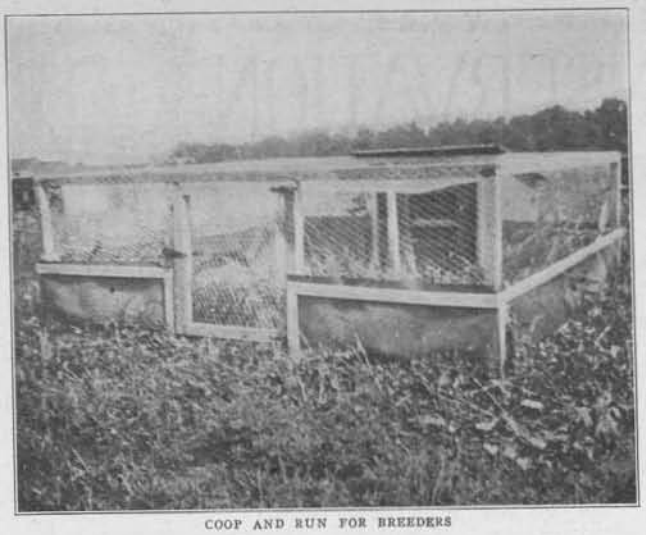
Removing Brood to the Rearing field

"The eggs are sprinkled with tepid water two or three times a week until three days before they are due to hatch. In our experience, the percentage of fertility is 85 to 90.

"The chicks must be carefully handled in taking them to the rearing coop. We use for this purpose the carrying box It is 26 inches long, 11¼ inches wide and 8½ inches high. The top consists of a sliding door and there is cut in one end of this an opening 5 inches long and 8 inches wide for convenience in taking the chicks out. The interior is divided into six chambers of equal width. Fine, short hay is placed at the bottom of these chambers, ventilation holes are bored near the top of the sides and there is a handle affixed to the cover for ease in carrying.

"Any well-drained spot containing sufficient vegetation to attract insects will do for a rearing field. Our practice in taking off the hatch is as follows:

"First with a scythe we mow the space in the rearing field on which we have decided to locate the coop and run. The hen is then taken off and placed in a loose-woven sack; the chicks are then placed in the carrying box described above and the journey to the rearing field is begun. The chicks are put in the coop and then the hen is placed on the ground and allowed to walk in through the small side door shown in the



COOP AND RUN FOR BREEDERS

illustration. The chicks will soon be cheeping their contentment as they hover under their foster mother.

How to Make a Rearing Coop

"A description of the rearing coop and run should be given at this point. The coop is 16½ inches wide and 18¾ inches long. Its height at the front is 18½ inches and at the rear 10 inches. The roof is 30 inches long and 22 inches wide and is made of tongue and groove stuff. Three slats, 10¾ inches long, 2 inches wide, at the front afford ingress and egress to the chicks but keep the mother confined. Four slats of the same dimensions are nailed to strips and placed in a slide immediately back of the stationary slats so that by moving them to the right or left, as the case may be, they close the front of the coop by covering the space between the stationary slats. Above the slats is an opening 12 inches long and 5 inches wide, covered with fly screening for ventilation.

"On one side of the coop is a door 7½ inches wide and 5½ inches high for convenience in taking the hen or chicks out. Half-inch ventilation holes are bored near the tops of the sides. A 'shutter' 16½ inches wide and 19½ inches long is constructed for shading the front of the coop when the sun gets too warm or there is danger of rain blowing in. It can also be used as a floor to the coop if the ground is damp.

Construction of the Run

"The run which goes in front of the rearing coop is 17 inches wide (the sides should fit flush against those of the coop to prevent the chicks escaping) 7 feet long and 1 foot high. The end which goes next to the coop is, of course, open and the other end is composed of a door which slides up and down. The sides are solid boards and the top is covered with half-inch wire cloth. Across the end farthest from the coop and at the middle are nailed 12-inch boards which serve the double purpose of bracing and shading the run. The wire cloth is not fastened to the run for a space of 10 or 12 inches at the end nearest the coop, as it is necessary to reach in the run at this point and place the food on wooden trays 12 inches long and 5½ inches wide, which have a quarter-inch edge to prevent the food from rolling to the ground.

(To be continued.)

GAME FARM FOR MICHIGAN

The Public Domain Commission of Michigan now has charge of the game department in that State, and it is anticipated that a considerable sum of money will be realized from the recently enacted resident license law. With the funds at its command, the commission is seeking to expend it along lines that will be for the best interest of the State. In this connection it has authorized State Game Warden Oates to establish a game farm, and a progressive administration of game affairs is expected, as the commission is composed of men of high character and ability. Its chairman is Julius E. Beal and its secretary A. C. Carton.

MICHIGAN WILD LIFE CONSERVATION ASSOCIATION CONVENTION

FIELD & STREAM PUB. CO.:

The State Convention of the Michigan Wild Life Conservation Association, consisting of enthusiastic Michigan sportsmen gathered from all over the State, will be held in Saginaw, February 23, 24, 25 and 26, 1916. Seven thousand people were at the last State meet and undoubtedly a still greater attendance will gather here.

Hon. Wm. B. Mershon, a resident of Saginaw, who is probably the best known Michigan man interested in the conservation of wild life and the promotion of everything relating to true sportsmanship and outdoor recreation, is president of the State Association, and, as you undoubtedly know, is also prominently connected with the leading National organization as well.

The meetings referred to will be held in the city Auditorium, a fine structure in which four thousand people can be seated at one time. Government Departments will participate and well-known speakers will be heard, while stereopticon and moving pictures of hunting, camping and fishing scenes will be projected by the finest apparatus manufactured.

The Michigan Fish Commission and the Game, Forestry and other State departments will be represented with large, interesting displays. Almost everything pertaining to outdoor life will also be exhibited by individuals. Diagrams of Auditorium area will be supplied and no charge is to be made for floor space to exhibitors who are accepted by the committee. Equipment of all kinds will be shown, including guns, rods, tackle, food and drink, tents, fine dogs, cameras, books and magazines, clothing, motors, etc., etc.; in fact, nothing of interest to the lover of the outdoors will be omitted.

HARVEY A. PENNY,
Secy.-Treas.

REPORT OF MARION COUNTY FISH AND GAME PROTECTIVE ASSOCIATION

FIELD & STREAM PUB. CO.:

I am enclosing statement of the work of restocking the waters of Marion County and adjoining Indiana waters by the Marion County Fish and Game Protective Association. This organization was organized in 1907, immediately built a black bass hatchery, which has been in operation ever since. It has increased its output each successive season. Its members are Marion County fishermen, who pay $3 yearly dues, which is used in the operation of its bass hatchery. The hatchery ponds are located in Riverside Park, Indianapolis, Ind.

A total of 175, 586 fish were planted in the Marion County waters from this hatchery; 78,300 fish were also furnished to other parts of the State. These fish were large and small-mouth black bass.

GUSTAV A. T. MEYER.

SOME LEADERS FOR MARCH

Hunting Kenai White Sheep—Moose Hunting in Manitoba—King Fishing on the East Coast of Florida—Game Farming for Pleasure and Profit—Trout Fishing for Tyros.

SHOTGUNS AND RIFLES

NATIONAL RIFLE ASSOCIATION NOTES

Legislation in the interest of civilian rifle shooting was considered at a meeting of the executive committee of the National Rifle Association on November 29. President Libbey announced that the Secretary of War will ask Congress at the coming session for an appropriation of $30,000 for the National Board for Promotion of Rifle Practice for general use in promoting rifle training among civilians. It is expected this will be made available for payment of markers and scorers on State ranges for such targets as are provided for civilian shooters. The National Rifle Association voted to ask Congress for a national charter and an annual appropriation of $25,000.

The results of a meeting held between the Secretary and Assistant Secretary of War and the president and secretary of the association that day, were reported. The recommendations for legislation adopted at the matches in Florida were gone over with the War Department officials as well as recommendations previously made by Col. Libbey. The Department officials were most favorably impressed and more than anxious to meet the wishes of the riflemen of the country as expressed in the recommendations, and the future looks very bright for real and practical assistance from both the Department and Congress, especially looking to the adoption of a national policy of range construction throughout the country. The idea of the Assistant Secretary of War is that Congress should provide for a commission and funds for its use to investigate thoroughly the question and make a survey of the entire country, selecting the most suitable and available places for the construction of ranges with a view of such ranges being available for construction and instruction camps as well as for civilian clubs, such commission to be composed jointly of members of the Army, Navy, Marine Corps and N. R. A.

A plan was presented by Attorney S. S. Holmes, of Chicago, who, in connection with prominent men, including J. Ogden Armour, have incorporated the U. S. Municipal Rifle Clubs, and propose to construct ranges and organize N. R. A. clubs in the cities, towns and townships of the 116 counties in Illinois. The plan was favorably received and will probably receive favorable endorsement after certain features have been thoroughly understood.

Announcement was made that the Secretary of the Treasury had given the use of the basement of a Government building at 15th street and Pennsylvania avenue for rifle practice among civilian rifle clubs of the District, and the association voted an appropriation to put the range in order.

One hundred rifle clubs have entered the indoor league matches which the N. R. A. will conduct this winter, as follows: 44 civilian clubs, 35 college clubs, 12 military school and 9 high school rifle clubs.

MORE POWER IN THE SHOTGUN

PART II.

Edward C. Crossman

As the 12 bore can be raised in power to the ordinary 10, so can the smaller bores be hoisted in efficiency, provided they are represented by first-rate, well-made guns, not of the featherweight variety. A well-made, high-priced, featherweight 20 bore is quite likely to be safer than the cheaper and heavier weapon, but the recoil developed by going above factory 20-bore loads is not at all pleasant.

Factory 16-gauge loads run from the pathetic affair of 2 drams, ⅞ oz. up to 2¾ drams, 1 oz. Duck shooters, owning guns of fair weight, and made with long chambers, use shot charges up to 1⅛ oz. with 3¼ to 3½ drams of powder to drive the shot. So you see a factory list represents—not as they would have you believe, the best proportions of powder and shot for that bore, but the best loads for the average run of guns which takes in some malleable iron affairs that never could get through the heavy proof of the English laws regarding gun-making. Always do the factories play safe, and to do this they have to consider some mighty poor specimens of gun building.

In our 20-bore list of loads we find 2½ and ⅞ oz. the heaviest combination listed.

Against this we find one of the greatest of English gunmakers recommending these combinations: Gun to weigh 5½ lbs., load ⅞ oz. of shot, 2⅝ drams of a bulk powder, giving considerable ginger for this weight. Gun to weigh 5 lbs. 14 oz., load 1 1-16 to 1⅛ oz. of shot. Or gun to weigh 5 lbs. 10 oz., load 1 oz. of shot and 2½ drams of powder.

In spite of the ideas of the English, there is nothing gained by sticking more than an ounce of shot in the 20, and this only when using large shot, 5's or larger. A load of ⅞ oz. of shot, and then 2¾ drams of powder in a 2¾ casing with soft wadding, will develop the highest efficiency of the little gun. Or the same powder load with a full ounce of *large* shot will raise the pressures but little. The true 20-bore fiend with heavy gun of this bore has been known to use as high as ⅞ oz. of shot, and 2⅞ drams of powder—but it is not a combination to use in a light weight—below 6¼ lb.—or in a cheap gun of uncertain construction.

I have shot for some time a special load in a 6 lb. 20 bore with beautiful results, 2¾ drams powder, ⅞ oz. 7½ shot, loaded in 2¾-inch case, with a ⅞-inch wad as the piece de resistance of the wad combination.

Most 20 bores are chambered for the 2½-inch case, which is a mistake. A good load, like the one mentioned, or even the 2½ drams, ⅞ oz. combination, cannot be put into the 2½-inch case and leave any room for adequate wadding. And in high-speed loads, particularly in small guns, plenty of wadding is indicated to cushion the jar of starting the shot, and to keep the hot powder gases out of the shot.

A gun chambered 2⅝ inches will handle either the 2½ or the 2¾-inch case satisfactorily. One of the largest of American double gun builders advises the use of 2¾-inch cases in their 2½-inch chambers, but while their special form of cone may allow this it is not good medicine in the average gun. A case ⅛ inch longer than the chamber is well and good, but ¼ inch too long is not right.

So the 2¾-inch chamber is probably the best to order, for then, regardless of the small loads one may use, the long case and lots of wadding to fill up makes better shooting than the short case ever will do. Not for fun alone did the men whose business it was to win use the 3-inch cases in their 12 bores in the days of live pigeon shoots. The exigencies of the pumpgun construction do not alter the facts about the lengths of shells.

Of course, a reasonable query to these tales of ways of getting more out of the gun is, why not use a gauge larger if it is advisable to make the one chosen lap over into the next size above?

In the case of the 12, the answer has been given; it is unwise to go over this gauge unless conditions absolutely demand it.

In the case of the smaller guns, many a man finds the 20 or the 16 bore just his size, and adequate for nearly all his shooting. Only once or twice a year he may want to get out of his little gun all there is in it to buck a harder game than that for which he

purchased the gun. Then, if his gun is a good one, he can most assuredly load it to give results that will equal the ordinary factory stuff of the next size larger, if not to considerably exceed it.

It is well to remember that while pressures are higher, yet the same amount of shot, loaded into the next bore smaller, will give as high velocities as the larger gun, with considerably less powder. Conversely with the same load all the way through, far higher velocities are obtained from the small bore than from the large. The 2½ drams, ⅞ oz. load in the 20 bore is a far more efficient load than it is in the 16—for the reasons set forth above.

LOADS IN THE 16-BORE

FIELD & STREAM PUB. CO.:

I have bothered you by two previous letters asking questions, and I now send you another, but I beg that you overlook this continuous questioning, for I am greatly interested in the subject with no one to get information from but you. I would like to know what is the heaviest load of powder practicable for a shell made for a 16-gauge pump gun. The game in this country affords many long shots and also, it being hard to kill, the hardest shooting load possible seems desirable. Would a heavy load such as 28, 26 or 25 grains of powder have any advantages over the 22-grain load?

DANIEL GOODMAN.

Ans.—We would prefer reducing the shot by 1/16 oz. and not adding more powder, to get more driving power in your 16, especially in a pump gun where shell length is limited. As you state the conditions it looks like a 12-gauge proposition.—ED.

RIFLE SIGHTS AND HOLDING

PART II.

By Warren H. Miller

Continuing with the discussion of the rear sight; in part I. we had described one or two forms of rear sights suitable for woods work and of proved excellence, also the use of the peep sight for rapid sighting and firing on running big game. Never depend on a peep alone. There will come many a shot when the light is so bad that no quick sight can be had with it, and not a few where no sight at all can be made. I have shot grouse over the open bar when it was so dark that only the dim black outline of the bird and the shadowy bulk of the front sight could be made out, yet it meant meat for the mulligan that very night. Have your peep either folding or flexible, if a tang sight, and raisable if a receiver peep, putting a folding leaf or bar sight in the old buckhorn notch so that it can be folded flat down on the barrel when the peep is in use. Do not try to have both tang peep and leave in the buckhorn, for the notch of the latter gets right into the peep line of sight and you are simply shooting a buckhorn notch with restricted eyesight and all the advantages of the peep are at once lost. And see to it that these things all "work" properly; that the leaf sights are not so loose as to be continually falling back out of plumb, that the peep releases easily and does not stick anywhere, and also that it is lined up true, for, as we showed in Part I., while it makes little difference if the front sight is not absolutely centered in the aperture, it makes a vast difference if the peep itself is not on the true centerline. As they come from the factory those that I have used have been horribly out of true, requiring several shims of paper under their pedestal on one edge or the other to throw the peep aperture over on to the exact centerline.

The choice of a front sight requires quite as much thought as the rear one. The military front sight, showing a black, square section to the eye, will give the user many a heartache if he hunts deer with it. Some sort of bright front is essential on game, for a black sight is lost against the dim coloration of the animal. The military sight is also too high, too weak and movable for hunting purposes, and the steel shield that guardsmen carry to slip over it would have no place at all in the woods. I made a fair hunting sight out of the one on a Mauser that I once owned by filing a 45 degree flat across the upper rear corner of the sight. It gave a square, well-defined, bright bar of light for the front sight, one easily seen against dim brown and gray shapes, and one that would reflect skylight back into the eyes much later in the day than a bead could be seen clearly. Fred Vreeland, of the Camp Fire Club, applied this idea to a knife blade hunting sight originally; he filed a long slant on the rear face of the sight so that it would reflect light back into the eyes, making it always a bright sight. The plumb vertical rear face seen on so many front sights is a deceiving thing. Swing the rifle around and note how the front sight goes from black as you face the light, through a shiny white line along either edge as you swing across the light, to full white when the light shines full on that plumb rear face. Any sight that makes all those changes is "too many" for a hunter to keep track of when the game is on the jump. I have obviated it on my two big game rifles by filing that same 45 degree flat across the rear upper corner, the whole face of the flat being only a sixteenth inch. It presents a square, bright bead in all lights, no matter how you swing the rifle, because it reflects overhead light which is constant. I like it better than the gold and ivory beads because these are more or less weak, and the plain front sight is undoubtedly the strongest and simplest thing of the kind made. For those who prefer the bead I should think that the gold bead front sight would be the best selection, as it is strong, and shows up equally well on brown, black, or white game.

Having chosen the sights, the next important thing is the ranges you can get with them. A rifle sighted "point blank" at 200 yards will miss you a lot of game in the woods, for seldom do you get any such range, and you will always have to hold under to score a hit at shorter ranges. The average woods rifle shoots some such cartridge as the .30-30, .30-40, .303, .30 Govt., .35 and .405, all of which will have about a six-inch trajectory at 200 yards, that is, the bullet will be six inches high in mid-flight at 100 yards. Therefore, if you put the bead to break his shoulder or hit just back of the shoulder in the heart at 100 yards the bullet will go over him, even if you draw the front sight just right. There is no use saying that you will always hold under to allow for this; in the excitement of shooting at game you have a lot of things to think about, finding a clear space to shoot, getting the mitt off your trigger finger, getting the strap under your elbow if you use one, watching his jump, finding the right lead—if added to all this you have to do some lightning calculations for an imaginary spot six inches under where you have already figured, the chances are you will forget all about it or guess wrong, with the result of a miss. No; the thing to do is to see that the rifle shoots "point blank" at 100 yards and then hold high or draw coarse when you get a long range shot. Most hunting rifles are already sighted to hit where the bead or top of sight is held at 100 yards, but some field practice with them until you know just where your groups land is essential. A shot then offered at 75 yards or 125 will not introduce a sight error of more than an inch. Any fool can hit a vertical string, cutting it and bringing down the apple for the applause of the multitude, but now is the time to learn your front so nicely that you can hit a *horizontal* string!

Having gotten well acquainted with your rifle at 100 yards and vicinity, so that you *know* what she will do when you see your sights in a certain position, the next thing is to provide for long-range work, 200, 300 and 400 yards. There are two ways to allow for increased range—see more of your front sight, or raise the rear sight a definite amount. All receiver peeps are provided with such a quick method of shifting the rear sight for various long ranges that it takes but a moment to push down the releasing lever, push up the frame to the required mark, and tighten the lever again. One can do it without hardly taking eye off the game, making all the changes with the hands alone and just glancing down to see the right mark for an instant while the thumbs finish the change. To do more than this it is hopeless to ask of a big game hunter, who, after a stalk of four hours around a great mountain rim is going to risk his shot by monkeying with a burl nut or other complicated adjustment when he knows that any minute the ram or goat may wind him, or take alarm from some other cause and start to move while the rifle is being resighted? The quickest range shifting device is the combination of three leaf sights either

on one base or three bases, any one of which can be pushed up with a move of the thumb, never taking the eyes off the game and never moving the rifle from ready position. The flat bar rear sight and straight front sight permit of very accurate cutting off of the amount of front sight seen to one who knows his rifle. The three leaf sights together on a modern rifle hardly involve a change in height of over a sixteenth of an inch, and any practiced marksman can cut off a like amount from his front sight with a little practice at known ranges.

The tang peep is at its greatest disadvantage in this shifting of ranges. It has a burl nut on the sleeve and a locknut under this. You are to loosen the one and turn the other so as to raise the peep shank to a given notch cut on it beforehand; absolutely *too* much to ask of a hunter whose stalk is made and whose game is already uneasy or maybe running. The peep cuts off nothing of the front sight; you see all of it, the barrel and the game and a lot of the scenery besides. It is fine and quick within its range; outside of it your best plan is to *know* how much over him to hold the bead for longer ranges. A final thing that must be looked to on the tang peep is its position forward of the eye on the tang. With the kick of such a powerful weapon as the .35 Winchester, for instance, the least distance it should be forward of the eye to prevent its being kicked back into the eye socket, or else strike your frontal bone is 2½ inches. This will clear for offhand and sitting positions; prone, your head is so much farther forward that it will surely come into your eye and you must hold your head back to allow for it. Many of the flexible tang peeps are set so far back for the particular rifle for which they are sold that they will come back into your eye anyhow; the makers were evidently so much more interested in dodging the breech bolt with their precious sight that they gave no thought to the shooter's optic. However, a good tang peep is such a joy for quick and accurate shooting at anything near its normal range as to be worth some trial to find the right peep for your rifle. The one sold for the model '94 Winchesters fits the model '95 .35 caliber much better than the one sold for that rifle itself. I would not shoot the latter for the sake of my eyes, as it sets the tang half an inch farther back than the one for the model '94, and this latter one is only just enough forward to clear your eye when the rifle kicks back. For a larger man, with heavier bones and more flesh on them this would not be the case, probably, but when you do get a tang peep see that it has not this fault, and, if it has look over the stock and pick out one that sets it further forward. Never mind the bolt running into it; it makes not the slightest difference in the action, and the flexible feature of the sight is for that very purpose of rolling back when the bolt pases over it.

(*To be continued*)

THE REMODELED KRAG CARBINE

MY SPORTING KRAG CARBINE

Ralph F. Rhodes

The gun described below may be of interest to those who have not a surplus of this world's goods and yet are possessed of a large-sized desire to own a modern high-powered rifle. I went into the woods last year on rather short notice, and the short time at my disposal prevented my securing a gun of my own, and while the one that I had was perhaps all that could be desired, yet it was not mine.

Membership in a rifle club that is affiliated with the National Rifle Association carries with it the privilege of purchasing certain arms from the Government at very reduced prices and there is listed in the ordnance supplies that are sold to such clubs the following: "U. S. Magazine Carbine, cleaned and repaired, $2.50." I had seen one of these guns and I found that "cleaned and repaired" meant a job very thoroughly done, in fact, it is often hard to tell the difference between "cleaned and repaired" and "new," so I bought one. The $3.30 that I paid for it was divided up as follows: For the gun at the armory at Springfield, Mass., $2.50; for one-fourth of the cost of the box in which it came, $0.55, for the gun came in the same box with three other guns that were ordered by other members of the club at the same time; for my share of the expressage, $0.25.

I did not like the military sights that adorned the top side of the barrel, for they will not do when a quick shot in poor light is very desirable, so I began to look up a sight outfit that, to my mind, would be more suitable for work in the woods. Finally I spent $3.40 for a Lyman No. 33 rear sight and a No. 26 of the same make for the muzzle pointer. The next job was to get the military sights off and my sporting combination on.

I have a friend that keeps a gun store, and in the back of this store he has a shop. His name is Bill, and Bill loves to tinker on anything that happens to interest him. Get him interested in a job and he will do that job and do it right if it takes him all Summer. I took the gun and the sights and went down to see Bill and have a consultation. Well, Bill got interested pretty shortly and nothing would do for him but that he must be the surgeon to get after this particular case, and I was willing. The first thing that he did was to take off the military sights, for they were the worst offenders. This left two holes in the top of the barrel and in these holes he put two headless screws. On top of the barrel there was a piece of wood that is labeled a "hand protector." Bill allowed that he did not "callate" that I ever would shoot the gun so fast that I would need a hand protector on the barrel, so he thought the best thing to do was to take the thing off for good. It was held to the barrel by two clips, so the process of taking it off was just to take it off. The next thing that he did was to take off the stock. This he placed in the corner, saying that maybe we would need it later. In the illustration the side plate marked A came off next. This left the barrel with the dangdest piece of iron hanging to it that you ever saw.

The Lyman No. 33 sight is composed principally of two parts, the sight base and the elevating piece that carries the sight aperture. These two parts were separated and the sight base placed against the receiver. The location of the two holes in the sight base was then marked on the receiver and Bill began to look around for drills and such for making holes in steel. What he wanted to do was to drill two holes in the receiver and then tap them for the screws that were to hold the sight to the gun. Well, the drill was found and the job started. Bill could make the drill go round all right, but the drill would not go in. The trouble was that some fellow over at Springfield had case-hardened that receiver, and from what Bill said he had done a fine job while he was at it. The two holes were finally drilled and tapped, but only after much time and labor had been spent and some half-dozen drills and taps had been thrown into a can where sawdust and used "finecut" are kept. Bill is not a profane man usually, but while this drilling and tapping business was going on he rid himself of some very original remarks. The sight base was then put on and it looked like a pretty nifty job. The next job was to replace the side plate, above mentioned. There is a spur on this side plate that used to live where the sight base now was, so that this spur had to be ground off. This took only a few minutes after the emery wheel got speeded up. The ivory bead front sight then took the place of the military front sight without any trouble.

What followed the putting on of the sights was done only after much discussion, accompanied by much burning of tobacco and the viewing of all the other guns that Bill had in his shop. No one liked the shape of this carbine stock, and while I thought it was good enough, Bill said that he thought that it would stand quite a lot of whittling and still be serviceable. He sent me home for my shot-

gun, and when he got his hands on it, tears came to my eyes, for he began to look around for screw-drivers and things. He took off the butt-plate of the shotgun and the steel butt-plate of the carbine and clamped them together. On the steel plate he marked the shape of the shotgun plate, and after the emery wheel had been busy for about five minutes the butt-plate of the carbine had quite a familiar look. The rifle stock was then shaped down flush with this new shape by beginning at the grip of the stock. A fine file and fine sandpaper completed the shaping of the stock, and after the barrel was attached, Bill handed the gun to me with instructions to rub into the stock at least a dozen coats of boiled linseed oil. I put on the oil and rubbed till I was nearly ready for the hospital, but the result was very gratifying.

As I said before, Bill was thorough, and he was not satisfied till the gun was tried out, so our outfits were packed and we got aboard the train for the Maine woods. We arrived at our destination about noon of the second day and that afternoon was devoted to setting the sights on the rifle. A target was set up at 100 yards and the first shot fired. The bullet hole showed about 12 inches high and 4 inches to the right. A little tinkering with the rear sight and the next shot centered the black.

Early the next morning, before the sun had begun to show over old Moxie Mountain, we had breakfast, and as we started down the road for our hunting grounds, I placed in the gun six brand-new cartridges in the ends of which were 220-grain soft-nosed bullets. About 2:00 P.M., while I was in quite a dark thicket, I saw a deer rise from the ground and stand facing me about 60 yards away. I got a quick aim—thanks to those sights—and fired. As soon as possible, and that was pretty soon, I got to that deer. It was as motionless as if it had been shot for a week instead of a few seconds. The bullet had entered the neck and had taken a course down the spinal column, and when we cut the deer up, the backbone for about ten inches was in pieces about the size of walnuts and smaller. I did not fire at another deer on the trip, so I do not know what the gun would do again, but I have my suspicions.

I now have a gun that weighs 7½ pounds, balances nicely, and it has performed to my utmost satisfaction. So far I have paid for it only $6.70, but on this last trip the stock has roughed up a little and I am afraid I will have to buy some more linseed oil. This is the history of the realization of a great desire, so if you are in the same boat, go thou and do likewise.

SIDE ARMS IN THE WOODS

Herbert K. Savage

I never realized the value of having along a side arm of some sort until my trip to the Maine woods this year after deer. My rifle, a carbine with 22-inch barrel, shooting the 30-40-220 Krag cartridge, could be made a single-shot, small-caliber rifle by using a supplemental chamber and a .32 short cartridge. As it was the partridge season I was always on the lookout for these birds, and on one occasion, not having seen any deer signs for several miles, I slipped in one of the supplemental cartridges and stalked a couple of partridges which were walking around and feeding some fifty yards ahead. I had covered about half this distance when I heard a crashing in the woods over to the left. I tried to eject the supplemental, but it stuck, and jam down on the lever as I would, it still remained fast. The result was I lost a good shot at a buck which went bounding away up the hillside.

If I had had some sort of side arm, either a single-shot pistol or long barreled, light calibered revolver I should have secured the partridge and at the same time have had my chance at the deer, as the soft-nose cartridge would have been in the barrel ready for business, instead of being buried in the box magazine, held there by a balky supplemental chamber.

The owner and head guide of the camp where I stayed never carried a rifle, but his side arm was a revolver shooting the .38 Special cartridge. This gun had a six-inch barrel, and special target sights, elevation front and wind-gauge rear. With this revolver he had killed a moose and a bear, and innumerable small game animals such as rabbits and partridge. Another guide carried a small caliber, high-velocity automatic pistol of foreign make, which he claimed was just about right. A member of our party had a .22-caliber, single-shot pistol, with eight-inch barrel, which certainly did good work on the small game found there.

A certain outdoor lover came in the office the other day to ask my advice about a side arm, and the circumstances prompting him to purchase such a weapon were the following. He was up in the woods this last fall and one day decided to go after partridges instead of deer and bear, which he had been hunting with poor success for about a week, owing to the woods being dry. He took with him his .20-gauge, double barreled shotgun. About a mile from camp he jumped a deer, and as he had only No. 8 shot in the gun, did not shoot. He figuratively kicked himself for not having brought along some sort of revolver, and resolved to do so in future. We studied over the various catalogs, and he expressed himself in favor of an automatic pistol with good smashing power. When he left the office his mind was finally made up, he went to the nearest sporting goods store and bought a 45-caliber automatic pistol. This was another case where the side arm would have saved the day.

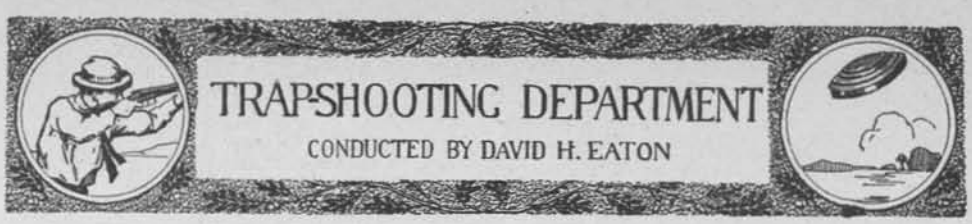
I know of many instances where supplemental cartridges of .32 caliber have failed to kill small game even when said small game was hit in a supposedly vital spot. I fired two shots into a partridge this year, the largest "Pat" I have ever seen, and he ruffled his feathers a little, ran a few steps and then flew off through the trees. I did not intend to lose him and followed his line of flight as best I could and soon jumped him again. He again flew ahead without offering me a chance to shoot. I repeated the performance and at last killed him with my third shot. Both the previous shots had gone through the base of his neck and had not bothered him to any apparent degree. Yet the same .32 cartridge in a revolver was pretty sure of scoring a kill.

If I were in the place of my friend mentioned above, I should have bought a revolver similar to that carried by Charlie, the camp owner of whom I have already spoken. This revolver will shoot three different cartridges, the short, long and Special .38's. The shorts are ideal for such small-game work as one will need it for in the woods, and the Special loads will stop a bear, moose, wildcat or similar game, as has been proven time and time again. If one did not wish target sights, a gun handling similar cartridges may be bought for about three dollars less. There is also a single-action model made which appeals to me, on account of the nice hang of the weapon. This has the ordinary sights also, knife blade front and the rear sight is a groove along the top of the frame. I have seen some very pretty shooting done with this model revolver, for all it is behind the times, so to speak, in speed of action.

If I needed a side arm to carry in combination with a high-power rifle, then my choice would be one of smaller caliber. I would buy a revolver put out by one of the well-known revolver manufacturers, with 6-inch barrel and target sights. This would handle the .22 long-rifle cartridge, which as every one knows is very effective, for all its small size.

As to the method of carrying the side arm, in my opinion the most comfortable way is in a shoulder holster, such as advertised under the name of Secret Service Holsters. These holsters are made with a loop to slip over the head and rest on the right shoulder, there is a strap to fasten around the body to keep the holster in place, and the revolver or pistol is carried under the left arm with the butt facing forward ready for instant action. Of course it looks more picturesque to wear a cartridge belt buckled around your waist and a holster dangling from that, but after walking some distance the novelty wears off and the presence of the extra weight around your waistline makes itself felt to no slight degree. This holster may be worn inside or outside of your mackinaw as you prefer, and will not be found any more annoying to tote around than the ordinary kodak or field glass.

Do you know about the Field and Stream Trophy Cup for trap shooting and casting tournaments?



INTERSTATE ASSOCIATION

All trapshooters are interested in the results of the meeting of the Association, held annually early in December. Questions relating to the sport, and plans for its betterment, are thoroughly discussed, and any changes which give promise of adding to the number of its devotees are adopted. At the meeting of the new Board of Directors the following officers were elected for the ensuing year: President, T. E. Doremus; vice-president, C. R. Babson; secretary, E. Reed Shaner; treasurer-manager, Elmer E. Shaner. Tournament Committee—J. T. Skelly, chairman; F. C. Drew, T. H. Keller, Jr., J. L. Clark, L. J. Squier, R. W. Clancy, H. E. Winans. Trophy Committee—A. F. Hebard, chairman; W. R. Clark, C. R. Babson. Gun Club Organization Committee—T. H. Keller, Sr., chairman; L. P. Smith, Edward Banks. The Grand American Handicap will be held in St. Louis, Mo., August 21 to 25, under the auspices of the St. Louis Trapshooters' Association. The Southern Handicap will be held at Memphis, Tenn., May 9 to 11, under the auspices of the Memphis Gun Club. The Western Handicap will be held at Omaha, Neb., June 13 to 15, under the auspices of the Omaha Gun Club. The Eastern Handicap will be held at Philadelphia, Pa., July 18 to 20, under the auspices of the Keystone Shooting League. There will be no Pacific Coast Handicap in 1916, as there were no applications received for this event.

A change was made in the distribution of that part of the registered tournament fund allotted to State tournaments. Under the new plan the 48 States are divided into four classes, A, B, C and D. State tournaments in Class A will receive $250.00. In Class B, $225.00; in Class C, $200.00, and in Class D, $150.00.

It was decided to set aside $2,000.00 of the tournament fund of 1916, and use this amount in the purchase of trophies to be given to all new gun clubs, or reorganized clubs which have not been shooting for twelve months prior to the reorganization, and which have joined their respective State associations.

As in 1915 all clubs asking to hold registered tournaments and requesting contributions must have their applications in on or before February 15; no applications will be passed upon before that date. State tournaments, leagues of gun clubs and special organizations are exempt from this rule.

The Association decided to present a trophy to the winner of high amateur average for 1915. For several years women shooters have been barred from entering the Grand American Handicap, but the prohibition was removed at this year's meeting, and at future Grand Americans they will be allowed to compete.

In addition to the high gun trophies now awarded in the Grand American Handicap, trophies will be awarded to the high guns at each handicap distance. These trophies are to be competed for only by contestants standing on the same mark.

Entries in the Grand American Handicap will close on August 5th, one week earlier than in previous years.

The following facts compiled by Secretary E. Reed Shaner give a good idea of the activity in trapshooting circles during the season of 1915. There were 8,140 different shooters taking part in the registered tournaments, and an average attendance per tournament of 46.80 amateurs, and 6.18 professionals. The amount contributed to registered tournaments was $23,900.00. Applications received for registered tournaments, 456. Tournaments registered, 333. Applications refused, 76. Tournaments contributed to, 229. Tournaments registered under "old policy," 104. State tournaments registered, 42. Tournaments registered in Canada, 11. Tournaments cancelled and not counted, 11. Targets trapped in 332 tournaments (the report of one tournament had not been received up to the time of making up report), 4,814,260. Average number of targets per tournament, 14,500. Number of trophies contributed to registered tournaments, exclusive of the Interstate Association's handicap events, 983; of these, 596 contestants won one each; 83 won two; 32 won three; 11 won four; six won five; five won six, and two won seven. At the Interstate Association's handicaps 39 trophies were awarded.

Pennsylvania led in the number of registered tournaments with 38; $1,250.00 was contributed; 420,405 targets trapped; average attendance, 46 15/19 amateurs and 5 12/19 professionals. Illinois was second with 32 tournaments; $4,675.00; 666,275 targets, the largest number trapped in any of the States; 69 25/32 average amateur attendance, and 7 15/32 professionals. Iowa third with 29 tournaments; $775.00; 349,715 targets; 41 25/29 amateurs and 4 13/29 professionals. New York, 18 tournaments; $925.00; 227,840 targets; 57 4/5 amateurs and 5 14/15 professionals. The number of different contestants in registered tournaments has increased each year since 1913, when there were 7,014; in 1914, 7,849, and in 1915, 8,140. There were 47 more tournaments registered in 1915 than in 1913. In 1913 there were 4,526,570 targets trapped; the next year, 4,780,690, and in the year just closed, 4,814,260.

In his report Mr. Shaner, the efficient manager, speaking of the Grand American Handicap, said: "Its magnitude overwhelmed the trapshooting world. Its like has never been known on the planet. The tournament attracted the largest gallery in the history of the recreation." Having given the largest shooting event ever held in the world, Mr. Shaner thinks that the Association should call a halt on the scope of the Grand American, and that its ambition should be to make that event not the largest but the best, in existence. He says: "In my opinion, we should not cater to quantity, in preference to quality, and that we should not cheapen America's blue ribbon event by reducing it to the level of a show." A number of the contestants expressed the opinion that the sport was detracted from by the number of contestants, one man styling it a "round up." Many others were enthused over the magnitude of the affair, and congratulated the Association on its success. It is probable that a smaller entry and a return to the five-trap system would please a large majority of the shooters who make it a point to attend this event each year. The question of providing more than fifty moneys in this event is one that is annually a subject of discussion among the shooters, but, as yet, no adequate scheme of distribution has been worked out. There is a chance for some expert among the trapshooters to make himself solid by working out a division providing for 100 or more moneys, which shall be equitable, without splitting a per cent too small. The entrants might be divided into two classes by their scores, and the purse divided into two equal parts, and then into fifty moneys in each class. Or Class A, consisting of the most expert shooters, might be given, say, 60 per cent of the total purse, and Class B share in the division of the remaining 40 per cent.

GRAND CANADIAN HANDICAP

This big event was brought to a successful close on December 4, after a week of shooting. The scores were high when the weather conditions of cold and snow

are considered, and the attendance from all parts of the States and Canada was very good. The feature of the tournament was the International Handicap at targets, shot on the third day. This was won by W. J. McCance, secretary of the St. Thomas Gun Club, under whose auspices the tournament was held, on a score of 96 from 17 yards; S. G. Vance was second, with 93 from the 20-yard mark. High amateur honors on 16-yard targets for the entire program went to C. D. Coburn, of Mechanicsburg, Ohio, with 380 out of 400 targets. Frank S. Wright, of Buffalo, N. Y., and S. G. Vance, of Tillsonburg, Can., tied for second place on 374; S. A. Huntley, of Omaha, Neb., 370, and Roy Bruns, of Brookville, Ind., 369. The professionals were headed by R. O. Heikes, of Dayton, Ohio, with 385; Fred B. Bills, of Chicago, Ill., 382; J. R. Graham, of Long Lake, Ill., 373, and John S. Boa, of Montreal, Can., 363.

On the first day C. D. Coburn was high amateur with 94 out of 100; S. A. Huntley and S. G. Vance 90 each; C. A. Corruthers, 89. Professionals, R. O. Heikes, 95; F. G. Bills, 91; W. S. Jones, J. R. Graham and Roland Day, 88 each. On the second day the following amateurs finished in the money: C. D. Coburn, 194 out of 200 targets; F. S. Wright, 193; T. Pendergast, 190; R. H. Bruns and B. Ehrlich, 187 each; S. G. Vance and F. Kerr, 186 each; S. A. Huntley, W. A. Smith, H. D. Bates and G. N. Fish, 183 each; M. Coombs, 181; J. E. Jennings, 180; T. Tomlinson, 179; O. C. Buck, J. McCausland, A. M. Mesner and H. L. Taylor, 178 each. The high professionals were F. G. Bills, 194; R. O. Heikes, 193; J. R. Graham, 187. A. C. Connor, of Springfield, Ill., won the event at 10 live pigeons with a perfect score; Summerhayes and Buck tied for second place on nine each.

The third day was given up to the International Handicap; the results are given above. Three men tied for third place in this event on 91: G. N. Fish, 22 yards; F. Kerr, 19 yards, and W. A. Smith, 18 yards. D. Smith, 18 yards, and T. J. Remy, 21 yards, tied on 90 for fourth place. J. R. Graham was high professional with 89; F. G. Bills, 85, and R. O. Heikes, 84, all shooting from 23 yards. On the fourth day H. D. Bates and S. G. Vance tied for high amateur with 98 out of 100 targets; T. Pendergast, 97; F. Dolson, 96; S. A. Huntley, J. MacCausland, H. W. Benson and T. J. Remy 95 each; W. A. Smith, R. H. Bruns, E. Harris, G. N. Fish and McNeil, 94 each; F. H. Willey and F. S. Wright, 93 each; C. D. Coburn, J. E. Jennings, H. Smith, B. Ehrlich, J. W. Broderick and W. Hart, 92 each. The professionals had J. R. Graham at the top with 98; F. G. Bills and R. O. Heikes, 97 each, and J. S. Boa, 95. In the handicap live bird event at 10 birds, J. W. Manney, 28 yards; A. C. Connor, 32 yards; G. McIntosh, 28 yards; P. H. Willey, 30 yards, and J. Vance, 29 yards, were tied for first on 10 straight. S. A. Huntley and H. D. Bates, 32 yards, and B. Ehrlich and J. Summerhayes, 30 yards, tied for second on nine each.

CHICAGO GUN CLUB

D. E. Thomas won the fifth Mid-West Championship at targets December 10, the contest being held on the grounds of the Chicago Gun Club. The weather was bad, a steady rain fell all the afternoon, and after 4 o'clock it was a mixture of snow and rain. A preliminary event at 25 targets was shot, the 16 high men drawing numbered slips, No. 1 shooting against No. 2, and so on; the winner of the first pair shooting against the winner in the second pair, and so on. All events were at 25 targets each. First elimination round: J. L. Meloy 21, C. W. Regester 19; J. F. Goodrich 20, J. F. Breitenstein 15; J. Gooch 19, J. O'Neill 17; D. E. Thomas 24, H. C. Snodgrass 18; Mrs. Winkler 18, C. A. Carroll 16; B. L. Kammerer 24, A. H. Winkler 22; J. Lino 22, W. P. Lewis 19; L. C. Huckins 22, T. J. Cole 20. Second round: Goodrich 20, Meloy 17; Thomas 25, Gooch 20; Mrs. Winkler 25, Kammerer 21; Lino 24, Huckins 21. Semi-Final Round: Thomas 22, Goodrich 18; Lino 24, Mrs. Winkler 21. Final round: Thomas 23, Lino 21. The winner broke 94 of his 100 targets, and the runner-up 91.

WEST JERSEY TRAP LEAGUE

In the League contests at Riverton on December 11, the Riverton Gun Club team finished in first place with eight targets to the good. Three teams were entered, five men on a team, 50 targets per man. Riverton—Stackgouse 47, Biddle 45, Chambers 44, Dr. Mills 43, Vaughan 43, total 222. The Delanco team was second with a total of 214, and Moorestown third with 188. There were 29 other shooters present who failed to qualify for their teams. Moorestown had 17 representatives, Delanco 15 and Riverton 12.

EVANSTON, ILL., GUN CLUB

On December 19 Mrs. Fred E. Smith won first place after shooting off a tie on 96 out of 100 with L. M. Fetherstone, one of the best shots in this locality. Mrs. Smith had the advantage of 31 added targets, while Fetherstone shot from scratch, but her victory was none the less creditable.

MINNEAPOLIS, MINN.

J. E. Harker outclassed the shooters at the Fort Snelling traps on December 18, breaking 97 out of 100 in the cold and snow. On December 16, F. R. Richter was high amateur in a field of 38 shooters, with 95 out of 100 targets; W. D. Mitchell and L. Maybe were second, with 90 each. The professionals were headed by H. C. Hirschy, with 96, and J. F. Dickey, with 92.

INDIANAPOLIS GUN CLUB

The Remy trophy was permanently won by C. A. Edmonson, of Clayton, Ind., on a score of 97. He and B. P. Remy had been tied for several weeks, the latter losing the final on a score of 92. Edmonson also won the leg on the Stutz XX cup, with 24 out of 25 from 22 yards. Mrs. B. Remy and Moller tied for second place on 21 each, from 16 yards.

PALEFACE GUN CLUB

L. F. Curtis, Newton Highlands, Mass., was high gun in the shoot at Wellington, on Dec. 18, breaking 89, his handicap giving him a total of 99. The match was shot in a snow storm, and scores fell below the average.

BOSTON ATHLETIC ASSOCIATION

J. L. Snow made the good score of 92 in the handicap shoot on Dec. 18. A. B. Farmer won the handicap honors with a total of 100, which included his handicap of 10 targets. L. Davis was second high scratch man, with 91. A severe snow storm kept the scores lower than usual.

GRAND AMERICAN HANDICAP NOTES

The arrangements for the Grand American Handicap, at St. Louis, next August, are in the hands of "Jimmy" W. Bell (Chief Ding Dong), of that village, and he will devote his entire time to the work of preparation. This is assurance that the Interstate Association will find everything in perfect order when the Blue Ribbon event starts. Mr. Bell had charge of arrangements when the G. A. H. was first held in Indianapolis, Ind., in 1904. He is one of the leading trapshooters of the West, and has had a varied experience, which makes him an ideal man for the job.

EXPERT ADVICE FOR $1.50 A YEAR

If you are at a loss as to what sort of tackle is necessary for trout, bass, salmon, muscallonge, tarpon, tuna, surf or other kind of fishing, write our INFORMATION BUREAU. Are you undecided as to what calibre rifle or bore of shotgun is best suited to your needs, write us. Are you having trouble with your dog? Do you want to visit some certain section of country this year on your vacation, a section which is entirely new to you? We will gladly answer all such questions. We have a fine INFORMATION BUREAU in connection with our SPORTING AND VACATION PLACES BUREAU which is always at your service. Just drop us a line stating your troubles and we will answer by the next mail.

That's part of the service we give for your subscription.

TRAINING THE BIRD DOG

I am writing direct to you as I want to ask for a little information on bird dogs, and I feel that you are very familiar with these kind of dogs.

I am a poor man, twenty-one years old, working, and of course cannot afford to buy a trained dog, but thought perhaps I could buy a good pup and train him myself.

I have hunted woodcock and grouse with a friend who has a very nice setter, and of course have been crazy for a dog ever since.

I would be satisfied if I could train a pup to point and not range very far away. Do you think I could do this with the aid of some trainer's book?

Would you be kind enough to tell me where I might get a good reliable pup? Would you advise male or female? Pointer or setter?

My friend said that it would be impossible for me to train a pup myself. Do you think so? Of course, I have not had any experience training dogs, but have always had pet dogs.

T. H. C.

Ans.—There is no reason why any man with patience, firmness, and a reasonable control of his temper should not be able to train a bird dog pup. We advise purchase of both "The Amateur Trainer," by Ed. F. Haberlein, and "Modern Breaking," by W. A. Bruette. Neither book is expensive and the owner can train, using as much of either method as his own and the dog's temperament indicates. A good bird dog pup can be had from any kennel advertising in FIELD AND STREAM. Pointer or setter equally good, male dog preferred.

THE BEST DOG FOR RABBITS AND WOODCHUCKS

FIELD & STREAM PUB. CO.

I am only a high school boy, fifteen years of age, but am a lover of outdoor sports and a faithful subscriber and reader of your magazine, which I enjoy very much, even to the advertisements.

If it would not be too much trouble I wish you would tell me what breed of dogs or mixture of breeds you would recommend to hunt rabbits and woodchucks and make a good, all-around dog, also what material and dimensions you would recommend for a woodchuck hook?

EDGAR C. PALMER.

Ans.—Beagles and Airedales are the best breeders for your purposes. A good beagle can be purchased at a moderate price from any of the dog breeders advertising in FIELD & STREAM. Make your woodchuck hook out of a 12-inch, three-corner file with a two-inch pointed hook at one end and an inch right turn at other. This to be lashed to a pole when dog has holed the woodchuck.—ED.

OVERRUNNING THE SCENT

FIELD & STREAM PUB. CO.:

I would like to ask you a question to be answered through your magazine if possible.

We hunt rabbits with two dogs, one a foxhound and beagle and the other is supposed to be the same, though I doubt it. Well, the point is, they start a rabbit and run a short distance and lose him through overrunning. They seem to go perfectly crazy, and the first turn the rabbit makes they go on by sometimes three or four hundred feet before they find out they are off trail. They start lots of rabbits but lose them. Now what in your opinion is the trouble?

We run at least once a week and sometimes three or four times.

I got one of my dogs from a popular kennel and was supposed to get a foxhound and beagle cross, but he looks more like a fox terrier than a hound.

L. R. HENDERSON.

Ans.—The overkeenness and general behavior of your hounds can all be attributed to lack of work and experience. Fortunately they are good searchers and starters, the most important qualification of a hound. All they require is repeated opportunities to learn to hold a trail and not overrun or be deluded by the wiles of br'er rabbit.

Hunt your dogs every other day for a week and then every day for a few days. When they lose a trail do not let them range out and start another rabbit, but insist upon them working close and sticking to the first rabbit until the kill is made. By proceeding along these lines we assure you that their progress in solving the problems of the trail will be gratifying.

Crosses between beagles and hounds frequently display a good deal of terrier type. In fact, when you begin crossing dogs, even those as closely related as hounds and beagles, you never know what to expect.

DR. W. A. BRUETTE.

SIZING UP THE PUPPY

Field and Stream Pub. Co.:

Can you give me any enlightenment as to whether there is any way of telling that a puppy is well bred?

I recently became owner of a puppy whose mother is an English setter, father is also supposed to be an English setter; both are black and white, also my puppy but she has short hair, more like a pointer; has a good nose, long ears, and is very prettily marked.

Can you tell me if there is any way of knowing if I have a well-bred dog?

J. A. LITTLE.

Ans.—All setter puppies are short-haired when very young. The feather does not begin to show until the fourth month. Ears at two months, however, should have curly, silky hair and coat should be silky. Get, if possible, mother's pedigree. Dog will show up whether cross or not at about four months of age.—ED.

Courtesy Big Hatchie Kennels, Ky.

IN ANSWER TO LETTERS FROM OUR READERS WE ARE PUBLISHING THE ABOVE PICTURE, TO SHOW WHAT GENUINE TENNESSEE REDBONE COONHOUNDS LOOK LIKE.—ED.

FISH AND FISHERMEN

THAT FLY

Alexis A. Kelsey

For years Maine has been the Mecca of the summer fisherman of the East; of late, however, New Brunswick has begun to entice some of the former visitants of the Rangelys and Moosehead. The chief reason for this is that, the more accessible Maine waters have become somewhat fished out, also that the liberty of the woods lover who wishes to wander by himself is trammeled by the state laws regarding the compulsory use of a guide. Moreover, certain sections of New Brunswick, where the fishing for bass, trout, and salmon is of the best, are no further away than some supposedly fine sections of Maine.

Last summer a combination of these reasons led me to forsake "mine own, my native land," and pass over into the Canadian province mentioned. Here it was that I created "That Fly," may its shadow never grow less. I still cherish its remains, though battered and scarred, and live with the fond hope of tying another on its waters some day.

If the reader will take down his map he will see that the Schoodic or Grand lakes form a portion of the western boundary of New Brunswick. They comprise about twenty-eight miles of continuous waterway, and are much cut up by inlets, and dotted with islands of some size. One of these inlets, known as Silas' cove, is the setting of my story.

I had been for a week in camp, which, by the way, consisted of a few log and frame buildings, erected by a native for the comfort of fishermen, and had had no great amount of success, getting only a few medium-sized salmon on a troll, and meeting with the same luck in bait-casting for bass. No, don't say it, I wasn't mad, I was rather getting curious to know what the trouble was, for I had thoroughly questioned those who had been trying a fly while I had been otherwise engaged, and their reports had been equally unfavorable. Such was the status of affairs at the end of my first week, and I had but a week longer here, as I was to meet friends eight days later up on the Miramichi.

I probably reached my deepest depth of gloomy curiosity on a certain Saturday evening, after I had made many fruitless attempts for bass with about two dozen patterns of flies. I must say, right here, that the weather having turned suddenly hot, the salmon had gone into deeper water, and had stopped biting entirely, so that the only choice remaining to me was bass.

Now where a bass will refuse a brown hackle, it generally means that he is feeding upon some particular form of insect, for which he will accept no substitute, and which usually may be found to differ considerably from anything you may have in your fly book.

On this particular Saturday afternoon I had fished some two miles of lake pretty carefully, dropping my fly in all the likely spots around, old tree trunks, sunken ledges and heaps of dryky; and although I had seen fish rise at a distance, I had been unable, owing to the distance, to determine the nature of what

"THAT FLY"

seemed to be their favorite food, and had secured but two small bass and a white perch. I did considerable thinking that night around the open fire, and even held a long council of war with three other frenzied fishermen of the camp, but we arrived at no definite conclusions; we all allowed, however, that bass were feeding upon some form of insect life, and I think that each one of us secretly determined, that on the morrow he would find out before the other fellow what that insect was.

Next morning, very early, we pushed out in our several canoes, each taking a separate direction, and I headed for Cold Water Bay, a little arm of Silas' cove, which lay some five miles distant from the camp. Here I toiled perspiringly, now at the paddle, now with my rod until well along toward three o'clock in the afternoon. I had seen quite a number of rises here on the day previous, and was getting rather disappointed with the two or three very small fish which had so far rewarded my day's labors.

Stopping to fill my pipe, I suddenly both saw and heard, near a little point just ahead of me, a noble splash from a rising fish, but the brilliancy of the sun reflected on the water prevented my determining the objective dinner of Mr. Bass. Grabbing my paddle I worked up to the vicinity of the rise, or about where I thought it had been, and had just given up hope of a further demonstration, when, KEE-BANG, out he came, and with a rush like a porpoise rising for air. And what do you suppose he was after: well, if it had been a swallow I should not have been more surprised: that fellow had attacked a silver-colored dragon-fly as big as an aeroplane.

Right then and there I sat me down and did a little thinking. I certainly had nothing in my fly book that would anywhere near approach that gay bird of paradise, whose life I had but now seen so perilously threatened. This being the case, I set out to invent something; but how to get a silver body? It chanced that shortly before the events just chronicled, I had placed a new roll of film in my camera, and instead of throwing away the wrappings, had dropped them beside me on the canoe seat. From among them there glistened a bit of tinfoil, this I grabbed with a fine frenzy. My troubles were now practically at an end. With my pocketknife I fashioned the body of the creature from a match, attaching it to a small gutted bass hook with a little silk winding thread, which I always carry in case of breakdowns. Around the match body I whipped a small piece of film tinfoil, decorating it with some red and green strands of silk thread, which I pulled from the old necktie which I always had in my pocket, and which I usually put on at mealtimes to dress up in, as there were ladies in the camp.

And now for the wings. Several days before I had been fishing the mouth of a small feed stream for brook trout, and had been using to measure them a small celluloid rule, and bearing the advertisement of some firm in Ohio which sold drugs. My eye rested upon this: at length I picked it up, and again reaching for my jackknife fashioned what I thought would answer for a pair of wings. With some misgivings I completed my hummingbird, and prepared to launch it upon the waters.

On my first cast or two the

AUTHOR'S WIFE AND BASS CAUGHT WITH THE FLY

dingus did not do much, as, being rather large, it resisted the wind, falling too heavily and not accomplishing much in the way of distance. My fourth cast sailed out nicely, lighting in a more sportsmanlike manner and attaining a distance of somewhere about forty feet. Gradually I began to reel in, the while skittering my lure along the surface.

Within twenty feet of the boat I became almost petrified by what I saw—a dark form, a big ripple, then a dorsal fin like a ship's rudder and then—well I can still feel that shock yet, running up my arm from my very fingertips! My, how he did take that fly, bat, bug, or what you will! He literally swarmed all around it.

The fight lasted about twenty minutes, as I did not care to force him too hard, my leader being rather light, and my rod a new four-ounce lancewood with bamboo tip, which I had made the winter previous, and which I did not care to set so soon. The old fellow broke no less than six times with me, going clear into the air each time, and shaking the silver drops from his sides in all directions. I think he would have been "charmed" to have shaken that dad burned bug from his mouth, but by good luck it held, and at length I brought him to net; a good four pounds even, fresh out of the water.

Before reaching camp that night at seven thirty, I had secured nine more fish in the same spectacular manner: none of them quite as large, the next in size being three and one-quarter pounds, but all being good fish, running anywhere from a pound and a half to three pounds. My total catch weighed twenty-six and a half pounds.

During my week's stay I nearly but not quite, duplicated this day's work on several occasions, and soon taught my wife, who was with me, how to cast "That Fly," and get results. Needless to say, I had it all over my companion fishermen, and for the next few days all the tinfoil on plug tobacco, which the guides carry by the yard, on package tea and on photo film, was in great demand.

My fly of the first day lasted, I think, longer than the average tailormade varieties, but it at length had to go the way of all good flies, and although I made several more, this time using crow feathers for wings, it did not seem to me that they filled the creel quite as easily, or with such big fish as "That Fly."

ASBURY PARK FISHING CLUB AWARDS PRIZES TO ANGLERS

By Hartie I. Phillips

Chairman Press Committee, Asbury Park Fishing Club

The season of 1915, from a fishing standpoint, has been exceptionally poor for catches of the smaller varieties of fish, such as weakfish, bluefish, kingfish and croakers. This, to a certain extent, was offset by a remarkable run of channel bass this fall, something unknown in this immediate section heretofore. Between Sept. 11 and Sept. 27 there were taken from the surf at Deal Beach 26 channel bass, averaging about 30 pounds each. The largest was taken by Henry C. Rydell, which weighed 38 pounds 6 ounces, and the greater number, seven, were caught by Harry W. Metz. The largest channel bass recorded was taken by Joseph Cawthorn at North Point, Barnegat Inlet, which weighed 39 pounds 10 ounces. The record channel bass of the year, 55 pounds, was caught by J. M. Bullock, a member of the club, at Corson's Inlet, but was not weighed in, being outside of the club's territory.

The list of John F. Seger of striped bass catches for the year, although not as extensive as last year, shows that there were five weighing over 40 pounds, seven between 30 and 40 pounds, 10 between 20 and 30 pounds, nine between 15 and 20 pounds, and 22 between 10 and 15 pounds. The average of the total catch was over 15 pounds each. The largest striped bass, weighing 45 pounds 13 ounces, was caught by Jacob Wertheim from his private pier at Deal. Frank H. Westervelt got second prize of the club, his striped bass weighing 31 pounds 15 ounces. Those who indulged in boat fishing did not find the fish so plentiful as usual, bluefish and bonito being very scarce, and catches of seabass were nothing exceptional. However, the catching of a tuna weighing 286 pounds broke all records for rod and reel fishing off the New Jersey Coast, when Jacob Wertheim, after a battle lasting an hour and 17 minutes, landed this monster after it had dragged his boat over three miles. The largest bluefish taken, boat fishing, was caught by B. C. Fincke, which weighed 10 pounds 14 ounces, and the largest from the beach by Joseph Cawthorn which weighed 9 pounds 3 ounces. The largest weakfish from the beach was caught by William N. Applegate, which weighed 6 pounds 10 ounces, and from a boat by W. A. Kennedy, which weighed 5 pounds 4 ounces. There was a special prize for the member catching the greatest number of striped bass during the season, which was won by Frank P. Johnson, who succeeded in landing five. The largest kingfish was caught by Allen F. Brewer, 2 pounds 4 ounces; largest croaker by George H. Perry, 2 pounds 11 ounces, and largest plaice by Charles K. Savage, 5 pounds 13 ounces. In boat fishing Dr. R. J. Parker succeeded in landing the largest bonito, 3 pounds 15 ounces, as well as the largest seabass, 4 pounds.

Considerable good-natured rivalry was occasioned by a number of members getting together after the regular list of prizes had been published and contributing toward the purchase of a pair of rubber surf boots "for the largest fish, edible or otherwise, taken with rod and reel, surf fishing," when it was discovered that a school of large blue nose sharks were feeding in front of Takanassee Lake, they got after them. Frank G. Ernest caught the first, which weighed 134 pounds, and took about an hour to land. There were five caught, all told, and he succeeded in landing three of them, but T. Herman Beringer, Jr., landed the largest, weighing 155 pounds. John E. Clayton also caught one weighing 142 pounds. Over 35 sets of tackle were lost by other anglers in their endeavors to handle them.

The special prize for the last fish of the season was caught at 12.40 P. M., on Oct. 31, the last day, by Harry W. Metz, who succeeded in landing a small plaice.

Mrs. Joseph Cawthorn got the largest striped bass, 11 pounds 3 ounces. Mrs. George W. Potts took a 6-pounder and Mrs. F. Brewer one weighing 4 pounds 3 ounces. Two channel bass were taken, one by Mrs. H. C. Fisher weighing 28 pounds 9 ounces, and another by Mrs. H. I. Phillips, 19 pounds 8 ounces. Mrs. Fisher also caught the largest weakfish and kingfish, and Mrs. J. H. Wortman the largest croaker.

A special prize for the largest edible fish caught by the son or daughter of a club member, under 16 years of age, was won by Adrian Phillips for a weakfish weighing 3 pounds 7 ounces.

The following is a full list of awards of the Asbury Park Fishing Club for the season of 1915:

BEACH FISHING

Striped Bass

Largest, Jacob Wertheim, 39 pounds 9 ounces; 2 ought Julius Vom Hofe reel and coat sweater.

Second largest, Frank H. Westervelt, 31 pounds 15 ounces; 2 ought Julius Vom Hofe reel.

Third largest, James H. Gunning, 27 pounds 7 ounces; Seger greenheart rod.

Fourth largest, Frank P. Johnson, 24 pounds 2 ounces; two one-quart thermos bottles, lunch kit and case.

Fifth largest, Frank G. Ernst, 21 pounds 14 ounces; coat sweater.

Sixth largest, John E. Clayton, 21 pounds 9 ounces; tackle book and tackle.

Seventh largest, Louis Lloyd, 18 pounds 2 ounces, rod belt.

Special Prizes

First taken, May 23, Allen F. Brewer; 200 yards 15-thread line.

For largest caught by a member who had never previously won a striped bass prize, James H. Gunning, 27 pounds 7 ounces.

First taken on 9-thread line, Jacob Wertheim.

For largest in month of August by a member not eligible to any other striped bass prize, a silver match safe, Richard C. Anderson, 10 pounds 9 ounces.

For greatest number weighed in during season, silver loving cup, Frank P. Johnson, five fish.

For largest taken on Seger rod, Jacob Wertheim, 45 pounds 13 ounces.

For largest between 6 A. M. and 6 P. M., Frank H. Westervelt, 31 pounds 15 ounces, Duxbak fishing suit.

For largest 6 P. M. to 6 A. M., Jacob Wertheim, 39 pounds 9 ounces, coat sweater.

For striped bass nearest one-half weight of largest. Louis Lloyd, 18 pounds 2 ounces, leather kit bag.

Channel Bass

Largest, Joseph Cawthorn, 39 pounds 10 ounces; 2 ought Meisselbach reel and coat sweater.

Second largest, B. C. Finche, 38 pounds 15 ounces; 2 ought Meisselbach reel.

Third largest, Henry C. Rydell, 28 pounds 6 ounces; Seger greenheart rod.

Fourth largest, Harry W. Metz, 36 pounds 12 ounces; two one-quart thermos bottles, lunch kit and case.

Fifth largest, James H. Gunning, 36 pounds 1 ounce; sweater.

Sixth largest, T. Frazer Price, 34 pounds; oil skin suit.

Seventh largest, I. M. Noe, 33 pounds 8 ounces, rod belt.

Special Prizes

First taken, Joseph Cawthorn, June 26, 200 yards 15-thread line.

Largest on 9-thread line, B. C. Finche, 38 pounds 15 ounces; electric beach lamp.

Largest 6 P. M. to 6 A. M., Henry C. Rydell, 38 pounds, 6 ounces; coat sweater.

Kingfish

Largest, Allen F. Brewer, 2 pounds 4 ounces; tackle book and tackle.

Second largest, T. Frazer Price, 2 pounds 2 ounces; rod belt.

Third largest, C. H. Wells, 1 pound 13 ounces; canvas fishing bag.

Special

First taken, William N. Applegate, May 9; 200 yards 15-thread line.

Largest taken from Asbury Park Fishing Pier, Loren Holdridge. 1 pound 13 ounces; camera.

Largest 6 A. M. to 6 P. M., Allen F. Brewer, 2 pounds 4 ounces; free spool surf reel.

Weakfish

Largest, William N. Applegate, 6 pounds 10 ounces, tackle book, tackle, and 200 yards Joe Jefferson line.

Second largest, C. L. Keast, 5 pounds 10 ounces; nickel plated electric lamp.

Third largest, H. W. Gilbert, 5 pounds 8 ounces; sand spike.

Special Prizes

First taken, Al Hunt, June 23; 200 yards 15-thread line.

Largest taken on 9-thread line, Hugh N. West, 4 pounds; electric beach lamp.

Largest taken from Asbury Park Fishing Pier, Steadman Applegate, 3 pounds 1 ounce; razor and razor hone.

Largest 6 A. M. to 6 P. M., William N. Applegate.

Bluefish

Largest, Joseph Cawthorn, 9 pounds 3 ounces, Seger greenheart rod.

Second largest, Peter Post, 8 pounds 10 ounces; tackle book and tackle.

Third largest, Allen F. Brewer. 4 pounds 5 ounces; fishing basket.

Special Prizes

First taken, Peter Post, June 22; 200 yards 15-thread line.

Largest, 9-thread line, Peter Post, 8 pounds 10 ounces; electric beach lamp.

Plaice

Largest, Charles K. Savage, 5 pounds 13 ounces; oil skin suit.

Second largest, Victor de Wysocki, 4 pounds 12 ounces; box 50 cigars.

Third largest, Wm. H. Schwartz, 4 pounds 4 ounces; beach chair.

Special Prizes

First taken, Hartie I. Phillips, May 2; 200 yards 15-thread line.

Largest month June, Fred Fech. 2 pounds 13 ounces; two season passes Long Branch pier.

Croakers

Largest, George H. Perry, 2 pounds 11 ounces; one quart thermos bottle, lunch kit and case.

Second largest, D. W. Mitchell, 2 pounds 5 ounces; 300 yards Joe Jefferson line.

Third largest, E. P. Gallaher, 2 pounds 4 ounces; Waterman fountain pen.

Fourth largest, Howard Kain, 2 pounds, box 50 cigars.

Fifth largest, Jesse T. Meeker, 1 pound 15 ounces; sand spike.

Special Prize

First taken, D. W. Mitchell, July 18, 200 yards 15-thread line.

BOAT FISHING

Tuna

Largest, Jacob Wertheim, 286 pounds, 7 feet 2 inches long, 4½ feet in girth, (record fish taken with rod and reel on New Jersey coast); six ought Edward Vom Hofe Ocean B reel.

Special Prize

First taken, same as above, Sept. 24, 200 yards, 15-thread line.

Bonito

Largest, Dr. R. J. Parker, 3 pounds 15 ounces, oilskin suit and also 200 yards 15-thread line for first taken.

Courtesy Asbury Park *Press*.

STEEL RODS AND SALT WATER

By "Twelve Thread"

Being much interested in salt-water angling, both deep-sea and surf fishing, I always read articles and stories pertaining to this form of sport, but do not remember ever having seen anything about the use of steel rods for salt-water angling. I have fished with many kinds of rods, and have enjoyed some of my best boat fishing while using a light steel rod.

Barnegat Bay is not far from my home and many a Saturday and holiday has found me there camping along the beach and dividing my time between the surf and the open bay. My favorite rod for bay weakfishing is a steel fly-rod, of 9 feet 6 inches length originally, but with the long tip replaced with a short trolling tip. At first I used the long tip entirely, but soon found that I could not sink the barb into the fish's jaw quickly enough on account of the spring of the pole, the distance of the fish from the boat and the depth of the bait under water. The fishing here is done in about 6 feet of water, but as the fish swim about half this distance below the surface, it is necessary to make use of a light cork for a float, and allow the bait to sink some distance from the boat. We have had more strikes when the bait was at a distance from the boat than when it was closer, as the fish seemed to distrust the shadow of the boat and keep a respectful distance away.

The rod I use has a cork handle, which does not slip in the hand when striking a fish, even when they are slippery from handling the fish last caught. The trolling tip is about 9 inches long, and equipped with a three-ring top. These trolling tips may now be bought fitted with an agate top, which is much preferable to the ordinary metal top. The rod thus equipped weighed about 7½ ounces, which may seem heavy, but I made up for this by using a 6-thread line. As for the reel, I sometimes used a single click trout reel, and sometimes a small multiplying reel, holding about 60 yards of line. The hook was a light weakfish hook, baited with a piece of shedder crab. The float was generally a medium-sized cork, such as you may find anywhere along the beach, washed up by the surf.

On the first day I used this rod with the short tip, a friend and I took the early train, hired a flat-bottomed boat at the Seaside Park public dock, attached our outboard motor, and soon arrived at the weakfish grounds, about five miles below the trestle which stretches across the bay from the beach to the mainland. My friend, we'll call him "Bob," had a stiff boat rod, such as we use for off-to-sea jigging, and teased me about my tackle, saying that the rod had too much spring, the line was not strong enough to permit of striking the fish in three feet of water, that the pull of the float through the water combined with the weight of the fish would break it like thread, etc. I let him rave on, but at the end of our two hours' fishing I had eight weakfish to his seven.

The first three that struck I lost through being too anxious to hook them, but I soon caught the knack and landed eight fish out of the next nine strikes. One fish, a four-pounder, gave me quite a little excitement, as he persisted in heading for a nearby seaweed bed, and I did not dare check him too hard on account of his tender mouth. If he had reached that bed of weeds, it would have meant a parted line and lost fish. For every fish I caught I had about three times as much fun as Bob had with his heavy rod, and did not come home the low man, either. Also the fish had a fighting chance for his life.

On the same trip I landed a bluefish of two and one-half pounds weight, and had my hands full for some minutes, keeping him headed away from the inlet. In this case it was the spring of the rod that hooked him, and not I, as I was half asleep, it being shortly after lunch.

I have used the same outfit with success when after blackfish. About a quarter of a mile off Elberon there is, or was before last Winter's storms, the wreck of a steel steamer, which was spread along the bottom for several hundred yards. The water here is about eight feet deep, and there are bolts, pieces of twisted iron, and great masses of iron plates extending up toward the surface in many places. The record fish for this wreck is an eight-pounder. My two brothers and I all use steel fly-rods when fishing here. The blackfish strikes quickly and must be hooked on the instant, so the more springy the rod the better chance one has of connecting. They put up a fairly good fight when taken on light tackle of this sort, and with a big fish it is quite a job to keep him away from bottom, where it is their wont to hide away under the masses of twisted metal which literally cover the sand. Once let them reach this haven of refuge your line is either wrapped around some spike or chafed against some sharp edge of metal.

We have found these steel fly-rods, with short tip, the proper equipment for this kind of fishing, both from the viewpoint of sport and that of results. We have made some good catches here, but only keep the big ones, throwing back all the others unless they are badly hooked, in which case they are kept for the cat.

One day when we were off to sea jigging, in one of the sea skiffs near us was a man using a steel rod of heavier pattern than the regulation bait-casting model. He said it was a muscallonge rod, and that he had been using it for several weeks and with very satisfactory results. If I remember rightly, the rod was about six and one-half feet long and weighed about thirteen ounces. It was fitted with a large agate top and double cork grip handle. It had lots of action and made the heavier, stiffer rods of his two companions look like broom handles. This should make a good rod for trolling for striped bass and bluefish in the inlets along the coast, as well as for the muscallonge fishing for which it was designed.

I have never had occasion to use a tarpon rod, but have seen steel tarpon rods in the sporting goods stores and know of a fisherman who uses of these for tuna fishing, for which it should do very well.

There is one argument which is often brought up against the steel rod and that is that it is liable to rust. This is so if the rod is neglected, but all rods of any worth have to be taken care of, and this should apply to the metal rod also. Your split-bamboo rod needs the greatest care; if one of the wrappings start, then it must be immediately rewound, and if this is not done, then the bamboo strips will spread and the rod will buckle at that point. Wood rods must receive care, also; they must not be left in a leaning position, but must be hung up, or put in a frame, otherwise they will develop lovely curves, and will have to be straightened before they can be used again. Steel rods have this advantage that they cannot warp from being left standing against the tent, tree, wall or other support. The rusting also may be easily averted. Wipe them off after use, and when the finish begins to flake off with hard usage, give them a coat of varnish, especially along the seam, and they will be found to resist the corroding action of the water and give as good service as any other more expensive rod. My rod has been revarnished some half-dozen times, and is still in good condition, although it has been in and around salt water for four years.

I understand that for a nominal sum the various manufacturers of steel rods will refinish your rod and make it like new.

Another great argument in favor of the metal rod is its comparatively low cost compared to the split-bamboo rods. Personally, I would not take an expensive wood or bamboo fly-rod out after blackfish, or down the bay after weaks and snappers, while with my metal rod I have no fear of its breaking or warping, and can have fun fishing with light tackle which I would have to miss otherwise.

31-POUND CHANNEL BASS ON 60 YARDS OF LINE

FIELD & STREAM PUB. CO.:

The year of 1915 will be noted for the increased interest manifested in the use of light tackle for salt-water fishing along the North Atlantic Coast, as well as the death of that famous marine scientist and advocate of light-tackle fishing, Dr. Charles F. Holder. Over at the Raunt, in Jamaica Bay, weakfish up to four pounds in weight have been taken on cotton thread, while a bonefish of equal weight was taken in Florida waters by another member of the Cotton Thread Club of America. A weakfish of two and one-half pounds, and a four-pound dogfish were taken on No. 100 cotton thread.

The surf fishermen are using as light as six and nine-thread linen lines for channel bass and striped bass. Jacob Wertheim landed a

OLIVER VINSON—HIS TACKLE AND BASS

286-pound tuna off the Jersey coast in September. This fish was taken on comparatively light tackle, and is considerably heavier than the record fish of the Tuna Club of California, the home of light-tackle fishing. Sharks, too, up to 200 pounds, were taken this year with the ordinary surf outfits, using fifteen and eighteen-thread lines.

Next to Wertheim's catch, perhaps the most remarkable of the year was the taking of a thirty-one-pound channel bass at Pensacola, Fla., by Oliver Vinson, a thirteen-year-old boy. His rod was a light, nine-ounce, five-foot rod, and he used a nine-thread line on a Meisselbach 60-yard free-spool reel.

This size reel is a favorite with weakfishermen, or fresh-water anglers, but on account of its small size and small line capacity, is not used for big fish. Most of the channel-bass fishermen want 300 yards of line—not sixty yards—as a bass will frequently take out a hundred or two hundred feet in a single run. Vinson was 75 minutes landing his fish, and it is doubtful if many of the old-timers at the channel-bass fishing game would have been able to land it at all with the small reel and short, light line he used.

C. E. HOLGATE.

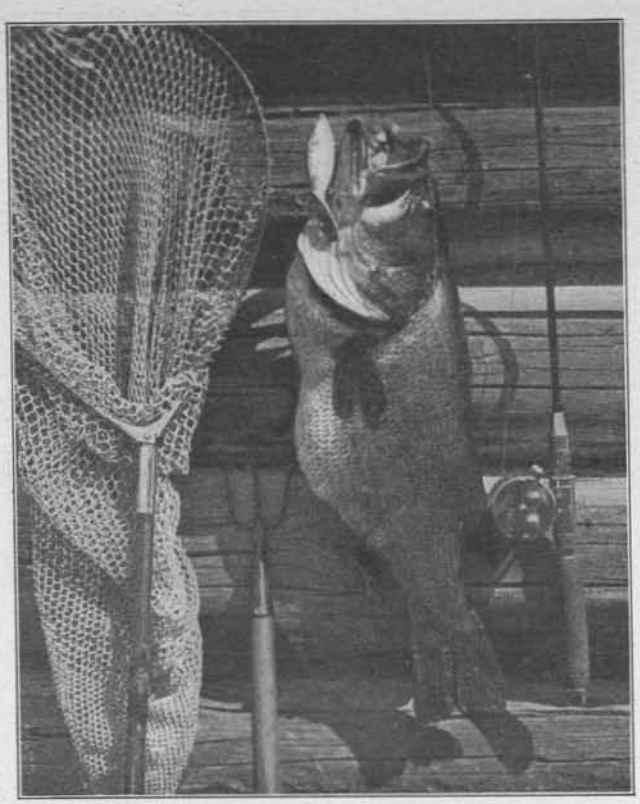
THE TANGO BASS

F. W. Bryan

We are off: the day promised to be all that we had expected, and more, for a fisherman never expects anything until he gets it.

The air was clear and cool and Mr. Sun promised not to radiate too much heat because we are going somewhere and going fast, and we needed just that kind of a day for our bass party.

From Chippewa Falls we traveled north, through the beautiful valley of the Chippewa. Beauti-



THE TANGO BASS—8¼ LBS. OF FIGHT

ful farms and buildings on both sides of the road for miles and as far as the eye could see. Further north the country became more broken and wild, and here and there we would catch sight of a little lake fringed with lily pads and our hearts would jump, and we would ask "Fish" "when are we going to get there?" "Right soon now I reckon" he would answer. Still we traveled north and the country got wilder, and we got wilder, for what is there that gives the sportsman that feeling of care-freeness but the wild woods, lakes and rivers. The shackles of confinement drop off and the mind frees itself and drinks in the beauties of nature. At last after covering 60 miles in our faithful little car we arrive at Dan Smith's, located on the banks of one of the beautiful lakes that abound in this locality. We are warmly greeted by "Aunt Eliza," with her delightful French patois, and told to "go get a fish for dinner." No use to tell us, our hands are itching to get them on those rods, and we can't do it quick enough. Fred Moore, our other "pal," has brought along his big camera; it looks kind of foolish to expect too much, but then there is nothing like being prepared for emergencies. We tumble the things out of the auto in a hurry, get our clothes changed, and hike for the lake. By this time it was 10 a.m., and although the wind had come up quite strong we chose a boat and shoved off.

This lake is about two miles across and about the largest of the many, and as the wind was still blowing harder we decided to fish the shores nearest the house. All three of us, "Fish," Fred and I, were using different lure. "Fish" had been telling me about this Rush Tango Minnow and had two of them with him; Fred had a live frog on a spoon, and I was pinning my faith on my favorite artificial bait. The "Tango" did not look very good to me on account of its peculiar shape, but after we had been on the lake only a few minutes Mr. Bass liked the looks of that Tango Minnow the best and "Fish" landed a dandy. I still had doubts, but after casting until almost noon and not getting a strike I began to think I had made a mistake in not bringing along live minnows, but Shaw still contended that we did not need them. We monkeyed around that lake and over into a smaller one until about 1 p. m.; by then we had all tried out everything we had, but without any further strikes. Those lakes were certainly the finest for the bass to live in that it had been my good luck to be on in a long time. Fred said "Let's go back to the house and try it again about 3 p. m. and then make the south shore and go around," this we did.

After dinner we put our auto robes out on the grass and took life easy, smoking our good old corncobs, telling stories and contemplating the coming afternoon performance.

About 3:30 p. m. we picked up our things and hiked for the same lake. The wind had gone down by then and we put off for the south shore, casting just over the lily pads and working our way around. "Fish" was getting a little peeved as we were getting no strikes and was afraid we were going to get "stung." Fred and I didn't care, we were having the time of our lives enjoying the air and the scenery. It sure was a beautiful lake. About 6:30 we pulled for the shore and went to the house.

We made our plans that evening to get an early start, get over on Buck Lake, which is about three miles east, and to get there we had to travel a very rough and rugged road through the woods. We got to bed early and after a good night's sleep were up early and ready for anything and everything. That September morn, the fourth, was all anybody could ask for, just cool enough to make a "feller" hurry around, and not a cloud in the sky. We got all our tackle together, primed old "Tin Lizzie" and got away while the day was still very young. Of all the inland lakes it has been my pleasure to look at that one is sure a beauty. Surrounded on three sides by high banks it looked that morning like an emerald setting, and looking to the south from the high bank on the west side of the lake we could see three more little lakes, all four forming a chain. The one peculiar feature of these lakes is that there is only a few feet of shallow water from the shore out, when it drops off abruptly to a great depth, no weeds, but just a beautiful fringe of lily pads all around the edges. There was a dandy nice dry boat all ready for us to hop into and we did not lose any time in getting out where we could tease the fish. This lake is about one mile long and not over one-half mile wide. The night before I asked John, Mr. Smith's son, what he thought of Buck Lake, and he said: "I always have good luck there," so we were prepared to take in everything that came our way.

I made up my mind to try out all the different baits I had with me first and then, if no luck, to try out the Tango Minnow. We went up one side of Buck Lake, then into the other little lakes, casting to every corner of those lakes that looked good. The day wore on and still we did not get a strike. Those are the finest bass lakes I ever saw, and I could not understand why we were not getting a strike.

On our way back down to Buck Lake through the chain Shaw saw one break water and made a nice cast to where he came up, and was rewarded with a nice little two-pounder. He was as black as your hat. That helped some because we were certain there were good sized ones in there, but why

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they refused to strike was the sticker. It was now 10:30 a.m. and we were again back into Buck Lake and only three small bass. Some fellows who had been camping over a short distance from Smith's had hauled a boat over by team from the other lake and were on the lake when we got back. We watched them a while to see if they were going to do anything—they had cane poles and spoons. Very soon they worked around to where we were and I hailed them and asked what luck they were having. "Not a strike," they said. Well, we were having a good time all right, but bass were what we thought would be still more fun if they could only see it as we did.

These other "fishermen" with me were beginning to think I was going home with a "fisherman's luck," and that only, but I thought I still had a chance between then and 1 a.m. Meanwhile the wind had come up strong, blowing down the lake. After a lot of bantering I changed my bait and put on the "Rush Tango Minnow." I made two casts with it and made a third and my line broke where I had it tied to a lighter weight line. We paddled the boat back to shore and I got out and went up to the auto where I had left a new Kingfisher 16-pound test silk line. While I was up on the hill Fred and Shaw pushed out again and did some casting. When I got back to the boat again Fred said, "Shaw had a strike that was a dandy; a big one, and he lost him." I said, "Let's try it again, then, down along that same place." We let the boat drift while I tied on and spooled the new line and tied on the Tango Minnow. It was now about 11:30 a.m., and the sun was warm. I peeled my jacket and, standing up in the end of the boat, made a heave and the "Tango" shot away for a good 50 yards and landed just about a foot from the fringe of lily pads. I made a little pull on the line to start the minnow and it felt heavy, but thought having so much line out and the wind blowing that perhaps I had hooked a lily stalk. Anyway, in jest I said, "Get the hook." "What you got?" said Fred. "Get the hook—get the hook," I said, but by this time it was no "josh". I knew by the pull that something had it, but figured it to be about a three-pounder He came in fine until I got him within about 25 feet of the boat, then "Whoosh," the fun began. My pals came near tipping the boat over in their excitement; all they could say was "Whale!" I could not reel him any further, and the way he churned the water was a sight to see. I gave him the line and he was off around the other end of the boat in a wink; he took the line so quick that it tangled in unspooling. Then I thought I was up against it, but called to my pals to hold the line until I got it straight. After getting the line untangled and reeled in again tight he came up with a rush and broke water, shaking his head from side to side trying to dislodge the gangs, but no such luck for his; I had him and had him for keeps. After about ten minutes' more excitement I towed him up to the end of the boat and Shaw gave him the gaff and landed him in the boat.

Fred said, "That is the biggest bass I ever saw; look at the head on him." And it sure was the biggest bass anybody had seen in that neck of the woods. That cinched the "tango minnow" with me if it could get that kind. We got several more nice ones before we left the lake, but the whole talk was the big fellow. At no time did I feel that he would be over a three or four-pounder, and was surprised to see the size of him after he was in the boat. I used a Triumph steel casting rod, Monarch 100-yard reel, and the 16-pound test Kingfisher silk line, and it's a good thing that the line I had on previously did break or I would not be writing, or trying to write, this epistle. Mr. Bass was hooked on that "Tango Minnow" for keeps; his mouth was closed tight, he was hooked "up stairs and down stairs." This, of course, is not a very good thing, and is probably the reason he did not make a much harder fight; he was hooked so badly it made him very sick and took the big fight out of him.

At about 1 p.m. we pulled for the shore and home, and then proceeded to "can" the evidence with Fred's big camera. The news spread pretty fast even in the woods, and the other fishermen and the berry-pickers had to have a look. How much he weighed was a guess for all, so we proceeded to prove it—eight and three-fourths pounds; twenty-four inches in length and nineteen inches in girth. The biggest bass of any kind ever captured in this part of the country and as fat as a pig.

I have since had remarkably good luck with this "Tango" minnow, and where all others fail to make them mad" this one gets their "goat." "Everybody has been doing it" and now even the bass can't resist the "Tango" (minnow.) And they sure do some stunts, too—dip and dive and swing around the boat at a pace that would make "chickens" dizzy, when they have a chance to get the habit. When a fisherman can make a nice long cast and the minnow starts to "tango" it's good to look at—no wonder the fish can't resist. The way it wiggles and wobbles makes you say at once that it's the prettiest bait you ever saw in the water, and almost good enough to jump in after yourself. You can throw it right into the lily pads and it comes right along and never catches a leaf or stalk. Me for the "Tango" minnow and next season I am going to see what the "muskies" think about it. They like a fight, and they are going to have a chance to get a good one and like it.

The moral of all this is: "Buy your tackle from the advertisers in the FIELD AND STREAM, and then come to Wisconsin, and be sure there is a "Rush Tango" minnow in your tackle box—you will get more than "fisherman's luck" for excitement.

WINNERS IN THE RUSH TANGO MINNOW $50 GOLD PRIZE CONTEST

No. 1—Mr. W. E. Cudney, Rochester, N. Y. Catch consists of one 6-pound Small Mouth Bass; one 5-pound Small Mouth Bass; six 4-pound Large Mouth Bass, and three 3-pound Pickerel, all caught within 45 minutes. Caught at East Lake, Ontario, Canada, August 28, 1915, casting with No. 2 Rush Tango Minnow, white, red head.

No. 2—Mr. Robert L. Singleton, Waycross, Ga. Large Mouth Bass, weight 10¼ pounds, length 27⅛ inches, girth 19 inches. Caught May 27, 1915, on Billie Lake, Okefenokee Swamp, casting with No. 5 Rush Tango Minnow, yellow, red head.

No. 4—Mrs. Ada L. Pugh, Syracuse, N. Y., for largest catch by lady. Catch consists of four Large Mouth Bass, the two largest fish measuring 17½ inches in length and 11½ inches in circumference, and weighed 4 pounds each; the other two measured 16½ inches long and 10½ inches in circumference and weighed 3¾ pounds and 3½ pounds respectively. This catch was made at Sandy Pond, N. Y., July 24, 1915, and represents a morning's catch before breakfast. Caught trolling with No. 5 Rush Tango Minnow—yellow, red head.

No. 5—Mrs. Clara R. Happ, Clayton, N. Y., for largest Muscallonge caught on Rush Tango Minnow and entered in this contest. Caught at Peos Bay on St. Lawrence River, near Thousand Island Park, October 7, 1915. This fish weighed 20 pounds, length 41 inches, caught trolling by Mrs. Happ, who used No. 5 Rush Tango Minnow—yellow, red head.

No. 6—W. D. Otis, Pinckney, Mich., for largest wall-eyed Pike. Weight 10½ pounds. Caught August 29, 1915, on Portage Lake, Mich. Caught on No. 2 Rush Tango Minnow.

EDITOR'S NOTE.—We are advised by Rush Tango Minnow people that this Contest will be on again in 1916.

1915 SUMMER TOURNAMENT SANTA CATALINA TUNA CLUB

Cups, Medals and Prizes Awarded Under Tackle Specifications of the Tuna Class Tuna

Wm. C. Boschen, New York, 138 pounds. Gold Medallion. Club Medal, Brock & Company Medal, Montgomery Loving Cup, McMillan Medal for first of season. Gun Prize for second largest fish —120 lbs.

John M. York, Los Angeles, 117½ pounds. Silver Medallion, Coxe Prize for first active member of season, Miniature Loving Cup for smallest tuna over 100 pounds.

H. W. Adams, Vermejo Park, N. M., 92 pounds. Coxe Consolation Cup.

A. W. Hooper, Boston, Mass., 14 pounds. Smallest tuna on light tackle.

SPENCER

THE BIG WINNER IN 1915

THE Interstate Association's Official High Professional Average for the season of 1915 was won by Charles G. Spencer, of St. Louis, Mo., with the marvelous record of 97.5% for 5620 targets. Such an average for such a large number of targets not only shows Mr. Spencer's great skill, but also proves the uniform and unequalled quality of

WINCHESTER

Loaded Shells and Shotguns

which Mr. Spencer used exclusively. He used this same combination when he made his marvelous straight run of 565 targets—the World's Record.

Contests for the Season's Trapshooting Averages have been held 16 times and 12 of them have been won by **W** shells or guns, or both, which is undeniable evidence of their superiority.

Lester German, of Aberdeen, Md.,, who was second high for the season, and who also made the greatest score of the year for a single tournament—499x500—used Winchester shells in performing this great feat.

J. Mowell Hawkins, of Baltimore, Md., shot 7,265 targets in competition during 1915, and made the splendid average of 95.56%, using Winchester shells and shotguns exclusively—more proof of their uniform shooting qualities. These performances show the reason why Winchester shells and guns are

GERMAN

HAWKINS

PREFERRED AND USED BY MEN OF ACHIEVEMENT

Swordfish

Wm. C. Boschen, New York, 285 pounds. Holder Cup, Victoria Alden Cup, Griffith Cup, McMillan Medal for first of season, Griffith Cup for first of year.

C. G. Conn, Elkhart, Indiana, 276 pounds. Silver Medallion.

W. E. Ingless, Vermejo Park, N. M., 192 pounds. Bronze Medallion.

D. A. McMillan, Los Angeles, 103 pounds. Griffith Cup for smallest fish by member, Miniature Loving Cup.

Black Sea Bass

H. W. Adams, Vermejo Park, N. M., 416 pounds. Rider-Macomber Gold Medal.

LIGHT TACKLE CLASS

Yellowtail

E. C. Hauser, Los Angeles, 57½ pounds. Gold Medallion, Gilles Diamond Medal, Western Hardware & Arms Co. Cup, Potter 3-6 Cup, Potter Prize, Split Bamboo Rod, Eddy Cup for largest Gold Button fish of season.

J. C. Walker, San Francisco, 44 pounds. Silver Medallion.

Dwight B. Heard, Phoenix, Ariz., 43¾ pounds. Bronze Medallion.

Mrs. Fred K. Burnham, Martinez, Cal., 41¾ pounds. Nordlinger Ladies' Cup.

Mrs. B. F. Alden, San Francisco, 45 pounds, Nordlinger Cup, Silver Medallion.

Dr. J. A. Wiborn, San Francisco, 36 pounds. Bronze Medallion.

Albacore

I. H. Herbert, Newport, R. I., 35 pounds. Hoegee Cup, Whitley Company Medal, Silver Medallion.

Paul Graner, Los Angeles, 34 pounds. Bronze Medallion.

Alice W. Gearing, Pittsburgh, Penn., 23½ pounds. Montgomery Ladies' Cup.

Bartlett B. Heard, Phoenix, Ariz. Medal for the largest fish of season on light tackle Black Sea Bass, 234 pounds.

Boatman's Prizes

Tuna, George Farnsworth. Hooper Prize, $50 cash; Tuna Rod for first of season; Coxe Prize, 900 ft. 24 thread line, second largest.

Swordfish, George Farnsworth, Griffith prize, $20 cash, first of season; Tuna Rod.

Wm. Mathews. Coxe Prize, 900 ft. 24-thread line for second largest.

Black Sea Bass, Harry Stoughton. Tuna Rod.

Yellowtail, John E. Edmundson. Split Bamboo Rod, P. V. Reyes prize, No. 4 Ansco camera and case.

Albacore, Roy Staples. Split Bamboo Rod.

J. Stamfield, Coxe Prize, 900 ft. 9-thread line for second largest.

SUMMER SEASON—1915

Two hundred and fifty-two tuna and forty-seven swordfish taken under club rules and tackle specification.

THE 73-INCH TARPON FROM THE GATUN DAM CAUGHT BY SERGEANT FRANK R. MERRITT, U. S. INFANTRY, OCT. 3RD, 1915.

A CORRECTION
1915 Prize Fishing Contest Muscallonge

First Prize

Caught by John C. F. Ricklefs. Chicago, Ill.
Weight—44¾ lbs.
Length—51¼ in.
Girth—25½ in.
Caught—August 14.
Where caught—Boulder Junction, Wis.
Rod—Bristol.
Reel—Blue Grass.
Line—Invincible.
Lure—Live bait.

Second Prize

Caught by Dr. A. H. Peck, Chicago, Ill.
Weight—41 lbs.
Length—49¾ in.
Girth—24⅞ in.
Caught—September 6.
Where—Lac Vieux Desert, Wis.
Rod—Bristol.
Reel—Pennell.
Line—Kingfisher.
Lure—Skinner Spoon.

Third Prize.

Caught by Willima A. Ralyea, Buffalo, N. Y.
Weight—40 lbs.
Length—48 in.
Girth—24⅛ in.
Caught—August 21.
Where——Lake Nipissing.
Rod—Bristol.
Reel—Shakespeare.
Line—Otselic No. 18.
Lure—Star bait.

Fourth Prize

Caught by George A. Streeter, Milwaukee, Wis.
Weight—39½ lbs.
Length—51¾ in.
Girth—23 in.
Caught—August 5.
Where—Pike Lake, Wis.
Rod—Shakespeare Steel.
Reel—Wheeler McGregor.
Line—Neverbreak.
Lure—Heddon Dowagiac Minnow.

The fish which had been announced as the First Prize Winner, Muscallonge Class, in our January issue, has been dropped from the Contest on account of the discrepancy between its length, girth and weight. We listed this fish as the prize winner until the judges could consider the matter carefully and take action.

OIL-SKINS
Ladd Plumley

Of a rainy day, to keep a fellow dry on the stream or in the woods, there is nothing more satisfactory than a "slicker," as an oil-skin is frequently called. Many of us remember the days when you must hunt up some shop along the water front and there make your purchase of a "Cape Ann slicker" from an old fellow, with sea-weed hair, who seemed somewhat reluctant to do business with a landlubber. But to-day many of the large sporting houses handle oil-skins and include them in their catalogues.

For a stream fisherman, the extra short lengths of coats are to be selected, and in light weights. Tightly wadded, such a coat can be carried in a fair-sized creel, but it must be acknowledged that the bundle is a somewhat heavy inconvenience. However, when it is considered that a good oil-skin can be purchased for very little money, and will remain water-proof for many years, we can excuse its incumbrance when not in use.

But like most other good things, an oil-skin needs a little attention once in a while. If it is carelessly wadded into a trunk, when damp, it will mildew, and when packed tightly for many months will stick together and when next used will leak. Once a year oil-skins should be given a coat of oil and they should never be wadded in a bunch for storage.

It seems rather difficult in these days to purchase the preparation for oiling slickers which could be bought in many shops a few years ago. But I am told by those in the trade that raw linseed oil will do at a pinch. For my own oil-skins I am using raw linseed, but do not find it as satisfactory as the fluid which is specially prepared for the purpose. Perhaps some of the readers of FIELD AND STREAM will tell us where this fluid can now be obtained.

I fancy that if a little beeswax was dissolved in the raw linseed oil the solution would give better results than the raw oil by itself. However, during a recent trip, my fishing slicker, carefully painted with the oil alone, gave me the best of service. But it is a little sticky, which I am certain would not be the case if it had been painted with the fluid that has been mentioned.

For winter storage, oil-skins should be hung in a dry place on coat or trousers hangers. An unheated garret is perfection. The garments should be suspended in such a manner that the portions are not folded close together. An excellent plan is to fill the sleeves of coats and the legs of trousers with wadded paper.

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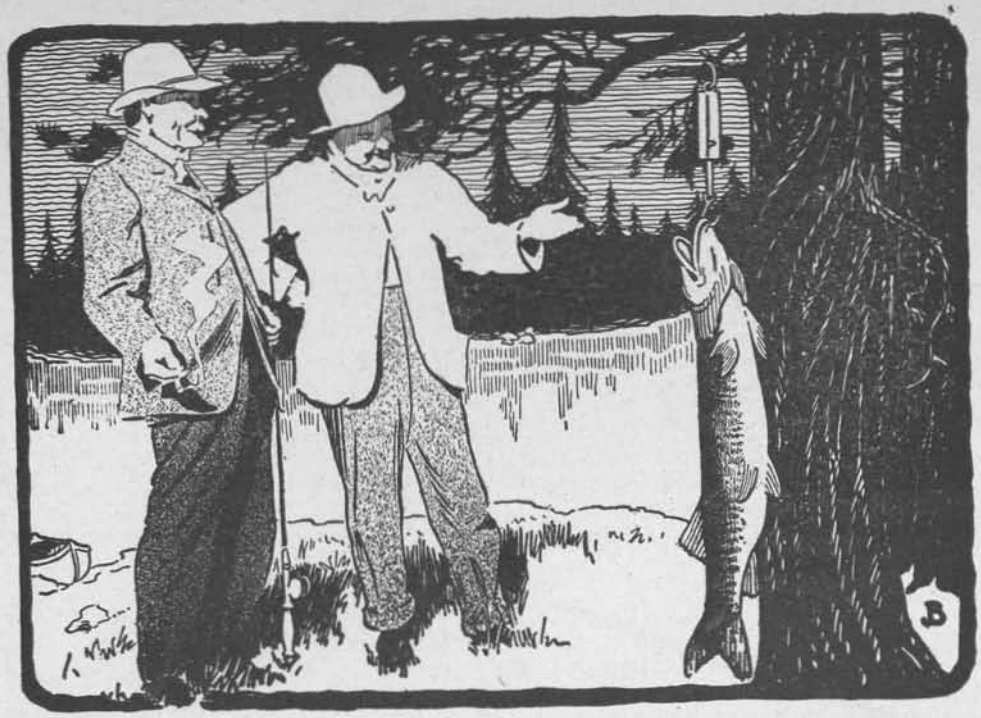

Field & Stream PRIZE FISHING CONTEST

MY MOONLIGHT BASS

By L. T. Holwell

Winner Grand Prize, Large Mouth Bass, Southern Division

My big fish was caught on the night of July 9, 1914, out of Talloosapopka Lake, a large irregular-laying body of water in Citrus County near the Withlacoochie River.

Mr. John S. Landram and Grady Zellner were with me when I caught my big fish.

We started out about nightfall on the night above mentioned. The moon was shining and we had high hopes of making a big catch.

"Luke," said Landram, addressing me, "we ought to load this boat before the moon passes from the South to the West to-night, for unless all signs fail fish are going to be hungry!"

We started out from the city landing, going well away from town before starting to fish. We began casting when a mile from the landing, but, although we could see the water ripple where some old bass poked his head out of the water to see if the moon was south, so he could go to feeding, we failed to get a rise.

"Holwell," said Jolly John (John Landram) "you being about six and a half feet high—you can wade deep—suppose you step overboard and investigate the bottom and see what's the matter with these fish that they don't bite." I declined with thanks.

We passed Devil's Neck—a great point of land which makes out into the lake from the west, lacking only a couple of hundred yards of cutting the lake in two. On the north side of the Neck the lake reaches nearly a mile in a westerly direction; and just north of the "Neck" is Johnsons Island, around which we went, still casting, and still failing to get a strike. We began to get discouraged. It was unusual for *us* to go this far and get nothing. We had passed over as good fishing water as was on the lake—and not a fish yet. This was unusual, for us, for we were all rated as successful fishermen, and we began to fear the boys would have the laugh on us when we got back to town. Well, we kept on a while longer. It was growing late and we decided to go back, fishing as we went. We met with the same ill luck on the return trip till we got to Deep Sink, which is a great hole near the western edge of the lake, about three-fourths of a mile from the landing.

Deep Sink has been sounded one hundred feet and no bottom found. It is over a hundred yards across the top, and the water is very dark.

"Let's try the Sink," I said to Grady Zellner, who was handling the boat.

"Yes," said Landram, "we can't do any worse than we have done, and some fool fish might bite and save us from getting skunked."

Grady ran the boat noiselessly over the deep water near the shore, and John and I began casting our lures.

There is a distance of perhaps fifty yards between the shore and the edge of the Sink which is shallow water—quite shallow—and just where the water begins to deepen there is a submerged log, the top of which is about two feet below the surface. "By the Great Bull Moose!" exclaimed Zellner, "all the fish in this Sink have had their supper and have gone to bed. I think, by the light of the moon, as it shines under that log, I se a big trout, with his pajamas on, taking his well-earned rest from rustling his supper and dodging flies."

"Well, Grady," I said, "I'm going to see if I can wake your sleeping trout up."

As a matter of fact, Grady had seen no fish, the water being so dark that one could not have been seen under that log at midday with a bright sun shining.

Well, I cast my lure so it would strike just over the log and started reeling in. The lure had not gone six feet before there was a commotion in the water, and—zip! the forty feet of line I had out was taut before John could say "D——," and he can say that quick under stress of excitement. I gave him more line—and soon

Prize Fish

1. Three prize "Muskies," 8 lbs., 10 lbs. and 12 lbs., caught on a "BRISTOL" Rod, French River, Ontario, by Chas. F. Henry, Marietta, Ohio.
2 and 3. 6½ lb. Square-Tail Trout caught in Moosehead Lake, Me., on "BRISTOL" Rod by R. Gordon Baldwin, of Bristol, Conn.
4. 15-lb. Salmon from Royal River, Ore. Caught by O. F. Smith, Kingfisher, Okla.
5. 4-lb. 12-oz. and 3-lb. 10-oz. Small Mouth Bass caught by W. Moles, Sr., Wilmerding, Pa.
6. Another prize "Muskie" caught at Rut Iron, Connecticut River, by S. A. Harris, Hartford, Conn.
7. Large Mouth Bass caught at Lake Weir, Fla., by Grace B. Willard.
8. Gar Fish. Weight 117 lbs. Length 7 ft 3½ in. One of ten big "Gars" caught in Red River at Alexandria, La., by Pat O'Shea.

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Showing 38 Different Kinds of "Bristol" Rods

New 1916 Art Calendar sent prepaid on receipt of 15 cents. Full color reproduction of a famous oil painting by Philip R. Goodwin, the noted painter of outdoor life. A beautiful decoration for home, den or camp. Supply limited. Send 15 cents immediately.

THE HORTON MFG. CO.
81 Horton Street **Bristol, Conn.**

We offer prizes for the best Fishing Pictures—Send in your Fishing Photos.

he had the whole hundred feet.

Now we started on a unique ride, being towed by a bass.

Grady was keeping well away from the log—he and the fish together—under which I feared he might run and entangle, or break my line.

"Jonah didn't swallow all the whales," declared Zellner, "for Luke has one on his hook now!"

"Flop! you big-mouthed scoundrel!" yelled the irrepressible John, as the fish, which had been doing its fighting under water suddenly leaped clear of the surface in a vain effort to shake the hooks out of its mouth. Down it went again, making the line I had managed to reel in spin out in jig-time! Off he went toward shore. "Come on, little fish," coaxed Landram, "and take a boat ride with us. See how things look on surface. You are living too secluded a life down in the water, associating only with your own kind, and turtles, snakes and alligators, with an occasional eel for variety. Come with us and be fried." But the fish, by his conduct, we judged, didn't seem inclined to accept John's invitation to come and be fried, but kept on fighting. He was working in shore all the while; so I told Zellner to work the boat up to the land and let me get out, which he soon did, and I stepped to shore. The fish was beginning to tire, but still had a lot of fight left in him.

I played him along the shallow water, but could not get him to land.

There was a water-weedy growth along the shallow water, toward which the fish forced me. I was afraid it would become entangled in these weeds and get away, as I reeled him in. Zellner spoke of this, too. But Landram was not going to let such a fish as this get away; for when I had played the bass up to the edge of the weeds, he rushed into the water, caught my line, got his hand in the fish's gills, and brought it out.

This ended the fight, which had lasted 30 minutes.

We caught several smaller fish before getting back to the landing, but nothing like the big fellow.

I do not remember being excited when I found I had hooked a big fish. I had confidence in my tackle, which was light for such a fish, but I knew it was strong and would hold even this fish if properly handled, and I was determined to use my utmost skill in playing him.

Prize Contest Certificate Record: Grand Prize, Large Mouth Bass, Southern Division.

Weight—13 lbs.
Length—28 in.
Girth—20 in.
Caught—July 9, 1914.
Where caught—Floral City, Fla.
Rod—Heddon.
Reel—Heddon No. 1.
Line—Heddon Sampson.
Lure—Heddon No. 200, aluminum.

MY PRIZE JERSEY COAST STRIPER

By Jacob G. Wertheim

Winner Second Prize Striped Bass, 1914 Contest.

Casting in the surf for the gamey striped bass is a fascinating sport, but very tiresome. It tires one's patience and arms to stand for hours on the ocean sands continually casting into the surf, holding one's rod, re-baiting and re-casting every ten or fifteen minutes, according to the greed of those foes of the angler, the voracious crabs, who devour the juicy shedder or the fat squid bait. In my case I am fortunate enough to escape these tiring hardships by using my fishing pier at Deal Beach, N. J., where, comfortably resting on my chair, I can wait with patience for the thrilling moment when His Majesty makes his strike.

At about 3.00 P. M. on June 30th, I was as usual engaged in my favorite pastime, and had made only two casts, using squid bait (secured fresh daily from a neighboring pound net), when I had a strike, and after five minutes landed a five-pound striped bass. Among casters there is a well-grounded feeling that these fish run in pairs, so I carefully continued my casting, selecting the most attractive squid heads as bait.

The pier fronts on a sand bar, and my casting was directed just inside of the first outside breaker. In about twenty minutes my big fellow made a dash for the bait, and after I struck him made a wild run northward in the direction I had been casting. I at once worked my way (as I usually do) to the head of the pier, and by this means the fish ran out to sea, where I could more safely play him. He took out about 400 feet of line in the first rush before I could stop him, and now ensued about twenty minutes of real sport. Gradually I was able to take in enough line to bring him in sight, and, oh, my! how big and noble he looked to me, looking down at him from the pier, a drop of about fifty feet or more. The tide was running north (half ebb) and I tried my level best to bring him to the north side of the pier, but the big fellow obstinately pulled southward, so I had no alternative but to bring him in on the south side. This caused me some uneasiness, as the pier is 420 feet long and every wave was sending him towards it. I felt I would never escape the danger of his being driven under one of the long spiles.

I was using a light E. vom Hofe split bamboo rod and correspondingly light Joe Jefferson 12-thread line (600 feet) wound on a 2-degree Julius vom Hofe throw-off reel, and I had no choice but to use the whole strength of rod and line to push him outward to the south from every spile he touched.

It seemed to me the pier was a mile long and a spile every foot!

To increase my fears, I was all alone, but by hallooing I attracted the attention of another fisherman who was casting on the beach above me, and he ran to my assistance. At last the lower end of the pier was reached, and one big wave sent the bass on the beach. In went my friend, boots, cloths and all, and grabbed His Lordship, unhooked him, and carried him to me at the pier.

As you can imagine, I was all in, and after a good look at his shining striped side, I decided I had enough fishing for that day, and ran home to take off my clothes, all wringing wet with perspiration. Then a run in the auto to Seger's shop in Asbury Park to weigh him, and thirty-six pounds was his weight, which for a long time was the prize fish. I am glad to know a brother angler made my catch look like thirty cents with a fifty-two pounder. I am glad (as I felt that day) that mine only weighed thirty-six pounds, for I am afraid this story would not have been written had his weight been fifty-two.

Prize Contest Certificate Record: Second Prize Striped Bass, 1914 Prize Fishing Contest.

Weight—36 lbs.
Length—43 in.
Girt—24 in.
Caught—June 30, 1914.
Where caught—Deal Beach, N. J.
Rod—Split-bamboo.
Reel—Vom Hofe.
Line—12-thread Joe Jefferson.
Lure—Squid bait.

On the front page of this issue you will find what we consider one of the handsomest duck paintings that has been painted for some time.

Two clean hits, a right and a left, and a clean miss—pictures that have been indelibly printed in your memory from days with a choke bore that you will never forget. This pair of pictures hanging in your dining room, den, library or office will help you live them over time and time again.

Of course you realize that a magazine cover, printed on the regular magazine press, cannot be an exact reproduction of the original, but we have reproduced this picture, size 13½ inches wide by 20 inches long, together with its companion picture, "To Miss is Mystery," so that they can hardly be told from the original paintings.

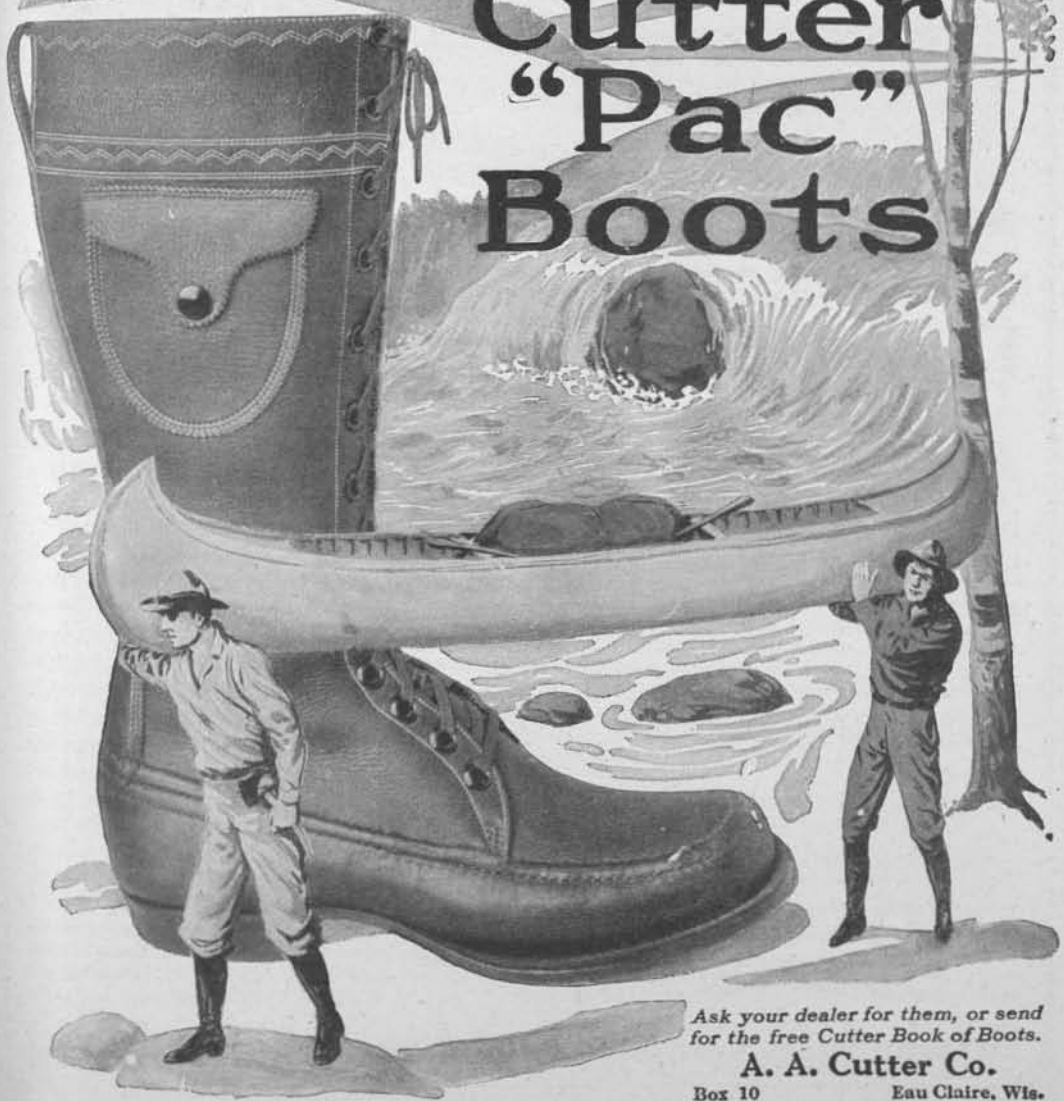
Anyone who is interested in duck hunting should read the advertisement pertaining to these two pictures in the advertising section of this issue.

(*Text continued on page* 1052.)

YOUR footgear is the most important part of your outing rig. When you are well shod—Cutter Booted—you find the miles are shorter and the going less rough. With your feet always dry—Cutter Booted—you forget there are such things as chilblains, scalds and blisters.

Only the centers of the best hides are good enough for Cutter Boots—and only masterworkmen, men who have grown up with cobblers' needles in their hands, are skilled and careful enough to make them. Cutter "Pac" Boots, made to be worn over heavy wool socks, combine moccasin comfort with boot protection. Probably your dealer carries them.

Cutter "Pac" Boots



Ask your dealer for them, or send for the free Cutter Book of Boots.

A. A. Cutter Co.

Box 10 Eau Claire, Wis.

We guarantee advertising on this page provided you mention FIELD AND STREAM

Fastest Boat in the World

10 to 32 Miles With 4 to 25 h. p.

$45
17-Footer

Buys this complete knock-down boat (open cockpit) selected oak frame, clear cypress planking, decking and interior finish. Cut to shape and fitted, including hardware (everything except paint).

$95
17-Footer

Buys this finished boat, painted and varnished, polished brass fittings, fully equipped. Ready for the water (excepting motor and auto top.) Catalog quotes prices with various motors installed.

WITH from 4 to 10 horsepower the 17-footer is a comfortable family launch, semi-V-bottom design, roomy, staunch and seaworthy. With 12 or more horsepower the boat becomes in effect a stepless hydroplane, which is the fastest model yet developed. The speed is limited only by the power and weight of motor used.

When motor is purchased with the finished boat it is installed and connected up ready to run.

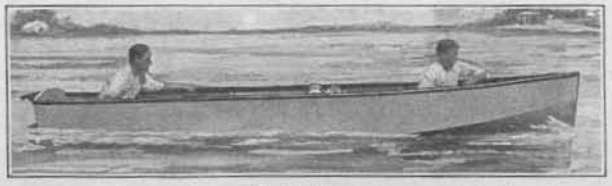
Send for our catalog giving full particulars.

Lowest-Priced Boat in the World

For Inboard or Outboard Motor

$25
15-Footer

Buys this complete knock-down boat, oak frame, clear cypress planking, cut to shape and fitted. All hardware included. Finished boat painted and varnished, ready for the water. $45.



$89
15-Footer

Buys this finished boat, painted and varnished, fully equipped, as shown above with outboard motor or 2 horsepower inboard motor installed.

THESE 15-footers are also of the semi-V-bottom type. The model is designed especially for outboard motor, eliminating the defects of the ordinary rowboat. It has an extra strong reinforced stern.

With a light inboard motor installed it makes a "natty" and serviceable runabout. Just the thing for resorts and liveries. The prices quoted with either motor represent the greatest motor boat value ever offered. Without motor it makes a first class, all-around rowboat, light and roomy. Full particulars on request.

Our ***Big Free Catalogue*** shows cruisers, launches, sailboats, rowboats and canoes. Over 100 designs. A postal brings it.

Brooks Mfg. Co., 5902 Rust Ave., Saginaw, Mich.

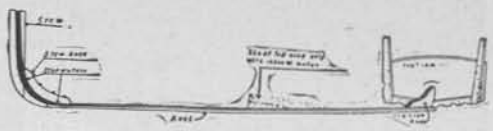
All advertisements are indexed—See page 2A

Build Your Own Boat

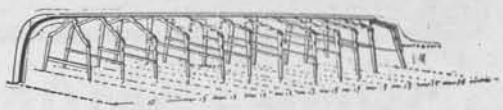
The Home Workshop

THOUSANDS of fathers and mothers recognize the clean, healthy, educational value of the home workshop. Swinging a hammer is just as good exercise as pulling a chest weight, and there's profit and pleasure in the hammer movement. Any room of sufficient size will serve as a workshop, and the building of a single boat will demonstrate the value of the venture. *Any 14 year-old boy can build these boats.*

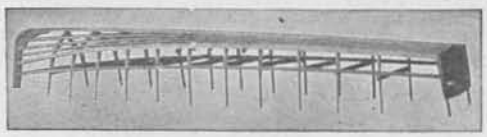
The knock-down materials, which we furnish, are in effect the raw materials required. We do all the difficult part of the work and send full illustrated instructions to assemble the shaped parts which we furnish. You don't need to know anything about boats or carpentry. The tools required are common to every household. Catalogue gives full particulars.



As you receive it. **Keel marked and bored for the ribs shown below.**



About one hour later. **Each rib comes notched, shaped and fastened together with cross-tie.**



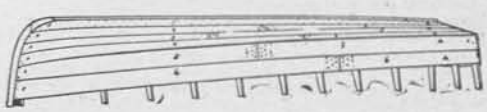
About two hours later. **The stringers or battens are laid and fastened in the mortises which are provided.**

Builder-Agents Wanted

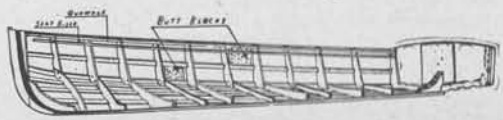
A Business Opportunity

THIS is a rare chance to engage in a pleasant and profitable business. By turning our knock-down materials into finished boats, the value is more than quadrupled. Practically no investment is necessary. About two-thirds of the value of a well-finished boat is in the labor and builder's profit. Besides, a local builder overcomes high freight rates that must be added to the cost of the finished boat shipped from distant factories.

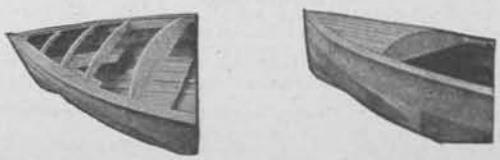
If you are making less than $10 per day, give this business opening a trial, test it during spare time. There's hundreds of localities that will keep you and many employees busy. Estimate how many dozens or hundreds of these low-priced, popular, speedy, best all around boats ever produced, can be sold in your vicinity. Send for our ***Big Free Catalogue.***



About two days later. **The planks come cut to shape, each marked for its location. Nothing difficult but lots of nailing.**

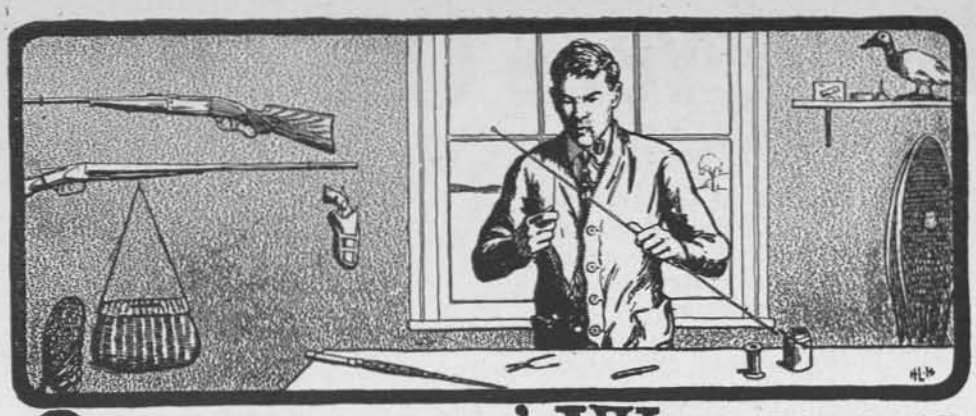


Now ready for interior finish and painting.



These few illustrations are greatly reduced in size. Our regular instructions completely cover every detail.

Brooks Mfg. Co., 5902 Rust Ave., Saginaw, Mich.



SPORTSMAN'S WORKSHOP

LEATHER WORKING FOR THE OUT-O'-DOORSMAN

PART II.

C. P. Fordyce

SOME USES OF LEATHER BY THE CAMPER

The leather prepared according to the directions given in Part 1 can be used to make camp equipment and in repair work of various kinds.

For sewing materials one needs a sharp knife, an awl, harness needles, harness or shoe thread, beeswax and a clamp or vise. The best sewing awl is a lock-stitch awl. With this simple device you can do all kinds of sewing, and it takes the place of the awl and needle, and its special thread is the best general purpose sewing thread one can secure. It makes stitches like the lock-stitch machines and is composed of an awl with needle eye through which the waxed thread is carried through the leather, a return loop is formed, another thread is carried through the loop, then both are drawn tight and the next stitch spaced and done as above.

In strap mending such as harness traces, lines and shoe soles it is well to cut a "channel" with the knife point and enlarge the same by running pointed stick along to open the shallow furrow. In this channel lies the stitching, and it is thus protected from wear after the channel is covered by smoothing down the lifted lip of the leather with the smooth awl handle.

The pieces of leather must be held in rigid position by a clamp or vise of some sort. Two boards may be nailed together and the leather put between allowing a portion to protrude so that the stitching can be done freely.

In sewing a half sole on a shoe the oak tan leather piece must be soaked for a day to make it pliable so it will conform to the shape of the soles, then it is tacked on over the sole and trimmed with a very sharp knife to the proper shape around the welt. A shallow channel is next made about ⅛ of an inch in from the edge and the lock-stitch employed. The lap of the channel is next smoothed down, the end next the heel nailed down and the job done. Heels are nailed on piece and trimmed nicely with a sharp knife and smoothed with sandpaper, then blackened.

To avoid mistakes, it is safest to draw a pattern out of heavy paper of the article you want to make, then cut it out and use it to plan the leather before it is cut.

HOW TO MAKE YOUR OWN MITTENS

Since the sizes of the hands differ so much in different individuals one should place the hands, fingers together, on a piece of paper and then draw an outline of the hand and allow ½ to ¾ of an inch extra all around. Fig. 2. Then round out with a pencil the ends so that they are symmetrical, and then square the wrist ends with the exception of the thumb portion A D B F. Allow a flap 1/5 the length of one palm which will extend as the back of the thumb and in width not quite a half of the distance across the end, A F. Now fold at the line C-C and sew the edges E-E together, the thumb back is a separate piece, Fig. 3, and is half as wide as the palm piece and ¾ as long. The corners G-G and H-B are sewed first then along the edges so that D-D approximate. The flap D, of course, folds downward and is the inside of the thumb. For the left hand fold the thumb flap the other way, just opposite. Make mittens plenty large enough so that in cold

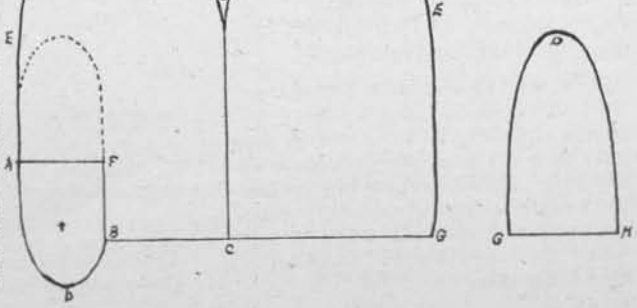


Fig. 2. Fig. 3

PATTERNS FOR MAKING LEATHER MITTS

All the Wild Game You Want

Ring-Necked Pheasant. First imported from China in 1881. Now being bred in fairly large numbers

FOR many years we in America have spent much time bemoaning the disappearance of our feathered game. But the fact that we have little game to shoot and little to eat is due solely to our own lack of initiative. We *should* have an abundance of game in the fields and on the market. We may obtain such an abundance by creating a supply equal to the demand. This can be done by increasing nature's output through game farming. And moreover, the demand of the sportsman may be much greater than at present, and still be easily met.

We have the land available to make America the greatest game producing country in the world. Utilize it, and everyone will have more opportunities to indulge in field sports. There will be more shooting for all of us, whether or not we have access to a preserve, because game that is raised for sporting purposes *can not be confined in any restricted area.* Wherever game is intensively cultivated, we find improved shooting in all the surrounding territory.

To anyone who has a small amount of land, game farming will prove profitable. The demands for eggs and for breeding stock is much greater than the supply, and will be for years to come. Pheasant eggs sell today at from $20 to $25 a hundred. Live birds bring from $5 to $7 a pair.

To those who own large acreage, game farming either provides sport, or profit from those who will pay for sport.

To the city man, it opens the possibility of enjoying good hunting near home.

To everyone who shoots, it brings increased pleasure afield.

Game farming means an addition to our food supply that will be welcome to all.

But this subject is too big to be properly treated in this space. If you are interested in it, either as a sportsman, as a prospective breeder, or simply because you believe in the movement as constructive and progressive, write for the book, "Game Farming for Profit and Pleasure," which will be sent to you without cost. It tells of the subject in a most interesting and informative manner. It is well worth reading. Fill out the coupon below and a copy will be mailed you at once.

Game Breeding Department, Room 180

HERCULES POWDER CO.

Wilmington, Delaware

Manufacturers of Explosives; Infallible and "E. C." Smokeless Shotgun Powders; L. & R. Orange Extra Black Sporting Powder; Dynamite for Farming.

Game Breeding Department, Room 180
Hercules Powder Company, Wilmington, Delaware

Gentlemen:—Please send me a copy of Game Farming for Profit and Pleasure. I am interested in game breeding from the standpoint of.....

Very truly yours,

Name.....

Address.....

We guarantee advertising on this page provided you mention FIELD AND STREAM

weather you can first put on a pair of woollen mittens or worsted gloves and then draw the leather mittens over. This serves as a wind and cold break and takes the hard wear. It is the best hand-warming combination there is.

AXE SHEATH

The hiker's axe should be the light weight hunter's style with a fairly long handle. An expert woodsman prides himself on the keen edge he keeps on the axe and in use he carefully protects it from contact with stones and from rust. Unprotected it may cause disaster by cutting its owner or valuable portions of the pack, hence it is well carried in a special sheath or scabbard which has a belt loop. It should be made roomy enough so that the axe will not be too hard to remove for use.

Measure your axe outline on rough paper, marking the position of the handle also. Place this on a piece of leather and cut. Allow a half inch extra all round and provide extra for the flap, Fig. 4, on which a short strap is sewed to be later fastened to the buckle on the front at H. In the middle of the back two parallel cuts, I-K, are made in length to correspond to the width of your belt, and in width about a half an inch. By pulling this loop away slightly there is sufficient room for the belt to slip through. Sew the edges A-E to A-D and B-F to B-G together, leaving the top unstitched, folds being at E-F and A-B. This opening is left for the handle of the axe to slip through and extend below A-C.

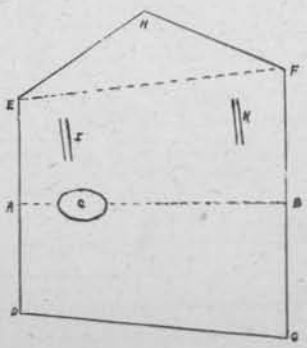
A shoulder sling strap with adjusting buckle may be attached to the blade and helve ends of the sheath at E and F should one not care to carry the axe in the belt.

SHEATH FOR KNIFE, FORK AND SPOON

In making a sheath for knife, fork and spoon roll them together in a compact bundle, then with rough paper measure out the proper size of the sheath. Fig. 5. Make it plenty long so as to nearly cover the knife handle and the articles will not easily slip out. Before sewing attach a belt loop at A and turn over the back and attach one end at B: fold along the line C-C and stitch around the edges leaving C-D open. It is now ready for use.

(To be continued.)

Fig. 4.



AXE SHEATH PATTERN

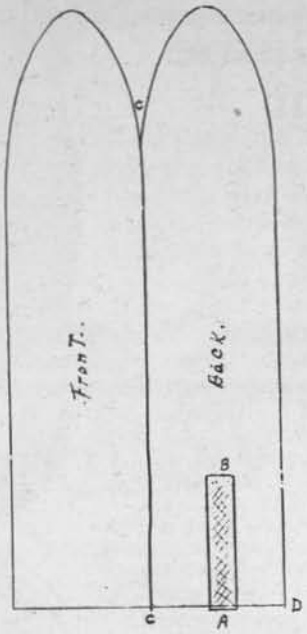


Fig. 5

SHEATH FOR KNIFE, FORK AND SPOON

PHOTOGRAPHIC CONTEST

FIELD AND STREAM offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the orders submitted. The prizes for next month will be: First Prize—Three years' subscription to FIELD AND STREAM. Second Prize—Two years' subscription to FIELD AND STREAM. Third Prize—One year's subscription to FIELD AND STREAM. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, FIELD AND STREAM, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO

Made by P. C. Kangieser, Ica Camera, Anastigmat Lens. F6.8, 1/25 sec. exposure. Hazy light. Camera 2 feet from subject, operator in blind. Subject—Prairie Dog.

SECOND PRIZE PHOTO

Made by Carl Wurm, Jr., Eastman 3A Special Kodak, Zeiss Kodak Anastigmat Lens. 1/100 sec. Stop F11. Subject—Feeding the Gulls.

THIRD PRIZE PHOTO

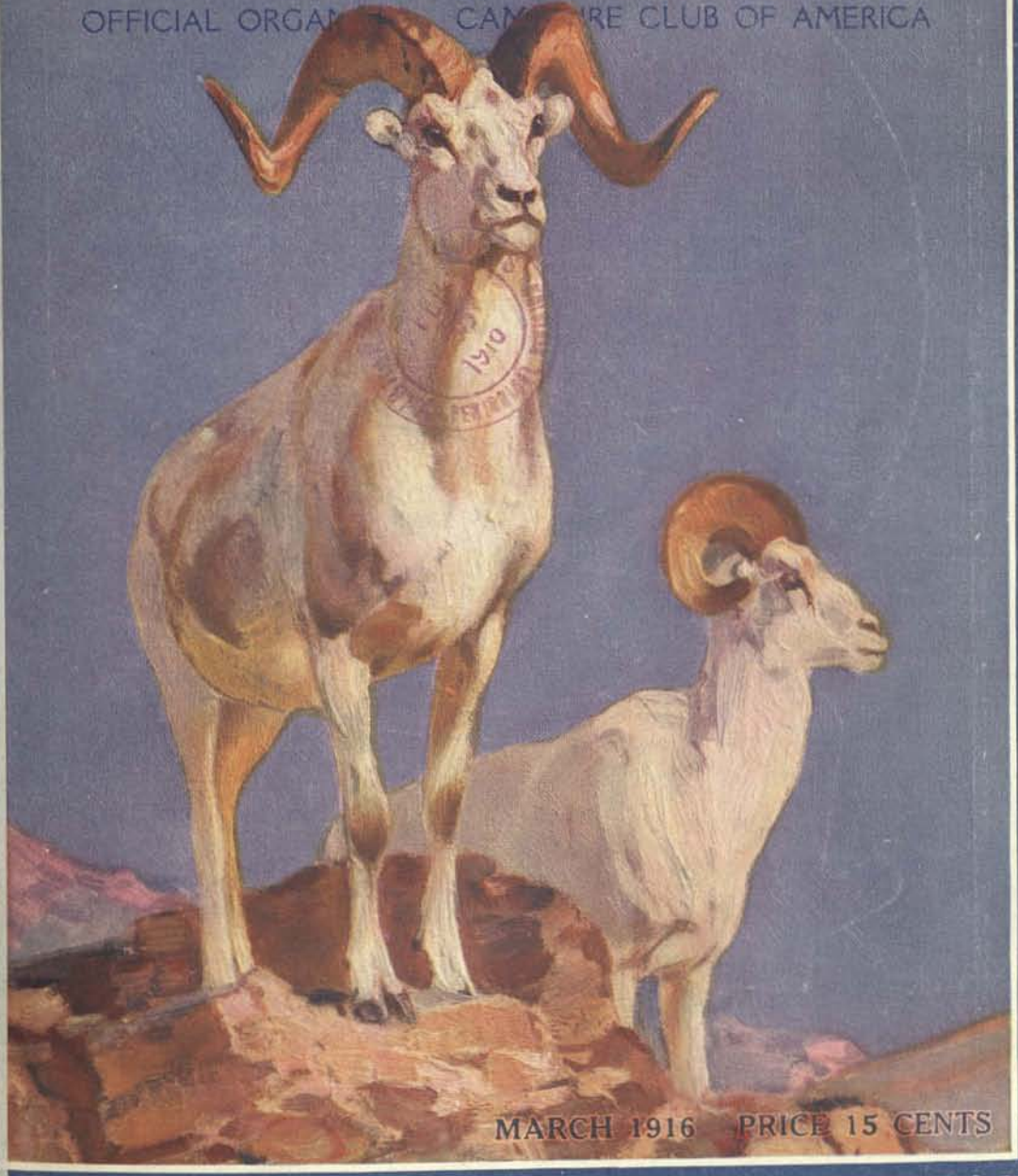
Made by E. E. Salter. Vest Pocket Special Kodak, Stop 8, 1/50 sec. Bright sun. Subject—Texas Fawn.

HUNTING KENAI WHITE SHEEP by Dan Singer

FEB 21 1916

FIELD AND STREAM

OFFICIAL ORGAN [illegible] CAMPFIRE CLUB OF AMERICA



MARCH 1916 PRICE 15 CENTS

MURAD

THE TURKISH CIGARETTE

FIFTEEN
CENTS

Made of 17 varieties of pure Turkish tobaccos.

Greatest selling high-grade cigarette in America.

Guaranteed by the whole nation's verdict.

Anargyros

Makers of the Highest Grade Turkish and Egyptian Cigarettes in the World

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SHOTGUNS AND RIFLES—Rifle Sights and Holding, III. Warren H. Miller.
Snap Shooting with the .22. Ray E. Smith.
Barrel Materials. E. C. Crossman.

TRAPSHOOTING—Conducted by David H. Eaton.

OUR HUNTING COMPANIONS—Buying Your Dog.
Doggy Questions and Answers.

FISH AND FISHERMEN—Winners, L. M. Bass, Class B, Fly Class and Tarpon.
The Soldier Palmer. Ladd Plumley.
The Best Trout Stream of Them All. W. C. Prescott.

PRIZE FISHING CONTEST STORIES—4th Prize Brook Trout, Class B.
4th Prize S. M. Bass, Class C.

PRIZE PHOTOGRAPHIC CONTEST.

THE SPORTSMAN'S WORKSHOP		1166

Leather Working for the Out-o'-doorsman. Claude P. Fordyce.
My Tackle Cabinet. W. H. Mapes.

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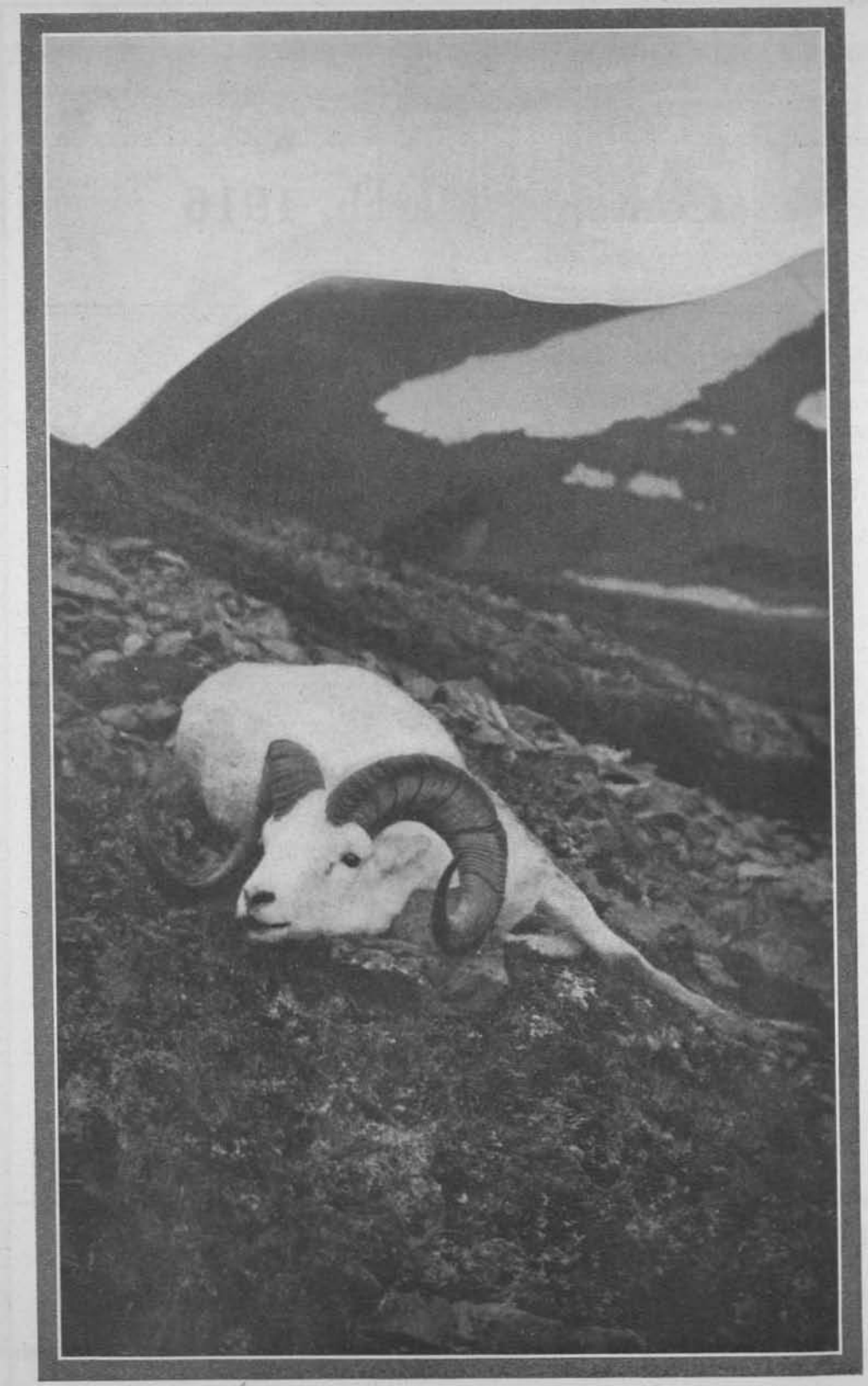

A KENAI TROPHY—THE ALASKA WHITE SHEEP—THE OBJECT OF SINGER'S TRIP

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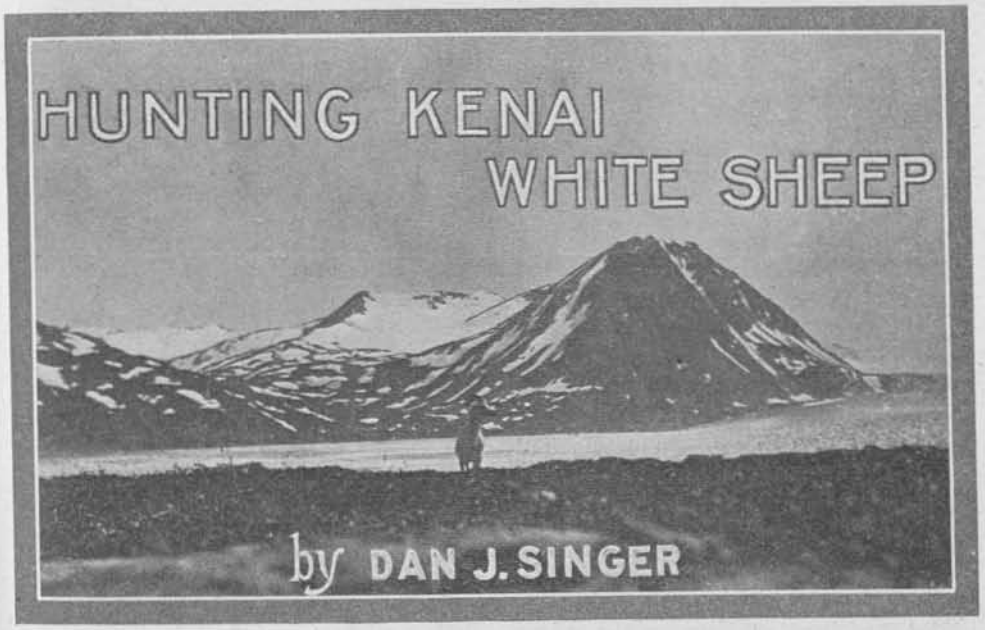


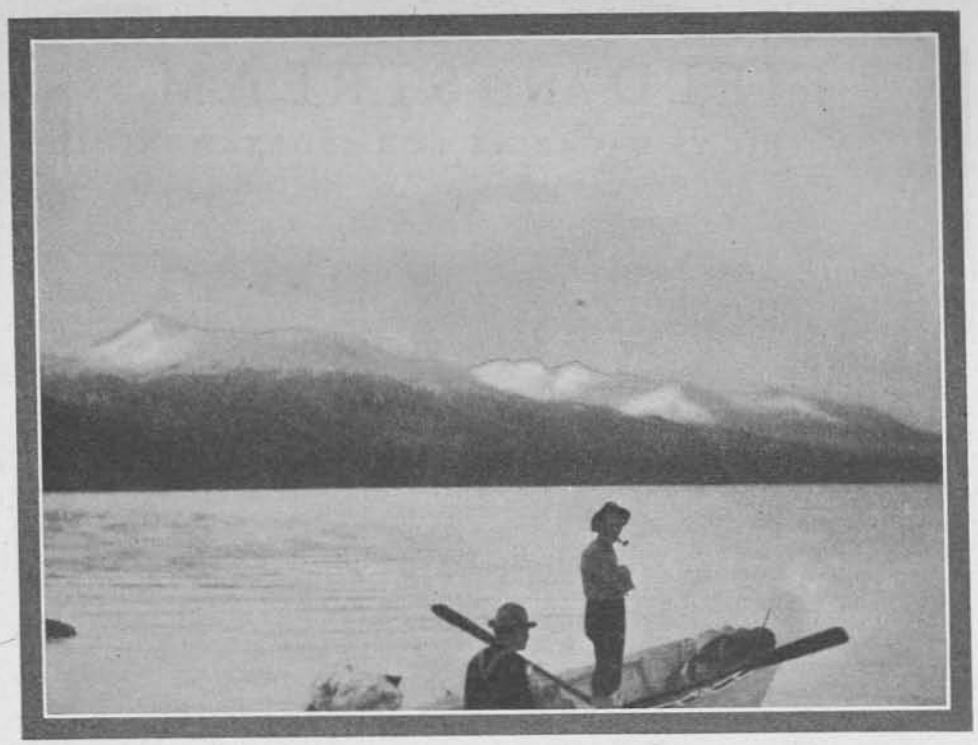
PART I

DOWN THE KENAI RIVER—PACKING INTO THE SHEEP COUNTRY—PTARMIGAN FOR SUPPER

THE evening star shines clear and high above the purple line of lofty spurs, and the west, with its rosy glow, pales to a delicate emerald tint. With the dusk came the sheen to the moon, a mere, silver thread that hung in the west. The wind had quite gone with the day and the swish-swish of the waves against the sides of the steamer, as she slid up along the Alaskan coast, was the only sound that marred the otherwise quiet evening.

From Seattle to Seward occupies eight days by steamer. The first few days had been clear, but later we experienced much mist, haze, and general atmospheric gloom, accompanied by intermittent rains,—quite typical weather for the Alaskan coast at this time of year.

Further up the coast we encountered a terrific gale, and I, for one, failed to put in an appearance at several meals. We had come up through the inside passage,



SKALAK LAKE. SHEEP MOUNTAINS IN THE DISTANCE

where it had been comparatively smooth, but now we passed out into the open ocean where a storm arose. The angry sea looked appallingly wicked, while the voice of the gale shrieked and raved and rose to a wild, unholy roar.

Toward evening we steamed up under the lee of an island, and beneath its high rocky cliffs we anchored. All were thankful for the shelter which the island afforded, and here we rode out the storm, which abated the following morning.

We called at several ports on the way up the coast. Many of the stops were made during the night, and I had not an opportunity to see the towns. Yakutat, however, we reached one evening while it was still light, for the twilight here, at this season, lasts until nine or ten in the evening. The Indians, with their squaws, paddled out to the boat in canoes. They had woven baskets and Indian trinkets for sale, in which they seemed to do a thriving business. I went ashore and wandered around among the huts with the intention of making some inquiries about the blue or glacier bear of that section. I succeeded in finding one old Indian who could and would talk a little. He showed me the skin of a glacier bear he had killed a year ago, and offered to take me on a hunt for the blue bear if I would return in October, when their fur is good. I am sorry to say I could not avail myself of his offer.

While in Seattle I visited the Zoological Park, and there saw the only glacier bear that is in captivity. It was captured at Baird Glacier and presented by N. J. Heney.

I have seen one other skin which was shown to me by Dr. W. T. Hornaday, Director of the New York Zoological Park.

Continuing up the coast the vast reaches of the Malaspina Glacier came into view. Looking across this gigantic ice field to the north, the massive snow-face of Mt. St. Elias loomed up into the sky 18,000 feet. Lying to the north and west, but not visible from this point of the coast, stands

our highest known peak, Mt. McKinley, 20,000 feet, the ascent of which is splendidly described by Belmore Browne.

On the afternoon of August 14th, just as the sun was beginning to sink, and turned to a fiery rampant red, the steamer entered Resurrection Bay. Seward, my destination, is situated at the head of the bay, which is twelve miles in length, and the most wonderful harbor on the Alaskan coast. Resurrection Bay is hemmed in by high, precipitous mountains rising up sheer out of the sea, that loom grim and monstrous against the sky, their tops powdered with snow. It was a matchless view in the dazzling glory of the setting sun. Marvelous color effects appeared in the layers of rock and ridges, pinnacle, and crag—deep wine reds that faded to the faintest pink; purples paling to lavender, tender greens, tones and half-tones of all, glowed in the waning sunlight and melted into gorgeous rose hues at the setting.

On disembarking we were met by a score or more of winter sled dogs, who had answered the shrill whistle of the boat with a chorus of howls, and in fact any unusual noise about town seemed to be a signal for them to give vent to their unearthly howling. Seward, without doubt, is the best town on the Kenai Peninsula, and has a population of something over 2,000. The railroad is now in course of construction from Seward through to Fairbanks. This will be completed in 1917, and naturally will prove a great boon to this section.

Alaska, our last remaining territory, can only be known in a fragmentary manner, since less than 20 per cent. of its 600,000 square miles have been mapped, and because it is the most complex and irregularly shaped area of its size in the world. A good example is the Kenai Peninsula, which has a total length of 150 miles and a coast line of something more than 1,000 miles. Alaska lies in both the eastern and western hemispheres, and extends on either side of the Arctic Circle, with a total coast line of 26,000 miles.

It is surprising how many people hold the erroneous idea that Alaska is a great, barren, frozen tract. It is true that in the interior the winters are terribly severe, but the climate conditions south of the

"KNOWN TO ALL THE WORLD AS 'DUNK'"

Alaskan Peninsula and its long extension of the Aleutian Islands differs markedly from the country lying to the northeast. South of the Aleutian Chain the warm flow of the Japanese current keeps the sub-Arctic Harbor of Seward open the year round. The adjoining country, too, has a surprisingly mild climate when considering the latitude. As late as September I saw poppies in full bloom and vegetable gardens that would be a credit to a Jersey farmer.

The law permits the killing of three mountain sheep on the Kenai Peninsula between August 20th and December 31st, both inclusive, provided same are taken west of longitude 150. There are several varieties of mountain sheep, two of which I had previously hunted and photographed. They were the big horn of the Rockies (*Ovis Canadensis*) and the black sheep or (*Ovis Stoni*) of northern B. C. The white sheep or *Ovis Dalli* found on the Kenai Peninsula was first described by E. W. Nelson, 1884. He named it *Ovis Dalli* in honor of Professor William H. Dall, the well-known scientist and Alaskan explorer. While the average basal circum-

PACKING INTO THE SHEEP COUNTRY—NOTE ALASKA PACKS

ference of horn of this species is not as large as those of the other varieties, the graceful curl and symmetry, together with the beauty of the head make it the most prized trophy of the sheep family. Their habitat is farther to the north than the rest of their kin, and are found only in Alaska and northwestern Canada.

The section I intended to hunt lay to the northwest of Seward and is in about the center of the Kenai Peninsula. The nature of the country made it impractical to use pack horses. Therefore it was necessary to carry our outfit on our backs. This meant going light, which really does not appeal to me as a rule except for the reason the less you take the less you have to pack. It was possible, however, going in, to cover considerable of the distance by boat; but coming out we were unable to trek up the river on account of its not having fallen as we expected.

My guide and packer met me in town, and we at once set about selecting provisions (all bought in Seward), and getting the outfit together. Tom Towle was my guide. Tom is Scotch, spare, keen-eyed, and as noble a man as ever trod a shoe-pack. Tom had lived down on the Kenai River for seventeen years, and his knowledge of the animals and country thereabouts was surprising as well as very interesting. No pack was too heavy, no peak too high nor day too long for Tom, always determined, never showing fatigue, and a quiet good nature under all.

Our packer was a typical Alaskan character. I will introduce him to you—Mr. Duncan Little, known far and wide as "Dunk," so we cannot very well call him anything else. Dunk had come into Alaska in 1898, and was in on the Klondike strike. He took $40,000 worth of gold nuggets out of the ground. He, too, spent it like a good sport, but a bad financier. Dunk is Irish, fifty, and he never combed his hair. Not that Dunk was untidy—but there was none up there to comb. Dunk remarked one day, "I feel very sorry for you fellows," meaning Tom and I. "Why?" I

PIPE CREEK CABIN—OUR BASE OF SUPPLIES

inquired. "Well, I've got you all so badly handicapped; I'm the only man in the outfit that can comb his hair with a towel." Dunk's wit and good nature supplied us with the nucleus of many a laugh; in fact, he seemed to derive just as much pleasure out of the hunt as I did. No matter what he was doing he seemed to be having a good time doing it.

On the morning of the seventeenth everything in readiness, we boarded the little gasoline car that runs over a portion of the railroad that has been completed. A run of twenty miles brought us to the appropriately named stop, "Mile 20." At this point Kenai Lake projects an arm that runs up within a few yards of stop Mile 20. Here we were met by a small power boat which carried us down beautifully picturesque Kenai Lake twenty-six miles in length. The mighty battalions of the Kenai Range rose on all sides, and its long wavering line of bald peaks, studded with patches of snow, lay glittering under the bright sun's rays. On the little islands cormorants were raising their young. Flocks of mallards winged their way up and down the lake. Pearly gulls circled about us and great bald-headed eagles looked like mere sparrows, as they soared before the face of some mighty cliff.

Tom with the glasses spotted a black bear up on the mountainside. But we were after sheep—that big ram and nothing else. At nightfall we arrived at Tom's Cabin, at the foot of Kenai Lake, and at the head of the swift-flowing Kenai River.

Early next morning we packed our outfit in a small scow or rowboat for the run down river, which is about fifteen miles to the lower or Skalak Lake. The river was up two feet higher than it was ever known to rise before. This made rather ticklish work for Tom and Dunk, although they are both expert river men. It was particularly exciting for me taking the stretches of white water, of which there were many. Their method of going through the rapids was rather a new one to me. One stayed at the oars, pulling up

river, allowing the stern to go down first, while Tom, with a long pole, pushed off from one side or the other, endeavoring to keep the craft in the best water.

At a box canyon where the river churns itself into a fury of white swirling water, then sweeps on between high perpendicular cliffs, we just missed a watery grave by the smallest kind of a margin. The combers were dancing up to the tune of three feet, and before they had played with us a second or two swish came a broadsider that lapped our length—then another and another. We were helplessly in the grip of the wild torrent which was beyond human power to resist. I glimpsed the bold rocky cliff as we shot by, the spray and water flying all about us, and I had a vague realization that my feet were in the water, while the roar and din of it all filled my ears.

There was a slight lull, in which I could hear Tom saying, "Try and make the shore, Dunk, before we fill." The little craft lurched on, paused a moment, then spun half around, fetching up in an eddy, and almost at once I could see Dunk was making real headway toward the shore. The boat, well filled with water, was doubly hard to handle, but with the great skill of the men and a deal of good luck, we soon were able to grab hold of a branch and pull up to the friendly shore.

"It's all off with me," said Dunk, "I've lost my pipe."

"The devil you have," said Tom, "you've got it in your mouth." I was just in the middle of a laugh when I discovered my own pipe was missing. After carefully returning all the water we had borrowed during our hasty flight through the canyon, and repacking the provisions, many of which were decidedly damp, we continued on without further mishap.

That night we camped at Pipe Creek, four miles down Skalak Lake. From here the real hard packing commenced, across the high rocky pass down to Benjamin Creek, which is the north fork of the Kelly River. Tom calls it about eighteen miles from Pipe Creek to Benjamin Creek, and with a pack on your back it seems twice that distance.

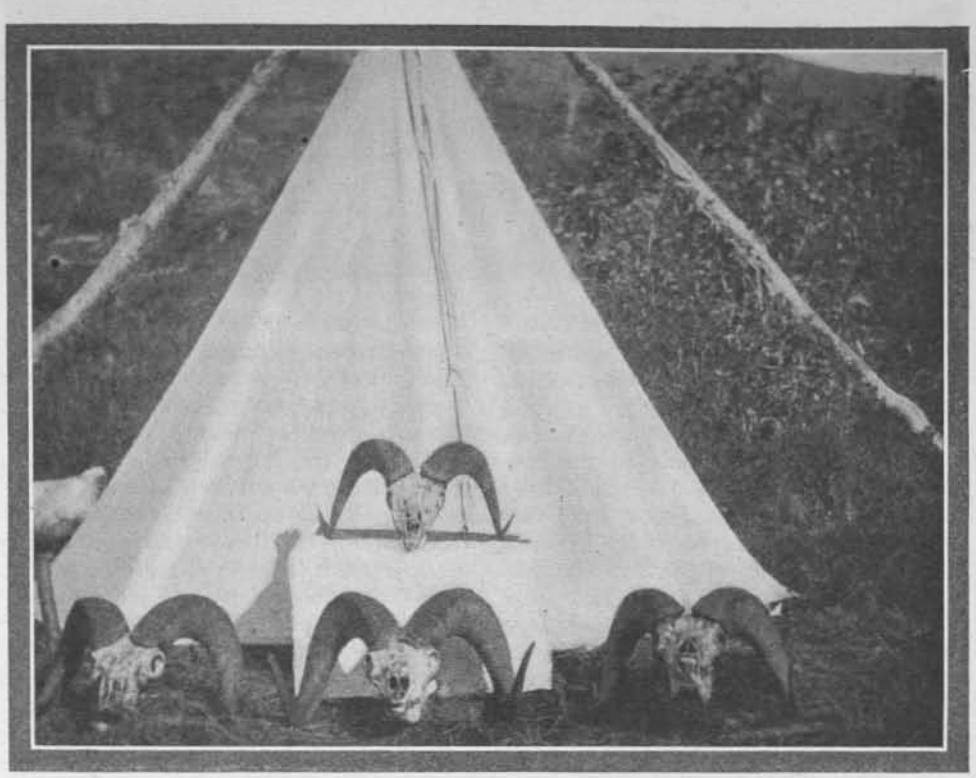
At an early hour, with pack on back, we started up the long trail. The air smelled good with the spice from the spruce. Our hearts were light, and we trod along cheerily to a quaint tune hummed by the good old Dunk. It was a steep five-mile climb up to the pass (Rocky Pass), and then a long, gradual slope down to Benjamin Creek, where we were to camp in the midst of the sheep country. At high noon, when we reached the summit, and before going through the pass, we stopped to boil the kettle. In a little patch of stunted wind-bitten spruce that seemed to have made a mistake in an attempt to grow above all other timber, we lunched and viewed the country that stretched below.

Skalak Lake, though sixteen miles in length, looked up like a pond, still as a mirror, from the deep valley. Unbroken phalanxes of spruce marked its sinuous shore line. Halfway up the steep slopes the green coniferous forests dwindled to a scanty growth, and then gave place to bush, moss, and rock, until finally the bald peaks showed white against the unclouded blue.

Looking far away to the west and extending to Cook Inlet lay the Chickaloon Flats, as green and flat as a billiard table, all studded with countless emerald ponds, the home of the giant moose, the black fly and mosquito. The day was very clear. We could see across Cook Inlet and faintly make out the dim line of snow mountains, with Mount Rideout 10,000 feet as the highest point.

Tom displayed good judgment when he suggested having lunch and resting up before going through Rocky Pass; for it proved to be the hardest kind of walking, especially with a pack. There was something over a half-mile all strewn with great boulders, as if tumbled about in giant's play. Tom and Dunk stepped and jumped from rock to rock with the ease and skill of a goat, but with me it was different, as I was always a little suspicious of the rock just ahead, wondering whether it was going to turn over with me, or give a firm footing.

It was a great relief when we reached the last of the rocks and the country in gradual slopes stretched before us in uncounted miles. On either side the great



THE AUTHOR'S TENT AND SOME TROPHIES OF THE HUNT

sheep mountains towered up to their snowy peaks. From here on it was all down hill to our sheep camp.

No sooner had we come out of the pass when Tom stopped stock still, and we all did likewise. "What is it?" I questioned. Tom looked straight ahead, never moved a muscle. Then he said in a slow, even tone, "I see about forty ptarmigan, a bunch of sheep and a fox." This was too much for Dunk, so I thought I would let him answer. Dunk puffed his pipe slowly, then he said very nonchalantly, "Hell; don't wake him up, he thinks he's in a circus."

Dunk always carried a shotgun. He said it was his protection against brown bear. Slowly he slid off his pack, quietly and catlike he stole a few steps ahead. Slowly he raised his "protection against brown bear," and then things happened! Bang! Whirr! and the air was full of ptarmigan, cackling and beating a masterly retreat. But there were four who flew no more, nor did they cackle. Dunk puffed his pipe again, then quietly observed, "You fellows may prefer bacon, but it seems to me when a man's head is screwed on right, he will eat ptarmigan for supper when they block up his trail."

The fox removed in haste and I caught a glimpse of his brush as he slid over a crest and down into quieter hunting grounds. But the sheep, there they were, high up on the mountain slope. To me they looked like little dots of snow. "They are lying down and haven't moved," said Tom. I took out my glasses and viewed the first white sheep I had ever seen. All ewes and lambs; but even so it looked encouraging.

Late afternoon found us still plodding along, and in the dusk of the waning day we could dimly make out Benjamin Creek in the valley far below.

(To be continued)

EDITORIAL

THE SPORTSMAN'S CALENDAR

IN a few months now, we sportsmen will have a date to start our calendar. It is a great event, one of the greatest in Nature's year, and the only one that has a definite date—the coming of the new leaves. Along about the Twelfth of May in the Middle Atlantic States (and two weeks earlier or later for every hundred miles north or south of the Fortieth Parallel) this date comes around each year and finds the forest just clothed in its new garments of green. Soft and feathery as fine silk, the new-blown leaves hang from every twig and bough; gone are the bare days of winter, and the faint tinge of green-gray that pervaded the forests in early spring has now given way to the full sap-green of the new leaves. The spring migrant songbirds have come to stay, and in every dell the thrushes find melodious breath. Wild flowers are about, carpeting the forest floor with beauty; the air is mild and balmy, and the sun benign in his heat. Nature's year has begun; her annual miracle of life and death is staged.

All through May, the Planting Moon, tree fruits and woods flowers are setting fruit, and the birds are busy over their nests, while the sportsman is abroad on the lakes and streams with rod and creel, for the insect life is in copious abundance and the fish are feeding mightily, against the dull days of midsummer to come. Every lake point and mountain slope has its tent, where those who love to be in and of all this teeming life of Nature are camping, free to enjoy the mild spring air and rest from the arduous work of the past winter. The sportsman's paradise has opened.

June, the Moon of the Wild Rose, finds the trees in green fruit, and the nests harboring naked fledglings with gaping mouths, while ever-busy parent birds carry cargoes of destructive caterpillars, aggregating many times their own weight, to feed the hungry chicks. Already the trees are loaded with the green, half-grown nuts and acorns which are to feed Nature's children in the fall, and for the sportsman the fishing season is at its height in fresh waters. It is the great camping month, especially for the amateur whose rig will hardly stand the rigors of a touch of real frost.

July, the Thunder Moon, comes on apace; the great ocean warms up and its denizens appear off the surf-bound coasts, while the sportsman hies himself to the sand-dunes with tent and surf rod, and the staunch salt-water dory is launched on the great bays or the ocean's bosom, its white sail spread to the breeze, while tackle for deep-sea fishing is got ready. A slackness comes on the trout fishing, for those cold-loving beauties get languid and apathetic with the summer heat, and the bass fishing begins to droop, but this is nothing to the all-around outdoorsman, who finds quite as much sport in the handling of surf tackle and the play of big ocean fish as he did with the fairy fly rod and the battling bait-casting outfit.

And now comes August, the Moon of the Ripe Corn, the Hot Month, when the creatures of the outdoors rest and recuperate for the fall activities. It is a fine month by the Big Sea Water, and many is the sportsman who doffs all clothes and lives in a bathing suit where he can let Brother Sun get acquainted with him and tan him a rich, tough brown. And yet August is not so hot either, in the

mountains and the great North. Already, frosty nights are abroad; it is well to sleep under blankets and cheap, shoddy camping outfits chill their owners. A hint of what is to come is in the air.

Imperceptibly the season glides into September. A hot spell or two; but the bracing, sharp winds out of the northwest are frequent, and already in the western mountains the Hunter's Moon is shining. Along our coasts and in the great bays and the prairie lakes, the fall flight of snipe and shorebirds is in full blast and the boom of fowling-piece sounds muffled over the marsh.

Then, like the sharp snap of a whip, along about the end of September comes the first real frost, a nipping night which wilts down vegetables and sends summer campers scurrying to the cities. The big game season is open in the Rockies and the first fall of snow has come; the Canadian wilds show everywhere the tents of hunters, and the call of the moose sounds over lake and deadwater. Down by the salt sea, big channel bass are arriving, and the beach is lined with eager anglers, while up in the mountains the bass are biting again and in the North the trout have roused themselves from the midsummer lethargy. It is the hey-day of the sportsman; in every line of activity, from big game rifle to surf rod, he has reached his zenith. Nature also has reached hers, for the year. All the rich crop of forest fruits are ripened and fall to bless the land; the young of birds and furred creatures are full-grown, and in some mysterious manner a pot of paint is being passed from tree to tree until the uplands are glorious with riots of color.

And so October is ushered in, and the sportsman takes his light and deadly small-bore and hies him to the forests to try his skill at grouse and cock, or else he haunts the field edges for whizzing quail. Later the month begins to deserve its Indian name of the Moon of the Falling Leaves, for, lisping softly, they waver down through the trees, and the fragrance of them is sweet in the nostrils of the true woodsman.

November, the Crazy Moon, finds the fields and forests brown and the hunting season at its height, while fall flights of ducks send the sportsman to bay and marsh. The keen wind rips over the open, and Nature is in an austere mood—the angrier the better, so far as duckshooting is concerned! And at the end of the month comes the first fall of snow. It may be but a flurry, but with what keen appreciation do we hail it! But it takes December, the Moon of the Long Nights, to give field and forest its first real blanket of white. Six, maybe ten, maybe sixteen inches of snow fall in a single storm out of the Northeast, and the ice on lake and stream invites the sportsman to take his tent, snowshoes and skates and enjoy the bracing pleasures of the winter camp. Not altogether is the faithful shotgun laid away, for the December flights of geese are in the bays and must not be overlooked, and there is plenty of trap-shooting for those who simply *can't* stop shooting! January is the Snow Moon, and February the Hunger Moon, but for the sportsman the two months are bracketed together as a time for indoor work on tackle and equipment, varied with an occasional dash into the snowy forests for exercise, nature study and testing of equipment. These are the months when the rods are rewound, the duck decoys repaired or built, an indoor range established, scores at the traps improved, camping outfits overhauled and new parts added. Never is the sportsman more busy, and never does he enjoy himself more than when going over the beloved tackle and toggery with some crony, recalling great days that have gone and anticipating more of them to come. Nature, too, has her own population for these snowy months. The winter migrants fill the woods, while our all-year-round residents are to be seen, or their tracks followed, throughout the winter woods.

Late in February a subtle change comes over the face of the world. Warm winds come out of the South. The sun has entirely recovered from his temporary indisposition of December last. There is a great thaw in progress and every ravine tinkles with the flow of running water. The sportsman goes out for his last winter camp and is on time to greet the coming spring. Green bits of vegetation that

(*Continued on page 1102*)

HERE'S A SHADED RETREAT WHEN SUMMER SUNS BEAT DOWN

TROUT FISHING FOR TYROS

By ERNEST WARREN BROCKWAY

"YOU can't catch brook trout unless you know how."

"Is that so?" asks Bill Smith in a superior air. He reflects a moment and then adds: "How about that little Simpkins chap that went down to Big Rock Hole yesterday and fetched home two trout that weighed a little over a pound apiece? — never'd catched nothin' but shiners and dace afore in his life!"

Of course, you couldn't dispute Bill, for you had seen the trout several hours before. The news of the catch had flown over Brooktown like the report from a huge cannon in the stillness of the night. The news of such a catch always flies; it ought to fly; a catch of that kind means glory to the captor, whether from luck or from skill. Even Hi Hingham, Brooktown's oldest and most skillful trout catcher, praised little Simpkins. But Hi smiled one of his customary kindly smiles just as he had done when other youngsters and older unskilled fishermen had scored big.

This smile of Hi's was a smile that reflected wisdom. He said not a word in the spirit of disdain; yet he knew that little Simpkins' glory was born of luck, pure and simple. For, away back in his schoolboy days, he had had just such luck. Three scores of years of experience had proved it luck, for had he not for years returned home day after day with a well-filled creel? He knows he has the ability to repeat large catches; and if a fisherman can repeat day after day, that is proof positive that he has arrived; that he holds an unwritten diploma of efficiency.

No, you can't jump into the realm of successful brook trout fishing with one leap or with several leaps; it is too intricate. You must begin in the primary department and learn your lessons gradually and thoroughly. Because they are jammed full of perplexing phases is the reason they are so interesting. And you can't learn all there is to learn in one year or in five years or in—why, old Hi Hingham at three-scores-and-ten never professes to know it all. He experiences the same overwhelming glee now when he

pulls a pounder from a stream that little Simpkins experienced when luck brought him glory. But there's twice the satisfaction now for him to land such a trout; for nine times out of every ten he has the conviction that his "know how" is responsible.

As I have previously intimated, this is an article for beginners. As some of the old veteran anglers read it I can almost hear them saying: "Why, I didn't follow out the tactics that this writer prescribes." And I wouldn't dispute them; I believe them. Herein lies the extremely difficult task of writing a truly helpful article of this nature—the reason that specific rules cannot always be followed. This is because trout are not all of the same mind, any more than are human beings, as to their likes and dislikes. Then, too, they act differently during different parts of the season and in different brooks. Yet there are general fundamental rules that can be followed, and must be, if one would meet success.

As to the kind of bait or lure to be used by the beginner, I am thoroughly convinced that the faithful old angleworm will serve you best under all conditions. Use a strong number six line and a number two or three snelled hook for ordinary fishing. For a rod, any light, yet strong, one of wood or bamboo or steel will do. I have always used one eight and one-half or nine feet in length. Provided its line guides are large and smooth to permit the line's running freely, you can use this either for casting your bait or for reeling it out, unless you are to attempt long and expert casting, in which case you will require a shorter and stiffer rod. But this is not for the beginner—this long and expert bait casting.

On the proper kinds of tackle for all conditions and occasions, volumes have been written, and I would not think of aiming any bald statements or subtle inferences against the magazine and book writers' claims on the subject. I have read many of them and received everlasting help from them. But I did not read them diligently at the very beginning of my trout-fishing career; and I'm thankful I didn't. Now, however, I'm eager to read everything on the subject I can find.

I realize that the foregoing statements are somewhat conflicting, and I must explain the "why not" and the "why" thereof. Obviously, the beginner wants to learn to catch trout. If, at the start, he enters into an exhaustless study of tackle, he will likely approach near exhaustion by his inability to catch trout. He needs first to learn all he can about trout, both from written articles and from the grand old teacher, Experience. After he has become fairly well schooled, then he may advantageously take up the study of tackle; for all of trout fishing is not in seeing how many trout you can slip into your creel each day; the fair and skillful angler wants to match his ability against that of the trout; and many of the artificial lures afford trout greater opportunities to outwit their would-be captors than if the angleworm is used.

Now, the beginner should not be misled by anything I have stated about the angleworm; that is, he should not think that because he is using a worm bait he is displaying no skill when he captures a large trout. Many of the most experienced anglers who carry fly-books filled with flies of nearly every color and hue also have tucked away in their pockets a generous supply of worms. And don't be fooled in believing that they never use the latter; and, furthermore, don't be fooled in believing that they have been successful in landing certain large trout with a worm bait. Should you become an adept in the fine art of fly-casting and catching with flies, I would wager that you would give all of your high-toned tackle if you were sure you could catch three old grandfather trout that have lurked for two or three seasons in a certain deep hole that you know of—catch them with a worm bait, I mean; for you'll admit you couldn't land them with any kind of fly. No, Mr. Beginner, never be ashamed to say that you are using a worm bait.

While this article deals essentially with the worm bait or lure for the successful use of the beginner, I feel impelled, nevertheless, in a general way, to make mention of the use of flies, for when nearly every fair-minded and enthusiastic trout fisherman becomes "advanced" he will

WHERE A PLUMP HALF-POUNDER WAS CAUGHT

want to try his skill at fly-casting. Of course, it's more difficult by far than fishing with a live bait, and that's just what makes it fascinating. I must state, however, that one should never permit his zeal or "high-browiness" in the art of fly-casting to prejudice him against the worm. Have I not seen repeated demonstrations of this prejudice? Why, a couple of seasons ago, I was fishing a stream with some city fishermen who carried a stupendous array of flies. When we arrived at the brook, I left my flies where they belonged, in my pocket, and drew out my well-filled box of worms. While I knew that my friends were experts with the fly, I knew that on that brook their efforts would be futile. And I plainly told them so. Yet they persisted in using flies and I persisted in using worms. After their repeated attempts at a strike, with no success, I laughingly handed them some worms which they were decidedly eager to substitute. Then they had strikes and trout. So never become that far advanced that you will scorn the humble worm — the chap that was the means of getting you "advanced."

I trust that in this article I shall make no statements that might lead its readers to opine that I am opposed to fly-fishing, for I am not; I am heartily in favor of it, enthusiastic over it. But I realize its success means a whole lot of knowledge of the proper kinds of flies to use at certain times and on certain brooks, as well as a whole lot of skill in casting. That's why I do not advocate it for the beginner, for he will have all he can attend to in learning the ways of trout and in learning of their habitats. But as soon as he believes he is sufficiently schooled in these, then, by all means, he should take up fly-casting.

There are two kinds of fly-casting, wet and dry. The latter is the more difficult and therefore brings more pleasure when fairly mastered.

In jumping for an artificial fly, Mr. Trout believes he is being served the real article, especially when applying to the dry-fly, which must float on the water as lightly and as temptingly as a miller or any other airy-fairy insect dear to the sight and taste of Mr. Trout. With the wet-fly this is different. The latter does not float; it is submerged, and often is pulled against the current of the stream. Now, Mr. Trout knows that no sane airy-fairy insect will pose as a master diver and work against the current at times. Yet he'll nab the submarine freak if his fancy dictates. Why, I don't profess to know, and yet I surmise it is because of

one of two reasons or of both—he is at the point of starvation and decides to take a chance at the crazy-looking thing, or else his curiosity is so high-pitched it gets the upper hand of his generally sound judgment. That trout are "curious," I know from repeated and carefully studied demonstrations.

For both wet and dry fly-casting, a light wood or split bamboo rod eight or nine feet in length and five or six ounces in weight will answer, while the line should be heavy and of enameled silk. As one becomes more skilled, the lighter the rod the better the sport. For wet-fly fishing some anglers use one fly attached to a leader, while others use two and three of different colors. Any good single-action reel which conforms to the weight of the rod will answer. As I have previously stated, the selection of flies is an intricate matter and must be left to the judgment of the angler. One should observe the kinds and colors of insects that hover about the stream he is fishing and try to match them, as nearly as possible, with artificial flies. It is generally considered that light flies bring better results on dark days, while on bright days dark flies are more effective. This, however, is merely a theory and not infallible. For ordinary fishing, flies tied over sizes twelve and fourteen hooks are best.

As to casting the fly, there are certain prescribed ways, and yet I have seen experts in the art vary greatly from them. The purpose of a good cast is to have the fly drop on the water as lightly and as near as possible to where a trout is thought to be lurking, especially in the case of the dry-fly. When about to make a cast, the right hand should be placed on the cork grip of the rod, with the thumb pointing up. With the other hand, you should operate the line, pulling it from the reel until a sufficient length is out to enable you to drop the fly where you wish. The wrist and not the whole arm should be used in casting. It is well to make two or three false casts before the final cast, as it enables you to judge the way your line is working. Especially during a breeze this is quite necessary. When you are ready for the final cast, your rod should be in a position a little more than vertical and the line straightened out at your rear. In making a dry-fly cast, the fly should light on the water with wings "cocked." The instant you feel a trout you should strike by a quick backward twist of the wrist; a trout looks at a fly

A GOOD BANK TO OBSERVE AT LOW WATER, SO AS TO FISH IT RIGHT IN FULL FLOW

and a worm with different sets of eyes, seemingly.

I have merely touched on this phase of the sport to give the beginner an idea thereof. I will now get back to first principles.

Now, let us get right out on some good brook and try to learn about trout, not tackle. You have a good supply of worms, and that is sufficient. Just a few words, though, about "baiting up." I have tried all ways and I have always found that one should never be "scrimpy" in using worms. Be sure that your hook is wholly concealed. Invariably, worms have a tendency when stretched on the hook to work down and leave the top of the hook, joining the snell, bare for a short distance. As a safeguard against this trouble, I always pull my first worm about an inch up on the snell. Then I put on two or three or sometimes four more worms, always making sure that they are well backed up against the first. I leave about a half-inch of "end" dangling from each worm, causing them to look more like the "real article" when they are in water.

You are ready now for a cast. On the average brook it is well to start in with a length of line out that will match the length of your rod. No rule, however, can be laid down, for you may be in a place where, from necessity, you could not use more than half as much, while again you might need twice as much. Naturally, when you get a bite or strike you will want to know just how to operate. Many of the best fishermen invariably give a little twitch by a movement of the wrist, to set the hook in the mouth of the fish. Another method is to "feel" your fish; that is, draw your rod along carefully in the opposite way from which the trout is pulling. By the latter method, if you lose a fish on the first strike you are more likely to get another strike, for he isn't pricked so badly as when the twitching method is used. I prefer the "feeling" method. Here again, a too close adherence to rules is often unwise. For when a fish is hooked it is a strictly personal matter between fish and fisherman as to who will prove victor; all the rules ever concocted may be ignored and yet you may bring to creel a trout with which you have been doing battle. But don't lose all faith in general rules just because you've made a record catch of a big fellow. While all trout are eccentric and fickle, that particular big chap may have been a staunch iconoclast; and because you made his ways your ways—that may be the sole reason you landed him. That is knowledge direct from the master teacher, Experience. Get all you can and keep steeping it up with your mess of rules. That's what old Hi Hingham has always done, and that's why he has the ability to repeat.

Barring the satisfaction of knowing that your hook is well and properly baited, if I were asked to answer quickly what was the most important rule to follow for successful trout fishing, I should answer promptly, "See that the trout don't see you or your shadow." By violations of this rule I am thoroughly convinced that I have lost more trout than in any other way. Seemingly it is a very easy rule to follow, and therein lies the danger. I lay no claim to a knowledge of the construction of the eyes of a trout. But I do know that he is both near-sighted and far-sighted, and that he will catch a glimpse of your shadow just as quickly and accurately as he will of your whole fleshy creation. And if he does—well, let old teacher Experience tell the results. During a cloudy day, you won't have to worry about shadow-casting; on a bright, sunny day you will have to worry if you would catch trout.

Furthermore, you should not be disillusioned by thinking that if a self-respecting trout isn't out in the middle of the stream you are safe from shadow fears. Oh, no, you are far from safe! A crafty old chap may be in hiding a foot or more under an overhanging bank. But because he's obscured he's not asleep; he knows all that's going on right around him and a long way from him. And, I repeat, if he sees you, you're not going to see him on the broiler or the frying-pan. This is almost an invariable rule. Occasionally Mr. Trout may be coaxed and wheedled and tempted beyond his endurance by the charms of a flimsy, fuzzy fly or by the sleek and portly worm that dangles near

him, but, as a rule, if he is thus enticed he's either demented or plain foolish. It's never wise, however, on the part of a fisherman to pose as a committee of investigation on the insanity or the imbecility of a trout.

How well I remember an instance of three years ago which bears out the efficacy of the not-to-be-seen rule. A friend and I were fishing a medium-sized brook. My friend was a long way in the lead. I came to a huge, shelving boulder which formed one of the sides of the brook. And an enticing pool, dark and deep and still, formed itself thereby. Well I recall the assertion of my selfishness by wishing that I rather than my friend might have tested the pool. Common sense dictated that he would not pass by so glamourous a pool without a thorough try. But I didn't have to rely on common sense, for as I scanned the opposite shore I saw in a little stretch of white sand the unmistakable imprints of his boots. I reasoned it was useless to throw in, but the magic charm of the pool drove away reason. Carefully I crept to the rear end of the boulder, from whence my shadow could not protrude, and made a gentle cast. No sooner had the bait struck the water than a fight was on. A plump half-pounder he was, and every inch a fighter. I made him mine. Of the fact that this fish had sighted my friend and had become cautious there was no doubt. Had I come along immediately, I doubt if he would have tested my bait; but a half-hour had elapsed and he thought he'd take a chance.

Here is another phase of the foregoing rule. Oftentimes if you or your shadow has been seen, it is well to leave Mr. Trout for a time, an hour if possible, and then come back to him. To him, absence makes the bait grow fonder, that is, if he hasn't been pricked to the point of torture.

Occasionally, even when one has been hooked, this rule holds. I will cite an exceptional case. I once lost a pound trout just as I was about to take him from the brook. He pulled the knot in the line and disappeared with the hook. The following day I returned to the brook and caught Mr. Trout in a deep pool a few rods from where I had lost him. The hook was deeply imbedded in the roof of his mouth. He had been a wise old chap, but he went insane, I'm inclined to believe.

In the May, 1915, issue of Field and Stream, I emphasized the importance of patience and thoroughness in trout fishing, and I strongly emphasize their importance again. If you don't cultivate these qualities you may as well abandon all hopes of ever becoming an expert. Nothing I can write will so forcibly illustrate the necessity of these qualities as to quote from my article of last spring, as follows: "I am well acquainted with an old and experienced trout fisherman who recently told me of a day's fishing which bears out the foregoing declaration. In company with a friend, he hired the right of fishing the brook for the day. The two started in in the morning and fished until nightfall. They began fishing only a short distance apart, yet they did not see each other again until the wind-up of the day's sport. His friend hustled on ahead and fished all the promising pools, while the other did no skipping, fishing the rapids as well as the pools. When notes were compared, the 'skipper' had six trout in his basket, while the latter had fifty-six. That was before the law of limitation of a day's catch prevailed in Connecticut."

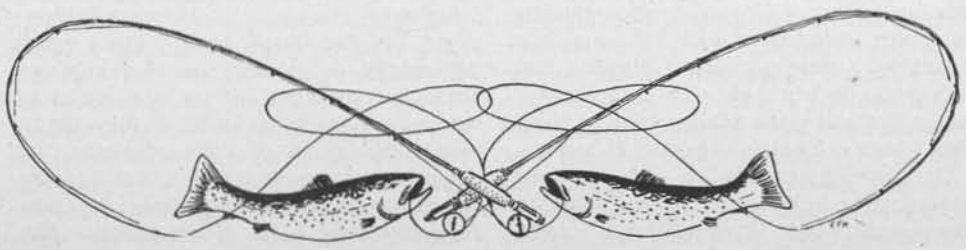
After you have fished considerably, you will unconsciously acquire a sense of intuition which will often guide you aright in telling where a trout is lurking. It is something I cannot explain, but I have had several experienced fishermen say the same. Of course, however, it is the outgrowth of careful observation, primarily. Yet one should not put but a small percentage of reliance on this intuitive sense, for trout are just as unstable as to where they are to be found as they are in every other phase of their existence. In the paragraph quoted, you will notice the old fisherman was not a skipper; he carefully tested all parts of the brook. The reasons why this rule must be followed are many. Conditions of the brook, whether the water is high or low; whether the day is hot and sunny or cloudy and cool; whether there is more natural feed in certain sections of the brook, thereby

causing the trout to be less hungry; whether unskilled fishermen may have disturbed the best places a short time before your visit and driven the fish temporarily to less inviting places—these are but a few of the many reasons why this rule, and this is an inflexible rule, must be followed. Frequently you will strike a large and spirited fish in an extremely shallow riffle. Two seasons ago I caught a half-pounder in such a place; there was barely enough water to cover him. My expectations from the large and deep pools below this riffle were tuned to the highest pitch; yet after fishing them diligently they yielded not a fish to compare with my "riffle" one.

In general, nevertheless, there are certain places which are more promising than others, and one should devote much more time to them. Under banks worn away by the current of the stream; around the roots of trees; under bridges, and especially stone ones; under dams; in small ponds formed by the piling up of débris, and, of course, in all pools. In midsummer fishing, when the water is warm and the sun hot, you will many times find your best trout in the active water at the head of a pool rather than in the pool itself, perchance the latter be of medium depth and not shaded by trees or other shade-giving growths. On the contrary, if the pool is deep and well shaded, there you will get your banner fish. During the early part of the season, I have invariably found the best trout in the shallow pools and in rapids. But again I repeat, fish the whole stream thoroughly unless you are so intimate with it as to know that certain sections are useless, which is sometimes the case. Yet before this decision is formed, repeated useless try-outs should be made.

In conclusion, and as a sort of general summing up, I can think of no more important advice for the beginner than to make a careful study of the various brooks which he has the good fortune to fish. It is an excellent idea when a brook is exceedingly low, often in autumn, to walk along its banks and carefully observe the whole make-up of the stream, its bed and its sides. Find where the water has worn the biggest places in the banks and see how far you can run a stick under the roots of certain trees that overhang the water. It will be a wonderful help to you, for when a brook is high and the water fills these places you will know better how much time to give to each. For a thoroughly educated trout lying among roots or under a bank will use his own good judgment about sampling the lure you so freely proffer him; and the safer his retreat the more time he will consume before entering the danger zone. If trout weren't schooled in caution they wouldn't be so aggravatingly particular about getting so well concealed. So always spend plenty of time at these places.

Your reason for studying your brook is to catch trout, and the study of the one brings a knowledge of the other. Diligence therein will bring you what old Hi Hingham has—the ability to repeat in your catches, as differentiated from little Simpkins' "luck."



"THE MEDICINE MAN IN THE WOODS," BY WARREN H. MILLER, COMING IN APRIL, IS FULL OF GOOD INFORMATION ABOUT MEDICINE KITS AND HOW TO USE THEM, WOODS SURGERY, FOREST HERBS, ETC. THAT EVERY FISHERMAN AND CAMPER SHOULD KNOW. GET POSTED.

"WE COLLECTED THE BIRDS AND LAY BACK TO WAIT"

A DAY WITH THE DUCKS AT BARNEGAT

By VAN CAMPEN HEILNER

DEAR VAN:

The ducks are trading in the cove to beat the band. Killed some fine red-heads yesterday. Advise you to come down.

Sincerely, LESTER.

THAT settled it. It was Christmas Day when the above arrived. All thoughts of Christmas flew out of my head. Guns were overhauled and oiled, coats were dragged out of moth balls, and pockets were filled with shells of favorite loads. Even the Christmas turkey himself seemed to me a fat-roasted red-head, and the toots of the kiddies' horns sounded like the quack of the black ducks in the marsh.

Christmas night blew up a storm, and when we woke on the morrow it was to look upon a blizzard. This stopped by noon, and having finally gotten together our guns and paraphernalia we started.

Billy drove the car, and Ben sat with me. The roads were full of snow, which made the going rather bad. Twice we were stuck, the second time this side of Lakewood, where we hired someone to dig us out.

At last, about dusk, we reached our destination, and rolled into the yard, where we were met by Arch, who came out to open the barn door for us.

"Lester's gone up to Toms River, but he'll be back shortly," he informed us, and sure enough that worthy soon made his appearance, and we all went in to supper.

Believe me, it was *some* supper, too, I can tell you. Hot spare ribs and sweet potatoes, cranberries, and other stuffings. No dinner at Delmonico's ever tasted better than did that one.

"To-morrow ought to be a good day," said Lester, glancing out the window. "The wind is southwest, and as the ice is all broke out of the cove, they ought to be feeding up there." We all agreed to this, and after a smoke went up to bed.

From the moment my head touched the pillow I became lost in oblivion. My bed was made of wild goose feathers; one of those "sinky" ones, that closes over the top of you as soon as you lie in it. I sank into the land of nod, to dream of legions of ducks, flying ever on and on. Only once I awoke, and then to look out across

ALL STOOLS OUT AND OUR BLIND READY FOR BUSINESS

the still moonlit marshes, and to hear the faint "honk, honk" which had aroused me dying away in the distance.

Lester woke us shortly before dawn. It was still dark, a winter moon hanging in the sky. After a hasty breakfast of steaming hot cakes and coffee we started for the bar.

For half an hour or so we plugged along over the marshes towards the bay. It had grown lighter by this time, and a few faint streaks in the east signified that Old Sol was not far off. The ice crunched and crackled under our feet, and an occasional meadow lark, startled by our approach, flitted away into the reeds.

At last we reached Out Point. Lester and Ben put out the stools, while Billy and I fixed the blind. We had barely got the stools out and settled down in the blind when things began to happen.

"Holy Smoke! look off there towards Lavallette, will you?" ejaculated Billy. I looked, and saw a small cloud that first grew and diminished, and finally lengthened out into a big flock of red heads.

"Get down, they're coming this way." And down we got, while Lester, who is an adept, began that peculiar whistling sound of the red head, to attract their attention.

At first we thought they were going up the cove, but they saw the decoys and turned, a cloud of gleaming white.

"Don't fire until I give the signal," whispered Lester. The ducks had come up into the wind, and with set wings were about to light in the decoys. "Now!" he yelled, and with one accord we rose up and sent a leaden hail tearing into their ranks.

The flock jumped up and we gave them another. "Four dead ones and three cripples; not so bad; eh?" said Lester. Billy and I went out for the dead birds, while Ben accounted for the cripples.

A yell from Lester interrupted our operations, and, looking off to the right, we saw another flock coming right towards us. We got down in the bottom of the boat, but they saw us and went up into the air. They wanted to come badly, for they turned and circled back, but the boat frightened them, and they veered off and kept on up in the cove.

We collected the birds and lay back to wait. For an hour or so nothing happened. Then a couple of broadbills came into the stools, and Ben made a pretty double.

A flock of about fifty crow-ducks could be seen on the outer edge of the ice, and as a bad corner prevented them from

GATHERING IN A NICE REDHEAD

coming within range, Billy went out and cut the piece loose, incidentally bringing down two fat ones.

Two flocks of red-heads then came in, one after another, leaving four victims behind them, and shortly after this I added a black duck to the list.

In the midst of lunch more red-heads were sighted, coming down the bay, and our thermoses were overturned in our scramble to get down in the blind.

"By golly, they're coming right in! Van, you take the lead. Billy, you and Ben take the middle, and I'll take the end. Well, what do you know about that for luck? (as the ducks swerved off.) Doesn't that beat all?"

A few moments later the guns from Tilton's Point announced that they'd "got into 'em."

"Oh, well," mused Billy, "we can't expect to get them all."

After two hours of waiting, without a sign of a bird, Billy and I decided to go out after crow-ducks, as we could see them congregating on the far shore. So we accordingly pushed the boat through the ice into open water, and drifted down wind upon our prey.

"For the love of Mike, look there, will you?" cried Billy. I *was* looking, and with both my two eyes at that. The water two hundred yards ahead of us was literally black with crow-ducks!

I crouched down in the bow, while Billy sculled the boat forward. Suddenly they saw us and got up. All the crow-ducks in the world were flying at us. The sky and sea were full of them. It reminded me of the picture in the "Did It Ever Happen To You" department of FIELD AND STREAM. I didn't know which way to shoot first. It reminded me of a battle; Billy and I loading and firing as fast as we could. When the smoke of carnage cleared away fifteen crow-ducks marked the scene of the fray. Gathering up our booty, we returned to the point, where we found two more red-heads awaiting us.

But the crowning success of all came just about sundown, when three mallards came into the stools, and Lester, with a well-directed shot, knocked a beautiful bird down, over and over into the midst of the decoys.

It was with contented hearts and visions of roast duck that we trudged back over the lonely stretches of marsh. The best way to describe it that I know of is by an expression of Billy's, "There's nothing else like it, is there?"

A MANITOBA MONARCH

MOOSE HUNTING IN MANITOBA

By J. MOORHOUSE

HAVING had considerable experience in hunting the monarchs of the forest, I was approached by some of my friends to organize a party to go out this season for a moose hunt. After considering the matter for a few days, and ascertaining from an old friend of mine (Dead Shot Bert) that his services could be obtained to act as cook and guide, I gave my consent.

The place I chose for the trip was a wild mountainous part of northern Manitoba which gave the hunters a variety of country to shoot over that was hard to beat.

The party consisted of six hunters, also myself, cookee, and guide.

As all the party could not leave Winnipeg the first of the open season, I decided to go up myself, accompanied by "Prince Rupert," so on the morning of November 30th we departed from the railway depot bound for Dead Shot Bert's home town of Bronson. We arrived there late in the evening and were met by my old pal, who informed us that the woods were full of moose and that the sleigh would be ready at 7.30 a. m. to take us to camp. The morning of December 1st turned out fine, and after a substantial breakfast we got our traps from the station and loaded up the sleigh for the camp.

The writer having shot over the same country before was on the lookout for moose up along Dead Fall Valley, and we had only proceeded about half the distance along this celebrated shooting spot when we saw a number feeding on the scrub down in the lowest part of the valley. We were not long opening up, although they were a long distance away (about 400 yards), but Prince Rupert managed to secure one with a spread of 48 inches. My, but he was a tickled boy! as this was his first moose hunt, and to think he secured one before we reached camp was luck indeed. We arrived in camp about 12.30 p. m., and Rummy Fred had a steaming hot dinner waiting for us. After dinner, and for the next two days, we pros-

pected around the valleys and mountains so that we would know where to guide the rest of the party on their arrival.

Friday morning we decided to walk to town and meet the boys who were to arrive that evening. While walking in we saw eight moose, and so informed the new arrivals, and they were so excited that they wanted to walk back to camp that night, about ten miles, so under these conditions there was no sleep for anyone, and the breakfast call was a very welcome sound.

After satisfying the inner man we collected the dunnage and had the sleigh loaded and everybody secured a seat on top, as he thought it would give him the best lookout in case we came on to some game. We had only proceeded about a quarter of a mile from town when we saw a calf moose feeding about fifty yards from the road, but as we could not shoot calves we proceeded on our way. We arrived at camp about 12 noon and everybody was eager for lunch. Nobody secured a shot that afternoon, but various moose had been seen, some at long range and others which would have made good shots, but proved to be cows.

Monday morning the writer and Windy Buck decided to hunt together, leaving the others to pair off to suit themselves, but we all went out to the crossroads together. While debating on the routes we would take, a fine bull moose viewed us from the top of a very large hill about 800 yards away; we gave him a morning salute and then separated, Windy Buck and the writer going over the hill where the bull moose had been; before we reached the hill, however, a fine buck black tail deer was started; we both opened up, but as the scrub was so thick we did not make a hit. The deer made for the hill, but before he reached half way up the writer planted a .280 Ross bullet in the back of his head. I might say right here, that in all my experience it was the finest shot I had ever made, and I feel very proud of it, as these animals are very scarce. Incidentally this is how I derived my name of "Black Tail Jack." That evening, on summing up the days adventures, Thermo Alfred, who accompanied Moose Lick Charlie, had secured a fine bull moose; Judge Harry and Auto David saw two bulls and a cow, but could not get a good shot, so returned empty-handed.

Tuesday we rearranged partners, Windy Buck took Auto David and I took Judge Harry, and we two tramped around all day, but saw nothing except some fresh

MY BLACKTAIL BUCK

"PRINCE RUPERT" AND HIS FINE BULL MOOSE

tracks. Windy Buck had much better luck, as they secured two fine bull moose; unfortunately one had lost its horns.

Wednesday, Judge Harry and the writer decided to hunt in the western end of Dead Fall Valley, and directed our steps in that direction as soon as it was light enough to see the sights on our rifles. Upon reaching the valley we sighted a cow moose feeding about 100 yards off; we kept perfectly still, and in a few minutes out walked a fine bull moose. I motioned to the judge that now was his time, and he opened up with his .38-55 Savage, and the way he peppered that bull was not slow. He ran into the scrub about 500 yards off, and as he did not show upon the other side, we concluded he was badly wounded. I advised the Judge to wait so as to give the moose time to stiffen up a bit, so we got out our pipes and had a quiet smoke for half an hour; we then proceeded to locate our moose and finish him, which we did, and had him dressed by noon, then returned to camp.

Thursday morning, as we were going out to the crossroads, Moose Lick Charlie spied a big bull on the top of old bald face hill about 300 yards distant, and opened up with his .30 U. S.; the first shot dropped him where he stood; we all went over and helped to dress him, and then returned to camp.

As we had now all filled our licenses, we proceeded to cut roads so that the teams could drive in to draw the game out to town.

Friday morning I left camp at 4 a. m. to get the team to draw in the game. I arrived in town at 7 a. m., had breakfast, and hired three teams, and by evening all the game was loaded in a freight car billed for Winnipeg. We arrived home Saturday at 3.15 p. m., a tired but well satisfied bunch of hunters, and concluded one of the most successful hunts and enjoyable trips any of us ever had.

A FINE MOUNTAIN SHEEP TALE IN A NEW COUNTRY IS "THE BIGHORN OF DEER CREEK MOUNTAIN," BY OTTO VAN NORDEN, COMING IN APRIL. EVERY HUNTER WILL WANT TO READ IT.

A SALMON OF OLD SEBAGO

By ASHLEY A. SMYTHE

Winner Fourth Prize Landlocked Salmon 1915 Contest.

WITH my wife and little boy and Dr. Gale, a friend of mine, I was spending the month of July at Sebago Lake, Maine. The fishing during the first week we were at camp was small and not much to brag about. Late one afternoon when, just before sundown, the lake had calmed to a regular salmon ripple, after having been actually boiling all day, the doctor and I started out, declaring that if we could strike a good salmon before it was dark it would help some towards making up for the time we had lost all day hanging around for just such a time as we dared to venture out on the lake.

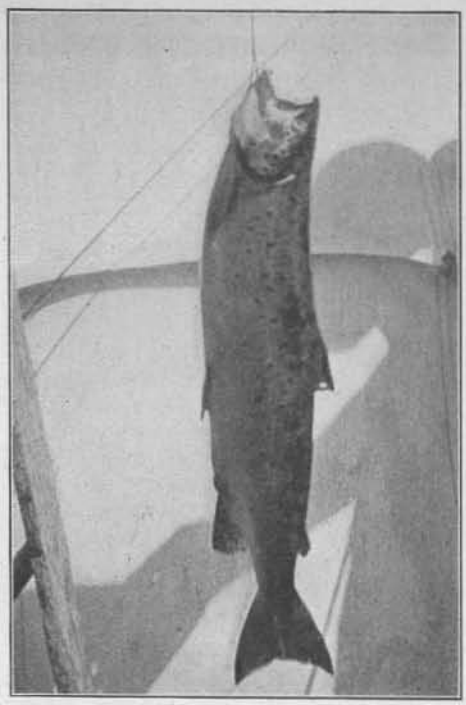
ASHLEY A. SMYTHE AND THE WINNER

We struck straight out from our beach and when about two miles out started down the lake towards the lake station. I was rowing and the doctor took a great interest in attaching the bait which consisted of a shiner tied to a long pickerel hook. I rowed quite a ways in this direction, and as it was just beginning to darken a little I suggested that we turn back, as we hadn't struck anything so far in that direction, and we didn't want to be too far away from camp when darkness set in, so the doctor said he would row going back. We changed places, and, just for luck, after I had taken the rod I let out quite a few more feet of line and said, "There, Doc, I guess that ought to fetch him" and settled back for a long row home.

It was most dark by now and I had almost forgotten I had the rod in my hands, being really more interested in the fact that we would soon be back at camp, when I thought I felt a little pull away back on my line somewheres, and before I could really mention the fact out loud or change my position so as to be more ready for such a happening, my reel began singing and out past my guiding finger started rushing the line, and by that time I sure was wide awake and had taken a better grip on my good old Sampson rod and said: "Ah! Doc, at last that sounds like a regular salmon strike!"

By now, Mr. Salmon had stopped his first mad rush and I started to reel in and he came pretty easily for quite a time, and the doctor was all excited and said: "Ashley, do you really suppose it *is* a salmon?"

Before I could answer we both had a chance to see for ourselves as the fish broke water, and while doing so he certainly jumped clean out of the water two



11½ LBS. OF PRIZE-FIGHTING OUANANICHE

and a half feet. It was just seven-thirty then, and almost dark, yet we could see his silvery sides glisten as he came out of the water, and the doctor, after taking one look at me, still very busy reeling in on that line which by now wasn't coming in so easily, said "Be careful, old man, he's a big one!"

I said: "Yes! get the net ready, I'll have him up to the boat in a minute," and so in a few more reels he came up splashing within a few feet of the boat, and stopped for a minute as though resting, and the doctor with an oar swung the boat around a little so as to get nearer to him with the net, but, oh, no, Mr. Salmon hadn't really begun his fight!

As with a leap clean out of the water, the spray of which wet the doctor a little, off he started, I had to give him the line and at this rush he took out at least forty feet of it. I thought he was never going to stop; at last he did, and I began my tedious duty of reeling him again. By now it was pitch dark and raining quite a little and this of course didn't lend any more comfort to our excitement.

Well, so it went for the next hour; I would laboriously reel that salmon almost into the boat only to have him rush away again; but at nine p. m. I at last reeled him in close and could see he was all tired out and was lying upon the surface on his side and then with a quick steady motion the doctor put the net under him and hauled him into the boat. I fished him out of the net and was so tired and happy at my prize, that I sat on him holding down the few last kicks he tried to make.

The doctor then rowed quickly for our camp and we were greeted by quite a number of fellow campers, and by lantern light we found he weighed eleven and one-half pounds and measured thirty-one inches; quite some fish.

All the next day as he lay in our ice-box, which was sunk in the ground near our tents, he was on exhibition and commented on by a large number of campers as being the largest fish they had seen this season.

PRIZE CONTEST CERTIFICATE
RECORD 1915 CONTEST
Fourth Prize, Landlocked Salmon

Weight—11½ lbs.
Length—31 in.
Girth—17 in.
Caught—July 16.
Where caught—Sebago Lake, Me.
Rod—Sampson.
Reel—Vom Hofe.
Line—Kingfisher.
Lure—Shiner.

THE ESQUIMAUX TENT, AUTHOR IN WINTER CRUISING RIG

THE ESQUIMAUX TENT

Something New in a Winter Tent for Sportsmen

By WARREN H. MILLER

I DO love to prowl around natural-history museums! Some of my earliest childhood recollections cluster around an enchanted afternoon when I was hustled through the delectable confines of the Philadelphia Museum by an unsympathetic parent. Here were all my embryo collections, magnified to the *n*th power—and *such* specimens!—with corkscrew neck I was dragged through those wonderful halls, and was only torn by force from final contemplation of a cave completely filled with amethyst crystals at the very gates of the institution! The desire to prowl amid the collected wonders of nature has never left me. If I were to add up the hours spent in the American Natural History Museum in New York, the Smithsonian in Washington, the Jardin des Plantes Museums in Paris, to say nothing of similar institutions in London, Berlin, Boston, Brooklyn and Philadelphia —I'll warrant that they would make up a pretty lifetime for a setter dog!

The department of ethnology interests me quite as much as any other, more so, in fact, for here the ways, customs, weapons and utensils of primitive man are set forth, and much of it is directly applicable to our own life in the wilderness when on the far trail. The primitive races were all hunters and fishermen, practicing agriculture in a very limited fashion, and storing up most of their sustenance from what grew or ran wild in the forest. Of all the savage races of the world, our own Indian was the most highly civilized, had the highest ideals, was the freest from idolatry, and lived the most logical life for his country. You have only to see him compared to other primitive peoples, as is done in the Paris and Dresden collections, to realize how very superior he was to the bestial and

of the tent rope came on the rear brace. The Esquimos avoided it by substituting a pole, or two of them, for the ridge rope and carrying the end of this pole in a pair of shears. However, for campers' use this would get into the region of too many poles at once, and so I sidestepped them all by using just one pole, a single stout upright eight feet long coming up through the center of the teepee. To set up you first drove the four teepee pegs in a true six-foot square and tied the four corners of the teepee to them. Next you cut four small sticks, two feet long, and tied them into a 16-inch square by the ties at the open square peak of the teepee. To these a double bridle was attached and then the eight-foot center pole was cut and slipped in through the hole in the top of the teepee. Next it was stood upright and the tie string at its top slipped under the double bridle. Hauling taut on this, up came the teepee all square, flat and true, and you could draw it as tight as you pleased—some tight in a heavy wind!—and make fast.

The time to do this, plus driving the central side stakes of the teepee bottom, took in all about half an hour—twenty minutes on a sand beach where stakes were plentiful and cheap. Then the tent rope was attached to the teepee pole and the tail of it led down and belayed fast on the rear central teepee peg. The tent was then slipped over this ridge rope and the latter led out over a pair of shears and belayed to a peg in the ground. The tent was then pegged out taut and the job was done; time, not over three-quarters of an hour for the whole operation. Entrance to both tent and teepee was via the flap of one side, which was left open on the leeward side, and the tie-tapes of teepee edge and tent wall made fast on the windward side. The two teepee flaps on the windward side at the peak were then tied up to the pole top, and the tent was ready for occupancy.

I first set it up this way in the woods of Interlaken, for I was wildly curious to know how a tent stove would operate in the teepee. My own tent stove has been illustrated before in Field and Stream. It weighs two and one-fourth pounds and is a mere shell of 28-gauge iron, bent around the two cooking pots of the forester cook-kit side by side, and provided with a top with two stove holes cut in it for the two pots, a detachable stovepipe which goes at one end and a draft-door at the other. As this pipe is included in the weight of the stove, it is shorter than the usual pipe, being only three feet high when extended. How would it work in the teepee? I knew that an open fire would get along all right, though much afraid of sparks on that processed cloth; but with the stovepipe raising the heat outlet up into the peak of the teepee, would it set it afire or get it too warm or discharge sparks on it, or what? The answer came as an agreeable surprise. I set up the stove with the pipe running up alongside the central pole and a bucket of water handy for emergencies, put on a pot and a pot-cover over the holes and set a fire opposite the draft-door. Smoke, as usual, poured out of the chimney in a heavy column, as always when starting up a tent stove, but the teepee itself acted like a splendid chimney, catching the smoke up in the peak and whirling it outside on somewhat the principle of an ejector. The only thing you had to guard against was getting too much kindling in the stove, so that more smoke was made than the chimney could handle; in which case, like all tent stoves, a lot of smoke would work out around the lids and the pots, filling the tent with smoke. But everyone who has handled a tent stove knows enough not to crowd the thing at first and to go light with fuel until he has a bed of coals established. It is the only way to avoid smoke.

You will be astonished at the amount of cooking that one of these stoves will do on a minimum of fuel. Compare it with the armful of good blackjack oak that you used in the open grid fire in cooking the same meal, and then note how a very few chips suffice to keep pots boiling and the frying-pan sizzling with the tent stove. As I look back over my writings on camping I feel that I have said not half enough on this subject; have not half appreciated my own stove, in fact, to say nothing of the many other

good ones made by the various outfitting firms.

Well, it was not long before the pot was bubbling, and I got on a fry-pan filled with water, as I was doing no cooking for this first trial in the teepee. This also soon began to bubble and boil over, and I looked inside the stove to see how things were getting on. A small bed of glowing coals under those pots and pans and a few brown chips were what were doing all this work. I put my hand over the top of the pipe; no great heat there; too warm, of course, to hold it there an instant. I felt of the walls of the teepee up in the peak; they were just comfortably hand warm—nothing to worry about there. Then I poked the fire to get some sparks. Quite a few shot out of the pipe and vanished up the teepee peak in the draft; they were all of the perishing kind. I decided to add a regular spark-arrester so as to catch the kind that do business, as it would add but little to the weight of the stove and would make sure on live-coal sparks.

There was plenty of room in the teepee tent. It will sleep six at a pinch; it did sleep five the first time it was used. It seemed to me pretty near ideal for winter camping in snowy and blizzardy weather, a tent that weighs six pounds to sleep five men, provide a comfortable cooking and eating space inside, a warm stove all night, and yet leave me half of the tent for use in fall and spring as a canoe cruising and hiking tent.

As sand is very like petrified snow in the way it drifts and acts, it seemed to me that we had here just the combination for comfortable sand camping. It has long been a problem to find just the tent for the Barnegat beaches. All the open tents were impossible, because they offered so much space to be protected from mosquitoes; the closed tents were still worse, because they were hot as Tophet in the daytime and they filled up full of stinging beach-flies if you opened them, and at night the mosquitoes were sure to find a crack from which your breath was escaping and follow it in, to your undoing. Any open leanto had the disadvantage that it protected you not at all from blowing and drifting sand, and out of many camps at Barnegat I have had few really comfortable ones, while my companions usually dig out for the shelter of the Life-Saving Station after the first tilt with the mosquitoes.

The teepee tent looked as if it had possibilities, and so we took it down for the first Barnegat camp in July. Arrived on the beach after a six-mile row down the bay, we found a gale of wind in progress, as usual; the sand drifting and blowing all over everything and the wind hurling everything bodily into the ocean not actualy nailed fast. The teepee tent went up in record time, principally because most of it was pegged fast before any of it was raised up to the fury of the wind. When the pole was finally raised we put one over on Old Man Wind, for before he knew it a taut straight pyramid of light green tenting was facing him on the open beach. At that we had to put such a strain on the bridles that I feared the wind would rip the light muslin to ribbons, but it did not, even though it blew much worse the next day.

Getting the A-tent up was not so easy. The minute it was led out on its ridge rope it flapped wildly and took the united efforts of two men and a boy to get its windward slope pegged fast. However, it was done in time, and the three kids were sent to the bay for dry seagrass for bedding while I foraged for a piece of tin for a stove-bottom, as sand makes poor stuff to set a stove on. I broke off and straightened out a piece of refrigerator door for the purpose while partner was getting ready the fishing-tackle, set up the stove and laid a floor of driftwood boards all around the leeward side of the teepee tent to keep down the sand tracked into the tent. Then I made a cupboard out of drift boxes, set out the cook-kit and provisions and, when the kids arrived with the floor tarp filled with seagrass, I laid it out over the floor of the tent and along one side and foot of the teepee. Then down went the three sleeping-bags for the kids in the tent, while partner and I had ours in the teepee, and then we all went fishing in the surf. In an hour it was time for me to get after grub. Our fishing-hole was full of flounders and the kids were yanking them

MULLIGAN AND RICE POTS BOILING

Asst. Ed. of FIELD & STREAM is trying to throw sand in the soup.

out as fast as they could strike and reel, while the Littlest Boy amused himself by climbing to the top of the tallest dune and shooting down a sand slide on its face to the beach, twenty-five feet below. Great sport for a five-year-old!

Cooking in the teepee in that gale was not all beer and skittles. The little old stove rambled right along with the boiling and stewing, but every now and then a gust would drive clear over the flaps, curl the column of smoke back on itself and puff it back into the teepee. A taller smoke pipe would have avoided this; it would not matter in winter camping, for you would naturally pitch the outfit in the shelter of a clump of spruces or a ravine so as to get out of the cold wind, and nothing but a squally gale would annoy you by driving the smoke back down through the teepee. I moved the kitchen out in the lee of the teepee and there had much more comfort. All you had to do was to prepare the mulligan in one pot, the rice in the other, heave in a few chips on the bed of live coals, and go fishing. Half an hour later I would come back to give her a look and everything would be bubbling nicely and a few more chips would be needed. Compare this with an open fire under a wire grate in a gale of wind—how long would the fuel last, how long would you dare leave it, and what sort of cooking would you get? I once left just such an open fire, only long enough to splice a broken tip for the Kid—to find my precious cake scorched to a cinder on my return, the coffee boiled down to lye and the fire burnt out. Not so with the stove!

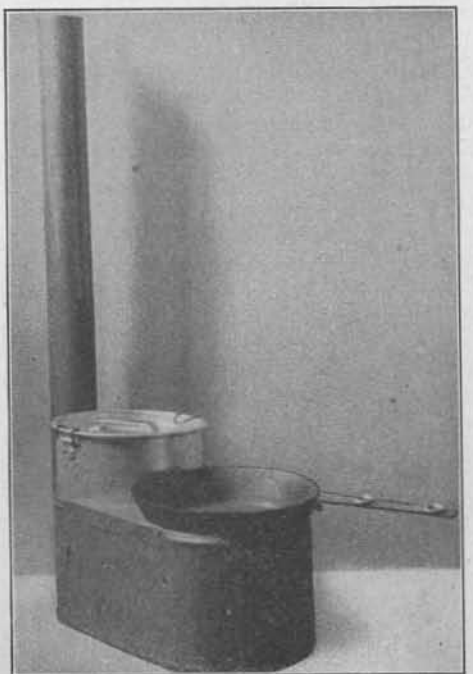
That night we tied up the flaps and, after fishing until twelve o'clock, turned in, only to find the tent full of mosquitoes and the kids restlessly turning in their sleep. How did they get in? For the flap had been carefully closed and the mosquito-blind was tight. P-s-s-t!—the teepee top, of course! Those devils had managed to light on that top in a gale of wind and follow down the outgoing draft of air, with its human scent, until they found the nice, fat pickings inside. We organized a war by carbide lamp, drove every last one of them out and swathed the teepee top in mosquito gauze. Then sleep for all! We camped there four days and had no trouble with mosquitoes, though some friends of ours, camping in a closed canoe tent, were routed and retired to the life-saving station, and we voted the teepee tent a good one for sand camping, though I have since gotten up and tried out a better one.

The next trip of the teepee tent was up to the Y. M. C. A. encampment in the Catskills, where the Honor Lodge begged for the privilege of sleeping in it (how enthusiastic boys are about anything that has to do with the great outdoors!) and six of them were accorded permission to do so. Anywhere you can find a level spot 6x12 feet in area will answer to set this tent upon if well drained, but when I set it up I removed no rocks nor put down any browse, as I slept that night in the original Old Warrior forester tent. However, those boys turned in on the rocks and went off to sleep like stones—I wish I had that hardihood!

All through the fall the "Perfect" shelter tent was used, but when the snows began to fly the first camp in the teepee tent

was undertaken. Two of us went on a showshoe hike in the mountains to see what we could see—mostly tracks. I carried my caribou-skin packsack sleeping-bag, the teepee half of the outfit, the tent stove and cook-kit, a 1-pound 6x6-foot floor tarp, night socks, mocs, skull-cap, carbide lamp, five pounds of provisions (much of it in the cook-kit), axe and ditty-bag. Partner had the tent half of the teepee tent, ten pounds of provisions, his sleeping-bag and personal duffle. Both packs weighed about the same—27 pounds—and we had our snowshoes slung on our backs when we started out. No firearms other than our revolvers were taken, the latter for practice and a chance at small game principally. When we arrived at the jumping-off spot there was over a foot of snow in the mountains and so we put on the shoes, just for practice, and hit the trail up an old lumber road. I got a crack at a rabbit scurrying off through a snowy thicket, but could not draw quick enough, and partner dropped a hawk which he wanted for a trophy. We did about eight miles, with the keen northwest wind whistling through the forest and the warm sun feeling good at every south bend where the wind was shunted off above us. In midafternoon we picked out a nice camp site, a ledge on the mountain facing south, with the brook down, maybe, a hundred feet below in the ravine, and set up the teepee tent. All its north wall was tied fast against the wind and snow was banked up a foot along the bottom. The tent end was floored with browse picked from some limbs lopped off a bushy white pine growing near our site, the snow having been first shoveled off the whole site with our shoes. Next I rustled two flat rocks for a stove bottom and set up the little major in his accustomed place, with the pipe running up alongside the pole about four inches away from it. Two snowshoes were cleaned of packed snow and set up for a shelf in one end of the teepee, and on them were set out the kit and provision bags, while partner hiked down to the brook for a canvas bucket of water. I got a tiny fire going in front of the draft-door of the stove, with the front lid off so that the flames could rise right up. A pot was set in the rear hole, half filled with water, and, while my front fire was establishing coals, I pared potatoes and onions for the mulligan, chopped in some cubes of steak, added a handful of rice and a dab or two of macaroni and then pushed back the first coals under the pot, adding more fuel to the fire in front. So started it will not fill the teepee with smoke, for the chimney will carry off all that is made. A second pot was prepared with water, sugar and mixed prunes, apricots and peaches, a few short, chunky sticks of hardwood were put in the stove and then both of us, feeling the warming-up effect of the stove in the tent, threw off our mackinaws and attended to one of the finest jobs of the day—taking off our freezing wet hunting-boots and changing to warm, dry socks in the grateful warmth of the stove. The wet ones were strung on the rear guy-rope of the A-tent, which goes down from the teepee pole to the rear center side peg, and we put on low mocs forthwith.

The day's work outside was done. My camp mocs for snow weather are "moose-hide"; that is, not buckskin which gets



A 2¼-POUND TWO-HOLE TENT STOVE

wet if you walk out in the snow, but heavy oiled leather. Then the harsh red sunset in the west warned us that it was time to fill the carbides, lash one to the teepee pole and mount the other on a stake driven in in the rear triangle of the tent. Partner busied himself with this and then with pegging down the floor tarp and rolling out his sleeping-bag, while I mixed my cornbread batter and poured enough for two into an aluminum baking-pan which I always carry for small parties. Raking out some coals through the draft-door I put them on top of the pan-cover with the cooking-gloves, took off the forward pot, raked back some more coals and covered them with fresh sticks. On these inside the stove went the pan, with its cargo of hot coals on top and the whole covered with a fry-pan doing duty as a stove-lid. Into this pan went a nice steak for two and, with it covered with a tin plate, I cleaned out the batter-mixing pan and poured the fruit stew off into it. Two cups of water next went into the former stewpot, and it was high time to go digging for my cake pan, for one must watch it to see that it doesn't burn. A peek inside showed the cake fully risen, so the pan was fished out and put on top of the stove, where it could get plenty of baking heat, but would not likely burn. A few more coals transferred to the top, and some undivided attention to the precious cake for five minutes more ended with a perfect golden specimen, ready to be set leaning against the stove to keep warm—still in its pan. I took pleasure in describing that little baking-pan in "With Knapsack and Rifle," for it is sure a wonderful discovery.

Back went the steak for a finishing; a smell of the mulligan, and in a few minutes more the steak was set aside, while a pot went on in its place to boil up for tea. Last ceremony: Already the mulligan is being poured out into two waiting tins, the steak is finishing on the rear hole; butter, cow-can and sugar-bag are produced, and the cake is tipped out of its pan smoking hot and divided between partner and I. Good with butter and mulligan. Now the tea is set off and steeped; a potful of water for washing up goes on in its place, and we divide the steak, more cornbread, and two big cups of bully old tea are poured, "cowed" and sugared to taste. Then the stewed fruit; the pipes are lit; the stove fed some more hardwood, and we wash up and put away the kitchen in the rear of the teepee.

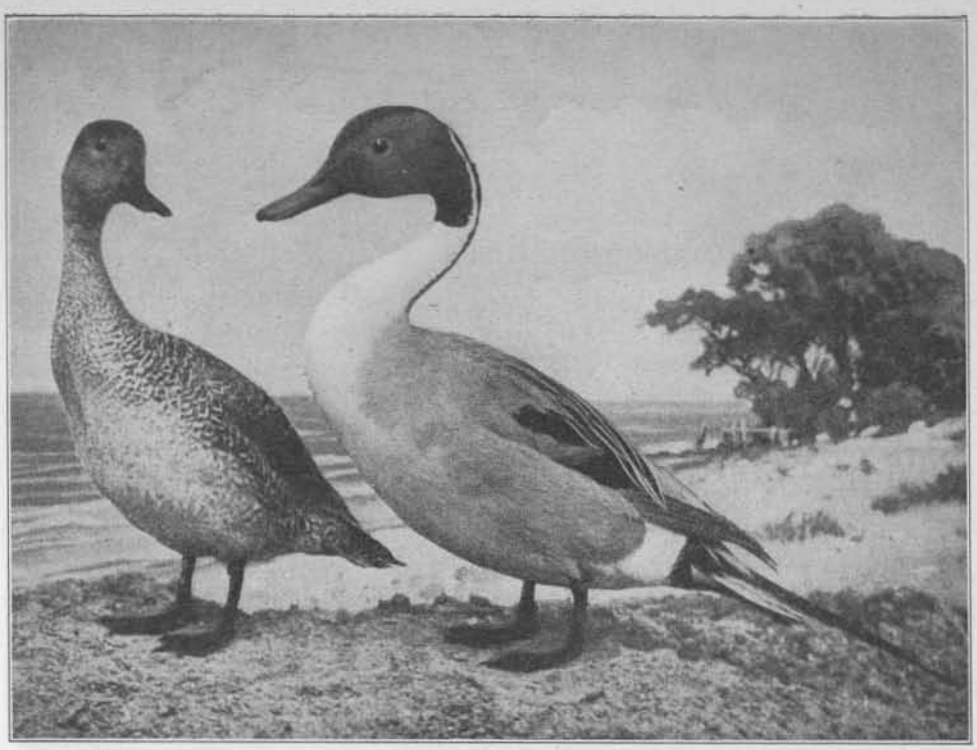
It was snowing again outside, and dark, pitch dark, by this time, and the wind was howling over the mountain, but we were warm, light and comfortable inside the teepee tent.

Keep trash wood out of the stove; it does not pay, and you are forever feeding it. Oak, maple, blackjack, birch, pignut hickory, these are not only very much hotter but last infinitely longer. I spent some time lacing up my sleeping-bag and then went out and prepared night billets for the stove. Two logs of oak, four inches thick by a foot long, are the medicine.

During the evening of story-telling and smoking we fed her fresh small sticks of one and two inches diameter at intervals until we had a deep bed of coals, with the draft-door almost closed. Then, after the carbides began to dim and give hints that bedtime was at hand, I put on these two billets, put on the lid-covers and turned in. I do not know when they burnt out, maybe three hours later. The process is a charcoalizing one; slow combustion, with no flame and no smoke; you will see it in your own hearth fire happening to the last log left in the ashes over a bed of coals.

Next morning bacon, eggs, coffee, cereal and cold fruit from last night, and then a fine day of tracking and exploring in the snow. The teepee tent had made good as a winter camp outfit. Anyone can make one; no one has any patent on it, for the Esquimaux invented it long before they saw the first white man.

"BE IN THE PICTURE," BY W. J. WHITING, IS THE FIRST OF OUR CAMERA ARTICLES THIS YEAR. GOOD PRACTICAL DIRECTIONS ON HOW TO RIG SO AS TO INCLUDE YOURSELF IN THAT BIG GAME PICTURE OR CAMPING SCENE!



PINTAIL (*Dafila acuta*)

OUR AMERICAN GAME BIRDS, III—PINTAIL

Reprinted from the Nature Library.

Called also Sprigtail; Winter Duck

Length—Male, 25 to 30 inches, according to development of tail. Female, 22 inches.

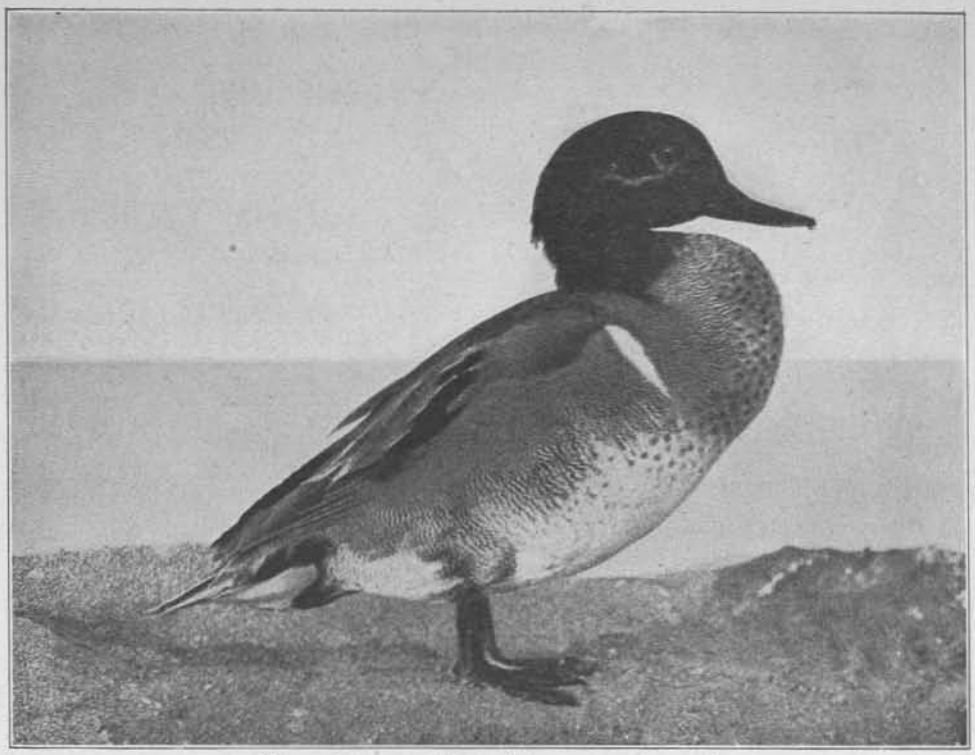
Male—Head and throat rich olive brown, glossed with green and purple; blackish on back of neck; two white lines, beginning at the crown, border the blackish space, and become lost in the white of the breast and under parts. Underneath faintly, the sides more strongly, and the back heavily marked with waving black lines; back darkest; shoulders black; wing coverts brownish gray, the greater ones tipped with reddish brown; speculum or wing patch purplish green; central tail feathers very long and greenish black. Bill and feet slate colored.

Female—Tail shorter, but with central feathers sharply pointed. Upper parts mottled gray and yellowish and dark brown; breast pale yellow brown freckled with dusky; whitish beneath, the sides marked with black and white; only traces of the speculum in green spots on brown area of wing; tail with oblique bars. In nesting plumage the drake resembles the female except that his wing markings remain unchanged.

Range—North America at large, nesting north of Illinois to the Arctic Ocean; winters from central part of the United States southward to Panama and West Indies.

Season—Chiefly a spring and autumn migrant, or more rarely a winter visitor, in the northern part of the United States; a winter resident in the South.

Field Marks—Long middle tail feathers, pure white front neck and under parts, and dark head distinguish the male in spring. Long slender neck, small head and bill, and pointed tail distinguish the species.



GREEN-WINGED TEAL (*Anas carolinensis*)

OUR AMERICAN GAME BIRDS, IV—TEAL

Reprinted from the Nature Library.

Length—14 inches. One of the smallest ducks.

Male—Head and neck rich chestnut, with a broad band of glossy green running from eyes to nape of neck; chin black; breast light pinkish brown, spotted with black; upper back and sides finely marked with waving black and white lines; lower back dark grayish brown, underneath white. A white crescent in front of the bend of the wing; wings dull gray, tipped with buff and with patch or speculum half purplish black and half rich green. Head slightly subcrested. Bill black. Feet bluish gray.

Female—Less green on wings; no crest; throat white; head and neck streaked with light reddish brown on dark-brown ground; mottled brownish and buff above; lower parts whitish, changing to buff on breast and lower neck, which are clouded with dusky spots.

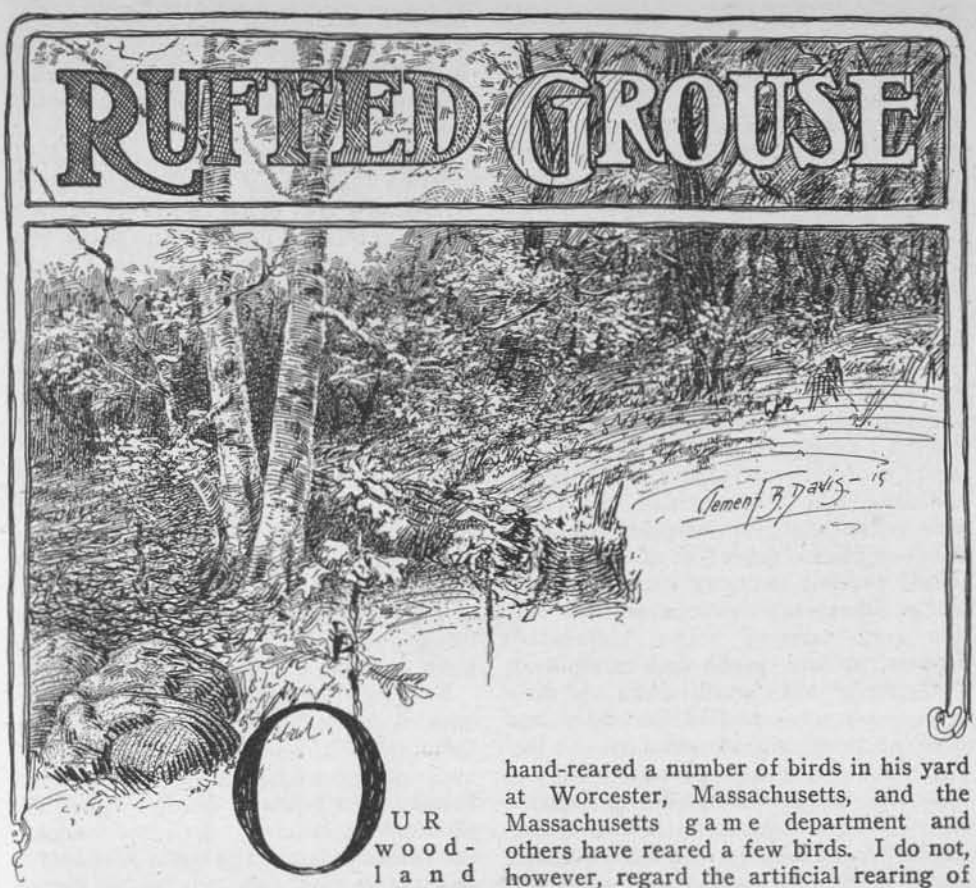
Range—North America at large; nests in Montana, Minnesota, and other Northern States, but chiefly north of the United States; winters from Virginia and Kansas south to Cuba, Honduras and Mexico.

Season—Spring and autumn migratory visitor north of Washington and Kansas; more abundant in the interior than on the coasts.

Field Marks—Small size, chestnut and green head, white crescent before the wing distinguish the male. Green speculum on wings prominent in both species.

This duck is a mark for experts only; for, with a spring from the water, it is at once launched in the air on a flight so rapid that few sportsmen reckon it correctly in taking aim. When wounded, the teal plunges below the water, but it rarely, if ever, dives for food, the "tipping-up" process of securing roots of water plants answering the purpose.

RUFFED GROUSE



OUR woodland drummer, the ruffed grouse, has been properly named the king of game birds. It is the best woodland grouse in the world, and it should always be as plentiful as the European black-cock is. The practical and profitable preservation of the ruffed grouse on comparatively small areas would result in their remaining plentiful throughout the surrounding country. The shooting can be made good on thousands of square miles where the birds now are few in number or entirely extinct. Where they are properly looked after they will thrive even in small woodlands and bushy tracts, provided they contain the foods they require and their enemies be controlled.

Many experiments have been made in the artificial propagation of this species, with some success. Professor Hodge hand-reared a number of birds in his yard at Worcester, Massachusetts, and the Massachusetts game department and others have reared a few birds. I do not, however, regard the artificial rearing of grouse as necessary or even desirable. The losses often are large and, for sporting purposes as well as for food, birds reared in a wild state in protected woods are the best and by far the cheapest; they can be made as abundant as it is desirable to have them.

Many believe that the ruffed grouse wanders over a wide territory and that it would be difficult to breed them in small woods. They undoubtedly wander long distances in search of food. Young birds hatched in a locality where insects are plentiful and where there is an abundance of mast for the old birds will be led away later to places where berries are plentiful, for this grouse is a great berry-eater.

Since game preserving has become popular in America and the necessity for it

Editor's Note.—This is the second article of the series "Game Farming for Pleasure and Profit," the material for which was loaned us by the Hercules Powder Co. Every sportsman should get posted on this subject and learn how easy it is to increase his available game supply. The series will cover, in addition to Quail, which appeared in our February issue, Grouse, Pheasant, Wild Ducks, Wild Game foods and the destruction of vermin.

has become well known, more attention has been given to the food habits and other requirements of all our game birds than was formerly given to this subject. Proper covers also are important. This bird's existence depends on them, since the entire destruction of forests will result in the extermination of woodland species. But the ruffed grouse can be kept plentiful even in closely settled farming regions provided small woods or thickets be left or are planted and foods suitable for different seasons of the year are kept plentiful. Young birds are largely insectivorous. More than 95 per cent of the diet of the young grouse examined by Dr. Judd was insects. Newly hatched chicks eat the most; as they grow older they eat fruit, and later they feed on mast, grain and buds. The study of the food habits of the young has not been as extensive as it should be, but indicates that the chicks eat grasshoppers, cutworms, certain beetles, ants, parasitic wasps, buffalo-tree hoppers, spiders, grubs and caterpillars. Undoubtedly many small insects and their eggs which are found in the woods and adjacent fields will be added to the list. The beetles seem to be preferred, but Dr. Judd says the grouse he shot in September, in New Hampshire, were feeding largely on red-legged grasshoppers, which were abundant in the pastures where the birds foraged. The vegetable food consists largely of seeds, fruit, buds and leaves. Mast, including hazelnuts, beechnuts, chestnuts and acorns, are staple foods, the acorns being the largest supply in many regions. Acorns of the scrub oak and scrub chestnut oak are swallowed whole, and I have often found the grouse abundant in the scrub oaks on Long Island, New York, and in other regions where there were few or no large trees. The ruffed grouse undoubtedly eats grain and often procures it along woodland roads, where it resorts to dust and to feed on the abundant berries.

More than one-fourth of the yearly food of this bird is fruit. Its diet includes the hips of the wild rose, grapes, partridge berries, thorn apples, wild crab apples, cultivated apples, wintergreen berries, bayberries, blueberries, huckleberries, blackberries, raspberries, strawberries, cranberries, sarsaparilla berries, and others; wild and cultivated cherries, plums, haws, sumacs, including the poison sumac and poison ivy, which are taken with immunity.

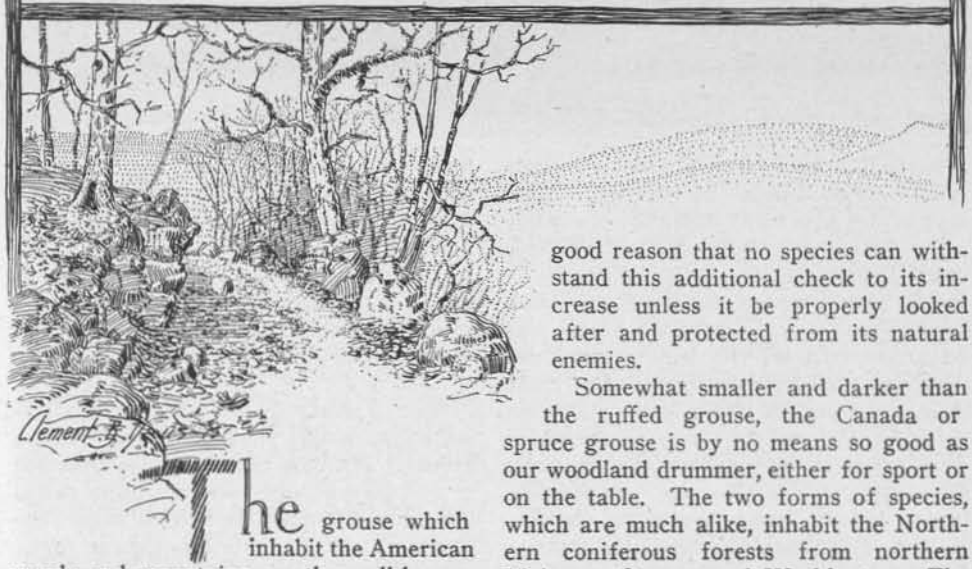
Sportsmen are well aware of the fondness of this grouse for wild grapes and apples, and they often find them in places where grapes are plentiful and in old fruit orchards, especially on abandoned farms. The wild-rose hips and sumacs are excellent Winter foods, because they can be obtained above the snow. Wild and cultivated sunflowers furnish excellent food, and many other fruits and seeds of varying importance are on the ruffed grouse's bill of fare.

Birch, poplar, willow, laurel and other buds are eaten by the ruffed grouse, and the budding, practiced for the most part during the Winter, enables it to survive the severe Winters of the Northern States and Canada, when other foods are buried in deep snows. The several species of birch buds are a staple.

The ruffed grouse has numerous enemies which must be controlled if any shooting is to be done. Certain hawks, owls and crows are the chief feathered enemies; the goshawk is often called the partridge hawk on account of its fondness for ruffed grouse. The great horned owl and the barred owl take many grouse which escape the fox at night by roosting in the trees. Foxes, weasels, minks, skunks and other furry enemies are fond of grouse. Snakes destroy both birds and eggs. The combined toll taken in a year by these enemies is large, and when the enemies are controlled it is evident the grouse supply must be big enough to stand a lot of shooting. Roving dogs and cats, both wild and domestic, do much damage in the grouse woods and should be exterminated. Forest fires at the nesting season are especially destructive.

Ruffed grouse prefer deciduous trees to evergreens. A forest of mast and fruit-bearing trees, with some evergreens, is far better for grouse than an evergreen forest with few deciduous trees. The grouse nests on the ground, usually against a fallen log, stump, tree or other obstruction. This usually contains from 8 to 12 eggs, and sometimes more.

THE GROUSE OF THE WOODS and MOUNTAINS

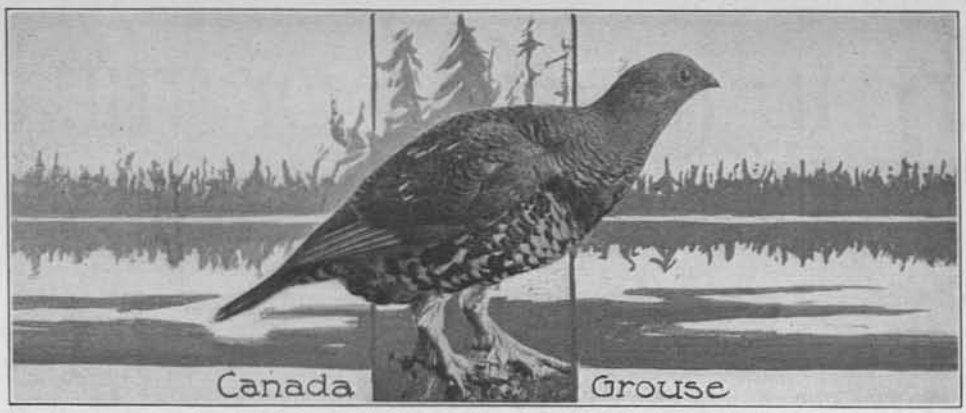


The grouse which inhabit the American woods and mountains are the well-known ruffed grouse, the Canada or spruce partridge, the dusky or blue grouse of the Rocky Mountain region, and the ptarmigans, which live above the timber line of the Rocky Mountains within the United States and thence north to the arctic tundras of Alaska. They are all excellent sporting birds, all good eating, and well worth preserving.

The ptarmigans are circumpolar and they no longer occur on vast mountain areas where formerly they were plentiful in the United States, and throughout their range they have diminished in numbers where shooting is permitted, for the very good reason that no species can withstand this additional check to its increase unless it be properly looked after and protected from its natural enemies.

Somewhat smaller and darker than the ruffed grouse, the Canada or spruce grouse is by no means so good as our woodland drummer, either for sport or on the table. The two forms of species, which are much alike, inhabit the Northern coniferous forests from northern Maine to Oregon and Washington. The Western form, termed Franklin's grouse, is much like its relative which is found east of the Rocky Mountains.

The spruce grouse are more plentiful in Canada and Alaska than they are in the United States. They are familiar to big-game hunters and often they are shot for food, but they are too tame in most woodlands to afford good sport, and they appear so stupid that they are called "fool hens" by residents of the Western mountains. Many have been taken by a noose fastened to the end of a fishing rod or stick, the noose being dropped over the head of the



unsuspicious birds, which are then easily jerked off the branch of the tree. Elliot says he has seen birds push the noose aside with their bills when it touched their heads without slipping over.

The spruce grouse frequents tamarack swamps and woods where the spruce and fir grow thickest; the leaves, buds and tender shoots of the coniferous trees make up a good part of their food. Like the ruffed grouse and the dusky grouse, these birds eat many berries and other fruits in the Summer; bearberries, blueberries, juniper berries, bunch berries and the wax currant berry are the principal berries eaten. At this season the flesh is palatable, but later in the year and in Winter, when the food consists largely of the spruce shoots, which suggested the name of the bird, the flesh becomes bitter and undesirable.

The nest contains usually from ten to twelve eggs, sometimes as many as sixteen. It is placed on the ground, and only one brood is hatched in a season.

THE RUFFED GROUSE

Blue or dusky grouse are from four to six inches longer than the average ruffed grouse. The blue grouse weighs from 2½ to 3½ pounds; the weight of the ruffed grouse is 2 pounds and often less. The range of the three ornithological forms of the blue grouse (which from the sportsman's viewpoint may be considered as one species, since the appearance and habits are much alike) is from Alaska to New Mexico and Arizona. The Western form inhabits the coast range from California and it occurs eastward to Nevada, western Idaho and thence to northern Alaska. I have observed these birds when they were abundant in the Rocky Mountains and so tame as to share the name "fool hen." Like the other grouse, it is disappearing so rapidly everywhere and has become extinct in so many places that laws prohibiting grouse shooting at all times have been deemed necessary. In many places the birds remaining are wild enough for sport, and they lie well to the dog.

The blue grouse are mountain as well as forest-loving birds, and they often wander from the spruce and fir forests above the timber line in their search for berries and other food. In Winter they descend to the

valleys. They are not migratory, such movements being made solely in search of food and to escape the severe weather of the higher altitudes.

The food of the blue grouse consists of insects, which form a large part of the food of the young birds, grasshoppers being the principal insect eaten, and fruit, seeds and leaves. Like the spruce grouse, the blue grouse is a browser and is one of our chief foliage-eating birds. Dr. Judd says it spends most of its time in pine forests feeding on needles, buds and flowers. In the Summer many berries are eaten, among them the abundant wild gooseberries, currants, strawberries, huckleberries, service and bear-berries. The flesh is white, tender, juicy and delicious. Later in the season it is affected by the change in diet and it often has then a bitter and resinous taste which renders it highly undesirable. Like the other grouse, the dusky grouse nests on the ground in May or June. Usually there are about eight eggs, sometimes more. The birds should be shot in September and October, and if properly looked after on some good-sized preserves their numbers can be kept up without decreasing their numbers from year to year.

The enemies of these grouse are eagles as well as hawks, and mountain lions, lynx and other species of ground vermin, including snakes.

THE PRAIRIE GROUSE

THE prairie grouse or "chicken," including the somewhat smaller form which is found in Texas and Louisiana, still occurs, in sadly diminished numbers, from Manitoba, Michigan, and Indiana to Texas and westward to the great plains, where, as in the Dakotas, it has extended its range with the advancement of civilization. When I first went to North Dakota to shoot the sharp-tailed grouse, the common prairie chicken was scarce, but later it increased in numbers in some parts of the State, and it could be kept plentiful on most of the open ground as far west as the Rocky Mountains.

The prairie grouse weighs about two pounds and its flesh is tender, juicy, and delicious. Some prefer it to the flesh of the ruffed grouse and I am inclined to side with them. It certainly is a magnificent wild food bird and well worth preserving.

Grouse cannot stand the ordinary destruction by natural enemies and the destruction by guns at the same time. Since the birds continued to vanish after shooting had been prohibited, it is evident that there are other causes for this besides shooting. The destruction of their foods and covers is sufficient to account for the loss. Cats, rats and roving dogs in many places prevent any increase in their numbers. Prairie fires and floods often exterminate them on large areas. The same may be said of the sharp-tailed grouse and

the "prairie chicken" of the Northwestern States, which once was plentiful as far west as California; this bird has suffered, also, from the loss of its food and covers. The prairie grasses, the wild rose, the wild sunflower and many other food plants often are absolutely destroyed on the big wheat farms where these birds formerly were abundant, and where they are now extinct, or nearly so. In addition to food, the briars afforded safe protection when a hawk or other enemy approached. I have seen a line of telegraph poles across a big wheat stubble when there appeared to be a hawk on nearly every pole, and there was absolutely no place where a grouse could hide on the vast prairie which extended to the horizon. I found the sharp-tailed chicken very abundant in the valley of the Rosebud, Montana, in the days when it was hardly safe to shoot there, on account of the Indians, but the wild roses were also very abundant and afforded protection to the birds and food in the Winter, when they lived largely upon the rose hips, which could be seen above the snow. If we give the natural enemies a good chance to eat them, by destroying the prairie chicken's nesting sites and covers, and if we destroy absolutely their Winter foods on vast areas, we must not expect the birds to return to places where they have become extinct simply because we have enacted laws prohibiting shooting.

The food habits of the prairie grouse are well known. They eat many insects, especially grasshoppers, from May to October, and are valuable aids to the farmer for this reason. In the Fall and Winter the food of the prairie grouse is mainly vegetable—fruit, leaves, flowers, shoots, seeds and grain. Dr. Judd says: "Like the bob-white and the ruffed grouse, the prairie grouse is fond of rose hips, and the abundant roses of the prairie yield 11.01 per cent of its food." In Kansas and many other States the wild sunflowers, goldenrod and other natural foods were tremendously abundant, but throughout most of the range of the grouse these foods have been destroyed absolutely. It would pay to restore some prairie grass, wild roses, sunflowers and other covers and foods which are essential to the birds' existence. No farmer or sportsman can be expected to give the land, time, labor and money needed to save the grouse simply as a bait for trespassers. This grouse is fond of the stubble as a feeding ground and it can be made profitably abundant on many farms, but it must have Winter foods and covers, and it must be protected from its enemies if any shooting is to be done, otherwise it will become extinct.

Dr. Judd says this grouse yields readily to domestication and says preserves for domesticated birds should be established. He relies on Audubon's statement that "the pinnated grouse is easily tamed." The recent experiments which have come to my notice have been failures, and since the birds now are very valuable, it seems peculiar that there are no published reports of successful hand-rearing. It is certain, however, that the birds can be made very abundant, as the red grouse have been on the moors of Scotland. Practically all of the grouse bred in Scotland are wild birds. Few experiments in hand-rearing have been made and they are not necessary or desirable. As I have observed, wild-bred birds are the cheapest

and most easily and safely reared; evidently they are better for sport and better able to take care of themselves than hand-reared birds.

Probably ninety per cent of the farms where these birds occur are now posted against shooting, and the number of farms so protected is increasing. There are hundreds of thousands of square miles where the grouse shooting can be made good as it is in Scotland, provided the farmers be dealt with fairly. A grouse preserve, properly conducted, will prove to be a money-maker. Since late in the year this grouse has a well-sustained flight and often will go a mile or more before alighting, the farm where any practical preserving is undertaken should be a big one, or the shooting on a number of farms should be under one management. Certainly no one will be damaged if such industry be encouraged on the farms which are now posted against all gunners or on the farms where the grouse have become extinct.

The cost of breeding game in a wild state is small when compared with the cost of hand-rearing pheasants and other game bred in captivity. The wild-nesting birds find most of their food in the fields. The grouse, like the quail, glean the stubbles after the harvest and they can subsist in large numbers, even in severe Winters, on the hips of the wild rose and the seeds of sunflowers, sumacs and other plants. The farmers whose farms are posted often are quite willing to rent the shooting for a few cents per acre, and if skilled game-keepers be employed to control the natural enemies of the birds and to see that they have proper nesting sites and foods, the grouse can quickly be made profitable, and syndicates of sportsmen formed to share the expense of looking after them can have splendid shooting at very small cost. As I have observed, the sportsmen who are looking after the quail often pay only $10 to $15 each per year.

Since it is very evident that as population increases the grouse shooting must be prohibited everywhere unless the birds be properly looked after, I sincerely hope it will not be long before grouse shooting is restored on many of the posted farms, from Louisiana and Texas to Michigan and North Dakota, by syndicates of sportsmen who are willing to deal fairly with the owners of the grouse lands and to persuade them to assist in making these splendid birds profitably plentiful, as the red grouse are in Scotland. We should always remember that most of the farms are now posted against all shooting and that the farmers are supplementing this prohibition with laws prohibiting the taking of grouse at any time. There are good reasons why these conditions must remain and grow worse unless the grouse be preserved, in the interest of sport, on at least a part of the vast area they should inhabit.

THE GROUSE OF THE OPEN COUNTRY

WE have four splendid grouse of the open country which formerly were tremendously abundant. The prairie grouse, the sharp-tailed grouse, the heath-hen, and the sage grouse comprise the best group of grouse to be found anywhere in the world. They all lie well to the dogs and are excellent food birds. The former abundance of these birds is almost beyond belief. Tons of them once were shipped to the Eastern markets at a single consignment. I have shot on the Western prairies when it was an easy matter to bag a wagon load of grouse in a half-day's shooting by two guns. The birds now are extinct in entire States and never can be restored excepting by private industry, since it is absolutely necessary to preserve some of the wild grasses, roses, sunflowers and other covers, which will not be preserved in closely cultivated regions unless it pays to do so.

In the States where the grouse still occur most of the farms are posted against all shooting, and many of the States now prohibit grouse shooting absolutely. But the birds must continue to vanish in places where their natural covers and foods are destroyed, because they become an easy prey to their over-abundant natural ene-

A "Sharp-tail"

mies, and they must perish in the Winter, when none of the natural foods remain in sight above the snow. No birds need more immediate attention from the sportsmen; no group of birds is more valuable from an economic point of view than the grouse of the open country. In many of the grouse States the State game officers are introducing foreign game birds in large numbers, and they seem to be aware that the grouse cannot be preserved on closely cultivated farms as objects of public pursuit. Some intelligent State game officers, I am pleased to observe, are prepared to urge breeders' enactments making it worth while to save these birds, and I recently had a letter from a Western officer in which he said he would favor the needed industry and would be glad to see syndicates of sportsmen formed to save the grouse.

As the matter now stands the shooting practically has ended and most naturalists predict the extermination of these birds. The country is so big (hundreds of times as big as the grouse lands of the old world) that there is room enough for all American sportsmen to have good grouse shooting for all time to come, provided we undertake the practical preservation of our grouse before it is too late.

Grouse multiply rapidly when the covers and foods are preserved and their enemies are controlled, and they can be made more abundant than they ever were.

The sharp-tailed or pin-tailed grouse is very similar in size and weight to its cousin, the prairie grouse. It is a lighter grayer bird, and has a short, pointed tail which suggested the name. I have had many good days shooting these birds on the Northwestern plains when they were abundant. They lie well to the dog and fly a mile or more, alternately whirring and sailing on extended wings, so that it is desirable to shoot them from a wagon or on horseback.

The range of the sharp-tailed grouse is from Canada and Michigan to New Mexico and westward to parts of California, and to Alaska. It is said to be still fairly abundant in some parts of Oregon and Washington, but it has been reported as extinct or nearly so in California and in other parts of its range. Its food is similar to that of the prairie grouse. Many grasshoppers and other insects are eaten, the young being highly insectivorous, like all the other grouse, the quails, and the turkeys. The vegetable food comprises leaves, buds and flowers, weed seeds, fruit and grain. Since this is the more northern species, it naturally relies more on buds than the prairie grouse does, and in Winter it eats birch buds, willow buds, and others. I have seen this bird alight on trees more often than the prairie grouse does, but it lies equally well to the dogs, does not fly to the trees when flushed, and I am inclined to regard it as the best grouse in America and I doubt if a better bird can be found in the world. Certainly it is well worth preserving and I believe it will not be long before it is restored and made plentiful and profitable on many of the big wheat farms of the Northwestern and Pacific Coast States. The sharp-tail is very fond of wheat, but it cannot secure the grains beneath the

snow during the long Winters, and it perishes, because the wild roses and other Winter foods have been destroyed. A handsome border to a private road, fence or path, containing wild roses and sunflowers and prairie grasses, could be made to yield a good crop of grouse, many of which might be shot on the stubbles in the Autumn without any danger of extermination. Some stock birds should be left, of course, and the prairie falcon, the coyote, the snake, and other enemies should not be permitted to devour them.

The sage cock, or cock of the plains, is the second largest grouse in the world, the capercailzie of the old world being somewhat bigger. Our sage cock is peculiar in its habits and it is found in the regions where the artemesia, or wild sage, grows, extensively. I have shot many of these grouse from the saddle when riding across the wide plains, covered as far as the eye can reach with the gray-green plants of wild sage.

The food of the sage grouse consists largely of the leaves of the wild sage, which late in the year impart a bitter flavor to the meat, and which caused a Western traveler to denounce it as a "quinine brute." Early in the year the young birds live largely on grasshoppers and other insects, and I have eaten them in August when they were delicious. The flesh at this season is tender and juicy and compares favorably with that of the other grouse.

Since the natural foods for these birds still are plentiful on the vast alkaline plains, it would appear that "too much shooting" must be ascribed as the reason for their threatened extinction. The well-known rule that no game birds can stand both the destruction due to natural causes and shooting also is proved everywhere and it explains, undoubtedly, our loss of the cock of the plains.

These big grouse are well worth preserving, the lands where they dwell are practically worthless, and a good big sage-cock ranch or preserve would cost almost nothing and there is room enough for all. A few mounted game-keepers who understand the control of the enemies of the red grouse of the moors could protect the cock of the plains on many square miles, and such industry should be encouraged if we wish to save the grouse and to perpetuate sport.

In pattern, marking and color the heath-hen is identical with the prairie grouse. It was considered by the earlier ornithologists to be an Eastern form of the abundant Western species. It was plentiful, formerly, in Massachusetts, Connecticut, and the eastern parts of New York, New Jersey, Pennsylvania and Virginia. Large numbers of heath-hens were shot on Long Island, N. Y., and this was one of the first birds to be protected by law in that State. It is significant that it became extinct, like the wild turkey in Ohio, at a time when shooting was prohibited.

The only surviving heath-hens inhabit the island of Martha's Vineyard, Massachusetts, and it is greatly to the credit of the capable Massachusetts Game Commissioners that the birds have not been permitted to become extinct. Although shooting was prohibited, the birds continued to vanish, because for a time they were not protected from their over-abundant natural enemies and from cats and roving dogs, which destroyed them every season. Forest fires also destroyed many nests, and in 1890 the ornithologist William Brewster ascertained that there were only about 200 heath-hens living on the island. They have since been given some special attention by a game warden and the losses due to game enemies, fires and other causes have been checked somewhat. The birds are said to respond slowly to this protection, but their numbers are reported to be increasing. A few skilled game-keepers devoting their entire attention to the protection of these birds soon would reduce the hawks and the cats and other enemies, and the increase in numbers undoubtedly would be rapid, because the destruction of each enemy would mean the saving of many birds.

The bird is especially desirable, since it thrives on the scrub-oak lands of the Eastern States, and it might be restored in places where no game of any kind now occurs. At present it is of no importance in sport and, of course, it no longer is eaten.

TAKING A PLUMP ONE FROM A CEDAR RIVER POOL

"DARB" THE PRIZE WINNER

By I. E. DICKINSON

Winner First Prize Brown Trout 1915 Contest.

AS champion fisherman in the Brown class, and winner of first prize in the FIELD AND STREAM contest, it's up to me to "use the brush" and paint a picture in words of the big fight, for it was a battle royal from start to finish.

I will tell you first a little about the Cedar River. Cedar River starts from springs and small spring brooks about fifteen miles northeast of Bellaire, and as it rambles on its journey is fed by spring brooks all along till it grows to be a fine, beautiful little river. About six miles out is a dam where in pioneer days there was an old mill that cut the lumber for several of the first buildings in Bellaire and a grist mill that ground the grist for the farmers of that day, and the little river furnished the power. To-day a larger concrete dam is on the old mill site and a fine electric plant furnishes light and power for the village of Mancelona, some seven miles away. This place is known as Stover, named after the old mill man. From Stover it runs on and on down its crooked path, sometimes almost meeting itself going back. The lumberman has filled it with tree-tops in many places until it is almost impossible to get a "barnyard hackle" (worm) down to the stream. These make lovely homes for the trout, where the angler can't even get a look-in. Then there are fine open stretches and deep pools where one can cast the fly and wade or fish from the bank, as he chooses, and then one mile from the main street of the village of Bellaire it finds itself harnessed again with another dam with a sixteen-foot head of water, making a pond of about twenty-five acres and the village lighting plant. From this dam it flows about one-half mile on, then losing itself in the jungle again and finally finds its way into another pond at Bellaire on Intermediate River, where another plant is located furnishing light and power for "Charlevoix, the Beautiful."

About ten years ago we received a shipment of trout fry on an evening train which we took out at once and planted in the pond at the Village plant. The next morning, on looking at the cans we found

we had planted about 40,000 German Browns. Yes, we were sore for we had a dandy pond and lots of brook trout. Only a few years later we began to catch the "Dutchmen" and they grew thick and fast and we had our special places on the pond to fish for them, but later we found them everywhere and they were getting *big* too. Each year someone would get a *big one* and its wasn't long until several four-pounders were caught.

Then something awful happened. The dam went out, the plant burned and while they were making over the dam and plant the pond was dry for several weeks. When it was finally filled again, of course, the fishing was poor for two or three years, but it has been getting better each year and we are planting from 50,000 to 100,000 each year of Brooks and Browns, so now we have as fine a pond as anybody ever had, with the Browns predominating.

Lots of these fish of course went below the dam and there are still lots of the "Big Boys" there yet. Well, it was just below this dam where I hooked "Darb," the prize winner. I had fished up the stream from about one-half mile below with rather poor success, for the sun was bright and not much wind. I saw several nice ones dart and hide as I came up, but not much bites. As I came up to the hole below the plant which has been washed out about four to six feet deep, I stood on the bank about four feet above the water and cast just out toward the swirl where the water comes down the chutes. The banks are washed out on the north side, forming an eddy of rather still water with white sand and gravel bottom. As I stood on this point projecting out into this pool and cast out into that hole, my first cast brought a nice one to the surface, but he missed. I renewed the cast and as the fly stood on the surface for a few seconds I saw "Old Darb" slip out of that swift water or somewhere, I don't know just where, but he was making straight for that little No. 10 March Brown. There is a thrill or some funny feeling slips up one's back when he can stand and see a "Boy" like that making straight for his "Bug."

Well, as his nose came to the surface

HERE'S "DARB"—6½ LBS. OF HIM

there was that little twitch of the rod that comes so natural to the fly caster and the fight was on. Neither of us knew just what was best to do, but I stood my ground and he (or she) did most of the fighting. The way he went up into that swift water wasn't slow. He would take line as if he owned it, but I had my little finger on the trigger of the old Y. & E. and when he stopped taking then I'd grab in a few yards. Several times he came to the surface and tried to shake it, but the little hook was in the southeast corner of his mouth and he couldn't cough it up.

No one happened to be in sight, so we fought for several minutes till he had about all the rush out of his system when a young man (Rex Hickox) was going by and I called him. He came down to where I was on the bank and as he looked in the water and saw the fish turn broadside towards him with the sun shining on his big side, he exclaimed, "Gosh! That's some fish."

After he had made several trips back and forth around and across the pool and

my arm, aching from the constant strain it took to conquer the King of the Pool, I slipped down onto a little ledge about four feet below me and straight down, with just room enough to stand, keeping a taut line on His Nibs all the time. I thought I might be able to lead him to the net as he seemed to be losing his pep, but when I got down close to him he made a few rushes for the plant and then downstream and back till I too thought he was some fish, but the constant strain of the Clark rod that I was using began to tell on him and he seemed to get a little groggy and let up a little on the rod and got more of a horizontal attitude, for he had been going around at an angle of about 45 degrees, head down and tail up, and his circles became smaller and smaller 'till finally I thought it time to call time.

So, dropping my net in with my left hand and holding my rod as high as I could with my right, for my line was now all in up to the leader, which was nine feet long, and the rod in the shape of a bow, I had to spread out some to make ends meet. Well, I told Rex when I netted him, I would hand it to him, for my net was hardly deep enough to take a 26-inch trout, tail and all. (I am weaving one now big enough to hold an 8-pounder for next season.) I led him in all right, but when I went to lift up he seemed to take a sudden dislike to the way things were going and gave a flop and as I raised the net to fool him I tossed him about ten feet out into the water again. Finding the line still taut, I proceeded to try again bringing him around a few more times till I got him close in with his broadside to the sun, I slipped the net carefully under him and with one long swoop, I landed him about fifteen feet back on the bank in the grass where he laid a vanquished foeman for a few seconds as if utterly exhausted—and I was about in the same fix.

Not till then did I think he was over four and one-half pounds. It was a fight to the finish and lasted from thirty to forty minutes. The picture is not a very good one for look who is in it. Oh, yes, the cat takes well. She is some cat and always meets me day or night, to help clean the fish for she comes in for her share.

PRIZE CONTEST CERTIFICATE
RECORD 1915 CONTEST
First Prize, Brown Trout

Weight—6½ lbs.
Length—25 in.
Girth—13½ in.
Caught—June 6.
Where caught—Cedar River, Mich.
Rod—Clark.
Reel—Yawman and Erbe.
Line—Enameled.
Lure—March Brown Fly, No. 10.

CONTINUATION OF EDITORIAL

have lived on under the snow put forth new buds on every sunny bank under the sun's grateful heat, and, as March grows, more and more of the new birds arrive, less and less of the snow is seen and the early wild flowers, star of Bethlehem, anemones, arbutus, blossom forth.

By April the sportsman has donned fishing coat and waders, and, with creel over shoulder, is out on his favorite streams, which have been carefully studied during March. April finds the trees bursting their buds, the red maple and sour gum blotching the gray of the forest with deep notes of red, the black willow, in yellow banks of buds, shining along the stream-side, and a tinge of green pervading the forest wherever one looks. By May First, the buds are out, and ragged, half-formed leaflets are hanging awkwardly from the twigs. The hatch of flies is on, and the spring trout season in full bloom. Then, with a rush and a bound, comes the Twelfth of May again, and once more the New Year of Nature is at hand. And, throughout the year, the all-around sportsman has not had an idle month. It is a game where one can never begin to learn it all; the pleasure never palls, and the learning of this and that new branch of the school of the outdoors is a keen enjoyment that more than repays the effort expended. The true outdoorsman never stops studying at this school!

HOW TO USE SKIS

By H. P. SHELDON

AS an amateur ski runner I served a hard novitiate and, by dint of many a "skint" nose and wrenched tendons, I have learned a few wrinkles relative to ski fastenings which have practically insured me against painful repetition —I can't, with Shakespeare, call 'em "tiresome" repetitions, because I can't recollect that I ever suffered from what the Judge is pleased to call "ongway"—never, at least, when I was sailing through the circumambient ether and trying to select a smooth rock to light upon.

My discoveries, if such they are, are few, and probably beneath the notice of the real dyed-in-the-wool ski runner; but they have helped me, and, in the hope that they may help others, I offer them herewith for whatever they may be worth.

Being crassly ignorant of the first principles of ski running, and yet having just enough imagination to realize the pleasure which might be had from a pair of the long snowshoes, I hied me, one day, to a sporting-goods store and laid down a price —which I could ill afford—for a pair of ash skis. Evidently the maker had anticipated a change of fastening from whatever he might put on, so he called the job complete with a simple band of leather which laced over the toe. This wasn't enough for me—I wanted 'em to clamp on like skates, so that my moccasins wouldn't be eternally slipping out backwards. Time and again, while negotiating some slight rise, my feet would basely desert me and leave me in all the appearance of a heathen prostrate before his idol; or else they'd not quite desert, but would plainly indicate their intention of so doing if I dared apply another ounce of pressure to either ski.

Then I'd have to stand in a strained, unnatural position upon a cold hillside until someone came to rescue and stuck a ski pole into the snow at the rear end of most insubordinate of the slippery rebels, and so gave me the fulcrum necessary to my further progress. The strain began to wear upon me; I feared I'd get stuck on "dead center" some day, with no friendly hand to aid me, and would freeze solid in the classic posture of Psyche at the Pool.

So I devised a system of straps and lacings which, when adjusted, made me one and inseparable with my skis. And then I took 'em out and tried 'em. Being a fool, I chose a steep hillside for my first experiment—and I had a gallery, too. In order to climb up, I had first to slide down; so I poised the ski pole gracefully, for the benefit of the ladies, and slid gently and trustfully over the brow of the hill.

After a time I was made aware that I had somehow contracted misgivings; I felt that unless an all-seeing Providence took a hand in my affairs pretty pronto, there wa'n't goin' to be no core. My knees contracted a sudden tremor, and I vaguely wished that skis had been so constructed that one who was tired of standing could sit down and rest his hands in his lap. The air whipped the tears from my eyes and blinded me so that it was no longer possible to see, or allow for, various slight inequalities in the earth's crust. Added to that, the snow itself was in a treacherous condition; a light film of loose stuff had fallen upon a well-glazed crust and had been swept about by the wind until there were spots where there was a great deal of friction, and others where there was no friction at all. Behind me I could hear subdued sounds of mirth as the gallery contemplated my certain downfall. I felt detached, isolated. And then I saw the inevitable coming at me all spraddled out.

Just ahead was a large drift from which the loose snow had been blown, so that its sides were shockingly smooth and glassy. Moreover, the ridge of the drift ran in the same direction that my wilful feet were prone to follow. Traveling with all the speed of a bloody what-ye-may-call-it,

FASTENING MOCCASIN TO SKI

I hit the drift and forthwith entered upon a short and brilliant career as a member of the Flying Corps.

It appeared, afterward, that one ski chose one side of the snowbank while the other selected the opposite; also, it seemed that there had been a bit of damp snow upon one flank and none upon the other. That is of no particular interest to the reader except that it probably explains why, when I slid off the gable of that treacherous bank, one foot remained slightly behind the other. Witnesses who were present also aver that I crossed my feet, but I have steadfastly refused to commit myself upon a point so obviously my own business.

Behind me I heard innocent voices raised in cries of wonder and delight as I left the earth and touched elbows with a couple of the more sociable planets. It was very pleasant, but I realized that, like Narcissus, I'd have to return to earth some time, and I began to wonder if it would make any difference what position the skis were in when I did get back. It didn't—because that end didn't get back first—the end that had the skis attached, I mean.

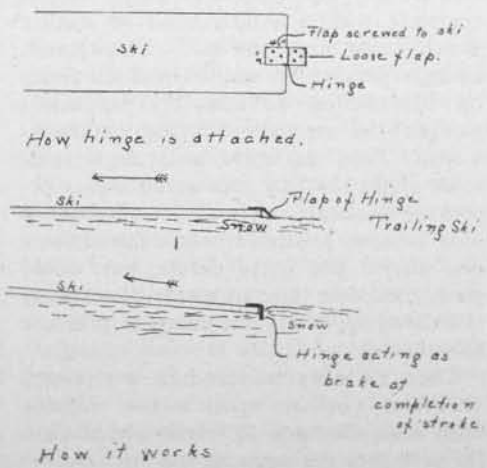
An examination of the wounds leads me to believe that I lit on my nose and probably glid for some distance upon that useful, and hitherto beautiful, member. Then, quite possibly, I turned over. I remember that, though I turned, my skis absolutely refused to turn too, and immediately there developed an interesting contest between my skis and my legs to see which would break first. Fortunately, the ski lost out and I was only in the hole for a trifling sum of money—six dollars or so.

But I had learned a lesson, and my next ski binding was not of the same type as the old. It possessed the same element of rigidity, but it gave the advantage of an instant release in case one didn't wish to ride any farther, and it entirely and automatically eliminated the possibility of a wrenched knee in the event of a fall sideways.

Briefly, it consisted of a single strap which was attached to the side of the toe strap, low down, and long enough to cross the arch of the foot, pass around the ankle just above the heel and recross the instep to fasten with a buckle sewn upon the opposite side of the toe strap.

It held the foot firmly in place at all times, and yet it allowed a lateral freedom, too. If I fell forward it instantly released my toes and let me fall easily, and it worked as well if I pitched sideways.

I was still bothered to make the ski hold while climbing a hill, especially if the snow was hard and dry or glazed by a freezing rainfall. The ski pole couldn't help me much under such circumstances.



THE HINGED SKI-DOG

so I tried this scheme—which I had read of somewhere—of carrying two loops of rope in my pocket. These loops were sufficiently large to slip readily over the tail of the ski and were pulled up under the foot when a hill was to be ascended. The added friction gave one a great advantage over the bare ski, but they were far from perfect. The ropes clogged with snow and were unpleasant to carry about in one's coat pocket; also, they bothered by continually slipping off at a critical moment and must needs be dug out of the snow and adjusted again with the bare hands.

The dog on a sled runner gave me the right idea. I purchased a pair of block hinges—the square kind—and screwed them firmly to the ends of my skis. Hinges measuring two inches across the joint and four inches the other way seem to answer the purpose very well. The principle is apparent: the loose flap trails along without friction when the ski is thrust ahead, and automatically "brakes" the runner at the end of the stroke. One can walk up a steep hill with almost as much ease as he can run on level snow.

If, when you purchase your hinges, you will remove enough metal to let the joints play freely, you'll have little trouble with freeze-ups. In case you do have a freeze-up—the hinge clogging with ice and snow—simply slat it once with the ski pole and your brake will work as well as ever.

MOUNTAIN STREAMS AND THE DRY FLY

By CLIFFORD A. NEFF

IT has been said so often that the dry fly is suitable to the placid chalk streams of England, and to no other kind of water, that, planning a vacation trip to the Rocky Mountains and being thoroughly imbued with the theory and spirit of dry-fly fishing, I determined to make a test of that method of angling on the turbulent streams of the mountainous region we had selected for our trip, and the results of my experiments were so surprising in themselves and so confirmatory of the theory upon which dry-fly fishing is based that I am moved to tell the tale for the benefit of those who wish to try out the newer method of angling and yet, at the same time, are fearful of its suitability to the varied waters of this country.

The entire trip covered about six weeks. I used the dry fly almost exclusively and I think fairly out-fished my companion, a veteran wet-fly man with fifty years of experience in the game. On occasions of competition, the dry fly always held its own, frequently being successful where the wet fly brought no results, and, in general, justified by close observation the theory which has made it increasingly popular with fishermen. Throughout the entire trip, many and excellent opportunities for the observation of the merits of the two styles of fishing were afforded us and, in the enthusiasm of myself for the new style and the sturdy adherence of my companion to the old, were eagerly embraced. In fact, in the short interval between supper and blankets, every fish caught during the day was thoroughly discussed.

The trip itself can be disposed of in a few words. We left the railroad at St. Anthony, Idaho, were carried by automobile sixty miles to Victor, at the Pacific end of the Teton Pass; thence by wagon through the pass to Leeks' Ranch, in Jackson's Hole, in Wyoming, where the pack train met us. Our outfit consisted of eleven horses, four saddle and seven pack. The latter animals carried two hundred pounds each at the start. We traveled almost entirely the peaks of the mountains, generally following game trails or watercourses, traveling across the ridges,

where, of course, there were no trails at all, working up and down the sides of canyons, or through fallen timber so difficult as to seem impassable to the uninitiated. One soon learns, however, the wonderful sagacity and sure-footedness of the pack horse of the West. He can maintain a foothold where his Eastern brother would be helpless; he can find a way out of difficulties with the intelligence of a human being; he knows the best places to cross the streams, knows where some semblance of footing can be obtained in the bogs; some way to get through down timber, some way to get up the side of a cliff. We soon became confident that in most instances it was better to trust to the instinct of our horses than attempt to exercise our own so-called intelligence. The elevation of our route—seldom below eighty-five hundred feet and frequently reaching ten thousand five hundred—afforded us scenery of the most unusual character. Often range behind range, all snow-covered, would stretch away to a horizon where the clouds and the mountains seemed to melt into each other; again, the peaks would be a huddle of ant hills below us, reaching out as far as the eye could see. Just before we left the hills, we crossed the peaks through Conant Pass, a ride of a day and a half. For a trip with the camera, a week in the pass would be none too long. To wrap the glory and the beauty of its scenery in words is beyond my power.

Of course, at first the riding was very difficult; it would be so even to an accustomed horseman, and we were far from that. The gait is usually a walk, but the horse is so frequently perpendicular from its rear up—or from its rear down—that it is compelled to adopt a wider variety of gaits and more different kinds of wiggles than we supposed any respectable item of horse flesh contained. The consequence is the animal is everlastingly surprising you with a new and unexpected jerk on some untried muscle. Of course, in time you get used to this, but until you do you will have many longings for the comfortable quarters back home.

Throughout the entire trip, wild life was in constant evidence. To say that we saw thousands of elk would be rather understatement than over-statement. Antelope, bear, wolves and mountain sheep also were seen at different times. To the man who is looking for elk and sheep, the peaks of the Tetons, Shoshones and the Gros Ventres offer as fine sport of this kind as can be found in the world.

The fishing, of course, surpassed anything that could be found elsewhere in this country. Possibly the streams in the Canadian Rockies afford equal or better opportunities, but certainly one must go to a region equally endowed with that through which we traveled to find equal fishing. We captured brook, loch leven, lake or mackinaw, and cut throat or black spotted trout.

Our largest stream trout was a three and three-quarter pounder. On one occasion the writer took, in an hour, four trout from one pool whose total weight was ten pounds. On another, we took one hundred and thirty-five brook trout from one stream in a day and a half, the largest two pounds, the others ranging from three-quarters of a pound to a pound and a half. We were putting back all trout under ten inches, although the legal size was seven. Our only excuse for such wholesale slaughter on this particular occasion was that we had a particular use for as large a catch as we could make. On all other occasions we killed only those we could eat. Catches that would average a pound were not infrequent.

The streams we fished were the upper stretches of the turbulent mountain streams, thirty to fifty feet wide, with long reaches of rapids and large, deep pools of more or less active water, smooth though they might be on the surface. The lake and loch leven were taken wholly in lakes very high up in the mountains, formed generally from the melting snows. In two of such lakes we also caught cut throat.

The first occasion on which I observed the comparative merits of the wet fly and the dry was when fishing such a lake. The fish had been striking well all day. About four o'clock, and for no apparent reason, they ceased rising, and neither of us could raise a fish, though we worked for an hour. Then occurred a remarkable

hatch of flies which started the fish at feeding. We immediately fell to casting the rise, which yielded good results to the dry fly for an hour, when the hatch was over. The wet-fly man seemed unable to raise a single fish and complained that when he succeeded in making a good cast to a rise he never seemed able to strike the fish. The very next day the phenomenon was repeated in another lake two or three miles from the first, situated, oddly enough, within a hundred yards of the Continental Divide. We reached the lake about ten o'clock, and found the trout feeding. For the purposes of the experiment, I tied on two successful wet flies, Jock Scott and Silver Doctor, and commenced to fish the rise, my companion in the meantime putting his wet flies to work on the other side of the lake. I fished industriously for an hour without a strike, and then took off the wet flies, put on an extra-fine nine-foot leader and a No. 12 Iron Blue, tied dry, and again fell to work on the rise. Instantly the conditions changed, and from that time on I had fine sport, succeeded to such an extent that, although I loafed an hour and a half over my lunch and pipe, I had twenty-six good fish when my companion joined me at three-thirty with six in his creel. After watching me work for a while, he asked me to fish a pool our guide had observed on his way around the lake, in which he had seen some fine trout. He wanted me to fish it, he said, so that he could better see the dry fly at work. It was a magnificent pool, perhaps a hundred feet in diameter and deep and still and cool. I allowed the guide to pick out the trout he wanted me to take and almost invariably, when I cast well, I would take that particular trout. My companion became so much interested in the game, so anxious that no time should be lost between casts, that he used the landing net and freed my hooks for me. When I dismounted my rod to start back for camp, he remarked that it was beautiful fishing, but not for him, as he could see neither the fish nor the fly with sufficient distinctness. To this, of course, I made the obvious reply that in wet-fly fishing one sees neither the fly nor the fish.

Observe that not yet had I come to understand my companion's complaint that he never seemed to get a strike when he cast well to a rise. I learned the reason for this a few days later. We were fishing a pool formed by a high cliff, which gave a right-angle turn to the stream we were working. It was this pool which yielded the greater part of the catch of one hundred and thirty-five fish of which I have spoken. The fish it held were simply countless. At the particular time of the experiment, my companion and I were fishing alternately; that is, one would fish until he caught a keeper, and the catch was so fast that one hardly had time to remove the hook and basket the fish before he was called upon to fish again. Desiring to observe the habits of the fish more closely, particularly when fished by such a veteran fisherman as my companion, I crossed the stream below the pool and, by dint of crawling on my hands and knees, and sometimes on my stomach, I managed to get behind some weeds on the opposite side of the pool, and from there I was able, at my ease, to see the trout, to watch my companion fish, and to observe the effects of his methods on the trout. The water was perfectly clear, the sun was at the right angle, and there was not a movement in the pool that escaped me. The fish were in dense black schools, perhaps six feet in diameter; there were four or five such schools in the pool. My colleague's forward cast was orthodox to the wet-fly teachings; his back cast was somewhat peculiar to himself. By drawing his flies—he always fished both dropper and stretcher—from the water with a jerk, he secured a tension on his line which gave him a strong back cast. In so doing, the flies always made a splash as they left the water. Thus, with the heavier wet-fly tackle and his peculiar method of fishing, he always caused two splashes—one when his flies fell on the water, the other when leaving the water. Although on the occasion I am describing I watched him an hour and a half or two hours, I never saw him fail to put down the fish and scatter them over the pool when his fly struck the water above one of these schools, nor did he ever fail to produce a like result when he withdrew his flies from the water above a school.

During the time I watched him, he did not have one strike when his flies struck the water about a school. He had many strikes and caught many fish, but, invariably, his strikes occurred when his cast struck the water some distance from a school and then drifted over it. Thus I understood that it was the splash of the wet-fly tackle which explained his remark that he never seemed to be able to get a strike when he cast well to a rise. Good casting was at a disadvantage. After I had satisfied myself that my observation so far confirmed the theory of the dry-fly men, I took my rod and fell to casting these schools of fish. When I cast properly—that is, cast above the water, allowing my fly to drop gently on the water—I was uniformly successful; but, even with the dry fly, if I cast directly to the water and caused any disturbance of the surface beyond that which would be caused by an insect falling naturally there, I generally succeeded in putting down the fish. On this occasion, as throughout the trip, I was compelled to recognize that the form, size and action of the fly had greatly to do with the success of fishing, and, to a degree, I came to disregard color.

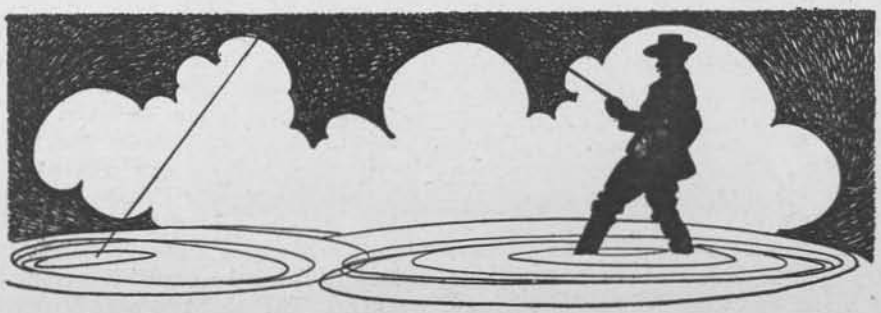
On another occasion, along about ten o'clock in the morning, I found a pool so perfect that it proclaimed the presence of trout. While I was making my preliminary survey, determining the best point from which to cast, and at the same time the best point for the landing of the fish I proposed to catch, I saw a trout rise to take a stream fly, and he took it so lazily and so confidently, and so securely against competition, that I knew he was the master of that pool and that stretch of the stream. The pool was quite large, and I did not know exactly where his hiding place was, and for an hour I put my flies over the pool without success. I fished it from lip to head without enticing the fish and, fortunately, without disturbing him. Across the stream I crawled to the opposite edge of the pool, where I was secure from observation, and tried to find the master trout, and only after watching for fifteen or twenty minutes did I see him. He was under a large boulder in the middle of the pool, and I saw him only because he drifted back far enough to enable me to see the flukes of his tail beyond the edge of the rock. Just how he managed to see out from his hiding place I could not tell. I hastened back to my casting point and commenced to put my flies over that side of the rock, which did not project above the water. No success. For half an hour I worked and then I sat down to think, and I made up my mind that I wasn't giving him the fly which in size and form resembled the fly he wanted. So I waded out in the stream and waited until I could catch one of the stream flies on which I had seen him feeding, and then I went back to my fly-box and found a No. 12 Whirling Dun resembled the stream fly more closely than any other in my outfit. Fortunately, my first cast was as though made to order; my line straightened out in line with the rock, the leader fell over slowly, and the little fly settled on the surface of the water just as though he were the real thing, and started on his career downstream just over the hiding place of the trout. It had not drifted a foot when the trout took it, and the battle began, I seeking to get the trout to the landing place I had selected and the trout trying to get into a broken-down beaver dam about twenty feet above. My tackle was of the lightest and the battle was a hair-raiser. Again and again I tried to net him, when a new access of latent strength would renew the fight and he would head for the snags. When I finally did bring him in the net he was worth the morning's work, for he was the three and three-quarter pounder I have mentioned.

On another occasion, I learned something on the subject of drag, the bogey of the dry-fly fisherman. I had been taught that the line and the leader must have absolutely no effect upon the action of the fly and I fished in accordance with my teaching. On the occasion I have in mind, I was working a good pool of varying currents. I had covered the pool by the orthodox methods and was casting the head of it when I observed near me a stream fly, already copied in the fly I was using, skittering across the current of the pool near the foot. Although I had already covered the foot of the pool, I wondered if I could not take advantage of

the varying currents of the pool, so that the drag of my line would draw my fly across the pool without drowning it. After a few experimental casts, I succeeded in getting the action I wanted and my fly was floating across with very much the action of the stream fly I had observed. As soon as I learned the trick, I commenced to practice it in a manner that brought my fly across some water of the pool which the currents prevented me from reaching by drifting, and, within an hour, I took from the pool four trout of the total weight of ten pounds, where I had worked for an hour previously without the slightest success.

On another occasion I saw trout feeding under a bank two or three feet high, on top of which was a fine growth of even grass. The overhanging bank prevented me from getting my fly in close when I cast in the manner required to let my fly fall gently on the water. I then tried to tempt the fish by casting directly at the edge of the water, though I feared the effect of splash; no success. Thinking possibly the wet fly might do where the dry fly failed, I put on some wet flies and tried them, casting directly at the edge of the water; no success. While using the wet flies, it occurred to me to cast on the bank and let my flies fall over the edge. I tried this with wet flies; no success. The idea, however, seemed so good to me that I took off the wet-fly tackle and put on my dry fly and tried the trick. As the fly fell over the bank and touched the water a pound and a half trout took it, and as long as I cared to fish that afternoon, all I had to do was to let my dry fly fall on the grass, to be dragged gently over the edge and dropped into the pool.

In telling this story I have assumed, of course, that the reader is a fisherman, and, if so, will understand my partiality for the dry fly. It seems to me that all the wet fly can do, the dry fly will also do, and many, many things that the wet fly cannot do, the dry fly will do. On the trip and on other occasions when I have used the dry fly, I have come to pay much reverence to the action of the fly on the water and to the size and form of the fly as compared with the size and form of the stream fly. So far as my observations cover, the color of the fly is, if not negligible, at least not as important as any of the three points of which I have spoken. Best of all to me was the certainty that the use of the dry fly, with its closer adherence to natural conditions, with its reproduction to the fish of the conditions under which he takes his food, is not limited to the placid waters of England, or of our own New England, but may with equal success be used on the most turbulent streams in which we fish, and, therefore, may be used with confidence in any of the streams we find in this country, between the slow-moving stream of the East on the one hand and the rough water of the Rocky Mountains on the other.



"THE BROWN TROUT AND HIS WAYS," BY ROBERT S. LEMMON, IN APRIL WILL TELL US THE DIFFERENCE IN CATCHING HIM AND BROOK TROUT

AN "ELEVENTH-HOUR" PRIZE WINNER

By J. MAXWELL BULLOCK

Winner Second Prize Channel Bass 1915 Contest.

THIS is the story of how Fortune withheld her boon until the very last moment—so late, in fact, that there came very near not being any story to tell. The way it came about was like this: On the second of July, Friday afternoon, William Meginnis and I journeyed down from Philadelphia for a four-day fishing trip at Gus Wittkamp's justly famous hostelry at Corson's Inlet. Our train arrived just at suppertime, and while enjoying one of Gus' well-known gastronomic triumphs we heard that Mr. Meisselbach had been very successful fishing for channel bass at Townsend's Inlet, some twelve or fifteen miles south of us. No channel bass, however, had been taken recently from the beach at Corson's. Supper over, we donned our fishing togs and following the directions of our host and guided by my acetylene lantern, we found our way to the beach. We saw another light further down the shore and arrived just in time to see a nice thirty or thirty-five pound channel bass beached. As the tide was then nearly high and we were not familiar with the position of the bar and sloughs we returned to the hotel. There we had the pleasure of meeting a group of fine fishermen and sportsmen, many of whose names are famous wherever channel bass fishing is known.

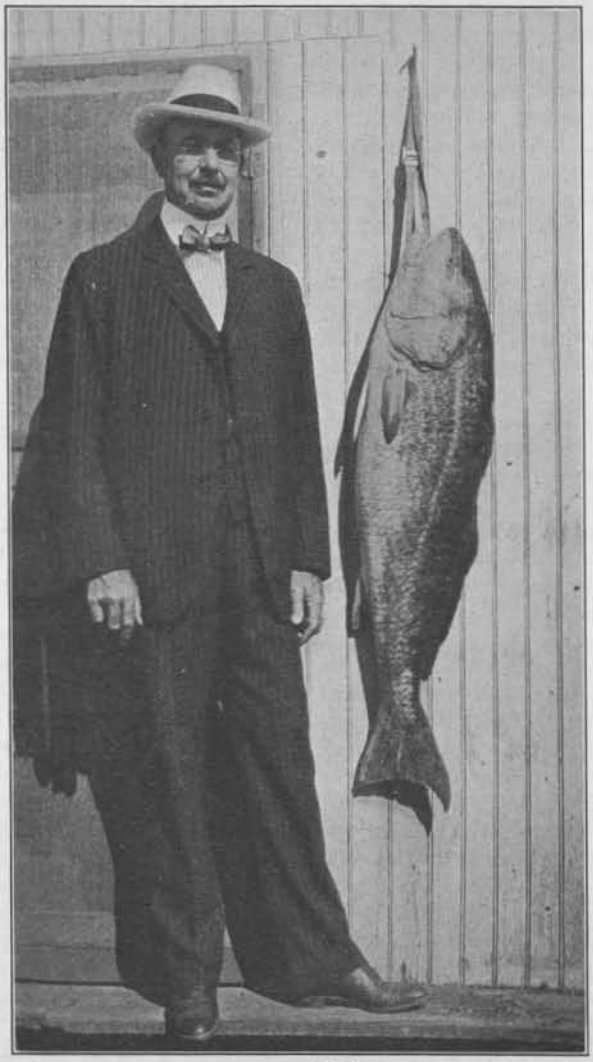
Saturday morning's early flood-tide found us industriously casting our tempting lures into what we hoped and believed was the favorite feeding ground of our quarry—not a bite, not even a nibble, from a real fish, only the pestiferous annoyance of hooking that vermin of the sea named by our friend, "Linc" Roden, the "winkus or Dutch flounder," but more commonly known as the "skate." We fished the tide to its top and for an hour of the ebb, and finally gave it up to return to breakfast.

Saturday evening's tide, Sunday morning's and evening's and finally, Monday morning's tide were but repetitions. We did, however, change our riggings from time to time and picked up a few king and weak fish, but we fished for them only half-heartedly, as our interest was in the big fellows.

The last three days had been very hot, and the seven or eight hours spent each day standing on the beach, and the half mile walk to and from "the hole" carrying rubber boots, rod, tackle, fishing baskets and what not, was beginning to have its effect. Our plans required that we leave Corson's on Tuesday morning, and so when we sat down to supper on Monday night our spirits were not very effervescent. The day had been sultry and the light westerly wind was driving in the mosquitoes from the marshes along the bay. There had been no moon any night and the lowering clouds made the night all the blacker. At supper there was much speculation as to whether it would be worth while to try the night tide on the off chance that a bass might come by, to offset the certainty that the "skeeters" were sure to be there.

The consensus of opinion was, that it wasn't worth while, Jack Whatton and Meginnis dissenting. I was, I'm afraid, rather weakly neutral, leaning slightly toward rest and a night's sleep, but still willing to "play the game" if anyone else would go. The other two were determined to go, so that decided it. Gathering up our tackle and filling our bait baskets with an alluring collection of "bunkers" provided by the genial George Geis, What-

ton, Meginnis and I wended our way through a fog of mosquitoes to the beach. It was pitch dark, not even a star to lighten the heavens, and by the light of our lantern we baited up and made our casts. My watch showed it was nearly nine o'clock. I chose my place to the south of the others, then came Whatton fifty yards away and Meginnis to the north of us. An hour passed without incident, except the occasional retrieving of the bait to see if it was still intact and unmolested by crabs.



MR. J. M. BULLOCK AND 55½-LB. CHANNEL BASS

Shortly after ten o'clock I was aroused from my reveries, on the futility of surf fishing, by a trembling of my bait. "Well! now, what's that?" I caught myself saying aloud. It couldn't be that the sinker was rolling around on the bottom, as there was little or no current. The tide was coming in, to be sure, but it still had four hours to rise and there was no sea and an offshore wind, so it couldn't be the current. Still my bait was being moved about, gently, almost furtively, as if a school of tiny mullet were dragging it to and fro. At last it ceased, and after a few moments I reeled in to find my bait quite uninjured. After casting it back in the surf I glanced up the beach in time to see Whatton, silhouetted against the distant lights of Ocean City, make a savage strike. Watching him intently, I saw his rod buckle and jump as he slowly passed on to the north, out of the range of the lights and into the gloom beyond. Returning to my own affairs with renewed vigilance and every sense alert, I waited impatiently for the "pick up" that I hoped for so ardently. A half hour passed, and again against the distant lights I saw a figure plodding toward me, dragging apparently a silver torpedo. Reeling in, I reached the lantern just as Whatton released his burden. Bringing out my scales we found the weight to be forty-six pounds. Congratulations were in order. While I was putting on a fresh bait Whatton told me how the fish took up his hook, and it tallied exactly with the experience I had had earlier in the evening. The fish were evidently not very hungry and played with the bait quite a while before making up their mind to finally take it.

Whatton decided that he had had enough fishing for that evening and sat down to rest by the lantern, but urged us both to "go to it." "If there's one, there's another" was his theory. Again I cast out into the inky sea. Ten minutes pass, fifteen, not a motion, my bait is as if buried in a bog. I am just debating whether to stick it out a while longer, or answer the appeals of my aching muscles, when, "Hello! what's that?" Again the nibbles, now a foot of line is drawn from my reel, my finger barely touches the spool, another foot, a stop, a yard is slowly unwound, and all the time the trembling keeps up. A minute passes, then another and another, but still no sign that the fish intended to really take hold. My fingers were itching to clamp the reel fast and to strike with all my strength. But ringing in my ears was Whatton's parting advice, "Don't be in a hurry, give him all the line and time he wants." At last, after a few minutes which seemed like dragging hours, my line tightened up again and began to run steadily from my reel; foot by foot it unwound, until fifty or more had disappeared into the blackness, then letting the tip of my eight strip Landman bamboo drop down almost parallel to the beach I clamped the reel fast with all the power of my thumb and struck with all my might. I may say in passing that I am six feet, two inches tall, and weigh one hundred and ninety-five pounds, and that it was "some strike." Then something happened, the line which I had previously seen was well wet, tore out from under my thumb, as this leviathan of the seas headed for the Emerald Isle. Hurriedly I set the drag of my 2-0 Julius Vom Hofe reel, but even that and the pressure of both my thumbs was powerless to check the desperate rush. Yard after yard was relentlessly dragged from the reel, despite my unavailing efforts, until three-quarters of my two hundred yards were gone, and then, thank heaven, he stopped. A quick glance at the illuminated face of my watch told me it was 11:05. Slowly I began to reel in, the fish making no violent opposition, but grudgingly let me recover perhaps fifty feet. As he was heading north, in order not to give him any more line, I was perforce obliged to walk up the beach with him. Another rush and my hard earned fifty was gone and another twenty-five feet to keep it company. By carefully reeling in a few yards at a time only to lose almost all I gained, I was at last able to recover all but one hundred and seventy-five feet. Twenty minutes had passed, and both the fish and I were willing to rest for a minute or so before renewing our battle. The thought suddenly dawned on me, "How am I going to beach this critter when I can't even *see* the water that I *feel* washing about my feet?" I knew that Whatton always carried a big electric torch, and if I could call him to me, he could be of inestimable aid in letting me see my fish when it was in the surf. I called, but my voice would not carry over the noise of a quarter of a mile of surf, and then I bethought me of my little pocket torch that I carry to help in picking out snarls in the dark. Turning it towards where my friends must be standing, I flashed it intermittently, it was seen and recognized as an "S. O. S." and soon Whatton was at my side. For twenty minutes more the battle went on with varying success on either side. At last, by dint of "pumping" and holding hard against the now enfeebled rushes, Whatton's light showed my beauty was in the surf. By keeping the light directed at the fish, I was at last able to draw him into the wash. Twice the sea took him back, as I released the strain on the line, till at last a larger sea left him high and dry, and there lay *my first channel bass and a prize winner*. Whatton, slipping his hand in the open gills, dragged him a yard above the tide-line. With but a moment's rest and a quick examination of my quarry we started down the beach, Whatton with my rod and I half carrying, half dragging the fish. 'Twas a tough trip, but as nothing to the one that was to come. When at last we reached the lantern, my scales were again called into use, but they dropped to their fifty pound limit before his tail was off the ground.

By this time I was pretty tired, I had been at Corson's seventy-one hours and had been on the beach thirty-seven of them. Meginnis all this while had not a nibble, so after Whatton had taken his fish and tackle and return to the hotel, I

sat down beside my prize and waited for Meginnis to get his. Finally at two a. m. the tide was so high that further fishing was useless; we prepared to go home, Meginnis taking both rods and the lantern and I shouldered the fish, passing my belt through his gill and mouth. While my scale only showed he weighed over fifty pounds on the beach, I would have been willing to wager after the half-mile carry to the hotel through the "mosquito belt" that he weighed a hundred at least. Still enough alive to resent such treatment, several times he banged me on the legs with his broad powerful tail and almost sent me to my knees. At last, after ages and ages, we reached the hotel and on the scales hanging on the porch we took his weight, fifty-six pounds even. To make sure no mistake could be made, I had Meginnis weigh him independently, and each time the needle pointed to fifty-six. Putting him away for the night in Wittkamp's commodious ice house we went to our well-earned and much needed rest.

Whatton, aroused by our entrance, was told of the weight, and the next morning he and Geis took the fish out of the ice house and measured him. Their length was forty-nine and a half and girth of thirty and a half. My measurements, taken hastily in the morning, are given below. I think it is probable, in my hurry to pack him to ship him to the taxidermist, that I measured his girth too far back for his greatest dimension.

In order that there could be no question as to the accuracy of Wittkamp's scales and therefore the real weight of my fish, I brought the scales up with me to Philadelphia, where the Bureau of Weights and Measures tested them for me and certified that they weighed one-half pound too much between fifty and sixty pounds. For that reason I entered my fish in this contest at fifty-five and one-half pounds, and not fifty-six, as the scales showed.

The next morning, as my fishing trip was over and I had to go over to Ocean City to ship my fish, I appeared in my "store clothes" only to be hailed by a myriad of camera fiends to "stand up and be tooken" with my fish. Hence the incongruous raiment. At last he was safely bagged, taken to Ocean City, packed in ice, and shipped to Murgatroyd, who made of him one of his always successful mounts, which embellishes the wall of my library.

This story only goes to show that it does not pay to become discouraged if luck is against you at the start, since it nearly always turns if you "stick to it" long enough.

It may be of interest to others to know that I used a 10-0 round wire "O'Shaughnessy" hook on a twelve-inch six-ply gut leader and the sliding sinker device that I described in a recent number of this magazine.

PRIZE CONTEST CERTIFICATE RECORD 1915 CONTEST

Second Prize, Channel Bass

Weight—55½ lbs.
Length—49½ in.
Girth—29 in.
Caught—July 5.
Where caught—Corson's Inlet, N. J.
Rod—Landman Split Bamboo.
Reel—Julius Vom Hofe.
Line—Ashaway 15-thread.
Lure—Menhaden.

A FAVORITE FISHING LOCATION BELOW THE SPILLWAY

THOSE PANAMA CANAL TARPON

By VAN ALLEN LYMAN

FROM time to time mention has been made of the tarpon fishing to be had in the waters of the Canal Zone, but so far as the writer is aware no detailed information has appeared on the subject. This article therefore may serve the purpose of supplying some accurate information to those who may be interested in tarpon fishing generally, or who may contemplate a bit of fishing as incidental to a trip through the Canal.

Tarpon and other fish are abundant in the Canal waters. As recently as October 4, 1915, a resident of Gatun, fishing four hours in the afternoon, hooked and landed nineteen tarpon. This is not an isolated instance of good luck, for many others have done almost as well.

The majority of the tarpon taken in the waters of the Canal Zone come from the waters of the Gatun Spillway. While they are plentiful elsewhere, the spillway waters have the advantage of permitting fishing from the shore, which is within easy walking distance of the town of Gatun. Consultation of a map of the Panama Canal will help to make conditions clear. It will be noted that Gatun Lake comprises by far the greater part of the Canal, the lake itself covering an area of 164 square miles. The overflow of the lake is handled through an immense concrete spillway over which the surplus water falls. From the spill the water enters the bed of the Chagres River and flows to the Atlantic Ocean, seven or eight miles distant. The tarpon come up from the ocean to feed on the small fish which are carried out of the lake in great numbers by the waste water passing over the spillway. As the tarpon naturally work up as far as possible, they are at times to be found in hundreds at the apron just below the spillway.

So far as the writer knows, the tarpon fishing of Gatun is absolutely unique. It differs radically from the sport as practiced elsewhere. It is remarkable to see the big fish jumping and playing in the rapidly flowing water or perhaps lying still on the bottom and keeping their position with no apparent exertion. Those who know the trout fishing of rapid streams will find the tarpon fishing of

Gatun Spillway comparable to it, though on a much larger scale. Like brook trout, these tarpon have their moods as to feeding. What can be more aggravating than to place the bait time after time before a six-foot tarpon, only to have it ignored? One is apt to revert in desperation to the small boy's method of "snaggin' suckers" and just try to snake the hook into his shimmering body. But such would be a waste of time, for it cannot be done. The body is too big and the scales too hard and slippery for any such procedure, even if it were sportsmanlike to try it.

But often the fish's mood is different and at the first offering the bait will be taken instantly. As the hook is set in its mouth a silvery mass of fighting muscle rises into the air in beautiful leaps. It may be a six-footer or it may be less; there will be a good contest, whatever the size, if the fisherman is at all skilful and sportsmanlike in the matter of tackle. After the first preliminary leaping comes the settling down to a steady, hard fight, with the hard pulling interspersed with sudden rushes that test all the fisherman's judgment and skill if he is not to lose the fish. Perhaps he will be landed and perhaps not. Remember, the fishing is in rapidly running water and that in this case the chances are apt to be more in favor of the fish than of the fisherman. But if by skilful handling, aided by good tackle and good fortune, he is finally worked in close enough to be properly gaffed and be drawn on shore or in the boat, the experience will have been one long to be remembered. Fellow anglers look on interestedly and may shout their approval. In addition to fishing companions, one may be certain of an interested audience of one or more West Indian negroes, out of work and perhaps sorely up against it for food. They would appreciate that tarpon if it were given them.

Fishing is usually done from the shore, or, when water conditions permit it, from the concrete bed of the spillway itself. In either case it is very essential to have one's shoes well studded with hobnails, in order to prevent slipping. Leggings should be worn both for ease in walking and to prevent the attacks of red bugs and wood ticks, both of which may sometimes be accidentally acquired from contact with the bushes or grass on shore.

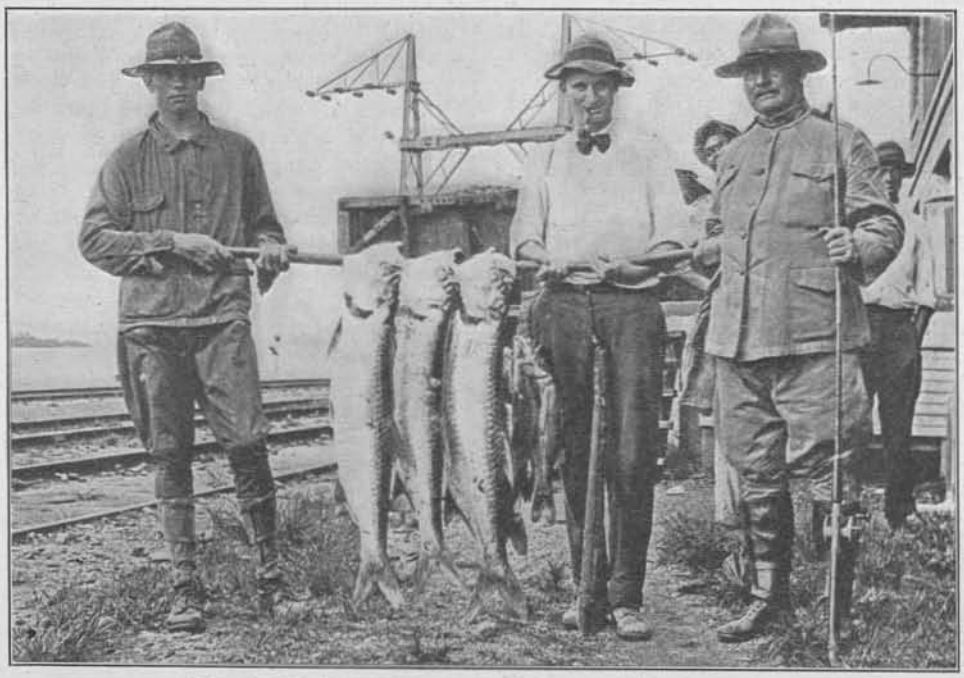
As the water conditions differ from those of the ocean, so do the methods of fishing. In the fishing waters of the United States the bait is usually trolled or allowed to lie on the bottom. In the spillway the procedure is necessarily radically different, two general methods being employed.

For bait casting a two and one-half or

WHY YOU NEED HOBNAILED BOOTS IN FISHING FROM THE SPILLWAY APRON

three-foot wire leader with swivels is used. The weight of the bait, leader and sinker should be from two to five ounces, depending on circumstances. To cast as far as possible and somewhat upstream, and then reel in, keeping the tip of the rod well up and twitching it slightly, so that the bait may simulate a live fish, is the usual procedure. Some sportsmen prefer to use, instead of a sinker at the upper end of the leader, a comparatively heavy float made from a short section of broom handle. This gives the necessary weight for a cast and obviates any chance of fouling the hook on the bottom in case of a tangle on the reel or other trouble. There seems to be little difference between it and the sinker, so far as their effectiveness is concerned. Both ways have their adherents and both ways catch plenty of fish; it is mainly a matter of personal choice. The lure used for both bait-casting methods may be a white rag about the hook, a piece of cotton waste, minnow or other fish, or a casting spoon of generous size. White-rag bait appears to be as effective as anything and costs nothing. The rag should be securely tied to the shank of the hook in such a way as to roughly simulate a minnow. Artificial minnows are very successful, and useless, for they will invariably be broken by the fish before it can be landed. If real fish be used as a lure and are of sufficient weight of themselves, the additional weight of sinker or float is, of course, dispensed with.

Differing from bait casting is an equally successful and much-used method of employing minnows or other fish as a lure, with a large float placed from four to eight feet above the hook. The whole outfit is allowed to drift downstream with the current. No sinker is needed. The bait is kept in motion by being reeled in and allowed to drift back again until the strike comes.



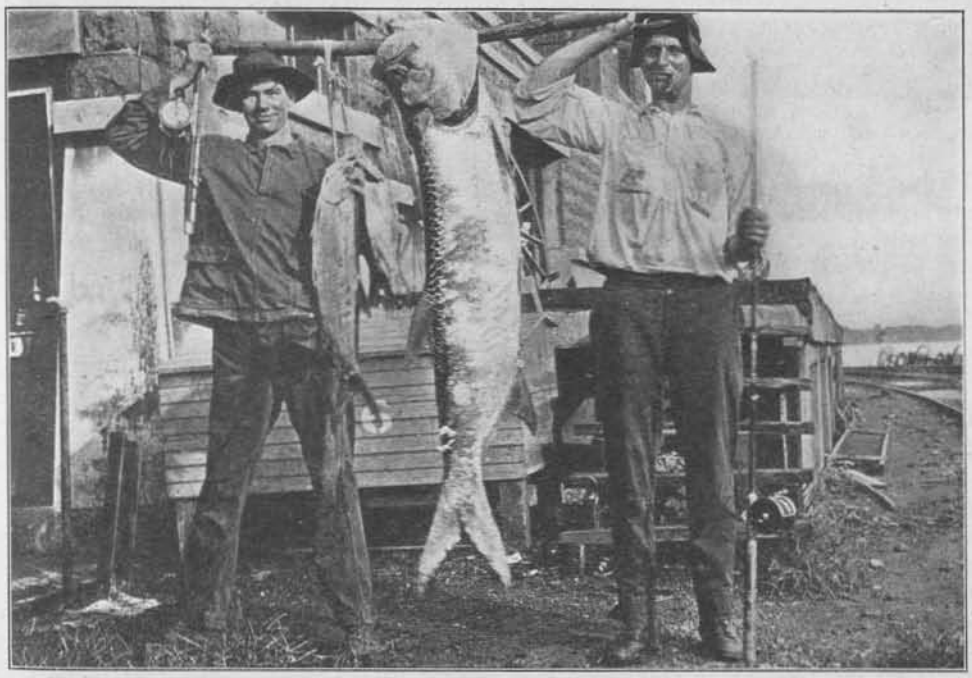
THE ARMY, IT SEEMS, CAN FISH AS WELL AS SHOOT

The foregoing applies particularly to fishing in the rapid water immediately below the spillway. In the quiet lagoons beyond and in the Chagres River itself it is possible to fish from boats in the conventional ways of still-fishing or trolling, though at the present writing boats are difficult to obtain in these waters.

The question of tackle? The natives go out with a small shark hook attached to a clothes-line and appear to get results, but this is hardly a white man's way. Regular tarpon tackle with a six-and-one-half-foot rod and two hundred yards of No. 21 to No. 30 size is all right. In the rapidly running water it takes a heavy line to land the large fish, and anything smaller than No. 21 is not practical. "Light tackle" is entirely out of the question here, except for the smallest fish. A hand line may be used both for casting and still-fishing with considerable success. Remember, however, that a big tarpon securely hooked on a strong hand line is no joke when he begins to put up a fight, and there is a possibility of serious consequences should the fisherman become snarled in his line.

The town of Gatun is within easy walking distance of the fishing grounds and many of the residents are enthusiastic fishermen. Considerable rod-making ability has been developed, and it is safe to say that fully two-thirds of the rods used by local fishermen are home-made and of native tropical woods, principally such as black-palm, cocobola, and tagame, a species of lignum-vitae. Some of them are beautiful pieces of workmanship. As to fittings, the writer once saw an "agate" guide in which a section of bottle-neck properly dressed down did duty as the "agate." The idea is a good one. Large standing ring guides are frequently cut out in one piece from brass tubing of suitable size. The reel will be "store-bought" and the line the best "Cuttyhunk."

The foregoing has dealt mainly on the tarpon fishing of the spillway. But from these same waters are taken in abundance snook (sergant fish), jack (crevally) and sea bass, and occasionally other varieties. But the spillway and Chagres River are by no means the only fishing grounds of the Canal Zone. Tarpon are taken at the entrance of Gatun Locks; in the Atlantic approach to the locks; in Colon Bay, and up and down the Atlantic Coast. One fish of eighty-five pounds has already been taken from Gatun Lake.



A GATUN BEAUTY

DESERT GOLD

A NOVEL, BY ZANE GREY

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XVII

THE WHISTLE OF A HORSE

AT the ranch-house at Forlorn River Belding stood alone in his darkened room. It was quiet there and quiet outside; the sickening midsummer heat, like a hot, heavy blanket, lay upon the house.

He took up the gun belt from his table and with slow hands buckled it around his waist. He seemed to feel something familiar and comfortable and inspiring in the weight of the big gun against his hip. He faced the door as if to go out, but hesitated, and then began a slow, plodding walk up and down the length of the room. Presently he halted at the table, and with reluctant hands he unbuckled the gun belt and laid it down.

The action did not have an air of finality, and Belding knew it. He had seen border life in Texas in the early days; he had been a sheriff when the law in the West depended on a quickness of wrist; he had seen many a man lay down his gun for good and all. His own action was not final. Of late he had done the same thing many times, and this last time it seemed a little harder to do, a little more indicative of vacillation. There were reasons why Belding's gun held for him a gloomy fascination.

The Chases, those grasping and conscienceless agents of a new force in the development of the West, were bent upon Belding's ruin, and, so far as his fortunes at Forlorn River were concerned, had almost accomplished it. One by one he lost points for which he contended with them. He carried into the Tucson courts the matter of the staked claims, and mining claims, and water claims, and he lost all. Following that he lost his government position as inspector of immigration; and this fact, because of what he considered its injustice, had been a hard blow. He had been made to suffer a humiliation equally as great. It came about that he actually had to pay the Chases for water to irrigate his alfalfa fields. The never-failing spring upon his land answered for the needs of household and horses, but no more.

These matters were unfortunate for Belding, but not by any means wholly ac-

countable for his worry and unhappiness and brooding hate. He believed Dick Gale and the rest of the party taken into the desert by the Yaqui had been killed or lost. Two months before, a string of Mexican horses, riderless, saddled, starved for grass and wild for water, had come in to Forlorn River. They were a part of the horses belonging to Rojas and his band. Their arrival complicated the mystery and strengthened convictions of the loss of both pursuers and pursued. Belding was wont to say that he had worried himself gray over the fate of his rangers.

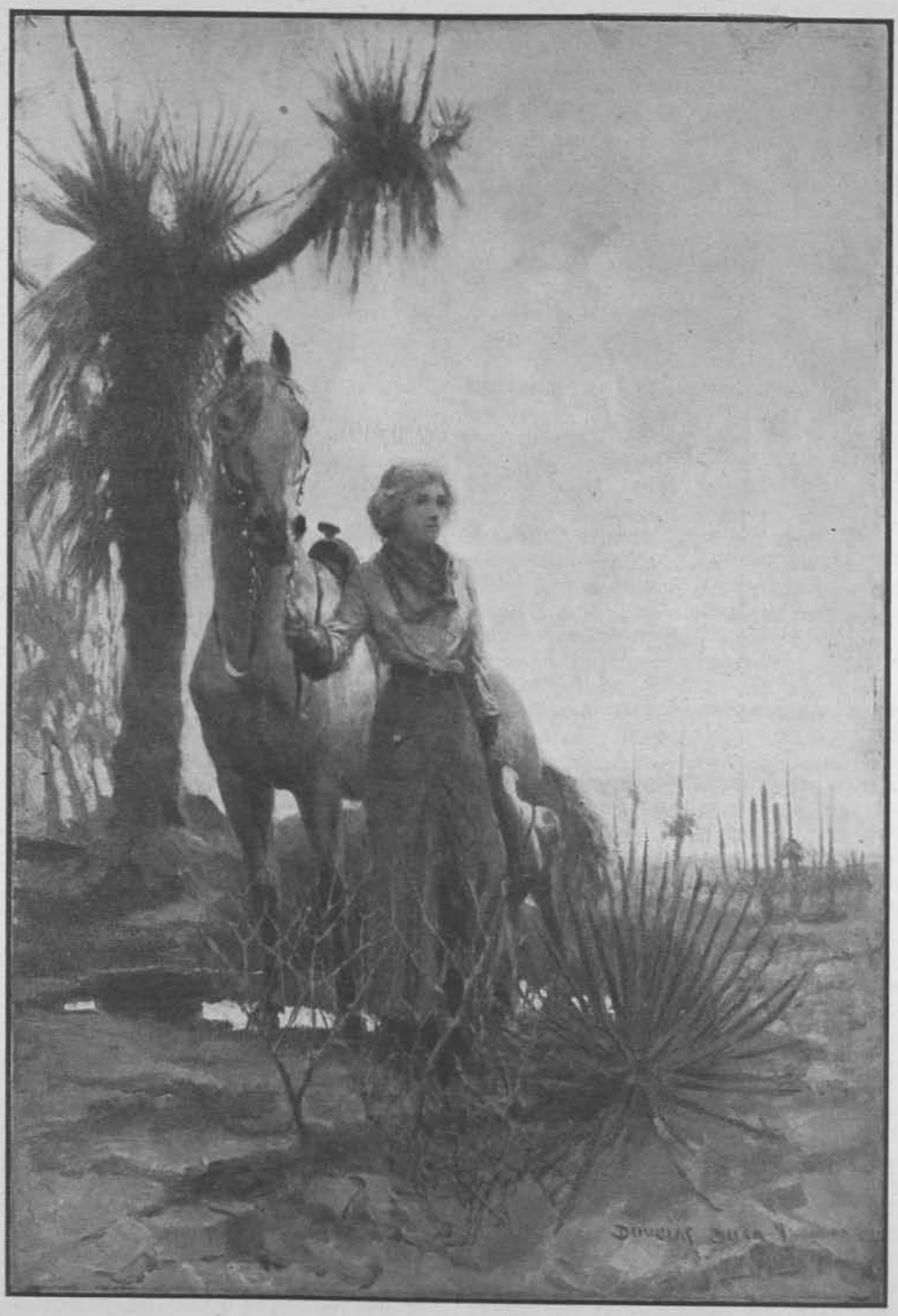
Belding's unhappiness could hardly be laid to material loss. He had been rich and was now poor, but change of fortune such as that could not have made him unhappy. Something more somber and mysterious and sad than the loss of Dick Gale and their friends had come into the lives of his wife and Nell. He dated the time of this change back to a certain day when Mrs. Belding recognized in the elder Chase an old schoolmate and a rejected suitor. It took time for slow-thinking Belding to discover anything wrong in his household, especially as the fact of the Gales lingering there made Mrs. Belding and Nell, for the most part, hide their real and deeper feelings. Gradually, however, Belding had forced on him the fact of some secret cause for grief other than Gale's loss. He was sure of it when his wife signified her desire to make a visit to her old home back in Peoria. She did not give many reasons, but she did show him a letter that had found its way from old friends. This letter contained news that may or may not have been authentic; but it was enough, Belding thought, to interest his wife. An old prospector had returned to Peoria, and he had told relatives of meeting Robert Burton at the Sonoyta Oasis fifteen years before, and that Burton had gone into the desert never to return. To Belding this was no surprise, for he had heard that before his marriage. There appeared to have been no doubts as to the death of his wife's first husband. The singular thing was that both Nell's father and grandfather had been lost somewhere in the Sonora Desert.

Belding did not oppose his wife's desire to visit her old home. He thought it would be a wholesome trip for her, and did all in his power to persuade Nell to accompany her. But Nell would not go.

It was after Mrs. Belding's departure that Belding discovered in Nell a condition of mind that amazed and distressed him. She had suddenly become strangely wretched, so that she could not conceal it from even the Gales, who, of all people, Belding imagined, were the ones to make Nell proud. She would tell him nothing. But after a while, when he had thought it out, he dated this further and more deplorable change in Nell back to a day on which he had met Nell with Radford Chase. This indefatigable wooer had not in the least abandoned his suit. Something about the fellow made Belding grind his teeth. But Nell grew not only solicitously, but now strangely, entreatingly earnest in her importunities to Belding not to insult or lay a hand on Chase. This had bound Belding so far; it had made him think and watch. He had never been a man to interfere with his women folk. They could do as they liked, and usually that pleased him. But a slow surprise gathered and grew upon him when he saw that Nell, apparently, was accepting young Chase's attentions. At least, she no longer hid from him. Belding could not account for this, because he was sure Nell cordially despised the fellow. And toward the end he divined, if he did not actually know, that these Chases possessed some strange power over Nell, and were using it. That stirred a hate in Belding—a hate he had felt at the very first and had manfully striven against, and which now gave him over to dark, brooding thoughts.

Midsummer passed, and the storms came late. But when they arrived they made up for tardiness. Belding did not remember so terrible a storm of wind and rain as that which broke the summer's drought.

In a few days, it seemed, Altar Valley was a bright and green expanse, where dust clouds did not rise. Forlorn River ran, a slow, heavy, turgid torrent. Belding never saw the river in flood that it did not give him joy; yet now, desert man as he was, he suffered a regret when he thought of the great Chase reservoir full



NELL;—WAITING

and overflowing. The dull thunder of the spillway was not pleasant. It was the first time in his life that the sound of falling water jarred upon him.

Belding noticed workmen once more engaged in the fields bounding his land. The Chases had extended a main irrigation ditch down to Belding's farm, skipped the width of his ground, then had gone on down through Altar Valley. They had exerted every influence to obtain right to connect these ditches by digging through his land, but Belding remained obdurate. He refused to have any dealings with them. It was therefore with some curiosity and suspicion that he saw a gang of Mexicans once more at work upon these ditches.

At daylight next morning a tremendous blast almost threw Belding out of his bed. It cracked the adobe walls of his house and broke windows and sent pans and crockery to the floor with a crash. Belding's idea was that the store of dynamite kept by the Chases for blasting had blown up. Hurriedly getting into his clothes, he went to Nell's room to reassure her; and, telling her to have a thought for their guests, he went out to see what had happened.

The villagers were pretty badly frightened. Many of the poorly constructed adobe huts had crumbled almost into dust. A great yellow cloud, like smoke, hung over the river. This appeared to be at the upper end of Belding's plot, and close to the river. When he reached his fence the smoke and dust were so thick he could scarcely breathe, and for a little while he was unable to see what had happened. Presently he made out a huge hole in the sand just about where the irrigation ditch had stopped near his line. For some reason or other, not clear to Belding, the Mexicans had set off an extraordinarily heavy blast at that point.

Belding pondered. He did not now for a moment consider an accidental discharge of dynamite. But why had this blast been set off? The loose, sandy soil had yielded readily to shovel; there were no rocks; as far as construction of a ditch was concerned, such a blast would have done more harm than good.

Slowly, with reluctant feet, Belding walked toward a green hollow, where in a cluster of willows lay the never-failing spring that his horses loved so well, and, indeed, which he loved no less. He was actually afraid to part the drooping willows to enter the little cool, shady path that led to the spring. Then, suddenly seized by suspense, he ran the rest of the way.

He was just in time to see the last of the water. It seemed to sink as in quicksand. The shape of the hole had changed. The tremendous force of the blast in the adjoining field had obstructed or diverted the underground stream of water.

Belding's never-failing spring had been ruined. What had made this little plot of ground green and sweet and fragrant was now no more. Belding's first feeling was for the pity of it. The pale Ajo lilies would bloom no more under those willows. The willows themselves would soon wither and die. He thought how many times in the middle of hot summer nights he had come down to the spring to drink. Never again!

Suddenly he thought of Blanco Diablo. How the great white thoroughbred had loved this spring! Belding straightened up and looked with tear-blurred eyes out over the waste of desert to the west. Never a day passed that he had not thought of the splendid horse; but this moment, with its significant memory, was doubly keen, and there came a dull pang in his breast.

"Diablo will never drink here again!" muttered Belding.

The loss of Blanco Diablo, though admitted and mourned by Belding, had never seemed quite real until this moment.

The pall of dust drifting over him, the din of the falling water up at the dam, diverted Belding's mind to the Chases. All at once he was in the harsh grip of a cold certainty. The blast had been set off intentionally to ruin his spring. What a hellish trick! No Westerner, no Indian or Mexican, no desert man could have been guilty of such a crime. To ruin a beautiful, clear, cool, never-failing stream of water in the desert!

It was then that Belding's worry and indecision and brooding were as if they had never existed. As he strode swiftly

back to the house, his head, which had long been bent thoughtfully and sadly, was held erect. He went directly to his room, and with an air that was now final he buckled on his gun belt. He looked the gun over and tried the action. He squared himself and walked a little more erect. Some long-lost individuality had returned to Belding.

"Let's see," he was saying. "I can get Carter to send the horses I've got left back to Waco to my brother. I'll make Nell take what money there is and go hunt up her mother. The Gales are ready to go—to-day, if I say the word. Nell can travel with them part way East. That's your game, Tom Belding, don't mistake me."

As he went out he encountered Mr. Gale coming up the walk. The long sojourn at Forlorn River, despite the fact that it had been laden with a suspense which was gradually changing to a sad certainty, had been of great benefit to Dick's father. The dry air, the heat, and the quiet had made him, if not entirely a well man, certainly stronger than he had been in many years.

"Belding, what was that terrible roar?" asked Mr. Gale. "We were badly frightened until Miss Nell came to us. We feared it was an earthquake."

"Well, I'll tell you, Mr. Gale, we've had some quakes here, but none of them could hold a candle to this jar we just had."

Then Belding explained what had caused the explosion, and why it had been set off so close to his property.

"It's an outrage, sir, an unspeakable outrage," declared Mr. Gale, hotly. "Such a thing would not be tolerated in the East. Mr. Belding, I'm amazed at your attitude in the face of all this trickery."

"You see—there was mother and Nell," began Belding, as if apologizing. He dropped his head a little and made marks in the sand with the toe of his boot. "Mr. Gale, I've been sort of half hitched, as Laddy used to say. I'm planning to have a little more elbow room round this ranch. I'm going to send Nell East to her mother. Then I'll— See here, Mr. Gale, would you mind having Nell with you part way when you go home?"

"We'd all be delighted to have her go all the way and make us a visit," replied Mr. Gale.

"That's fine. And you'll be going soon? Don't take that as if I wanted to—" Belding paused, for the truth was that he did want to hurry them off.

"We would have been gone before this, but for you," said Mr. Gale. "Long ago we gave up hope of—of Richard ever returning. And I believe, now we're sure he was lost, that we'd do well to go home at once. You wished us to remain till the heat was broken—till the rains came to make traveling easier for us. Now I see no need for further delay. My stay here has greatly benefited my health. I shall never forget your hospitality. This Western trip would have made me a new man if—only—Richard——"

"Sure. I understand," said Belding, gruffly. "Let's go in and tell the women to pack up."

Nell was busy with the servants preparing breakfast. Belding took her into the sitting-room while Mr. Gale called his wife and daughter.

"My girl, I've some news for you," began Belding. "Mr. Gale is leaving to-day with his family. I'm going to send you with them—part way, anyhow. You're invited to visit them. I think that'd be great for you—help you to forget. But the main thing is—you're going East to join mother."

Nell gazed at him, white-faced, without uttering a word.

"You see, Nell, I'm about done in Forlorn River," went on Belding. "That blast this morning sank my spring. There's no water now. It was the last straw. So we'll shake the dust of Forlorn River. I'll come on a little later—that's all."

"Dad, you're packing your gun!" exclaimed Nell, suddenly pointing with a trembling finger. She ran to him, and for the first time in his life Belding put her away from him. His movements had lost the old slow gentleness.

"Why, so I am," replied Belding, coolly, as his hand moved down to the sheath swinging at his hip. "Nell, I'm that absent-minded these days!"

"Dad!" she cried.

"That'll do from you," he replied, in a

voice he had never used to her. "Get breakfast now, then pack to leave Forlorn River."

"Leave Forlorn River!" whispered Nell, with a thin white hand stealing up to her breast. How changed the girl was! Belding reproached himself for his hardness, but did not speak his thought aloud. Nell was fading here, just as Mercedes had faded before the coming of Thorne.

Nell turned away to the west window and looked out across the desert toward the dim blue peaks in the distance. Belding watched her; likewise the Gales; and no one spoke. There ensued a long silence. Belding felt a lump rise in his throat. Nell laid her arm against the window frame, but gradually it dropped, and she was leaning with her face against the wood. A low sob broke from her. Elsie Gale went to her, embraced her, took the drooping head on her shoulder.

"We've come to be such friends," she said. "I believe it'll be good for you to visit me in the city. Here—all day you look out across that awful lonely desert. . . . Come, Nell."

Heavy steps sounded outside on the flagstones, then the door rattled under a strong knock. Belding opened it. The Chases, father and son, stood beyond the threshold.

"Good morning, Belding," said the elder Chase. "We were routed out early by that big blast and came up to see what was wrong. All a blunder. The Greaser foreman was drunk yesterday, and his ignorant men made a mistake. Sorry if the blast bothered you."

"Chase, I reckon that's the first of your blasts I was ever glad to hear," replied Belding, in a way that made Chase look blank.

"So? Well, I'm glad you're glad," he went on, evidently puzzled. "I was a little worried—you've always been so touchy—we never could get together. I hurried over, fearing maybe you might think the blast—you see, Belding——"

"I see this, Mr. Ben Chase," interrupted Belding, in curt and ringing voice. "The blast *was* a mistake, the biggest you ever made in your life."

"What do you mean?" demanded Chase.

"You'll have to excuse me for a while, unless you're dead set on having it out right now. Mr. Gale and his family are leaving, and my daughter is going with them. I'd rather you'd wait a little."

"Nell going away!" exclaimed Radford Chase. He reminded Belding of an overgrown boy in disappointment.

"Yes. But—*Miss Burton* to you, young man——"

"Mr. Belding, I certainly would prefer a conference with you right now," interposed the elder Chase, cutting short Belding's strange speech. "There are other matters—important matters to discuss. They've got to be settled. May we step in, sir?"

"No, you may not," replied Belding, bluntly. "I'm sure particular who I invite into my house. But I'll go with you."

Belding stepped out and closed the door. "Come away from the house so the women won't hear the—the talk."

The elder Chase was purple with rage, yet seemed to be controlling it. The younger man looked black, sullen, impatient. He appeared not to have a thought of Belding. He was absolutely blind to the situation, as considered from Belding's point of view. Ben Chase found his voice about the time Belding halted under the trees out of earshot from the house.

"Sir, you've insulted me—my son. How dare you? I want you to understand that you're——"

"Chop that kind of talk with me, you ——— ——— ——— ———!" interrupted Belding. He had always been profane, and now he certainly did not choose his language. Chase turned livid, gasped, and seemed about to give way to fury. But something about Belding evidently exerted a powerful quieting influence. "If you talk sense I'll listen," went on Belding.

Belding was frankly curious. He did not think any argument or inducement offered by Chase could change his mind on past dealings or his purpose of the present. But he believed by listening he might get some light on what had long puzzled him. The masterly effort Chase put forth to conquer his aroused passions gave Belding another idea of the character of this promoter.

"I want to make a last effort to pro-

pitiate you," began Chase, in his quick, smooth voice. That was a singular change to Belding—the dropping instantly into an easy flow of speech. "You've had losses here, and naturally you're sore. I don't blame you. But you can't see this thing from my side of the fence. Business is business. In business the best man wins. The law upheld those transactions of mine the honesty of which you questioned. As to mining and water claims, you lost on this technical point—that you had nothing to prove you had held them for five years. Five years is the time necessary in law. A dozen men might claim the source of Forlorn River, but if they had no house or papers to prove their squatters' rights any man could go in and fight them for the water. . . . Now I want to run that main ditch along the river, through your farm. Can't we make a deal? I'm ready to be liberal—to meet you more than halfway. I'll give you an interest in the company. I think I've influence enough up at the Capitol to have you reinstated as inspector. A little reasonableness on your part will put you right again in Forlorn River, with a chance of growing rich. There's a big future here. . . . My interest, Belding, has become personal. Radford is in love with your stepdaughter. He wants to marry her. I'll admit now if I had foreseen this situation I wouldn't have pushed you so hard. But we can square the thing. Now let's get together not only in business, but in a family way. If my son's happiness depends upon having this girl, you may rest assured I'll do all I can to get her for him. I'll absolutely make good all your losses. Now what do you say?"

"No," replied Belding. "Your money can't buy a right of way across my ranch. And Nell doesn't want your son. That settles that."

"But you could persuade her."

"I won't, that's all."

"May I ask why?" Chase's voice was losing its suave quality, but it was even swifter than before.

"Sure. I don't mind your asking," replied Belding, in slow deliberation. "I wouldn't do such a low-down trick. Besides, if I would, I'd want it to be a man I was persuading for. I know Greasers—I know a Yaqui I'd rather give Nell to than your son."

Radford Chase began to roar in inarticulate rage. Belding paid no attention to him; indeed, he never glanced at the young man. The elder Chase checked a violent start. He plucked at the collar of his gray flannel shirt, opened it at the neck.

"My son's offer of marriage is an honor—more an honor, sir, than you perhaps are aware of."

Belding made no reply. His steady gaze did not turn from the long lane that led down to the river. He waited coldly, sure of himself.

"Mrs. Belding's daughter has no right to the name of Burton," snapped Chase. "Did you know that?"

"I did not," replied Belding, quietly.

"Well, you know it now," added Chase, bitingly.

"Sure you can prove what you say?" queried Belding, in the same cool, unemotional tone. It struck him strangely at the moment what little knowledge this man had of the West and of Western character.

"Prove it? Why, yes, I think so—enough to make the truth plain to any reasonable man. I come from Peoria—was born and raised there. I went to school with Nell Warren. That was your wife's maiden name. She was a beautiful, gay girl. All the fellows were in love with her. I knew Bob Burton well. He was a splendid fellow, but wild. Nobody ever knew for sure, but we all supposed he was engaged to marry Nell. He left Peoria, however, and soon after that the truth about Nell came out. She ran away. It was at least a couple of months before Burton showed up in Peoria. He did not stay long. Then for years nothing was heard of either of them. When word did come Nell was in Oklahoma, Burton was in Denver. There's a chance, of course, that Burton followed Nell and married her. That would account for Nell Warren taking the name of Burton. But it isn't likely. None of us ever heard of such a thing and wouldn't have believed it if we had. The affair seemed destined to end unfortunately. But Belding, while I'm at it, I want to say that Nell Warren

was one of the sweetest, finest, truest girls in the world. If she drifted to the Southwest and kept her past a secret, that was only natural. Certainly it should not be held against her. Why, she was only a child—a girl—seventeen—eighteen years old. . . . In a moment of amazement—when I recognized your wife as an old schoolmate—I blurted the thing out to Radford. You see now how little it matters to me when I ask your stepdaughter's hand in marriage for my son."

"So you told my wife you'd respect her secret—keep her dishonor from husband and daughter?" demanded Belding, his dark gaze sweeping back from the lane.

"What! I—I—" stammered Chase.

"You made your son swear to be a man and die before he'd hint the thing to Nell?" went on Belding.

Ben Chase had no answer. The red left his face. His son slunk back against the fence.

"I say you never held this secret over the heads of my wife and daughter?" thundered Belding.

He had his answer in the gray faces, in the lips that fear made mute. Like a flash Belding saw the whole truth of Mrs. Belding's agony, the reason for her departure; he saw what had been driving Nell; and it seemed that all the dogs of hell were loosed within his heart. He struck out blindly, instinctively in his pain, and the blow sent Ben Chase staggering into the fence corner. Then he stretched forth a long arm and whirled Radford Chase back beside his father.

"I see it all now," went on Belding, hoarsely. "You found the woman's weakness—her love for the girl. You found the girl's weakness—her pride and fear of shame. So you drove the one and hounded the other. God! what a base thing to do! To *tell* the girl was bad enough, but to *threaten* her with betrayal; there's no name for that!"

Belding's voice thickened, and he paused, breathing heavily. He stepped back a few paces; and this, an ominous action for an armed man of his kind, instead of adding to the fear of the Chases, seemed to relieve them. If there had been any pity in Belding's heart he would have felt it then.

"And now, gentlemen," continued Belding, speaking low and with difficulty, "seeing I've turned down your proposition, I suppose you think you've no more call to keep your mouths shut?"

The elder Chase appeared fascinated by something he either saw or felt in Belding, and his gray face grew grayer. He put up a shaking hand. Then Radford Chase, livid and snarling, burst out: "I'll talk till I'm black in the face. You can't stop me!"

"You'll go black in the face, but it won't be from talking," hissed Belding.

His big arm swept down, and when he threw it up the gun glittered in his hand. Simultaneously with the latter action pealed out a shrill, penetrating whistle.

The whistle of a horse! It froze Belding's arm aloft. For an instant he could not move even his eyes. The familiarity of that whistle was terrible in its power to rob him of strength. Then he heard the rapid, heavy pound of hoofs.

"Blanco Diablo!" he cried, huskily.

He turned to see a huge white horse come thundering into the yard. A wild, gaunt, terrible horse; indeed, the loved Blanco Diablo. A bronzed, long-haired Indian bestrode him. More white horses galloped into the yard, pounded to a halt, whistling home. Belding saw a slim shadow of a girl who seemed all great black eyes.

Under the trees flashed Blanco Sol, as dazzling white, as beautiful as if he had never been lost in the desert. He slid to a halt, then plunged and stamped. His rider leaped, throwing the bridle. Belding saw a powerful, spare, ragged man, with dark, gaunt face and eyes of flame.

Then Nell came running from the house, her golden hair flying, her hands outstretched, her face wonderful.

"Dick! Dick! Oh-h-h, Dick!" she cried. Her voice seemed to quiver in Belding's heart.

Belding's eyes began to blur. He was not sure he saw clearly. Whose face was this now close before him—a long, thin, shrunken face, haggard, tragic in its semblance of torture, almost of death?

"I shore am glad to see you all," said a well-remembered voice in a slow, cool drawl.

(To be continued)

The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

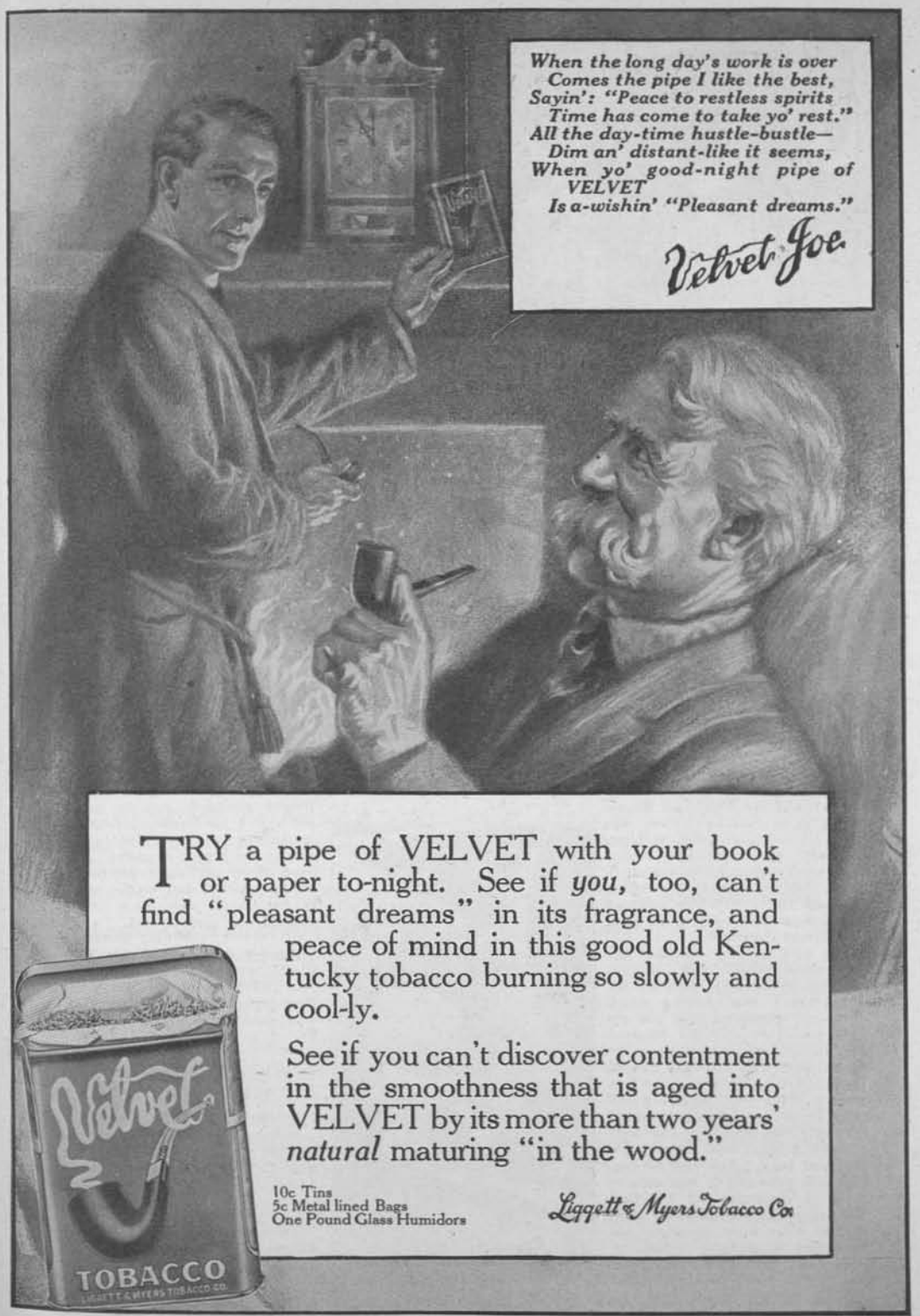
NOTICE OUR CHANGE IN TYPE SET

Some months ago we changed the make-up of our Sportsmen's World Department, setting it in smaller type than the rest of the magazine. You will perhaps remember that the reason we did this was that we had so much valuable information which we wanted to run in this department that it was impossible to get it all in, or anywhere near all in using the larger size type. Therefore we decided on what we thought was the rather unique idea of setting this department up in smaller type in three columns, which gave us an opportunity to run from 35,000 to 40,000 words in each issue. In other words, practically doubling the amount that we had been offering to our readers previously, and in this way giving the sportsmen more reading matter than any sportsman's magazine published. At that time we asked our readers what they thought of this idea and we received a great many answers; some were delighted with it, saying that this department was the one best bet in the magazine, and that the more of this practical information we could give them the better they liked it, and that they would read it if they had to use a microscope. However, some said the type was too small, and that it was a little hard on the eyes, so this month, although we are retaining the same size type, we have leaded it out so that it will be easier to read, and we hope that with this issue we are going to be able to please everyone.

A CLOSE CALL

By E. A. G. W.

This fall I was so nearly the victim of a very peculiar shooting accident that I now have an intense desire to recite it. I was shooting from the left-hand side of a double battery in the Great South Bay. My wife, who was with me, had stopped shooting and I was using her gun, a 16-gauge Sauer, as well as my 10-gauge Remington. Being somewhat fuzzy about loads, I had had the shells for both guns loaded to order, and despite the fact of the difference in size they were very similar, being entirely green. A big flock of broad-bill came into the stool from the left, low to the water. Using the 10-gauge I knocked down two towards the rear of the flock at the tail of the stool, grabbed up the little 16 and killed another close up and missed with the second barrel as they towered off with the wind. Realizing that one of the first two was only crippled I picked up the 10-gauge again shoved a shell in the right-hand barrel, covered the duck as he swam about in the decoys and pulled the trigger. Nothing happened and believing it a misfire I opened the breach but saw no shell in the gun. Seeing from the tail of my eye that the duck was up and flying to the right, I didn't stop to reason but fumbled for another shell and shoved it in the right-hand barrel, but by the time I got the gun up again the duck was 90 yards away and going strong so reluctantly I refrained from shooting. Investigating the cause of the misfire I discovered that in my haste the first time to reload the 10-gauge I had slipped in a 16-gauge shell which had gone down the barrel about four inches, out of sight to a casual glance, but the second time I had put a 10-gauge shell in the same barrel. If I had shot then I am firmly of the belief that I would have lost my head, so to speak, and that my wife, too, would have been badly injured, for as the duck flew to the right and as she was on that side the explosion would have occurred within two or three feet of her head. The strength and gameness the Lord gave that broad-bill prevented a tragedy.


When the long day's work is over
Comes the pipe I like the best,
Sayin': "Peace to restless spirits
Time has come to take yo' rest."
All the day-time hustle-bustle—
Dim an' distant-like it seems,
When yo' good-night pipe of VELVET
Is a-wishin' "Pleasant dreams."
Velvet Joe.
TRY a pipe of VELVET with your book or paper to-night. See if you, too, can't find "pleasant dreams" in its fragrance, and peace of mind in this good old Kentucky tobacco burning so slowly and cool-ly.
See if you can't discover contentment in the smoothness that is aged into VELVET by its more than two years' natural maturing "in the wood."
Velvet
TOBACCO
10c Tins
5c Metal lined Bags
One Pound Glass Humidors
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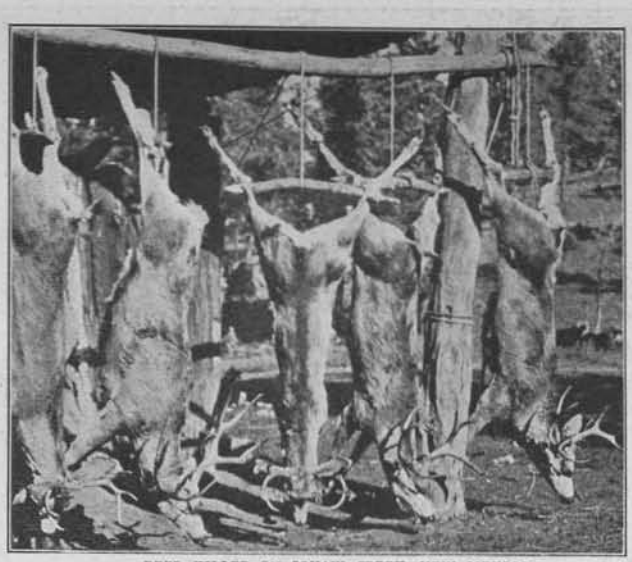


DEER KILLED ON SQUAW CREEK, NEW MEXICO

A NEW MEXICO DEER HUNT

L. L. Dierssen

A party of rangers and miners, most of them employed by the Chino Copper Company, left Santa Rita on October 25, 1914, for a deer hunt in the Black Range, about forty miles north. The outfit consisted of a grub wagon, three pack burros and five saddle horses. Plenty of eats were aboard and the expedition looked very promising.

The first night brought the party to the 3 Circle Ranch, located on the Mimbers River. The next evening, with an early morning start, the Mecin Ranch, on Squaw Creek, was reached. Here was to be the main camp for the hunt. The old log ranch house looked very much deserted and was all in ruins. It looked like a tombstone to mark the spot where cowboys and Indians held sway in the good old pioneer days.

The next morning everyone was up before sunrise and, without thinking of breakfast, were off for a big hunt. The morning passed without a shot being fired and not even a sign of a track. Most of the time the party kept along the ridges, as the country was new to them and because it was the best place to look for tracks. About three in the afternoon a bunch of blacktails was scared up and, with a running shot, Doc. Zeemer got the head buck. The luck in general was poor and it was decided to go to camp and call it a day. The supper sure tasted good, as up to this time little attention had been paid to anything to eat.

Squaw Creek is considered the heart of the deer country, and it didn't take long to find it out. A nice blacktail buck strolled into camp just at sundown to see what was going on. He received lead from Clyde Jones' rifle and furnished tender fresh meat for the camp.

Everybody had a good night's sleep and was ready next morning for a good day. The weather was pleasant, and all the small animals and birds were out enjoying the beautiful outdoors. There were pine squirrels, chipmunks and lots of turkey. These, however, did not draw much atention from the hunters, as they were out for larger game. Frank Greene got the first deer. It was another blacktail, and a dandy. James Blair was second to get his prize and Herb. Robinson was third. Lots of tracks were seen as well as some fresh bear tracks. This is also good bear country, but none of the party got near enough to get a shot at one.

HARDIN AND HIS BIG BUCK

On Sunday, October 31, Zeb Hardin got the prize buck. This was the last deer killed by the party as the game laws are very strict in this locality and each man had his limit (one buck). The next two days were spent around camp taking life easy, fishing and hunting wild turkey to take home.

On November 4 every one was back to work in the mine or on the ranch, telling about the big trip and killing more deer (in words) than are in Grant County.

A VENISOW STEW RECIPE

FIELD & STREAM PUB. CO.:

Will you kindly give me list of necessary ingredients for a good venison stew, length of time for cooking, etc.

G. A. MORRISON.

Ans.—Chop venison into chunks and put in gallon pot. Slice in three onions, three potatoes, a handful of rice; salt and let stew for an hour. Add celery salt and serve. This for four men.—ED.

WATERPROOFING CANVAS

FIELD & STREAM PUB. CO.:

I am a constant reader of your magazine and find it of solid worth to the lover of outdoors. Now I wonder if you can advise me how I can waterproof canvas or drilling so it will stand a reasonable amount of weather? I believe there are some compounds on the market, but would prefer to use some preparation recommended and tried by you.

W. M. SKEELS.

Ans.—4 oz. alum, 10 oz. lime, 10 gal. water. Slack together and pour off clear liquor in which steep tent. This is successful with 8 oz. duck but not with drilling.—ED.

THE RECORD NORTH AMERICAN BISON HEAD

FIELD & STREAM PUB. CO.:

Will you kindly inform me through your valued magazine the size of the record head for North American bison.

HARRY A. ARCHIBALD.

Ans.—Seton gives 6 feet at withers as a record size horn, 22 inches by 16⅜ inches girth, about 2,200 pounds weight.—ED.

SPENCER

THE BIG WINNER IN 1915

THE Interstate Association's Official High Professional Average for the season of 1915 was won by Charles G. Spencer, of St. Louis, Mo., with the marvelous record of 97.5% for 5620 targets. Such an average for such a large number of targets not only shows Mr. Spencer's great skill, but also proves the uniform and unequalled quality of

WINCHESTER

Loaded Shells and Shotguns

which Mr. Spencer used exclusively. He used this same combination when he made his marvelous straight run of 565 targets—the World's Record.

Contests for the Season's Trapshooting Averages have been held 16 times and 12 of them have been won by **W** shells or guns, or both, which is undeniable evidence of their superiority.

Lester German, of Aberdeen, Md.,, who was second high for the season, and who also made the greatest score of the year for a single tournament—499x500—used Winchester shells in performing this great feat.

J. Mowell Hawkins, of Baltimore, Md., shot 7,265 targets in competition during 1915, and made the splendid average of 95.56%, using Winchester shells and shotguns exclusively—more proof of their uniform shooting qualities. These performances show the reason why Winchester shells and guns are

GERMAN

HAWKINS

PREFERRED AND USED BY MEN OF ACHIEVEMENT

CONSERVATION

BOB-WHITE—HIS BREEDING, PROTECTION AND INCREASE

By E. A. Quarles
Director, Department of Game Breeding and Preserving

Courtesy American Game Protective Association

PART III.

The First Feed

"The first feed is given as soon as the chicks cease brooding, and commence moving around in search of something to eat. This will usually be within one to three hours. As stated above, all food is placed on wooden trays, top and bottom being used on alternate days. I carry a whisk broom with me and brush these thoroughly each time before feeding and, in addition, they are scoured frequently. No water is given the chicks at this stage, but the bantam is supplied it in a vessel of sufficient height to prevent the chicks from getting to it.

"Great care must be exercised in banking the earth against the sides of the coop and run, as a quail chick can get through an inconceivably small space. We come now to the feeding of young quail.

"The first feed is custard, given four times a day. It is made in a double boiler, three eggs to a teacup of milk, the eggs being heated separately and added to the milk when it comes to a boil. Boil till the custard thickens and then cool. Break up for feeding.

Wet Mash Second Week

"After the first week a mash of Spratt's number 12 pheasant meal, the yolk of a hard-boiled egg and chick grain is given. The chick grain and pheasant meal are scalded together and the egg, which has first been put through a very fine sieve, is mixed in along with finely chopped lettuce and onion tops. This is given four times a day. Keep your birds hungry. Avoid overfeeding at all times. Never leave any food that is not cleaned up. Underfeeding rarely kills a game bird, while overfeeding slays its thousands.

"The birds are carried along on this mash till they are two weeks old, when a single dry feed of chick grain is given, the last of the day. At the end of four weeks this dry feed is given at the second and fourth feedings.

"At the end of two months the birds are placed on the ration for adult birds described at the beginning of this article—one or two feeds a day of chick grain with a wet mash given two or three times a week.

"When two weeks old, clip the primary (long feathers) of one wing if it is not intended to turn the birds out in the fall for stocking purposes. Never pinion a bird and do not clip it if the birds are to be turned out the same year.

Handling Young Birds

"Having covered the feeding of quail from hatching to maturity, let's come back to the handling of the young birds in the rearing field. The coop and run in which the brood is placed is moved daily after the third day and this constitutes one of the most tedious features of quail breeding. Fresh ground is necessary, however, and this is absolutely essential. Here are the several steps in the moving of hen, brood, rearing coop and run:

"1. Mow with scythe space to which coop and run are to be moved.

"2. Drive chicks in coop with hen and close door.

"3. Move run to new location and pack earth about the sides with driving end of hammer or hatchet, leaving no crack or cranny of escape.

"4. Place shorter run called transfer run, in front of coop in which hen and chicks are confined.

"5. Open front of coop, allowing chicks to enter transfer run and close entrance to coop, so they cannot retreat to it.

"6. Open door on top of transfer run, reach in and take the chicks out, one by one, placing them in the carrying box, previously described.

"7. Take hen out of coop by its side door and move coop, hen and brood to new location, packing earth well about the bottom of the coop with hammer.

"8. Place hen in coop and chicks in run.

"Great care must be exercised in affording access to both sun and shade to the birds and each must be readily available.

Wings Clipped at Two Weeks

"When the chicks are two weeks old, they are wing-clipped as previously described and are placed in a run 16 feet square, surrounded with boards 2 feet in height. If they are not wing-clipped, wire or fish net will have to be placed over this. The rearing coop is placed in the center of this space and the bantam mother is still kept confined. It is not necessary to change the location of these pens more than once a week, which greatly lightens the labor of attending to the chicks. Where quail are being reared in smaller quantities, they may be allowed more or less free range after the first week (as explained in the interesting article on quail breeding in the April number of the *Bulletin* by Mr. Arthur M. Barnes), the hen usually being kept in the coop, though some breeders let her go with the chicks, merely confining the mother and brood at night. The more insects the birds can get, the better they will thrive, for the nearer will they be to conditions that they encounter in the wild state.

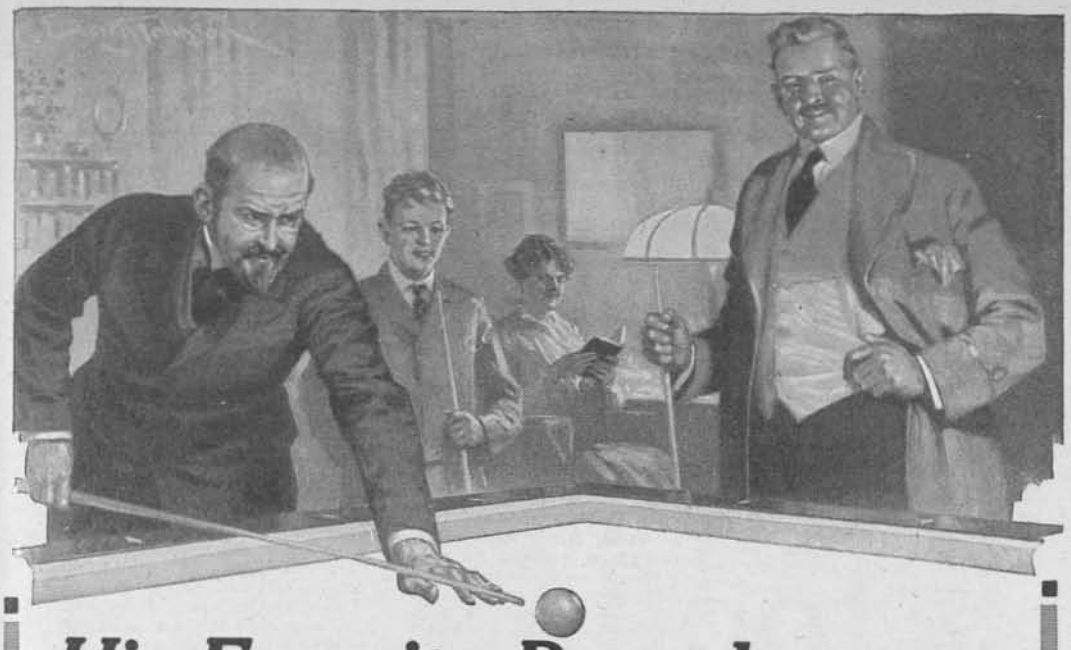
THE TRANSFER RUN

The Transfer Run

"The transfer run mentioned above, is 3 feet long, 1 foot high and 17 inches wide. The end that goes next to the coop is, of course, open. The top is covered with half-inch wire cloth and a sliding door 10 inches wide is placed at the middle. It is through this that the chicks are taken when the brood is moved to fresh ground.

"When two months old the chicks are placed in the covered pen for adults described at the beginning of this article but the bantam mothers are allowed to stay with them till they are fully matured.

"This completes the outline of activities for the year in quail breeding, but, of course, it is impossible to put the whole story on paper. Perseverance, painstaking attention to detail, absolute clean-



His Favorite Remedy—

These days physicians prescribe Home Billiards to keep the whole family *rolling in health!* All that the doctor calls for now is to take his own medicine on the Brunswick "Baby Grand." This famous home table brings 33 carom and pocket billiard games. Year-round sport that banishes brain fag, aids digestion and *puts new blood into folks who work all day!*

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Address.....

liness, the whole seasoned with no small proportion of intuition, I should say are the qualities that go far toward making the successful quail breeder.

"Captive quail are likely to droop in August, if at all, and the advent of cold weather seems to put them on their feet again. The experienced breeder will have to determine, if his birds begin to droop, whether or not it will be best to turn them out."

D. H. Selden's Quail Breeding Methods

Mr. D. H. Selden, of Richmond, Va., bred his first quail twelve years ago, and he is probably the first man in the country to achieve any considerable measure of sustained success. Quail breeding with him has necessarily been a side issue as he is in the employ of a railroad. His business brings him in close contact with both farmers and sportsmen, principally of the Southeast, and he has done valuable missionary work in preaching quail protection to these and telling them how to go about it. Mr. Selden writes of his methods in quail breeding in part as follows:

Prefers Game Bantams

"I prefer game bantam hens for mothers. I find my breeders average about thirteen eggs a season, commencing laying the latter part of April or first of May and quitting the last of May, through weather conditions have much to do with the beginning and end of egg production. My laying ration consists of cottage cheese, soaked wheat and soaked clover seed, mixed with hard-boiled egg. The winter ration for adult birds is composed of a mixture of corn meal, cottage cheese, hard-boiled egg and soaked wheat and clover seed with a dash or two of red pepper. My breeders are confined in a pen 10x12 feet covered with ½-inch mesh wire cloth and I put a strip of old matting three-feet wide around the bottom of the enclosure to minimize disturbing the birds.

"Eggs are not collected till the quail hen becomes broody and the keeper's hands should be thoroughly cleansed before touching them. The bantam is set in a small flour barrel and the eggs are sprinkled once or twice with lukewarm water three or four days before they are due to hatch, as this softens the shell and saves a good many young birds.

"The birds are kept in the barrel three or four days after they are hatched with a supply of mica grit and a little fresh water. Following the second day, crumbled hard-boiled egg mixed with curds is given, a dash of red pepper being thrown in.

"On the sixth day the hen and brood are released from the barrel and placed in an enclosure, the larger the better."

Mr. Selden advocates the occasional feeding of maggots in small quantities to quail chicks, but it is likely that this procedure in inexperienced hands will work great havoc. The leading pheasant breeders of the country have abandoned maggots, and the quail is a much frailer bird than the ringneck.

Little Things That Spell Success

Continuing his narrative, Mr. Selden says:

"Keep your birds a little hungry all the time, otherwise they will gorge and perish of what I call 'hard crop.'

"Green foods, such as lettuce and clover, are essential.

"The larger the range of captive birds the better, and plenty of cover should be provided—in other words, imitate Mother Nature as much as possible.

"Never make a sudden movement when in sight of young or old quail and handle your birds as little as possible.

"Overfeeding and feeding the wrong food account for most of the failures in quail breeding."

(To be continued.)

THE MICHIGAN WILD LIFE CONSERVATION ASSOCIATION

FIELD & STREAM PUB. CO.:

Beginning the 23rd of February, 1916, and continuing for three days thereafter, there will be held at the Auditorium at Saginaw, Mich., a Sporthman's Show under the auspices of the Saginaw County Sportsman's Association, of which H. A. Penney is secretary, and the Honorable W. S. Linton, chairman, of the committee on the Sportsman's Show.

During this time also the Michigan Wild Life Conservation Association will hold its annual meeting. The Auditorium has a seating capacity of 4,500. Each of the three evenings addresses and moving pictures will be given and shown by noted exponents of outdoor life. The afternoon sessions of the State organization will be devoted to the discussion of the "more game" idea, and I especially invite to participate in this, either by being present or sending papers that can be read, those who are competent to tell what to do so that we can have more game in Michigan. We do not want to pass a lot of resolutions and say that such and such ought to be done, but we want to get right down to the fact of *how shall we do it.*

We have an excellent Game Refuge law as far as it enables us to provide bird sanctuaries. During the year of 1914, fifty-five parcels of land of private ownership, comprising 24,000 acres, were dedicated to the State as game refuges. The State also has hundreds of thousands of acres of wild and idle lands that could be used for sanctuaries, but we are not doing anything with them now, other than the police duty that is incident to the old idea of game protection by enacting more stringent laws, restricting the bag and then arresting violators if they can be caught.

I am making this appeal so that we can bring together the best thought on this subject, and the convention may be of national use in that respect. Our Public Domain Commission here having charge of this phase of the work is anxious to do something practical if someone will only tell it how. We want some addresses from men capable of handling the subject on the planting of food, fencing, posting, putting the same under the care of game keepers instead of game wardens; exterminating vermin, keeping out fire, transferring wild life from covers where it could be spared to refuges where it needs it for breeding purposes.

Please give this subject publicity, with the hope that we may have a successful convention and bring something to a practical focus on this much talked of question of "more game."

W. B. MERSHON, President.

PROFESSIONAL CRIMINALS GET THEIR CHANCE TO SLAUGHTER WILD LIFE

I am sure that sportsmen generally, and especially those of Indiana, will be interested in the latest news from Pike County, Ind. Here it is! Now all that is lacking is to give the inmates of the insane asylums their chance, and I am sure that Pike County can be depended upon to attend to that little matter in due season.—W. T. H.

Hunting has become a pleasant diversion for some of the inmates of the Pike County jail. Time hangs heavily on their hands and twice during the last week prisoners were permitted the freedom of the nearby fields, and the privilege was given to shoot, maim or capture wild game. Thus far the boarders have returned and have not violated their parole. "The business of going to jail is not so bad," said a business man, "when one can enjoy himself like a sport at the expense of the county taxpayers.

TOUGH and trail-proof as a moosehide moccasin—and much easier on "civilized feet." Heavy enough to stand the stab of snags and the rasp of rocky roads—but not stiff enough to chafe or tire you. Water shedding, too—in Cutter Boots properly cared for, you can slosh all day through swamp or snow, yet come to camp dry footed. What more can you ask of footgear, you who hunt or hike, heeding the Red Gods' call?

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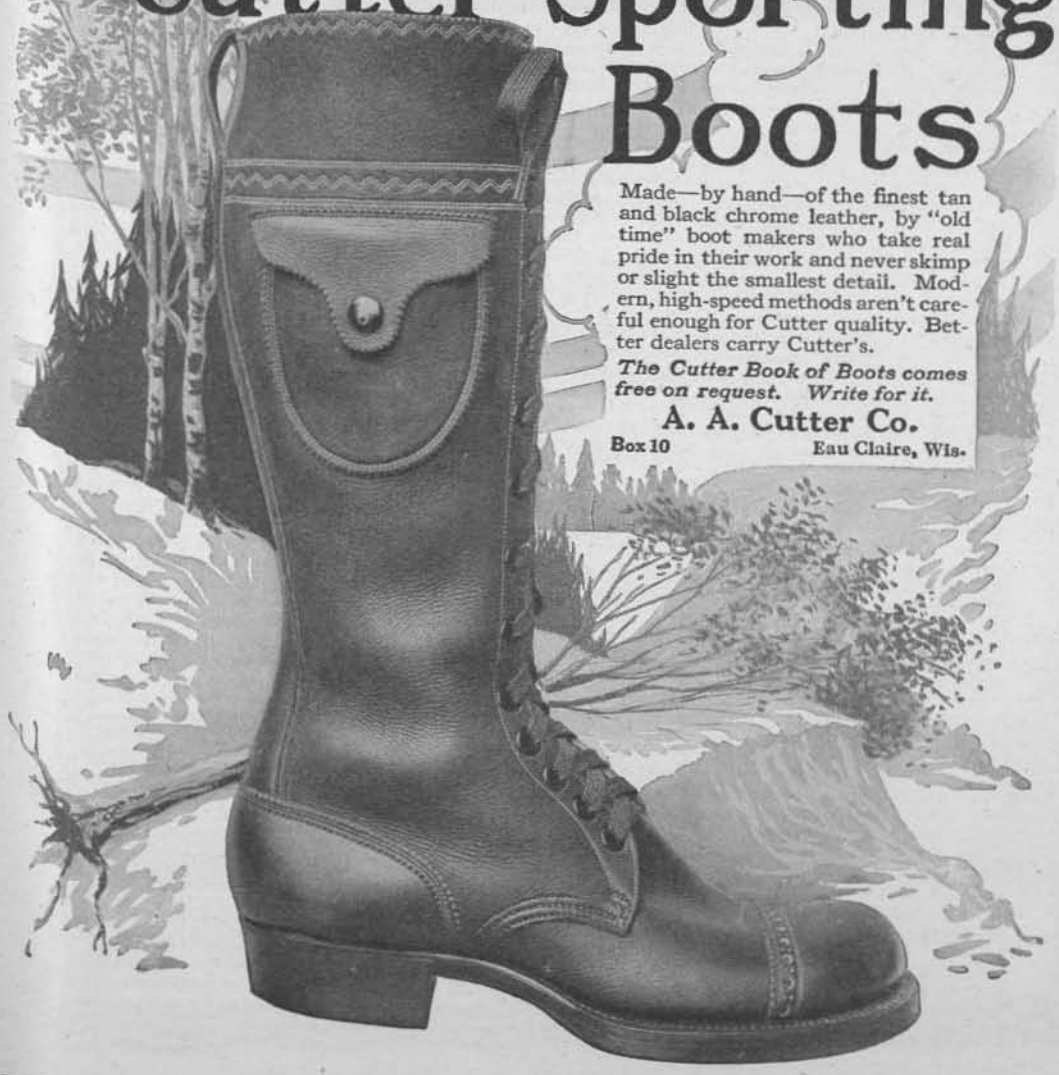

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Box 10 **Eau Claire, Wis.**

SHOTGUNS AND RIFLES

PHILADELPHIA SPORTMEN'S SHOW

Lovers of sports will be interested to learn that a Sportsmen's Show is to be held in the First Regiment Armory, Broad and Callowhill Sts., Philadelphia, Penna., the week of February 26th-March 4th, 1916. The exhibition is to be conducted by the First Regiment Infantry N. G. P., and is being planned on a scale that will eclipse anything of its kind ever held in Philadelphia.

Many unique features have been planned, the most notable of which will be the Championship Indoor Tennis Tournament, staged on the big drill floor of the Armory, while on the lower floor the Indoor Golf Links will stage the first real indoor golf tournament ever held in Philadelphia. On the Armory Rifle Ranges one of the most important rifle tournaments ever held in Philadelphia will be conducted. A list of events of this feature has been prepared which will cover the entire field of rifle shooters all the way from the expert sharpshooter down to the young man who has just learned how to point a gun, and will also include a special class for the ladies. In the big swimming pool devotees of aquatics will be entertained in the shape of water polo, relay races, exhibitions of diving and other water sports.

The Armory Building will be transformed into a section of the Maine Woods, big game hunters will show the way they camp in the wilderness, while the Boy Scouts will show their lines of activity in the form of a camp surrounded by forestry.

Fine specimens of taxidermy will be placed in life-like abandon and every huntsman who is pining for the thrill of pulling the trigger on his first shot of the season, will find the waiting less oppressive after browsing about amid these life-like scenes of game haunts. This miniature strip of woods will contain exhibits of hunting trophies, mounted wild game animals and fish, taxidermy, railroad exhibits of hunting sections. The Guides and Guides' Association, Camps and Camp Association will also be there, and information relative to camps, hunting guides' equipment, etc., which would take unlimited time to collect piece-meal, will be obtainable here in a trice.

The Rifle Shoot Committee, consisting of Lieut. Roland C. Heisler, chairman; Capt. Robert B. Atwood and Captain Clarence B. Bishop, are preparing a program of events which will include a School Match, an Intercollegiate Match, a Company and Regimental Match, an open team match and a match between teams representing camps of the Patriotic Order Sons of America.

The headquarters of the committee is located in the Armory, Broad and Callowhill Sts., Philadelphia, Pa.

CAMP-FIRE CLUB RIFLE ASSOCIATION

FIELD & STREAM PUB. CO.:

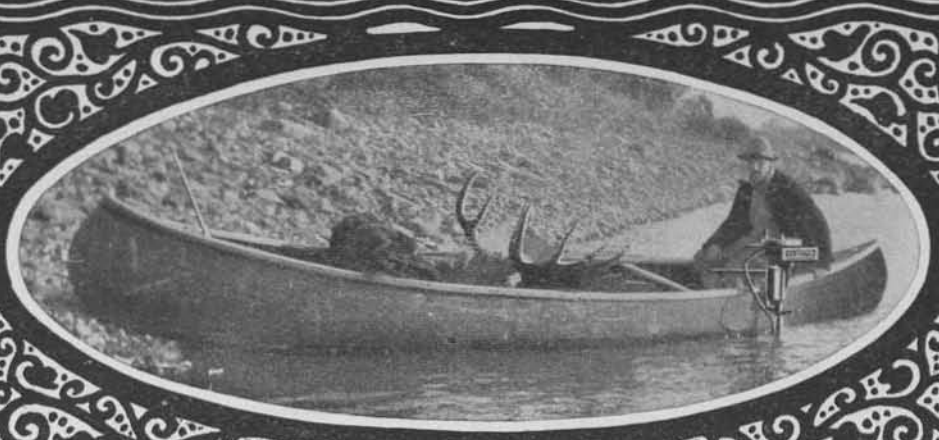
You may be interested to know that at a meeting of the Board of Governors held last Tuesday the resolution was offered and unanimously adopted that there be formed a Camp-Fire Club Rifle Association under the rules and regulations of the National Rifle Association, to be open to all Camp-Fire members and confined to them, provided they are citizens of the United States.

ARTHUR F. RICE,
Secretary.

RIFLE SIGHTS AND HOLDING —PART III

By Warren H. Miller

We now come to the important part of holding in big-game rifle-shooting. You read much of making a human tripod of yourself, to get steadiness, and probably wonder why so much stress is laid on it when most of the shots you had required a swift, easy swing rather than any steadiness. What you really need is a sharp eyesight and a prompt, accurate trigger-finger. Any trigger which "creeps" is out of the question for woods shooting. You want an instant release, of not over four pounds trigger pull. All the military "dodges" for a steady, rock-like foundation on which to base your shot are "nix," but of course should be learned, as there will be long-range, still shots in which they will be useful. But the shooting that you will use far more is a swift swing of the rifle on or ahead of the game, and a quick, simultaneous trigger-pull the second that the bead is where you want it. Such great game shots as Lyman and Walter Winans insist on this training as the only one. I personally have found use for the other, and expect to use it a good deal more, especially in mountain work, as time goes by. But, even after the first shot is thus expended and a hit scored, even a mortally wounded animal will in most cases start off at top speed, and it's up to you to hammer him as long as you can see to shoot. The quicker he is down to stay the less your chances of losing him are. It's no fun to try to find a deer a hundred yards from where he stood when you put in the mortal-heart shot; he may have gone almost anywhere and left no great amount of blood behind to give you a clew. Mountain game is even worse, for it has an engaging habit of running over precipices and rolling down slopes, breaking its horns, and staggering off to places where no one but a fly could crawl down to it, to let you miss him much after the first shot. And then you are right back to the woodsman's art of chucking it to him as he hops, with a rifle. No, cut out that guardsman stunt of holding the fore-end on the tip of thumb and forefinger; get a firm grip on fore-end and tang, and learn, first of all, to shoot standing up in any old position so that you soak it to him at the instant that the bead is in the right place. It is not hard. Four shots out of five into a standing deer as big as a rabbit at 75 yards is a score that any deer-hunter should make easily if he is going to go after them in the woods. Personally, I never found any gain by holding longer than it took to swing the rifle on the mark and fire. To wait longer would be simply to swing it back and catch another sight, so why not let off in the first place? A military man, not used to this style of shooting, is of course at a great disadvantage when you begin to speed him up. Shooting against a "crack," on fifteen seconds time limit, I once ran up a score of 85 against his 56. He shot his first ones as fast as he could aim, with



A Good Companion on Those Trips of Yours

YOU'RE mighty particular whom you take with you. He's got to be a real sportsman—a good fellow—ready to do a man's share of the work—to rough it without complaint.

Why not take along an Evinrude? It will do all the hard work of rowing for you—take you where you will and when you will—on ocean, lake or river—hunting, fishing, camping or "exploring". This wonderful little motor is a most cheerful and willing worker—always ready—always dependable. You can attach it to any rowboat or canoe in a few minutes and it will drive you over the water at top speed.

Of especial interest to sportsmen, and lovers of outdoor life is the New Evinrude FOUR CYCLE TWIN—a two-cylinder, four-cycle motor with more speed and more power than the single cylinder models. There's more speed, too, in the Evinrude single-cylinder models for 1916.

Mail the coupon or write for the 1916 Evinrude catalog—it's interesting.

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the result that they all went wild, and then got off the rest of his shots at about 4 seconds each, scoring a few bull's-eyes, but both in number of bull's-eyes and total score my huntsman's way of aiming had it on him. Give him plenty of time and he would have made every shot a bull's-eye, but what good would that have done him with a deer in the woods? I have made my best "possibles," ten successive bulls, by just swinging the sights across the bull and letting drive as I crossed, and never could equal them by slow and careful holding. The point is that it is just as accurate as the slower method and infinitely more serviceable on game; in fact, it is the only practical method on game.

Therefore, begin at the start with moving targets at close range. A pendulum tin can, a blue rock thrown in the air will teach you more woodsman rifle-shooting than any amount of range practice. Learn, first of all, just how much of your front sight seen means dead in the mark, and then always see that much sight when you lay the piece. Next, plant it on the mark, or, if it is moving, ahead of the mark the right amount, and let off at once. That's all there is to it, training of the trigger-finger to let up, the arms to hold the rifle sights in line, the eye to see the mark and the sights at the same time. A barrel rolling down hill, a cardboard deer, bear, or rabbit hung from a trolley wheel, running on a taut wire with a slant to it like the cash runways in a department store, cans and blue rocks tossed into the air—these are the marks that count for real training. I quite agree with T. S. Van Dyke, the still hunter, in his remark that what the woodsman needs is the ability to hit a three-inch bull at 40 yards every time for ordinary work, and the same at 75 yards every time for proficiency. Anyone that can do that on three-second time limit with no misses is good enough for the woods. Military work begins where the huntsman leaves off, and requires a different training. At that, they should provide for quick, accurate firing during a charge or melée when the ranges are close and two seconds is the most that anyone should have to aim and fire.

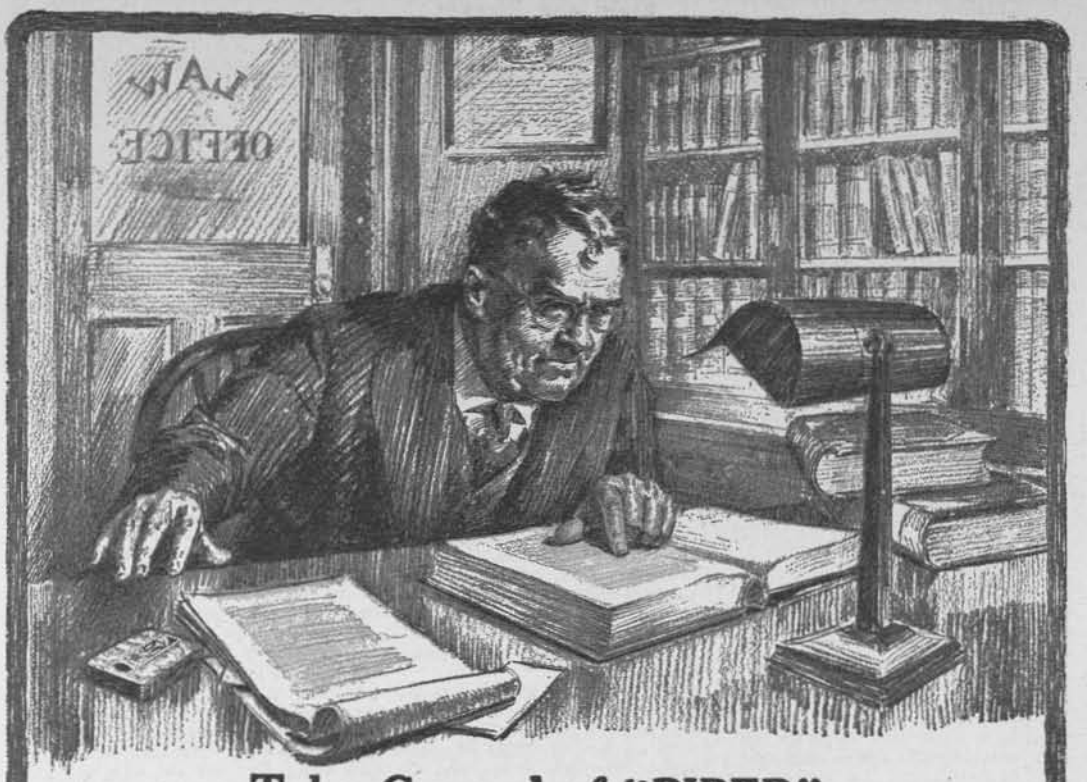
A miss is as good as a mile. What counts in hunting are the hits only. There are no 4's and 3's to help along the score, and therein is the danger of target practice. One gets contented with a string of fours, all of which are misses, and the other fellow with his bull's-eyes may lose to you because of a wild 2 or a mean 3, in spite of the fact that he hit and you did not. Your total striking circle in a deer is about 12 inches, 24 in elk, moose or bear; get the notion that it is either to hit inside of that or not at all. Every running animal has to be lead; not right ahead of him, but above or below him, depending upon whether he is going up or down in his bound. An elk's back will rise ten feet in the air in mid-jump, a deer about six feet; if you fire then you will most likely overshoot as he will have come down from two to four feet while your bullet is getting there, so try to get him coming down, and hold low and in front. About two feet in a hundred yards is none too much. Like the wing-shooter, you can cut this down a bit by getting the knack of flipping the rifle ahead as you pull trigger, it then gets its lead while the hammer is coming down. To get to know your rifle with this kind of shooting takes practice at moving marks, and not slow ones either, but marks going about twenty feet a second at least. That is going about fifty feet a second, yet many of your shots will be at this speed and will need lots of holding ahead and lots of practice to know how much.

After climbing a steep slope or running fast to make a quick detour you will be sweating like a bull, and your fingers will be slippery and cannot grasp the fore-end with any firmness. For this reason checking on both tang and fore-end are essential; if you bought your rifle plain, do it yourself with a checking tool which you can buy from the sporting-goods store for fifty cents. Or, have the local gunsmith do it; but never omit it.

Again, when tracking elk or deer in the snow, be careful about letting your right hand get numb or sluggish. A finger-mitt is no good, for the actual shooting, it is far too clumsy, and you cannot feel the trigger sensitively through it. I lost a fine shot once from this very cause. He had been watching me, and suddenly burst into a dead run about seventy yards off. I had no time to get off the glove and fired with the mitt on. The rifle went off before I was ready and I overshot. I was just drawing the front sight fine when it fired, and I knew I had missed. A friend of mine lost a deer from numbness because when he started the deer he found his hand, only a short time out of the mitt, so numb that his thumb simply would not raise the hammer. He wanted it to, all right, but there was nothing doing with the thumb! The best way is to carry your rifle in your left hand and keep the right bare and tucked into your coat or shirt, on your breast so that it will be warm and ready to use instantly.

A rifle strap is essential in the western mountains. In the eastern woods it is more or less of a nuisance, unless you use it in firing. I do so, and find that it not only gives you steadiness, but checks that wild impulse to jerk up the rifle on sight of game. The rifle must not be jerked up, raise it slowly, taking the time to align the sights so that they will fall to your shoulder practically trained true. My strap is just long enough to slip my elbow into, and when the piece is at shoulder the strap is taut and helps hold the rifle firmly so that one can swing the sights without wabbling. In raising the rifle the strap drops naturally around my elbow, and, as it comes to shoulder it begins to set fast. In a cross wind it is the only thing, for the amount that a gusty wind will wabble a well-held barrel is almost unbelievable. For that reason avoid a standing shot where the wind is heavy. The strap should be wide and soft, tapering down at each end to an inch. The bronze swivel buckle is the right one for the fore-end, for, in running from it over your shoulder, the buckle swivels, thus feeding the strap flat on your shoulder and not at a twist as it would do if the buckle were merely hinged. A hinged bronze buckle goes at the lower end of the strap on the stock.

Your rifle is your hunting companion, your best friend, and the heart of your trip. Pick out the one that you fancy and then stick to it, learning all about it, "dolling it up" with sights and straps and checks, everything that will make the weapon more efficient. Every man has his own pets; I will describe my three and their sights, not that they are a model for anyone else, but to give some idea of the practical considerations that went into their selection. My western rifle is a .35, Model '95, a cheerful young cannon with a knockout punch. She weighs but 8¼ pounds for all that, and has a handsome stock with checkered fore-end and tang. I owned another just like her, only plainer, for some time before I was sure that she was *the* rifle for me. She has a plain front sight with the 45 degree filed across the rear upper corner of the knife; a combination wide notch leaf and flat bar with pearl triangle sight on the barrel, and a flexible tang peep on the tang. I use the tang for most shooting, the flat bar for all short-range shooting, with the .380 sup-



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plemental in the Marble-Brayton steel auxiliary cartridge for small game met on the trail. Rifle No. 2 is a .32-20 Model '92, for eastern work on deer and hiking trips where you want a good, all-around rifle that can get squirrels, woodchucks, ducks, etc., with the .32 S. & W. short, and the H. V. cartridge for deer and long-range shots at fox, duck or hawk. She has plain front sight, filed; receiver tang peep, and folding wide-notch leaf and flat bar. The receiver peep is raised out of the way in dim light and the other sight used; otherwise I use the peep entirely, for quickness and accuracy. Rifle No. 3 is the Kid's treasure, also my own. It is a .22 Favorite, shooting all the .22 cartridges. It has a folding tang peep, and combination front sight, giving a ring-and-pinhead or ivory bead at will, and the barrel sight is a folding wide-notch leaf. The latter, in combination with the ivory bead, is the general choice for game, the tang peep and pinhead for long-range work. With these the Kid once made a 44x50 at 100 yards, and I had to make a 47 to keep him from trampling all over me! All three of these rifles are some busy, and they suit us a whole lot. And this last is a quality in a rifle by no means to be overlooked. Do not stop with a weapon that you are not completely satisfied with.

NISKAYUNA RIFLE CLUB NOTES

As in the past you have favored us with short news items in your publication, I am taking the liberty of again requesting this favor.

The annual meeting of the Niskayuna Rifle Club was held January 15th and the following officers were elected for 1916:

President, F. T. Marks; vice-president, N. W. Lower; secretary, C. C. Sliter; treasurer, M. Wade Lansing; executive officer, H. W. Snyder; range officer, L. E. Osborne.

The year just passed has been a very enthusiastic and satisfactory shooting season.

Our club now has a membership of 120 men with very bright prospects of doubling this number before the closing of the present year.

Considerable interest is being awakened in this city by the club and the sport which we are enjoying in this respect. We have now amended our by-laws and are admitting ladies as associate members of the organization. This change has been made on account of a number of requests from members that their wives be allowed to enjoy the sport.

We have also installed a trap division which last fall was encouragingly supported and which is gaining new recruits at every meet.

A number of members of the club have gotten together and have purchased a tract of 406 acres in the Adirondacks which we hope to increase to 1,000 acres in the near future and hold as a game preserve. An opportunity is being given to the members of the club to subscribe for this and become members of the game preserve organization. Improvements will be made throughout the tract and with the support which is being given us by the members we are contemplating some good shooting during the coming hunting season.

CHAS. C. SLITER, Secretary.

BARREL MATERIALS
By Edward C. Crossman

Pretty it is, to some tastes, the twisted, turned, scrolled, grapevine curlicues of grey and black in the other fellow's Damascus barrels. Admire the figure if you will, but envy no man the ownership thereof.

Much as I hate to put even the smallest gnat in the ointment of some fellow's pleasure in his handsome four- or five-stripe Damascus barrels, I've got to say that for the sum of two dollars and fifty cents, coin of the realm, any gunmaker can bring across the water plain steel barrels superior in every respect to the old costly Damascus tubes.

Gunmakers cater to the wishes of the dear public. If a man, reading or hearing from his forebears of the virtues that lie in the built-up layers of iron and steel that lie in Damascus, desires such tubes on his new gun, he gets them without ado. Never a word is there in the catalog of any shotgun maker to spoil his pleasure, or to head him off from a mistake.

Also, strange as it may seem, Damascus tubes can be laid down in these United States for about $1.50 each, rough bored and with the flats already on them, ready to start through the factories' machines.

If you'll read between the lines of some of the catalogs of American makers you'll find what they think of the good old built-up barrels, alas now inferior to the plainest sort of ordinary steel tube. Our makers will turn out for you a light weight 20 bore, as light as any reasonable man could ask, but never with Damascus barrels. They don't say why, they merely say that you can have the gun with our "Nitro," "Golden Eagle," "Bull Run," or other fancy name for plain steel, but not with Damascus.

The reason is merely because the old material lacks strength as compared with the new fluid steels.

Also other indictments are to be drawn against the old tubes. They pit easier than the plain steel, because of the soft iron used in the composition, and the fact that it does not take on the same polish as the steel particles. The finished exterior of the gun lacks the protection of the well-browned, plain steel barrel, and rusts very quickly.

In the best of the barrels it is impossible to guard against flaws, open places in the work of welding the layers, and it is an old trick with the gunsmith of hammering closed such open spots. Subjected to hydraulic test, such barrels not infrequently emit a tiny, high velocity stream of the water under pressure within.

In the days when the welded tubes were in their prime, steel was in its infancy. Gunmakers did not trust a plain steel barrel, nor was their distrust an injustice to the material at their hands.

They used to subject their rough tubes to the primary proof in the regular proof houses as laid down by law, a wholly superfluous process in these days. But then, with poor tubes, they did not want to go to the expense of finishing up and joining a pair of barrels, only to have them open up on the finish proof charge, to which all finished guns were subjected. If the tubes were bad they wanted to find out about it early in the game—and not infrequently they did.

Then, the welded layers of iron and steel, welded by hand into ribbons, twisted and hammered and finally pounded into the rough tube over a mandrel, were a guarantee that although liable to the objections they are at the present time, they would not let go all holds and carry away a hand or two for souvenirs.

Now steel is steel, not a large interrogation point. For shotgun barrels the fluid metal is run into a huge press, with a top that can be driven down by tremendous pressure from above. As the pressure falls on the steel, the impurities are driven out, and burn violently in the form of gas.

An ingot from steel so treated is all steel, without impurities and without flaws. At present this compressed fluid steel is the most reliable material for shotgun tubes, hard, tough, bulging long before it lets go, and of a structure that practically never develops a bad spot that may let go when powder pressure falls upon it.

Also it is very cheap in most excellent quality. An American

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Practice up now for the season's trophies. Start early. Be among the first out to pepper the speedy clay targets. Get an edge on the other fellow while the season is still young. There's no game can surpass

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for all 'round sport, health and pleasure. Gun "bugs" are the best of good fellows and there's a hearty welcome ready and waiting for you at the nearest gun club.

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When in Atlantic City visit the "Du Pont Store," Pennsylvania Avenue and Boardwalk—see the big Du Pont Night Sign and try your skill at the Trapshooting School at the end of Young's Million Dollar Pier.

gunmaker, as I said before, can lay down a pair of tubes almost ready for joining together, of a quality better than the best Damascus tube ever welded, and for a consideration of about $2.50.

True, there are other grades of fluid steel, far more costly ones, but the most expensive barrels now brought to America, the Whitworth, cost the gunmaker but $22 a pair. Hold on, that's all right if the makers do ask far more than that additional for Whitworth. The tubes are very hard to machine; all shotgun tubes are liable to accidents in manufacture that may ruin them, and what you pay for Whitworth barrels is merely their cost, your pro-rata of the few spoiled ones, and the high cost of turning them into the slim, graceful shotgun barrels of the finished gun.

Probably the Poldi rustless steel is at present the best material in the world for shotgun tubes, if the proof-house reports of Germany, France and Belgium can be believed. They stand more pressure than even the best Krupp, and they don't rust under any ordinary circumstances.

I do not own a pair of shotgun barrels of this material, but I do own a Mauser shooting the Springfield cartridge and with barrel of this stuff. Also I do know that I leave the poor gun uncleaned for three days at a time if the spirit does not move me to clean it, and that it shines back cheerfully at me when I get the powder residue out with some nitro cleaner.

I do not think that leaving a shotgun uncleaned even by salt water for a week would rust the stuff, but then my experience with leaving shotguns uncleaned by salt water is very limited.

Strange as it may seem, practically every barrel used by the standard American makers of double guns comes from abroad, either from Belgium or from Germany. All Damascus barrels come from Belgium. A few of our makers turn out their own tubes in the low grades, but this is the rare exception.

In spite of Yankee genius our tube-makers shy at the task of turning out barrels of such material as the fluid steel, carried to so high a finished point as are the imported tubes, all for the price of less than $3.00.

NEW YORK TO HAVE ITS PUBLIC TRAPS

SPACE SET ASIDE IN VAN CORTLANDT PARK FOR PURPOSE

The recognition by the New York City Park Commissioners of trapshooting as a sport by the setting aside of two acres of ground in the northeastern section of Van Cortlandt Park for the devotees of "the sport alluring" is another indication of the marvelous growth of the pastime.

New York is the first city to realize the importance of trapshooting, and the necessity of having public traps. Many cities have municipal tennis courts, gridiron and baseball fields, and some few have established golf links, but the trapshooter has no place in the public parks where he could bang away at the clay birds. Now he is coming into his own.

No sooner had the New York Commissioners granted the "scatter gun" bugs permission to go ahead with their plans for the erection of a $10,000 clubhouse than Chicago launched a boom for public traps in Grant Park. And so it will come to pass that Grant Park will have public traps, for Chicago has no desire to play second fiddle to New York.

This New York proposition was engineered by C. T. Summerson, secretary of the White Plains Gun Club. He formed the Greater New York Gun Club, which now has 500 members. The organization should be the largest in the country within a year. The largest at present is the Chicago Trapshooting Club, with 600 members.

The Park Commissioners have given the club a ten-year permit for the use of the park, but also stipulate that the shooting will come under the supervision of the commissioners.

Any citizen may join the club, and the dues will be small. Three days of the week will be set aside when only the members of the club will be permitted to use the traps. The other three days will give the general public a chance to try their accuracy and skill in hitting the blue rocks.

The clubhouse now being erected will be two stories in height, the second floor being exclusively for the women trapshooters, of whom there are many in the metropolitan city. A shell house will also be built. There will be three movable traps.

It is the intention of the club officers to promote trapshooting at night, and with that idea in mind they have arranged for the proper illumination of the traps.

What one city has done another can do. Chicago, St. Louis, Philadelphia, Cleveland and other cities have parks which would allow the installation of public traps for trapshooters, and to get such privileges it is only necessary for the shooters to show a few real signs of activity. The New York Commissioners were shown there was a demand for public traps, and they immediately met the demand.—New York *Evening Sun*.

SNAP-SHOOTING WITH THE TWENTY-TWO

Ray Ernest Smith

For many years the closing of the open season for big game has signified the termination of my trips afield. With my guns before me in their cabinet, I have contented myself with dreams of past exploits and with plans for future expeditions. It is true that on one or two occasions I have made one in a party for a day's trip after rabbits, but, frankly, there was scant pleasure to me in killing a hound-driven "snow shoe" with the shotgun.

There was no feeling of satisfaction when I made a kill, and no stab of regret when I scored a clean miss.

This is all changed now. The rabbit has as many possibilities to me as any game animal, and I can experience with it all the thrills that formerly were associated only with the gun on grouse; or the rifle on big game; and all because last season, for the first time, I used the ubiquitous .22 as a rabbit gun, and as a consequence there ceased to be any closed season on my hunting activities.

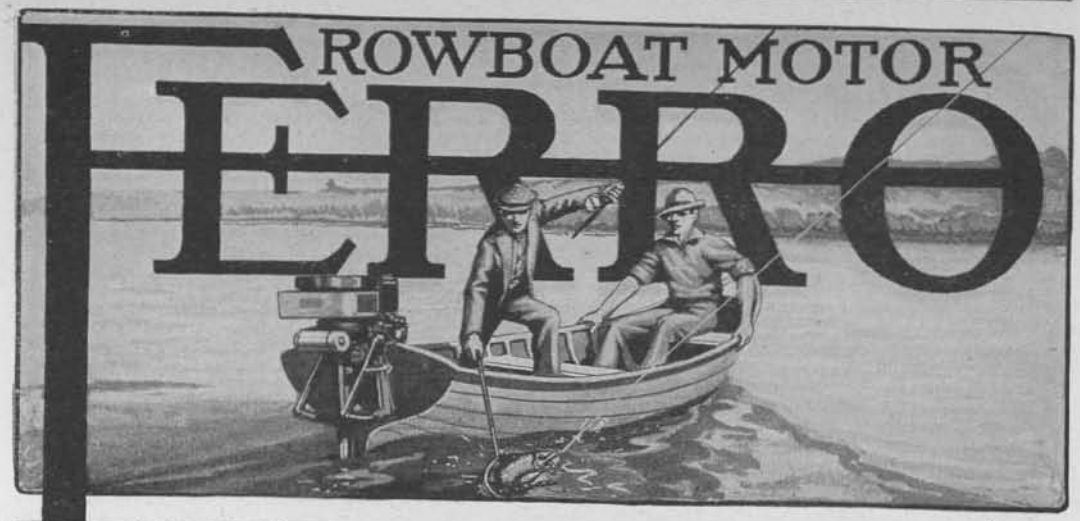
This little rifle has always been a favorite of mine for short-range target work, and for shooting the omnipresent sparrow, while with the long-rifle, hollow-point bullet, I have had many hours of good shooting fun with squirrel and woodchuck.

For many years I had watched the exhibitions of various rifle experts using this little firearm, and always with the feeling that many of their tricks would not be especially difficult of emulation. Early last spring I decided to do some experimenting, and consequently two or three times each week I spent an hour or two in practise.

I commenced with the easier of the standard trick shots; that of placing in a row various small objects (usually lumps of coal), and then, with gun held steadily to shoulder, and shooting as rapidly as possible, smashing them in rotation. After but short practice I found this a comparatively easy procedure. From this I progressed to the more difficult feats of hitting tin cans thrown in the air, smashing clay balls, etc. These experiences took place in the spring, summer and early fall, and were sandwiched in between business, fishing trips and various other matters.

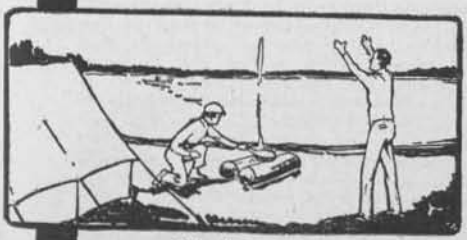
Early in the winter, with the coming of the first snow, I received an invitation to again join a party for an afternoon with the hounds, after rabbits, and with some considerable trepidation, took with me the little rifle, rather than the customary twelve gauge; but

ROWBOAT MOTOR FERRO



Carry it like a suitcase.

Just the thing for trolling.



Fish till the last minute.

Completes the camper's outfit.

Fish Where You Wish

Out of reach of oars, five or ten miles from camp or cottage—that's where you're likely to find the fishing best. And that's where you can fish only when you're equipped to cover long distances quickly.

With a Ferro Detachable Motor on your rowboat, the farthest points are near. Two miles or ten, it makes little difference, for a turn of the fly-wheel starts you off at any speed you prefer up to ten miles an hour.

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Catalog tells all about this handy motor. Write for it.

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Don't Go Rowing—Go Ferrowing

the first hour in the woods convinced me that I had made no mistake and that I had discovered a new thrill in rifle shooting at moving game.

The first rabbit, started by the dogs, made a short run over the snow-covered swamp bottom, then turned and swung over the hill directly toward me. I could hear the deep-toned, ringing bay of the hounds drawing nearer and nearer, and mindful of the many jibes of my companions anent the .22, I slipped the mitten from my hand and closely scanning the hill-side, prayed that my first shot might be an open one. It was—and ridiculously easy. While the voices of the hounds were yet some distance away I caught a glimpse of a bounding glimmer of white coming straight toward me through the scattered spruces and pines of the hillside. I had just come to the conclusion that it was "now or never," when the rabbit stopped, not six rods from my stand, and deliberately started to scratch its ear with a hind foot. He never itched again! Straight through the head the little hollow-point went, and the resultant damage would have served as a perfect advertisement for the smashing effect of any high-power cartridge.

This first kill of the first rabbit started, gave me just the needed nerve steadier, and when No. 2 came tearing across a little opening in the spruces, the second shot sent him in a double somersault from which he never arose.

That was a red-letter day for the scoffed-at .22. Eight rabbits started by the dogs, and six of the eight to its credit.

Twice again that winter did the little gun and I sally forth, and each time, returning, put to shame the "scatter guns" of the party, and fun—it's the best fun in the world! Rabbits are plentiful in nearly every section of the country, the .22 is inexpensive and the cost of its ammunition but a trifle, and the amount of real outdoor shooting enjoyment to be had from the combination must be experienced to be realized.

Early in the game I found that I must make a change in my customary sights. I am the veriest tyro regarding the science of rifle sighting, my experience being limited to the use of the gun on game, rather than at the butts. My big-game rifles are all equipped with the Lyman type of sight—not so much because of any deep-grounded theories of my own—as because the consensus of opinion seems to be that they are the proper ones for that purpose.

When I took up snap-shooting at moving objects, alive or inanimate, I found that the plain open sight with very low horns was, for my use at least, the best.

I arrived at this conclusion from the following facts: I discovered that at least fifty per cent. of my misses were due to over-shooting, and also found that I was much more certain of a hit when the object aimed at was above the line of the sights all the time. In other words, I found that I attained my best results from shooting under the target, rather than from shooting at it—and I must see the object with both eyes to attain any degree of certainty.

The above conclusion being arrived at, I proceeded to prove it Q. E. D. An ordinary miniature target was set up at twenty yards and, taking in all of the front sight and a perceptible portion of the barrel as well, I held far enough under the black to allow a distinct margin of white to show betwen it and the sights, and I then adjusted them so that holding in this way, my shots would cut the center of the "bull." When I came to try this out on game it worked to perfection. I could see the moving game above my sights, with both eyes, all the time, and the question of elevation needed no consideration. One instinctively takes a full sight when shooting quickly, and with the sights arranged as I have described, the only matter for consideration left is that of lateral lead and trigger pressure—both of which are matters having to do with the personal equation of the shooter.

REFINISHING THE GUNSTOCK

FIELD & STREAM PUB. Co.:

Please answer through your next issue of FIELD AND STREAM the best method of improving the appearance of an old gun, that is, the gun is a high-grade good shooter but the stock and forearm I wish to varnish. What is the best varnish, also how will I polish the Damascus barrels outside?

W. E. WOLFF.

Ans.—Remove old varnish from stock and fore end and rub with pure linseed oil, rubbing oil well into the grain of the wood. The more rubbing the finer finish. Clean barrels with toothbrush and some good oil, scrub well and the design of the barrels will show up nicely.—ED.

THE NEW TRAPSHOOTING SCHOOL

The mere mention of a trapshooting school will cause sportsmen to sit up and take notice, as the saying goes, for while there have been and still are places where tennis, golf and other sports are taught novices, this country has never boasted anything in the form of a shooting school. Anticipating the many queries which will follow the announcement of the starting of the trapshooting school, E. I. du Pont de Nemours & Co. send out the following information concerning same:

The school will be operated at Atlantic City, N. J., the greatest year-round pleasure resort in the world, and a place annually visited by more sportsmen than any other city.

The purpose of this new shooting school is threefold, viz., to teach the proper care and use of firearms; to instruct men and women in the art of trapshooting, and to provide a place where the thousands and thousands of "gun bugs" who yearly visit Atlantic City may enjoy their favorite sport, engage in trophy contests, team races, etc., in a place easily accessible and at a moderate cost.

The school will be in operation about March 15, or by April 1st at the outside. The equipment will consist of one Ideal Leggett and one Western McCrea automatic trap, standard targets being used, twenty-gauge guns of practically every make, and competent men in charge. The targets will be thrown against a background of water, targets and shot falling into the Atlantic Ocean.

Standard trap loads will be on sale, but only twenty-gauges may be used. The targets will be thrown about forty yards. A person desiring to use his own gun may do so, but only factory-loaded ammunition can be shot on the range.

The services of Henry Hewgill Stevens, famous professional and known to everyone in the trapshooting game as "Hank," has been secured and he will be in charge of the school as manager, and will act as personal instructor at no cost whatever to anyone desiring his services. Mr. Stevens has been shooting since 1888, and nearly thirty years ago competed on the trapshooting team of Rutgers College, of which he is a graduate, against the Princeton, Yale and other college teams. In the year 1903, Mr. Stevens turned professional,

Mr. Stevens is well equipped by personality, experience and ability to fill his new position. He has made for himself a host of friends everywhere, who will always remember him as the genial "Hank." One of the original Westy Hogans, he has done much to insure the present success of that organization. His experience covers every phase of the gun and ammunition game, and all kinds of game shooting as well as trapshooting. It may be well to say also that he coached the 1913 Princeton College trapshooting team, which won the intercollegiate trapshooting contest, and also the 1915 Yale College trapshooting team, which won the cham-

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Never fished from a Mullins boat? Gee, you certainly have a treat coming, brother!

Listen! You'll find it the driest, most comfortable fishing boat you ever stepped into. It's steady and stable, walk all around in it and it'll never tip over. Light—easy to handle—roomy. Can't leak, water-log, dry out or open at the seams—never needs calking. You can face either end of the boat when fishing. In either deep or shallow water, rain or shine, Mullins steel fishing boats make the greatest sport in the world doubly enjoyable.

Don't buy any kind of rowboat, power boat or canoe, until you have read Mullins catalog. Free on request.

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World's Largest Manufacturers of Steel and Wooden Pleasure Boats

HAVE YOU A BIRD DOG?---THEN YOU WANT

THE Amateur Trainer

BY ED. F. HABERLEIN.

FORCE SYSTEM WITHOUT WHIP

A PRACTICAL TRAINER OF OVER 30 YEARS' EXPERIENCE, WHOSE SYSTEM IS UP TO DATE AND STANDS UNEQUALED. 16TH EDITION--1909. MERIT MADE IT FAMOUS. NEW EDITION JUST OUT.---ILLUSTRATED.

A plain, practical and concise, yet thorough, guide in the art of training, handling and the correcting of faults of the bird dog subservient to the gun afield. Written especially for the novice, but equally valuable to the experienced handler. By following the instructions plainly given, every shooter possessed of a little common sense and patience can train his own dogs to perfection. If your dog is inobedient, does not retrieve, or if so, is hard mouthed, unsteady to point and shot, chases rabbits, is whipshy, gunshy, etc., you will find ample directions how to correct any such fault speedily and thoroughly. Dogs of any age or breed can be taught to retrieve promptly and made submissive. Comprehensible, popular form, devoid of long-spun theories, based on practical experience throughout. A large volume of pastime reading not intended nor promised, but this book is guaranteed to contain the most practical information on the subject at any price. Chapters on feeding; care of the dog; explicit symptoms of usual diseases. Sent postpaid on receipt of price.

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We have made 500,000 pairs for army wear and are supplying the great civilian demand through 4500 stores. **Ask your dealer. Price $5.00 post paid.** Black or tan. When ordering by mail, state size and width usually worn. We guarantee fit and satisfaction. Army shoes viscolized, waterproofed, $5.00 to $6.50 a pair, black or tan. *Booklet free.*

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pionship last year. When Mr. Stevens' ability as a shooter comes up, one has but to refer to the official trapshooting records for the past several years to appreciate his true worth, and men who have shot with him in the field and from the blinds and shooting boxes will tell you that his aim is deadly—in fact he seldom misses.

In inaugurating this new school, the DuPont Company believes that it will prove a boon to every sportsman who visits Atlantic City, and will also fill a long-felt want on the part of those who have desired to learn to shoot under the tutelage of a competent instructor, such as Mr. Stevens. From time to time events will be arranged for groups of shooters who may be at the seaside resort, and team races and trophy events staged. Local shooters will also have events arranged for them, or may arrange their own events, and shoot them over the school traps. In fact, Mr. Stevens will see to it personally that everything possible is done to make the visit of sportsmen to Atlantic City as pleasant as possible, and sportsmen and sportswomen everywhere are extended a cordial invitation to call and see him at Young's Million Dollar Pier after March 15th.

UNKEL DAVID'S LETTER

DERE FELDE & STREME:

A eddytur is a kold-bludded beest, by needsessity if not by natur. His speer knoes no bruther, becos he deels with riters & uthers hoo are owt for the stuph, reegardless of pollytix & their attytood toard the Feddyrul bird law. If it wazzent for the eddytur of this grate reelijus maggyzeen the leeding artikel mite b on "How to Ware Low-Hipt Evening Kostooms Withowt Gallusses" or "Why Blum Mong Shoodent be Eet with French Fride Potatoze." Evry vizziter to the eddytoryel sanktum is a self-konfest spoartsman hoo wants reel munny for the best stoary ever rit or a better pikchur then Mykel Anjylo ever drawd. Moastly theez publik ennymies are alloud to maik a hoam run down the fire eskaip, but the seekrit arkives of the offiss cood prodoose sullooshuns of menny a dark misterry. The lamm-like grin of the sekkund eddytur beegiles the viktim, & then—(Too be kontinyood).

Heer-2-4 I thot sutch as this was awl rite—pryer to the eddytur putting one (1) over on me & Sar An (menshund in preevyus letters as mi dootiful & durabel wife), Aij & sekts get no respekt when he has in voo a speshul artikel to foller his signatoor. Wunst, as the poit sais, I held him littel lower than the stars—whitch was befoar he tuk to riting dog classix—from memmery of the mutz that follered him hoam after the kag went dry & the piknik bust up in a fite. If I held him that hi now, yood heer sumthing drap. That's propper!

Prik up yore eers & lissen to mi tail. We was that minnit arrived from the Dallywair Duk Klub—the seezon beeing over & awl the bottels struk by a drowth—when the eddytur sujjested we shood taik a rest in a winter kamp. He wood cleer the trale for owr aigid fete. Yes'm. Purvide shelter & warmth, & whare with to fill owr aiged stummix. Yes'm. We lissend to the syreen song & who is me (& awlsoe Sar An)! we was goaldbrikt to a finnish. Way bak befoar war times the Abblishunists had a undergrownd ralerode for running niggers owt of Diksy. The eddytur had an uther—part trane, part ottomobeel & the rest bay mewl & bobsled—whitch left us in a holler footy (40) miles from the neerest rode house or similer konsolashun with snoe on a levvul up to mi britches pokkits. No kamp was vizubel, & when the mewl-driver had dumpt owr impeddymenty in a heep it lookt no bigger than a gofer-hill. It was FELDE & STREME'S eddytorial sooper-eksellent kamp owtfit for two (2), inklooding a munth's rashuns. The last-menshund Sar An ropped in her hankychiff immediate & putt whare deepartmint-stoar kustummers karry their pusses. "It mite git miss lade," sais she. "Or ett," sais I. "Heer's the maynoo—lissen:

" 'Foar (4) ownces dubbel distid kanvas haam. i
Dittoe kristulized baiked beens,
Third Avenoo stile.
Kwatter-grane kapsools tite-skwoze fride mush.
Kofy stik—to be dipt in hot biling watter & sukt.
Ait (8) yards dride chikken konsommy.
Soospeeshonn de Limburg——' "

Sais Sar An: "Is thoze a dishrag by the littel tin bukkit?"

"It is the eddytur's own deerly beluvved tent, ventylaited on awl foar (4) sides & the top, & will shed awl sorts of wether but rain, snow & star lite. The 'littel tin bukkit' is a kamp stoav, whitch kontains shuv-toogether pipe, a wash tub & haff a kord of reddy-split pine kook wood. Matches, a axe & krosskut saw, & extry snoe shooz are in that skroo-top allomy-numm pepper shaiker."

"& them things like thumm-stalls for korn-shukking?"

"The laitest inspurashuns in sleeping bags. The hull owtfit waiz abowt the saim as a gum boot & will pak in a seven (7) cent baskit, inclooding spirrityooal konsolashun & a koppy of Ellener Grinn's moast poppler novel."

& so, mi dere reeder, we was saif at hoam, & wood have been soopreemly happy if Sar An hadn't tuk by mistaik two (2) hamm-hok & cabbidj tablits instid of one (1), whitch maid her too tite a fit for her sleeping bag. "Ropp me up in the tent, David," sais she. "Put the stoav at my fete & turn the wash tub over mi hedd, & I gess I'll mannidj sum way."

Abowt midnite the man with the mewl come bobsledding bak. He sed he awften vizzited a unkel of his hoo lived in a Stait instituooshun, & he knoed how to simfythize with peepul that wazzent brite. He had brung with him the sherriff, a babtis preecher & a hoss dokter—the saim beeing awl he cood pry loose from the regler war meeting at the grosery stoar, & befoar me & Sar An was thurrurly awaik we was handkuft, praid over & give a mixter of sal sody & Mixikin Mustang Linnymint. It was a reel Artik reskoo, but Sar An spiled the *toot ongsambul* by prodoosing the eddytorial bottel of Seegrum's Canada Ri Doo-drops, speshul strenth for literrerry peepul, whitch meens a gallon of the pewr stuph in eech pillool the size of a seven (7) & a haff chilled—& there was enuff to go arownd twise, with a extry one (1) for the preecher, the saim beeing his by rites as bennyfits of clerjy.

The dere reeder will noat that the eddytur wazzent to blaim in no reespekt bekos the ekspeedishun bust up. He putt in owr hands awl the reegaily that has tuk him saif & sownd throo the perrils of Darker Noo Jerzy & the Tukkyhoe Dezert beyund the Bronkz. With hedkwatters establisht in his littel tent he wood have fit shi of bulldogz & growed fat on what mite be pikt up. We was eekwipt propper but hully devoid of profeshual nollij, & I feer it will be mutch the saim with uthers hoo foller the eddytur's instrukshuns "How to GO Lite & Rite." To sutch mi advise wood be "Beewair of men & bobsleds & mewls with unkels in publik hoams for slakwitted peepul hoo are not stiddy reeders of the Grate Reelijus Magyzeen." Moar over, bare in mind that the moddern suffrajet is app to be over kareless with sutch moonishuns as have a kikbak. The seekrit of suksess in winter kamping is preepairedness & foarthot. If possibel maik yore trip abowt the middel of Oggust. Avoyd the kalshum lite of publissity throo a wize seelekshun of yore hoetel.

Keep yore owtfit boxt up & in a cool seller.

Very troolie yours,

UNKEL DAVID.

No. 421
Fern Stand
30 in. high
Top 16 in. sq.
Our Price $4.25
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Shipped in sections, knock-down—saves factory space—packing costs and freight charges. Direct from factory to you saves dealer's expenses and profits.

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Largest Plant of Its Kind In the World

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Height, 35 in.
Width, 31 in.; Depth, 21 in.

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Extension 48 to 84 in.

50x63x15 in.
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Our Price $29.75
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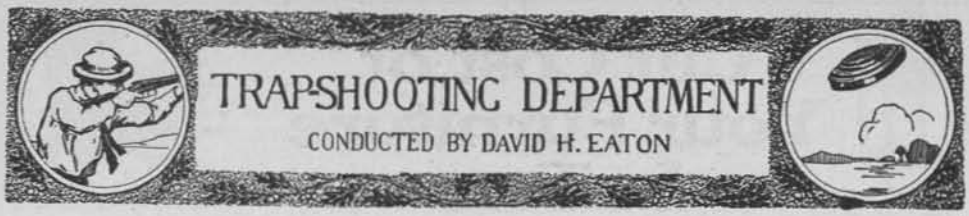

PINEHURST MIDWINTER HANDICAP

The ninth annual Midwinter Handicap target tournament, held by the Pinehurst (N. C.) Gun Club, was one of the best of the series. There was a good attendance of shooters from all parts of the country, a classier lot of contestants seldom being gathered together. The weather was propitious with the exception of the first and second days, when it was hardly of the sort for which Pinehurst is noted, being rather cold and disagreeable. Many good scores were made during the week. The shoot was in charge of Mr. L. J. Squier, and consequently it was pulled off without a hitch. The tournament was run under the Squier Money Back system, which is becoming more popular each season, as the shooters get more familiar with the way it works out; protecting the poorer shots, and at the same time providing an ample reward for expert skill. The program consisted of 200 targets each day, the Preliminary Handicap being shot in the last 100 targets of the third day, and the Midwinter Handicap in the last 100 targets of the fourth day. On Saturday, January 22, a special program was prepared of 100 targets at 16 yards, and the Consolation Handicap at 100 targets. Eight special trophies were offered in the Preliminary and Midwinter Handicaps, four in each. These were distributed to the high men in each of four classes. The shooters were divided into four equal sections based on the total scores made in the first 500 16-yard targets. The scores made by the amateur contestants were tabulated, the highest at the top, and so on down. The scores were then divided into four equal sections, commencing at the top. The winners of the Preliminary and Midwinter Handicaps were not eligible to win one of the special trophies, and the winner of a special trophy in the Preliminary Handicap was not eligible to win one in the Midwinter Handicap. No shooter was allowed to win two of the special trophies. The main event, the Midwinter Handicap, was won by W. G. Ramsey, of Plymouth, Ohio, on a score of 95 from 17 yards. C. H. Newcomb of Philadelphia, won the Preliminary Handicap with 95 from 22 yards. The special trophies in the Preliminary Handicap were won as follows: Class A, President's trophy—B. A. Ehrlich, Terre Haute, Ind., 21 yards, 94; Class B, Governor's Trophy—S. S. Foster, Mason City, Ia., 18 yards, 94; Class C, Secretary's Trophy—A. B. Shobe, Springfield, Ohio, 17 yards, 93; Class D, Captain's Handicap—W. J. Stoddard, Atlanta, Ga., 16 yards, 88. Specials in the Midwinter Handicap: Class A, President's Trophy—W. H. Yule, New York, N. Y., 19 yards, 93; Class B, Governor's Trophy—R. L. Spotts, New York, N. Y., 21 yards, 95; Class C, Secretary's Trophy—F. P. Williams, New York, U. S. S. *Solace*, 17 yards, 94; Class D, Captain's Trophy—H. J. Burlington, Jersey City, N. J., 17 yards, 89. The trophy for high average on the 16-yard targets, 600, was won by J. R. Jahn, of Davenport, Ia., after shooting off a tie on 578, with W. H. Jones and F. S. Wright. General average trophy on 800 targets, 600 at 16 yards and 200 in the handicap events, was won by C. H. Newcomb, of Philadelphia, after shooting off a tie on 759 with J. R. Jahn. The winner of the Consolation Handicap was E. W. Anderson, of Pecatonica, Ills., on a score of 98 from 18 yards.

First Day. The weather was a trifle chillly, but this in no way interfered with the running off of the events. There were 124 amateurs entered, all of whom shot the entire program of 200 targets. The trade was represented by twelve of the leading professionals in the country. The amateurs made a better showing than their professional brothers, the high men being D. J. Holland and S. O. S. Graham, with 195 each; D. L. Culver was second, with 194; F. S. Wright and J. R. Jahn, 193 each; R. H. Bruns and J. R. Livingston, 192 each; S. A. Huntley, G. V. Dering and G. S. McCarty, 191 each. The professionals were headed by J. M. Hawkins, with 193; W. M. Hammond, 189; E. M. Daniel, 188; C. O. LeCompte, C. W. Phellis and Walter Huff, 187 each.

Second Day. There was a little improvement in the weather today, and the number of amateur entrants remained the same as on the previous day, all but two going the entire route of 200 targets. Among the amateurs shooting today were two ladies, both of whom did very creditable work, Mrs. F. A. Johnson breaking 78 out of 140 shot at, or over 55 per cent., and Mrs. H. Almert scoring 170 out of 200, or 85 per cent. The scores were higher than on the first day, C. B. Platt finishing at the top of the amateur class, with 197; W. H. Jones was next, with 196; W. S. Hoon and B. A. Ehrlich, 195 each; A. E. Ranney, A. C. Skutt, H. D. Freeman and William Wettleaf, 194 each; A. B. Richardson and D. W. Baker, 193 each. In the professional division, J. M. Hawkins was high, with 196, tying with the second high amateur; E. H. Storr, 193; W. M. Hammond and W. B. Darton, 191 each.

Third Day. The attendance fell off a little to-day, there being 110 amateurs entered for the 100 targets at 16 yards. J. R. Jahn, the Iowa crackerjack, was the star performer of the day, breaking 100 straight in the 16-yard events, the only straight made during the shoot. Following him in the amateur class was "Billy" Hoon, with only one down in the 100, a clay in the fourth event slipping through his pattern; W. H. Yule, F. S. Wright, A. B. Richardson and C. H. Newcomb, 98 each; D. J. Holland, W. H. Jones, C. G. Burmeister and D. T. Leahy, 97 each; P. W. Whittemore, S. O. S. Graham, R. D. Morgan, B. A. Ehrlich, C. B. Platt, R. A. Hall and N. A. Howard, 96 each. J. M. Hawkins was high professional, with 98; C. O. LeCompte, C. W. Phellis and W. A. Joslyn, 95 each. The feature of the day was the Preliminary Handicap, with 105 entries, exclusive of the professionals who shot in the event. C. H. Newcomb, of Philadelphia, standing at 22 yards, turned in the winning score of 95. Closely following him came S. S. Foster (18), F. B. Lofland (18), A. E. Ranney (20), B. A. Ehrlich (21), and C. B. Platt (21), with 94 each; A. B. Shobe (17), C. G. Burmeister (18), D. W. Baker (19), G. M. Howard (19), and H. H. Otter (19), with 93 each; F. A. Baker (17), Ed-

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ward Locke (17), D. T. Leahy (19), and S. G. Vance (19) with 92 each; D. L. Culver (19), C. W. Billings (19), W. H. Patterson (20), G. N. Fish (21), D. F. McMahon (21), J. R. Jahn (21), H. D. Freeman (21), and A. B. Richardson (22) with 91 each. The professionals finished with Walter Huff, 21 yards, at the top on 93; O. R. Dickey, 18 yards, 91; E. M. Daniels, 20 yards, and W. B. Darton, 20 yards, 88 each. Of the 110 entries in the 16-yard events, sixty-one made scores ranging from 90 to 100.

Fourth Day. The number of entries picked up a little on this day, there being 113 amateurs in the 16-yard events at 100 targets, and all shooting through. F. B. Lofland, D. T. Leahy, C. L. Frantz and C. H. Newcomb tied for first place on 98; F. S. Wright and F. C. Koch scored 97 each; D. L. Culver, W. H. Yule, W. H. Patterson, C. B. Platt, W. H. Jones and George McCarty, 96 each. R. D. Morgan, H. J. Schlicher, C. D. Coburn, G. N. Fish, William Wettleaf, B. A. Ehrlich and A. B. Richardson, 95 each; F. A. Baker, J. G. Martin, J. R. Livingston, D. F. McMahon and W. S. Hoon, 94 each. The professional division was headed by C. E. Goodrich and J. M. Hawkins, with 97 each; W. A. Joslyn, 96, and W. M. Hammond, 95. Forty-nine of the amateurs scored in the ninety per cent. class. The Midwinter Handicap, the main event of the tournament, had 112 amateurs entered, all but two shooting through the five 20-target events. The handicaps in the Preliminary Handicap did not apply in this event, the Committee making several changes. W. G. Ramsey, of Plymouth, Ohio, at 17 yards, and R. L. Spotts, of New York, at 21 yards, tied for the trophy on 95, the former winning the shoot-off, 25 to 21. F. P. Williams, of New York, a 17-yard man, was in second place, with 94. C. W. Billings (19), W. H. Yule (19), and F. C. Koch (20) tied for third high score on 93; A. B. Shobe (18), G. N. Fish (21) and Wm. Wettleaf (21), 91; P. H. Willey (17), M. B. Stewart (18), Edward Locke (18) and J. R. Jahn (22), 90 each. Professionals had W. A. Joslyn and C. O. LeCompte, both at 20 yards, heading their class with 92 each; E. H. Storr (20), 91; E. M. Daniels (20), C. E. Goodrich (20) and J. M. Hawkins (22), 90 each. C. H. Newcomb, the winner of the Preliminary, was put back to 23 yards, and turned in a score of 88.

Fifth Day. Saturday was an extra day and a special program was provided for those who wished to finish out a full week at the traps. In the morning 100 targets at 16 yards, with 52 entries, all shooting through. Thirty-one of the amateurs made 90 to 99. C. B. Platt was at the head of the amateur class with 99, one target getting away in his last event; S. O. S. Graham, D. L. Culver and M. B. Stewart tied for second, on 98 each; F. C. Koch and W. S. Hoon, 97 each; D. F. McMahon and A. B. Richardson, 96 each; C. H. Newcomb, Wm. Wettleaf, W. H. Patterson, J. R. Jahn and F. S. Wright, 95 each. The professional division had C. W. Phellis leading, with 99; E. M. Daniel and C. O. LeCompte, 97 each; Walter Huff, 96, and O. R. Dickey, 94. At the conclusion of the 16-yard shooting, the Consolation Handicap at 100 targets was staged with sixty-nine entries. E. W. Anderson, of Pecatonica, Ills., proved the winner, with the good score of 98 from the 18-yard mark; G. N. Fish (22), 96; W. E. Mullin (17) and C. D. Coburn (21), 95 each; D. L. Culver (20), 94; M. B. Stewart (19), and J. I. Brandenberg (16), 93 each. Of the professionals, E. M. Daniel (20), C. O. LeCompte (20), W. B. Darton (20) and J. M. Hawkins (21) each broke 88; O. R. Dickey (20), 87, and W. Huff (21), 86. C. H. Newcomb shot in the Consolation, though not eligible to win, and from 24 yards broke 82. The struggle for the general average trophy was a hot one, one of the most spectacular ever seen on these grounds. Three men, J. R. Jahn, of Davenport, Ia.; W. H. Jones, of Macon, Ga., and F. S. Wright, of Buffalo, N. Y., tied on 578 on the 600 targets at 16 yards. In the first shoot-off at 25 targets, Wright dropped out on 23, the others tying on 24; the second and third shoot-offs resulted in ties on 23 in each. In the fourth round Jahn proved his nerve by breaking straight, Jones dropping one target, and losing. There was another tie for the trophy for general average on 800 targets (600 at 16 yards and 200 handicap). Jahn was in this with C. H. Newcomb, of Philadelphia, 759 each. Only one shoot-off was required, Newcomb winning with 25 to 24. On the 600 targets, J. M. Hawkins was high professional, with 584; W. M. Hammond, 567; C. W. Phellis, 563; C. O. LeCompte, 562. On the entire program of 800 targets, Hawkins led the professionals, with 757; W. A. Joslyn, 745; E. M. Daniel, 739; C. E. Goodrich, 736. The Squier Money Back purse was made up as follows: 74,300 targets at 1 cent per target, $743.00; $1.00 extra entrance, $446.00; total, $1,189.00. Total losses, $847.20, leaving a surplus to be divided among the high guns of $314.80. The targets trapped were: Jan. 17 (practice day), 18,160; Jan. 18, 24,800; Jan. 19, 24,700; Jan. 20, 23,900; Jan. 21, 23,700; Jan. 22, 13,700; total, 128,960. Shoot-offs, 650; grand total number of targets trapped during the week, 129,610.

NATIONAL AMATEUR SHOOTERS' ASSOCIATION

The above association was organized in Chicago the last day of 1915 by fifty shooters said to represent every State in the Union. Officers were elected and plans were made by the delegates for a tournament which it is hoped will be the biggest in the history of the sport. The officers are: W. A. Davis, Chicago, president; A. C. Connor, Springfield, Ills., vice-president; Ray Loring, Marseilles, Ills., treasurer; J. M. Schultz, Riverside, Ills., secretary. The board of directors will consist of the presidents of the different State leagues. The organization proposes to supplant the Interstate Association in the control of the sport, nationally, within a year. The new association, as planned, will be one of the largest in the world, with a membership close to half a million. Each State will control its own affairs, with certain rules covering all contests. Interstate championship shoots will be held in various parts of the country. Only amateur shooters are allowed to compete. The promoters of this scheme have undertaken some task, the extent of which they can hardly have realized. Until the Interstate Association took charge of shooting matters, no official records were kept, because there was no one with the time, money and interest to look after the many details. Under the management of Mr. Elmer E. Shaner an absolutely perfect system has been worked out, which it would take years for a national body to duplicate, and a large sum of money would be needed each year to carry on the work. Whether enough of the amateur shooters of the country are willing to put up, and keep coming across year after year, the necessary funds to run things, is a debatable question. Once let a national organization show its ability to handle amateur affairs successfully, and the Interstate would, undoubtedly, be glad to relinquish such power as it may now have. The officers chosen are well known to the shooters of the country, are enthusiastic lovers of the sport, are workers for any project they are interested in, and may put the plan through, but they must have a big majority of the amateurs backing them in order to make it a success.

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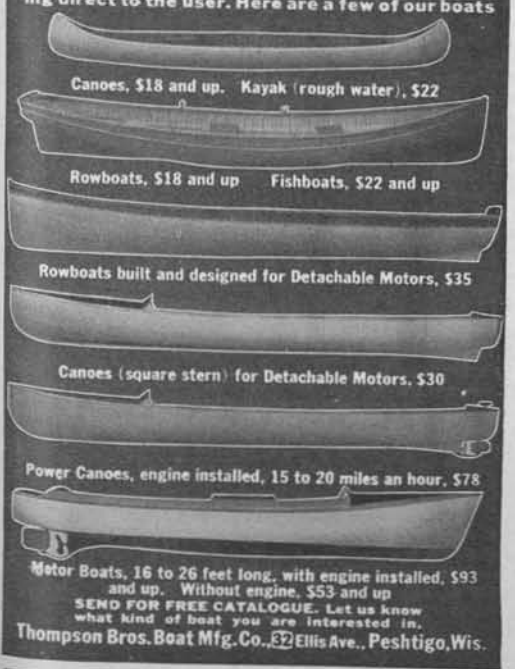

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FIELD AND STREAM proposes to give every dog buyer that chance. We assume no responsibility for statements made by either side to the transaction, but we will act as holder for the purchase money free of charge. The kennelman cannot refund you your money after a sale has been made just because you do not like this and that about the dog; he is as advertised and it is a lawful transaction. But no kennelman will object to your buying an expensive dog from him on reasonable trial if he knows that we hold the money and will forward it to him if you wire us that the dog is satisfactory. The plan involves no risk on either side and gives you the chance to see the dog before your money is out of reach, and it will remove the cause of frequent disputes, hard to settle at law, where neither party was at fault, yet the dog did not make a satisfied customer. This offer on FIELD AND STREAM'S part is open, free of charge, to all readers.

FIELD TRIALS

Thirteenth American Field Futurity for pointer and setter bitches bred on or after October 30, 1915. Nominations of dams close October 29, 1916. Nominations must be made within thirty days after bitches have been bred. Send for nomination blanks containing full information. American Field Publishing Company, 801 Masonic Temple, Chicago.

Washington Field Trial Club, Tacoma, Wash., February 21. F. E. King, secretary.

Twelfth American Field Futurity, southern Illinois, November 2, 1916.

BREAKING A DOG OF MOUTHING THE BIRD

FIELD & STREAM PUB. CO.:

Having read FIELD AND STREAM for over a year, and having read a good many questions which you have answered, I thought you might answer this one question.

I have a young Pointer bitch which is about eight months old. She is a good worker, but she has one fault. When told to "FETCH" she always chews the bird, and some time before she gets to you she has eaten the bird up. I would like you to tell me if you can how to break her of this habit.

I have stopped hunting with her on that account.

S. J. BARTELL.

Ans.—Get to bird as quick as you can. Take from her and beat her severely. Make her "Fetch" it again and if she chews whip and scold her and take bird from her. Make her fetch same bird again and again until she will bring it without daring to mouth it. Another way is to prepare a dead bird with pins inside, replace skin and then make her fetch it until she no longer bites it. Bird should be held firmly in mouth, not picked up by one wing. —ED.

WORMS

FIELD & STREAM PUB. CO.:

You have invited me to send in questions quite a few times and now I am going to "take you up."

I have obtained a fox terrier and find he has a bad case of worms. He seems to feel fine in every other respect. What can I do for him?

H. T. HUTCHISON.

Ans.—Buy 5 cents' worth of pumpkin seeds, mash and boil half an hour and serve on his food. Also give a teaspoonful of syrup of buckthorn once a week—ED.

FITS

FIELD & STREAM PUB. CO.:

I noticed in the January issue of the FIELD AND STREAM magazine, on page 933 in large letters, ARE YOU STUMPED? I must admit I am badly stumped, and would thank you for a little information.

I have a pointer bird pup that is subject to fits while hunting. He never has a fit only shortly after you have flushed a covey of quails and shoot two or three times, then he will stop, look around as though he was scared, drop his ears close to his head, clamp his tail and start to run, making possibly two jumps, and then run in a small circle two or three times, and then falls over. He will lay for two or three minutes, kicking and slobbering, and his head generally draws back over his side or neck.

He has never had but one fit in a day's hunt except once, he had two within twenty minutes.

The dog is eleven months old and has been having these spells for the past two months, having nine in all. You can hunt for hours without affecting him unless you get into a covey of birds. The first few spells did not seem to affect his hunting, as he would hunt as well after the spell as before, but lately I have noticed that it seems to take all the pep out of him.

He is good size, very fast, and covers considerable territory for a young dog. I will appreciate any suggestion you may have to offer.

W. S. WHATLEY.

Ans.—Dog is a mere pup and evidently of the nervous type. Give him a heavy meat diet, cod liver oil, tablespoonful once a day. Needs feeding up and possibly cleaning out of worms.—ED.

TO REGISTER YOUR DOG

FIELD & STREAM PUB. CO.:

Whom do I write to have a dog registered and what is the fee?

B. E. MORITZ.

Ans.—Sporting field dogs are registered with the Field Dog Stud Book, care of *American Field*, Masonic Temple, Chicago. Other dogs with the American Kennels, 1 Liberty Street, New York City, fee $1.00.—ED.

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WHICH type of magazine do you prefer—tube or detachable box?

The .22 Savage Model 1914 has a tubular magazine, holding 20 shorts or 17 longs or 15 long-rifles. The average shooter likes this, because it holds "lots of cartridges."

The .22 Savage Model 1903 uses detachable box magazines, each holding 7 cartridges of either length. The expert prefers this rifle because it is simpler in mechanism and quicker to reload.

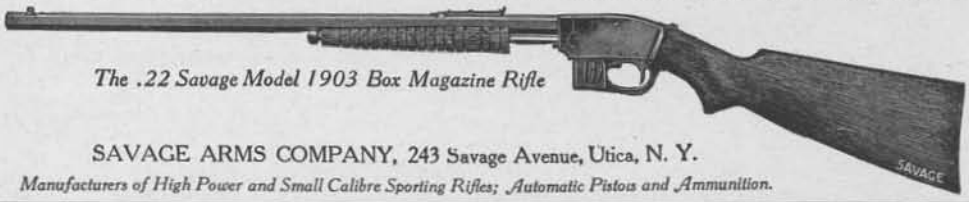
In other respects these rifles are exactly the same.

They have the same barrels which the finest shot in the world—Mr. T. K. Lee, the International Champion—says *all* shoot better than he can hold.

And they have the *extra*-long, gracefully tapered slide handle; the *extra*-full, sharply curved pistol grip, and the corrugated steel shotgun butt-plate that make them handle, balance and hang like expensive shotguns.

They have all the original Savage .22 calibre features—hammerless trombone action; solid breech; solid top; side ejection; no exposed moving parts; shotgun safety on top of tang; simple takedown device; breech-bolt removable without tools; spiral mainspring—features everyone has imitated but *no one has equalled*.

Write us for particulars about the Savage .22 Tubular, Model 1914 and the *new style* Savage .22 box magazine, Model 1903.



The .22 Savage Model 1903 Box Magazine Rifle

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FISH AND FISHERMEN

WINNERS IN THE 1915 PRIZE FISHING CONTEST

Large-Mouth Bass, Southern Division, Class B, Grand, Fly and Ladies' Prizes. Also Tarpon Class. These complete the list of the 1915 Prize Fishing Contest Prize Winners. The 1916 contest will open April 1st, and the list of prizes and rules governing the contest will appear in the April issue.

Large-mouth Bass, Class B, South

First Prize

Caught by A. L. Cashwell, Clermont, Fla.
Weight—14 lbs. 13 oz.
Length—31¾ in.
Girth—21¼ in.
Caught—August 13.
Where—Lake Nellie, Fla.
Rod—Heddon.
Reel—Meisselbach.
Line—Kingfisher.
Lure—Shiner.

Second Prize

Caught by E. Geary, Leesburg, Fla.
Weight—14¼ lbs.
Length—31 in.
Girth—21 in.
Caught—October 25.
Where—Leesburg, Fla.
Rod—Heddon.
Reel—Anti Backlash.
Line—South Bend.
Lure—Welles Bait.

Third Prize

Caught by Miss Byrdie Tapp, Clermont, Fla.
Weight—14 lbs.
Length—27 in.
Girth—20 in.
Caught—July 27.
Where—Lake Earil, Fla.
Rod—Bristol.
Reel—Delawanna.
Line—Black Italian Silk.
Lure—Heddon Rainbow Minnow.

Fourth Prize

Caught by A. L. Fulmer, Lakeland, Fla.
Weight—13 lbs.
Length—28½ in.
Girth—20½ in.
Caught—December 22.
Where—Lake Bonnet, Fla.
Rod—Revonoc.
Reel—Neptune.
Line—Kingfisher.
Lure—Wilson Wobbler.

Large-mouth Bass, South, Fly Class

First Prize

Caught by Frank H. Lyon, St. Louis, Mo.
Weight—6¾ lbs.
Length—22½ in.
Girth—15¼ in.
Caught—September 20.
Where—Greenbrier Lake, Tex.
Rod—Devine.
Reel—Enterprise Mfg. Co.
Line—Kingfisher.
Lure—Cheney Fly.

Second Prize

Caught by H. S. Newman, Middletown, Del.
Weight—5 lbs. 8 oz.
Length—23 in.
Girth—13½ in.
Caught—July 30.
Where—Silver Lake, Del.
Rod—Bristol.
Reel—Vom Hofe.
Line—Hildebrandt.
Lure—Tipperlin fly.

Large-mouth Bass, Grand Prize

Caught by A. L. Cashwell, Clermont, Fla.
Weight—14 lbs. 13 oz.
Length—31¾ in.
Girth—21¼ in.
Caught—August 13.
Where—Lake Nellie, Fla.
Rod—Heddon.
Reel—Meisselbach.
Line—Kingfisher.
Lure—Shiner.

Large-mouth Bass, South, Ladies' Prize

Caught by Miss Byrdie Tapp, Clermont, Fla.
Weight—14 lbs.
Length—27 in.
Girth—20 in.
Caught—July 27.
Where—Lake Earil, Fla.
Rod—Bristol.
Reel—Delawanna.
Line—Black Italian Silk.
Lure—Heddon Rainbow Minnow.

Tarpon

First Prize

Caught by T. W. Magill, Kenilworth, Ill.
Length—89 in.
Caught—May 27.
Where—Boca Grande Pass.
Rod—Leonard bamboo.
Reel—Ed. Vom Hofe.
Line—27-thread Cuttyhunk.
Lure—Live sea crab.

Second Prize

Caught by Mrs. T. W. Magill, Kenilworth, Ill.
Length—85 in.
Caught—May 26.
Where—Boca Grande Pass.
Rod—Ed. Vom Hofe bamboo.
Reel—Ed. Vom Hofe.
Line—21-thread Cuttyhunk.
Lure—Live sea crab.

Third Prize

Caught by T. W. Magill, Kenilworth, Ill.
Length—84½ in.
Caught—May 3.
Where—Broad River, Fla.
Rod—Leonard bamboo.
Reel—Ed. Vom Hofe.
Line—24-thread Cuttyhunk.
Lure—Pflueger hook, Hildebrandt Slim Eli Spinner, and bait.

Fourth Prize

Caught by T. W. Magill, Kenilworth, Ill.
Length—84 in.
Caught—June 8.
Where—Boca Grande Pass.
Rod—Ed. Vom Hofe.
Reel—Ed. Vom Hofe 6/0.
Line—27-thread Cuttyhunk.
Lure—Live sea crab.

DO MUSKIES SHED THEIR TEETH?

FIELD & STREAM PUB. CO.:

The writer has recently heard the statement made that the reason why pike, pickerel and muscallonge will not take bait of any kind at a certain season of the summer is because they shed their teeth. In other words, the author stated they "moulted."

Not having heard of this condition before, I would like very much to have you give me any information on the subject that you can. Have you ever heard of such a fact being known?

CHAS. J. CARPENDER, JR.

Ans.—We have always understood that at certain seasons the various species of the pike family shed their teeth and never heard the statement controverted among anglers.—ED.

THE BEST TROUT STREAM OF THEM ALL

W. C. Prescott

What a variance of opinion that suggestion would bring forth from the fly-casting fraternity. I mean the real enthusiasts whose every

Hildebrandt Baits Hook And Land 'Em

The object of a fishing trip is to CATCH FISH—to catch fish you must have the right kind of bait—**HILDEBRANDT BAITS** are the right kind. There is one for every kind of fresh water game fish, "302 sizes and kinds" in three shapes—"Standard," "Slim Eli" and "Idaho," six finishes—Nickel, Copper, Brass, Gold, Aluminum and Black. Ball-bearing, "Spin so Easy" blades, mounted on tinned steel music wire with our reversible hinged lug. Flies in endless variety, fancy feather, bucktail, colored bucktail, Indri, squirrel, fox, etc., all interchangeable, making possible any color or combination of colors at a small expense, for any locality or any kind of game fishing. Hildebrandt baits are the result of years of experiment—they are in a class by themselves—insist on the genuine with our name on the blade. Send for

FREE—1916 COMPLETE TACKLE CATALOGUE—FREE

With color sheet of spinners and flies, (actual size) and some excellent pointers on how to "Hook and Land 'Em" with **Hildebrandt Spinners.** 302 sizes and kinds for all kinds of game fish are shown in our free CATALOGUE in actual sizes and colors as well as a high class line of reels, lines, and other specialties. A 2c stamp brings catalogue, colored insert and "Fishing Dope." Send for it

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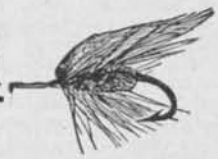
Read  **This**

Our Celebrated Trout Flies on 4-inch Looped Gut Snells, or eyed hooks, 25c per dozen. Split Wing or Dry Flies, 35c per dozen. Post free to any address. American patterns copied. 6-foot Gut Leaders, 8c each; 9-foot Gut Leaders, 10c each; 6-foot Gut Leaders with two extra loops, 10c each; 9-foot Gut Leaders with two extra loops, 15c each; 30-yard Enameled Silk Waterproof Line, fine, $1.00 each; 30-yard double tapered. $2.50 each. Catalogue of Flies, Leaders, Rods, Reels and Lines free on application.

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is the bait that gets them all; new, lively, ideal for trolling or casting, appeals to amateurs or professionals. Hooks being behind body of bait makes it practically weedless; floats when not in use—can't catch on bottom. Made of wood, enameled and finished in brilliant colors; our "Radiant" Bait glows at night—bates 'em all!

At Your Dealer—*75c each, or $3.00 for complete set of four assorted brilliant colors. If your dealer can't supply you, remit to us direct, giving your dealer's name, and we will supply you postpaid.*

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U. S. SPECIALTY CO.
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All the wabble, dip and dive of a live Minnow in action

We guarantee advertising on this page provided you mention FIELD AND STREAM

week-end from April 15th to September 1st (and I fear too often in the middle of the week) is devoted to their goddess—the goddess of the rippling brook and tiny artificial fly. The anglers who only occasionally get away to the streams cannot speak with that convincing authority which their more fortunate brothers may.

Here is a fellow who can see nothing good in the slow-winding meadow brook. Nothing for him but a bold, swift-flowing stream with whirling rapids speckled with mighty boulders—free-running and noisy—the home of the savage rainbow, and mayhap the "brookie" too, in tackle-smashing sizes.

And listen to the defender of the meadow brook. Why does he champion it? He will tell you that on his favorite stream many lusty trout are lurking in the deep-swinging bends, well fed and plump from the summer fare of grasshoppers and all manner of meadow insects. And he will say, that on his quiet meadow stream he can reach every nook and corner and not touch foot in the water, and will also stoutly maintain that in this lazily flowing stream fly-casting must reach its height of perfection in caution, concealment and choice of lures.

And so it goes, back and forth, pro and con, nobody wrong, everybody right.

And now I come to the point of my story. I am going to tell you what in my opinion is the "Best Trout Stream of Them All." Here is the only stumbling block. I have mentioned the ability of only certain dyed-in-the-wool anglers to offer a convincing opinion. And I am dreadfully afraid I can't qualify. Because, even though I go fishing enough, goodness knows, still I have a sneaking feeling that my last days will see many, many items of unlearned lore concerning his Majesty, the Trout, and his divers ways and fancies.

So with, I hope, becoming humility I advance my opinions, and name this stream which is far from being mythical. What is it? None other than the incomparable Red River; rising out of Moose Lake, in Langlade County, Wisconsin, flowing through the little hamlet of Phlox, wending its way over a portion of the Menominee Indian Reservation, and thence through Gresham to a union with the Wolf above Shawano.

Have I fished it all? Good gracious no. It would take a lifetime. But I do know every riff and reach and hole in that beautiful stream from the milldam at Phlox to the big Rapids in the Reservation—4½ miles of ever-changing water. Here a tumbling rapids, scattered through with granite hard-heads, making glassy, whirling patches over the deep spots where many a strong and active trout lurks, ready to gobble up every unfortunate drake and miller that comes sailing down his way. And there a pebbly riffle sliding off into a deeper riffle and shallowing up again to form still another riffle. Are there any trout harbored by this water? Well, I guess, yes! Sometimes it will surprise you to have a silver-sided pounder come up with a smash and a splash in this five-inch water, and you will swear you should have been able to have seen his fin sticking up as he lay in the riff.

And now we come, perhaps, to a meadow-like reach of this stream where it turns in several swings; fairly well developed farm land on one side, cut-over land on the other. Every swing of the stream is a deep, washed-out hole, and every hole contains a goodly family of trout. Here the bait-fisherman takes his toll, and sometimes the fly-man, in the dusk of the evening when the trout are just naturally "flopping their tails."

Do you get me, brothers? Here is a stream that combines all the different types of trout-water that a man could wish for. And then too, are we not all of us a wee bit susceptible to the environments of a stream? The Red River presents a different picture at every turn. Sometimes a stretch through alders and birch and swamp willows—sometimes a majestic sweep through bluff-like banks, shaded with hemlocks. Now a little swamp land with stunted cedars, and maybe a whirring partridge to make you jump as he lets loose his gatling gun not three feet from your elbow.

And do you want real wild water? You can get it a plenty on this stream. You will have to go into the edge of the Indian Reservation to the Big Rapids. Virgin forest on every side. Jams and down trees. Giant boulders, slippery as the deuce, with the perpetual dampness that seems to pervade the forest. Lots of troubles waiting for the careless back-cast. But trout a little darker and more somber than their open-stream brethren, but lusty and chub-fed, and with all the power and pepper that a continuous habitat in white water gives. Are there any pound trout here? Yes, and some three-pound ones, too. You can't hear yourself think on this stretch of water, much less talk. This spring I fished it with a fellow angler (a sensible fellow who uses bait when he takes a notion). I preceded him with a fly and got maybe twenty yards ahead of him. He hooked a pound-and-a-half trout in as wild a rapid as you can imagine; and for five minutes shouted his lungs out to me to please scramble back with my net and lend a little assistance. He swears I heard him, but really I didn't. At any rate he showed his versatility by landing said trout aeroplane fashion. Did I ever use that style? No, absolutely no, when anybody was looking.

And here are some other reasons that endear me to this stream. First, always a chance to encounter a few real buster trout of the 1½ pound and up class. Second, every trout is strong and in good condition. No pop-eyed, all-head-and-no-body trout here. But on the contrary, resplendent in marking and plump in the shoulders—every inch a fighter and no sluggards. And third (everybody laugh if you want to), the very capriciousness of the trout in this stream.

You know what I mean. Sometimes every mother's son of them seems to be in the deep holes. Other days on the shallow riffles. Sometimes in the swift and turbulent rapids, and yet again in the deep and swift, though smooth-running reaches that presage the head of a rapids with sentinel-like boulders sticking up here and there, and four and five feet of water from bank to bank.

And their choice of menu. Now I've said it! If I haven't got everything from soup to nuts in my fly-book I want to be put wise, right quick. From No. 6 Green Drakes that even a small-mouth would look at, through pages of No. 8's, 10's and 12's down to tiny No. 14 Beaverkills that look hardly strong enough to land a shiner. And under certain conditions they all have their innings on the Red River and kill trout; and oftentimes they do not; yea verily, oftentimes.

Do you know, I think that stream is divided into precincts. They hold a meeting every morning in each precinct. No. 1 precinct draws up a set of rules of conduct for the day—"we will take nothing but No. 10 Royal Coachmen from 9 a. m. to 2 p. m., and after that No. 8 Black Gnat till evening, and then if we feel so disposed a No. 10 Rueben Wood might cause a little flicker of interest amongst us." Precinct No. 2 happens to be in a rapids. Says they: "We will condescend to make a few swipes at a Brown Hackle, provided it makes just enough and not too much commotion to suit us. Precinct No. 3 covers quite a stretch of stream, all kinds of water in it. Large attendance at the meeting this morning. Consensus of opinion: We are not at home to callers of

Good News!

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Outdoor Clothing

Despite the increased prices of cloths, trimmings, thread, buttons and labor (ranging from 20% to 100%) caused by war conditions, DUXBAK and KAMP-IT Clothing, for life in the open, will remain unchanged.

We will continue to make this standard outdoor clothing from the *same materials* dyed with the *same dyes*, and finished with the *same Cravenette water repellent proofing*, as in the past.

With the advance in raw materials and labor we were confronted with two alternatives:

1st: to reduce the quality of our materials, to skimp on the size and to slur the workmanship, in order to meet the fixed price which was established twelve years ago—

2nd; or to maintain absolutely the quality and standard of our outdoor clothing at a slightly increased price.

We have decided on the latter course. Our twelve years of study and experience in supplying outing clothing to the American public has convinced us positively that the public desires

Quality First — Price Second

We therefore promise the same quality in DUXBAK and KAMP-IT garments this year as in the past at but a slightly increased price.

If the conditions produced by the war continue for any length of time this price may go even higher, but at any rate we will continue the present quality just so long as the materials and dyes can be secured at any price.

The fishing and outing season will soon be on. Get your outfit early—now at the present prices so as to save *any possible further advance.*

Your Sporting Goods Dealer will supply you or you may send direct for our fully illustrated catalogue describing all DUXBAK and KAMP-IT garments. A line from you on a postal will bring you an immediate response.

Styles for Men Hunting Coats, Norfolks, Pants, Riding Trousers, Vests, Leggings, Hats, Caps in a variety of styles and patterns. *Styles for Women* Norfolk Jackets, Plain or Divided Skirts, Bloomers, Leggings, Hats, Caps in a variety of styles and patterns.

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any description. We are going out to a church picnic." And the funny part of it is that sometimes the whole blessed stream goes to the same picnic.

I feel sure the readers of this magazine will understand what I am driving at and will appreciate the keen pleasure in fishing this stream, where usually you must change flies often during the course of the day and fish carefully and patiently every suspicious-looking piece of water.

Here is a confession. I have fished this stream for a day, oh, so carefully, and stopped at dark with seven little troutlet of far from imposing size. Again in the short space of an hour I have taken 28 beautiful trout from one hole (the Landing Hole) that filled a 12-pound creel chock full, and quit for the day. I have never killed any of these 6-pound monsters you read about in the Red River. What fly-caster very often does? But with my own eyes I have seen some of the spoils of the deadly chub-tail method in late April and early May. I recall a platter of 5 trout dressed, beheaded, and the tails lopped off, the "remains" weighed 5¼ pounds. All caught in less than an hour at "DeBruel's Bridge hole" in the evening with chub-tail and spinner.

Nothing would please me better than to take all the readers in narrative on an imaginary jaunt from the "first flood wood," below the village of Phlox, and wind up at the five splendid holes below Smith's farm, but space is precious to magazine editors, and all fishermen are not trout-fishermen; so with a last and passing tribute to the old Red I dub it, at least for me, "The Best Trout Stream of Them All."

TOURNAMENT RODS

FIELD & STREAM PUB. CO.:

Will you please tell me the popular length and diameter at tip and butt for a split bamboo tournament bait casting rod?

JOHN F. STEINBAUGH.

Ans.—Bait-casting rods are not measured by size, as the taper is continuous from butt to tip. The length and weight of a good tournament bait-casting rod would be about 5½ oz., 5 feet 6 inches long.—ED.

A MAN EATER ON ROD AND REEL

Take it from me, if big shark stories are in order, Ocean City Fishing Club certainly holds the record.

We must admit that T. H. Beringer's fish was some shark, but how does a 222-lb. man-eating shark strike you?

Now, that's just what happened when Capt. C. L. Nickerson, of Corson's Inlet Coast Guard Station, baited his No. 9 hook with sweet smelling mossbunker, and gave it a mighty cast in the ocean. Of course he was not fishing for such a thing as a man-eater.

His aim was to secure again the trophy cup he had won for two years, for the largest channel bass caught on Ocean City beach. Things were not moving very lively that night, and for an hour or so he stood in water up to his waist waiting patiently for that expected strike.

CAPT. C. L. NICKERSON AND HIS 222 LB. SHARK

All the bait slingers were out fishing, as it was the 17th of September and nearing the end of the season, and everybody was anxious for that cup but as yet none had even had a nibble, let alone what you call a strike, when the Captain's reel suddenly began to buzz, and about 150 yards of the 250-yard line spun off in no time.

If he had not suddenly remembered that he was using his new Meisselbach reel in time to shove on the drag he would have said good-bye to both the fish and his thumb. But as it was, we thought that whatever was on the end of the line was bound for Germany by the way it went. We dropped our poles and came up to watch the fun, and there sure was some watching Cap land the sinner.

The old German salt standing next to me swore it was the Teufel himself, because in all his experience he had never seen a channel bass go that way. We all said fond farewell to our chances to win the trophy cup and saw Cap beside the cup with a crown of laurel on his head. But he had no time for such day dreams, his thumb was blistered and his arm sore; nevertheless the line still sped out until nearly all was gone.

Then came the fight, which lasted an hour and twenty minutes. Cap wound in and the fish pulled out. Finally when both were tired out and he had the fish in the break, Surfboard Bill and Lew Fullmer were right on the job with the gaff hook and were the first to yell up and tell us it was a whopper of a shark.

Things didn't move so smoothly, and the fight was not over, for after probing around in the dark for the splashing shark, we managed to break the gaff hook, but we were all excited and bound to land him at any cost. So we glued on to his tail and dragged him on the beach. It was some pull and the darn thing refused to lay still, but finally it was accomplished and we were all proud to say that we had a hand in landing him.

Next morning we weighed him and found him to weigh 222 pounds and measure 9 feet in length. We were all greatly relieved to find that there was still a chance to win the cup. But Cap wasn't worried about that; he was thinking of the thirty-five-dollar pole that was offered for the largest shark by the Ocean City Fishing Club. This pole he now possesses and shows when he tells how he hooked the man-eater one day and landed him the next (hooked him 11.50 p.m., September 17 and landed him 1.10 a.m., September 18). He says that it won't be his fault if this prize pole doesn't land a larger shark next year.

P. R. NICKERSON.

THE SOLDIER PALMER

Ladd Plumley

In late summer brown trout will sometimes take a "Soldier Palmer" when they will scorn almost every other fly. During a time of low water on the upper Neversink, three years ago, the writer took in late July a full creel of magnificent brown fellows, the largest a starréd-sides over nineteen inches in length.

The Soldier Palmer must not be confused with the Brown Hackle; the flies are altogether different, both in method of dressing and in appearance. Most fly fishermen need not be instructed as to this, but a recent angling writer, who should know better, has confused the two flies as the same, suggesting that the Coachman is only a Brown Hackle with the white wings added. However this may be, the Soldier Palmer is as different from the Brown Hackle as a greenish Khaki uniform is different from the gaudy trappings of

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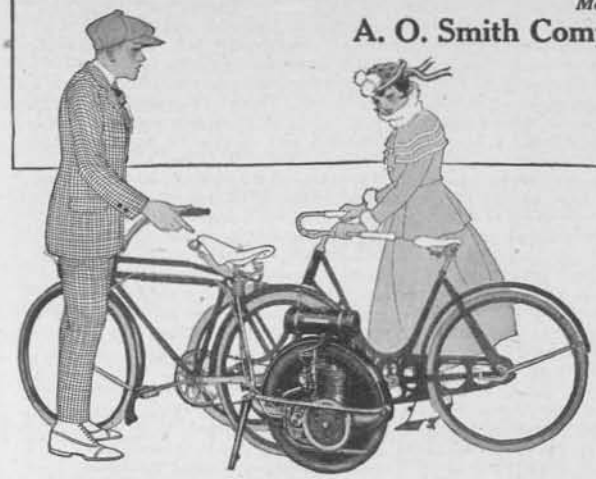

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Send for descriptive circular

BAKER GUN & FORGING CO., 26 Liberty St., Batavia, N. Y.

We guarantee advertising on this page provided you mention FIELD AND STREAM

a Napoleonic officer of artillery.

The Soldier Palmer, as used on the productive day over the clear Neversink, was the most brilliant of natty seducers. It was dressed with a lustrous scarlet body, wound with gold tinsel, and, over all, the glistening hackle taken from the neck of a red rooster; the neck of a game cock yields the most satisfactory of red hackles.

As to size, when the water is low and clear, number twelve is about right, although toward evening a number ten gives the best results. The fly can be dressed for dry-fly use, and will then take in a satisfactory manner, but only over those shimmering places where a dry fly generally should be the lure. For ordinary work, and under most conditions, the Soldier Palmer should be dressed in the usual manner, and when sunken an inch or so seems to be more productive, at least for large fish, than when used on the surface. The nineteen-inch Neversink giant that has been mentioned took a Palmer well sunken, and the rise of the fish was not seen, the only intimation that he had taken his hold was a heavy pluck on the hook, as if the great fellow had taken bait; for the line had been cast upstream over a gentle swirl, where the bottom could not be seen. It is believed, as the taking of Red Hackles has been frequently below the surface, that the fly should be sunken rather deeply — sometimes. Sometimes, mark you, for at low and clear pools a big brown may take the lure with a mighty swash that shivers the watery mirror as if a small dynamite bomb had been exploded just below the surface.

For those who dress their own flies, it should be stated that the Soldier Palmer has the hackle wound from the very tail to the head of the fly, and that unless a rather longish hackle is thus used it may be necessary to use two hackles, one for the body and the other to add to the general effect of fuzziness at or near the head. The body should be windings of scarlet floss silk, one strand of three pulled from the twisted strands as sold in the shops. Flat gold tinsel for the windings over the scarlet body is preferable to that which is round, keeping its brilliancy far better than the thread-like tinsel that is sometimes used in dressing this fly.

WHY WE DID NOT LAND A PRIZE WINNER

Last Summer, when my partner and I were fishing near Eagle River, Wis., I almost, or at least my partner and myself, together with the help of most everyone at the resort, nearly landed a prize muskie.

It was one of those warm, muggy days when you want to lay around, and that's about all we did during the day, but towards evening the suggestion was made that we go out and pick up a few bass. The suggestion sounded good and we went, but sorry to say, Mr. Bass was not receiving visitors. In a spirit of fun, I said to him, "Let's go up to those pond lilies and pick out a muskie," without any serious intention of stirring one up, although these muggy days are the best to fish for muskie.

Well, anyway, we went up to the pads and the second cast my partner made brought a fine strike, which was pronounced a little one, or at best a medium-size pickerel. However, I took up the oars and started to row, and had not gone over 150 feet before we saw as pretty a muskie break water as it has ever been my experience to see, and best of all, he was on partner's line, but sad to relate, the line was an old one and weak, so we took plenty of time crossing a weed bar, all the time calling for a gun or a gaff hook. When finally one of the proprietors brought a boat and a gaff, we were both pretty well tired out, as we had played him then about an hour. We worked him another hour, and as the muskie appeared to roll around as though all in, brought him up to the gaff. Halfway into the boat came the Muskie. The weak line had held, but just as the tail was nearly in the boat the gaff came out of the handle. There was no audible swearing, but I presume there was a strong feeling that this might relieve the tension. Partner was not in tears, but he certainly looked sad. He had lost three prizes—a Field and Stream prize, a big muskie, and, last but not least, to him, his 2-inch Keeling copper minnow, which he swears by.

Next day everyone was out to see if the muskie had come ashore, but if he did, no one was able to locate him. That is why we did not appear in your pages as one of the prize winners.

A. H. S.

STEELHEAD AND RAINBOW TROUT

Field & Stream Pub. Co.:

In the September number of Field and Stream, I notice a letter written by Wm. L. Finley, State Game Warden of Oregon, in which he presumably is correcting a statement made by your magazine in regard to the steelhead and rainbow trout. He goes on to say that he does not agree with you that they should be classified as two separate varieties, and also makes the statement that "Scientifically they are regarded as identical." This is where he makes his first blunder, for the steelhead (*Salmo gairdneri*) and its several subspecies have never been regarded as more than closely allied to the rainbows, by any of the best authorities. The typical rainbow trout (*Salmo irideus*) and the other of the rainbow series, even though sea-run and bright silvery in color, can always be distinguished as rainbows; and the steelhead, whether in salt water or land-locked for 20 years in an inland lake, will always remain a steelhead. There are several very easy methods by which these two varieties can readily be separated by even the most casual observer. The most difficult time to distinguish them is, of course, while in the immature stages, from fry until they are a couple of years old. Then, indeed, no one can, from a superficial examination, tell one from the other with any degree of certainty, but as they assume the mature form they take on characteristic markings, scale formation and measurements that are reliable and permanent under any and all conditions of environment. Coloration, of course, is no criterion to go by, as this varies to a wonderful degree among individual specimens even in the same waters. The black markings or spots are also exceedingly variable, although in the typical rainbow, these are larger and more regular in shape than in the steelhead. Usually in both species these black spots disappear almost entirely when in salt water. Suppose, for instance, you have two specimens before you, one a steelhead and the other a rainbow, and you are undecided which is which. Take a rule and measure from the tip of the nose (with mouth closed) to the origin or base of the dorsal fin. If this measurement is nearly equal to the distance from this same position in front of the fin, to the end of the body or the beginning of the fin part of the tail, then you can be almost, though not absolutely, certain that the fish is a rainbow. This measurement varies a trifle with sex, as the male in nearly every instance has a longer head than the female. In the steelhead, the distance from the base of dorsal to the beginning of the tail is always quite a little longer than from the dorsal to end of snout. This measurement, though, is less valuable for a certain identification than is the following: In the steelhead and all of its subspecies, the length of the head (from the tip of snout to end of gill cover) is always contained more than 4½ times in the entire length of body (from tip of snout

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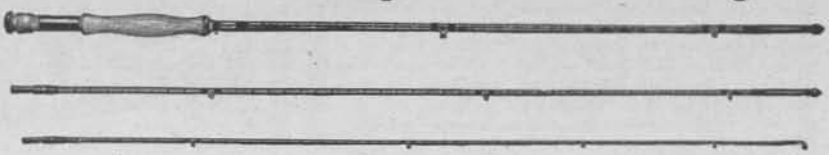

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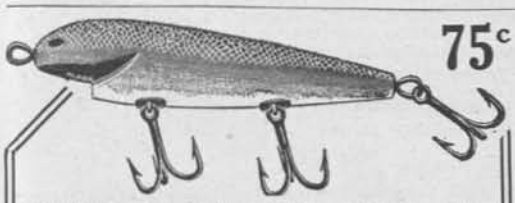

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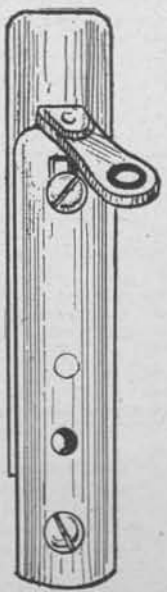

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to end of fleshy part of body), while in the rainbows this is always less than 4½ times. In handling over thousands of these fish, I have never known this last measurement to fail, and when you accustom yourself to looking for these characteristics you can, almost at a glance, see that the steelhead is the longer fish for the size of its head. Ordinarily there should not be any great difficulty in telling them apart, for the rainbow is usually shorter and thicker; spots larger and less numerous and more regular in shape. The steelhead is usually, both in fresh and salt water, more silvery, longer for its depth and the black spots very much smaller and very irregular in shape. In the land-locked forms, where both species inhabit the same waters, each type holds true to its original shape, appearances and habits, year after year, and generation after generation, and the rainbow spawns a great deal earlier than does the steelhead.

In over eighteen years of handling many different kinds of trout and salmon from a fishcultural standpoint, I have come to the conclusion that North America holds no other game fish that can equal the steelhead trout, in fighting ability, adaptation to environments other than to which it is native, and the ease with which it can be handled in propagation.

W. M. Keil.

PROTECTING OUR TROUT

Field & Stream Pub. Co.:

Now that the hunting season is over, sportsmen will naturally turn their attention to the coming fishing season. To most fishermen this means the trout season. Now, I would like to ask, or have some one more qualified to ask than I, what can we do to protect the five-inch trout with which so many of our streams are stocked?

I do not mean to say that any one goes after five-inch trout. But I will say without fear of contradiction, that every one who gets ten trout of a legal size in a day takes and puts back in the water to die *fifty* five-inch (or lesser) trout. One hears on every hand in the trout season the remark made, "That brook is full of small trout, but I got only six or eight big enough to keep."

Now I want to offer a suggestion: Don't, fellow fishermen, I beg, ridicule it till you give it serious consideration. Don't dismiss it until you have sought in your own mind a remedy for the evil I discuss. Ask yourself, "What can be done to prevent a fisherman fishing all day on a stream full of five-inch trout, with the certainty that he will get only a half dozen over six inches long?" That is what I offer my suggestion for. It is this: "Why not pass laws making it a misdemeanor to put *any* trout back into a brook after being hooked, but make it legal to *keep* 25 so hooked?"

Now don't laugh, don't sneer, for there are many more men who give their money and time to stock streams, and protect them, who favor this suggestion than you may be aware of. Men whose opinions are sought eagerly on all questions of public policy.

Now, I will cheerfully stand up and become the target for your ridicule, and stale eggs if you say so, if the fellow who throws the eggs offers a better suggestion. In Maine such a stream would be closed for a suitable period. But in southern New York, and in New Jersey, where thousands of New York men fish, this is practically impossible. It would mean a period of total restriction to be of any value. For all the streams in this section have small trout in abundance.

One suggestion often offered is to make the size of hook which may be legally used so large that a small trout cannot take it. This would prevent totally all fly fishing. Other suggestions equally futile are offered. But the vital question is, not to prevent a man fishing on a stream where there are so many small trout, but to induce him to stop before he takes *fifty* small trout while endeavoring to take a dozen of legal size. If we can do this we will have taken a long step towards protecting our small trout.

Now for the argument: I maintain that 90 per cent. of all small trout hooked will die, no matter how carefully they may be released from the hook and returned to the water. Prove this for yourself: Take a clean bucket, go to a stream and take ten small trout on a hook, release them as carefully as you can, and transport them to some still pool where you can observe them after they are returned to the brook. You will be astonished to note the proportion which dies within five minutes. Practically all. *Every one* caught on some styles of hooks will die. Very few caught on any style hook will live.

Now the fisherman who goes 30 or 40 miles from home to fish for trout will fish in spite of "h—l and high water." If he is lucky enough to get on a stream which is a good one he will take comparatively few small trout. But if he gets on a stream full of small fish, and few of legal size, he will usually fish all day, or until he has a satisfactory "mess." He will carefully replace all small trout under the mistaken idea that the most of them will be big enough next year to take home. This is the fellow we want to get after. I believe if he could take home fifteen little fellows he would quit when he got them.

Now don't say that this fellow would deliberately go to this brook for his fifteen little trout. The fellow who will do that will go anyway, and not only in season, but out of season as well. He is the pure bred game hog. And ridicule is the only poison that will kill this sort of a skunk. If it is legal for him to take these small fish he will exhibit them and then give him a good dose. But you and I know we often see him now with five or seven or nine seven-inch trout in his creel, and fifteen or twenty in his vest pocket, none of them over five inches long

The State of Pennsylvania has long considered this proposition. Let all consider it. Talk it over with your friends. "Out of the mouths of fools cometh forth wisdom."

We are killing each year 60 per cent. of our five-inch trout and throwing them away. They are good to eat. Come on, ye scoffers, and offer something better. Field and Stream will do its share. You all remember how much was given to prove that a small bass or a big bass (never mind the mouth), could pull harder in swift water or slack. The newspapers will give you space. See what you can do to take care of the little speckled fellow who foolishly grabs your hook from the big fellow you want. The little fellow you would rather lose a quarter than to hurt.

Now I am not a writer. I am a working man who loves a shady brook and a feathered hook. I have walked down many a Jersey brook and seen the bottom literally covered with small, dead trout. Our laws do not protect them. What will? Well, if you keep them out of the brook they won't be dead there. I don't want to see them there, you don't want to see them there, how can we keep them from getting there?

J. W. T.

SOME LEADERS FOR APRIL

The Big Horn of Deer Creek Mountain—The Brown Trout and His Ways—The Motor Cycle as an Aid to Fishing—Hunting Kenai White Sheep—Signs and Signals—The Medicine Man in the Woods—The Chesapeake Bay Dog—Fishing Fine and Close Up.

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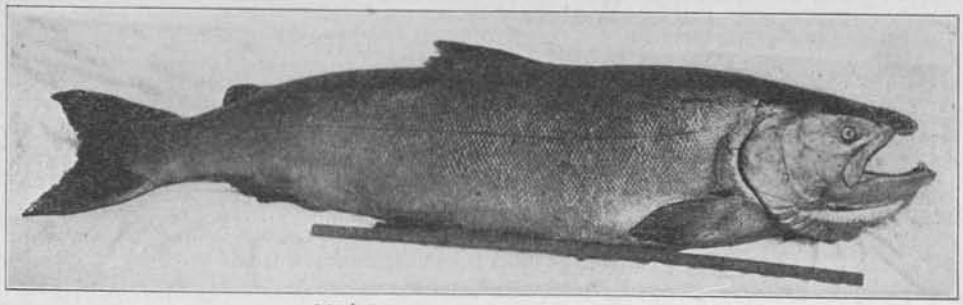

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READ UP on the lines, rods, lures and tackle that caught the big ones last year, and then go after a few YOURSELF this season. Next month the list of prizes and conditions will be published. Cut it out and paste in your tackle box, also cut out and save your affidavits so's to have some handy.

Did YOU get enthused over those stories last year? and did YOU resolve to get through catching those long strings of little ones and to get after the big fish with a big purpose this year?

If not, you have missed the message of the Contest.

Those stories are the accounts of how they caught 'em, by men who really CAN catch big fish. Not the big-one-that-got-away kind; not the dishpan-full-of-minnows kind; not the practical advice kind, by some literary fisherman who never caught a half-pound trout or a three-pound bass in his life, but these stories are the REAL GOODS—they tell methods out of the ordinary, tactics that you'd never learn about elsewhere.

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The Contest Records are THE records; the only authentic ones in all classes of big game fish published. Once entered on that honor roll, your fame as an angler is secure.

Let the Facts Speak!

In the 1915 "Field & Stream" contest there were 89 prizes awarded to contestants in classes where silk lines are usually used. 7 winners failed to give the name or make of the lines they used so they could be identified. 7 used lines other than silk (wire, cuttyhunk, linen, etc.). The remaining 75 winners gave the name or make of the lines they used (silk) and the official list is as follows:

"Kingfisher"—The Old Reliable—36

Von Lengerke & Antoine	4	"Robt. Ogilvy"	1
"Saline"	4	"Classic"	1
"Invincible"	4	"David Harum"	1
Abbey & Imbrie	2	"Otselic"	1
Abbey & Imbrie—"Lake Shore"	2	"Black Warrior"	1
Mills Standard	1	"Whirlpool"	1
"Intrinsic"	4	"Crimson Beauty"	1
Abercrombie & Fitch	2	"Neverbreak"	1
Gold Seal	2	"South Bend"	1
"Kelso"	1	"Black Italian"	2
Kalamazoo "Expert"	1	Hildebrandt	1

"Kingfisher" Lines Used by Winners, 36
All Other Makes Combined, - - - 39

Every Other Winner Used a "Kingfisher"

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Do You Intend Entering the 1916 Contest?
If so, write us for "Special Information."
It will interest you.

E. J. MARTIN'S SONS, Rockville, Conn.

Field & Stream PRIZE FISHING CONTEST

BIG TROUT AND LITTLE ROD
By Donald Parson
Winner Fourth Prize, Brook Trout, Class B, 1915 Contest

"Brownie" had said, in the midst of a golf game at Pinehurst, "Come to Upper Dam in September and I will guarantee you a big trout." So to Upper Dam we went, a whole automobile full of us. I had used the floating fly at Grand Lake Stream the month before, and was anxious to try the same tactics on the most famous of Rangeley pools.

But conditions during our stay were as bad as they could be. The water was high and the pools swollen beyond recognition. The temperature of the stream was up around seventy degrees, and the big fellows were either not in the pools or they refused to rise from the cooler depths into the fly zone. Some fish, indeed, I took, running up to two pounds, worthy foemen in other waters. But at Upper Dam a trout under three pounds is not a trout.

"Come back in two weeks," said Brownie. "The cold nights of late September will surely bring them up." And in late September—thanks be to the God of fish and men—back to Upper Dam I went. In Boston I picked up a few extra flies; one in particular looked tempting, Dashwood by name. These, let me state, were of the wet variety, for I had come to the conclusion that the dry fly was *persona non grata* at Upper Dam.

It was Sunday morning—without shame I repeat it was Sunday morning—just after breakfast. I stepped into the boat and, rowing to a position at the head of the Lower Pool, dropped my anchor, sans guide, sans companion to shout me advice (as they always do in fishing stories), and I might almost add sans hope. Of a truth, the day was none too auspicious, with a brilliant sun casting sharp shadows and hardly a whisper of wind to break the smooth surface. The water at that point, however, is very swift, breaking into swirls and eddies like a rapids, so that absence of wind is not a fatal handicap.

Just a word as to my equipment. I was using a Leonard rod, Catskill type, length 9 feet, weight 3½ ounces, a mere toy built for the lighter trout of the Sourdnahunk region. A big fish might work havoc with it and swim off with the parting admonition that "No children need apply." Yet I recalled that the previous year I had played an Atlantic salmon of 18 pounds on the same rod, and I was game to take a chance. Light tackle adds much to the sport of fishing. The above-mentioned Dashwood held the strategic position of tail fly.

I had cast quartering downstream and let my flies straighten out naturallly under the influence of the current. Like a vision of wrath, a dark form hurtled through the water. Instinctively, I struck and from the shriek of the reel I knew that I was fast in a good fish. Down-stream he rushed, stripping off the thirty yards of my line at a terrific rate. Quickly, with my free hand, I lifted the anchor from the bottom, and the current swept me after him in swift pursuit. I managed to retrieve a few valuable yards of line, and then he was off again. I followed his lead, glad to work out of the rapids into the dead water at the tail of the pool. Here I was able to hold the boat without anchor, under which I was afraid the fish might become snagged, and I was able, too, to recover more line and fight out the duel at close quarters, give and take.

And now General Fontinalis abandons the brilliant rushing tactics of Napoleon and adopts the strategy made famous by Fabius Cunctator. To the bottom he went and lay there for a half hour, for the most part motionless, but at

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other times "jigging" in that powerful way that denotes a big trout in the sulks. My rod was arching in a beautiful three-quarter circle, the butt pointing to the sky, the tip in the water. My wrists were numb and aching, but I lit a cigarette and tried to possess my soul in patience. It was rod against fish, and the battle would be to the strong.

Word had gone around the colony that a fight was in progress, and a crowd was gathering on the nearer shore. "Brownie" came out in a boat and at intervals he would shout bulletins from the front to the assembled throng. He also offered to net my fish, but that is a point on which the Waltons, of Upper Dam, have principles. The fish is making his fight single-handed; let the fishermen do the same.

My *quarry* was nearing the surface. From his weight I thought he must be a *stone quarry*. I tried to slip the net under him. Tragedy! My net was a huge two-handed affair. I missed the fish, and the mesh of the net became entangled in the dropper fly. This, I thought, spells ruin. A rush now would be fatal. I was tempted to stake all on a quick swoop of the net. Cooler judgment, however, prevailed and with nervous fingers I fumbled at what seemed a very Gordian knot. It was ages before the fly was free again. Then the trout, which a miracle had kept passive during the imbroglio, was off again in another wild dash. "One hour by the clock," cried Brownie to the crowd on shore, "and the fish still going strong."

That danger past, another now presented itself. From the depths a Leviathan appeared, the mate to my captive, several inches longer and much fatter. It was the female of the species, "much deadlier than the male." In a rage it swirled about my dropper fly, and for the next half hour I was in mortal terror that it would strike. Fourteen pounds of trout on a 3½ oz. rod I might take a chance on, but my light leader would strip like thread under their dissonant efforts.

To make a long story long, this danger passed, too, like the other. The red gods must have been fighting on my side that Sunday morning. After thirty minutes of menace, the mate left for parts unknown, while my antagonist slowly neared the range of my net, bowing his heart of oak to a fairy wand of split bamboo. I slipped the net under him, and a cheer went up from the crowd on shore as they discerned from a distance his huge bulk. The pounds had surrendered to the ounces.

We trooped back to the hotel where resides the official weigher, Charley, most incorruptible of judges. Five pounds fourteen ounces was the verdict, and a pity he was not caught in the spring of the year. His measurements indicate a brook trout of eight pounds, if properly filled out. So said the guides; so said Barber and Van Dusen. Which means it is true.

Prize Contest Certificate Record
Fourth Prize Brook Trout, Class B, 1915 Prize Fishing Contest
Weight—5 lbs. 14 oz.
Length—24¼ in.
Girth—15¼ in.
Caught—Sept. 26, 1915.
Where caught—Upper Dam, Me.
Rod—Leonard.
Reel—Mills Neversink.
Line—Mills Intrinsic.
Lure—Dashwood No. 8 fly.

THE BELL-WETHER OF THE SUSQUEHANNA

By Howard P. Miller
Winner Fourth Prize—Small-mouth Bass, Class C.

"Shade of Izaak Walton, you're the bell-wether of this neck of the woods," I remarked to Mr. Small Mouth, out of pure good fellowship, as the little sneck went home and the monarch of the "crooked waters" left his native element, leaping fully four feet into the air, shaking his splendid head to free it of the cruel barb. But believe me, fellow disciples of the gentle art, the slashing of his wide-spread jaws was no more rapid than the beating of the writer's heart from the fear of him shaking free. As Learoyd remarked to Private Ortheris, my heart was "playing tivvy-tivvy on ma ribs." To you who have been in a similar situation I need not elaborate further on the exact nature of that cardiac disturbance. I wonder how many of you of the tens of thousands of sportsmen who will read this have seen and know the upper waters of the north branch of the Susquehanna other than as Richard Harding Davis saw the West, "from a car window."

On reaching the river I was disappointed to find that the bass were rising, which in these waters is usually a poor time for bait fishing. However, I anchored my boat off a bar at the mouth of the Wyalusing creek and baited up with a stone cat (locally known as a bullhead), getting nicely horned in the process, thank you.

Fishing was not brisk enough to be exciting, but I succeeded in killing a couple of bass, one of which was a two-pounder. Meanwhile I had heard a splash now and then a couple of hundred yards above me as though some one had hit the water with an oar, but watch as I might he always made his rise when my back was turned and all I would see was the foam on the water where he disappeared.

I have set out many times before to catch a particular big bass on his feeding ground when he was rising, but always to get the merry ha! ha! from the fish, but I remarked to myself, "I'll have a try for you anyhow, old boy, for at the worst you won't be any further from my stringer than you are now." So I put on the largest bait that I had. Letting out about one hundred and fifty feet of line I circled about where he had been rising and drew the bait past his front door again and again. Perhaps half an hour of this, then, somewhat disgusted, I stopped to light my pipe when—bing!

Again and again he rose but I was on the watch to turn him over before he could tear free. He took line in savage rushes between jumps until I had but a few feet left. Some wise guy on the far bank whom I never did identify kept yelling, "Give him line! Give him line!" but I had not been selfish if I did part with it rather reluctantly, for I had given him all the line I had and the big cuss wouldn't reciprocate; he apparently had a hurry up call for an assignation in the Chesapeake Bay and I couldn't coax him to spare me a foot, although I would have cheerfully paid Mr. Bass about a dollar a yard for a rod or two of line just about then before he started another of those tiger-like rushes.

I was gaining a little with each rush and the spurts were getting shorter, and several times I had the beauty where a landing net would have finished it, but with still too much fight left in him for the work that I must do to win the day. Finally I had him on his side in reach of my arm, a moment to cool my hand in the water, then two fingers slipped into the flaring gills and he was mine. As he lay on the bottom of the boat, all in, but with fins still erect, I hailed him as a gamey brother. No yellow streak there. I hope that when your time and mine comes that we may die as game.

Prize Contest Certificate Record
Fourth Prize—Small-Mouth Bass, Class C, 1915 Prize Fishing Contest.
Weight—6 lbs.
Length—23 in.
Girth—15½ in.
Caught—Sept. 25, 1915.
Where caught—Susquehanna River, Wyalusing, Pa.
Rod—Bamboo.
Reel—Pfleuger Buckeye.
Line—Kalamazoo Expert Casting.
Bait—Stone catfish.

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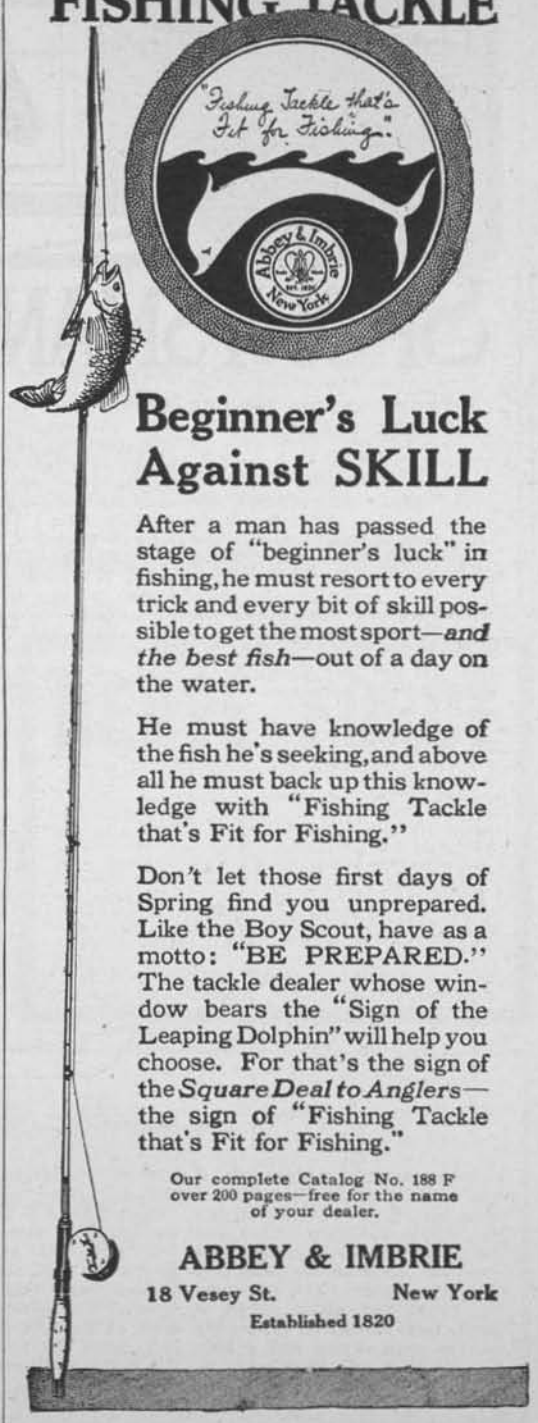

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PART II

MOCCASINS

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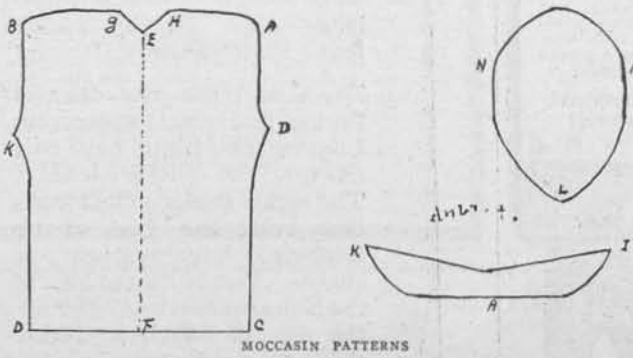
Fig. 6.



MOCCASIN PATTERNS

Moccasins are easily made if one works methodically. Because sizes here play an important part you should make the pattern first from heavy paper or cloth. Put your feet down on the paper and draw the outline. This gives you the length and width. Make it plenty large enough for the leather shrinks upon drying and a little extra room is needed to make up for this. Allow about an inch surplus all around the foot, then trim the edge to the pattern as shown for the sole, Fig. 6. The patterning of the toe should be carefully done and exactly alike on both sides. The vamp which rests on the top of the foot should be wide enough to draw the side neatly into shape and plenty long enough to serve as a tongue also. It is easier to make the vamp quite large and thus throw the seam lower on the toe and sides, then sew the vamp into place. Now cut the pattern from the leather which has been well soaked in water.

First fold A-B and C-D along the line E-F then sew A-H to B-G and E-H to E-G. This finishes the heel. From A to C is ½ inch longer than the foot, and when A-B are brought up to the sides of the foot the edge is ½ inch below the ankles. Sew up C-D folded at F: stitch in a puckering string from I and to K and draw up tight at I-K. The vamps should fit this opening, the tip L fitting in at F. Sew the vamp sides L-M to the sole piece F-I and L-N to F-K. The ankle piece is to fit K to K and I to I and A to F. This adjusts itself easily to the shape of the foot.

Put in holes for eyelets in the top or anklet, some thin strips of leather for laces and the moccasin is ready to dry and use. As we have no rights or lefts one may mark one right and one left, and while drying wear these one corresponding feet to accustom the wet leather to the new shape.

THE PACK SACK

No single item of the campers equipment will come into greater use than the knapsack. A light pack will hang well enough from the shoulders and can be comfortably carried provided the shoulder straps are broad and soft. Materials used may be leather, tan canvas or light khaki cloth, with the shoulder, head and flap straps of leather. The whole sack may be cut as one piece according to our diagram, Fig 7, or in smaller parts, to be sewed as directed. The front, back and front flap portions are 24 inches square or if cut all in one piece 24 by 72 inches.

In sewing begin at A and sew the line A-E to A-D. Do likewise at A-B and A-C—these lines coinciding. Sew on the buckles to the front about ¾ the way down X-X-X and stitch the perforated leather straps S-S-S to the front flap corresponding in distance from the edge. The shoulder straps are next put on and the head strap then attached to the back as illustrated. The pack sack is now ready for use.

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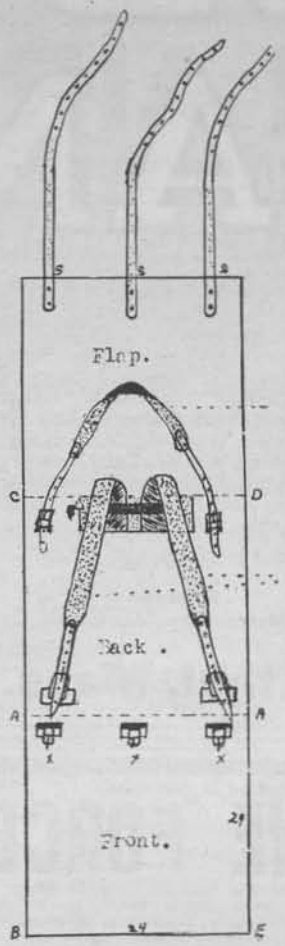


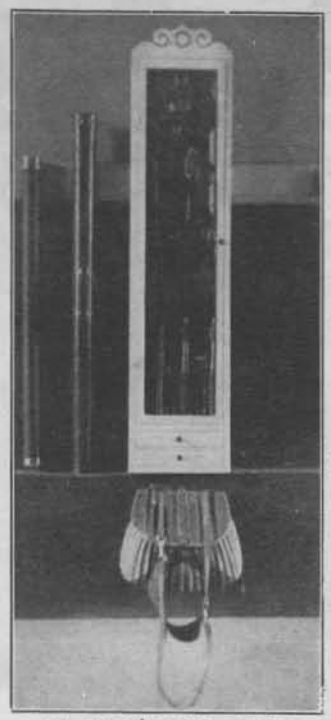
PACK SACK DIAGRAM

Indians of some localities utilize a larger type which has the two shoulder straps and head straps, and they are able to carry very large loads which is a real necessity in their woods life where their home—tent, bedding and food—must be wholly transported in on their backs. For use as an emergency bag, of course, a smaller sack with a single strap will suffice, and it is indispensable for housing the various articles of equipment which are considered necessary.

MY TACKLE CABINET

FIELD & STREAM PUB. CO.:

Thinking that readers of FIELD AND STREAM would be interested in a novelty, I am enclosing you a photograph of my fishing cabinet which I made from scraps of old walnut.



MR. MAPES' TACKLE CABINET

The cabinet is 50 in. by 12 in. by 3½ in. and finished white on outside and black inside. The upper compartment is fitted up to hold at least four rods, also reels and wooden minnows. It closes with a glass door equipped with brass hinges, knob, lock and key. There are two small drawers below, for tackle and small tools.

W. H. MAPES.

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Ask Field and Stream's INFORMATION BUREAU for the answer. Information on hunting, fishing, guns, tackle, camping and trail equipment, dogs and all other matters pertaining to the great outdoors. Write our SPORTING AND VACATION PLACES BUREAU about the country you have planned to visit on your next trip.

PHOTOGRAPHIC CONTEST

FIELD AND STREAM offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the orders submitted. The prizes for next month will be: First Prize—Three years' subscription to FIELD AND STREAM. Second Prize—Two years' subscription to FIELD AND STREAM. Third Prize—One year's subscription to FIELD AND STREAM. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used light conditions time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, FIELD AND STREAM, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO

Made by Dr. Geo. R. Stalter. Eastman 1A Kodak Junior, Achromatic lens, portrait attachment, 1/25th sec. Subject—Woodcock.

SECOND PRIZE PHOTO

Made by W. McFadden. Eastman Vestpocket Kodak, 1/25th second. Subject—Skunk.

THIRD PRIZE PHOTO

Made by George Battler, Jr. No. 1 F. R. Kodak, portrait attachment, cloudy day, 1/25th sec. Subject—Nesting Quail.

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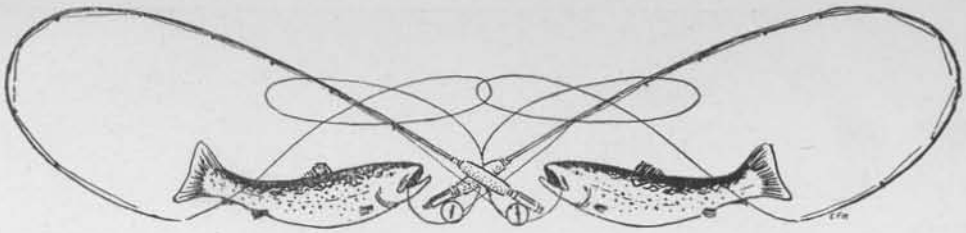

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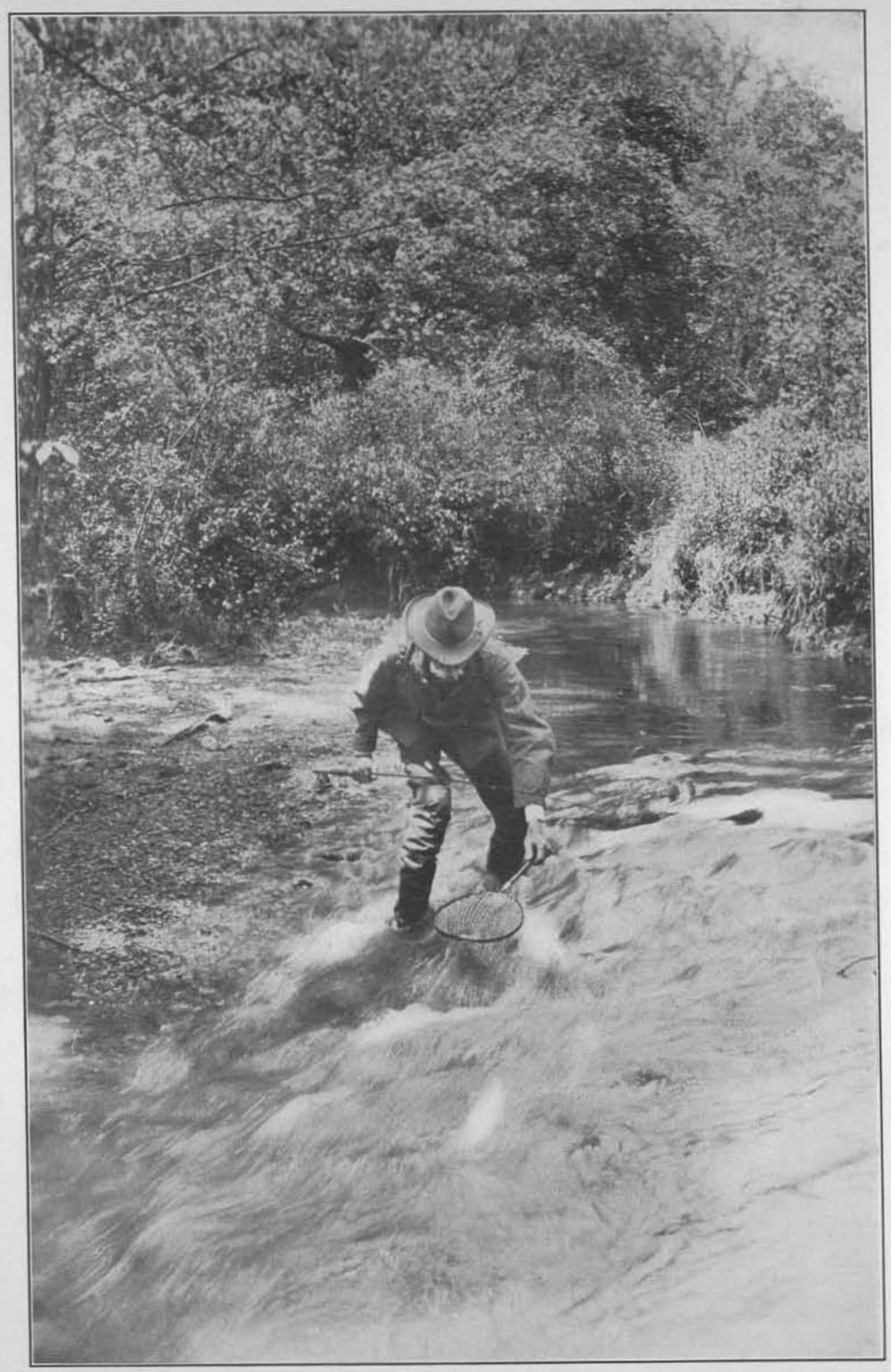

HIS MOST DANGEROUS MOMENT

MAR 20 1916

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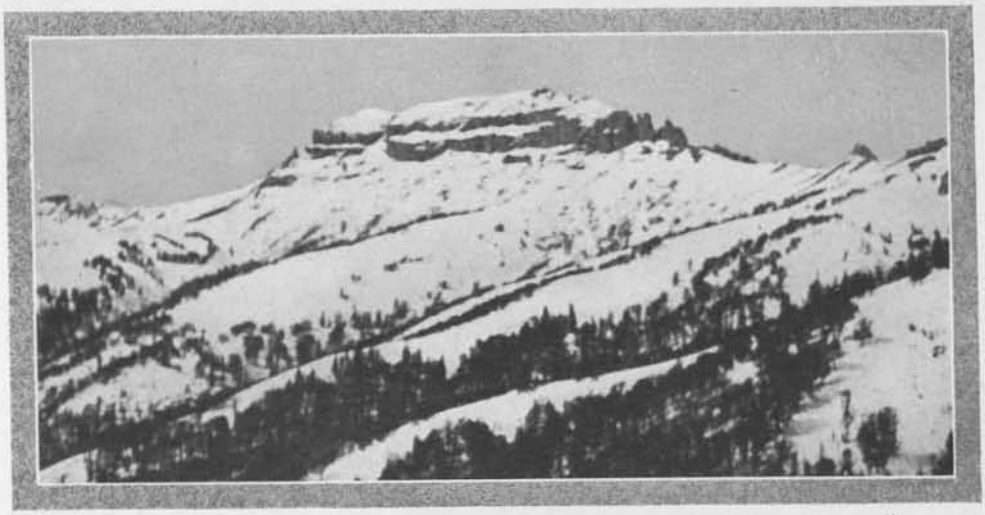
OFFICIAL ORGAN OF THE CAMP-FIRE CLUB OF AMERICA

TWENTIETH YEAR APRIL, 1916 NUMBER TWELVE



"A HIGH, ROCKY BUTTE JUTTED INTO THE SKY A HALF MILE BEFORE US"

THE BIG-HORN OF DEER CREEK MOUNTAIN

By OTTOMAR H. VAN NORDEN

JOE and I agreed that to hunt sheep properly one should camp in their country, and so on a rare morning in early October we left our pleasant bivouac on the head waters of the Thoroughfare River, not many miles from the southern boundary of Yellowstone Park, and with three pack-horses, carrying light loads, and our saddle-horses, we worked up to the head waters of Butte Creek and crossed the Deer Creek Pass—a pass that raises its rather inhospitable back 40 feet higher than two miles above good old Sandy Hook—and then dropped down the eastern side of the pass to the head waters of Deer Creek. So far we had been following our back trail, made several days previously, when we brought our outfit in, and so the way was broken and comparatively easy; but now we turned directly

off the trail and to the south, and, crossing the head waters of Deer Creek, undertook a 2,000-foot climb up the steep north face of the mountain on which we planned to camp and to do our hunting. As the experienced mountain man will know, north mountain slopes at high altitudes in October mean deep snow, and we were hardly off the trail before our horses were plunging in snow which Joe aptly described as "hip deep to a tall Indian."

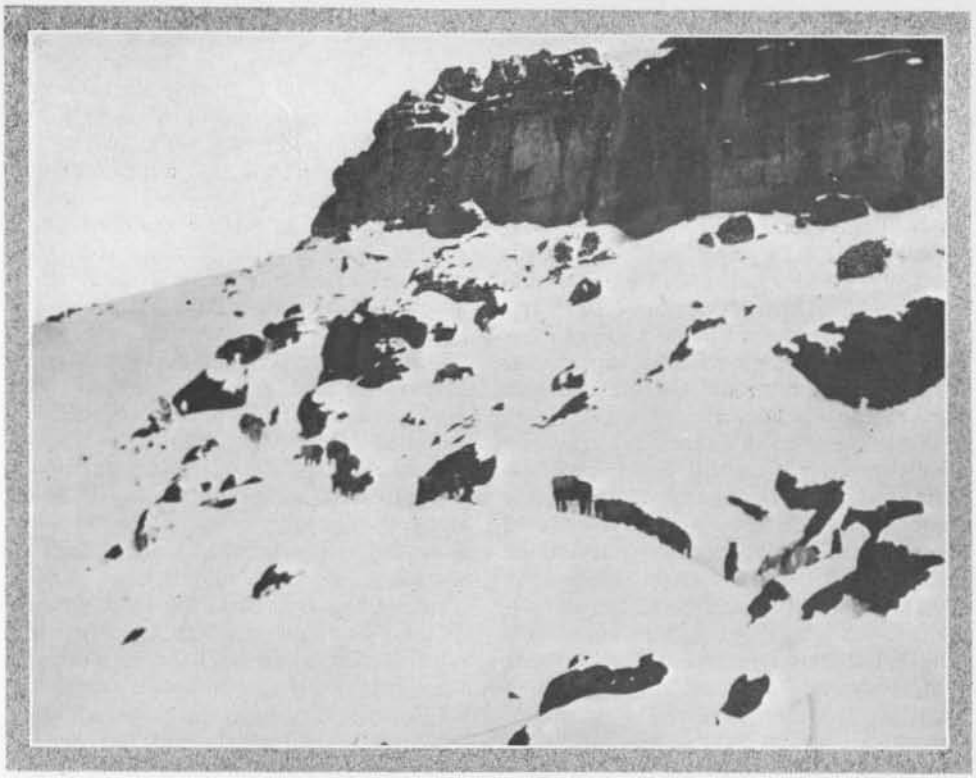
Two hours later, at just three o'clock, we stood upon the top of the ridge at 11,000 feet. We were all, man and beast, in a lather of perspiration, and the heaving sides and trembling legs of our horses told us that we had gone far enough for that day, and it was about time to camp. We knew that somewhere along the south slope, at about timber line, we should find grass for our horses, and water, which was quite as important for us all. So we

OUR MAIN CAMP IN THE SHOSHONES

Joe, riding his roan, led the way and broke the trail; the pack animals followed, and I, astride of Old Fox, brought up the rear guard. Back and forth we zigzagged, going through a thick stand of small white fir, and then coming out on the smooth glacis. The horses plunged and wallowed, and soon we were walking and leading our horses, Joe breaking the trail and encouraging the train with a splendid vocabulary, while I gave my whole attention to the business of keeping my feet.

mounted again and moved down the ridge toward the east, working around the Rim Rock, and in some places making very difficult detours. At one point we passed a little serrated peak where, not over 30 feet above us and certainly not 20 yards away, sat a large golden eagle. Whether gorged with food, or perhaps feeling himself safe in his aerie, he never moved, but watched us stupidly, and we passed on and left him as we first saw him, the picture of humped-up dejection.

The sun was getting low in the west, when we were delighted to locate, some distance below us, a large grassy slope, clear of snow. Here was food for our horses. We had some trouble reaching it, as it was necessary to work the train down a steep rock-slide and across a ravine head where the snow had drifted abominably. But, once through, we passed down across our little grassy pasture, looking now for wood and water, further and fare worse. A short conference and our horses were unpacked, and while Joe drove them up to their night's lodging in the little mesa, a hundred yards above us, I brought the shovel into play and cleared a space for our tent and for our fire. And soon the fire was going, supper was ready, and our camp was made—a camp high up, under the stubby old pine and balsam, in snow at least two feet deep, and at an altitude which



OUR PACK TRAIN GOING OVER THE DIVIDE UNDER A HUGE WALL OF RIM ROCK

and found below it another ravine which had a scattering growth of gnarled and stunted old balsam and pine trees along its sides. The train was stopped, we climbed to the bottom of the ravine and with shovel and ax cleared away the snow and cut a hole in the ice, and beneath it found a small stream of running water. It was not an ideal camp site, for the snow was deep and the ground sloped sharply, but we had wood, water and horse feed. Certainly we might go much my aneroid showed was 10,250 feet.

I shall never forget the wonderful sunset of that evening. Across the western sky, banked like snowdrifts, was a great mass of clouds, ranging in hue from a dull red at the ends to molten gold at the center. Framed at the bottom by the snow-covered mountain peaks, and above by the dark-blue sky, it made such a picture as has never before been my privilege to witness. And, as I watched the golden tints change to scarlet and the scarlet to

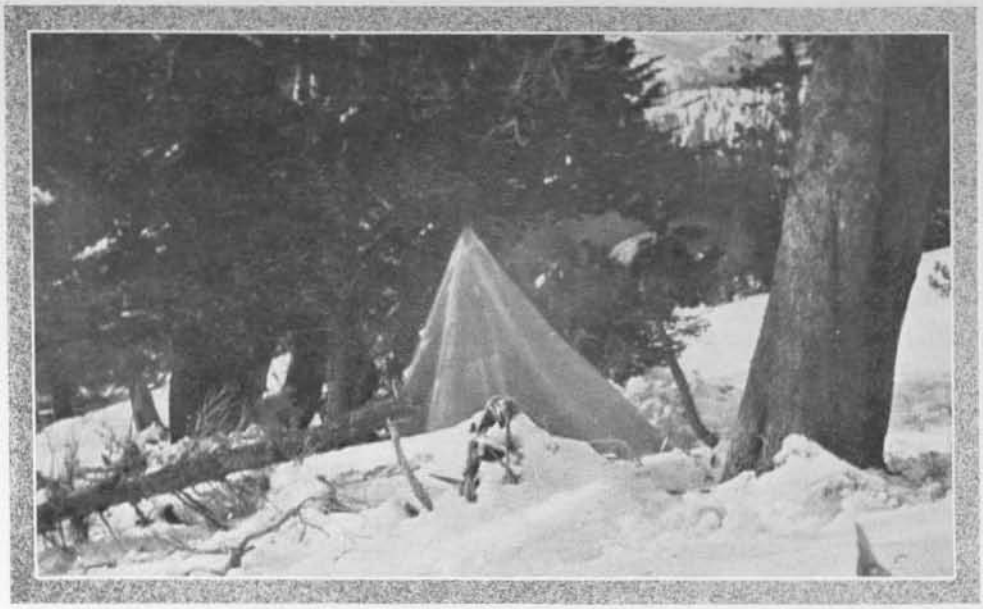
a cherry red, and then to a dull gray, the sunlight passed out of the sky, for all the world like the slow fading of a glowing steel ingot under the hammer. I stood there for a long time, watching, while Joe busied himself with the fire, and when the light had gone I simply said: "That was a gorgeous sunset."

Joe stopped for a moment. "Yes; it means wind to-morrow," he prophesied.

During the night the wind came, and by morning our little lean-to was pounding and slapping vigorously. With the dawn we had our fire going, and we needed it, for it was cold, and the water in our bucket made ice if left alone for but a few moments. In spite of our Alpine surroundings, we had one ever-faithful friend with us—the Canadian jay, better known as "Camp Robber." Here he was, just as inquisitive and bold as ever, hopping about, looking for his breakfast—and he certainly got it and made a feast that morning! Although during our trip through Wyoming we made fifteen camps, some of them at high altitudes, there never was a day that we did not have one or more Camp Robbers around our fire.

We made a good, substantial breakfast of elk meat, coffee and frying-pan biscuits, and, gathering some chocolate, my aneroid, glasses and compass, I shouldered my rifle and we headed straight up the mountain-side from our camp, through the stunted timber, in a deep, crusted snow—a crust not strong enough to bear one's weight, but yet requiring an effort to break it at every step. A hundred yards above camp we came on our horses making a disconsolate group in the partial shelter of a bunch of scrubby pine. For some reason they did not seem to care for the grass and apparently had done but little feeding during the night. Leaving them, we passed out of the scattered timber and on to a smooth, snow-covered slope that reached to the summit, and here the wind reached the violence of a hurricane, carrying such clouds of powdered snow with it that it was difficult to face it. A few days previously, from the valley of the Shoshone, far below, I had admired the snow banners that had stretched, pennant-like, from each snow-clad peak; but now I saw these same snow banners in the making. I saw the great snow-clouds sweep to the crest of the mountain, whirl high into the air, and then stream off far to leeward, and whatever curiosity I had as to the mechanics of the process was fully satisfied. In a perfect whirlwind of frenzied air currents—a blizzard, although the sun was shining brightly—we hurried as fast as we could along the serrated crest of the ridge, keeping well back from the wide snow cornice, and finally, finding a little notch, climbed over and dropped down across a steep slope of snow and broken stone to a little rock outcropping, where we rested in the warm sun and out of the wind. Here the glasses came into play, and, as sheep hunters do, we searched, foot by foot, the slopes and ridges below us and on either side, but saw nothing.

And so it was all the morning as we worked across ridges and snow-filled gulches, around rim rock and under beautiful little waterfalls, until the sun told us it was noontime, and we lunched. So far, except for two eagles and some ravens, we had seen no life. We had seen no signs of sheep, although we had searched constantly with our glasses. Lunch over, it was time to start back toward camp, so we decided to walk directly up the apex of the ridge we were on—a ridge which led at a steep angle to a wing ridge connecting with the main arête we had crossed in the morning, and on the other side of which our camp lay. We had climbed for an hour, in places on our hands and knees, and all in the peaceful quiet of the golden afternoon sunshine—although the whirling snow banner above us warned us of what we might expect at the top—when, on coming under the crest, we found rim rock. Joe went ahead to locate a notch through which we might climb over, but after some time worked back to where I was, to say that the connecting ridge at this point was so steep on both sides that we could not pass along it. Here was a problem. It was too late to go back and retrace our route of the morning and reach camp that night. So we decided to make a horizontal traverse along and under the crest of the ridge, above and parallel to it, until we reached the point where we had crossed



THE SHEEP CAMP, AT AN ALTITUDE OF 10,250 FEET

in the morning, or a nearer practical place. This operation meant crossing a succession of small ridges and the ravines between them, the latter deep with snow and pitching off at a steep angle. Joe gave a quick glance up and down, and then led the way across the first ravine, feeling for each foothold, moving very slowly and cautiously, and safely reached the rock outcroppings of the little ridge on the other side. I gave one glance below and saw a steep, wide slope dropping away for at least a thousand feet, a slope interrupted with numbers of little black cliffs each ten or twenty feet high—a bad place to cross at any time, but particularly bad on snow softened by a day of warm sunshine. But it was a case of Hobson's choice, and so, stepping in Joe's tracks, with every sense alert, and without once looking below me, we crossed without incident, and soon we stood together on the far side. And so we climbed around four more little ridges and crossed four more snow-filled ravines, the last being the worst and requiring the negotiating of some bad rim rock and rock outcroppings. It was four o'clock when we came out on the main arête, at 11,300 feet, to face the ice- and snow-laden gale that seemed, if possible, to have gained in velocity during the day. With each gust we dropped on our hands and knees and clung to what we could find, to prevent our being blown over the crest. The gust over, we hurried along as fast as we could, often walking backwards to catch our breath. In this manner it took us nearly an hour to make a half mile, and the sun was setting when, thoroughly exhausted, we reached the partial shelter of the timber, and were glad of the deep, crusted snow again, as the lesser of two evils. We reached camp to find our horses standing in misery around our little tent, and regretfully we drove them back to their pasture. Soon our fire was going, supper was ready, and we feasted on our menu of the morning and voted it fit for a king.

That evening, camped as we were at timber line, in deep snow, was one to be remembered. The wind gusts, carrying clouds of ice-dust, swept over the snow banked high around us and pounced upon our little bivouac, thrashing our tent to and fro and raising our fire of dry balsam stubs to a frenzy of smoke and flame, while clouds of sparks like miniature shrapnel shot out and exploded with a continuous crackle. Overhead the stars in

THE AUTHOR

a cloudless sky seemed like some stage illusion, so clear and large they were. We were very tired and only waiting for a good excuse to turn in. As we smoked, Joe told stories—perhaps of an experience in the Philippines as an American soldier during the Spanish War, or as a cowpuncher, or a tunnel builder, or a guide—he has been all of these, and more. And the best part of Joe's reminiscences are that he makes himself most often the "goat" and seldom the hero. As each story was finished we smoked in silence and listened for the coming of the great wind gusts. A moment of almost calm, and then far below us, down the steep ravine, a murmur that grew louder and louder, reminding one of the oncoming rush of a great express—a crash, and an icy cloud of fine snow, and then a booming like a distant waterfall on the rock crests a thousand feet above. We had been silent for a long time when Joe said: "This wind may bring snow, and if it snows hard we may never get our outfit out of here. Our horses are starving, and I think we had better move to-morrow." My hopes for sheep were dwindling, but I tried to be cheerful. "Never mind, Joe," I said; "we will get our sheep to-morrow morning." But I really didn't believe it.

During the night our horses came into camp three times. Joe drove them back twice, and when morning dawned there they were again, looking at us reproachfully, and apparently very hungry and homesick. The wind had gone down and the air was very cold and clear and still. Our friend, the Camp Robber, was on hand for breakfast, and we gave him his share. The horse proposition had now become serious, and we agreed that we would break camp in time to get back to good grass in the valley by night. Having come to this understanding, and our consciences clarified thereby, we gathered up our impedimenta and started to make a short half-day trip along the south side of the ridge on which we were camped. Crossing out through the snow as we had the day previously, we skirted along through the timber and then crossed a number of grassy mesas that had been swept clear of snow by the wind. We were crossing the furthest mesa, just above a little bunch of timber, when we suddenly came on the fresh beds of four rams, used only the night before. Instantly, the wisdom of our camping in sheep country was apparent, for had we been camped in the valley there would have been several hours' hard climbing to have reached this point, and we might not have been able to have taken advantage of it. We were pretty well tired out by our experiences of the two previous days, and our enthusiasm, perhaps, was a little dampened by the knowledge that this was to be our last day in that country. But now, with the evidences of our quarry before us, we forgot our disappointment and our

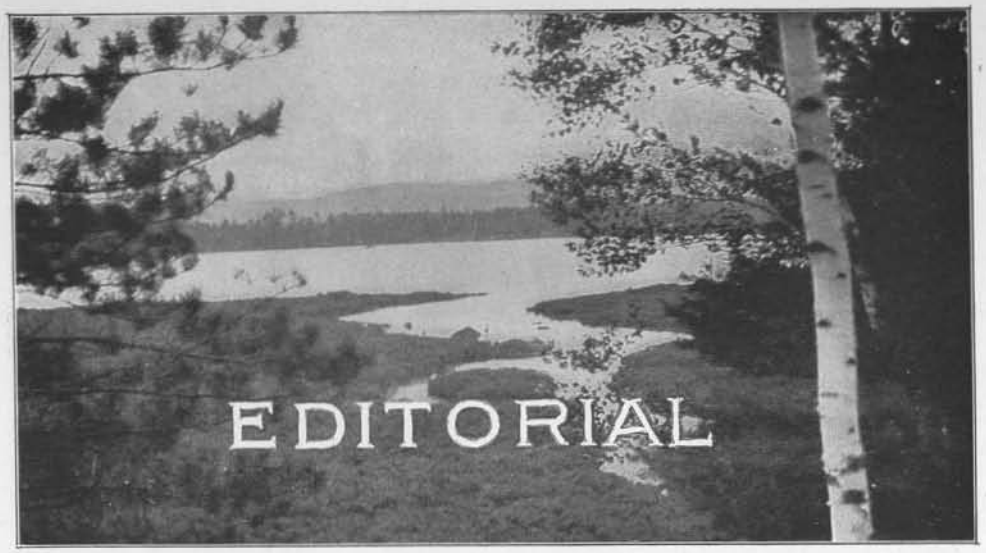
fatigue, and, quickly bringing our glasses into play, scanned every foot of a high, rocky butte that jutted into the sky a half mile before us and of the steep, broken rocky slope that swept away from it to the valley below. Certainly there were no sheep in sight, and whatever wind there was seemed to be in our favor. So we started forward as rapidly as possible and were soon climbing over a talus of huge broken stones that made going very difficult. A light snow had drifted into the spaces between the boulders, but after I had taken several bad falls—in one case going to my shoulders between two great stones—I no longer trusted to the apparent security of the snow surface, but stepped only on the rock where I could see it. And so we passed on along over the talus and under the face of the great butte, perhaps 150 yards below the bottom of the cliff. We were still on the fresh trail of the sheep and expected to see them any moment, when suddenly Joe stopped and looked up, and I, too, instantly saw a horn showing over the edge of the rock slide and clear against the sky before us. In a moment my gun came off my back, and as it did so three great rams sprang into view and ran, single file, directly across and above us, and at least a hundred yards away.

JOE JONES, MY GUIDE, AND THE BIG-HORN

"The leader," was all Joe said, but as he spoke I had the leader covered, and just as they passed out of sight I fired. It was all over in less time than it takes to tell it, and then for a moment I had the sickening fear of one having come two thousand miles and worked hard for such an opportunity, only to fail at the test. But on second thought I felt sure it was a hit, because I was holding right and had perfect confidence in my rifle. Joe was the first to reach the trail of the big-horns and life seemed again worth living when he shouted back that he had found blood, and that the leader was badly wounded. It was a long, hard run we made down the mountain-side through the deep snow. The old ram led the other two for perhaps a quarter mile, and then turned off, and he went down alone, a sure sign that his wound was mortal. And yet he showed remarkable vitality, for we had gone a mile and climbed down 1,500 feet before we saw him, and a second bullet finished the work that the first bullet should have done under the butte high above.

Of course we were elated and very happy. Otherwise we would never have been able to make that climb up through the deep-crusted snow with the scalp and horns and 50 pounds of meat fairly divided on our backs.

That night, as dusk was falling, pitched our little tent on Butte Creek. The next day would see us back again in our main bivouac, successful and eminently satisfied with ourselves. We had secured that greatest of all American big-game trophies, that diploma of the American sportsman—a Rocky Mountain big-horn.



Game Refuges in the National Forests

THE attention of our readers is called to the bill now in the United States Senate to establish game sanctuaries in the National Forests. It is published in full in our Conservation Department of this issue. This is a measure in which all big game hunters should be vitally interested. The supply of some species of big game in the Rockies has already so greatly diminished that all who can afford it go over into Canada or keep on to Alaska where they can be sure of a good bag. While this is not true of elk, it is becoming increasingly true of sheep, goats and grizzlies, and the need of permanent sanctuaries is yearly becoming more manifest. This bill contemplates the legal establishment of such sanctuaries, and the overflow from them will give us a perpetual supply of big game, no matter what happens to the remainder. The bill seems worthy of earnest support; practically the only objection to it that we can see is that such sanctuaries might be selected right in the paths of mountain trails over the passes of the Continental Divide, necessitating permits for carrying rifles across such sanctuaries when on the way to good hunting grounds. This permit business is a nuisance, and will arouse hostility, if pressed, in sections where the mountaineers must use the only available trails for transportation no matter what game sanctuaries they may cross. Dr. Hornaday, who is a strong supporter of the bill assures me that the rules and regulations to be drawn up regarding the establishment and management of such sanctuaries will provide for such permits.

Sec. 2 of the bill is so broadly drawn that the carriage of firearms on the trails crossing such sanctuaries might be very easily construed as "attempting to hunt" in the language of the bill, and no one wants to travel in such country with all weapons sealed up as is done by the rangers for parties carrying rifles and revolvers on the person within the limits of our National Parks. This would be a very irksome provision, and would at once arouse hostility to the bill, even if it should pass. All of us have suffered more or less from well-meant but ill-worded game legislation, and, as it looks to us, the bill should have specific wording *prohibiting* the location of these sanctuaries anywhere across any trail that now constitutes a hunter's highway over the passes of the Divide or through the National Forests into what big-game hunting country is left in the Rockies.

Otherwise we may find some of the best and most important passes closed to us entirely, by committeemen in Washington who never saw the country they legislate about, or, what is quite as bad,

be saddled with the necessity to hunt up the ranger and get a permit to carry sealed weapons over the trails. I, for one, would not care to hunt at all under such restrictions.

Again; a word of caution seems necessary regarding the size of the fine that can be imposed. The law as it now stands puts no limit short of $500 or six months' imprisonment for the offender, in the judgment of the Federal Court. Is it such a crime to carry a rifle across a game sanctuary that one is to be fined more than is a real criminal for felonies and wickednesses committed against human kind? There is too much of this sort of thing in game legislation already throughout the country. An honest and law-abiding citizen is fined $40 in the name of game protection because his dogs happen to be just outside his private property and technically breaking some game law, while the real criminal, the dishonest, badhearted ruffian who beats up a citizen or gets drunk and insults ladies on the street is given but $10 or ten days. Five dollars seems to be enough to mulct the automobilist who runs down a harmless pedestrian, but $25 for each bird is none too much to fine the sportsman who dares to bring home to his family in New York a few quail that he shot in North Carolina.

Let us restrain our zeal for these altogether disproportionate fines, gentlemen, lest the great and level-headed public (who recognize a spade as a spade) refuse to "write their congressman or senator" in behalf of a bill which may be only an instrument of cruelty to humans, even though it may serve in a way to protect the animals. Rationality is what is needed nowadays, and, with the interests of human-kind looked to as well as that of the precious goats and sheep, we should be inclined to support the bill and urge our readers to do so.

Help Wanted with the Jersey Coast Net Bill

The bill by Assemblyman Whitman prohibiting fish pound nets from being maintained along the coast of New Jersey and in the Sandy Hook, Raritan and Delaware Bays during the fish spawning season, which is May and June, had a hearing in Trenton on February 29th, and was attacked, as was expected, by the coast fishermen. The biological facts back of the bill are that from early in May until late in June the run of weakfish, kingfish and flounders occurs along the coast, when these fish, full of spawn, come up the coast seeking inlets and estuaries up which they may go to spawn. Pound nets set at this time are particularly destructive to the species, for each female caught in the nets represents from ten to twenty thousand eggs, or at least a thousand young fry to replace the ravages made by marine life on the species. A set of nets will take at least 5,000 fish a week, and prevent the presence in our bays and estuaries of at least 20 million young fry for the four weeks that the spawning run is on. As there are some twenty-five sets of pound nets strung along the coast from Sandy Hook to Cape May, the practice of setting the nets in those months robs the species of at least 500,000,000 young fish from the year's increase. Before the nets were set there was abundant surf fishing on the coast, for a reasonable number of last-year fish reappeared in the succeeding year. Now this spawning is so hampered by the nets and such a big toll taken that the decrease in surf fishing has been very noticeable during the last few years. Where six years ago big schools of weakfish came inshore, lately these have been much scarcer and much reduced in size, and last year was an especially poor year for smaller game fish.

The Asbury Park Fishing Club, the Belmar Club, and all the organizations representing the Hook and Line Fishermen's Protective Association are active in the support of the bill, and were ably represented at Trenton by Henry C. Wootton. The bill has had its hearing, and it is now up to the individual reader of this paper who is interested in surf fishing to see that his assemblyman or State senator hears from him, demanding his favorable vote when the bill is reported out of committee.

THE SMALL-STREAM BROWNIE IS PRIMARILY A HAUNTER OF ROCKY RECESSES

THE BROWN TROUT AND HIS WAYS

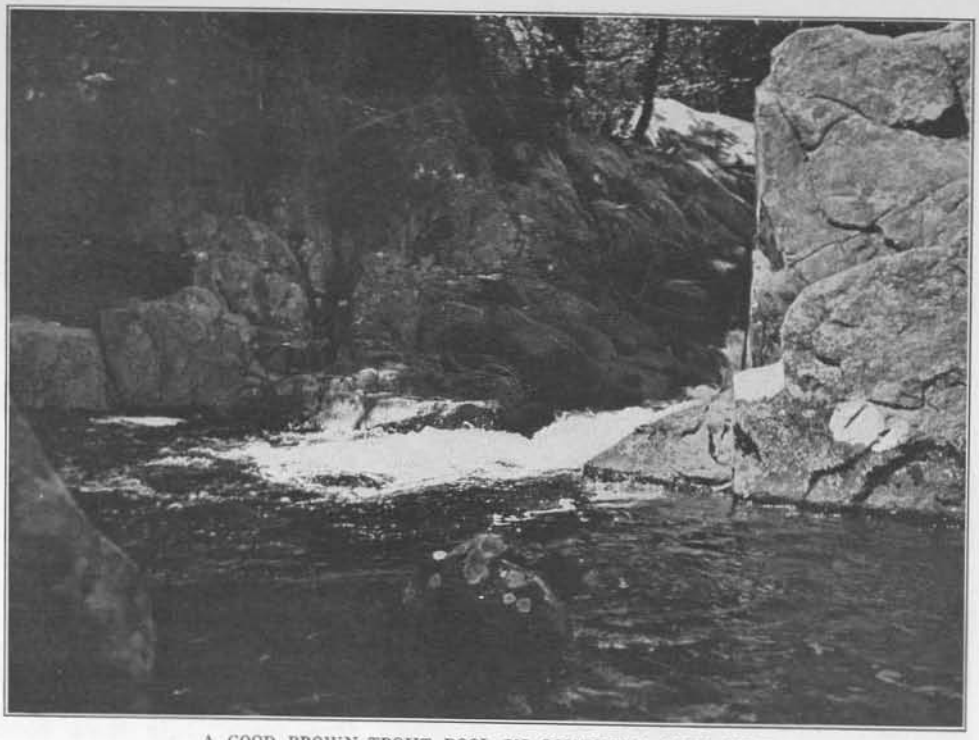
By ROBERT S. LEMMON

PHOTOGRAPHS BY THE AUTHOR

IF the real figures could be obtained, I fancy that a large percentage of the trout fishing in these more or less United States would prove to be of a humble and not at all spectacular brand. That is to say, it would be the fishing of the small streams.

The famous waters of the Catskills, the lakes and rivers of the Adirondacks, Maine, Canada and the Northwest, of course, attract their thousands of enthusiasts every season. But what of Trout Run, and Rattlesnake Brook, and Mine Creek, and unnumbered other obscure little rivers which take their modest way through laurel thickets and hardwood tangles, stumbling persistently onward over the rocks on their journeys to the mirrored stillness of Atwood's millpond, or the broader opportunity of the river farther on? We knew these brooks in the years that are past, many of us, and we like to go back to them once in a while because of what they have been to us in other days.

And what do we find when we have followed the old logging road to the bridge in the woods? Well, the water is still there, as clear and cold as ever. The larger pools have not changed much, and the same black shadow lurks under the rock ledge at the falls. Even the skeleton of the fallen hemlock still spans its two boulders in the gorge. But the fishing has changed. The speckled brook trout have gone; only rarely does a small one slash



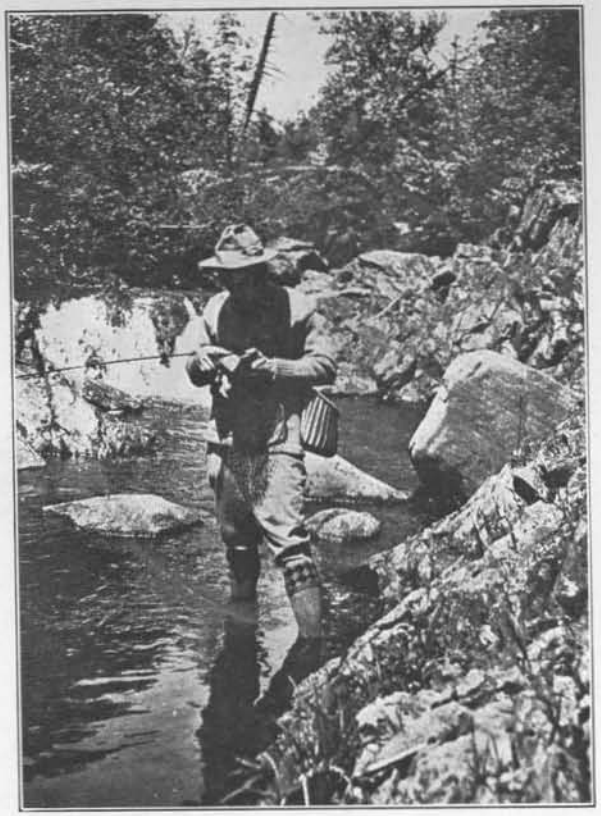
A GOOD BROWN-TROUT POOL IN SOUTHERN NEW YORK

at the dropper with the old-time vim. In their places are foreigners, less delicately marked, coarser in form and scale, more hardy and headstrong and big. We miss in them the indefinable charm of the native fish, but they will rise to a fly, they put up a good fight, and—anyhow, they're there.

To be sure, there are yet many streams, even in the Eastern States, where these imported brown trout have not been introduced and where *fontinalis* still rules the fountain. But yearly these favored waters are joining a fast-diminishing minority, for the Powers that Be in the State Fish and Game Commissions have discovered that the brownies are the better fish for restocking—better, that is, for holding their own in streams that are hard fished and whose waters, through the draining and clearing of land, have in many cases been brought to a higher temperature and a lower purity than were theirs in years gone by. And wherever the brown trout gains a finhold, there will he crowd out the less robust *fontinalis*.

I hold no particular brief for the small stream as opposed to the large one, nor do I favor as a steady diet those miniature brooks where one hooks his fish from the roots of a bush and lands him in its branches. But there is many and many a rocky, medium-sized brown-trout water where the brush is accommodating enough to permit a comfortable back cast and where the man who knows the game can show a distinctly creditable basket, even in these motor-car days. Even though nearby, such streams are well worth the fishing, for often they hold big fish and plenty of them. They are worth while, too, because they offer a special field for the study of trout habits, and tax the adaptability of the man behind the rod.

Successful brown-trout fishing in the small streams is rather highly specialized. The fish here is primarily a lover of the rocks. The more broken the water the better he likes it, so long as there are deep crannies and pockets among the boulders where he can lie in unsuspected watchful waiting for such edibles as



BROWN TROUT HAVE A FONDNESS FOR BIG ROCKS IN A STRONG CURRENT

chance and the current may bring. The deep, mirror-like pools that sometimes occur even on smallish brooks may hold a brownie or two, but there will be a better chance of raising one in the narrow hole that lies midway of the riffle at the head of the still water. Let me illustrate this rock-pocket habit with a few concrete cases.

On a stream in southern New York there is a twenty-yard, shallow, unpromising riffle. In its center are two large boulders, their tops but slightly exposed at a normal stage of water. Nowhere, apparently, is the riffle more than eight inches deep, and the casual fisherman would pass it by as distinctly troutless.

Close examination around those two boulders, however, discloses an interesting situation. Between their upstream corners is a small triangle of darker water. If the fisherman investigates this when the light is just right he will find that, instead of being merely underlaid by an unusually dark rock, as he had at first thought, it is the entrance of a submarine cave three feet deep and nearly as wide. Let him drop an accurate fly on this triangle a couple of hours later and he will be surprised at the bigness of the brown trout that nails it.

The same stream has a pool sixty feet long, ideal for brook trout in the days when those fish predominated. The water is almost still and five feet deep under the bushes along one side. I have fished this hole three or four times every season for the past ten years, with the net result of one nine-inch brown trout last May. But in the rift two yards above the head of the pool there is almost always a good one to be taken from a deep pocket only three feet across.

On a northern New Jersey brook that I often fish there are two stretches of swift, stony water separated by an eighth of a mile of swamp. Fishing up the lower reach in May or June, one will raise perhaps half a dozen brown trout up to a pound in weight. Then comes the swamp, abounding in deep, quiet pools as troutless as Death Valley, if I may judge from several seasons' careful fishing and observation. The last pool of all, where the stream rattles down out of a ravine, would be ideal for *fontinalis,* but I have learned to pass it by and look for a twelve-inch brownie in a swift chute between the boulders just above.

On small brown-trout waters, then, much of the old native fish lore of places may be passed up as of little practical value. It would be impossible to catalogue every spot where the imported fish may be sought with likelihood of success, but with general principles and certain definite types in mind the chances for enough fish to make the pan smell will be considerably improved.

First as to pools. Look for those in which are large boulders, preferably in a strong current. Whether half out of water or entirely submerged, these rocks are apt to have large hollows about their bases such as the brown trout like. As a rule the fish will be found on the upstream side of a rock, though it is probable that the under-water formation, which cannot be distinctly seen, has more influence on the spot where a rise occurs than do any surface indications. My own theory is that the brown trout, preferring to be the first at the dining-table when the meal comes in, finds a comfortable waiting place at the upper side of a boulder precisely where the current, striking against the obstruction, backs up and forms a little space of practically dead water. Those who have done much white-water work in a canoe understand how these areas of comparative quiet exist even in a heavy current.

BROKEN WATER WITH PLENTY OF BOULDERS MAKES FOR BROWN-TROUT FISHING

If the pool itself yields nothing, it is more than likely that there is a fish at its very head, especially if the water there is shallower and more or less obstructed with rocks. In my own brown-trout fishing I am more sanguine of a rise in such a place than in the deep spots. Six or eight inches of broken water in the main current seems to have a peculiar attraction for half- and three-quarter-pounders.

Between the pools of a rocky stream there are often comparatively shallow riffles. These are well worth careful attention, for some of them contain pockets such as were described in an earlier paragraph. Fish every foot of them, especially if they are well broken up and the water is swift enough to prevent your seeing accurately the formation of the entire bottom. Smashing, tumbling rapids in a small stream are not apt to be as productive of fish, but they should be tried out, particularly where the surface indicates pockets of comparatively deep water.

Best of all are those boulder-strewn stretches, part pool, part riffle, part just plain zigzagging from nook to corner and *vice versa,* which abound on the granite hill-streams of the Appalachian system and its allied ranges. Here, indeed, the brown trout finds his most congenial surroundings.

In such waters there are crevices and hidden holes innumerable where the man who knows the brown-trout game can pick up many a fish whose presence would be entirely unsuspected by one familiar only with speckled-trout fishing. *Spend plenty of time here, and overlook no possibility.* In such stretches one can take good brown trout, not once but many times, from dark crannies whose exposed surfaces are but a foot across. The water has a way of sliding partly over and partly under a jumble of huge boulders, filling shadowy holes beneath them such as the brown

OPEN, SUNNY BROWN-TROUT WATER

trout prefer above all others. Do not think there are no trout there just because none is seen rushing for cover as you work along from rock to rock; in such places it is rare to see any fish except those which take your fly or, more seldom, rise at a natural insect. But take it from me, they're there!

So much for the sort of water the small-stream brownies frequent. Now for a few hints on how the fish themselves may be coaxed in out of the wet.

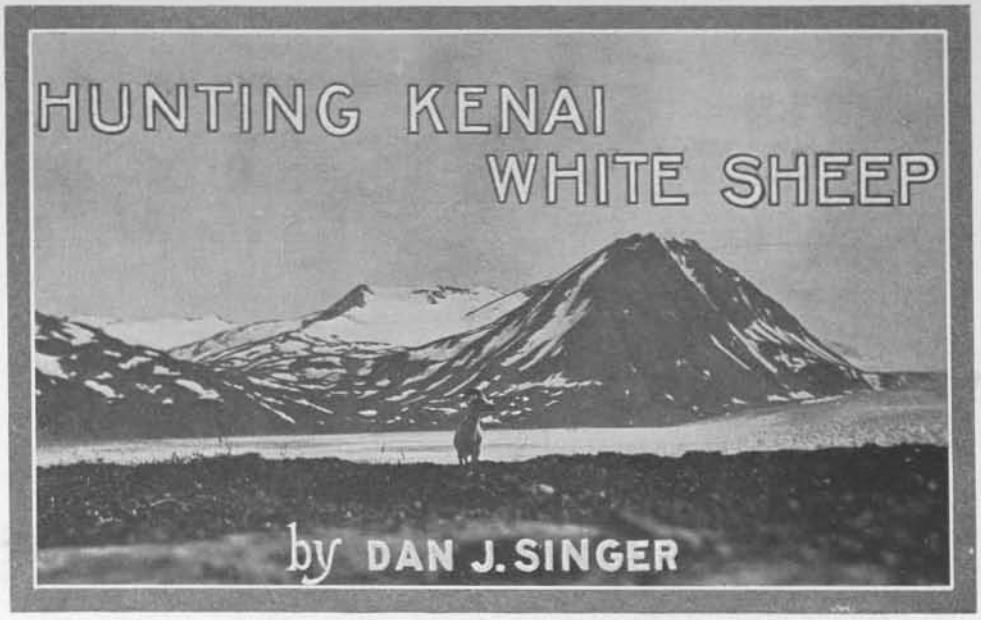
First as to flies. In my own fishing of the rocky hill-streams of northern New Jersey and southern New York, I seldom use more than three patterns: leadwing coachman, March brown, and cowdung. Generally the best size of hook is No. 10, with an occasional No. 8, and, more rarely, a No. 12. These three, of course, are exclusive of the dry-fly patterns, which are seldom as successful on the streams under consideration.

Fish wet, upstream, using but a single fly on a five- or six-foot leader. Casts of fifteen or twenty feet from the tip of the rod are generally long enough; I have taken good brown trout from within six feet of where I stood in a boulder-choked stream. Accuracy and complete control of the fly at all times are more important here than is distance, provided care is taken to move slowly and keep reasonably well out of sight.

The secret of success with the upstream wet fly is to keep it under water. Forget the skitter-along-the-top-as-if-it-were-alive game; let the current carry it in and out among the rocks, exploring every deep corner, riffle and water-buried pocket. Comparatively seldom will the rise be seen; brown trout take such a fly deep under water almost as if it were bait, and the strike must be made in response to their pluck rather than by any visual warning. As straight a line as possible must be maintained at all times, for though the fish seem to hold the fly longer than they do when taking it at the surface, any delay in setting the hook is risky.

This mode of fishing brings results when all others, bait included, fail. It is especially deadly during the low water of summer, when the brown trout have chosen their rock-sheltered hot-weather lairs. At such times the ordinary fly methods meet with little success, and many a man would conclude the stream to be troutless. But if he will carefully study the situation and the stream, searching out the hidden pockets and shadowy caves and testing them with the deeply sunken fly, there will open before him a new and delightfully absorbing chapter in the book of fishing experience.

"PRACTICAL BAIT CASTING FOR BASS" BY THE SAME AUTHOR, ROBT. S. LEMMON, IS TO BE OUR LEADER IN THIS MAY ISSUE. GOOD FOR THE BEGINNER AND VETERAN ALIKE. DON'T MISS IT!



PHOTOGRAPHS BY THE AUTHOR

PART II

A NOCTURNAL VISITOR — THE BROWN SHADOW COMES TO GRIEF—COLLECTING GROUP OF SHEEP FOR A MUSEUM

CLOSE on the vanishing trail of sunset came the first pale glow of moonrise. A long white ray flooded down through the valley, enchanting all things into a creamy white. The wind had quite gone with the day; not a breath was astir; the silence lay thick and brooding. All around the great mountains looked down, mute and solemn under the strange ghostly light.

Down in the valley a much-swollen stream wound its course through a thin strip of spruce. On its bank, showing white under the unwinking eye of the moon, stood a little cabin, and the groundhogs, if they had been looking, would have seen three very tired men slouch up to the cabin, build a fire and pitch a little shelter tent for the writer.

I was very tired, so directly the evening meal was over I retired to my tent, crawled into the old sleeping-bag, and soon was partaking of nature's sweet restorer—balmy sleep. In the open I seldom awake before dawn, but on this occasion it was different. I had been asleep perhaps two hours, and though my eyes were still closed, I was possessed of a strange feeling that told me I was not alone in the little tent. Without the slightest move I listened intently. It was very still; the silence was complete. After a short interlude came a queer scraping sound very close to my face. I opened my eyes. The outline of a little black hulk showed dimly against the white tent.

Was it my coat and boots piled up? I was asking myself—when it moved—just a little. But that was enough. I sat up quick—yes, rather quick. Will you believe me when I tell you, the mystery, whatever it was, did the very same thing, and sat up within fifteen inches of my face.

Well, what in the name of heaven is this? was the natural question—when a flash from my little pocket electric lamp revealed the mystery. What a grotesque picture he made, sitting up on his haunches, head cocked to one side and his eyes, big, round and black, paws held up, and I could almost swear he was grinning at me.

"FEEDING UP A LONG GRASSY SLOPE WAS A FLOCK OF EWES AND LAMBS"

Without any further introduction I addressed him:

"Look here, Mr. Porkie, one of us has got to get out of here; and, seeing this is my tent, I think you'd better step out the same way you came."

He sat there and viewed me complacently, with an air that seemed to say, "Oh, don't make such a fuss; I'm not going to eat you." Then I heard Tom's voice from the cabin saying, "Hey, out there; got the nightmare?"

"No, Tom," I replied; "I've got a visitor, and one of us has got to get out of this tent." Then it was that Mr. Porkie dropped down to all-fours and with a look (so it seemed to me) of utter disgust slowly shambled out of the tent.

THE BENJAMIN CREEK CABIN AND FIRST RAM

In the morning the rain was sluicing down, and the mountains, like sphinxes brooding over the solitude, were wrapped in the vapory breath of the east wind.

"No use of trying to spot sheep in this murk," said Tom. "Better to make camp snug to-day, and to-morrow we'll do our worst."

I had received a cable at Seward from Mr. James L. Clark, of New York, asking me to collect a group of sheep for a Minneapolis museum—a ewe, a lamb and a ram. We intended, therefore, to collect this group before trying for the three rams I was allowed on my own license.

The following morning dawned drear and overcast, but Tom and I were off at an early hour on our first serious day's hunting. We followed a slim trail north along the bank of Benjamin Creek. The creek was unusually high, on account

of the very warm weather that had been prevailing, which caused the glaciers and perpetual snowdrifts on the higher slopes to melt more rapidly. The creek was a raging torrent and had broadened out to more than 60 yards in width. This prevented us from hunting the range directly opposite camp, as we were unable to cross the stream.

It was necessary, then, for us to walk several miles up through a long draw before the sheep mountains could be reached and the actual hunting commenced. Continuing on, we soon emerged from the thin strip of spruce—for the cabin was situated just within the upper limit of timber line—and were now above all timber, with the mountains gradually arising higher and higher on either side of us as we continued on and up through this great scoop or basin between them.

At the far end a higher range, running from east to west, shuts off further progress through the valley, rising like a great barricading wall. It was towards this high range we were directing our course. The mountains seemed softened in the drab light of the sunless day; their sides looked like smooth greenswards on gently sloping sides, and the climb appeared easy —an impression, however, which changed considerably when I came to negotiate their precipitous sides.

Willow ptarmigan were very plentiful and we continually flushed flock after flock, getting within a few yards of them before they would take wing. On the higher slopes, where grayish rocks spotted with black lichen were plentiful, we often saw the little rock ptarmigan. They were very difficult to discern, for they resemble very much the surrounding rocks. Whether they were aware that they blended so perfectly with the surroundings and of our likelihood of passing them unnoticed I do not know. But they would sit motionless and allow us to approach so close that Tom on two or three occasions killed one with a stone.

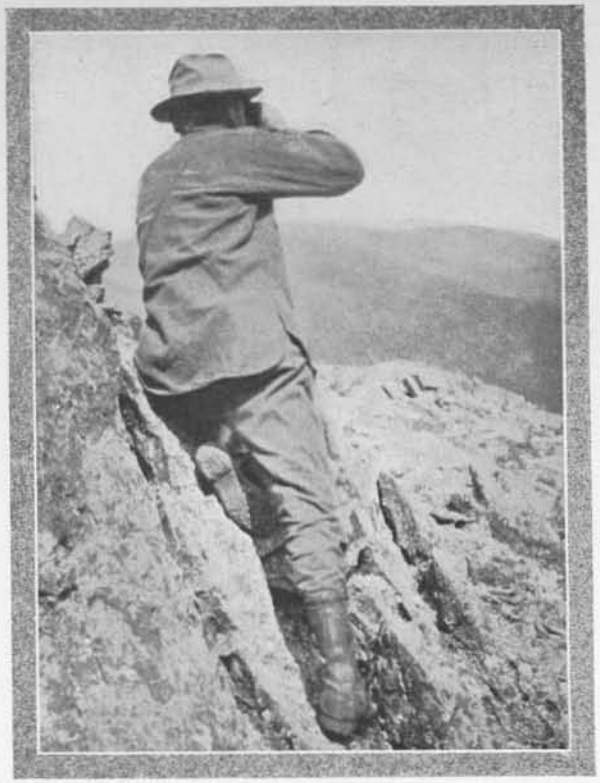
We were now well up on the higher levels, but still between the mountains. Little sparkling, crystal-clear pools dotted the valley, and upon some of them we saw a few ducks, which afterward proved to be harlequin ducks. At length we reached

"AND PITCHED A LITTLE SHELTER TENT FOR THE AUTHOR"

the head of the valley, and Tom very sagaciously suggested we have a little bite of lunch before clambering their precipitous sides.

We stopped at the margin of one of those little pools to enjoy both its cooling liquid and its picturesqueness. The little loch, tucked deep in one corner of the rugged ramparts, was a veritable gem of many colors. From one of its sides the mountain rose abruptly for hundreds of feet, and a perpetual snowdrift lay smooth and white across its face, extending down to the water's edge. Hung with crystal icicles and tinted with a riot of color, the little pool reflected from its unwrinkled surface all the deeper hues of the paint-box.

It may not have been the almost sacred beauty of the place that gave another spectator pause. How, when, or where he came from I do not know, though the rock upon which he sat was but a few feet away, and he might have been a part of it for all he moved—a long, squat, menacing shape, with little beady eyes that looked nowhere in particular, yet seemed to pierce every direction. He wore an expression of diabolical cunning. This little chap of



TOM SPYING FOR SHEEP

the base of the high range that shut off wonderful twistfulness the books call a weasel.

Nor was it the presence of a human that held him rigid. No, something much more of a business nature with him; the scent of a ptarmigan strutting just below the rock had turned him to stone, I fancy.

Tom spoiled his dinner and came within a small margin of spoiling his life by bouncing an empty sardine-box very close to Mr. Weasel's ear.

"This isn't collecting sheep for a museum," Tom remarked, when lunch was over. "We will step over this mountain and you will find a ewe and a lamb waiting for you on the opposite side. Incidentally, we will have mutton for supper. How does that sound to you?" asked Tom.

"Very good—all but that step over the mountain," I retorted, as we proceeded up the steep side of the slope. This was the first stiff climb we had had. The mountain-side was liberally sprinkled with loose rock, which made the ascent doubly toilsome.

Hunting these Nimrods of the sky is hard work at best, in any range of mountains. The year before I had hunted the Big Horn of the Rockies, where the peaks ran up to 12,000 feet and over. Here the highest peaks averaged less than half that height. Timber-line on the Kenai peninsula is something less than 3,000 feet, I think, and we found the sheep from about 3,000 feet up to the highest peaks.

Slowly we picked our way over the loose rocks, and up into the dizzy heights of the lofty range. Near the top we stopped for a breather. The valley far below, with its shades of greens and rusty browns, was flecked and dappled with the shift and play of cloud-shadows. The sun was trying hard to show his wan face, and the patches of blue sky looked encouraging. The little pools looked up, still as mirrors, and gave back to the sky its blue, gray or green.

Down through the soundless spaces of the immeasurable landscape all seemed to be held under a mystic spell of deathly quiet. For a moment a pall of loneliness gripped me. I felt so small—a mere speck on that vast mountain-side—as I viewed the immensity of the surroundings—all quiet and cruel, and seemingly untenanted.

Another short climb and we reached the summit. Tom brought the glasses into play, and, though we saw no sheep, there were many signs which indicated we had at last found the home of the runners of the high peaks. We crossed over the ridge and worked our way just below the sky-line. Then Tom sat down for another squint through the glasses.

For several hundred yards the mountain sloped gently in little broken sweeps, which formed between the tumble of rocks, grassy pockets and Alpine meadows. Here the sheep had been recently feeding, and their tracks were in every

direction. We moved on across the high plateau and came to a point where the mountain seemed to fall almost sheer in thousand-foot drops. The great gap below was filled with ice and ran up and back into the range as far as the eye could see, forming an immense glacier. The wind that blew from this great ice-field was as cold and cutting as an icicle. It was right on this giddy edge Tom spied some tracks so fresh that he used sign language to tell me to continue cautiously down along the edge of the cliff.

A few moments later, looking over a small fringe of rocks, I saw about forty ewes and lambs, slowly feeding up a long grassy slope. It was a beautiful sight, for every ewe had at least one and many of them two lambs frolicking at her side. Oftentimes one of the lambs would jump clear over its mother's back while frisking about.

THE RAM FOR THE MUSEUM GROUP

They were a little too far off to select with certainty the proper ones we were to collect for the museum, as we were required to get sheep of certain ages and sizes. Suddenly something happened that was not exactly on the program. The sheep stopped grazing, raised their heads, and stood like little marble statues, motionless, and in marked contrast to the surrounding green pasturage.

Evil was brewing up on that great mountain-side and none knew it better than the sheep. Nor was the dreaded scent they sniffed that of man, but something they hated far more. The taint emanated from a rufus-hued shadow that slid like a snake—and when I say snake I mean it, for a snake could not have slid better or flatter.

Out across the mountain-side drifted this strange apparition, putting the least bit of cover or unevenness of ground between it and the sheep it was stalking. A closer view of this creeping brown shadow would have shown you a short-legged, thick-set animal something near four feet in length, with a face that was not good to look at—the face of a bad dream—a visage that belonged only to a fiend—eyes that burned like two coals, in a triangular head, with low, brutal brow and a black snout that covered steely fangs beneath. To be perfectly plain, it was a wolverine —a glutton. You have the picture; now this is what happened:

Slid the brown shadow toward the sheep, and one old ewe, perhaps more world-wise than the rest, pointed a nose straight at the approaching doom. Up along the fringe of rock a rifle puffed. Stopped suddenly the brown shadow, and then, as if a spring had been loosed, the wolverine flew up in the air, and when he came down he forgot to move, for one thing, and for another he was quite dead.

They scarcely touched the ground, those sheep, as they flitted up the mountain, turned and, all strung out in a long line,

crossed just above us. Then Tom spoke: "I've been watching those last two with the glasses. They are just the right size for the group." Then he added, "I think you can reach them in a minute."

The rifle puff-puffed again, and, to be quite exact, repeated itself twice more. Then Tom and I spent the rest of the afternoon measuring, skinning and packing in a ewe and a yearling.

For several days following the weather was unfavorable for sheep hunting. Mist, murk and rain, with a raw gale from out the northeast, made it well-nigh impossible to traverse the higher mountains. Even so, we tried braving the weather on several occasions, only to return to camp tired and soaked through.

Finally one night came a sharp frost. The next morning dawned cold, with a bright, clear sky. We were off at an early hour and stepped gingerly along, passing again up through the long draw. We saw three flocks of sheep, of perhaps a score each, feeding or lying at ease on the sides of the slopes. There were no rams among them, however, so we did not molest them. The ram wanted for the museum collection was one with the horns making only about half a turn. We sighted one ram on the skyline of the ridge we were climbing, but a careful examination through the glasses showed he was a smaller ram than I wanted to take for myself and too large a ram for the group, so we also left him to grow up and romp over those magnificent steeps.

It was well along in the afternoon when Tom sighted three rams, down in a pocket, and just above the foot of the big glacier. We made a long stalk atop a rocky ridge, then rimmed the side of the mountain facing the glacier, which was rather ticklish work on account of the bad footing and loose rocks, which might go sliding down with us any moment in an avalanche into eternity. We worked around an upthrust elbow of rock and looked down into the pocket where we had seen the rams. Evidently they had become suspicious, possibly from the noise of stones we had loosened and that went rolling down the slopes, though on the opposite side from the rams. They were slowly walking up the opposite mountain and it was evident if I expected to shoot I would have to do so at once.

"Put up the 300-yard sight," said Tom, "and hold on the middle one." At the report of the rifle I could see the dirt fly about ten feet this side of the ram. "Try 450 now," said Tom, which I did. I could not see where I hit that time, but the rams were still going up, and were, as I thought, getting too far away to try again—that is, for me. "Come," said Tom; "shove up to the 500-yard notch, and I'll watch where you hit."

The little god of fortune must have smiled when I pressed the trigger, for only two rams now proceeded up the mountain. The ram I had selected, whose horns made half a turn, stood still for a moment, then dropped to his knees and rolled about 100 feet down the mountain. When he stopped rolling, to my surprise he rose to his feet and started slowly up the mountain again.

Tom held the glasses on him and advised that he could see where he was hit in the shoulder, and for me to wait for him to lie down. Slowly he climbed up the mountain. We expected every minute he would lie down, when we would then go up and finish him off. Finally I realized he had gotten out of all range and was still going up the mountain. We watched him until he reached the top and crossed over, passing from view. It was four-thirty—too late to climb that mountain and get back to camp before dark. Therefore we decided to start back at once for camp and try in the morning to locate the ram.

In the first wane pallor of dawn, before the squirrels had begun to scud and scamper, while the pale, drifting pools of silver mists still haunted the valleys, there was a stir and faint sounds about camp. An hour later two figures wormed slowly through the mists and up into the higher slopes. A fox, still out on some very private and perhaps a bit shady business, stopped and sniffed the breeze; then his nose telegraphed to his brain—man! At least, so it seemed to Tom and me, for he went screwing across the open, dew-drenched glades in something more than a hurry.

We made good time and soon arrived at the foot of the mountain where we

expected to find the ram of the evening before. With the glasses we scanned that vast mountain-side from base to summit, but no ram did we see.

"Nothing for it," said Tom; "we will have to stroll up to the top." Only you sheep hunters can appreciate that stroll. Suffice it to say, later—quite a bit later—Tom and I were stealing along the crest of that mountain, Indian style, examining every crag and nook with the glasses on that monster rock-ribbed ramp.

Most unexpectedly, Tom and I discovered the ram at the same moment. Out on a slab of jutting rock, backed up by a row of ragged, sharp-pointed, teeth-like rocks, stood the ram, gazing in our direction. With all our caution he had located us first and was about seventy yards distant. At the report of the rifle he plunged over the side of rocks and luckily lodged a short way down the mountain without damaging skin or horns.

This completed the group for the museum. His length of horn, making about half a turn, was what they required. We judged the ram to be about five years old.

When a ram's constitution has been undermined by the rutting season, the horns cease to grow, nor do they begin again until the grass is green in the spring. This is the cause of the rings around the horns, which therefore indicate the number of winters old a ram is. This is Tom's theory, and is, I believe, a correct one. I found it coincided with the age of the sheep as told by the teeth. Up to five years the age of a sheep can always be determined by the incisor teeth; a yearling has but two permanent incisors, a two-year-old four, a three-year-old six, and a four-year-old or over eight teeth, or a full set.

After skinning, measuring and photographing the ram, we started back for camp. About half-way down the mountain we stopped for a brief rest.

A distant call came floating through the clear, calm air, and soon a couple of the black scouts of the wilderness appeared, winging high over the top of the bald mountains, till suddenly something arrested their keen eyesight. Wheeling, and with an occasional hoarse croak, they circled high up against the unclouded blue. Four more dark, ominous shadows joined the first, and we left the freebooters of the steeps to their supper and their quarrels.

About a mile from camp we sighted a large brown bear on a distant ridge. The glasses showed he was traveling along at a lively gait, and as it was a little too early in the season for good fur, we did not follow him up.

Just before we came to timberline we walked up within two hundred yards of a splendid bull moose. He stood apparently unalarmed watching us. His spread looked to be at least sixty. I made no attempt to shoot him, as I did not intend to take any moose on this trip.

(*To be continued*)

Afterglow

Twilight, and o'er the hills' far western rim
The dying day has hung her lamps of flame
That bloom the sky's pale dome from brim to brim
And paint with ashen rose the snow-washed plain.

R. R. Greenwood.

THE AVERAGE ANGLER RELIES UPON LENGTH OF LINE TO AVOID BEING SEEN BY THE FISH

FISHING FINE AND CLOSE-UP

By SAMUEL G. CAMP

EVERY orthodox essay on fishing begins with an easy, off-hand reference to some dusty classic in the literature of angling. This proves at the very outset and most conclusively that the writer is undoubtedly an "authority," and that the reader may confidently accept his further remarks as gospel truth. A certain Dame Juliana Berners and one Walton—I think I have the name right—are both good names with which to put the seal of authority on a fishing story. And so——

I am quite sure that the fly-fishermen, reading for the first time Walton's Complete Angler, will be somewhat surprised at the number of ideas, and even phrases, he will find therein which are constantly current in the angling literature of to-day. The truth of the statement that there is little new under the sun will be more than ever apparent; also, that there is the least new under the angling sun than perhaps any other. As an example, you will find in Chapter V, Part II, of the Complete Angler—the second part, you will remember, being by Charles Cotton—this phrase: ". . . and to fish fine, and far off, is the principal rule for Trout-Angling."

One is pretty sure to find the advice to "fish fine and far-off" in most modern angling text-books; and it is good advice, too, only, it would seem, rather apt to mislead the angler if not conservatively applied. As generally understood, and quite rightly, in view of the context in the Complete Angler, the fly-fisherman is advised to use fine tackle—two hairs next the hook—and to cast a long line.

But there is another thing—two things, rather—which in this connection are apparently far from rightly understood. One of them is the rod with which Cotton advised fine and far-off fishing, and the other is the line. To quote:

"For the length of your rod, you are always to be governed by the breadth of the river you shall choose to angle at: and for a Trout-river, one of five or six yards long is commonly enough."

And again: "But I must come now to the second way of angling at the top, which is with an artificial fly . . . that with this you are to angle with a line longer by a yard and a half or sometimes two yards, than your rod."

Yes, for a trout-river an 18-foot rod is commonly enough. Still, with this rod, and a line longer by sometimes two yards, one could make a practical fishing cast of merely 40 feet or less. It would seem then that an expert caster, with modern tackle, in making present-day application of the fine and far-off rule, should also make certain allowances in view of what is now considered lengthy casting.

Certainly the fly-caster should know how to throw a fairly long line, that he may reach out when distance is necessary. Otherwise it pays particularly well to fish fine and close-up. It would also seem that the rule of far-casting is somewhat less applicable to dry- than to wet-fly fishing downstream.

The practical disadvantages of fishing with a very long line are many. The following, in brief, are some of them.

You are more liable to get hung up. You are more apt to overcast your water, neglecting good water close at hand, because you like to throw and are in the habit of casting a long line—or perhaps because you consider a long line absolutely necessary. Unless you are a very fine caster, indeed, you cannot cast with the same accuracy and delicacy possible with a moderate length of line.

With a long line you will miss more strikes than with a short one, and, by the same token, the fish you hook will be less safely hung. You will have more foul-hooked fish. In a strong wind you are always in trouble, straining tackle and temper to get out and cast, even approximately where you wish, the length of line which you consider necessary. And of the fish you hook, you will lose more than a duly proportionate share, because every additional foot of line off the rod-point is twelve inches of line which a heavy trout in its first run for safety—and snags—will not have to take from you.

Against these very material disadvantages of the long-line system, practically its only virtue is found in the fact that by using a long line one lessens the chance of being seen by the fish. With this possibility removed, everything is in favor of fishing close-up.

The wet-fly fisherman, working downstream, for familiar reasons—because, in fact, trout head against the current—is always in greater danger of alarming the fish than is the dry- or wet-fly fisherman casting upstream. However, the wet-fly man can almost always shorten his cast at the cost of some little foresight or possibly personal inconvenience, taking advantage of any natural ambush on the bank of the stream, keeping himself and his rod down low, avoiding quick motions, and, if

YOU CAN LEAD THE FISH DOWN AND LAND HIM IN UNFISHED WATER

GOING DOWNSTREAM WITH A GOOD ONE

necessary, crawling into a strategic position from which to cast over a good pool or a rising fish. This is possible, of course. But it does not necessarily follow that many anglers pursue this safety-first policy with any sort of consistency. Speaking from experience, I would say that very few of them do. Almost always the angler prefers to throw a long and generally sloppy line, relying upon the distance of his cast to save him from being seen by the fish.

At this point the writer may as well confess that thus far he has experienced considerable difficulty in preventing this article from turning into a brief for upstream fishing. In fact, close-up fishing and fishing upstream are so closely related, so interdependent, that one can hardly advocate close fishing without at the same time coming out rather strongly for upstream fishing—not that one for any reason hesitates to take the latter position, but the subject is an old one. However, I have already mentioned the fact that there is very little new under the angling sun, and so perhaps some reference to the upstream method, as naturally involving the most practicable manner of close-up fishing, with its attendant advantages, may be excusable. Moreover, I wish to bring out a point or two with regard to the wisdom of working "up" a trout stream, which I have not seen mentioned in that connection.

If you wish to avail yourself of all the advantages of fly-fishing with a moderate length of line, cast upstream. Obviously, these advantages are the disadvantages of the long-line method, outlined above, with the reverse English; and there are also others. This applies to wet-fly fishing as well as, of course, to dry-fly angling. It would seem, in fact, that the suggestions made here may be of more benefit to the wet-fly fisherman than to the dry-fly man, because the latter almost invariably casts upstream as a matter of course. Still, there is nothing to prevent one's throwing a long line upstream if he can and cares to; wherefore, the dry-fly man with long-distance casting ambitions, and who does not confine his distance work to the tournament or practice platform quite as closely as he might, might do well to consider some of the points brought out herein. Also, of course the wet-fly man can reach out upstream—but the first thing is to educate him to upstream casting, which, in the case of the average wet-fly fisherman and the language of the day, is some job.

Fishing upstream, following the bank or wading with ordinary care, one can certainly cast with safety at a considerably less distance from the fish than when working downstream. Of course, you cannot approach carelessly close to a good pool or a rising fish simply because you are stalking the trout from the rear; there are a good many factors which enter into the situation and render it most advisable for one to be as unobtrusive as possible even when casting upstream. But, fishing with a dry fly, allowing it to float down very close to me, I have had trout rise within four feet of my waders. You could not do that fishing downstream. An

extreme case, of course, but one which merely "goes to show."

One of the very greatest advantages of the upstream short-line method is that you can study the water at close hand while actually fishing it—not after wading into it after having fished it more or less successfully downstream. Brook trout are very finicky about taking the fly even when they are strongly on the feed; in the case of any given fish, the fly must follow a certain path, pass over a particular and very small area of the surface, or, many times, the trout will not rise to it. Working upstream it is possible to spot the locations of a good many more fish than is the case when fishing downstream, because, obviously, in keeping far enough away from the fish to avoid being seen you thereby lose most of your chances of seeing the fish.

Often, however, in fishing up you can see your trout before casting for him. You can then use your judgment as to the best way of going after him, where to cast the fly, and just how to float it down to him. Then, too, you will see rises to your fly which at a greater distance would have passed unobserved. Often a trout on seeing your fly will come up perhaps only half way to the surface, then lose his interest and go down again. Drifting your fly down, say, three feet from the edge of a submerged rock, you will see a good fish come out from underneath the boulder, float up lazily a little way towards the fly, then turn and go back to his retreat. Perhaps the fly came down in a way which aroused his suspicions, or perhaps the pattern of the fly did not appeal to him. But, at any rate, you have the fish located—which would probably not have been the case if you had been casting a pretty long line downstream—and the chances are that a change in tactics or flies will result in getting another rise and probably a strike. Without knowledge of the presence of the trout, you would probably have cast around the boulder several times without change of method or flies and passed on—without the fish.

Another thing: you will be able to spot more trout rising to the natural fly. A trout rising to the natural insect creates very little disturbance on the surface; on still water, of course, the rise may be noted at quite some distance, but where the surface is more or less broken, one must be very close up to see or hear a rising fish. In this fact may be found a very good reason why the American dry-fly fisherman should, if I may so term it, work as closely as possible to the water. Fish rising to the living insect are the natural game of the dry-fly man, and casting for rising or visible trout is by far the most interesting phase of dry-fly angling; in view of which the dry-fly angler should not lose sight of the advantage of close-up fishing in this respect.

THE SORT YOU GET FISHING CLOSE UP

Without doubt one can pick out more good-looking places to prospect with his fly when he is fishing upstream. This is a somewhat difficult thing to explain, but I am sure the fact remains. I think you can judge better as to the probable location of a trout when you get the upstream angle at the surface than when looking down;

your view is more intimate and you see little smooth places, small slack places in fast water, little side-currents close to the bank, and places of like nature which are well worth trying out—often distinctly more worth while than the more obvious spots. An instance of this occurred one day last season when I was out with a friend who always fishes downstream. A little while after he had fished down a generally productive swift without success, I tried the same place, fishing up. Three good trout were taken in water about six inches deep and not more than that distance from the bank. The swift is a wide and deep one, and my friend had simply explored the water on both sides of the strong middle current, the perfectly obvious places from his upstream viewpoint. I feel sure one can get a better line on the possibilities of a stream when working up.

Two other factors in favor of close-up fishing, which are more familiar to most anglers, but of sufficient importance to warrant "honorable mention," at least, are as follows: A trout, hooked when casting upstream, can almost always be played and landed without spoiling water as yet unfished. When fishing downstream I have lost a great many good fish by holding them too hard, trying to keep them from running down into a near-by pool which I knew to be a good one. Sooner or later, and generally sooner, a trout, when being played, will attempt a downstream run; you must then go with him, with the certainty of spoiling the water below you, or you must simply snub your fish and hang on. In a swift current the latter course generally results in the loss of the fish. With your line taut the force of the water brings your trout to the surface, where he rolls over and over and eventually tears away unless unusually well hooked. A fish hooked when casting from below him can almost always be nursed downstream, very soon after he is hung, and played and landed at your leisure in water already fished. Also, when fishing up you will more often find yourself in the right position for netting your trout—below him—than is the case when you have hooked the fish from above.

Just one suggestion with regard to the tackle most suitable for short casting upstream. If you use a tapered line, as you naturally will with the dry fly or for delicate work with the wet fly, let the taper be a short one, about twelve feet. A tapered line does not work well unless a considerable part of the swelled portion of the line is in action, otherwise you do not get enough action in the rod. So, naturally, a short taper works best for short casts. This suggestion as to length of taper goes for the usual size E line on the average four- to five-ounce rod.

After Asking Mr. "Rube Wood"

"I don' know if I kin;
But do you see that tall pine there
With an elbow in a limb
Hit looks suthin like a chair?
Wal—there the stream bends round
And broadens to a pool——
The dog-gastedest trout lives under thot bank, and
He sure is nobody's fool:
Yas—you gits through them bars—goes 'crost that lot
To the back of them alders you see——
Then on your knees—crawl to that stump——
An cast em—er—nop damn hit! A bee.
Oh! He'll bite—he allers does
An ginerally gits the bee——
Ef you do lug em out—fotch em round,
He's one trout I want to see."

* * * * * * *

"What! Bust your gut?
Git a plaster!"

LEONARD G. BOND.

SIGNS, SYMBOLS AND SIGNALS

By DAN BEARD

[EDITOR'S NOTE:—*This article is made up of excerpts from Dan Beard's forthcoming book on Signs, Symbols and Signals, constituting some three hundred signs of all kinds. Only those which pertained directly to hunting and woodcraft were included in the present article.*]

PIONEERS, trappers, surveyors, hunters, fishermen and boys, as well as all the vagabonds of the road including the hoboes, tramps, yeggmen and gypsies, like the American Indians, all have a system of trail signs—picturegraph, hieroglyphics with meanings understood by the initiated. The great usefulness of these signs lies in the fact that if one understands the symbols, one does not need to understand the language of the sign-maker. For instance, if the traveler sees on a rock by the side of the trail or a fence or a barn by the roadside, the sign of danger, no matter what tongue is used by the traveler, he knows that he must proceed with caution, for that sign spells danger in every language.

The author has made no attempt to invent a system of signs for the very good reason that there are signs already in use, some of which have stood the test of centuries and this collection is made up from such recognized systems. Almost all the trail signs for the open are taken from the American Indian and the American Buckskin men and also almost all of the signs indicating natural phenomena such as rain, cloud, water, day, night, month, etc., are taken directly from the Indians, but most of the chalk signs such as are used on fences, barns and sign-posts are cribbed from the "Knights of the Road," in other words, from hoboes and tramps, while those signs indicating color are taken from heraldry.

It was no easy task to secure the vagabond's secret symbols and their meaning; they were picked up one by one and verified as the opportunity occurred, for they are especially guarded secrets among the vagabonds of the road, and it is hoped that the publishing of them and making them public and free to all will accomplish two purposes, one in supplying a useful system of road signs to the hunters, fishermen, Boy Scouts and other pedestrians, and the other in defeating the purposes of the underworld by robbing these signs of their secrecy.

A householder, finding the tramp sign of the easy mark on his house, may erase the same and substitute the danger mark, and the Boy Scout, the pedestrian, the hunter and the fisherman may use the easy mark to show the easy trail and the danger mark to show the dangerous trail. Besides which, all sorts of useful information may be conveyed by one patrol of scouts to those following by the use of a few chalk marks on a board, fence or sidewalk. By putting the sign of the past, then the sign of direction, then the sign of noon and the sign of Scout drawn across the wavy line of direction, one will see that a Boy Scout passed here at noon. If necessary, a long letter or communication may be written by the use of the signs here given, a letter which will be much shorter than written words.

WILDERNESS SIGNS OF DIRECTION

When the trees blanketed our continent from the Atlantic Ocean to the Mississippi River with a dark and gloomy forest in which there were only occasional openings, or prairies like those which existed in Indiana and Illinois, it was necessary to mark the trails through the woods in order that one should not become lost. True, the country was traversed by big game trails, war-paths and Indian trails then known as "traces." But even the celebrated war-paths were overgrown with

underbrush and weeds so as to be only distinguishable to the initiated and accomplished wilderness man. Hence when the white man came, they marked out roads for the settlers. The surveyors and pioneers did this by blazes made with their axes on the tree trunks. These were called blazed trails, and they are still used in the North Woods, in Maine, in the wilderness of Canada and the far North, as well as in the few forests remaining in the West.

The blazed trail is either made by chipping pieces of bark off the side of the trees along the line of travel or by what is called a "spot-trail," i. e., by making big blazes on the face of the trees along the line, so that one spot may be seen from any other preceding it.

Fig. 13. Line blazed trail. Tells the traveler that a line or trail runs alongside of the points marked. It does not give the particular direction like the arrow, because this trail may be followed either way. In the diagram the blazes are much closer together than they would be in the wilderness, but it is so made that the reader may more readily understand it. (Surveyors,' foresters' and explorers' sign.) Most woods trails are blazed as in the spot trail, Fig. 14.

Fig. 14. Spot blazed trail. Useful in traveling after sunset, as one blaze may be seen from a position in sight of any other blaze, but cannot be seen from a position to one side of it. (Hunters' and foresters' signs.)

Fig. 15. Broken bush trails. When traveling in an unknown country, one bends and breaks the bushes backwards so that their tops point backwards. When retracing one's steps, one's eyes will catch the exposed under surface of the leaves on the broken bushes, thus making it easy to find the way back. (Hunters,' trappers' and scout signs.)

Fig. 16. When a stick is stuck in the ground, the free point shows the direction to camp. In the Northwest, when an Indian has made a kill of moose, sheep or caribou he puts one end of a fresh willow stick in the ground and wraps a bit of the skin of the dead animal on the end of it as an invitation to anyone coming along that trail to come and eat. If the willow stick is fresh and not withered the traveler knows that food and camp are not far ahead of him, but if the willow stick is wilted and drooping, the traveler knows that it has been there a long time and the hunters have probably eaten up the food supply and hit the trail, but the stick in Fig. 16 simply indicates direction. (Abenaki Indians.)

Fig. 17. A long, upright stick at the upper end of the pointer tells us that camp is a long distance ahead. (Abenaki Indians.)

Fig. 18. A short, upright stick near the buried end of the pointer tells us that camp is a short distance ahead. (Abenaki Indians.)

Fig. 19. A number of upright sticks against the leaning stick indicate the number of "sleeps" or days' journey among the Indians, but with the Boy Scouts of America it tells the number of miles to camp. (Abenaki Indians.)

Fig. 20. A cleft stick with a forked stick in the cleft tells us that the direction is that pointed by one end of the stick. (Gypsy sign.)

Fig. 21. A stone with another stone on top of it, marks the trail.

Fig. 22. A stone with another stone on top of it and a stone to the right, means to turn to the right.

Fig. 23. The same with a stone to the left of it reads, turn to the left here.

Fig. 24. In the prairie and open country a bunch of grass tied together at the top tells us that this is the trail. (Sioux Indian sign, Dr. Eastman.)

Fig. 25. If the top ends of the grass are bent to the right, trail turns to the right. (Sioux Indian sign, Dr. Eastman.)

Fig. 26. If the top of the grass is bent to the left, trail turns to the left. (Sioux Indian sign, Dr. Eastman.)

Fig. 27. Two sticks laid on the ground in the form of a V, indicates direction as in Fig. 8.

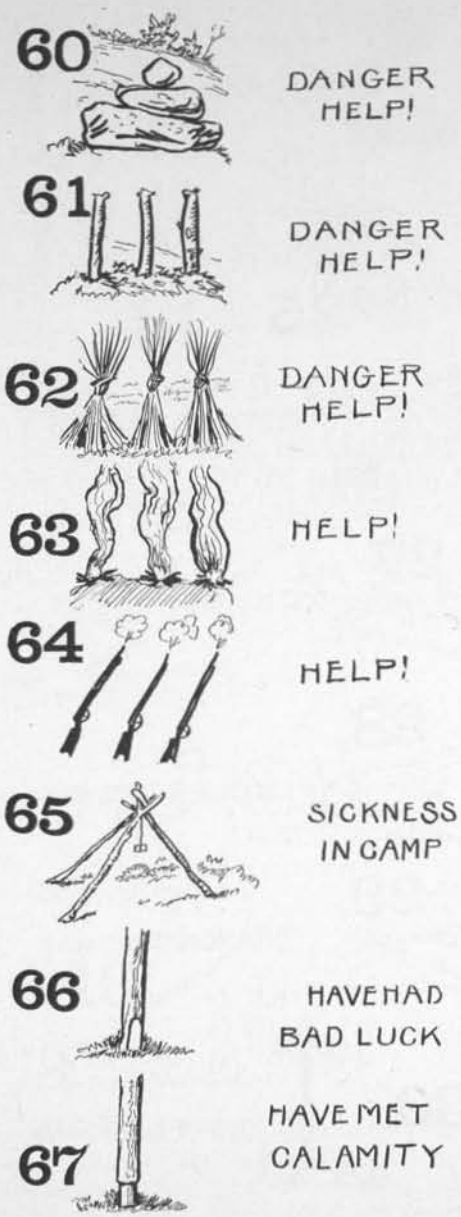
Fig. 28. A row of little stones laid in the form of a V indicates the direction taken.

Fig. 29. A green forked stick laid with apparent carelessness upon the ground, to the keen eye of the vagabond, tells him that companions have lately passed in that direction.

Fig. 30. The lop stick. In heavily-wooded districts, when the attention of a passerby is required, a prominent tree is selected, a space cleared around it and the branches of the tree lopped off for a considerable distance up the trunk. Such a mark cannot escape the eye of the passer-by. (Alaska prospectors, explorers and Indians.)

If, for instance, one of a party goes ahead and comes to a lake which is crossed, the water affords no means of marking a trail, but if on the hill or high bank where he again takes up his trail, a tree is lopped in this manner, it will attract the immediate attention of those following and enable them to pick up the trail on the opposite side of the lake.

The lop stick is frequently made to commemorate some event. . . . "The next day we dug him a grave above high water mark. . . . I climbed the tree to make a memorial of the North—the lop stick."



Stefasson. (Alaska prospectors, explorers and Indians.)

SIGNS OF ALARM, DANGER AND TROUBLE

It is of vital importance to the whole outdoor world that a uniform system of signals should be adopted and understood to mean trouble or disaster and a call for help. Owing to the fact that some writers have, through misapprehension or typographical error, given *two* shots as a call for help, it has put a dangerous confusion of ideas in many amateurs' minds. It should be recognized among all outdoor people, including hunters, explorers, military men and Boy Scouts, that THREE of anything stands for something serious, for a call for help, for a sign of danger. THREE might be called the Paul Revere among the signs, spreading and giving the alarm. Two shots from a gun, for instance, may simply mean that a man has fired the right and left barrel of a shotgun, but three shots in rapid succession would attract any hunter's or sportsman's attention, and if the three shots were again repeated in the same manner, he would know that someone was in trouble.

There are also statements in print that three stones one on top of the other, three tufts of grass and three blazes on a tree, are signs of danger or alarm, which is true enough, but confusion is made when *three smokes* are given as a sign for good news and *two smokes* for "I am lost, help!" Three of everything does, and must have the same general meaning, a cry for succor, help, an alarm. The white man's custom of firing three shots as a call for help, the Apache's custom of three smokes as a sign of alarm, the mountaineer's custom of three stones one on top of another, and three blazes on the tree, three tufts of grass. Three short blasts on a steamboat whistle means full speed astern. All these things indicate trouble, consequently in this system of signs I have taken the liberty to ignore any apparent exceptions to the rule.

Fig. 60. Three stones piled one on another. Danger, or help needed. (Boy Scout sign.)

Fig. 62. Three sticks driven in the ground. Danger. Help needed. (Boy Pioneer sign.)

Fig. 62. Three wisps of grass tied at their top. Danger. Help. (Scout sign.)

Fig. 63. Three smudge fires burning. Enemy approaching. I am lost in distress. Help wanted. (Apache Indian sign.)

Fig. 64. Whenever you hear three reports of a gun in the woods, at regular intervals, about as you would count 1-2-3,

you must give it your immediate attention. In the Northwest, at Mt. McKinley region and Alaska hunting ground, Mr. Belmore Browne tells me they fire the three shots and then three more shots to be sure to attract attention, but in other localities, usually three shots are sufficient to call help.

We cannot be too careful in regard to our "trouble" signs, for life often depends upon making them understood. Keep the number 3 in your mind as always meaning danger, trouble or a cry for help and as a sign that should be recognized by all outdoor people.

Fig. 65. A piece of bark or wisp of grass hung on the limb of a tree or on a tripod means that someone is sick in camp. "Smoking a piece of birch-bark and hanging it on a tree means 'I am sick.'" (Mr. J. W. Powell, U. S. Ethnological Report.)

Fig. 66. Bark removed near the butt of a tree. Bad luck. (Indian.)

Fig. 67. All the bark removed means a grave and dangerous situation. According to H. L. Masta, Chief of the Abenaki Indians, cutting the bark off from a tree on one, two, three or four sides, near the butt, is to be read as poor, poorer, poorest luck. Cutting it off all around the tree, "I am starving."

SIGNS OF THE ELEMENTS
MAP, CHALK, OR PICTURE-WRITING SIGNS

These signs include fire, air and water, and like the celestial signs, they are mostly borrowed from the Red Men. Hoboes and yeggmen take little interest in celestial objects, and unlike the proverbial Kentucky Colonel, they do not even use water for bathing purposes. But in the wilderness, life often depends upon the traveler's ability to find water, and among the ordinary pedestrians, Boy Scouts and Girl Pioneers, it is absolutely necessary for the hikers and scoutmasters to be able to direct the followers to the location of good water which is uncontaminated, especially by the dreaded typhoid germs.

Fig. 136. Smoke. Indian sign, supposed to be the balloon-shaped puff of smoke arising from the smudge fire, from which a blanket has suddenly been removed.

Fig. 137. Fire. (Combination sign.)

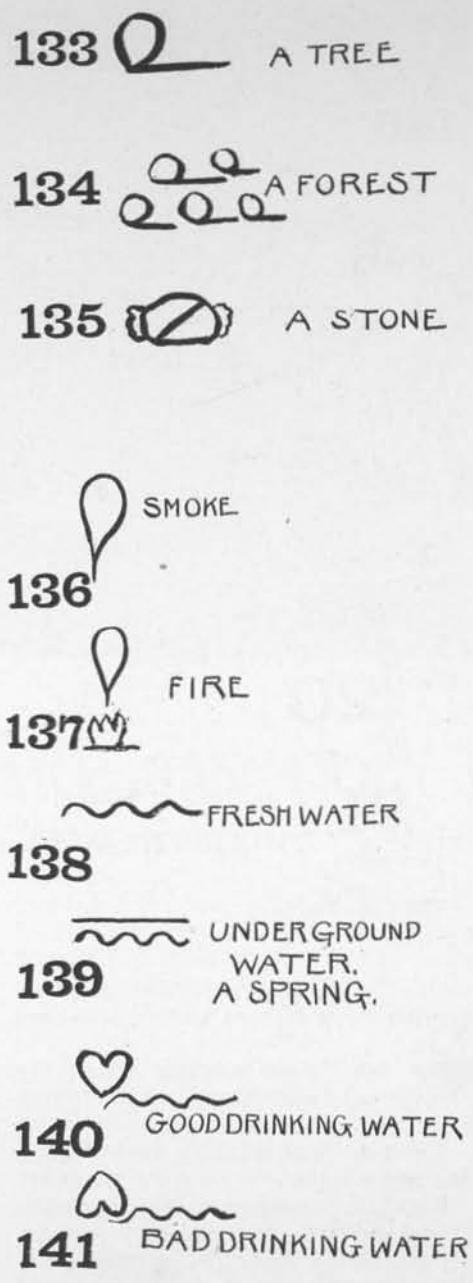
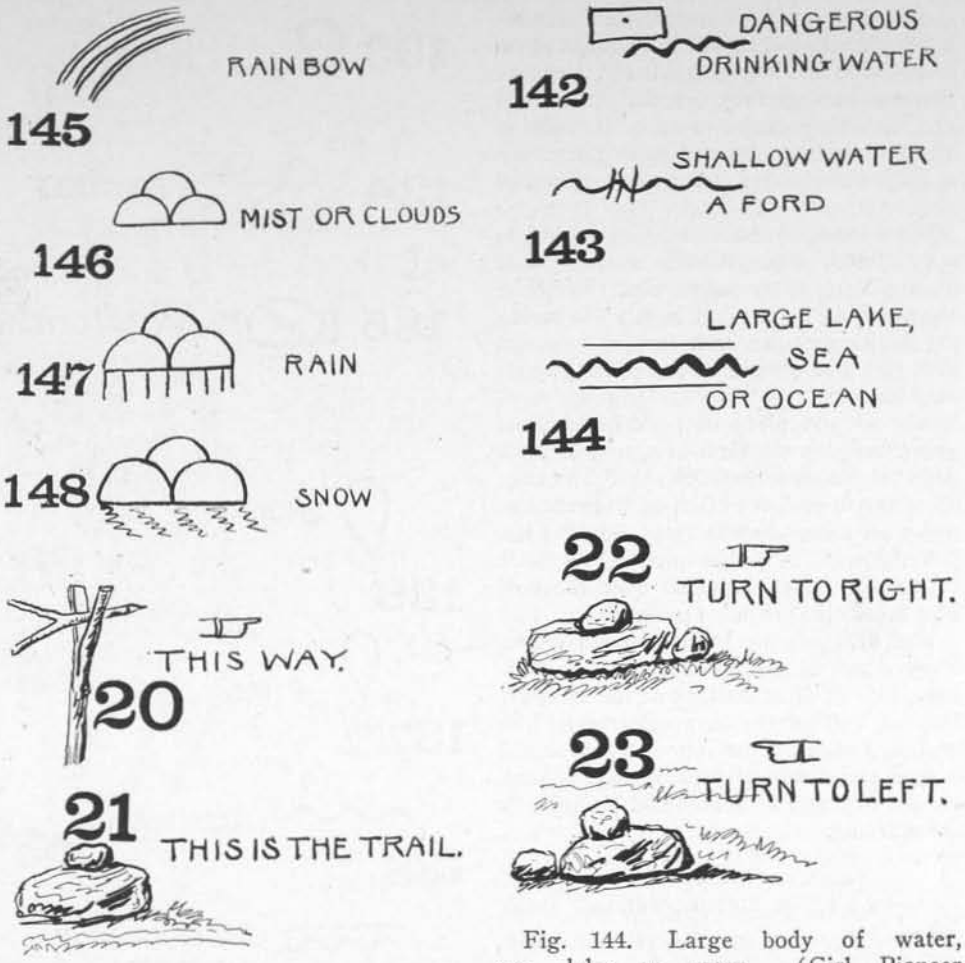


Fig. 138. Fresh water. This is a map sign. Hoboes use the same sign to represent a poor man, probably meaning a man who is too poor to drink anything but water, but the poverty meaning of the sign is omitted here to prevent confusion.

Fig. 139. A spring, sign of ground over



the sign of fresh water is the sign of underground water or a well. (Map sign. Tighe.)

Fig. 140. Good drinking water, sign of good heart and the sign of water combined. (Map and scout signs.)

Fig. 141. Bad drinking water. (Map and Scout signs.)

Fig. 142. Dangerous drinking water. (Hobo and map sign combined.)

Fig. 143. A ford; upright lines represent men, the wavy line water; the combined shows that men can wade the water. (Map sign.)

Fig. 144. Large body of water, sea, lake or ocean. (Girl Pioneer sign.)

Fig. 145. Rainbow. (Indian sign.)

Fig. 146. Clouds of fog. (Indian sign.)

Fig. 147. Rain. (Indian sign.)

Fig. 148. Snow. (Indian sign.)

Fig. 149. Lightning. (Indian sign.)

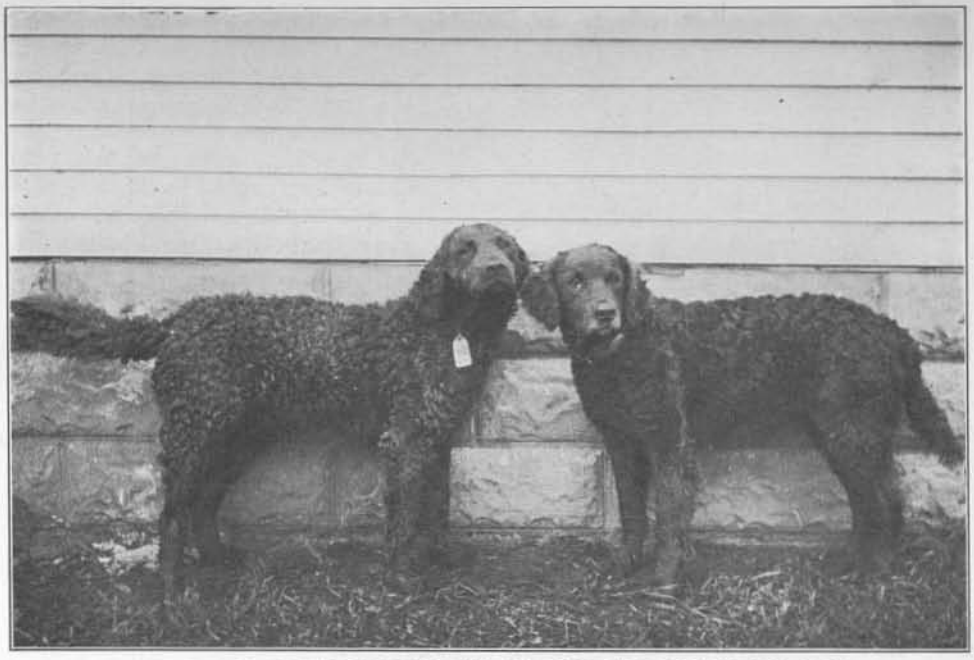
Fig. 150. Thunder. (The thunder bird of the Indians.)

Fig. 151. Air or wind, probably a puff adder. (Indian sign.)

Fig. 152. The four winds, or four parts of the earth. (Indian sign.)

Fig. 153. A tornado or whirlwind. (Indian sign.)

SALMON FISHING IN NEW FOUNDLAND "BY CHAS. J. CAMPBELL; COMING IN MAY. DON'T MISS IT.



TONY T. AND BROWN BEAUTY, TWO TYPICAL CHESAPEAKE BAY DOGS

THE CHESAPEAKE BAY DOG

By WILLIAM B. HAYNES

MY first introduction to the Chesapeake Bay dog converted me from an open skeptic into an admiring enthusiast. At the time I was not at all keen about the idea of a retriever. I pictured vividly the supposed disadvantages of a wet dog in a cramped blind on a cold morning. It seemed to me to be easy enough to pick up the dead birds along with the decoys. I could not see that the dog would be worth half the trouble I expected him to be.

During a Thanksgiving recess I went home with a college chum who lived on the Eastern Shore of Maryland. He had filled me full of tales about the duck shooting and was always extravagant in his praise of the Chesapeake Bay dog in general and his Trix in particular. He left no doubt that his were the best ducking grounds in the world and that he owned the world's champion duck dog. His face fell a little when, on our arrival, he learned that Trix had been missing from the place a week. We spent the next day scouring the country on horseback and found that everyone knew her, but no one had seen her.

"We will have to take Dixie in the morning," my friend said as we were going to bed.

Dixie was Trix's puppy, a rolicking youngster of some ten months, who had impressed me as being rather frivolous for a dog of the breed's reputed gravity, and I asked if he had been trained.

"Not he; but I'll promise you good sport. Good-night."

At the blind next morning Dixie and I both received our first lessons in the proper behavior of a Chesapeake. His master made him lie down beside the blind. Ten feet away, so perfectly did his tawny brown blend with the dry sedge

FERG'S BINGO—A NOTED CHESAPEAKE

grass, he was all but invisible, and he lay as still as if playing dead. When the ducks came he never quivered, though he dashed after we shot without waiting for the command "Fetch!" For this he was punished, and next time my friend kept his hand on his collar and let him go for the birds only after the word had been given. He retrieved as naturally as a yellow duckling takes to water. His master insisted on getting out of the blind twice, to make him deliver right beside the blind. After three trials, the puppy was a trained retriever, and his education had hardly interrupted our sport.

Bred and born to his task of duck retrieving; with the strength and courage to face the rolling surf, plough through mud flats, or plunge into floe ice; wearing a cold-resisting jacket that sheds water like a duck's back and of the color of wet sedge grass, the Chesapeake is ideally equipped for his life work. Nevertheless, although he is indeed, to borrow the words of his warm friend, Captain Morris, "the world's greatest wild-fowl retriever," he finds little favor nowadays with American sportsmen. He is, moreover, a thoroughly American breed, and this, one would think, might count in his favor. He divides this distinction with the Boston terrier, but he certainly does not share the popularity of his attractive fellow countrymen. The fault, however, is not his. The Chesapeake has fallen on evil days mainly because of the activities of the game hog. He is deserving of better things.

Created for hard work, the Chesapeake is no beauty. To many people he seems the personification of "just dog"; but, for all his plebeian appearance, there is a certain distinction in his great strength and obvious intelligence. He is a big dog—standing twenty-five inches at the shoulder and weighing close to seventy-five pounds—with a coarse, plain head, broad skull, widely separated, yellow eyes, and low-set ears. He has tremendous bone (some dogs measure six inches around the foreleg) and great feet that serve a water dog so well as paddles. His coloring is plain in the extreme, the various shades from liver to fawn, with an intermediate brownish tawny shade the most esteemed. His coat may be either short and curly or rather longer and almost straight, but always with a furry, oily undercoat during the winter months. His general outline is that of a plain, heavy setter.

The Chesapeake is not a lively dog, but, on the other hand, self-contained. He is intelligent rather than clever, deeply devoted to his friends and family, but indifferent towards strangers, whom he receives with dignified, kindly tolerance. Other dogs he openly mistrusts. In fact, he does not bear a very good reputation as a peaceable member of the canine community. To sum up, he is a strapping, honest, plain-looking workman.

"Handsome is that handsome does" is his motto. To know him at all one must go hunting with him. He is a sportsman to the core, and does his retrieving with a vim and enthusiasm that no rough water can dampen, no ice chill. His courage is remarkable. I have seen a Chesapeake plunge through ice, shoving floating cakes out of his way with his nose, breaking ice

too thin to bear him with his big paws, and even biting it with his teeth. And he will go back into that kind of water again and again in weather when, sheltered from the biting wind in the dry blind and bundled up in two sweaters and a mackinaw, his master nearly perishes of cold. I have seen him breast the Atlantic surf in an October storm to bring in duck, and, thrilled with admiration of his strength and pluck, I have watched him struggle through a chop that broke over his head every second as he dragged a giant honker out of the icy water of a northern lake. He will hunt out his quarry through a sea of mud or in a network of marsh grasses. He will follow a wounded bird any distance. Water or ice, mud or grass, he stops at nothing till he returns, his tail wagging, his big, yellow eyes gleaming with the pride of good work well done, and in his strong jaw the game he went to retrieve.

The Chesapeake comes honestly by his retrieving abilities. Three interesting traditions are told of his origin. Down on the Eastern Shore, the breed's undoubted birthplace, old Uncle Simon, who totes your gun and shells to the blind, will tell you that "'way back b'fo' de war, suh, des a gem'men ovah in Talbot county done own ah pretty li'l' gyp; an' one night when de moon war full, suh, she war out in de marshes runnin' an' she kum up wid an otter. Massa Otter he fall in lub wid Mis' Dog, an' she fall in lub wid him, but by-an'-by she kum home ag'in, 'cause her husband he git ketched in one ob Massa Harry's traps. When her pups is borned, dey's de furst Ches'peake Bay dogs what ever was." The old fellow believes it as firmly as he believes in Judgment Day, and so do the other darkies and the oyster fisher men and such "pore white trash."

In the billiard-room of the Baltimore clubs they tell historical romance about the dog. The gay cavaliers who settled Lord Baltimore's Maryland colony were gentlemen adventurers—sportsmen who brought otter hounds and spaniels with them to the New World. Finding neither breed adapted to the sport of the country, they cross-bred them. From these matings some would trace the origin of the Chesapeake Bay dog.

The generally accepted and well-authenticated story is romantic enough, and even it is told in two versions. Likely both are true. One version says that the Baltimore brig *Canton*, homeward bound in the fall of 1805, fell in with a sinking British ship from Newfoundland. The crew were rescued, and the captain saved two puppies of the Newfoundland breed, a dog and a bitch, which he later gave to his saviors. The dog, a dingy red in color, became the property of John Mercer, of West River, and was given by him to Governor Lloyd, who took him to his plantation on the Eastern Shore. Dr. James Stewart, of Sparrow's Point, near the head of the Bay, got the bitch. The Chesapeake breed is reported to have sprung from these two.

CAPT. J. G. MORRIS, A VETERAN DOG BREEDER

The second version, vouched for by General Ferdinand Latrobe, is that a vessel from Newfoundland ran ashore on the estate of George Law, on the Eastern Shore. In return for his kindness and help, the captain presented Mr. Law with a pair of Newfoundland puppies. These, crossed with the natives' hounds and spaniels, produced the Chesapeake.

Whatever their exact origin, the breed was developed on the Eastern Shore, and thoroughbreds trace their pedigrees back to Maryland kennels. The breed owed much to several Chesapeake shooting clubs, notably the Carroll Island Club, which for generations bred and trained retrievers, and also to some gentlemen of Baltimore who maintained private kennels. Among these were Charles E. Tilghman, George Law Harrison, James Swan Frick, who owned a good dog called Dick, and Joshua F. Wilson, whose best dog was Boatswain.

J. D. Mallory, of Baltimore, was the originator of a famous strain. The founder was a dog called Monday, who, bred to Lottie, produced Oak and Mary, the latter winner at the Baltimore dog show in 1889 and at New York in 1890. Oak, bred to his sister Mary, got Flow, another prize winner. Mr. Mallory also bred Colonel (by Nip ex Polly), one of the first dogs to go to the far West, where he became the property of Ellsworth Daggett, of Salt Lake City.

Two other Maryland kennels were fountain-heads of the breed. Jay F. Tower, of Perrymans, developed a strain that produced Romney, Bush, and Pat Sheedy, three illustrious sires, and Bess II, a famous dam. Edward Lynch's strain supplied stock to many breeders. His Duck II and Magnolia went to the Middle West, and his Laddie, the first blue blood to go to the Coast, went to Los Angeles.

In the scanty show records of the breed —Chesapeakes have never been bench favorites—Dr. Robert Milbank, of New York, was long prominent. Prince and Echo he got from Edward Lynch and Bush from Jay Tower, while Lady he got from the West. These were all famous winners. He also did considerable breeding, and I believe I am right in saying that he bred the celebrated Pride. Down East, W. S. Bigelow, in Boston, led with Bigelow's Rose and Otter Girl. He also owned Tuckernuck Prince, purchased from William Simpson, of Baltimore, and Marengo II, son of Marengo, founder of the Morris strain in Easton, Md. One of Mr. Bigelow's best home-breds was Tuckernuck Favorite, a daughter of his Rose. The Oak Grove Kennels, his neighbors and rivals, were always more prominent as exhibitors than as breeders. Among their winners were Curley, Deacon, Biddy F, and Daisy—a strong team.

The star of the breed has always held a westward course. Before the Maryland shooting had begun to decline, the dogs were already famous on the Middle West ducking grounds, where they added to their laurels by their work on brant and geese.

George W. Kierstead, of Laporte, Ind., was a pioneer breeder, and blood from his kennels did much to build up the famous strain of Dr. H. Horace Smith, of Malvern, Iowa, and later of Superior, Wis. From Mr. Kierstead Dr. Smith got Barnum II, Spray, and Maryland. In these three the Doctor was but reinforcing his own strain, which was principally from his great dog Barnum. This dog was the most important sire in the early history of the breed beyond the Alleghany Mountains. He was bred by Mr. Mallory in Baltimore, produced by that great breeder's favorite cross of full brother and sister. His sire and dam were Monday and Maryland, both by Sunday ex Mollie. This strongly inbred dog proved to be very prepotent. He sired for Dr. Smith the important dogs Birdo, Barry, Barnum II, Barnum, Jr., and Chess P, and the famous bitches Gympsie, first at Chicago, 1890; and Teal and Kit, great brood matrons. From Dr. Smith's kennels the get of Barnum were scattered all over the West. J. W. Miller, White Bear, Minn., purchased his son Modoc; H. S. Dowe, St. Paul, got Zip; John M. Stewart, of Butte, the bitch Belle of Butte; A. S. Trude, Chicago, Duke T; C. E. Heald, Riverside, Tex., Chess III; Green Ellery, Gladstone, Miss., Blue Wing, and Dr. Milbank, the show bitch Lady, mentioned before.

Another famous stud dog owned by Dr. Smith was Gowrie II, purchased from

George E. Poyneer, of Williamsburgh, Iowa, another early Western breeder. Mr. Poyneer brought the bitch Magnolia from the Lynch kennels in Maryland, and later sold her to Frank Conley, Deer Lodge, Mont., where she was the nucleus of the first important kennel in the Northwest. Mr. Conley had a fine stud dog in Mose, and later in Doc, the last the sire of Diver. Other good Chesapeakes in the Conley strain were Baby, who went to Wyoming, Sport, and Rex.

A kennel, largely of Barnum blood, was gotten together in Chicago by H. R. Butler with Missouri Belle, by Barnum II, and Mollie B, by Chess P. From Mollie, by his dog Neptune, Mr. Butler bred a nailing dog in Sport. The Osceola Kennels, Osceola Mills, Wis., were prominent in the Western shows during the early nineties. In their string were Dick, Miss Fortune, Traitress, and Osceola Miss. Two of their dogs made their mark—Osceola Boatswain, owned by J. H. Burton, Minneapolis, and Osceola Don Pedro, the property of Dr. F. H. Stewart, Ada, Minn. A little later, A. M. Coughlin, of Toledo, collected a few fine show specimens, headed by Gammon Gata and Clairvine, the winning bitch at the St. Louis Exposition.

It would require an entire issue of FIELD AND STREAM to mention all the good dogs and all the sincere breeders who have had a part in the development of the breed; but the above are the principal strains to which present-day Chesapeakes trace back.

Since these foundations were laid, twenty-five years ago, the breed has continued to move West. To-day the Pacific Northwest is the center of Chesapeake interest. In Seattle such men as G. G. Nevins, M. C. Smith, F. O. Erlich, and J. W. Rumsey, Jr., keep interest in the breed very much alive. William Porter, of Raymond, Wash.; C. V. Garrison, of Kent, Wash., and W. J. Becker, of Everett, Wash., are other leaders in this section of the country.

Dr. W. D. Jones, Devil's Lake, N. D., is breeding some good dogs sired by his dog Frerg's Bingo. He owns two valuable matrons in Brownie Girl and Juda. C. L. Wallace, of Whitefish, has some of Dr. Jones' stock in his possession. Another important breeding center is the kennel of F. J. Thompson, Prophetstown, Ill. Mr. Thompson owns Tony T, and in his kennels he bred Delaware, sire of Reed Song. Delaware is the property of L. D. Fay, Loyalton, Calif. Among his other Chesapeakes are Lena Lake, Bessie I, and Spoon Bill Duck.

Coming East, up in New England, at Martha's Vineyard, T. G. Strater owns Max II and Girlie, and down in Virginia John Sloan, of Lee Hall, has collected a select kennel, including Bridget, by Bob Ingersoll ex Lady Jane, whom he brought from Utah, where she was bred by Dr. Otto Nielson; Virginia, purchased from the Radue strain in Milwaukee; and the stud dog Patsy, by Hunter Boy ex Miss Mermaid, bred by W. E. Clarke, Cheyenne, Wyo.

Down on the Eastern Shore of Maryland there is still much good stock scattered among the old land-holding families, but the breaking up last year of the Morris kennels by the removal of Captain Morris from Easton to New Jersey has been a distinct loss. Harry Rieman, Jr., at Easton, owns Ben Doc, Mink II, Manley's Queen, Beaver Girl and others, while his neighbor, James Sutton, has Beaver III as his stud dog and a capital bitch in Sutton's Belle. Local pride will always keep the breed pure in the Eastern Shore country, but general interest in the dog as a retriever has waned with the failing supply of ducks.

This is the secret of the Chesapeake's lack of general popularity. He is first and last a ducking dog, and, unless there are lots of ducks, he is a good dog without a job. Contrariwise, where there are lots of ducks, he is a mighty useful sporting aide.

Although by instinct a water retriever, it is a mistake to think a Chesapeake will not need training. All puppies are not so brilliant as Dixie, but any well-bred youngster will be an apt pupil. He will be cool and collected in the field, very business-like in his work, but possibly a little hard-headed. Therefore, it is well to take him young. Teach him to retrieve to hand by throwing sticks, first on land, later into the water. "To hand" is impor-

CHESAPEAKES AT PLAY; NATURAL WATER-LOVERS

tant, or he may get into the provoking habit of leaving his game at the water's edge. If, however, he is taught to deliver right into his master's hand, he will soon catch the trick of piling his game beside the blind. One season I shot with a dog, a lusty, light-colored chap owned by a Baltimore friend, with whom neatness was a perfect mania. He would stack his ducks up, laying them always on their backs and nosing their heads around under their right side, for all the world like a shopkeeper making a display for market.

After the pup has learned to retrieve sticks, graduate him to a turkey wing or an old feather duster. There is little danger of his being hard-mouthed; but, if he should be, the ball of yarn wound lightly round pins, such as is used in breaking shooting dogs, will quickly effect a cure of this habit. Obedience to the commands "Charge" and "Fetch," as taught any bird dog, are necessary to complete his education.

The Chesapeake bay dog is a specialist. First, last, and all the time he is a wild fowl retriever. While his nose serves him in good stead hunting out dead and wounded birds in high marsh grass, still it apparently fails to catch the scent of living birds on dry land. He has the retrieving instinct highly developed, but he is almost without the hunting instinct. I have never seen one that displayed any real bird sense. Down on the Eastern Shore they are kept solely as retrievers.

The sportsman who buys a Chesapeake for a general purpose sporting dog will be disappointed. He is a capital watch dog and the ideal American water retriever, but he is no canine Jack-of-all-trades. This undoubtedly is a big factor in his lack of general popularity, for unless one can afford to keep several dogs, or is in a country where wild fowl shooting is the principal, the only sport, a Chesapeake will be "just another dog."

FOR DOG LOVERS—AND DOG BREEDERS—"PUPPIES," BY WARREN H. MILLER, AUTHOR OF "AIREDALE, SETTER AND HOUND"; COMING IN OUR MAY ISSUE

KINGFISHING IN FLORIDA WATERS

By CLAYTON A. PENHALE

WHILE the waters of the Northern oceans are full of large fish, the greatest variety of both large and small abound in the tropic and semi-tropical seas. Among ocean denizens, the warmer the water the more vigorous is the life therein, and it is because of this that the fisherman who devotes his energies to big game fish finds all he needs in the warm stream which flows northward from the Mexican Gulf close past the coral reefs of Florida and the Bahamas. Food fish of almost endless variety, both of the migratory tribes and those loving certain localities, find the coral banks beneath the clear, tepid water excellent feeding ground.

The mackerel tribe is essentially the one with the widest range in regard to both fitness for food and "gameness," vitality of the order which knows no surrender, and those of the medium size of this immense family offer the greatest inducements to both sportsmen and market fishermen. All of this family are good food fish, from the huge tuna, or horse mackerel—which, by the way, is seldom found on the South Atlantic coast—down to the small Spanish, which is, or has for years been, considered one of the best food fishes of the sea. Next in order over the Spanish comes the King, which ranges from two to twenty-five pounds, and this fish has within the last few years become more and more popular until in many localities it has taken first place both as a fighter and food fish. The season for king fishing begins about the first of January along the Florida reef, although the fishing companies usually start their men out for them long before this date, and the season lasts for about three months.

Ten years ago this fish could not be sold at many points along the Atlantic coast and was thrown overboard by the ton from the boats of sportsmen and others who "killed" them for the fight they made. As the season closed this year every fish-house on the line of the railroad was crying for more kingfish, and the East Coast Railroad carried them North by carload. Fishermen would fish for nothing else and many men would earn from twenty to forty dollars per day, fishing two in a boat from daylight in the morning until three in the afternoon, when they would run for home to pack them in ice and catch the evening train with the fare. Negroes who lived like savages on almost nothing all summer, smoked twenty-five-cent cigars and spent their money freely, reveling in the sudden change of fortune, or rather popular prejudice, which turned from against to in favor of the despised king.

To the Northern tourist the kingfish offers the most exciting and at the same time most exhilarating sport. The banks which become his feeding ground during the winter months are close to the shore and easy of access. Particular spots on the edge of the reef, in from six to ten fathoms, where he finds his food, simply swarm with countless thousands of these voracious mackerel, and when there is a shift of wind to the northward, bringing with it a chill to the air, he becomes a mighty and relentless hunter for the smaller fry. These patches on the edge of the bank along which flows the Gulf Stream are small, sometimes not over a mile in length and breadth, and it is these the fisherman hunts for with untiring diligence. When found and the fish show a disposition to strike, the king can be counted upon to be on hand during every day of the season. Sometimes, as in the vicinity of Miami, the bank is but eight or ten miles from town, and the small craft swarm out each morning, running

THE HUSKY TYPE OF LAUNCH NEEDED FOR GULF FISHING

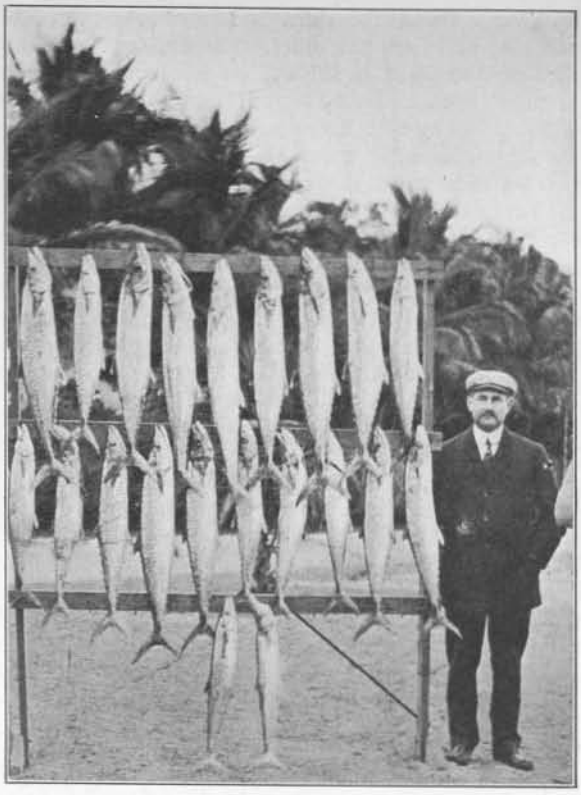
through the cuts between the cays and getting to work by the time the sun is above the horizon. A good breeze ruffles the water and makes the work wet, but the high, rolling sea of the Stream is easy and seldom gets so sharp as to make it very dangerous for a twenty-foot launch. When it does, the bank is quickly deserted and a string of small craft fight their way back, the different companies having large receiving boats out to help in the cripples and take in the fare. It is an unwritten law of the reef that a boat in distress, even when belonging to a rival company, must be towed in out of danger and without pay.

The sportsman who kills kingfish for sport alone need not start to sea so early. To arrive upon the bank about ten in the morning is time enough.

A heavy rod and line a trifle smaller than that used for tarpon is the best, and the bait is a question of taste and habit. Some days a kingfish will strike solely upon a piece of fish on a metal squid, and others he will prefer a Wilson spoon to all other attractions. Live bait is never used, although the writer has had good luck with small mullet hooked upon a short metal squid, such as are furnished by the fishing companies to their men. The king strikes generally for the head of the flying squid and it is best to have it short and heavy, with the hook well forward. All kinds of bait must be hung upon steel piano wire by at least three feet, or the big fellow will hit the line and go through it like a cobweb. Two swivels, one at the squid and one at the end of the wire, are best and will keep the line from fouling from the twist it gets by being towed through the sea at the rate of five knots or more an hour. There has been much discussion among even the best fishermen as to the proper rate of speed for trolling for the heavy fish, and while all agree that it should be greater than for the smaller mackerel, many contend that too great speed is harmful, as it prevents the fish from getting a good hold on the hook and tears out the mouth when the hold is fairly good. On the other hand, the boats that keep up the speed limit to about as high as they can go have always made the best scores, and no fisherman burns gasolene for nothing. On an average, a hundred and fifty small launches, ranging from twenty to forty feet, will be upon the ground daily, and often nearly as many small sloops or yawls. Then it is sometimes difficult to navigate through the press where the fish are striking, so thickly do the boats congregate. To cross a line is unpardonable, but it is often done during the excitement of the hours when the fish rise quickly and everyone is bent upon the rush of fins and swish of the lines. There is always one compensation, however, to the man who has his wake crossed by a negligent navigator, and that is if his squid strikes the keel of the of-

fender and parts his line there is nearly always enough of that line left trailing to wind a good, tight wind about the shaft of the offender's propeller, putting him out of business until he cuts it out. In a heavy sea this is not easy and often a careless negro or white man will pay the penalty of losing the entire day's catch.

There are always times when the fish sink and refuse to rise to any kind of lure. Even the most expensive spoons are refused. To get them under those conditions requires practice in the gentle art of jigging, which takes both skill and unlimited patience and muscle. To jig for kingfish, the fisherman lets his squid, baited with a thin strip of kingfish belly or the soft under part of almost any kind of fish, sink to the bottom in about ten fathoms of water. Then, with a quick, jerking motion, he raises the rod, swinging the jerk with a free hand and quickly taking the slack. The fish near the bottom will often jump for the moving bait and strike savagely. The boat during this time is always motionless upon the sea, save for the swell and drift from the wind. A good jigger will haul fish fast when he understands this method, but as it is not a sportsmanlike way to catch fish, no one save the professional resorts to it. The pleasure fisherman runs slowly about over the bank until the sinking school rises again, or he goes home with peevish thoughts upon fishing.



A ONE-HOUR CATCH OF KINGFISH FOR TWO RODS

As the land is about five miles distant, or often less, the current is not strong and often during calm weather boats will float for hours without changing their bearings to any great extent.

When the fish first strike, in the early morning, they do so after the sun has begun to lighten the eastern horizon. A boat under full power, with two lines out about a hundred and fifty feet astern, the squid scintillating at the end of the almost invisible steel wire, will cross the bank where a rising school are seeking their morning food. The fish nearest the flying hook will strike savagely, crossing at an oblique angle and grabbing at the head of the supposed prey to kill it. When the hook strikes into the mouth or throat, the king will usually rush for the surface and fling himself high in the air to get it clear, and the sudden rush and splash astern is warning to the rest of the fleet that the sport will begin. Usually he will run frantically upon the line and shake it furiously to spit out the agonizing barb. Then as the fisherman reels in line he will suddenly become aware of the boat and swerve off at right angles, putting the strain of the weight of his whole body and strength upon the line. Finding he cannot get away at the first rush, he will suddenly cross and dash ahead, running ahead of the launch, if possible, to gain way. By holding him back he will then dive vertically and the swishing cut of the line is music to the ears of the true sportsman as

he swings under the stern and tries first one side and then the other. He can see through the clear liquid and he is afraid of the shadow of the boat above him. He will try his best to keep under her, keep out of sight, and resists to the last the pull which brings him slowly but surely to the surface. He must not strike the boat, for if he does so he will nearly always do it hard enough to tear out the hook, no matter how badly it cuts his throat. He is thoroughly mad now and is fighting for his life. The trained fisherman steers him alongside and cautiously holds him away from the boat until the length of piano wire warns him that it is time to swing him up. Up he comes, swinging far out and then inboard, touching nothing until he strikes the fishbox, where he pounds and thrashes in a wild flurry. The fish club is at hand and a series of sharp raps upon the head reduces him to a state of quietness, so that the hook can be removed, and he is left lying straight fore and aft for the rest to fall on top of him.

In the meantime the other line has been struck and the partner who has been steering seizes it and reels steadily, keeping clear. Then the watching fleet fall in the wake and the fishing is on until the school sinks. With the ruffling of the surface gone, one may gaze down into the blue void below and see the bottom in six fathoms. Kingfish will be seen in great numbers, and also the forms of other denizens of the bank, among which the shark in all varieties is ever present. Sharks are the pest of the fisherman, for, although they will be seen calmly swimming side by side with kingfish three or even four feet in length, apparently taking not the slightest notice of them, when a fish strikes and is in trouble, there is no one so quick to realize it as the scavenger. Like lightning he will go for the hooked fish and as he is hauled close to the boat will nip him in two neatly, leaving often nothing but a bloody head to be hauled aboard. Shovelnose, hammerhead, and the bullheaded maneater abound and all of them love kingfish. Cutting the fish in two saves the line, but then no fisherman likes to lose his fish and many take pains to kill the pests with guns. harpoons or others weapons. Often the thief can be enticed to the surface by dangling a kingfish over the stern of a motionless launch, then he usually gets the fish along with lead or iron enough to make him keep away. Sometimes the huge creature is hauled aboard, but more often he is killed and is quickly cut adrift to sink.

During the past season only two lives were lost out of more than two hundred engaged on the northern bank near Miami. One of these accidents was due to the ugly sea which breaks in the Government cut just north of Norris cut, between Virginia Cay and Key Biscayne. With nearly two hundred fish in a twenty-foot launch of four horse power, one, Jones, waited too long and trailed in behind the mass of the fleet late in the evening. The wind, which had been fresh all day, rose to half a gale and the rolling seas of the Stream began to break on the top, making it dangerous to remain out longer. He ran safely until he reached the jetty and was just making the turn around the buoy, running almost dead before the sea, when a huge roller caught him and sent him in on the forward downward slope. He was seen to run like down a slide with amazing rapidity and would have gone in on the sea, but it swung him slightly and then instantly broke over his stern, rolling his launch over and over in the smother. In a few moments, both launch and man disappeared forever, with the current setting out against the wind. It was a bad accident, but one that is usually looked out for.

The other accident was caused by drink and heavy weather and the man lost his life by neglecting his engine, being unable to nurse it along when it needed most care.

There have been, of course, many narrow escapes. A remarkable one was of two men blown off into the Stream and having their engine disabled. With a five-knot current setting northward, a boat goes fast and a few hours puts many miles between the disabled ones and harbor.

These two faced a heavy westerly wind one day when it was blowing so hard no other boats went out beyond the six fathom bank. They caught a few

fish when their pump broke down. In spite of the accident they drove the engine hoping to get in before it grew too hot. They failed to reach soundings where they could anchor and were forced to give up running the engine. Then they set to work to repair the pump, drifting along with the current and going fast to the eastward. Darkness came on before they accomplished much. They worked all night without proper tools and were unable to finish repairs when day dawned showing them a strong westerly sea that grew heavier as the morning wore on. They were forced to stop work and devote all their energies to keeping afloat. The land was not in sight and they made a drag and bailed and rested by turns. By the second night they managed to fix the pump enough to start the engine and they started her off against the heavy sea, making hardly more than a mile an hour with the boat flinging herself wildly into the smother. The next day they were still in the Stream and the gasolene was running short. They decided as they could not possibly get in on it to save the remaining few gallons for an emergency. They ate raw kingfish and drank sparingly of their water until the fifth day when the wind swung suddenly out of the southeast and blew strongly. They rigged a bit of sail out of a piece of canvas and drove before it. Two days later they raised the land and started the engine to get in at last. They were astonished to find themselves running into Brunswick, Ga., more than four hundred miles from where they had started. As they had had nothing to eat but raw fish and nothing but a two-gallon jug of water, they were nearly dead as they came to the dock.

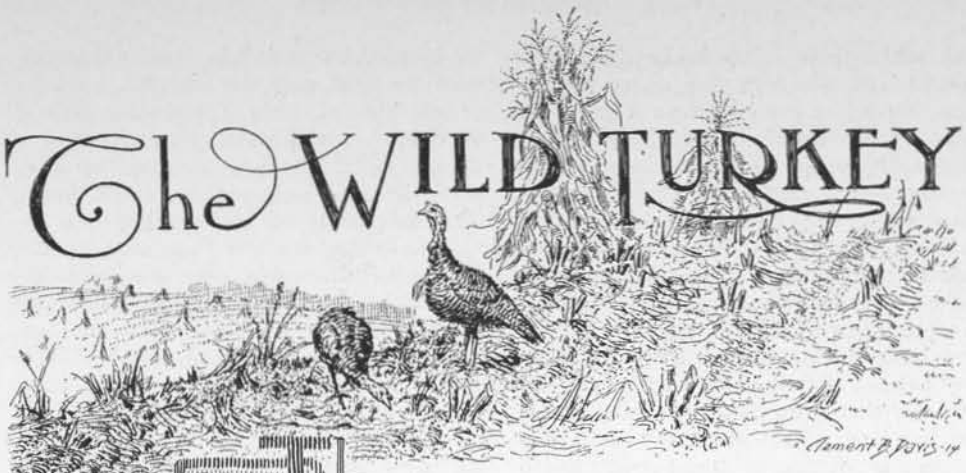
By far the most dangerous part of kingfishing is from possible poisoning due to the slime of the fish getting into bites, or cuts. The king has a long pointed jaw and small razor-like teeth which seem to have but to touch to cut. If he gets into the boat he will almost certainly bite, or stab with his fins. To push or kick him out of the way with the boot will generally ruin the boot, for he will in some way manage to cut it. A fish is always swung into the kingfish box where he is at once struck over the head with the fish club, to stun, or kill him. If this is not accomplished at once he will make frantic and not always futile attempts to snap, or bite, when he is disengaged from the hook. The fisherman will always get cut, or spined, sooner or later. The skin of this fish is the thin mackeral skin with its tiny scales, but with a slime that is at times peculiarly poisonous to most men if it reaches a cut or abrasion. Clean as the king is he can slime up a boat amazingly in his dying struggles, and few escape sore hands, or swollen fingers, during the height of the season when it is necessary to handle him often and rapidly. Sometimes these sores are so venomous that the flesh sloughs away to the naked bone.

When a kingfish grows over the thirty pound class he is a "cero," a species of king which gives joy to the sportsman, but not the fisherman, who must, by the rules of the companies, sell him at so much a head and not by the pound. These "cero" are not so plentiful as the smaller king and they are not always to be found in the same localities in different seasons. Hurricanes, shifting of shoals, and other causes, probably are the reason for this and on account of it the "cero" is seldom sought save by the tourist sportsman.

In appearance the young king is so like the Spanish mackerel that it is impossible to tell them apart, save for the spots on the latter fish. A two pound mackeral and a two pound king are in other respects alike. But the king is never caught in nets like the mackerel. He never comes into the shoal water of the inner reef of cays where the mackerel swarm at certain seasons and can be caught either with line or net.

At the first protracted period of warm weather, the king vanishes as quickly as he comes. Where he goes is not known, but the fleet of fishing craft will suddenly find a vacant sea over the bank which has been swarming with life. Then there is a quick overhauling of boats and the kingfishing is over until the following year.

The WILD TURKEY



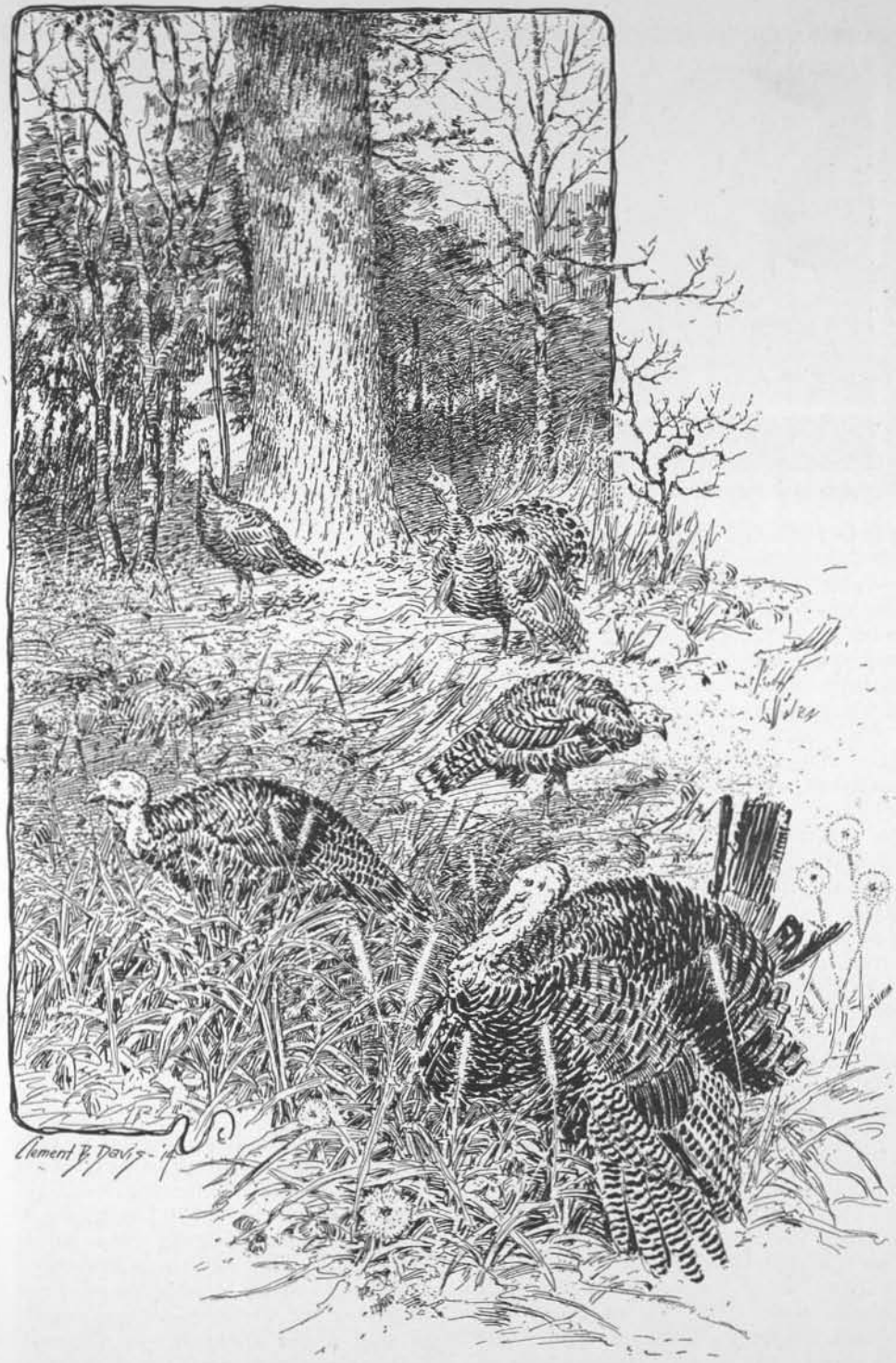
The restoration and propagation of wild turkeys has become of great economic importance, because our domestic turkeys are decimated by a disease which has made it impossible to rear them on vast areas where turkey breeding was an important industry. Fortunately the wild birds, which are comparatively free from diseases, can be introduced and quickly made abundant in many places throughout their former range, from southern Maine and Canada to Florida, and westward to Wisconsin and Arizona. The breeding range, no doubt, can be much extended, since the wild turkeys have been introduced successfully in California and other Western States.

Our ornithologists recognize four species of wild turkeys: the common wild turkeys of the Eastern States; the Florida turkey, which is somewhat smaller and darker than the Eastern bird; the Elliot's Rio Grande turkey, a handsome species found in the lowlands of southern Texas and eastern Mexico; and the Mexican wild turkey (from which came all our domestic turkeys), which is distinguished by the light rump with broad white borders to the feathers. But to the sportsman all these forms are alike good game birds when they go whirring through the woods like big ruffed grouse, and all are regarded as far better on the table than the best domestic birds.

Wild turkeys inhabit the forest, but wander out into fields in their search for food, and they can be successfully introduced in farming regions, where the woodlands are not large, provided a number of farms be included in one preserve. The so-called "more game" movement in America has resulted in many experiments with wild turkeys. They have been bred in a wild state on the great quail preserves in North Carolina, where I have seen them nesting quite near farm buildings. Here they are protected from their natural enemies, and from cats and trespassing gunners, by skilled game-keepers. In the absence of such care they never could have been restored and in the absence of the keepers, here as elsewhere, they soon would become extinct.

The late Professor Blanton, of Richmond, Virginia, was the first to breed wild turkeys commercially in America, and in an interesting account of wild-turkey breeding, written for *The Game Breeder's Magazine,* he said he hatched some young wild turkeys in a hotel room, using an electric light for his incubator. The Woodmont Rod and Gun Club, of Maryland, has reared large numbers of these birds for sport and had about a thousand turkeys last season. This number easily

Editor's Note.—This is the third article of the series "Game Farming for Pleasure and Profit," the material for which was loaned us by the Hercules Powder Co. Every sportsman should get posted on this subject and learn how easy it is to increase his available game supply. The series will cover, in addition to Quail and Grouse, which appeared in our last issues, Turkey, Pheasant, Wild Ducks, Wild Game foods and the destruction of vermin.



OUR GRANDEST GAME BIRD, THE WILD TURKEY

Hen Foster-mother with Young Wild Turkeys

can be increased. Mr. Bridges, a member of the club, has several hundred wild turkeys on his farm near Baltimore. There are many commercial game farmers and some importers who sell live wild turkeys and their eggs. These have sold wild turkeys which have gone to breeders in the South and as far West as California.

The Game Breeders' Association on Long Island, N. Y., made some simple experiments with wild turkeys purchased in Virginia. One hen which nested wild in the woods laid ten eggs, which were lifted by a game-keeper and hatched under a barnyard fowl. The turkey persisted in laying and, although her nest was robbed a second time, she brought off a brood of seven or eight birds. Twenty-six eggs were hatched from this bird, which indicates that nature's records easily are beaten when eggs are stolen and young birds are hand-reared.

It is important to keep down the natural enemies of turkeys and to wire the ground enemies out from the rearing fields. Do not make the birds too tame. Turkeys are easily domesticated and when too tame for sport they will probably suffer from the diseases which destroy our tame birds. The laws should not compel the breeding of game birds "in captivity," as some statutes read. The food of young wild turkeys is largely grasshoppers; later they eat berries, and in the Autumn and Winter acorns and mast of various kinds are the principal food. Acorns are a staple and when plentiful they will keep the turkeys at home, and when they fail the turkeys will migrate unless they be properly fed with grain, nuts or other foods. They are very fond of pecans and in the South they eat many of these nuts. Woodlands for food and cover and grassy openings bordering fields for grasshoppers make ideal ground for wild-turkey preserving.

Wild turkeys are now quoted from $15 to $20 for gobblers; $20 to $25 for hens. Turkeys, like other pheasants, are polygamous: one gobbler and from three to six hens make the proper groups for breeding. The eggs sell readily at $10 to $12 per dozen. These prices undoubtedly will fall somewhat in a few years; and the prices for turkeys in the markets soon should be lower than the price of domestic turkeys now is, when some big turkey "shoots" are started in the West and South. Turkeys can be reared cheaply on areas where their natural foods are abundant and sport will pay a good part of the cost of production. Wild turkeys can be successfully introduced, no doubt, on the wild-fowl preserves about the Great Lakes and in Canada, where mast-bearing woods adjoin the marshes. They have been introduced successfully and are breeding on the State refuges in the Pennsylvania mountains, and with proper attention soon they can be made abundant in many places throughout their former range.

The PHEASANTS

Although pheasants were introduced in England centuries ago (the date is uncertain) and their propagation has been carried on extensively by commercial game farms as well as by sportsmen, and although there was not a pheasant in America until the year 1881, when a few birds were sent from China to Oregon by Judge Denny, I firmly believe that in five or ten years, at most, there will be more pheasants in the United States than there are in any country in the world.

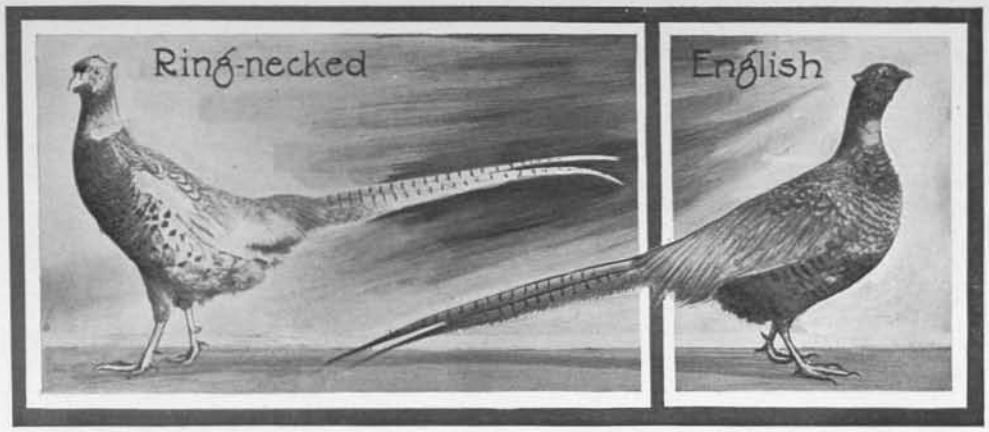
Partridges and the migratory quail of Europe have also been introduced in the United States and Canada in considerable numbers, but the last-named vanished absolutely and experiments with this bird have been abandoned. A few capercailzie, black-cock and other birds have been imported, but only in small numbers, and the experiments with these birds are unimportant.

A foolish idea has prevailed that the foreign birds are better than our own, because of their abundance abroad, but the truth of the matter is, our grouse, partridges or quails and turkeys are by far the best game birds in the world, and if properly handled they can be kept as abundant as the foreign birds are.

The pheasants which have been introduced have multiplied rapidly and it has been proven that they will thrive almost anywhere in the United States and in Canada, provided they be properly protected. They disappeared as "State" birds from Kansas, Ohio and other States because they cannot stand our vermin and some illegal shooting, even when shooting is prohibited.

We now have several thousand pheasant breeders, some of whom produce thousands of pheasants every year for sport. Many State game departments have game farms, where thousands of pheasants are reared every season, and thousands of birds are imported annually for propagation. The industry of pheasant breeding is interesting and profitable, and no good reason can be assigned why the pheasant clubs should not have pheasant shooting, just as trap-shooting clubs have clay-bird shooting. Many now prefer to shoot something which is good to eat, and there can be no doubt the pheasant is one of the most excellent food birds in the world.

It is absurd to say that pheasants purchased or bred by syndicates of sportsmen or by commercial game breeders belong to the State, and, under the game breeders' laws which are popular in many States, the private ownership of pheasants is recognized so long as the birds do not wander from the grounds where they are propagated by private industry. There are several hundred small breeders in Massachusetts, and in a recent report



issued by the Commissioners of Fisheries and Game of that State, we are told that the abundance of pheasants must depend on the many small breeders, because there are more people who can breed a few pheasants than there are who can breed thousands. In several States complaints have been made to the Agricultural Departments by farmers about the damage done by State pheasants, and in answer to an inquiry addressed by the Agricultural Department of Massachusetts, asking that if the State owned the pheasants would it remove them from the farms where they were found to be injurious, the Game Department replied that the pheasants were more beneficial than harmful and that it would not be long before they were regarded as a profitable farm crop.

In New York a county grange is reported to have asked the State Game Department to keep its pheasants out of the county. It is evident that the farmers own most of the shooting grounds and that the birds can be produced to the best advantage by those who deal fairly with the landowners, as many sportsmen do. The State birds, of course, can be liberated on public lands and wild lands where the shooting is open to the public. The "overflow" from game farms and clubs adds materially to the public shooting. Many pheasants were shot for miles about the farms of the Clove Valley Club, the Game Breeders' Association, and other game-breeding clubs, by persons who had never shot a pheasant until the clubs began liberating them.

The pheasant first introduced into England, which is now often called the English pheasant, is the dark-necked species, *Colchicus,* which has no white ring or collar about the neck. The ring-necked pheasant, *Torquatus,* and other species, were introduced in England during the present century and the birds have interbred to such an extent that it is said to be unusual to see a pure-bred dark-necked pheasant in the English covers.

The birds first introduced into the United States were the ring-necks, and these are more common everywhere than the dark-necked birds are. In Austria and Hungary many dark-necked birds are bred in a wild state and many breeders believe that this species is less likely to stray, and on this account it is the better bird for wild-breeding operations. I have reared many birds of both species and they seem to be equally good for hand-rearing operations. Both are good marks, but they do not lie to the dogs as well as many species of our indigenous game birds do, excepting on certain grounds where the running is not good by reason of natural obstructions, such as occur in tufted marsh fields and other places where there are barriers to speeding.

The Mongolian pheasant, a large species having the white collar, and the Prince of Wales pheasant, and a few others, are considered desirable by breeders, but the common ring-necked and dark-necked birds will, no doubt, become the most plentiful here as elsewhere.

The pheasants persist in laying when

their eggs are stolen, and by hatching the eggs under barnyard fowls it is an easy matter to have a big lot of pheasants on suitable ground. The birds thrive better on valley farms, where there are good fields of grain and grass, than they do in the mountains, where the young birds often are decimated by cold rains and where the older birds are more given to straying to seek more agreeable surroundings. The dealers in pheasant foods issue small booklets telling how to rear the birds, and while skilled game-keepers no doubt produce the most birds, many small breeders who understand poultry have been very successful. I recently have heard from some small breeders who have been very successful. One says he sold three thousand eggs this year and had orders for several thousand more which he could not fill. The eggs sell for $25 and $30 per hundred. The live birds sell for from $5 to $7 per pair. Many birds were sold as food last season in the New York markets for $2.50 each.

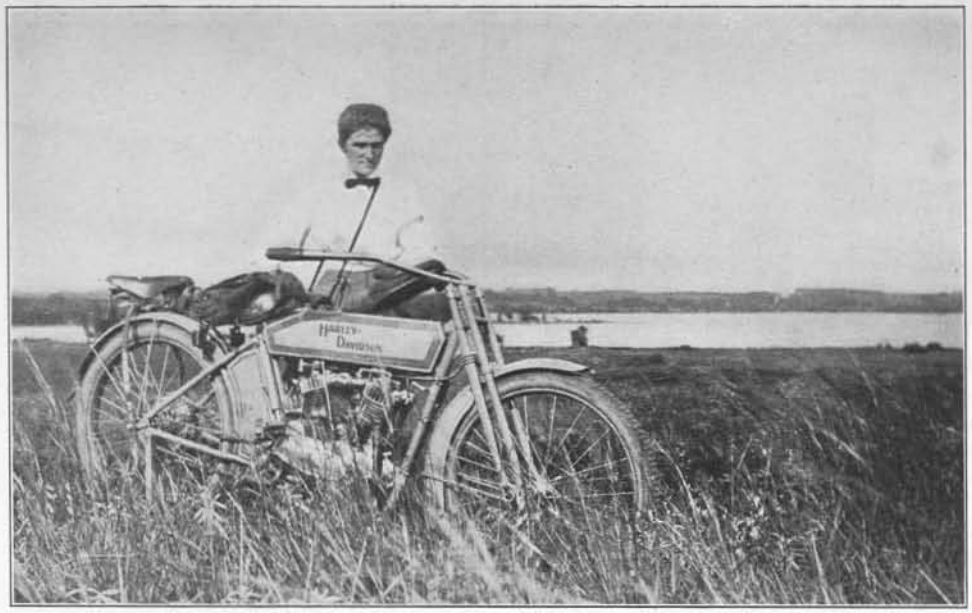
The methods of hand-rearing pheasants are very similar to the methods of poultry rearers. Some breeders confine the stock birds in large pens which contain a hundred or more hens and about twenty cock birds. Little brush covers are provided and the eggs are gathered daily and hatched under barnyard hens. Other breeders use many small pens, each containing five or six hens and one cock.

When the young pheasants are one day old they are taken with their foster mothers to a rearing field, where the hens are confined in coops and the chicks are permitted to run out in little yards inclosed by boards or wire until they are a week or ten days old, when the fenders are removed and the little birds are permitted to have a wider range and to chase grasshoppers and other insects in the field, which is inclosed with chicken wire to keep out vermin. Traps are placed on poles set in and about the field and the keeper shoots the hawks, crows and other vermin.

Some breeders have permitted the hens to run with the young birds in protected fields and woods, just as hens are permitted to move about with their chickens, and much success has resulted from this method, both at State game farms and on private preserves.

The incubator is often used until the eggs are nearly hatched, when they are removed and placed under ordinary barnyard hens or bantams, and later taken with the hens to the rearing field or permitted to run with the hens as above described. I had great success with some pheasants which I permitted to run in a cornfield, and my friend, Mr. Bigelow, reared a lot of pheasants in this way, letting the young birds run in asparagus and rye fields. The young birds are shut up in coops at night and liberated in the morning. For the first few weeks they are fed on specially prepared meals, which are supplied by dealers with instructions for their use. Hard-boiled eggs are chopped fine and mixed with the meal. Lettuce and other green foods should be supplied, also, and little pans of water should be placed in front of the coops.

I have had some good sport shooting pheasants over dogs, but in countries where they are abundant the shooting is far more difficult, because the birds are driven over the guns and they go high and fast when they are well handled.



TAKE PARTNER ALONG, TOO, ON REAR SEAT, WHEN YOU FISH THAT GOOD LAKE TEN MILES FROM THE NEAREST RAILROAD

THE MOTORCYCLE AS AN AID TO HUNTING AND FISHING

By GEORGE M. JOHNSON

OF course you know all about the motorcycle. Some day you're strolling peacefully along a rural lane, where the sunlight trickles down through the trees overhead, when the atmosphere is punctured by a noise which vividly suggests the approach of a crew of care-free cowpunchers, bent on shooting up the entire country. You get behind a convenient stone wall just in time to escape a roaring Juggernaut on two wheels, and as it disappears in a cloud of dust you indulge in a few vicious comments on all motorcyclists in general and this one in particular.

And you doubtless believe that you are really in a position to hand down an opinion on motorcycles. You're not, however. Your opinion, based on a prejudiced viewpoint, would be worth no more than the ideas some honest granger might entertain towards automobiles, after the old mare has run away and scrambled some fifty dozen eggs over a half-mile of macadam road.

You may have been unfavorably impressed by the speedy little two-wheeler because the riders to whom are due your ideas on the subject are not representative of motorcycledom as a whole. The auto driver who bowls over a harmless pedestrian and then rushes on without waiting to face the music does not represent the great body of autoists, any more than some crazy motorcycle rider, carried away by his mania for speed and noise, represents the army of those who can enjoy to the full the pleasures of this newest outdoor sport and yet not infringe on the rights of the dear public.

The best way to get acquainted with the motorcycle is to ride one. Then be prejudiced—if you can.

When I hear some poorly informed in-

FISHED THE CREAM OF A HALF-DOZEN STREAMS FOR THESE TROUT—WITH THE AID OF THE MOTORCYCLE

dividual declaiming against motorcycles and those who own them, I always say:

"You've ridden a motorcycle, of course, so that you know from personal experience that all these charges you make are true?"

"Ride one!" is the usual snort. "Ride one! No! You couldn't hire me to straddle one of the dirty things!"

Such a chap's mental caliber is in the .22 class—not high power, either. If the world had been developed by men of that ilk, it would now be the other side of the Dark Ages, and going backward so fast you couldn't see it for the smoke. But people are gradually waking up to the fact that there does exist an occasional person who can actually be a gentleman and a motorcycle rider at one and the same time!

One of the best things about the motorcycle is its vast convenience for getting about the country. Of course, the machines now on the market are reliable—as much so as automobiles—and a good motorcycle can go anywhere an auto can, and some places where it can't. The motorcycle is easy to ride, easy to manage, and easy to take care of; nor is it necessary that its owner be a mechanical engineer. The gas-engine principle is not difficult to grasp and anyone will pick up, almost unconsciously, the necessary information. When I bought my first machine I didn't know the difference between the magneto and the muffler, while the spark-plug was very much of a sealed book to me. The one thing concerning which no doubt existed was that I wanted a motorcycle, and wanted it badly.

Now, if there is one thing—aside from motorcycling—over which I am likely to wax enthusiastic, it is angling, and angling for trout in particular. Ever since old enough to understand the mysteries of extracting a fish-hook from the slack of my trousers, the pursuit of fontinalis has been my greatest joy. And when I saw that motorcycle, glistening with all its glory in the show window, my first thought was, "Isn't that the boss machine for fishing trips!" And thereupon I rose at the motorcycle as eagerly as ever trout rose at a plump grasshopper.

Trout fishing in the densely settled portions of New England is what you might call—well, precarious. Streams with trout in them are not everywhere, and only too many of the few decent ones are plastered with white notices which sternly warn the angler to keep his distance. Once in a while you'll happen upon a

BACK FROM THE HUNTING GROUNDS—DOG IN CRATE ON REAR CARRIER AND GAME OVER SIDE

really good stream which, by a strange miracle, is not posted. That was what I did one time. It was about twenty-five miles from home, and the transportation problem at once entered upon the scene. The railroad was a possibility, to be sure, but the earliest train did not get there before 10:40 A. M., and the home train came along about eight in the evening, the whole arrangement being decidedly inconvenient. But the motorcycle saved the day.

Everything worked out most beautifully. A pleasant ride of an hour or a trifle more would put me on the fishing grounds as early as I desired; I could fish until ready to stop, and then there was no waiting around for several hours until that jerkwater accommodation took a notion to come along. (By the way, *why* do they call them accommodation trains? Is it because they are never known to be accommodating?) I have gone through this program so many times that now it is almost a habit.

One season the fishing on my river promised to be especially good—good for southern New England, that is—owing to the fact that some time previous a few kindred spirits had been thoughtful enough to plant several thousands of baby trout along its impetuous course. It was therefore with considerable anticipation that I prepared for the first trip of the year.

The journey up was accomplished with no incident of note, and I left the motor near the remains of an antique mill, at the lower end of the stream, where the water poured itself over a ledge of rock for a clear fall of fifteen feet, forming a pool that would have made the eyes of honest old Izaak Walton glitter out of pure joy. I usually fish downstream in preference to up, and so, resisting all temptations to get busy, I tramped up the brook for at least four miles before venturing to make a cast. Flies were out of the question, as the stream was yet swollen by the spring freshets, and the water as chilly as the attitude of a man

whom you've just tried to touch for a ten-spot; therefore, I began operations with a plump garden hackle.

Results at first were disappointing. I fished down through some beautiful water, pools that in other years had always yielded something to my efforts, but this time only one misguided fingerling responded. He was carefully returned to the water uninjured. Presently I came to a wide and deep pool, dear to the memory of more than one fisherman who haunts this stream. The current swept the lure through a wide eddy at the lower end, and then there came a vicious bite—not one of those half-hearted nibbles that betrays the baby trout, but a solid yank that clearly meant business. A second later I struck sharply, while the little four-ounce split bamboo bent and quivered under the frantic rushes of a lusty ten-inch trout. And let me pause to remark that on most Connecticut waters a ten-inch trout is a regular bruiser.

Well, the aforesaid trout duly took up permanent quarters in my creel, and I moved on downstream very much satisfied with myself. That was only the beginning. The trout were there, and they were hungry. Who could ask more? As if that were not enough, I seemed to have the stream to myself, which was another cause for self-congratulation. One other fisherman only did I meet. At one time the trout suddenly and mysteriously stopped biting, and the reason was not in evidence until I rounded a bend, to see another angler knee-deep in the stream below me; I had been fishing directly in his tracks. Cautiously and silently I slipped off among the low-hanging branches of the evergreens, and made a wide circle about the unconscious angler, not striking the brook again until a safe distance beyond him. Hoggish? Perhaps it was, just a mite, but he was fishing more slowly than I was, and I left him room enough.

It is entirely unnecessary to give the details of that day's sport. If you are an angler, you appreciate that the capture of every trout is in itself an incident to the individual who makes the capture—an incident about which he may be more willing to dilate at length than are his friends willing to listen, and therefore I'll be merciful. Suffice it to say that when I finally concluded to stop, my creel contained exactly two dozen of the speckled laddies, with no truly small ones in the number. The motorcycle was then but a short distance away, ready to do its duty.

Does the foregoing brief narrative indicate forcefully the value of the motorcycle as an aid to trout fishing? I have made similar trips, times without number, visiting streams that were far from steam and trolley lines. The motorcycle even beats the automobile in one respect, for I have actually ridden my machine down a cowpath into the woods, leaving it against a tree beside the brook, waiting until its lord and master returned to ride it forth to civilized regions.

More than a few times have I gone puffing away to ponds, cozily hidden among the hills, after bass and pickerel; and I have even made evening trips after the despised though succulent bull head, following some gloomy wood-road, whose inky blackness was turned to momentary and unnatural day under the glare of my searchlight. In short—for me, at least—the motorcycle is now just as important a part of my angling equipment as my favorite fly rod.

And it is not in fishing trips only that the motorcycle makes good; many a rider has discovered how exceedingly convenient it is when the hunting season opens. As the few spots where game is to be found retreat year by year before the inexorable advance of progress, those of us who like to hunt find it increasingly difficult to get on the ground. That is where the motorcycle comes in. It is even possible to carry a hunting dog, by means of a padded box on the luggage carrier.

That is something of a bother, of course, but for many kinds of game a dog is unnecessary, and there the motorcycle rider has things his own way. I have heard of riders in the big-game country who have started out from town in the morning, to return at night with the body of a deer slung across one of the machines. My personal motorcycle hunting experience has been confined to such small game as squirrels, rabbits, upland birds, and the like. Quite often, before

ice comes in the fall, I have taken short, early morning trips to a small pond where one or two ducks are likely to drop in for the night, arriving home, sometimes with a pair of broadbills, in time to eat breakfast with the family. Such trips would be beyond the range of possibility were it not for my motorcycle.

And one morning I did myself proud by jumping a fat mallard drake as I pushed my canoe through the clumps of marsh grass in the shallow water at the head of the pond. It was the first mallard I had seen in ten years, since coming into New England from the West, and you may well believe that one big thrill of satisfaction played up and down my backbone as that drake crumpled in the air, under the convincing impact of No. 4's chilled. That morning I realized more than ever what a fine thing the motorcycle is.

It cannot be urged against the machine that hunting or fishing via motorcycle throws a man on his own company unless his friends also chance to be riders. Any self-respecting motorcycle is willing to do double service, and there are plenty of tandem attachments on the market that will quickly convert a machine into a comfortable two-passenger vehicle. Only a little practice is required to learn to balance and control a tandem motorcycle.

The motorcycle's day is coming. No, that is not correct—its day is already here. With twenty or thirty different makers hustling out machines for 1916 (some of them shouting about outputs ranging from twenty thousand to thirty-five thousand), there will be a big increase in the number of motorcycles on the road. And, to tell the truth, they are now tolerably numerous in some parts of the country.

Motorcycling is a red-blooded sport, one that affords its devotees the keenest of pleasure, aside from its convenience to the sportsman, as already pointed out. Don't consider my statements as the mad ravings of a motorcycle maniac. Just give it a trial. Beg, borrow, or steal a machine from some agent and try it out. Then ten to one in chalk, money, or marbles that you will soon be just as much of an enthusiast as I am at present. Motorcycles seem to breed enthusiasm, anyway.

And if you fail to develop a lively interest, fail to acknowledge yourself as eternally indebted to me for the suggestion that first put you on the right track—look yourself squarely in the eye and ask: "Now what in the wide world is the matter with *me?*"

"CHOOSING SALT WATER TACKLE," BY HERBERT K. SAVAGE, ASST. EDITOR OF FIELD AND STREAM, COMING IN MAY. A GOOD AND TIMELY PRACTICAL ARTICLE ON YOUR SALT WATER OUTFIT.

The Call of the Trail

You can hear the game trail calling,
  O'er the noisy streets of the town.
That nameless lure is falling,
  When the autumn night comes down.
It fills the heart with a mad desire
  For the pines where the night winds play,
For the ruddy glow of the leaping fire,
  That waits at the close of day.

The wild-goose sounds her voyage song
  From the peaceful leagues of the sky,
Where winged battalions drift along,
  In the grip of the homing cry.
Then who will answer that bugle-call—
  That pibroch of the wild—
To follow the miles on the trails of fall,
  Where the wind-tossed leaves are piled.

THE MEDICINE MAN IN THE WOODS

By WARREN H. MILLER

HE is blind to the facts who goes on any extended trip with no packet of simple remedies in his kit. Even on a five- or seven-day trip there are a number of things that are quite likely to afflict one or another member of the party, and to be without anything whatever to use and eight miles from a doctor, is banal. A very few remedies suffice; to be without them is to run into sore trouble, to have them at hand is to go your ways serene. The woods themselves are full of standard specifics—more of them later in this article—but an efficient kit, with its little bottles or boxes of pills, is so simple and so easy to possess that one does not well to rely upon woods simples alone.

Most of us who raise a family of kids are bound to be something of a near-doctor ourselves, capable of handling ordinary ailments without bothering the family physician, who already has his hands full of real trouble. And most camp ailments are of the simple, easily managed kind that do not require more than ordinary horse-sense for treatment. The sick man most likely has constipation from the unwonted exercise, change of diet, or neglect of ordinary hygiene; or he has a touch of diarrhœa from improper food or rooty water or cold in the bowels; or he has a cold brought on by reckless exposure; or malarial fever from too much being in swampy localities; or headache from any of the above causes; sunburn, sunstroke, sore feet, wrenched or sprained wrist or ankle; sore eyes from snow or sand glare; a burn, a scald, a cut, or, most rarely, gunshot wound or snake bite.

All of these are preventable, but they all *do* happen, and when you face the fact it's time to do something. Now, at home we use bulky remedies, as they are true and tried and mild in their action on the system. My mother, who doctored and raised five, was quite a practitioner, but, when she looked over my medicine closet on which my four are raised, she declared that I had but four oils and a can of Epsom's salts for all the ailments in the world! Castor oil, camphorated oil, omega oil, and carbolated vaseline; these four grand specifics suffice for everything that happens to the kids. Castor oil for pretty near everything from earthquake to constipation; camphorated oil for colds; omega for aches and sprains; and vaseline for general wound emollient—if these four didn't work, call in the family physician!

But such remedies are far too bulky for camp medicine kits. The doses are far too big, and the four do not cover half enough ground. My first medicine kit, and one that went with me constantly for four years, was a small, flat tin box 3½ inches x 2¼ inches x ⅝ inch in measurement and weighed, loaded, 2½ ounces. It held: a roll of surgical bandage 2 feet long by 3 inches wide, already treated with antiseptic; a piece of surgical tape 16 inches long by 1½ inches wide; a tiny tube of carbolated vaseline; a safety pin; ten two-grain quinine capsules; ten bismuth tablets for diarrhœa; one dozen small fever tablets; one dozen quarter-grain podophyllin pills for liver troubles and constipation; six headache pills; four bronchitis tablets; the little burner cleaner for the gas lamp; sewing needle and thread, and a paper of burnt rag tinder. This kit doctored nearly everybody but me. The pills were loose in the box as they were so different as to be unmistakable, and it saved the bulkiness and unpackability of a collection of small glass vials. The sight of those loose pills gave Bob Davis his grand idea

of mixing bear-hide poison with tabloid sugar (which I never use) and putting quinine on the fish (the quinine being in gelatine capsules), which he worked up so artfully in "Adrift with a Ditty-bag Nut." That epic had little or no foundation in fact, as I was a prisoner of war in Europe at the time the alleged events occurred, but my friends enjoyed it hugely; it was sweet balm to their souls to see someone heave a brick at the mighty and tyrannical Editor!

This kit disappeared somewhere, after a long and eventful history. Its surgical components doctored the only case of gunshot wound that has happened to any friend of mine in camp; in a camp full of famous physicians it was the only one that had the wherewithal to bandage up a case of spent .22-calibre bullet. The medicines were used up on one camp bunky after another, and, as I never got around to replacing them, the kit sunk in efficiency and finally the case was loaned to someone and never returned and there was an end.

Along about that time I won a handsome medicine kit for an all-around championship prize. It weighs a pound loaded; measures 5½ inches x 4 inches x 1½ inches thick, and is formed of two halves of green leather, like a fat purse, around a nickeled frame with snap clasp. It contains 17 vials of tabloid medicines, a snake-bite outfit and a surgical knife. The medicines were specially selected by the Burroughs-Wellcome Company for camper's use and cover about everything that can happen to a man in camp, except high fevers (which seems to me quite a serious omission), although asperin will do for the ordinary ones.

I will devote more time to this outfit later on, but at present will describe my own present kit for ordinary hiking trips and canoe cruises lasting from one to two weeks. This kit is made of the tin box furnished with the tabloid form of lactobacilline. Eight of these small vials, each holding six tablets, come in the tin box, which measures 4 inches by 2 inches by ⅝ inches and weighs, loaded, 2½ ounces. The eight vials contain: No. 1, 21 ¼-gr. podophyllin pills for heading off constipation and general bilious upsets in camp; No. 2, filled full of liquid sweet spirits of nitre, for fever, which shows up in nearly all serious upsets—grippe, a touch of swamp fever, fever attendant upon wounds, etc. Fifteen drops in half a glass of water, a teaspoonful every hour until fever drops and a profuse perspiration shows up; will knock out any fever except the major ones, and is good for the earlier stages of those. No. 3, a dozen two-grain quinine tablets; for cold, grippe, swamp fever, malaria and the like. No. 4, eight two-grain cascara tablets, for mild laxative and regulator. Give to your bunkie when he is feeling rotten and tied up and coming down sick. No. 5, twenty 1-gr. bismuth pills. These are for a bowel antiseptic after cleaning out in case of intestinal upset from poorly cooked food, overeating, etc. It is essential to first clean out the bowels with a purge, get rid of the poison and then follow with the bismuth while you tighten up with a change of diet. No. 6, twenty 1-gr. tablets for rhynitis or cold in the head. These contain camphor and quinine with a trifle of fluid-extract belladonna, and will break up any incipient cold if the patient but shows up on the first day of it. No. 7, bronchitis tablets, nine of them; will smash any cough; after taking you can rip out your lungs and slosh 'em round in a mudpuddle, replace and feel fine. I once took them along on a duck trip when I already had a fine case of bronchitis, hacking cough and the like, and expected to get frozen and drowned, both of which *did* happen, as it rained in sheets and soaked everything through, but it never touched me a little bit and I got over what bronchitis I had besides. No. 8, headache pills; as I suffer from auto-intoxication a good deal unless in camp or in the woods, I take four of them along, for the other fellow, and usually manage to have one headache myself, about the second day in camp, due generally to fatigue. The vials in this kit are protected from shock by two surgical bandages, each 20 inches long, one of cotton and the other of adhesive tape folded flat in bottom and cover of box. Then a stout rubber band outside, clamping a clinical thermometer in its rubber case to the tin box, and my kit is ready

for trouble or accident. Its principal advantage is that it is so small and light that it is never left behind, which the larger kit always would be for lack of room.

But on a big trip, to last a month, the other kit would be the choice. The little one is soon spent, one or two cases of sickness use it up and its variety is not enough to cover things that *might* happen and most probably would on a long trip. Let us go over the bigger case just as it appears in the photograph, beginning with the upper row of vials: No. 1. Calcium Sulphide, 16 tablets. Taken internally in case of boils, suppurating wounds, etc. No. 2. Calomel and Bicarb. Soda, 13 tabs. Taken for a purge and liver stimulant. No. 3. Alum, 11 tabs. Bully as a wash for your sore feet or your dog's, a closer for small wounds, gargle for sore throat, etc. A handful of salt thrown in the water improves it. No. 4. Iron, Quinine and Strychnine Phosphates, 12 tabs. A restorative tonic and a fine bracer when a man is run down. Lieut. Shackleton said of it that this tablet braced up his men when they were all dog tired out and ready to lie down. No. 6. Quinine Bisulphate, 12 tabs. Antimalarial, one to four in cases of ague. No. 7. Coffee-mint. 20 tabs.; in cases of indigestion and vomiting. No. 8 Asperin, 12 tabs., anti-pyretic, which means it's good for fever in inducing a heavy perspiration; will knock out a headache from indigestion. No. 9. Surgical knife, sterilized; useful in all sorts of work where tissue is to be cut or lanced. No. 10. Small lance in hard-rubber case, for making incision in wound in case of snake bite, to be followed with a little permanganate of potash powdered and moistened. No. 11. Beta-Napthol compound, 9 tabs. Intestinal antiseptic and germicide, useful in acute indigestion and "booze" intestinal trouble. No. 12. Permanganate tablets, 50 tabs. For use in snake-bite, antiseptic; a wash for wounds and sores; a gargle and a test for impure water. If organic matter is present a crumb or two of it will turn a muddy yellow; if water is free from organic matter it will turn a bright pink. Also in a case of lost toothbrush a gargle of it will keep mouth and gums sweet. No. 13. Zinc Sulphate, 11 tabs. A fine lotion for sore eyes from snow blindness or glare. Also as an emetic in case of poisoning, either mushroom or ptomaine. No. 14. Lead Subacetate, 15 tabs. Astringent; makes a good lotion applicable to bruises, sprains, etc. No. 15. Bismuth Carbonate, 16 tabs. Astringent; useful in

THE AUTHOR'S MEDICINE KIT

diarrhoea and dysentery after cleaning out infection. No. 16. Saxin, 100 tabs. A substitute for sugar where same cannot be allowed. I would prefer this vial in Aconitine or similar febrifuge. Not straight aconite, however, for this is a powerful poison in overdoses and not fool-proof in amateur hands. No. 17. Cascara, 12 tabs. A mild laxative useful to take cases of constipational upset in hand before they get acute. No. 18. Boric Acid, 12 tabs. The standard wash and antiseptic for wounds. No. 19. Salol, 12 tabs. Intestinal antiseptic for dysentery, ptomaine poisoning, typhoid, rheumatism, etc. No. 20. Laxative Vegetable, 11 tabs. A good purge for intestinal upsets and in mild doses as a regulator.

The above in a one-pound leather case protected by interior padding against injury in your pack. One could take a long trip with that case, armed for almost any contingency, from your guide roaring at you with "rheumatiz" to your bunkie coming down with typhoid. Of the seventeen remedies, six are for wounds, burns, and the like; seven for stomach and bowel complaints; two for fevers, and one for a stimulant. There are enough of them all to make a deal of medicine, as many of these tablets are first dissolved in considerable water and then used, making a lot of medicine from one small tablet. The selection was made by a famous firm specializing in the needs of the outdoorsman, and is the result of experiencing the average ailments that afflict the average exploration party in the wilderness.

Camp, as a rule, is the healthiest of places. I hit the trail every month in the year and have been doing so, *sans* intermission, for four years, yet I can recall but little sickness in my camps. Most headaches come from fatigue or overeating. The party pushes on regardless of the fact that it is long past eating hour, and one's system gets so run down that when grub is finally served there is no vitality to digest it, and a headache has already set in. As a rule it cannot be helped. Men do not push on with one of the party coming down sick unless they *have* to make some objective before stopping, such as water or a campsite. What's to be done? Give him a bracer like the iron-quinine-strychnine phosphate, or a pull of brandy to put him on edge again, and then don't let him eat much and let him get to his sleeping-bag as soon as may be. It will save a day's headache on the morrow. Plenty of bully old hot tea and plenty of hot mulligan are the best remedies for him. Avoid the drugs all you can. Good food and plenty of work will keep everyone healthy.

Unfortunately we see a great deal of the frying-pan evil in camp. The cook may be a fiend at it, and not only serves too much fried work but his cakes and fish may be greasy as well. Soon the weaker members of the party report with indigestion headaches. This calls for a purge, a calomel, or the vegetable laxative (with my kit a podophyllin pill and a cascara pill suffice). The sick men are then put on a bland diet of meat broths and nothing much else, and they will soon be in shape again.

Another headache and upset comes from too much booze. Podophyllin is one of the quickest booze mollifiants of my acquaintance; a double dose, a cleaning out and a good sleep are the quickest way out with such troubles. The betanapthol pill is also effective in "heap firewater" cases.

More serious intestinal disorders are the kind that come on slowly from continued poor cooking, rooty water, etc., forming a true diarrhoea with thin and frequent watery discharges. This calls for, first of all, a purge, castor oil in orange juice at home, calomel in the woods. The infection and poison must first be gotten out of the system before anything else can be done. Astringents given at this stage will do a great deal of harm in confining the toxins in the body. Vegetables of all kinds are extremely irritating at this time; they must be discontinued and a meat broth diet instituted. Keep patient quiet, at home or loafing about camp, and when thoroughly cleaned out come on with your bowel antiseptics, bismuth carbonate and salol. Sick man ought to be back to normal in a week, or less.

Ptomaine poisoning is a trouble that one has occasionally in camp; canned salmon, meat that is "on its way," fish far gone, and the like being the principal offenders.

Patient has severe cramps, devilish pains in the bowels, tongue feels like a copper kettle, bowels purge violently—I guess we've all had it more than once in our own experiences! What's to be done? An emetic, first thing. Give victim zinc sulphate emetic from your kit, or hot salt water or even his own third finger thrust down on palate is efficient. Empty and wash stomach all you can. Next, salol for the bowels and a tablet of the iron, quinine and strychnine to keep up the strength. Help along by hot bottles and hot stones at the extremities. Feed nothing throughout the day. If you can get ice, let him sip a little of it at a time, to keep down fever in the stomach. I did this once during a whole day of ptomaine, when I had a case of the kind, after the other remedies had worked, and surprised everyone later by vomiting up, ten hours after the pains had subsided, a basin full of dirty, black water representing the washing action of that ice water on the stomach walls.

I never had a mushroom-poisoning case to deal with, but the treatment is about the same. Some of the species, notably the tuberous gilled ones, act quickly and produce the pains in a few hours, and then may be combated by the same means as ptomaine cases. With the amanita varieties of mushrooms—those smooth, deadly fellows that grow in the woods, with a white gill, a collar on the stem, and a poison cup at the base—the symptoms will not show up until twelve hours after the poisonous mushroom has been eaten (in company with a quantity of good ones, most likely). The phallin or toxic properties have then thoroughly worked into the system and your patient's case is desperate. It is almost too late to catch the trouble in the stomach, though of course the emetics, bowel purges, etc., should be gone right at. But your big fight will be to keep up the patient's vitality. The good old standby of white of an egg should be given copiously; the strychnine tablets, hot-water applications, etc., kept going, and a watch kept on the temperature with your thermometer. He may or may not live through the tendency to sinkage and stupor; but never give up, and send for a doctor with his hypodermic outfit, if you have to send fifty miles for him.

On a long camp it is quite possible for typhoid to show up. On my last one the river water smelled as if slightly tainted with sewage; it tasted fine and looked clear to the eye, but my good nose would have none of it! Never go back on your nose in matters of this kind! The nose was right, and if we had had some of those tablets of permanganate along we would have had further warning, for a crumb of it would have turned a cloudy yellow in that water. There was a town on the banks of that river, some distance up above us, the first river I have ever canoed on that was not wholly wild. We decided that we had better boil the water; but somehow, first and last a good deal of it was drunk from the river as we explored our way upstream. Of the party of three on that trip, all were physicked from the water, and one had a high fever and was down a week of it. But my own boy suffered the worst, for, ten days later, he came down with typhoid. First came three days of languid dulness, with no energy and a slow fever getting up. These I went after with laxatives, and, when the fever showed up, I kept at it with sweet spirits of nitre. The doctor and I agreed over the 'phone that it might be only a case of swamp fever, as none of the violent symptoms of typhoid were present—no delirium, no soreness in abdomen, no chill. But the fever kept on, and, though he responded nobly with profuse perspirations and fall of temperature, still, each day saw no improvement, but instead a heightening of pulse and temperature. I had no thermometer, but I now bought one to replace the last broken one (a good clinical thermometer should be in every household). The new thermometer settled it—103.6°, and, to add to my anguish, the Kid did not respond to the ordinary fever medicines. The next day 104°, and a blood test revealed typhoid. We followed the usual course: absolute quiet, nothing to eat but a little broth in the morning, when temperature was low; fever medicine when temperature went above 103°; frequent baths in bed with alcohol, to reduce the skin temperature. A normal case in camp will reach its crisis

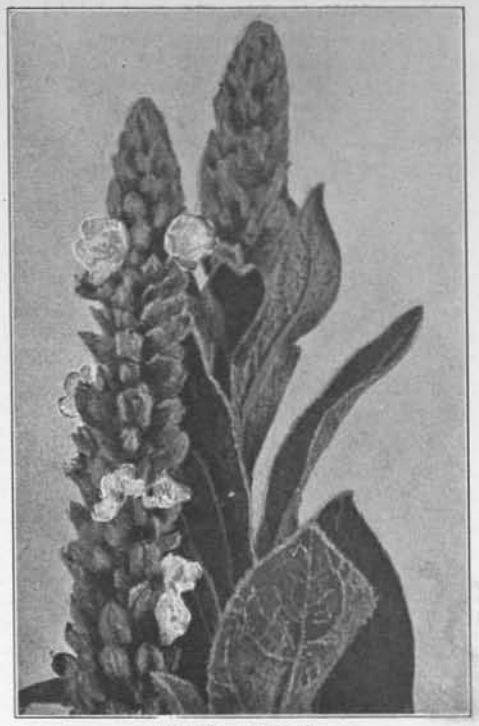
on the eighteenth day; that yellow, fiery typhoid tongue, with red edges, will be thrust out at you on the seventh day; the fever will be at its highest during the second week, and will then gradually go down a half degree a day. A sudden fall is an alarming symptom, denoting puncture of the intestines, and requires an expert physician at once. The patient positively *cannot* be moved; if his symptoms have progressed far enough to disclose typhoid tongue, better send for physician and nurse and keep them in camp rather than try to move him. All waste from the body of the patient is of the greatest danger and must be thoroughly disinfected with chloride of lime, creosol, etc., and burnt, and all clothing must be boiled for half an hour after patient is through with them. A sanitary pan must be improvised from the first, as patient cannot be even raised up without extreme danger.

He can be started towards home about ten days after the fever goes and the return to normal is assured. There will be several days of subnormal before this takes place, when stimulants may be needed and must be given as soon as the thermometer shows 96. This ten days after normal is only in case transportation facilities are good—canoe and stretcher, not buckboard or wagon. Otherwise he had better stay about camp for at least three weeks after the fever before attempting a return home. In concluding the subject of typhoid, it is well to add here that not only should all water not spring water be boiled on a camping trip where any habitations are known to front on the lake or river traversed, but before going into such country one should take the regular Army serum for anti-typhoid. This is in three injections with a hypodermic syringe, taken ten days apart. They will cause you little or no inconvenience if you are entirely free from germs; if typhoidy and somewhat infected yourself, as I was, they cause each of them a miniature case of typhoid lasting two days, quite distressing to endure. Both my right and left arms were nearly paralyzed, and I was chilly and miserable for a day after each injection. Everyone who attends on the patient should be so dosed. If you have to do it yourself and want to be sure of not puncturing any artery with your hypodermic needle, grasp patient's arm above elbow in the fleshy part to the rear of the arm, jab in the needle slantwise and push down on the plunger.

Most fevers of the swamp order and similar varieties require good bundling up of the patient until the sweat comes, aiding this with a dose every hour of asperin or aconitine (not aconite) or spirits of nitre. At the same time loosen the bowels and keep them loose. With the great fevers, these febrifuges are of no avail and the body of the patient is to be kept cool with light covering and a surrounding temperature maintained at 65 degrees. Where fever attends cold, grippe or intestinal upsets, keep it down with the above remedies. If you have no thermometer, guess by the pulse, which is around 75 at normal and augments ten counts to every degree rise in temperature (about seven counts in grippe). Normal temperature is 98.4. A high fever is easily told by your knuckle under the patient's chin alongside the big neck artery; it will feel burning hot to you if he has 102 to 103. One hundred and four usually causes delirium in a man, and 105 to 107 are the highest danger limits that the body can endure. Never feed much while fever is present. "Feed a cold and starve a fever" is one of the truest of old saws.

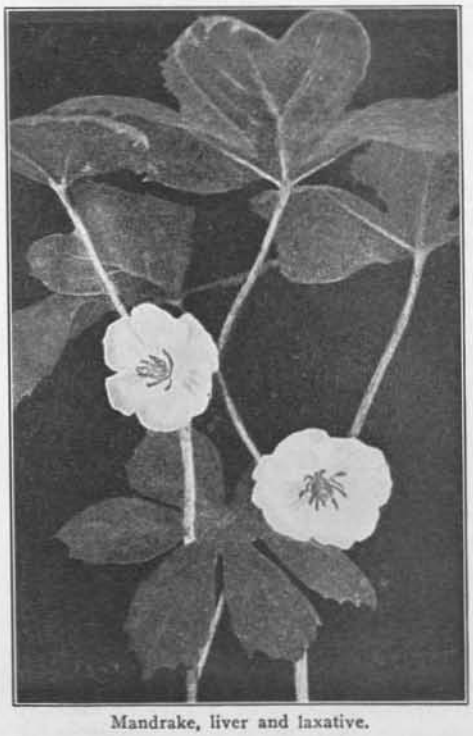
Colds in camp usually come from exposure, with cotton or shoddy clothing on the victim. Seldom will wool let the wearer catch a chill; even soaking wet, it is warmer than cotton or linen is when merely damp from perspiration. The chill stops all natural processes of eliminating waste and fills the system up with poisons, so that the sufferer has pretty much everything the matter with him when he reports to you feeling "no good." Asperin tablet; plenty of hot tea and mulligan; a dose of calomel; then salol, and he will turn out next morning cleansed of all his foul infections and ready to look with cheerfulness upon life again. Grippe follows much the same course, except that fever is also present. Bundle him up and give both asperin and your fever medicine until you establish a profuse sweat. Mix up a gargle for sore throat, and open the

Joe Pye Weed, for typhoid.



Mullein, for colds.

Gentian, general tonic.



Mandrake, liver and laxative.

FOUR FOREST SPECIFICS

bowels and keep them open. He will be all right again in about four days.

Sunburn and mosquito poisoning are frequent camp ailments. A good dose of sunburn will, curiously enough, induce a chilly yet roasty feeling in the victim. He is all afire, yet sensitive to the least draught. Paint him all over with one of your lotions, such as the lead subacetate, which also use for sprains, bruises and burns, all of which occur now and again. Cuts require the wound to be kept washed with antiseptic solutions (boric acid), and the wound itself is to be kept open, so as not to close up at the lips and confine the pus and excreta. There will be some fever present, which keep down when it goes above 101 with your fever tablets or spirits of aconite or nitre. Sprains and breaks require absolute rest for the patient and a splint to hold the broken parts firmly in place while the process of knitting up is going forward. Elm bark or strips of the basket oak or black ash make good splints. Bind limb to them gently, with plenty of soft woolen bandages to ease the contact, and paint limb regularly with your lead acetate lotion for the purpose.

While the medicines discussed above represent the world's cull for the best specific for each ailment, there are plenty of woods simples growing at hand from which a good many of our standard American remedies have been made. An infusion or tea of woods roots and plants will answer to combat most ailments, not possibly as well as the world's best specific, but well enough and far better than nothing at all. An infusion usually means one ounce of the root or leaf steeped in one pint of water; that is, the pint is poured over the leaf, boiling hot, and allowed to cool, when it is ready to give. Many of our medicines are simply fluid extracts of these plants and roots in alcohol to preserve them (since a plain tea or infusion will quickly spoil if not used at once), or else they are infusions boiled down to a solid and made up into a pill. So fear not to make and use a good tea of well-known plants in case you are up against it for remedies. For a general laxative and tonic I have made a fine decoction out of the twigs and bark of wild cherry, the roots of sassafras, and a trifle of mandrake root or hepatica or licorice, if there is any in camp. A glass of it for the brother who is coming down with a constipation headache will generally relieve him. Root of hepatica or liverwort will answer as a substitute for mandrake (whose leaves and stem, by the way, are poisonous; root only good), also leaves of the moosewood or striped maple and inner bark of butternut. For the opposite complaint, such as diarrhœa or dysentery, after cleaning out the bowels with hepatica root infusion give him the root of cranesbill or wild geranium chewed raw. It will tighten him up like a drum. Bark and roots of wild blackberry, boiled, will make a similar decoction. For both of the above decoctions I did not use the boiling water as an infusion, but boiled the roots in a large pot for half a day, until it had become quite strong. The twigs of black birch boiled in the same way will yield a nice camp beer, also useful as a tonic. Add sugar to taste. Other good astringents: infusions of wintergreen, arbutus leaves, bark of persimmon and root of Solomon's seal.

The two eupatoriums both yield fine tonics; queen of the meadow, the purple-flowered one, giving a splendid diuretic in the infusion, and the white-flowered one, boneset, giving a tonic and bracer for grip, biliousness, malaria, cold, etc. Mullein leaves and flower petals yield a good decoction for colds and sore throat; make an infusion and drink all you want; also use as gargle. For a powerful sedative in case of sleeplessness, nervous excitement, etc., use the roots of lady slipper, Indian moccasin. It flowers in May and thereafter the lily-like leaves tell its location. Its root infusion will quiet a maniac. For fevers Nature has provided us with several good substitutes for quinine, the four best being root of vervain, inner bark of white willow, tulip tree, and dogwood. Give dose of the infusion until fever subsides. Dose for all of these is a tablespoonful, as the infusion is much weaker than standard medicines. For typhoid the Indians used Joe Pye weed or queen of the meadow (*Eupatorium purpureum*) infusion of the leaves, with much success. It flowers in September

and has a purple-magenta head of flowers, the leaves being four in a whorl. For burns, stings and small wounds I have found the juice of the jewel weed, crushed and rubbed on the affliction, to be singularly quick and efficacious.

The list of natural tonics is a long one and the infusions are easily made from plants growing in every clearing. Gentian heads the list and may be found in any woods road. The blue, closed flower appears in September. The root, combined with cherry, sassafras, golden seal and vervain, makes a decoction that will be very useful in putting your sick man on his feet after a siege of grip, diarrhœa, etc.

For poisons requiring an emetic the best herb is lobelia tea, infusion of the leaves and flowers. Its blue spike of flowers grows everywhere.

As I remarked before, camp is the healthiest of places. If the members of the party are getting sick, it is because of bad water, swampy location, or too many mosquitoes, and is easiest remedied by moving the camp to a more healthful site. See that your simple sanitations are looked to and you will not need any of the medicines. Don't drink brook water; it is rooty and sure to physic one or more members of your party; get near a spring as a first consideration. Camp high; keep out of damp ravines, locations near a marsh or swamp, or any other source of miasmas. Trench the tent and see that all bedding is aired and dried on sunny days. Watch the camp diet closely; the concentrated foods carried are very constipating and must be counteracted by plenty of soup greens, onions, prunes, apricots, peaches and apples, all of which can be carried dry and are stewed to make many times their volume of cooked food. Watch the frypan in particular. Greasy food will lay low the healthiest man. See that the cook has his fat screeching hot before he puts any food in it; see that he drains the pan before dropping in the cake batter; keep away from lard and use bacon and pork drippings instead.

Look out for too much of the highly preserved and concentrated foods, such as cheese and raisins. The latter sometimes will not digest at all, being so heavily preserved, and chocolate will soon upset one's digestion, the effect of too much cheese, raisins and chocolate being a violent upheaval and excessive physicking. Keep your cuisine as near the standard home routine as camp conditions will allow and you will have but little intestinal sickness to combat.

VERVAIN, FOR FEVER

The best antidote for colds and pneumonia is good wool clothing for every part of your body. Homespun wool pants will let you get soaking wet without any appreciable diminution in bodily warmth, while corduroy or khaki would send you to the fire with chilly legs and cold feet. Wet feet and wet body are a normal state of affairs in certain times of the day and are serious matters if you have any cotton or linen on you. With wool there is nothing to worry about, and for that reason I prefer wool even in midsummer. Rather fewer garments, but, such as are worn, let them be wool.

Good clothing; a healthy camp site; good cuisine; and dry changes of clothes in dry tents—these are the antidotes for all sickness.

DESERT GOLD

A NOVEL, BY ZANE GREY

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XVIII

REALITY AGAINST DREAMS

LADD, Lash, Thorne, Mercedes, they were all held tight in Belding's arms. Then he ran to Blanco Diablo. For once the great horse was gentle, quiet, glad. He remembered this kindest of masters and reached for him with warm, wet muzzle.

Dick Gale was standing bowed over Nell's slight form, almost hidden in his arms. Belding hugged them both. He was like a boy. He saw Ben Chase and his son slip away under the trees, but the circumstance meant nothing to him then.

"Dick! Dick!" he roared. "Is it you? . . . Say, who do you think's here—here, in Forlorn River?"

Gale gripped Belding with a hand as rough and hard as a file and as strong as a vise. But he did not speak a word. Belding thought Gale's eyes would haunt him forever.

It was then three more persons came upon the scene—Elsie Gale, running swiftly, her father assisting Mrs. Gale, who appeared about to faint.

"Belding! Who on earth's that?" cried Dick, hoarsely.

"*Quien sabe,* my son," replied Belding; and now his voice seemed a little shaky. "Nell, come here. Give him a chance."

Belding slipped his arm round Nell, and whispered in her ear, "This'll be great!"

Elsie Gale's face was white and agitated, a face expressing extreme joy.

"Oh, brother! Mama saw you—Papa saw you, and never knew you! But I knew you when you jumped quick—that way—off your horse. And now I don't know you. You wild man! You giant! You splendid barbarian! . . . Mama, Papa, hurry! It *is* Dick! Look at him. Just look at him! Oh-h, thank God!"

Belding turned away and drew Nell with him. In another second she and Mercedes were clasped in each other's arms. Then followed a time of joyful greetings all round.

The Yaqui stood leaning against a tree watching the welcoming home of the lost. No one seemed to think of him, until Belding, ever mindful of the needs of horses, put a hand on Blanco Diablo and called

to Yaqui to bring the others. They led the string of whites down to the barn, freed them of wet and dusty saddles and packs, and turned them loose in the alfalfa, now breast-high. Diablo found his old spirit; Blanco Sol tossed his head and whistled his satisfaction; White Woman pranced to and fro; and presently they all settled down to quiet grazing. How good it was for Belding to see those white shapes against the rich background of green! His eyes glistened. It was a sight he had never expected to see again. He lingered there many moments when he wanted to hurry back to his rangers.

At last he tore himself away from watching Blanco Diablo and returned to the house. It was only to find that he might have spared himself the hurry. Jim and Ladd were lying on the beds that had not held them for so many months. Their slumber seemed as deep and quiet as death. Curiously Belding gazed down upon them. They had removed only boots and chaps. Their clothes were in tatters. Jim appeared little more than skin and bones, a long shape, dark and hard as iron. Ladd's appearance shocked Belding. The ranger looked an old man, blasted, shriveled, starved. Yet his gaunt face, though terrible in its records of tortures, had something fine and noble, even beautiful to Belding, in its strength, its victory.

Thorne and Mercedes had disappeared. The low murmur of voices came from Mrs. Gale's room, and Belding concluded that Dick was still with his family. No doubt he, also, would soon seek rest and sleep. Belding went through the patio and called in at Nell's door. She was there sitting by her window. The flush of happiness had not left her face, but she looked stunned, and a shadow of fear lay dark in her eyes. Belding had intended to talk. He wanted someone to listen to him. The expression in Nell's eyes, however, silenced him. He had forgotten. Nell read his thought in his face, and then she lost all her color and dropped her head. Belding entered, stood beside her with a hand on hers. He tried desperately hard to think of the right thing to say, and realized so long as he tried that he could not speak at all.

"Nell—Dick's back safe and sound," he said, slowly. "That's the main thing. I wish you could have seen his eyes when he held you in his arms out there. . . . Of course, Dick's coming knocks out your trip East and changes plans generally. We haven't had the happiest time lately. But now it'll all be different. Dick's as true as a Yaqui. He'll chase that Chase fellow, don't mistake me. . . . Then mother will be h o m e soon. She'll straighten out this—this mystery. And Nell—however it turns out—I know Dick Gale will feel just the same as I feel. Brace up now, girl."

Belding left the patio and traced thoughtful steps back toward the corrals. He realized the need of his wife. If she had been at home he would not have come so close to killing two men. Nell would never have fallen so low in spirit. Whatever the real truth of the tragedy of his wife's life, it would not make the slightest difference to him. What hurt him was the pain mother and daughter had suffered, were suffering still. Somehow he must put an end to that pain.

He found the Yaqui curled up in a corner of the barn in as deep a sleep as that of the rangers. Looking down at him, Belding felt again the rush of curious thrilling eagerness to learn all that had happened since the dark night when Yaqui had led the white horses away into the desert. Belding curbed his impatience and set to work upon tasks he had long neglected. Presently he was interrupted by Mr. Gale, who came out, beside himself with happiness and excitement. He flung a hundred questions at Belding and never gave him time to answer one, even if that had been possible. Finally, when Mr. Gale lost his breath, Belding got a word in. "See here, Mr. Gale, you know as much as I know. Dick's back. They're all back—a hard lot, starved, burned, torn to pieces, worked out to the limit I never saw in desert travelers, but they're alive—alive and well, man! Just wait. Just gamble I won't sleep or eat till I hear that story. But *they've* got to sleep and eat."

Belding gathered with growing amusement that besides the joy, excitement, anxiety, impatience expressed by Mr. Gale, there was something else which Belding took for pride. It pleased him.

Looking back, he remembered some of the things Dick had confessed his father thought of him. Belding's sympathy had always been with the boy. But he had learned to like the old man, to find him kind and wise, and to think that perhaps college and business had not brought out the best in Richard Gale. The West had done that, however, as it had for many a wild youngster; and Belding resolved to have a little fun at the expense of Mr. Gale. So he began by making a few remarks that appeared to rob Dick's father of both speech and breath.

"And don't mistake me," concluded Belding, "just keep out of earshot when Laddy tells us the story of that desert trip, unless you're hankering to have your hair turn *pure* white and stand *curled* on end and *freeze* that way."

About the middle of the forenoon on the following day the rangers hobbled out of the kitchen to the porch.

"I'm a sick man, I tell you," Ladd was complaining, "an' I gotta be fed. Soup! Beef tea! That ain't so much as wind to me. I want about a barrel of bread an' butter, an' a whole platter of mashed potatoes with gravy an' green stuff—all kinds of green stuff—an' a whole big apple pie. Give me everythin' an' anythin' to eat but meat. Shore I never, never want to taste meat again, an' sight of a piece of sheep meat would jest about finish me. . . . Jim, you used to be a human bein' that stood up for Charlie Ladd."

"Laddy, I'm lined up beside you with both guns," replied Jim, plaintively. "Hungry? Say, the smell of breakfast in that kitchen made my mouth water so I near choked to death. I reckon we're gettin' most onhuman treatment."

"But I'm a sick man," protested Ladd, "an' I'm agoin' to fall over in a minute if somebody doesn't feed me. Nell, you *used* to be fond of me."

"Oh, Laddy, I am yet," replied Nell.

"Shore I don't believe it. Any girl with a tender heart just couldn't let a man starve under her eyes. . . . Look at Dick, there. I'll bet he's had something to eat, mebbe potatoes an' gravy, an' pie an'——"

"Laddy, Dick has had no more than I gave you—indeed, not nearly so much."

"Shore he's had a lot of kisses then, for he hasn't hollered onct about this treatment."

"Perhaps he has," said Nell, with a blush; "and if you think that—they would help you to be reasonable I might—I'll——"

"Well, powerful fond as I am of you, just now kisses'll have to run second to bread an' butter."

"Oh, Laddy, what a gallant speech!" laughed Nell. "I'm sorry, but I've Dad's orders."

"Laddy," interrupted Belding, "you've got to be broke in gradually to eating. Now you know that. You'd be the severest kind of a boss if you had some starved beggars on your hands."

"But I'm sick—I'm dyin'," howled Ladd.

"You were never sick in your life, and if all the bullet holes I see in you couldn't kill you, why, you never will die."

"Can I smoke?" queried Ladd, with sudden animation. "My Gawd, I used to smoke. Shore I've forgot. Nell, if you want to be reinstated in my gallery of angels, just find me a pipe an' tobacco."

"I've hung onto my pipe," said Jim, thoughtfully. "I reckon I had it empty in my mouth for seven years or so, wasn't it, Laddy? A long time! I can see the red lava an' the red haze, an' the red twilight creepin' up. It was hot an' some lonely. Then the wind, and always that awful silence! An' always Yaqui watchin' the west, an' Laddy with his checkers, an' Mercedes burnin' up, wastin' away to nothin' but eyes! It's all there—I'll never get rid——"

"Chop that kind of talk," interrupted Belding, bluntly. "Tell us where Yaqui took you—what happened to Rojas—why you seemed lost for so long."

"I reckon Laddy can tell all that best; but when it comes to Rojas's finish I'll tell what I seen, an' so'll Dick and Thorne. Laddy missed Rojas's finish. Bar none, that was the——"

"I'm a sick man, but I can talk," put in Ladd, "an' shore I don't want the whole story exaggerated none by Jim."

Ladd filled the pipe Nell brought, puffed ecstatically at it, and settled himself upon the bench for a long talk. Nell glanced appealingly at Dick, who tried to

slip away. Mercedes did go, and was followed by Thorne. Mr. Gale brought chairs, and in subdued excitement called his wife and daughter. Belding leaned forward, rendered all the more eager by Dick's reluctance to stay, the memory of the quick, tragic change in the expression of Mercedes's beautiful eyes, by the strange, gloomy cast stealing over Ladd's face.

The ranger talked for two hours—talked till his voice weakened to a husky whisper. At the conclusion of his story there was an impressive silence. Then Elsie Gale stood up, and with her hand on Dick's shoulder, her eyes bright and warm as sunlight, she showed the rangers what a woman thought of them and of the Yaqui. Nell clung to Dick, weeping silently. Mrs. Gale was overcome, and Mr. Gale, very white and quiet, helped her up to her room.

"The Indian! the Indian!" burst out Belding, his voice deep and rolling. "What did I tell you? Didn't I say he'd be a godsend? Remember what I said about Yaqui and some gory Aztec knife-work? So he cut Rojas loose from that awful crater wall, foot by foot, finger by finger, slow and terrible? And. Rojas didn't hang long on the *choya* thorns? Thank the Lord for that! . . . Laddy, no story of Camino del Diablo can hold a candle to yours. The flight and the fight were jobs for men. But living through this long, hot summer and coming out—that's a miracle. Only the Yaqui could have done it. The Yaqui! the Yaqui!"

"Shore. Charlie Ladd looks up at an Indian these days. But Beldin', as for the comin' out, don't forget the hosses. Without grand old Sol an' Diablo, who I don't hate no more, an' the other Blancos, we'd never have got here. Yaqui *an'* the hosses, that's my story!"

Early in the afternoon of the next day Belding encountered Dick at the water barrel.

"Belding, this is river water, and muddy at that," said Dick. "Lord knows I'm not kicking. But I've dreamed some of our cool running spring, and I want a drink from it."

"Never again, son. The spring's gone, faded, sunk, dry as dust."

"Dry!" Gale slowly straightened. "We've had rains. The river's full. The spring ought to be overflowing. What's wrong? Why is it dry?"

"Dick, seeing you're interested, I may as well tell you that a big charge of nitroglycerin choked my spring."

"Nitroglycerin!" echoed Gale. Then he gave a quick start. "My mind's been on home, Nell, my family. But all the same I felt something was wrong here with the ranch, with you, with Nell. . . . Belding, that ditch there is dry. The roses are dead. The little green in that grass has come with the rains. What's happened? The ranch's run down. Now I look around I see a change."

"Some change, yes," replied Belding, bitterly. "Listen, son."

Briefly, but not the less forcibly for that, Belding related his story of the operations of the Chases.

Astonishment appeared to be Gale's first feeling. "Our water gone, our claims gone, our plans forestalled! Why, Belding, it's unbelievable. Forlorn River with promoters, business, railroad, bank, and what not!"

Suddenly he became fiery and suspicious. "These Chases—did they do all this on the level?"

"Barefaced robbery! Worse than a Greaser holdup," replied Belding, grimly.

"You say the law upheld them?"

"Sure. Why, Ben Chase has a pull as strong as Diablo's on a down grade. Dick, we're jobbed, outfigured, beat, tricked, and we can't do a thing."

"Oh, I'm sorry, Belding, most of all for Laddy," said Gale, feelingly. "He's all in. He'll never ride again. He wanted to settle down here on the farm he thought he owned, grow grass and raise horses, and take it easy. Oh, but it's tough! Say, he doesn't know it yet. He was just telling me he'd like to go out and look the farm over. Who's going to tell him? What's he going to do when he finds out about this deal?"

"Son, that's made me think some," replied Belding, with keen eyes fast upon the young man. "And I was kind of wondering how you'd take it."

"I? Well, I'll call on the Chases. Look here, Belding, I'd better do some fore-

stalling myself. If Laddy gets started now there'll be blood spilled. He's not just right in his mind yet. He talks in his sleep sometimes about how Yaqui finished Rojas. If it's left to him—he'll kill these men. But if I take it up——"

"You're talking sense, Dick. Only here, I'm not so sure of you. And there's more to tell. Son, you've Nell to think of and your mother."

Belding's ranger gave him a long and searching glance.

"You can be sure of me," he said.

"All right, then; listen," began Belding. With deep voice that had many a break and tremor he told Gale how Nell had been hounded by Radford Chase, how her mother had been driven by Ben Chase—the whole sad story.

"So that's the trouble! Poor little girl!" murmured Gale, brokenly. "I felt something was wrong. Nell wasn't natural, like her old self. And when I begged her to marry me soon, while Dad was here, she couldn't talk. She could only cry."

"It *was* hard on Nell," said Belding, simply. "But it'll be better now you're back. Dick, I know the girl. She'll refuse to marry you and you'll have a hard job to break her down, as hard as the one you just rode in off of. I think I know you, too, or I wouldn't be saying——"

"Belding, what're you hinting at?" demanded Gale. "Do you dare insinuate that—that—if the thing were true it'd make any difference to me?"

"Aw, come now, Dick; I couldn't mean that. I'm only awkward at saying things. And I'm cut pretty deep——"

"For God's sake, you don't *believe* what Chase said?" queried Gale, in passionate haste. "It's a lie. I swear it's a lie. I know it's a lie. And I've got to tell Nell this minute. Come on in with me. I want you, Belding. Oh, why didn't you tell me sooner?"

Belding felt himself dragged by an iron arm into the sitting-room, out into the patio, and across to where Nell sat in her door. At sight of them she gave a little cry, drooped for an instant, then raised a pale, still face, with eyes beginning to darken.

"Dearest, I know now why you are not wearing my mother's ring," said Gale, steadily and low-voiced.

"Dick, I am not worthy," she replied, and held out a trembling hand with the ring lying in the palm.

Swift as light Gale caught her hand and slipped the ring back upon the third finger.

"Nell! Look at me. It is your engagement ring. . . . Listen. I don't believe this—this thing that's been torturing you. I know it's a lie. I am absolutely sure your mother will prove it a lie. She must have suffered once—perhaps there was a sad error—but the thing you fear is not true. But, hear me, dearest; even if it *was* true it wouldn't make the slightest difference to me. I'd promise you on my honor I'd never think of it again. I'd love you all the more because you'd suffered. I want you all the more to be my wife—to let me make you forget—to——"

She rose swiftly with the passionate abandon of a woman stirred to her depths, and she kissed him.

"Oh, Dick, you're good—so good! You'll never know—just what those words mean to me. They've saved me—I think."

"Then, dearest, it's all right?" Dick questioned, eagerly. "You will keep your promise? You will marry me?"

The glow, the light faded out of her face, and now the blue eyes were almost black. She drooped and shook her head.

"Nell!" exclaimed Gale, sharply catching his breath.

"Don't ask me, Dick. I—I won't marry you."

"Why?"

"You know. It's true that I——"

"It's a lie," interrupted Gale, fiercely. "But even if it's true—why—why won't you marry me? Between you and me love is the thing. Love, and nothing else! Don't you love me any more?"

They had forgotten Belding, who stepped back into the shade.

"I love you with my whole heart and soul. I'd die for you," whispered Nell, with clenching hands. "But I won't disgrace you."

"Dear, you have worried over this trouble till you're morbid. It has grown out of all proportion. I tell you that I'll not

only be the happiest man on earth, but the luckiest, if you marry me."

"Dick, you give not one thought to your family. Would they receive me as your wife?"

"They would," replied Gale, steadily.

"No! oh, no!"

"You're wrong, Nell. I'm glad you said that. You give me a chance to prove something. I'll go this minute and tell them all. I'll be back here in less than——"

"Dick, you will not tell her—your mother?" cried Nell, with her eyes streaming. "You will not? Oh, I can't bear it! She's so proud! And Dick, I love her. Don't tell her! Please, please don't! She'll be going soon. She needn't ever know—about me. I want her always to think well of me. Dick, I beg of you. Oh, the fear of her knowing has been the worst of all! Please don't go?"

"Nell, I'm sorry. I hate to hurt you. But you're wrong. You can't see things clearly. This is your happiness I'm fighting for. And it's my life. . . . Wait here, dear. I won't be long."

Gale ran across the patio and disappeared. Nell sank to the doorstep, and as she met the question in Belding's eyes she shook her head mournfully. They waited without speaking. It seemed a long while before Gale returned. Belding thrilled at sight of him. There was more boy about him than Belding had ever seen. Dick was coming swiftly, flushed, glowing, eager, erect, almost smiling.

"I told them. I swore it was a lie, but I wanted them to decide as if it were true. I didn't have to waste a minute on Elsie. She loves you, Nell. The Governor is crazy about you. I didn't have to waste two minutes on him. Mother used up the time. She wanted to know all there was to tell. She is proud, yes; but, Nell, I wish you could have seen how she took the—the story about you. Why, she never thought of me at all, until she had cried over you. Nell, she loves you, too. They all love you. Oh, it's so good to tell you. I think mother realizes the part you have had in the—what shall I call it?—the regeneration of Richard Gale. Doesn't that sound fine? Darling, mother not only consents, she wants you to be my wife. Do you hear that? And listen—she had me in a corner and, of course, being my mother, she put on the screws. She made me promise that we'd live in the East half the year. That means Chicago, Cape May, New York—you see, I'm not exactly the lost son any more. Why, Nell, dear, you'll have to learn who Dick Gale really is. But I always want to be the ranger you helped me become, and ride Blanco Sol, and see a little of the desert. Don't let the idea of big cities frighten you. We'll always love the open places best. Now, Nell, say you'll forget this trouble. I know it'll come all right. Say you'll marry me soon. . . . Why, dearest, you're crying . . . Nell!"

"My—heart—is broken," sobbed Nell, "for—I—I can't marry you."

The boyish brightness faded out of Gale's face. Here, Belding saw, was the stern reality arrayed against his dreams.

"That devil Radford Chase—he'll tell my secret," panted Nell. "He swore if you ever came back and married me he'd follow us all over the world to tell it."

Belding saw Gale grow deathly white and suddenly stand stock-still.

"Chase threatened you, then?" asked Dick; and the forced naturalness of his voice struck Belding.

"Threatened me? He made my life a nightmare," replied Nell, in a rush of speech. "At first I wondered how he was worrying mother sick. But she wouldn't tell me. Then when she went away he began to hint things. I hated him all the more. But when he told me—I was frightened, shamed. Still I did not weaken. He was pretty decent when he was sober. But when he was half drunk he was a devil. He laughed at me and my pride. I didn't dare shut the door in his face. After a while he found out that your mother loved me and that I loved her. Then he began to threaten me. If I didn't give in to him he'd see she learned the truth. That made me weaken. It nearly killed me. I simply could not bear the thought of Mrs. Gale knowing. But I couldn't marry him. Besides, he got so half the time, when he was drunk, he didn't want or ask me to be his wife. I was about ready to give up and go mad when you—you came home."

She ended in a whisper, looking up wistfully and sadly at him. Belding was a raging fire within, cold without. He watched Gale, and believed he could foretell that young man's future conduct. Gale gathered Nell up into his arms and held her to his breast for a long moment.

"Dear Nell, I'm sure the worst of your trouble is over," he said gently. "I *will not* give you up. Now, won't you lie down; try to rest and calm yourself. Don't grieve any more. This thing isn't so bad as you make it. Trust me. I'll shut Mr. Radford Chase's mouth."

As he released her she glanced quickly up at him, then lifted appealing hands.

"Dick, you won't hunt for him—go after him?"

Gale laughed, and the laugh made Belding jump.

"Dick, I beg of you. Please don't make trouble. The Chases have been hard enough on us. They are rich, powerful. Dick, say you will not make matters worse. Please promise me you'll not go to him."

"You ask me that?" he demanded.

"Yes. Oh, yes!"

"But you know it's useless. What kind of a man do you want me to be?"

"It's only that I'm afraid. Oh, Dick, he'd shoot you in the back."

"No, Nell, a man of his kind wouldn't have nerve enough even for that."

"You'll go?" she cried wildly.

Gale smiled, and the smile made Belding cold.

"Dick, I cannot keep you back?"

"No," he said.

Then the woman in her burst through instinctive fear, and with her eyes blazing black in her white face she lifted parted, quivering lips and kissed him.

Gale left the patio, and Belding followed closely at his heels. They went through the sitting-room. Outside upon the porch sat the rangers, Mr. Gale, and Thorne. Dick went into his room without speaking.

"Shore somethin's comin' off," said Ladd, sharply; and he sat up with his keen eyes narrowing.

Belding spoke a few words; and, remembering an impression he had wished to make upon Mr. Gale, he made them strong. But now it was with a grim humor that he spoke.

"Better stop that boy," he concluded, looking at Mr. Gale. "He'll do some mischief. He's wilder'n hell."

"Stop him? Why, assuredly," replied Mr. Gale, rising with nervous haste.

Just then Dick came out of his door. Belding eyed him keenly. The only change he could see was that Dick had put on a hat and a pair of heavy gloves.

"Richard, where are you going?" asked his father.

"I'm going over here to see a man."

"No. It is my wish that you remain. I forbid you to go," said Mr. Gale, with a hand on his son's shoulder.

Dick put Mr. Gale aside gently, respectfully, yet forcibly. The old man gasped.

"Dad, I haven't gotten over my bad habit of disobeying you. I'm sorry. Don't interfere with me now. And don't follow me. You might see something unpleasant."

"But my son! What are you going to do?"

"I'm going to beat a dog."

Mr. Gale looked helplessly from this strangely calm and cold son to the restless Belding. Then Dick strode off the porch.

"Hold on!" Ladd's voice would have stopped almost any man. "Dick, you wasn't a-goin' without me?"

"Yes, I was. But I'm thoughtless just now, Laddy."

"Shore you was. Wait a minute, Dick. I'm a sick man, but at that nobody can pull any stunts round here without me."

He hobbled along the porch and went into his room. Jim Lash knocked the ashes out of his pipe, and, humming his dance tune, he followed Ladd. In a moment the rangers appeared, and both were packing guns.

Not a little of Belding's grim excitement came from observation of Mr. Gale. At sight of the rangers with their guns the old man turned white and began to tremble.

"Better stay behind," whispered Belding. "Dick's going to beat that two-legged dog, and the rangers get excited when they're packing guns."

"I will not stay behind," replied Mr. Gale, stoutly. "I'll see this affair through.

Belding, I've guessed it. Richard is going to fight the Chases, those robbers who have ruined you."

"Well, I can't guarantee any fight on *their* side," returned Belding, dryly. "But maybe there'll be Greasers with a gun or two."

Belding stalked off to catch up with Dick, and Mr. Gale came trudging behind with Thorne.

"Where will we find these Chases?" asked Dick of Belding.

"They've got a place down the road adjoining the inn. They call it their club. At this hour Radford will be there sure. I don't know about the old man. But his office is now just across the way."

They passed several houses, turned a corner into the main street, and stopped at a wide, low adobe structure. A number of saddled horses stood haltered to posts. Mexicans lolled around the wide doorway.

"There's Ben Chase now, over on the corner," said Belding to Dick. "See, the tall man with the white hair, and leather band on his hat. He sees us. He knows there's something up. He's got his men with him. They'll come over. We're after the young buck, and sure he'll be in here."

They entered. The place was a hall, and needed only a bar to make it a saloon. There were two rickety pool tables. Evidently Chase had fitted up this amusement room for his laborers as well as for the use of his engineers and assistants, for the crowd contained both Mexicans and Americans. A large table near a window was surrounded by a noisy, smoking, drinking circle of card-players.

"Point out this Radford Chase to me," said Gale.

"There! The big fellow with the red face. His eyes stick out a little. See! He's dropped his cards and his face isn't red any more."

Dick strode across the room.

Belding grasped Mr. Gale and whispered hoarsely: "Don't miss anything. It'll be great. Watch Dick and watch Laddy! If there's any gun play, dodge behind me."

Belding smiled with a grim pleasure as he saw Mr. Gale's face turn white.

Dick halted beside the table. His heavy boot shot up, and with a crash the table split, and glasses, cards, chips flew everywhere. As they rattled down and the chairs of the dumfounded players began to slide, Dick called out: "My name is Gale. I'm looking for Mr. Radford Chase."

A tall, heavy-shouldered fellow rose, boldly enough, even swaggeringly, and glowered at Gale.

"I'm Radford Chase," he said. His voice betrayed the boldness of his action.

It was over in a few moments. The tables and chairs were tumbled into a heap; one of the pool tables had been shoved aside; a lamp lay shattered, with oil running dark upon the floor. Ladd leaned against a post with a smoking gun in his hand. A Mexican crouched close to the wall, moaning over a broken arm. In the far corner, upheld by comrades, another wounded Mexican cried out in pain. These two had attempted to draw weapons upon Gale, and Ladd had crippled them.

In the center of the room lay Radford Chase, a limp, torn, hulking, bloody figure. He was not seriously injured. But he was helpless, a miserable, beaten wretch, who knew his condition and felt the eyes upon him. He sobbed and moaned and howled. But no one offered to help him to his feet.

Backed against the door of the hall stood Ben Chase, for once stripped of all authority and confidence and courage. Gale confronted him, and now Gale's mien was in striking contrast to the coolness with which he had entered the place. Though sweat dripped from his face, it was as white as chalk. Like dark flames his eyes seemed to leap and dance and burn. His lean jaw hung down and quivered with passion. He shook a huge gloved fist in Chase's face.

"Your gray hairs save you this time. But keep out of my way! And when that son of yours comes to, tell him every time I meet him I'll add some more to what he got to-day!"

(*To be concluded*)

SPORTING AND VACATION PLACES

Have you decided where you are going this year on your trout-fishing trip? If not, then these pages, showing the best localities in the various States, accommodations while there, how to get there, and in fact all the necessary data for the enjoyment of your trip, will be of aid to you in making your selection.

The information found on these pages has been carefully collected and is not copied from railroad circulars and advertisements, but is the real "dope" on these localities. Only the best places are given, those places where there is just a slim chance of your catching fish are not mentioned. Our information files are always at your disposal.

Do not forget to enter your big trout in our 1916 Prize Fishing Contest; do this as soon as you get home, and then you will not forget or put it off until too late.

NEW ENGLAND STATES

Lake Parlin, Somerset County, Maine; reached by the Maine Central Ry. Accommodations at Lake Parlin Camps; H. P. McKenny, prop.; $17.50 a week. Trout fishing in Lake Parlin, Long Pond, Cold Stream and others.

Kidney Pond, Penobscot County, Maine; reached by Bangor & Aroostook Ry. to Norcross Accommodations at Hunt's Camps; I. O. Hunt, prop.; $2 a day. Trout fishing. Guides $3 a day and board.

Norcross, Penobscot County, Maine; reached by Bangor & Aroostook Ry. Accommodations at The Antlers Camps; Leon T. Potter, prop.; $12 per week. Brook trout and lake trout fishing, also pickerel. Fishing in Cooper Brook and surrounding lakes.

Sourdnahunk Lake, Aroostook County, Maine; reached by Bangor & Aroostook Ry. to Norcross, boat to Sourdnahunk Stream, then ride. Accommodations at The Antlers; Charles Daisey, prop.; $2 a day. Guides $3 a day and board. Trout fishing in surrounding lakes.

Round Mountain, Franklin County, Maine; reached by Boston & Maine Ry. and Maine Central. Accommodations at Round Mountain Lake Camp; Dion O. Blackwell, prop.; $16 a week. Trout fishing.

Jackman, Somerset County, Maine; reached by the Canadian Pacific from Moosehead Lake. Accommodations at Attean Camp; Ruel E. Holden, prop.; $14 a week. Brook trout in Wilson Brook and others.

Upper Dam, Oxford County, Maine; reached by the Maine Central Ry. Accommodations at Upper Dam Hotel; John Chadwick, prop.; $3.50 a day. Brook trout and landlocked salmon fishing.

Norcross, Penobscot County, Maine; reached by the Bangor & Aroostook Ry. Accommodations at Katahdin View Camps; F. M. Pitman, prop.; $12.50 a week. Trout, pickerel and perch.

Rangeley, Franklin County, Maine; reached by the Maine Central Ry. Accommodations at York Camps; J. L. York, prop.; $17.50 a week. Trout and salmon fishing.

Masards, Aroostook County, Maine; reached by the Bangor & Maine Ry. Accommodations at house of Billy Soule for $2 a day. Brook and lake trout and some salmon fishing.

Schoodic, Piscataquis County, Maine; reached by the Bangor & Aroostook Ry. Accommodations at Lakeside Camps; Cable & McNaughton, props.; $2 a day. Lake and brook trout, pickerel, bass and perch.

Patten, Penobscot County, Maine; reached by the Bangor & Aroostook Ry. Accommodations at Arbo's Hay Lake Camp; E. A. Arbo, prop.; $10 a week. Guides $4 a day. Landlocked salmon and brook trout in Sawtell Brook and Hay Brook.

Carrabasset, Somerset County, Maine; reached by the Maine Central and Sandy River Ry. Accommodations at Mt. Bigelow House, for $7 a week. Trout and salmon fishing.

Belgrade Lakes, Kennebec County, Maine; reached by the Bangor & Aroostook Ry. Accommodations at Belgrade Lake Camp; Francis Thwing, Prop.; $14 a week. Guides with boat, $3 a day. Fishing Big, Long and North Ponds. Trout, salmon and bass fishing.

Carratunk, Somerset County, Maine; reached by the Maine Central Ry. Accommodations at Spalding's; C. A. Spalding, prop.; $1.50 a day. Trout and salmon fishing in Pierce Pond and others.

Green Lake, Hancock County, Maine; reached by the Maine Central, Ry. Accommodations at Green Lake Hotel; Andre Leyneek, prop.; $15 a week. Trout, salmon, bass fishing.

Sherman, Penobscot County, Maine; reached by the Bangor & Aroostook Ry. Accommodations at Bowlan Camps; Charles E. McDonald, prop.; $2 a day. Guides $3 a day and board. Trout and salmon fishing in East Branch of Penobscot and surrounding lakes and streams.

Norcross, Penobscot County, Maine; reached by the Bangor & Aroostook Ry. Accommodations at Buckhorn Camp; Bert Haynes, prop.; $1.50 a day. Guides $3 a day. Trout, pickerel and white perch.

Averill, Essex County, Vermont;

reached by the Boston & Maine Ry. Accommodations at Cold Spring Camp; Charles M. Quimby, prop.; $3 a day. Trout, salmon and muscallonge in Big and Little Averill Lakes.

Warner, Merrimack County, New Hampshire; reached by the Boston & Maine Ry. Accommodations at farmhouse of Mr. White, $7 a week. Trout, pickerel in Warner River and Lake Sunapee.

MIDDLE ATLANTIC STATES

Old Forge, Herkimer County, New York; reached by the Fulton Chain Ry. Accommodations at Bay View Camp; O. C. Tuttle, prop.; $14 a week. Brook trout, lake trout, salmon and white fish.

Forest Home, Tompkins County, New York; reached by the Delaware, Lackawanna & Western Ry. Accommodations at Forest Home; Walter Humes, prop.; $10 a week. Trout fishing.

Wanakena, St. Lawrence County, New York; reached by the New York Central Ry. Accommodations at New Inlet House; Mr. and Mrs. L. F. Moore, props. Trout fishing.

De Bruce, Sullivan County, New York; reached by New York, Ontario & Western Ry. Accommodations at Homestead Inn; Miss Ada Cooper, prop.; $2 a day. Brook trout and brown trout.

Neversink, Sullivan County, New York; reached by New York, Ontario & Western Ry. Accommodations at Farm House; H. B. Christian, prop.; $10 a week. Brown and brook trout fishing in Neversink River.

Raquette Lake, Hamilton County, New York; reached by the New York Central Ry. Accommodations at The Antlers; Charles Bennett, prop.; $4 a day. Trout, perch and bass fishing.

Raquette Lake, Hamilton County, New York; reached by New York Central Ry. Accommodations at Raquette Lake Hotel; Mr. Reardon, prop.; $17.50 a week. Brook trout, lake trout and some bass.

Beaver River, St. Lawrence County, New York; reached by New York Central Ry. Accommodations at Dobson's; B. A. Dobson, prop.; $1.50 a day. Trout fishing. Guides $4 a day.

Old Forge, Herkimer County, New York; reached by the New York Central Ry. Accommodations at Bay View Camp; O. C. Tuttle, prop.; $12.50 a week. Brook trout and bass fishing.

Minerva, Essex County, New York; reached by the Delaware & Hudson Ry. to North Creek, then stage to Minerva. Party camped out. Brook trout, rainbow trout, and lake trout in Minerva and other creeks and ponds.

Indian Lake, Hamilton County, New York; reached by the Delaware & Hartford to North Creek, then 20 miles by stage. Accommodations at Lock House; F. N. Lock, prop.; $2 a day. Brook trout and pike. Fishing in Indian Lake.

Crown Point, Essex County, New York; reached by the New York Central Ry. to Albany and then Delaware & Hartford. Accommodations at Lake House; M. Gilligan's Sons, props.; $2 a day. Trout, pickerel, bass, pike in Lake Champlain and neighboring lakes.

Glen Eyre, Pike County, Pennsylvania; reached by the Erie Ry. Accommodations at Rock Bound Camp; Mrs. A. W. LeRoy, prop.; $10 a week. Trout, pike, pickerel, bass in Lackawaxen River, Lakes Tudenscung and Wescolong.

Elkgrove, Columbia County, Pennsylvania; reached by the Delaware, Lackawanna & Western Ry. Accommodations at Elkgrove Hotel; J. W. Perry, prop.; $1.50 a day. Trout fishing.

Muncy, Lycoming County, Pennsylvania; reached by the Pennsylvania & Reading Ry. Accommodations at hotel for $1 a day. Brook trout, bass and pike.

Spruce Creek Station, Huntington County, Pennsylvania; reached by the Pennsylvania Ry. Accommodations at farmhouse of William Johnson, $2 a day. Brook trout and brown trout in Spruce Creek.

Conrad Post Office, Potter County, Pennsylvania; reached by the Buffalo & Susquehanna Ry. Accommodations at Hotel Walker, $1 a day. Brook trout fishing.

Clermont, McKean County, Pennsylvania; reached by the Pennsylvania Ry. Party camped out. Trout fishing in Potato Creek and West Fork.

Canadensis, Monroe County, Pennsylvania; reached by the Delaware, Lackawanna & Western Ry. to Cresco Station. Accommodations at Spruce Cabin Inn; W. J. and M. D. Price, props.; $2.50 to $6 a day. Brook trout, brown trout in Spruce Cabin Run and nearby streams.

Cresco, Wayne County, Pennsylvania; reached by the Delaware, Lackawanna & Western Ry. Party camped out. Trout fishing.

Cross Fork, Potter County, Pennsylvania; reached by the Buffalo & Susquehanna Ry. Accommodations at house of Mr. Jones, for $1 a day. Brook trout, brown trout and black bass.

SOUTHERN STATES

Petersburg, Grant County, West Virginia; reached by the Baltimore & Ohio Ry. Accommodations at hotel for $1 a day. Brook trout and black bass fishing in Potomac River. Guides $2.50 a day.

Linville, Avery County, North Carolina; reached by the Southern Ry. Accommodations at Eseeola Inn; James P. Vining, prop. Trout fishing in Linville River and Kawana Lake.

Saginaw, Avery County, North Carolina; reached by the East Tennessee & Western North Carolina Ry. Accommodations at Pineola Inn; William F. Green, prop. Trout fishing in the Linville River. Brook trout and rainbow trout. Fishing permit 75c. a day.

Verona, Onslow County, North Carolina; reached by the Atlantic Coast Line Ry. Accommodations at Pine Top Lodge; C. & L. P. Blow, props.; $17 a week. Guides $2.50 a day. Trout, pike and bass fishing.

MIDDLE WESTERN STATES

Bellaire, Antrim County, Michigan; reached by the Pere Marquette Ry. Accommodations at The Maples; W. C. Green prop.; $8.50 to $12.50 a week; and at the Fisherman's Paradise; H. D. Smith, prop.; $12 a week. Rainbow, brown and brook trout, also bass, pike, muscallonge and pickerel.

Grayling, Crawford County, Michigan; reached by the Michigan Central Ry. Accommodations at Wakeley's Bridge; S. B. Wakeley, prop.; $1.50 a day. Brook trout, rainbow trout and brown trout. Guides $3 a day.

Luther, Lake County, Michigan; reached by the Pere Marquette Ry. Party camped out. Rainbow and brook trout in the Little Manistee River. Good camping locality.

Gogebic, Gogebic County, Michigan; reached by the Chicago & Northwestern Ry. Accommodations at Gogebic Hotel and cottages. Trout fishing, also small-mouth bass and pickerel. Trout in Slate River and tributaries. Good camping locality.

Baldwin, Lake County, Michigan; reached by the Pere Marquette Ry. Accommodations at Rainbow Camp; Frank Solaire, prop.; $2 a day. Brook trout, rainbow and brown trout.

Lovells, Crawford County, Michigan; reached by the Michigan Central Ry. Accommodations at Douglas Hotel; T. E. Douglas, prop.; $2 a day. Fly fishing for brook, rainbow and brown trout. No bait fishing allowed.

Central Lake, Antrim County, Michigan; reached by the Pere Marquette Ry. Accommodations at Fisk Lodge; J. P. Fisk, prop.; $2 a day. Brook trout and brown trout.

Lakota, Vilas County, Wisconsin; reached by the Chicago & Northwestern Ry. Accommodations at Lakota; Wm. Adams, prop.; $10 a week. Guides $2.50 a day. Brook trout, also muscallonge, bass, pike and pickerel.

Powell, Iron County, Wisconsin;

reached by the Chicago & Northwestern Ry. Accommodations at Flambeau Lodge; W. G. Watrous, prop.; $2.50 a day. Brook trout, pike, bass and muscallonge.

Stone Lake, Sawyer County, Wisconsin; reached by the Minneapolis, St. Paul & Sault Ste. Marie Ry. Accommodations at house of Mr. Greenhagen; $10 a week. Guides $2.50 a day. Trout, whitefish, bass, pike and muscallonge.

Hackley, Vilas County, Wisconsin; reached by the Chicago & Northwestern Ry. Accommodations at Long Lake Camp; Charles Hazen, prop.; $12 a week. Guides $2.50 a day. Rainbow trout in Deer Creek, also fishing for bass, muscallonge, pickerel and pike.

Brule, Douglas County, Wisconsin; reached by the Chicago & Northwestern Ry. Accommodations at Denny's Idlewilde Lodge; Henry Denny, prop.; $1 a day. Guides $3 a day. Rainbow and brook trout.

Cable, Bayfield County, Wisconsin; reached by the Chicago & Northwestern Ry. Accommodations at The Cavalier; L. A. Cavalier, prop.; $2 a day. Brook trout, lake trout, bass, pike, muscallonge. Six trout streams.

ROCKY MOUNTAIN STATES

Salesville, Gallatin County, Montana; reached by the Gallatin Valley Ry. Accommodations at Karst's Cold Spring Resort; P. F. Karst, prop.; $12. Trout, whitefish.

Glacier National Park; reached by Great Northern Ry. to Glacier Park Station. Accommodations at Great Northern Hotel and camps throughout the park. A saddle or camping trip through the park will take one to the best of trout fishing waters. Horses and outfits can be had at Glacier Park Station.

Stillwater Valley, Yellowstone County, Montana, reached by the Northern Pacific Ry. Accommodations at Woodbine Ranch, B. Wood, prop. Trout fishing.

Woods Lake, Pitkin County, Colorado, reached by the Chicago, Rock Island and Pacific Ry. to Colorado Springs, then Colorado Midland Ry. to Thomasville. Accommodations at P. J. Engelbrachts camps, $15 a week. Brook, mountain and rainbow trout fishing.

Basalt, Eagle County, Colorado, reached by the Colorado Midland Ry. Co. Accommodations at Basalt Hotel, E. P. Mattingly, prop., $2.50 a day. Mountain trout in Roaring Fork and Frying Pan streams.

Cody, Big Horn County, Wyoming, reached by the Chicago, Burlington and Quincy Ry. Accommodations at Aldrich Lodge, S. W. Aldrich, prop., $5 a day. Brook trout fishing. Accommodations also at Frost and Richard Ranch Resort; Frost and Richard, props. Trout fishing.

Jackson, Uinta County, Wyoming; reached by the Oregon Short Line. Accommodations at Lovejoys; Fred Lovejoy, prop. Cutthroat and lake trout.

PACIFIC COAST STATES

Klamath Fall, Klamath County, Oregon; reached by the Southern Pacific Ry. Accommodations at Eagle Ridge Tavern; Mrs. Griffith, prop.; $2.50 a day, Rainbow trout and salmon in Klamath Lake and the river.

Vida, Lake County, Oregon; reached by the Southern Pacific Ry. Accommodations at Carey Thompsons. Trout fishing in the Rogue River. Redside, cut-throats, and mountain trout. Magic Dam, Blaine, Idaho, reached by the Union Pacific Ry. Party camped out. Trout fishing in Big Wood River.

Bay View, Kootenai County, Idaho; reached by the Southern Pacific Ry. Party camped out. Horses, $1.50 a day. Cut-throat trout in Bear, Tupee, and Trail Creeks.

Dixie, Idaho County; reached by the Northern Pacific Ry. Accommodations at the Five-Mile Ranch; J. R. Painter, prop. Trout and salmon in the Salmon River.

Kalama, Cowlitz County, Washington; reached by the Northern Pacific Ry. Accommodations at Pigeon Springs; Mr. Wynkoop, prop.; $2 a day. Rainbow trout and mountain trout.

Pend O'Reille Lakes, Washington; reached by the Great Northern Ry. Accommodations at house of H. W. Hentage; $1 a day. Trout in Little Pend O'Reille Lakes and River.

Mammoth, Imperial County, Cal.; reached by the Southern Pacific Ry. Accommodations at The Mammoth; $2.50 a day. Brook, rainbow, Loch Leven and cutthroat trout in Crater and other nearby lakes.

Sanger, Fresno County, Cal.; reached by the Southern Pacific Ry. Accommodations at Kanawyer's Camp in King's River Cañon. Rainbow and steelhead trout.

Redlands, San Bernardino County, Cal.; reached by the Southern Pacific Ry. Accommodations at Pine Knot Lodge; $3 a day. Trout fishing in Pine Lake and Bear Creek.

Lone Pine, Inyo County, Cal.; reached by the Southern Pacific Ry. Accommodations at Bug Hunter; $2.50 a day. Trout fishing in Cottonwood Lakes.

CANADA

Joe Lake, Nipissing County, Ont.; reached by the Grand Trunk Ry. Accommodations at Algonquin Hotel; L. E. Merrell, prop.; $3.50 a day. Speckled trout fishing.

Sault Ste. Marie, Ont.; reached by the Canadian Pacific Ry., Soo Line. Accommodations at Algonquin Hotel; J. W. Moffate, prop. Speckled trout, rainbow trout fishing.

Newboro, Ont.; reached by the Grand Trunk Ry. Accommodations at the Hotel Rideau; J. H. Scott, prop.; $2 a day. Salmon and lake trout.

Magnetawan, Ont.; reached by the Grand Trunk Ry. Accommodations at the Lake of Many Islands Camp; Fred Schmeler, prop.; $1.50 a week. Lake trout, brook trout.

Sand Lake, Parry Sound, Ont.; reached by the Algoma Central Ry. Party camped out. Lake and speckled trout in Sand Lake and river.

Georgian Bay, Ont.; reached by the Grand Trunk Ry. Accommodations at hotels for $15 a week. Brook trout, also bass and muscallonge.

Nipigon, Ont.; reached by the Canadian Pacific Ry. Party camped out. Brook trout and lake trout in Nipigon River and nearby lakes.

Temagami, Nipissing County, Ont.; reached by the Grand Trunk Ry. Accommodations at the Wabi-Kon Camp; L. M. Orr, prop.; $12 a week. Lake trout in Lake Temagami.

Lake Edward, Que.; reached by the Quebec and Lake St. John Ry Accommodations at the Laurentide House; Robert Rowley, prop. Trout fishing.

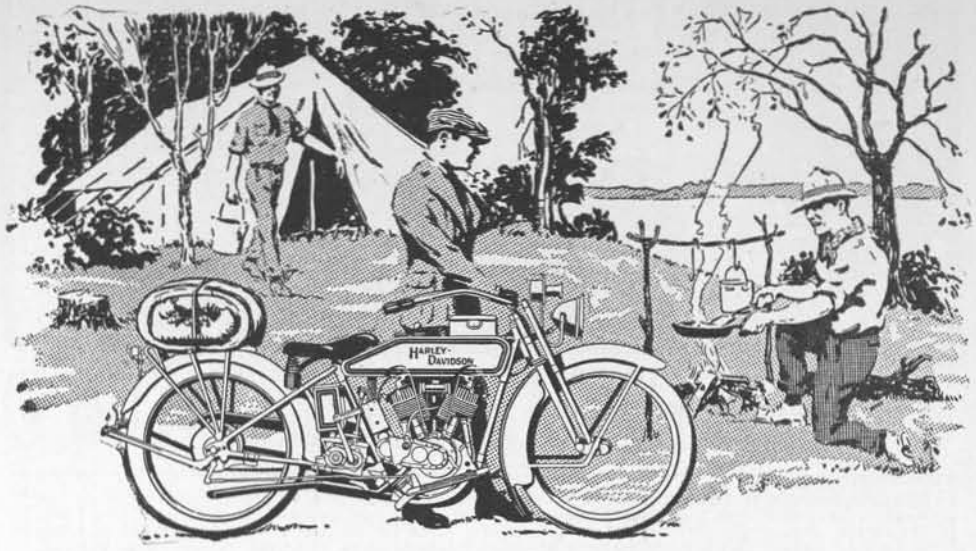
Tadusac, Que.; reached by the Richelieu and Ontario Boat from Montreal or Quebec. Accommodations at Hotel Camp; B. F. Bowen, prop.; $3 a day. Trout fishing and salmon.

Riley Brook, New Brunswick; reached by the Canadian Pacific Ry. Accommodations at the Marston and Vanderbeck Sporting Camps; Asa Marston and R. L. Vanderbeck, props. Trout fishing in Riley and Stewart Brooks.

Sparkle, New Brunswick; reached by the Canadian Pacific Ry to Bristol. Accommodations at Murdock McKenzie's Camps. Brook trout and salmon fishing.

Bathurst, New Brunswick; reached by the Intercolonial Ry. from Montreal. Accommodations at Imhoff Camps; Imhoff Bros., props. Brook trout and salmon trout fishing.

Plaster Rock, New Brunswick; reached by the Boston and Maine Ry. Accommodations at camps of Geo. E. Gough; $21 a week. Trout and salmon fishing.



When Nature Comes to Life

GEE, but it's great! That scent of the woods in the spring time—clear skies—rustling leaves—nodding wild flowers—the swish and swirl of the water on the shore.

And that whiff from the brewing coffee—get it?

Long days full of keen joy and nights of deep, refreshing sleep come to the owner of a

HARLEY-DAVIDSON

that master motorcycle that takes you in a twinkle "from where you are to where you want to be".

With a 3-speed Harley-Davidson you will be all set for a glorious summer. Sundays—holidays—vacation days—it will be your willing servant, always ready for a trip—ten miles or a hundred—up hills, through sand—it's all the same to the "silent grey fellow".

You give the orders with a twist of the wrist. You can loiter along the road or travel with the speed of the wind. All this with a Harley-Davidson, for fourteen years the master motorcycle.

And the cost? Don't bother about that. Most dealers will make terms to suit your convenience.

If you don't know your Harley-Davidson dealer write for illustrated catalog today

HARLEY-DAVIDSON MOTOR COMPANY

Producers of High-Grade Motorcycles for Fourteen Years

464 B Street **Milwaukee, Wis.**

The SPORTSMAN'S WORLD

The Sportsman's World Department is the forum for discussion of all outdoor matters, and also for the records of trap shoots, rifle tournaments and casting contests. Here will be found the latest notes on Conservation of game and fish, hints for making outdoor equipment at home, records of big fish caught and matters of equal interest. Any questions pertaining to hunting, fishing, tackle, baits, equipment, cartridges, guns, conservation, etc., should be addressed to this Department, and will be answered by letter, and if of sufficient interest to the mass of our readers, we will run the questions and answers in these columns.

HUNTING AND WOODCRAFT

CAMPING PERMITS IN THE APPALACHIAN RESERVES

A recent letter written by Mr. H. S. Graves, Chief Forester of the United States, to Mr. W. H. Tayloe, Passenger Traffic Manager of the Southern Railway, outlines the plans which the Government will make effective in the Mount Mitchell National Park.

"I am very much interested," writes Mr. Graves, "in the development of the Appalachian national forests for recreational purposes. The enjoyment by the public of the national forests for all sorts of out-door recreation is recognized as one of their important uses, and ample regulations exist for the purpose of facilitating this use to the fullest extent. The roads and trails built primarily for the purpose of administration and protection are open to all who desire to tramp or ride through the national forest, and the only restrictions existing are that travelers observe the ordinary precautions against the burning of woods or the destruction or injury of timber or other property.

"Free permits may be obtained for temporary camping purposes and it is required only that necessary precautions be taken in building and extinguishing the campfire, and that the cutting of green timber be avoided and that the grounds be kept in clean and sanitary condition.

"The most important problem in connection with the recreation development of the Appalachian national forests is to provide means for bringing the opportunities offered to the attention of the public, and making it easy for people who are interested in camping or in building permanent summer homes to find the exact locations which will best suit their needs. In bringing this about the Southern Railway can, I am confident, be of great assistance through the facilities offered by the organization for the dissemination of detailed information concerning the recreation attractions of the country tributary to its lines.

Chief Forester Graves has authorized the District Forester to prepare maps and reports upon the Mount Mitchell National Park which will disclose in detail its recreational features and explain to the public the opportunities afforded. The maps will indicate the main routes of travel, those parts of the tract of special interest from a scenic or other recreational viewpoint, and the localities which have special advantages either for temporary camping purposes or for permanent cottage sites.

It is explained by Mr. Graves that "for camps of a permanent nature, or for summer cottages, permits will be required and charges are fixed in accordance with the exclusive privileges thus granted." The charges, however, are substantially negligible. As further explained by Mr. Graves, "the primary object of the term permits is not to secure a revenue, but to promote the use of National forest lands for recreation purposes. The annual charge for summer-home permits is not less than $10.00. The rates for revocable permits for summer homes may be as low as $5.00 per annum." Temporary camp sites, of course, are free.

In the Mount Mitchell National Park campers may live a delightfully carefree life, in ideally beautiful and healthful surroundings, at practically no expense except their subsistence. Thus the opening of the park will afford to thousands of people, who otherwise might not be able to avail themselves of such advantages, all of the real pleasures and profits of an expensive summer outing.

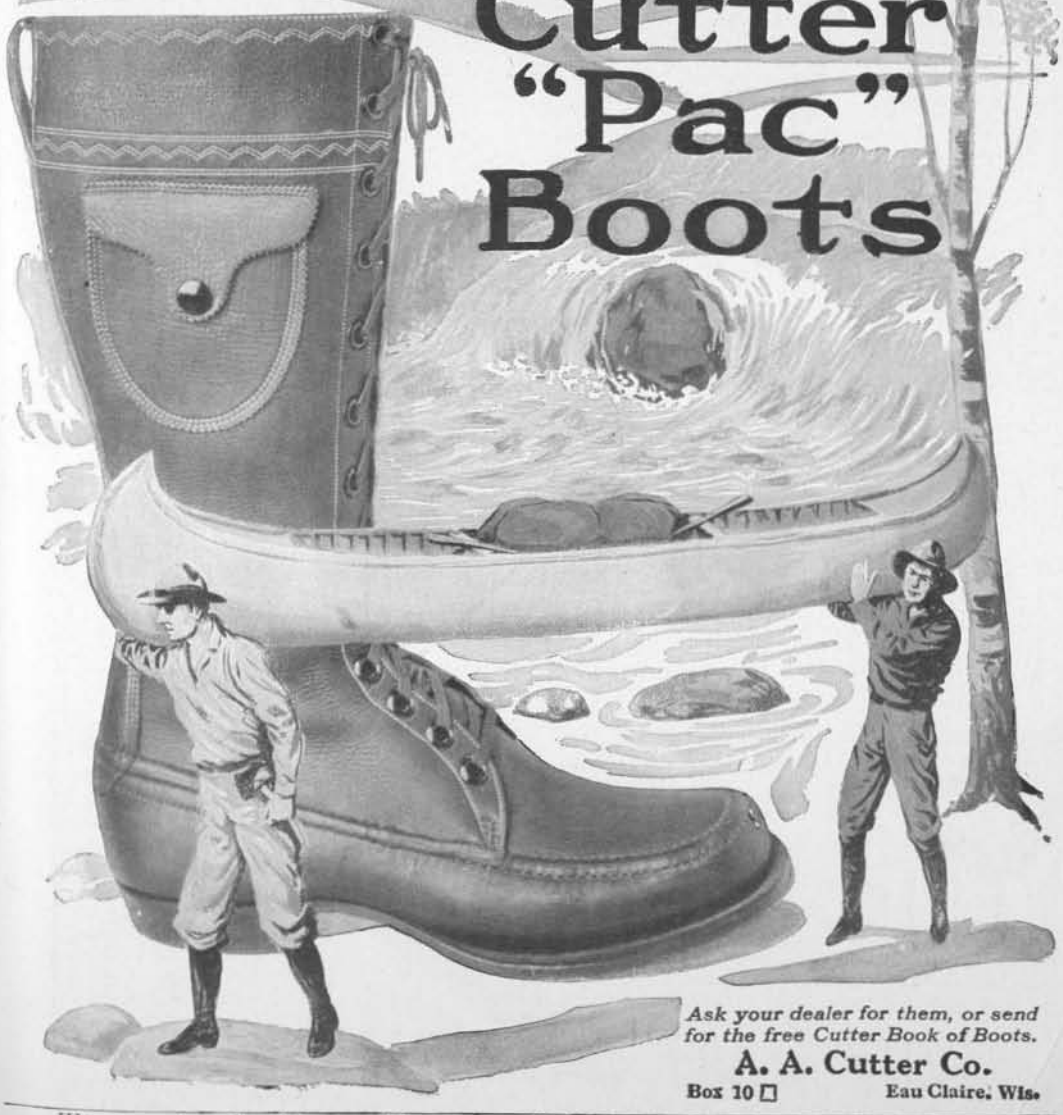
Mount Mitchell National Forest, in the very heart of the Southern Appalachian Mountains, one of the most beautiful and picturesque spots in the Western World, is to be opened to the people for camping and recreational purposes. In loveliness of scenery, in salubrity of climate, in wonders of natural resources and in accessibility of location it will be the most wonderful park in America.

In protection of the superb primeval forests and the vast

YOUR footgear is the most important part of your outing rig. When you are well shod—Cutter Booted—you find the miles are shorter and the going less rough. With your feet always dry—Cutter Booted—you forget there are such things as chilblains, scalds and blisters.

Only the centers of the best hides are good enough for Cutter Boots—and only masterworkmen, men who have grown up with cobblers' needles in their hands, are skilled and careful enough to make them. Cutter "Pac" Boots, made to be worn over heavy wool socks, combine moccasin comfort with boot protection. Probably your dealer carries them.

Cutter "Pac" Boots



Ask your dealer for them, or send for the free Cutter Book of Boots.

A. A. Cutter Co.

Box 10 ☐ Eau Claire, Wis.

natural water sources, the Government acquired the area of the reserve. After mature consideration, it was decided to convert it into a recreation park—a magnificent playground for the people of the entire country.

In conformity with this plan, the Forest Service and the Southern Railway are preparing literature and maps descriptive of the reserve to place at the disposal of those who may desire permanently or temporarily to locate within the park. It is the purpose of the Government to place within the reach of all either locations for cottages or sites for camps. Here they may spend all or any part of the year in an environment unsurpassed in beauty and healthfulness.

Mount Mitchell, from which the park takes its name, is one of the grandest upheavals on the Western Hemisphere. Its summit is lifted 6,711 feet into a sky of deepest azure. It is the loftiest peak in Eastern North America. For ages it has stood in primeval solitude and solemn grandeur, while above and around and beneath, the clouds have swept and storms have raved.

From its top is disclosed a panorama of scenery of surpassing beauty. Below, Nature has riven great gorges and built everlasting cliffs; and the neighboring peaks of the Black Mountains, many of them ranging above six thousand feet and clad in the dark, rich green of the balsam, rank worthily with the giant Mitchell. Across the marvelous Asheville Plateau, of an average altitude of 2,200 feet, is the summit of the Blue Ridge, where such wonderful peaks as the Dome, the Pinnacle and the Bull's Head toss their tops into the sky, and, in the purpling distance, are such mountain wonders as Table Rock, Roan, Grandfather, Tennessee Bald, Pisgah and scores of others, which

"Loom grander far than any sea."

In the opening to the people of the Mount Mitchell National Forest, the Government has conferred no greater blessing upon the nature lovers of the United States, and it is expected by the Forest Service, in co-operation with the Southern Railway, to make it one of the most convenient and delightful pleasure resorts in the world.

PARAFFINING CANVAS

FIELD & STREAM PUB. CO.:

As I feel the editors of such a valuable magazine as FIELD AND STREAM should know about pretty much everything, I am wondering if you can tell me where to get a formula for paraffining canvas for waterproofing.

H. M. FINCH.

Ans.—Get five blocks of paraffin from grocery store. Cut up and dissolve in one quart warm gasoline to thoroughly break up the fibres (cold will not do the trick). Paint on tent walls with flat brush.—ED.

A WATERPROOF BOOT DRESSING

FIELD & STREAM PUB. CO.:

In the last November number I see an inquiry for waterproofing hunting boots, and I wish to tell you of a preparation which personally I find perfectly effective. Some fifteen years ago or so I had made to order a pair of heavy shooting boots. The maker was a thoroughly good workman, and made them of heavy, sound cowhide. I wore these boots ever since every Fall deer shooting, in Muskoka, through all kinds of weather, rain, snow and slush, and on no occasion did I ever get wet feet, nor have the uppers cracked or shown any signs of doing so, while the soles are still sound. Muskoka, from Gravenhurst to Parry Sound, is about as rough a country as is to be found, rocky and swampy wherever you go. The boots are still perfectly sound and waterproof.

When I received the boots, before putting them on I gave them two or three dressings of the composition stated below:

Melt 3 ozs. spermacetti in an earthen vessel (a pipkin) over a slow fire. To this add 6 drachms of raw India rubber cut into thin slices; when thoroughly dissolved add 8 ozs. tallow, 2 ozs. hog's lard, 4 ozs. of amber varnish. When well mixed it is ready for use. Keep the mixture gently warmed and well stirred. Apply to the boots when they are quite new and unworn, and slightly warmed. Apply a heavy coat with a brush, the mixture also being warm, and place the boots when dressed with it near a slow fire to allow it to soak into the leather; when the first dressing has done so, give another dressing and place near the fire, and a third one if thought necessary. The soles to be dressed the same as the uppers. After the expiration of about five seasons another dressing in the same way may be given.

If the above is carefully done, wet feet will be unknown.

S. J. STAMMERS.

MAKING BUCKSKIN

FIELD & STREAM PUB. CO.:

Can you favor me with the formula for making buckskin out of a deer hide? I want to try my hand at it.

PELE BOTHEN, JR.

Ans.—Soak deer hide in wood ash lye for three days until hair slips; scrape clean, rub in deer's brains or tallow and work wet over a rail or board with a wedge edge somewhat rounded. The idea is in the skin, and should be kept up with lots of elbow grease until skin is entirely pliant. It should dry out during the final working.—ED.

SOMEONE TRY THIS ON A DEER'S HEAD

FIELD & STREAM PUB. CO.:

It may interest you to hear of a means of cooking by which one can prepare a cow's head into a very toothsome article of food. I once had the good fortune of camping out with some vaqueros or cowboys in Southern California. It was during the round-up and whenever we needed fresh meat we would slaughter a cow. As the same kind of meat for breakfast, lunch and dinner soon became tiresome, the vaqueros tried many ways of making it more palatable. One interesting method was putting a cow's head in a sack and baking it in the ground. The men first dug a hole 20x20x20 inches. In this a fire was built of dry alfalfa and oak bark. The fire was kept going until the hole was filled with a living mass of coals. On top of these the men put the sack containing the head, after having moistened it a little to prevent its catching fire. They then filled up the hole with earth and allowed the head to cook over night. The next morning when it was dug out I found that the flesh, especially on the cheek, made a very good dish.

A. STARR KEELER, JR.

DEER ANTLERS

FIELD & STREAM PUB. CO.:

Does the deer shed his antlers every year? If he does, how long will it be before his horns are full size?

ARTHUR FROST.

Ans.—Sheds in January; antlers are full grown again by September.—ED.

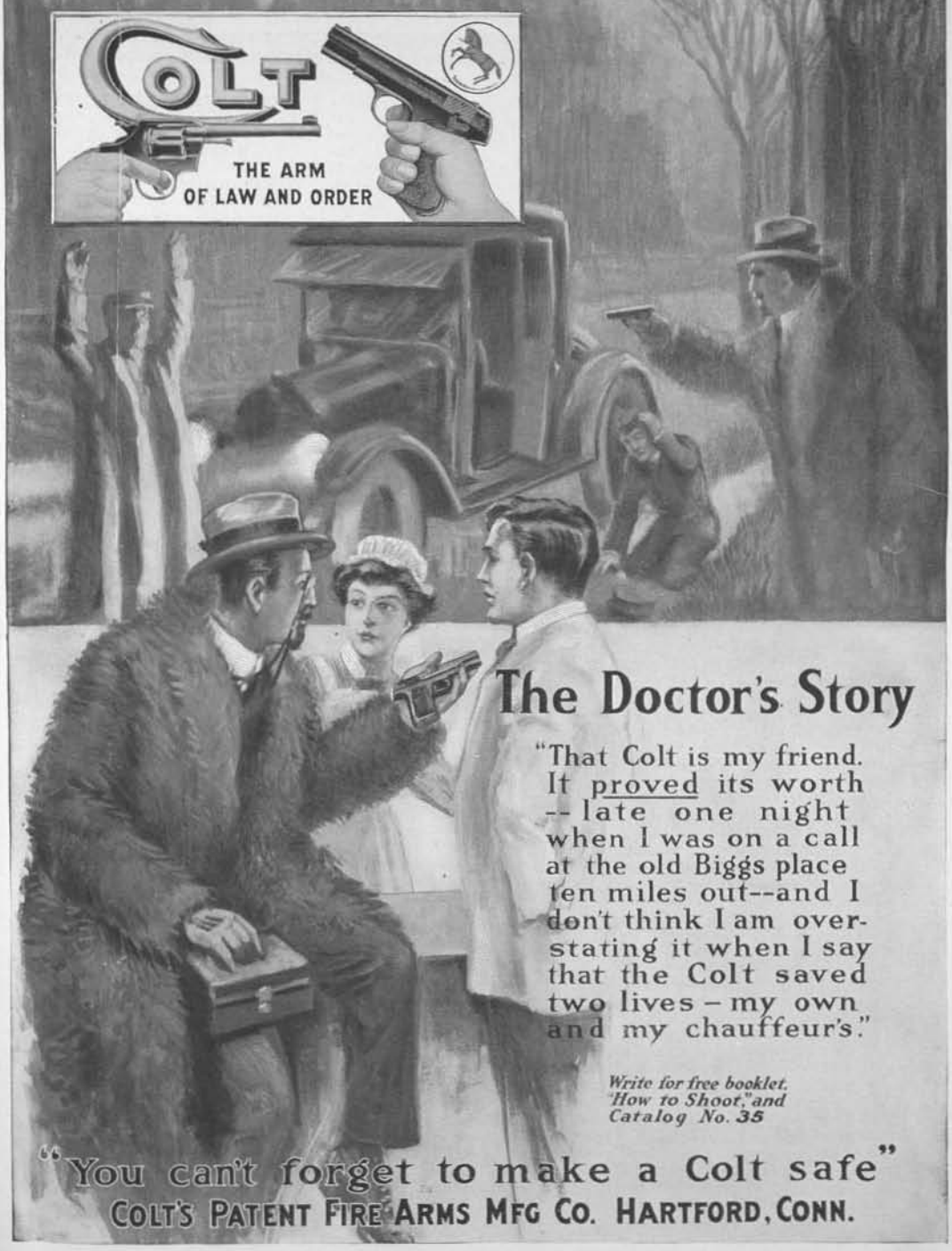
ARE YOU STUMPED?

Ask Field and Stream's INFORMATION BUREAU for the answer. Information on hunting, fishing, guns, tackle, camping and trail equipment, dogs and all other matters pertaining to the great outdoors. Write our SPORTING AND VACATION PLACES BUREAU about the country you have planned to visit on your next trip.

ONCE IN EVERY MAN'S LIFE

COLT

THE ARM OF LAW AND ORDER



The Doctor's Story

"That Colt is my friend. It proved its worth -- late one night when I was on a call at the old Biggs place ten miles out--and I don't think I am overstating it when I say that the Colt saved two lives – my own and my chauffeur's."

Write for free booklet, "How to Shoot," and Catalog No. 35

"You can't forget to make a Colt safe"

COLT'S PATENT FIRE ARMS MFG CO. HARTFORD, CONN.

CONSERVATION

NATIONAL FORESTS AS GAME PRESERVES

IN THE SENATE OF THE UNITED STATES

January 5, 1916

Mr. Chamberlain introduced the following bill; which was read twice and referred to the Committee on Forest Reservations and the Protection of Game.

A Bill to Establish Game Sanctuaries in National Forests, and for Other Purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of providing breeding places for game animals and creating an increased food supply in the national forests the President of the United States is hereby authorized, upon recommendation of the Secretary of Agriculture and with the approval of the governors of the States in which the respective national forests are located, to establish, by public proclamation, certain specified areas within said forests as game sanctuaries or refuges which shall be devoted to the increase of game of all kinds naturally adapted thereto, but the establishment of these sanctuaries or refuges shall not prevent the Secretary of Agriculture from allowing grazing on these areas of cattle, sheep, and other domestic animals under such regulations as he may prescribe: *Provided,* That said sanctuaries or refuges shall be established on lands not chiefly suitable for agriculture.

Sec. 2. That when such sanctuaries or refuges have been established, as provided in section one of this Act, hunting, pursuing, poisoning, killing, or capturing by trapping, netting, or any other means, or attempting to hunt, pursue, kill, or capture any wild animals or birds for any purpose whatever upon the lands of the United States within the limits of said sanctuaries shall be unlawful except as hereinafter provided, and any person violating such regulations or provisions of this Act shall be deemed guilty of a misdemeanor and shall upon conviction in any United States court be fined in a sum not exceeding $500, or be imprisoned for a period not exceeding six months, or shall suffer both fine and imprisonment, in the discretion of the court.

Sec. 3. That the Secretary of Agriculture shall execute the provisions of this Act, and he is hereby authorized to make all needful rules and regulations for the administration of the lands included in such game sanctuaries in accordance with the purpose of this Act, including regulations under which fishing within the limits of game sanctuaries may be permitted but not in contravention of State laws, and predatory animals, such as wolves, coyotes, foxes, pumas, and other species as may be declared destructive to live stock or wild life may be captured or killed.

Sec. 4. That the Secretary of Agriculture shall cause the bounaries of all game sanctuaries established under the provisions of this Act to be suitably marked where necessary and notices to be posted showing the location of the sanctuary, and warning the public that hunting therein is prohibited except under such rules and regulations as may be prescribed.

Sec. 5. That it is the purpose of this Act to provide breeding places for large wild animals such as deer, elk, mountain sheep, and other species which may be made to produce a new food supply by breeding under natural conditions and spreading over adjacent territory whereon they may be hunted in accordance with State laws; to establish sanctuaries of medium size rather than large preserves; and whenever possible to establish chains of sanctuaries which in turn will restore wild game animals to intervening territory; but it is not the purpose to extend the areas of such sanctuaries or refuges in such manner as to close surrounding hunting grounds.

THE SOCIETY OF AMERICAN FORESTERS ENDORSES FEDERAL MIGRATORY BIRD LAWS

Field & Stream Pub. Co.:

It gives me pleasure to inform you that the Society of American Foresters, at its annual meeting held in Washington on January 22, adopted a resolution endorsing the present Federal Migratory Bird Laws.

Raphael Zon,
Editor-in-Chief.

NEW HAMPSHIRE'S NEW FISH HATCHERY

Kenneth A. Lord

Hidden amongst the shadows cast by Mt. Carr, in the town of Warren, beside a roaring mountain stands New Hampshire's newest fish hatchery. This large though economical plant is easily proving the finest in the State because of its ideal environment. Ground for the building was broken September 7, 1915, and November 11, 1915, the hatchery, dam and breeding tanks were ready for use in the season for incubation of trout and salmon eggs.

One hundred thousand chinook salmon eggs were received at the station from the Pacific coast November 11th, and at the same time a similar allotment arrived at the hatchery in Laconia. November 23d all the eggs at the Warren station had hatched, while those at Laconia did not commence to produce until the last week in December. This one instance alone sustains the prophesy of State Commissioner Beal that the Warren water contained a larger per cent. of production elements than any other in the State.

There are now about 2,000,000 eggs of different species at the station in the process of incubation, and many more will be received as the commissioner's future plans develop. It is understood that Brook trout, Chinook salmon and Land-locked salmon will be the species chiefly handled.

Located about 1,000 feet north of the hatchery building is the dam that supplies through a 12-inch iron pipe with leaded joints the water for the hatching and rearing tanks. Within the building are 40 troughs, each 12 feet in length, 16 inches in width and 16 inches in depth which are supplied in the usual manner from the main water pipe. These troughs are placed about 30 inches above the solid cement floor, the lower end of each one being one inch lower than the upper so as to give the water a gentle flow. The water empties from a spigot about one inch in diameter. The troughs stand in pairs so that those in charge can readily overlook them by passing on each side

PAIN AND ITS RELIEF

By Dr. E. L. Abogado

OURS is not a nation of Stoics. We are not indifferent to pain. We abhor it. Be it ever so slight, we fume and fret until we get rid of it, because it annoys us—it interferes with our work and pleasure.

And if pain is severe—the pain of rheumatism, sciatica, neuralgia, gout or some acute nerve derangement, we are apt to regard it as sufficient excuse for a hurried call at the doctor's office.

In the aggregate, the American people probably suffer more annoying, useless pain, than any other people on the face of the earth.

That is because of the intensity of our complex civilization—the strenuosity of our effort to secure dollars—the rapidity of our pace in pursuit of pleasure—the indulgence of our appetites.

Rich, poor, saint, sinner, stray from the straight, narrow path of nature's immutable law, until Pain is so universally present, so much of the time, that one can scarcely find a home, in any walk in life, in all this broad land, that is unacquainted with pain. Pain is so common that to see a frown is to bring forth the question, "Are you in pain?"

Despite the almost universal prevalence of pain in its various manifestations, it is a curious fact that some people dread to assume the responsibility of attempting to relieve themselves of it, almost as much as they dread the pain itself.

How fortunate therefore it is, that there is a simple and reliable remedy, which, because of its power to bring sure and speedy relief from pain in any form, may be termed a "pain specialist."

Ready to minister to the need of every one who suffers pain, regardless of its primary cause, anti-kamnia tablets await your call at every drug store.

The development of most diseases is heralded by pain and fever and while in no sense a cure-all, anti-kamnia tablets are exceedingly useful in a large number of diseases.

That is because these tablets are quite as effective as reducers of fever as they are as relievers of pain.

Therefore, they have their use in any disease where pain or fever exist, either together or separately.

It is gratifying to note that prominent practitioners everywhere have prescribed anti-kamnia tablets with most satisfying results in the treatment of all kinds of headache, migraine, neuralgia, la grippe, and its after-effects; as a sedative in indigestion, gastralgia, dyspepsia, hysteria and insomnia; as an antipyretic in intermittent and malarial fevers and bronchitis and for the severe pains of toothache, sciatica, rheumatism and gout.

You know full well when you are in pain or when you feel feverish and it doesn't require a physican's advice to tell you so—nor is a prescription needed to take anti-kamnia tablets. They may be obtained in any quantity desired.

You'll find it no longer necessary to take your every ache and pain to a doctor, when you have once learned of the quick relief afforded by anti-kamnia tablets, the pain specialists, at the corner drug store.

through a passage left for that purpose. The eggs are placed on screens inside the troughs which measure 12 x 18 inches, and are so arranged as to fill the entire inside space. As soon as the eggs are hatched the screens are removed.

At the end of six weeks the fry have absorbed the sac which is attached to them at the time of hatching and are ready for distribution in the brooks of the State. It has been proved that better results are experienced in the end if the fry are kept longer at the station, so with this idea in view Mr. Beal had 16 cement tanks built in which they can be put until the fingerling stage is reached. This prevents the destruction of young fry by the larger fish in the brooks where they are placed. Each one of these tanks are 50 feet in length, four feet in width and 28 inches in depth. Water is introduced into them by a pipe two inches in diameter at each end, also there is a boiling fountain in the center of each. By this means the water is aerated to the fullest extent. Many thousand fry can be grown to the fingerling size in this way every year.

Upon recommendation of Hon. Nathaniel Wentworth, former commissioner of the State, fifty aurelous or golden trout, peculiar to Lake Sunapee, have been placed in the pond above the cement dam. It is thought that this species can be successfully propagated there.

A grove of 300 pine and spruce trees is to be set out on the tract of land where the station is located. This will cause the spot to blend with its American-Alpine surroundings. Flowers and shrubs will be set out in close proximity to the building, and in time the entire plant will become one of the most beautiful spots in New Hampshire. A far more important factor than beauty will be reached, however, because the product of this hatchery will give a possible recreation and food supply for every man, woman and child in the State.

COATESVILLE GAME AND FISH ASSOCIATION

FIELD & STREAM PUB. CO.:

The city of Coatesville, Pa., has organized a game and fish association to be known as Coatesville Camp, No. 137, United Sportsmen's Association of Pennsylvania, with these officers: President, James G. Pugh; secretary, Jesse Manuel; treasurer, William Caywood. The Camp, a branch of the State Association, while but in its infancy, has over a hundred members, residing in all sections of Chester County. It was through the efforts of State Game Protector N. M. Wood and Deputy Protector Pugh that the association was formed. The same organization has organized a gun club with N. M. Wood as president and James Eckert as secretary and negotiations are already on for a plot of land for a country club with traps and where field trials can be exhibited. The State Game Commission has sent considerable game, pheasants, quail and rabbits to Protector Wood for distribution in this county.

N. M. WOOD.

BOB-WHITE—HIS BREEDING, PROTECTION AND INCREASE

By E. A. Quarles

Director, Department of Game Breeding and Preserving

Courtesy American Game Protective Association

PART IV.

A Woman's Plucky Work in Quail Breeding

Miss Helen Bartlett, of Cassapolis, Michigan, shares with Mrs. Harry T. Rogers the distinction of being one of the two women appointed to membership on the committees of the Association's Department of Game Breeding and Preserving. She details her experience in game breeding most interestingly as follows:

"I have been breeding bobwhite and blue valley quail for six years.

"The first year I had four pair that laid sixty eggs. The eggs seemed to lack fertility. I hatched some 30 birds and raised none.

"The second year six pair produced 136 eggs, from which I hatched 80 birds and raised 10.

"The third year six pair laid 155 eggs of which I hatched 94 and raised 14.

"Fourth year, six pair, 147 eggs set, hatched 102, raised 20.

"Fifth year, ten pair, 230 eggs set, hatched 164, raised 40.

"This year, ten pair, 248 eggs set, hatched 168 and have on hand possibly 60 young ones.

"I sell most of the birds. Some get away and some are liberated. I liberated 80 blue valley this year.

Housing in Winter

"My quail are kept in winter in an enclosure approximately 80x 160 feet, open top, and by keeping one wing clipped they do much better than in smaller closed top pens. A board is placed around the bottom of the fence, then 24 inches of one-inch mesh netting, and tacked to it above this 1½-inch mesh 4 feet wide, the two meshes being laced together. Buckwheat, wheat, millet, unthreshed, is the principal grain. This is given once a day. If the weather continues cold and there is much snow, an occasional feed of Spratt's food is given; sometimes coarse chick feed, and corn bread crumbled fine are thrown in the pen.

"I have a part of my breeders pinioned. The rest I wing-clip. My breeders are placed in a pen 12x16 feet, movable, and covered, one pair to a pen. They begin laying in May or June. Some do not lay until July, due, I think, to improper mating. I have gathered eggs in September, but they are worthless as the season is too far advanced to incubate them. Eggs are gathered every other day.

Hen Quail Incubates Last Eggs

"A few of the last laid eggs I allow the quail hen to set on, but she is much like the female pheasant, confinement makes her too fussy and nervous with her young, and I never succeed in having my hen quail raise many of the birds they hatch, but the eggs always hatch splendidly.

"For a laying ration I use Spratt's or Evans' food or hard-boiled eggs and oatmeal.

"I use bantams for mothers and place fifteen to seventeen eggs under each hen.

"My nesting coop is 24x30 inches, 18 inches high in the rear, 20 inches in front, with front screened. The roof is hinged. The nest is placed in a shallow box, three inches high with screened bottom. The box is filled with dirt, the nest being lined with grass or chaff. I do this instead of making the nest directly on the ground so I can move the coop to fresh ground when the hatching begins, then allow the quail to leave the nest when they choose.

"Eggs are sprinkled if the weather is extremely dry. Fertility is good as a rule and when it is not, I attribute it to improper mating.

(To be continued.)

SOME LEADERS FOR MAY

Practical Bait Casting for Bass—Hunting Kenai White Sheep—Salmon Fishing in Newfoundland—Mounting the Brook Trout—Puppies—Be in the Picture.

How Dad Broke Up the Corner Gang

Carom or Pocket Billiards played at home gives boys a manly way to let loose their 40-horse energy. *It keeps them off the street.*

In homes that have the "Baby Grand," the parents write us it's **solved** the boy problem.

Why don't you learn to be a robust boy or girl again? One Brunswick Home Table brings 33 royal games—*and each one makes grown-ups feel a year younger.*

Brunswick "Baby Grand"

"Grand," "Convertible" and "Quick Demountable" Billiard Tables

This family of Brunswick Tables lead the world because they are scientifically built.

Fast, ever-level billiard beds, famous Monarch cushions—life, speed and accuracy of angle. *Sizes and styles to fit all homes, regardless of room.*

$27 Up—Pay 10c a Day

"Grand" and "Baby Grand" Brunswicks are made of genuine San Domingo mahogany, with rich inlaid design.

We can use these beautiful woods because we are building for thousands yearly, and quantity output cuts our factory cost way down.

"Quick Demountable" Brunswicks can be set up anywhere in a jiffy and easily taken down after play.

"Baby Grand"
Combination Carom and Pocket Table with Accessory Drawer that holds full playing outfit.

"Convertible" Brunswicks are handsome library and dining tables that give you grown-up carom and pocket billiards, too.

30-Day Trial—Balls, Etc., FREE!

Yes, complete High-Class Playing Outfit included without extra cost—Balls, Cues, Rack, Markers, Expert Book of 33 Games, etc.

Accept our home trial offer and let the table win every member of the family. Color-photos, low prices, and easy terms all shown in our handsome book—"Billiards—The Home Magnet." *It's FREE.* Lest you forget, **mail the coupon now.**

This Brings Billiard Book FREE

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Send free postpaid your color photo book
"Billiards—The Home Magnet"
and tell about your home trial offer.

Name.....

Address..... [518]

The Caille Five

With Starter ~

This is truly the most remarkable rowboat motor ever built. It combines all that is good in other similar motors and many features that no other motor ever had nor can have until our patents expire. Many have referred to it as the "Master Motor" of the outboard motor field. And that's just what it is. It has no equal. It's the easiest operated and easiest started motor on the market.

Simply Pulling a Little Handle Starts It—

requires no more effort than lifting a few pounds. It does away with cranking entirely. No more blistered hands, aching arms and back. No more rapidly revolving cranking handle to give you knocks and catch your clothing.

The starter is mounted on top of the flywheel and is fully enclosed in a metal case. A little handle attached to a strap projects from this case. Pulling this handle revolves the shaft and starts the motor. It's simple as A B C. A child can start and operate this motor with perfect safety.

Has Five Speed Adjustments

This is an exclusive Caille feature and it's just the thing for sportsmen. It gives you a high speed forward, trolling speed, slow reverse, fast reverse, and neutral. All these speed changes are secured without stopping, reversing or altering the speed of the motor in any way.

Suppose you were trolling with a Caille Five-Speed Motor and your line became tangled in weeds or stones. You would simply press a button at end of steering handle and drop the handle to the neutral position. This causes the boat to stand still while motor remains running. Dropping the handle another notch causes the boat to back slowly to where the line is caught. You then set the motor at neutral, thus stopping the boat, while you disentangle your line. When free, raise the lever

CAILLE DETROIT 5 Speed Motor

All advertisements are indexed—See page 2A

1916 Speed Motor

No More Cranking

one notch and you're trolling again. When ready to go home, raise lever another notch and off you go at 7 to 10 miles an hour. It's easy as falling off a log.

Magneto is Enclosed in Flywheel

This is of the high tension, waterproof type and furnishes a good, hot spark, down to practically the last revolution. It can't help but ignite the mixture in the cylinder every time. Absolutely reliable and dependable.

Water Cooled Silencer on Exhaust

This not only renders the silencer more silent but prevents burning your hands should they accidentally touch the silencer. It causes the motor to run so quietly that it can scarcely be heard.

Attaches to Any Rowboat —Runs 7 to 10 Miles an Hour or Slow Enough for Trolling

Other Caille Features

Speed Propeller; Self-lubrication; Watertight Gear Housing; Cushioned Steering Handle; Reinforced Bracket Design; Double Seamed Fuel Tank. These and many other features fully described in our

1916 Catalog No. 10, Free on Request

Send for a copy now. Get the details. This motor costs no more than those of inferior and less efficient design.

For Larger Boats

We build a complete line of inboard motors ranging from 2 to 30 H.P. Special catalog No. 24 on request. When writing give us dimensions, style and purpose of boat to be powered.

DEALERS WANTED

The Caille Perfection Motor Co., 1527 Caille St., Detroit, Mich.

CAILLE DETROIT 5 Speed Motor

SHOTGUNS AND RIFLES

PSYCHOLOGY OF SHOOTING

By L. E. Eubanks

Is it best to have a thorough appreciation of the difficulties attending a given performance or does this realization handicap the performer by developing self-consciousness, over-care, etc.? This is a psychological problem that can be answered both ways. In the case of marksmanship, it depends on the shooter, on his temperament, physique, and training in the sport.

I have seen good shots who seemed to have acquired their skill without scientific mental application, with no study at all—rather by the possession of negative qualities. They had never taken the matter seriously: just "banged away," seeming to shoot by instinct. Conscious care, any attempt to analyze the rationale of their work, detracted from their skill. Billiardists, tennis players, bowlers, often show the same traits. Men of this analytical type do things better in the "offhand" style.

The other class of marksmen "study the game." They reason, plan, deliberate and over-deliberate, losing as many shots by hypercaution as the other fellows do by impulsive methods. One pulls trigger in 1/100 of a second, the other in 1/20. They both can't hit the same bird, but each may get his own bird, depending on circumstances.

So all discussion of this subject must rest on the concession that one system will not suit all men. However, certain fundamental principles are observed by all good shots, though some are not conscious of the observance. "Instinctive" shooting—which in a literal sense is an impossibility—is unquestionably the desideratum; but the "instincts" prompting it have to be *trained*. An expert wing shot points his gun automatically; apparently there is no calculation of distance, lead, etc.; but the bird falls. The brain is so habituated to the action that it has become "instinctive." The conscious mind taught the hands and eyes their part through years of repetition, then turned the reins over to the subconscious mind, reserving just enough say in the matter to meet special emergencies—unusual range, eccentric behavior of the bird, etc. Even these calculations must be made in a fraction of a second, and are not effectively possible for a slow and untrained mind.

So a marksman must have training, but it must be the training of yesterday that helps him to-day. Like the man who could not "swap horses in mid-stream," he has no time for painstaking estimates and careful aiming when the bird is on the wing. The mistakes of yesterday must have been theoretically rectified and the corrections so impressed on the subconscious mind that to-day finds us doing the right thing instead of the wrong.

All this implies study of the beautiful science of shooting. We learn between trials, from mistakes; subconscious mentation keeps careful tab on our progress. Study the thing you must have—the successful shooter who denies having studied it is simply mistaken—but not at the time of shooting. Over-care, remembrance of past misses, anxiety to make a good showing, any distraction at the critical second is likely to cause a miss. Wing shooting is fine training for mind control, and teaches its devotees to settle details previously and meet the real issue with every faculty concentrated.

A slow man may be a good shot at stationary marks, sometimes he makes a fair trap-shooter; but to be a good wing shot a fellow has to be quick mentally and physically. If careful plans have to be made when your bird is going eighty or a hundred miles an hour, the ammunition might as well be saved. The gun must come up automatically, and swing on the course of the bird's flight with an easy grace and controlled strength that have come from *conscious previous* practice. The proper lead must be estimated as the gun swings, based on distance, speed, kind of bird, etc., and the trigger pulled without checking the piece or flinching.

Shooting is a game wherein the smallest fraction of a second counts. Failure to realize this accounts for the fact that so few wing marksmen have a dependable second barrel. It is a fundamental rule to follow with the second charge immediately; the shooter knows this, knows what he wants to do, but can't do it. He finds it comparatively easy to conquer the desire to see the effect of his first shot before firing again, but what he can't do—without persistent practice—is to ignore the shock and recoil of the explosion. Unavoidably, there is an appreciable space of time between the report and the return of "consciousness," a period when the mind is more or less confused. With some this "blank" period begins with the expectation of the "bang"; these are the marksmen who flinch.

The man who flinches, shudders after his first shot, and has to search the skies for his mark, has no use for a second barrel. He will do well to kill a quail or snipe with it occasionally; and a bluewing, teal or canvasback will be clear out of sight before he can right himself.

Constant practice shortens the blank period, but it cannot be entirely eliminated. What the shooter can do is to so train his hands and faculties that they act automatically. "Continue the swing, *don't lower the gun.*" Say this to yourself over and over; impress it on the subconscious mind till your arms obey of their own accord. The second shot should be theoretically made before you pull the first trigger. The whole process should be regarded as one effort. Whether the first is a snapshot or a swing, number two will always be a swing; and knowing this, one may so drill himself on the movement that his second barrel will follow within a half or even a quarter of a second.

NATIONAL RIFLE ASSOCIATION NOTES

Reports reaching here from all parts of the country show an awakened interest in rifle practice among civilians as a part of the program of national defense. Under a law passed by Congress two years ago ten or more civilians in any locality can organize a rifle club under War Department rules and on affiliation with the National Rifle Association of America, which co-operates with the Government in promoting rifle training, receive a free issue of rifles and ammunition at the ratio of one rifle for each five club

Duxbak Quality will never be sacrificed because you don't want us to

With increased prices of cloth, dye-stuffs, trimmings, thread, and labor (ranging from 20% to 100%) caused by War conditions, we had to do one of two things.

Either reduce the quality of our materials and workmanship

OR

Maintain the quality and increase our prices slightly.

We have decided on the latter course. Because we believe it is what *you* want us to do.

We believe that you would very much rather pay $6.00 for a DUXBAK Coat, and other garments in proportion, and have it the *same* DUXBAK Coat that we have been making for twelve years—rather than buy a coat marked "DUXBAK," but made of cheap material, skimped in size, dyed with poor dyes, and hurried through the factory, so as to keep down costs.

Duxbak *and* ***Kamp-it***

"Cravenette" Proof

stand for the very best in outdoor clothing, regardless of fluctuating market conditions.

This year and next year and the year after, you may be sure that when you buy Sporting Clothing with the DUXBAK CRAVENETTE label you will get just what you pay for—*the best that experience and human ingenuity can give you for the money.*

The Fishing and Outing season will soon be on. Get your outfit early—now—at the present prices so as to save *any possible further advance.*

We guarantee to you now the same materials, the same dyes, and the same **Cravenette water repellant proofing** which we have always used.

Your Sporting Goods Dealer will supply you, or you may send direct for our fully illustrated catalog, describing all DUXBAK and KAMP-IT garments. A line from you on a postal will bring you an immediate response.

BIRD, JONES & KENYON

Specialists in Serviceable Clothing for Life in the Open

2 Hickory Street Utica, N. Y.

Styles for Men

DUXBAK Coats - - $6.00
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Hunting Coats, Norfolks, Vests, Pants, Riding Trousers, Leggins, Hats, Caps in a variety of styles and patterns.

Duxbak
Sportsman's Clothing
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Styles for Women

DUXBAK Coats - - $6.00
DUXBAK Skirts - $4.50 to $6.00

Norfolk Jackets, Plain or Divided Skirts, Bloomers, Leggins, Hats, Caps in a variety of styles and patterns.

KAMP-IT Garments for Men and Women at a slight increase in price over last year

We guarantee advertising on this page provided you mention FIELD AND STREAM

members and 120 rounds of ammunition per member per year. At present there are about 700 such rifle clubs organized in practically every State, and inquiries reach Washington by the dozens daily for information as to organizing new clubs.

The National Rifle Association is bending every effort to increase the number of clubs in the country and offers every encouragement for their formation. The organization of these clubs is regarded as a step in the direction of national defense.

It is to be hoped that quite a number of rifle clubs may be represented by teams at the National Matches which have been recommended by the National Board for Promotion of Rifle Practice for Jacksonville, Fla., beginning October 20 next. Secretary of War Garrison has not yet acted on the matter, but it is highly probable that he will approve holding matches this year. Riflemen throughout the country were pleased at the action of the Board in voting for annual matches instead of holding these competitions every other year. At the recent meeting of the National Rifle Association the following officers were elected for 1916:

President, Lieut.-Col. Wm. Libbey, Princeton, N. J.; First Vice-President, Brig.-Gen. Fred B. Wood, St. Paul, Minn.; Second Vice-President, Brig.-Gen. Chas. F. Macklin, Annapolis, Md.; Third Vice-President, Capt. Wm. C. Harllee, U. S. Marine Corps, Washington, D. C.; Treasurer, Lt.-Col. David M. Flynn, Princeton, N. J.; Secretary, Major Fred H. Phillips, Jr., Chattanooga, Tenn.; additional members of Executive Committee, Col. S. W. Brookhart, Washington, Iowa; Lieut.-Col. E. B. Bruch, New York City; Captain Thomas Holcomb, Jr., U. S. Marine Corps, Washington, D. C.; First Lieut. Edgar Z. Steever, 3d, 11th U. S. Infantry, representative of the Assistant Secretary of War.

Persons interested in the organization of rifle clubs may procure full information and descriptive literature by making application to Major Fred H. Phillips, Jr., Secretary of the National Rifle Association and Assistant Recorder of the National Board, at Washington, D. C.

MORE ABOUT RIFLE SIGHTS

FIELD & STREAM PUB. CO.:

Shotgun and Rifles Department for January contained a splendid article that many of us will agree was placed in the wrong portion of the magazine. It, of course, came to the attention of the large number of readers who regularly peruse FIELD & STREAM from cover to cover. But to those of us who love a good rifle and all that the term includes, it would seem that the Editor has modestly placed an article that thoroughly deserved a very special position in the main body of the magazine.

Mr. Miller's article on "Rifle Sights and Holding," begun in the January number and continued for February, deserves most careful reading from every man who hopes to bring back his trophy on the next big game hunt he is planning so carefully. The writer has read and re-read the article in question and would like herewith to express his appreciation of the advice given by Mr. Miller, and further craves indulgence if he at the same time pays tribute to another genial sportsman whose helpful influence still shares the trail though we are separated by three thousand miles.

Some five years ago, when wishing to purchase a small caliber rifle for general use, I had the good fortune to acquire a 1906 Model Winchester .22 cal., for some time the especial pride of S. E. Lawhon, now of Mount Dora, Florida. It had always received perfect care and, though having at that time handled over 5,000 rounds, was in splendid condition. With it I had seen him do some marvelously accurate shooting. In other words, I had become the owner of a rifle with a personality. The wish to preserve the accuracy of a friend's pet firearm and to keep it in the same fine condition in which I received it resulted in forming a habit of careful attention to the care of all firearms from which satisfactory results were expected.

When Brother Lawhon purchased this rifle, he found, through careful shooting during a lengthy test, that the factory sights and barrel were in excellent alignment. He then placed a Lyman folding peep sight on the tang. Using the disc with pin-hole opening, this sight was carefully lined up with the sights on the barrel. When sure of this position, it was carefully marked and turned down out of the way, while the factory rear sight was removed, and he mounted in its place a double-leaf sight combining the black straight bar with ivory triangle and the broad or Rocky Mountain "U" as described and illustrated by Mr. Miller. This sight was set and lined by making use of the alignment of the rear peep and the front sight, thus preserving the original aaccurate sighting of the rifle.

This sight combination has proven a most excellent one for all classes of small-game shooting. Without the peep, the black bar with ivory triangle is all that could be asked for squirrel shooting against a background of trees in full leaf. The same arrangement is equally advantageous over fields of snow in rabbit shooting. With certain conditions of lighting, with the sunlight at certain angles, the wide "U" is preferable. With both leaf sights flat and the peep up, I have seen my friend, the "Parson," do some wonderful shooting on running rabbits. With the use of three sights in line, aaccurate target work comes within reach of the average shot.

Not having a shotgun eye, I have been forced to rely on the little rifle to save my self-respect in more than one group of fellow sportsmen and have come to have some degree of confidence in wing shooting. This has been fine practice, developing confidence in quick work. Mallard, pintail, chicken and partridge, with a twelve-pound Canada honker, have paid tribute to the efficacy of the little peep sight in finding and holding ahead of moving bodies.

Now Mr. Miller tells us that the same combination and the same principles apply if used on the heavy game rifle many of us are thinking and planning on these wintry fireside hours. And he tells us plainly and convincingly why. He has settled, with the grave finality such a subject deserves, what those new sights are to be for one man. Mr. Miller's explanation makes it pretty evident that poor combinations of sights and lack of knowledge as to how to use them result in more lost and crippled game than any other piece of carelessness we may be guilty of. We all spend considerable time to make our hunting trips a success. We can well afford to pick up the January and February numbers of FIELD & STREAM and read again Mr. Miller's splendid article, on a subject far more vital to a successful game-getting trip than so many items of equipment that we spend so much time on.

CHAS. W. HOLLIDAY.

TRAJECTORY

FIELD & STREAM PUB. CO.:

Will you kindly answer the following questions in the columns of your magazine.

1. Knowing the amount of elevation of the trajectory of a given charge at mid range, how can one determine the amount of drop of the projectile at full range where the sights are set at point blank range and the rifle is aimed at the bull's-eye at full range.

In other words, how does one ascertain how high above a given point at a given range a rifle must be aimed in order to hit that point, the sights set at point blank range, when the range and the height of trajectory at mid range are known.

For example, the Winchester

Chew It Over With "PIPER"

and you'll find the right solution to your problems. "PIPER" gives you real tobacco satisfaction and helpful, cheerful comfort that a man needs to bring his efficiency up to top-notch. That's the reason famous architects, lawyers, judges and scientists chew

PIPER Heidsieck

CHEWING TOBACCO—Champagne Flavor

Only the ripest, finest leaves of selected white Burley are used for "PIPER". The richness and mellowness of this superb tobacco are blended with a wonderful wine-like flavor that distinguishes "PIPER" from all other tobaccos.

This "Champagne Flavor" affords a degree of satisfying, healthful pleasure and lasting, substantial enjoyment not obtainable from the use of tobacco in any other form. A week's trial will prove this, and make you a lifelong friend of "PIPER".

5c and 10c cuts, foil-wrapped, in slide boxes. Also 10c cuts, foil-wrapped, in metal boxes. Sold everywhere.

THE AMERICAN TOBACCO COMPANY

ON THE 100 YARDS RANGE

Model 1893—35 Smokeless—is said to have a height of trajectory of 48.09 inches at 250 yards on a 500-yard range.

2. With the sights set for point blank range in order to hit a given point at 500 yards, how high, in feet and inches, above that point should the rifle be aimed.

3. With a twelve-gauge, 30-inch, full choke barrel gun, shooting 3 drams bulk smokeless powder and 1⅛ oz. No. 8 shot, approximately how much will the charge drop at 40 yards?

HARRY A. ARCHIBALD.

Ans.—1. Rifle is usually sighted "point blank" at 100 yards. At ranges far beyond this, as 200, 500, etc., hold over the full height of trajectory.

2. About 48 inches.

3. None appreciably.—ED.

OUR SATURDAY GUN CLUB

By Herbert K. Savage

Our gun club, which we sometimes refer to as the Saturday gun club, meets every clear weekend from the closing of the field-shooting season to the time when the first fish appear in the surf. For, be it known, we are all hunters and fishermen, and target shooting but whets our appetite and serves to fill in the closed seasons. Our club, if it could be called such, is very informal. Everyone is welcome. Our only rules are bring your gun along if you have one; if not, then you are welcome to the use of any one of our arms; and always keep your rifle, revolver or shotgun unloaded until you step to the firing line. Carelessness in this matter is frowned upon, and in one case this rule was forcibly impressed on the careless one, who narrowly missed the scorer. Anyone who has stopped several pellets from a shotgun or heard the hum of a bullet near by will appreciate the feeling of said scorer.

The weapons used are of various calibers, models and makes, none of them, with the exception of one target rifle, being equipped with other than sporting sights.

In our revolver shoots we use the following weapons: Two .38 caliber Army model revolvers with 6 and 7½-inch barrels, respectively; a .32 automatic pistol, a .32 police model with 6-inch barrel, and a .44 caliber single-action revolver with 7½-inch barrel. These guns all have the knife-blade front sight and groove along top of frame for rear sight. The trigger pulls have been lightened by the owners according to their ideas of what the perfect pull should be.

Up to the present the .38 Army gun with 6-inch barrel holds first place, with a 22x25 on the 25-yard range. The other Army revolver is a close second, with the .32 automatic only a jump behind. As all our shooting is done on an open sand beach where there is no protection from the breezes that blow, we feel that under the circumstances we have some cause for hope.

Our small-bore rifles are many and various, consisting of a .22 autoloading gun, two single-shot .22's, a double-barreled rifle with a .22 upper barrel and .44 lower, a .22 repeater and a single-shot .22 target musket, which we all take turns using. Of the standard guns, the .22 single-shot with lever action, in the hands of its owner, easily holds first place, while the repeater stands second. The double-barreled gun does not behave well at the target, being too light, but for offhand shooting at corks and pieces of clamshell, easily holds its own. All these guns are equipped with mule-eared rear sights, some of which have been filed down somewhat, and the front sights range from the knife blade to the gold and ivory bead sights.

When we feel like a little clay-bird shooting, the hand trap is brought into use, or clamshells, skilfully scaled with the wind, offer the hardest kind of targets, gliding, jumping and dropping with every gust of wind.

The ranges we shoot over are 25 and 40 yards for the revolvers, 50 and 100 yards for the small bores, and 200 and 300 yards for the big game rifles, which most of us own.

The beach where we shoot is very wide and slopes very gently from the sand dunes to the water's edge, so that we do not need a backstop for our targets, but can either shoot straight out to sea, or at an angle along the beach, when using the larger rifles, without danger of injury to any one.

Our target support consists of two pieces of wood about 2x4 inches, and 6 feet long, held about 18 inches apart by long iron bolts. Two holes about 8 inches deep are dug in the sand and into these the two uprights are set, and sand piled around the base. Between these uprights the targets are hung, either on a board hung from one of the cross bolts or tacked to the uprights themselves. At the finish of the shoot the support is carefully hidden away for next time. When these supports are set up against a background of sea and sand, the men on the firing line are able to see the holes in the target made by their bullets and so may judge where to hold for the next shot. This is a great advantage and one which cannot be enjoyed when a backstop is used, unless you have a pair of glasses at your elbow.

We once built a stationary support, but this was chopped down and carried away by the wood-gatherers who frequent these beaches.

We sometimes vary our target shooting by shooting with the rifles at tin cans thrown in the air. Here the repeater and autoloading rifles come into their own, as their weight and balance seem to make them particularly suitable for work on moving targets.

We have done some experimenting on sights for our high-power rifles and find that exclusive of the rear peep sight, the best and quickest sight is the flat-topped sporting rear sight, with V-shaped groove. Before my trip to Maine this year, I painted, with white enamel, a small pyramid on the rear face of this sight with the apex of the pyramid just touching the bottom of the V-shaped groove. This combination makes quick sighting possible in the heavy woods on a dull day. For front sights we favor the various gold beads.

We hope to get up enough interest among the local shooters to get them to form a rifle club and join the N. R. A., but the outlook is not especially cheerful, and for the present we must be satisfied with our makeshift rifle club.

They Couldn't Get Away From Me

Good luck, you say? Not much—good sense.

They didn't come after me, you bet. I had to go after them. And they surely kept me guessing.

I covered about twenty-five miles and tried a dozen places before I struck the right one.

Thank goodness, I didn't have to row, for I never could have done it. When they didn't bite in one place, all I had to do was pull up anchor, give the wheel of my Ferro motor a turn and whiz away to another spot.

Pretty soft, too—nothing to do but steer.

Makes any Rowboat a Motorboat

The Ferro can be carried in a traveling case and attached in two minutes to your own or rented boat. One of a famous line of marine engines, *it is thoroughly reliable.* Starts easily, runs steadily and quietly. Speed, 2 to 10 miles an hour.

Specially-designed muffler and weed-proof propeller make possible trolling in shallow water.

Other features include: Bosch high-tension magneto, float-feed carburetor, and rudder with tiller and steering ropes.

$85 with Bosch High-Tension Magneto. **$65** with Waterproof Batteries.

DON'T ROW—

FERRO

There are many other reasons for buying a Ferro. You'll find them in our Rowboat Motor Catalog. Write for it now.

THE FERRO MACHINE & FOUNDRY COMPANY
446 Hubbard Avenue **Cleveland, Ohio**

16 vs. 12 GAUGE

FIELD & STREAM PUB. CO.:

I am using 16-gauge high grade gun and the parties I hunt with are all using 12-gauge and are outshooting my 16. Can I use 24 gr. ballistite with about 1 1/16 No. 7½ chilled, and what chamber length would be necessary for proper loading? The right barrel is open and left modified, 28-inch. Would this heavy load affect the spread any, shooting in the brush?

M. W. P.

Ans.—Of course the 12s are outshooting your 16! Unless you are in the expert class we advise getting a light 12 to fit you and sticking to it until you are a first-class wing shot. We would not advise a 12-gauge load like 24 gr. ballistite and 1 1/16 oz. shot in your 16. There is no shell that would hold it so far as we know.—ED.

On the 15th of April we will move to our new home in the Printing Crafts Building, Thirty-fourth Street and Eighth Avenue. In our new offices we will have over twice as much floor space as we now have. This building is the latest and most up-to-date building of its kind, and is devoted entirely to the publishing and printing trades. When we are settled in our new offices we would be glad to have our friends call and see us. We are sure that we will have the most up-to-date and best equipped offices of any sporting magazine in the United States or Canada.

UNKEL DAVID'S LETTER

Dere Feld & Streme:—

I am roomynaiting tonite—whitch Sar An sais aint the rite word; but it soots me better than "cojjytait," and it's me that ames to tawk. Awl mi innersent yooth is reecawld, befoar I mixt up with the grate reelijus maggyzeen—a doller & a haff to regler suskribers with the kustummerry diskownt for kash munny. Still futher bak, in the gloe of mi brite & bootiful caff-time. It was a mentul strane to have sutch long thots, but I pussyveerd & got there, & then I wepp. Peepul have no bizness dooing thus. The prezzent is enuff to bair withowt awl sutch extry trubbel.

Beeleve me, dere reeder, yore unkel was sum kid, eer missforchun give him the ju-jitney & got his gote. Sar An, the lite of mi matoorer yeres, in them dais was still in the draw. Sorrer had past me bi. I had never rote a parrygraff for print; never stole anny thing I coodent eet; never been kust or puntched in the stummik with a klub bi the polees; never allowd miself to have loe assoshyaits eksept Sundy, when I shot krapz with the plantashun niggers for their kottun pikking munny. & I alwais toald the trooth & drunk mi likker strate. Sar An sais I shoodent meddytate abowt things that haster be kride over. "Where wood I git oph at," sais she, "if I had thots like I mite, at every site of yore moar or less ajid & tollabel bawld old hed? Have I ever eenoomeraited to you sum of the uther felloes I cood have got in mi fresh & bammy yooth?" "Not just sum," sais I. "If there was moar than has been spessyfide on sevral okkashuns, the poppylashun of San Marcos Cownty (whitch is in Texas) must have been graiter than I had anny idee. Awl the saim it shoze that lots of felloes had narrer eskaips in them old pianere dais. Mine wazzent a eskaip, but a offel trajjidy. Beehoald mi greef!"

One (1) time, when I was hi sherriff of San Marcos, a littel hosstheef maid fite at me & I broak his nek with the swingeltree of a mewl waggon. No buddy mist him mutch; but a Eestern felloe with toobukkelosis & a poettik sole from Noo Jerzy riz up in horrer & sed sutch dooings coodent cum oph in a commoonity that had church howzes & bibels. Sais he, "Hooman life is saykrid in the Eest & in Yoorup. Bludshed is owt of dait in eddykaited sirkels, eksept when you miss a lik pealing yore korn. Dooels & wars is awl over. Reelijun & brutherly luv has nokt awl that owt. Yore a border ruffin & I'm ashaimed to tawk to sutch peepul." Abowt whitch time of the day up spoak old Parson Pink Tarver, owr Babtis preecher. Sais he, "I knoe the Book from kiver to kiver, & the Lord's chozen leeders has allus been men of rath. Men will skrap & mommix eech uther up till the Jedgmint Day, whitch to mi noshun will see the biggest fite on reekord. & there ain't enuff darn fools in Noo Jerzy to maik me think utherwize." "This a noo dispensashun," sais the lunger. "Shore thing," sais Pink. "The old way was slash, kut & jab; but the prezzent idee is to reach you with a bum shell akross two (2) counties."

The saim beeing abowt awl that sivvylizashun has brung us—two thousand (2000) yeres of it. Ruther than be gassed & Zepperlined & awl that brutherly luv stuff, I wood taik mine like they did it to Jerryko, with a bloe horn & a Krissmus candel in a bere stine. It is koorius how peesful & lam like theze kronnik Sundy Skool skollers git to bee! No moar Sabbuth fishing or marbel gaims for Bibel Klass Jeems. Give him sum gass bums & a masheen gun in the bak yard, & the fokes can go vizziting & knoe he will be awl rite till they kum bak. Exkooze these weeps. That swingeltree eppysode was shure a raw deel—I shood have dug a trench around mi littel hosstheef & fed him illoominating gas throo a perryskoap. But mi hind site has awlwais been better than mi foar site.

Sar An wants the Eddytur to male her a kwart of unyun sets, sum dill pikkel sead & a haff duzzen bakun sprowts for a erly garden, bekos it is the verdik of her Heroik Muthers Klub that awl wimmen shood be prepaired for a forrin invayshun & git fixt to raize owr eets at hoam. The klub has voated to eekonnymize in what they cawl overhed costs, putting the limmit at one (1) hat meedyum, foar (4) shirt wastes & two (2) pares of sox per anyooal. Miself & uther Heroik Fathers are suppoased to live oph the ennimy—& will maik it just as fur oph as owr spase permitz.

Hi kost of gassyleen is app to nok mi trip to Noo York on the hed. Sar An purpozed to kleen mi chekkerd soot, whitch was bot on Six(6)th Avenoo the yere the Sekkond Eddytur went to Kony Ilund with his best & unly, & it has klung to me throo bad & wuss repoot ever sense. Sar An sais they shood be yooniform awl over, & it's eether kleen the boozzum & neez or greese the reer ellyvashun, whitch won't be a bit cheeper. The lojikel coarse wood be to stay oph the strete eksept at nite, but Sar An moast throde a fit when I sed soe. Why can't men ware a apurn like the wimmen fokes? Sumthing saim as the Fillypeen Dog Eeters woar at the Saint Looy Fare? Yore unkel will maik one (1) of anny haff-duzzen publik-minded men to interdoose the fashun & cawl it the Unkel David apurn—with or without pokkits, & maid in kwatter sizes to soot the moast fastiddyus.

Sum Indyanny cuss hoo don't like me has just wired hi tellygraff that katfish are biting at fride liver & unyuns in the Wawbosh River. I prezoom he ment it for a joak, bekos menny peepul knoe mi weekness; but if troo, I don't blaim the katfish. Hoo wood miss a shot at "fride liver &"? I have behelled the greef of menny hoo give up their awl for a publik karear—primer donnys, bally girls, Bill Bryan & uthers—& moar than hoam & children, mattermoany, allymoany & the hoap of a peesful & reelijus old aige, they reegreted the liver & unyuns fride rair. A katfish that can git enuff of the saim wood be justyfide in mutch—even in puddeling abowt the Indyanny shoar of the Wawbosh—& I wish mi thumm was in his gills this minnit.

Very trulie yores,

UNKEL DAVID.

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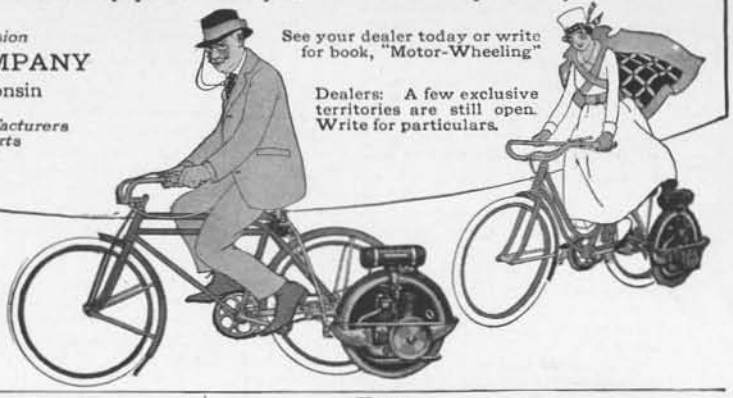

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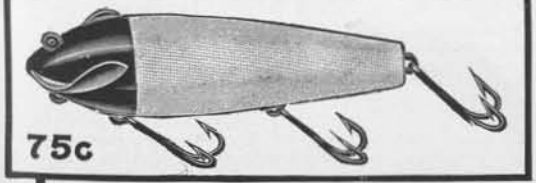

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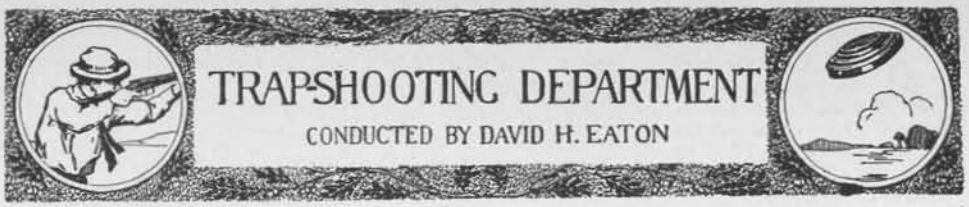

RHODE ISLAND STATE ORGANIZATION

A state association of trap shooters has been organized in Rhode Island, consisting of the Providence Gun Club; Rhode Island Country Club, of Nayatt; Hundred Acre Club, of Kingston; Green End Gun Club, of Newport, and the South County Rod & Gun Club, of Westerly. Arrangements are being made to hold a State tournament in Providence, early in the summer, under the auspices of the Providence Gun Club. A new clubhouse will be erected, and enough traps will be installed to handle a crowd. Providence, in the early days of target shooting, was one of the leading cities in the sport. The city is ideally located and the efforts of the club members will do much to again put the city on the trapshooting map.

CAMDEN, N. J.

At the shoot of the Beideman Gun Club on February 5th, Chief Bender, the famous ball player, carried off the honors in a field of 18 shooters with 96 out of 100 targets. Beauchamp was a close second with 95. On February 12, Bender was again the leader with a score of 95, and defeated Joe Bush in a special event at 50 targets on a score of 49.

PENNSYLVANIA STATE TOURNAMENT

The 26th annual State shoot will be given on May 17 to 20, under the auspices of the Lansdale Gun Club. The open events for May 18 and 19 consist of 175 targets daily; on the morning of May 20 there will be events totaling 100 targets, a grand total of 450 targets which will be counted for average. The popular Squier money-back system will be used, and the Lewis Class system, with four classes, will be used for the average money each day. Over $1,000 in gold, trophies and special prizes will be offered. A new feature for the State shoot will be the women's event at 100 targets, and a large entry in the contest has been assured.

MAPLEWOOD, N. H.

The manager of the Mid-summer Handicap tournament at Maplewood, N. H., Mr. W. F. Dunspaugh, has announced the week of July 3 as the time for this year's event. Mr. Dunspaugh has made rapid improvement in his shooting, and on February 12 won the New York Athletic Club's handicap event with a total of 199 out of 200.

CENTRAL OHIO TRAPSHOOTERS' LEAGUE

Starting in on its third season the League has demonstrated the value of co-operation in sport, as well as in others of the more serious undertakings of life. Since its organization the League has held five tournaments each year which averaged the largest attendance of any given in the State. At the annual meeting on February 8th, the officers' reports showed the League to be in a better condition than it was a year previous, and the enthusiasm of the members was unabated. The same officers were re-elected, viz.: J. M. Markham, Dayton, president; H. L. Hildinger, London, vice-president; Harry C. Downey, Springfield, secretary-treasurer. The tournaments were awarded to Springfield, which will hold the opening shoot the latter part of April, followed by the Riverdale Gun Club, of Dayton, in May; Lima, in June; Marion, in July, and the Ideal Gun Club, of Circleville, in August. The programme of last year was so generally satisfactory that the same will be repeated this season: 100 targets at each tournament, and a special event at 50 targets. Trophies will be given as heretofore, and there will be the two and five-men team contests running through the season. The anual meeting was held at the clubhouse of the Springfield Gun Club, and the members were the guests of President Markham at lunch. Two new clubs were admitted to membership in the League, the number now being 14 clubs, all active in the sport, and including in their membership some of the best of the buckeye State shooters. An impromptu programme was prepared after the meeting, and 25 contestants took part in the events, most of which were shot in a blinding snowstorm. C. D. Coburn, of Mechanicsburg, was high amateur with 91 out of 100.

ST. PAUL (MINN.) ROD AND GUN CLUB

After the banquet at the annual meeting of the club, the season's club trophies, and the cups won at the winter carnival, which closed February 7, were presented to the winners. J. E. Harker, Minneapolis, won the St. Paul *Pioneer Press and Dispatch* cup for high gun for the five days' shooting during the carnival, on an average of 96 per cent. Mrs. R. R. Barber, of the same city, won the cup donated by Dr. Plondke for the women's high average, with 88 per cent. These were extremely good averages to be made in the very cold weather which prevailed during the entire carnival. The *Pioneer Press and Dispatch* trophy for high average for entire season was won by F. S. Novotny, and he also won the E. W. Brown cup in Class A. D. Van Slyke won the trophy for second, and F. A. Richter, of Minneapolis, won the third high trophy. In Class B, the Schuneman and Evens cup was won by S. S. Johnston, of Minneapolis. In Class C the Jesse Foote cup and the *Pioneer Press and Dispatch* winter cup were won by T. E. Covington.

BIRMINGHAM (ALA.) GUN CLUB

The fourth annual mid-winter tournament was held on February 18 and 19, and was a grand success. There was a good attendance and keen competition. Walter Huff was high professional on all 16-yard targets, 400, with 386, and Gentry Hillman high amateur with 355. Capt. Andy Meaders, of Nashville, Tenn., one of the "old timers" who still shoots like a youngster, better than most of them, tied for fourth high place on 343 with C. J. Barr. The race for the club championship on the second day, open to members only, was a hot one. At the halfway post, 100 targets, Hillman, last year's champion, and O. L. Gare, were tied, with Mrs. Gare eight targets behind. She improved in the last 100, dropping but three targets in the last 60. Hillman fell behind, and the race was between Mr. and Mrs. Gare, the former winning with six targets to the good, 182 to 176. T. C. Delaney, of Margret, Ala., won the mid-winter handicap with 90 from 18 yards. E. M. Cornwell, 17 yards, was runner-up with 89; Lee Moody, 16 yards, E. R. Holt, 21 yards, and John Livingston, 20 yards, tied on 88.

The Wild Turkey.
Its restoration is important because domestic turkeys are decimated by a disease from which the wild variety is free.

in the field

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A FEW years ago America was the greatest game country in the world. Our woods, our fields, our water-ways, were teeming with game birds. Wild turkeys, quail, grouse, ducks, were familiar sights—to the sportsman; on the table; and in city markets.

These conditions should again prevail. They may successfully be brought about through game farming.

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If you are interested in game farming from any standpoint, you should write for a booklet which takes up the subject in a broad way and gives much interesting and valuable information regarding it.

The book is called "Game Farming for Profit and Pleasure." It is well worth reading. Write for a copy. Use the coupon below.

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WOMEN'S TROPHY EVENT

The special trophy event for the women devotees of trapshooting, held by the Lansdale (Pa.) Gun Club, on Feb. 1st, was won by Mrs. William H. Ehle on a score of 19 out of 25. Miss Morgan was runner-up with 13, and Mrs. Henry R. Ehle third with 12. A high wind made the shooting extremely difficult, accounting for the unusually low scores.

ALEC MERMOD TROPHY

The race for the final possession of the Alec Mermod Elimination Handicap Trophy narrowed down to a 25-target shoot-off between E. Prendergast and Ben Cawi, the former winning on a score of 23 to 22. A comparative novice in the game, W. T. Hill, crowded the others throughout the entire match, but Cawi put him out of the running in their match.

MANHASSET BAY YACHT CLUB

A field of 42 shooters entered the eighth annual contest for the championship of Long Island Sound on February 1st. The weather conditions were adverse, the day being rainy and misty, and the targets barely distinguishable against the background of dark clouds. A. Elliott Ranney, of the New York Athletic Club, won the championship, tying with Hazen L. Hoyt, of the Manhasset Y. C., on a score of 95 out of 100 targets, and winning the shoot-off 25 to 23. Hebert L. Funke, of the Bayside Y. C., and Wm. H. Yule, of the New York A. C., tied for third place on 94, Funke winning the shoot-off with 22. Jack Fanning was high professional with 93. The team prize was won by the New York A. C. on a score of 468, ten targets better than Manhasset. The Bayside team scored 437.

TRAP AT MILWAUKEE

There was shooting on three club grounds February 17. At the Badger Gun Club Captain Jack was high with 94 out of 100. C. Stump 87. At the Parker Gun Club H. Ludington broke 85 out of 100, and H. Kroening was second on 77. Only four shooters were at the North Side Gun Club, Thien being high with 47 out of 50.

SHOOT AT TORONTO, ONT.

At the shoot of the National Gun Club on February 12, J. Summerbays was high man with 100 straight. Cashmore broke 71 out of 75, and G. L. Vivian 43 out of 50. A dozen other shooters took part in various events.

PORTLAND (ORE.) GUN CLUB

A field of 27 shooters shot over the traps on February 13, and turned in some good scores. Ten amateurs were led by Mrs. Ada Schilling on a score of 91. J. W. Seavey, Dennis Holahan and H. R. Everding 90 each. P. J. Holahan, high professional, with 97. E. B. Morris 93. W. C. Bristol broke 51 with a 20-gauge, and A. W. Strowger, Jr., 28 with a 28-gauge. Miss Gladys Reid scored 70. In a team race at 25 targets per man, the team led by Miss Gladys Reid defeated Mrs. Schilling's by six targets, 162 to 156. Mrs. Schilling broke 24 in the match. The Portland Club proposes to match Mrs. Schilling, Miss Reid and Mrs. E. H. Keller against any three ladies of the Spokane Gun Club.

LEAGUE IN CALIFORNIA

The League movement is spreading, and O. N. Ford, of the Blue Rock Gun Club, San Jose, California, is making efforts to organize a league of clubs representing San Francisco, Sacramento, San Jose, Stockton, Newman, Modesta, Vallejo, Martinez and several other cities. Mr. Ford recognizes the value of the league idea in developing and maintaining interest in trap shooting, and it is his plan to have each of the teams meet the others during the season, which will begin in May. Ten shooters will constitute a team.

PACIFIC COAST HANDICAP

The Pacific Coast Handicap this year will probably be awarded to Spokane, Wash., and will likely take place in June. This is the big trap shooting event of the Far West. Portland and several other cities put in a bid with the Interstate Association for this event, but are willing to waive their claims in favor of Spokane.

MEMPHIS (TENN.) GUN CLUB

George Schmidt outshot the field of amateurs on February 16, and tied for first place on 95 with the professional, H. D. Gibbs. Second high amateur was H. Bellinger, with 93.

FREEHOLD (N. J.) GUN CLUB

Scores ran high at the all-day shoot on February 17. A. C. King, of Toms River, broke 150 straight in the regular events, and counting practice and extra sweep, he broke 198 out of 200, missing his two targets in the last 25. He made a straight run of 184, breaking the ground record, which has been held for some time by William H. Matthews on a run of 100. H. H. Stevens, the popular professional, broke 147 out of the 150 targets, and made a straight run of 105. R. Robinson was second high with 142.

AMATEUR SHOOTERS ORGANIZE

John Philip Sousa, President

Probably the most important happening in the shooting world since the formation of the National Rifle Association is the recent incorporation of the American Amateur Trapshooters' Association for the purpose of providing an official supervisory body for the half million shooters and nearly 5,000 trapshooting clubs in this country. The national officers of the Association are as follows: John Philip Sousa, of New York, president; Dr. Horace Betts, president Delaware State Sportsmen's Association, first vice-president; Charles W. Billings, of New Jersey, captain of the trapshooting team which won for America in the Olympic Games at Stockholm, second vice-president; Professor James L. Kellogg, of Williams, third vice-president; Stanley Frederic Withe, secretary of the Intercollegiate Trapshooting Association, secretary-treasurer.

Coming as it does at the close of the most successful season in the history of trapshooting, the announcement of the new association is particularly timely, and though not at all unexpected by close followers of the sport, this latest development has for the moment taken precedence over all other topics among shotgun enthusiasts. In announcing the organization of the new association, Secretary Withe made this statement:

"Amateur shooters have long felt the need of a strictly amateur organization, directed by amateur sportsmen and in the interests of the amateur gunner. It is owing to the increasing sentiment that such an organization would prove of inestimable value to the sport and to the individual shooter that the A. A. T. A. has come into being. In addition to standardizing the rules governing the sport, the association aims to increase interest in club shooting and to bring about a greater development of the individual shooter by instituting a system of medal and trophy awards. As soon as a shooter has scored breaks of 38 out of 50 targets he will be awarded a 75% medal of bronze, and so on as his skill increases until he has won the 95% medal of solid gold, each medal representing the association's official recognition of the degree of proficiency attained."

The headquarters of the association will be in Baltimore, Md., in charge of Secretary Withe, where the *American Shooter*, the official organ of the association, will be published.

BE AN EARLY BIRD THIS YEAR

Practice up now for the season's trophies. Start early. Be among the first out to pepper the speedy clay targets. Get an edge on the other fellow while the season is still young. There's no game can surpass

TRAPSHOOTING

for all 'round sport, health and pleasure. Gun "bugs" are the best of good fellows and there's a hearty welcome ready and waiting for you at the nearest gun club.

Have you seen the

DU PONT Hand Trap

It's a practical little device that throws all kinds of targets. Great practice for both beginners and experts. Makes crack field shots. Folds up. Goes in a bag and makes trapshooting possible at any time or place. A portable gun club. Bully for camp and vacation use. Get one now.

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When in Atlantic City visit the "Du Pont Store," Pennsylvania Avenue and Boardwalk—see the big Du Pont Night Sign and try your skill at the Trapshooting School at the end of Young's Million Dollar Pier.

FITS

I have a female St. Bernard, six years old; one year ago she started having fits, and has had them at almost regular intervals two or four weeks apart, but the last two were in one week, and seemed to be worse than the others. She holds her hind leg up, walks a piece, falls down, looks around at herself, crying, and then goes into a fit, which lasts a few minutes, opens and closes her mouth; when she gets up she is dazed; if water is put into her mouth she laps it; the day before she has a fit she makes a queer noise in her throat, and after it is over she coughs, at other times she is well and lively. I have had her examined by three veterinarians, with no result, treated her for worms, tapeworm, indigestion, nervousness, and she is not constipated; has no heart trouble.

T. J. M.

Ans.—Give 10 grains bromide potassium in a little camphor water 3 times a day and put her on mild diet of dog-meat broth and broken up pieces of bread baked to a golden brown in the oven. Give plenty of milk and little exercise for two or three weeks.—Ed.

CHOOSING A DOG

Field & Stream Pub. Co.:

Will you kindly, through the columns of your valuable paper, furnish me with the following information on dogs:

Which of the following would be the most preferable dog for watching, ratting and general purposes: Airedales, Irish, Scotch, Yorkshire, Skye, West Highland or fox terriers, or any other dogs that may be better for the above purposes that I have not mentioned?

Wm. H. Neumann.

Ans.—We prefer the Airedale if you want a dog that can kill a tramp instead of merely barking at him. In cities or thickly settled suburban districts the Irish and fox terriers would be preferable. If there are children about, Airedale or Irish make good playmates that will not get cross or snap.—Ed.

REDBONE HOUNDS

Field & Stream Pub. Co.:

I would deem it a favor would you give me the name of the kennel owning the pack of "Redbone" hounds pictured on page 1035 of Field & Stream, February, 1916.

Should be delighted to read in column "Our Hunting Companions" any information you may have relative to the work of these hounds on deer in the mountains of California. I have used these dogs on 'coon in the Southern States and have seen so-called "trailing hounds" work on deer in this State. From my limited experience with them here it seems that time does not enter into their calculations.

A great many hunters here are shouting the praises of the Airedale, naming his superior intelligence, his speed, running only warm trails, etc., as being attributes not possessed by the hound. My experience with them has been limited and for which, so far, I am thankful. Personally, I like the hound if he be well broken.

Again, any discussion you may see fit to give this matter in your valuable columns will be greatly appreciated by an old reader.

J. R. Scott, Jr.

Ans.—These Redbones are from the Hatchee Kennels, Covington, Tenn. They have a fine reputation in the Rockies where they hunt big game with Airedales and Crossbreads. I know of several famous packs using them either pure or crossed on some other strain to give more speed.—Ed.

DEWCLAWS

Field & Stream Pub. Co.:

I have a young setter bitch that has dewclaws on hind feet which get very sore when hunting in stubble and brush; I wish to know if they can be removed and how? She had a litter of eleven pups, three of which have dewclaws also, if they can be removed would it be better to do so while quite young?

Should a well bred setter have dewclaws?

H. G. Kukelie.

Ans.—A good veterinary can remove decclaws, but if you attempt it yourself it will likely make the dog lame for the resulting sore is slow in healing. The claw itself can be snipped until it is quite short. Snip it little by little with sharp wire cutters.—Ed.

THE BASSET

Field & Stream Pub. Co.:

Please give me a description of a Basset hound as to size, build and markings.

Arthur B. Fowler.

Ans.—Basset hound stands low in leg like the dachshund, is somewhat larger than that dog and is tri-color. Of French origin. "Basset vs. Beagle" is very ably treated by Walter Dearing in the February issue of Field & Stream.—Ed.

CURE FOR RED MANGE

Field & Stream Pub. Co.:

Please tell me what to do for red mange on a dog. I think it is red mange. The sores break out on his neck and run and get sticky. Would like to know about diet, too. I suppose candy is not at all the thing to give him.

J. Peetrey Clark.

Ans.—Sounds to us like eczema. Reduce his diet to plain stale bread baked to a golden brown broken in dog meat broth, and rub him over with Kenwyn Koat Kure or Glover's Mange Cure.—Ed.

ORIGIN OF THE GRIFFON

Field & Stream Pub. Co.:

Could you please tell me the origin of the pointer, griffon and foxhound?

Vincent Nixon.

Ans.—All three developed from the coursing hound of the Middle Ages. The early pointing hounds of 1750-1800 had the bushy tail of the modern foxhound curled on high, thin muzzle and other houndy characteristics which changed as the breed was established as a pointer. The griffon is a French breed undoubtedly descended from the Russian wire-haired pointing hound. He resembles a shaggy pointer with wire hair and docked tail.—Ed.

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WITH A COMFORT SLEEPING-POCKET

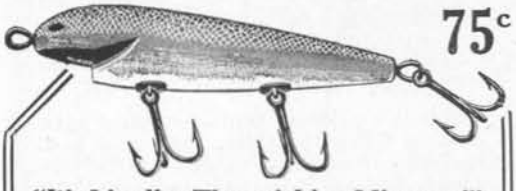
EQUIPPED WITH A COMFORT SLEEPING POCKET YOU CAN SLEEP ON A PILE OF ROCKS AND BE COMFORTABLE

Metropolitan Air Goods are recommended by the Forest Service, Campers, Physicians, Invalids, Tuberculosis Patients and Sportsmen everywhere. A warm, comfortable, dry bed. Wind, rain, cold and moisture proof. Packs 6x25. We make air goods for home, camp, yacht, canoe, etc.

Write for Catalogue A.

Successors to the Metropolitan Air Goods Co.

Athol Manufacturing Co., Athol, Mass.



75c

"It's Livelier Than A Live Minnow!"

exclaimed an old bass fisherman on first seeing this new floating, diving and wiggling bait at work.

And when he had tried it out in a day's hard fishing he agreed that it had brought him more strikes, and landed more bass, than any live minnow—or bucketful of 'em—he had ever seen.

The great strike-getting qualities of the

"Pflueger-Surprise" Minnow

are due to the fact that it can be made to perform, and the great control exercised by the "man behind the rod."

The "Pflueger-Surprise" floats until reeling in is commenced, the depth controlled by reeling speed. Coming in, its peculiar construction causes it to wiggle and dart about with the characteristic movements of a live minnow—arousing the combative instincts of the gamey bass. Stop reeling, and the bait rises to the surface.

Made in seven color blends, as follows:

No. 3970 Luminous Enamel Over All—Red Throat.
No. 3980 White Enamel Over All—Red Throat.
No. 3973 White Enamel Belly—Blended Rainbow Back—Red Throat.
No. 3985 White Enamel Belly—Blended Green Cracked Back—Red Throat.
No. 3969 White Enamel Belly—Blended Green and Red Spotted—Red Throat.
No. 3971 White Enamel Belly—Blended Green Back—Red Throat.
No. 3993 Yellow Perch—Red Throat.

This year do not fail to try out the "Pflueger-Surprise." See it at your dealer's. If he can't supply you, send 75c for a sample bait, or $2.50 for an assortment of four, sent postpaid.

PFLUEGER

TRADE MARK Reg. U.S. Pat. Office

The Enterprise Mfg. Co.
Dept. 2 Akron, Ohio

Notice—Send for free copy "Tips on Tackle" containing interesting information for anglers.

Ry-Krisp

Recommended by
Warren H. Miller

Have you read his article in the February Field and Stream entitled, *"With Knapsack and Rifle."*

He Says:

"I often take along Ry-Krisp Swedish Health Bread for lunches. It is d-licious when toasted and very sustaining. Comes in flat crackers 11 inches in diameter. Will keep a long time."

The well are better for its use
The sick need it to get well

Ask your grocer for it or send direct, by mail 35 cents

Send for circulars

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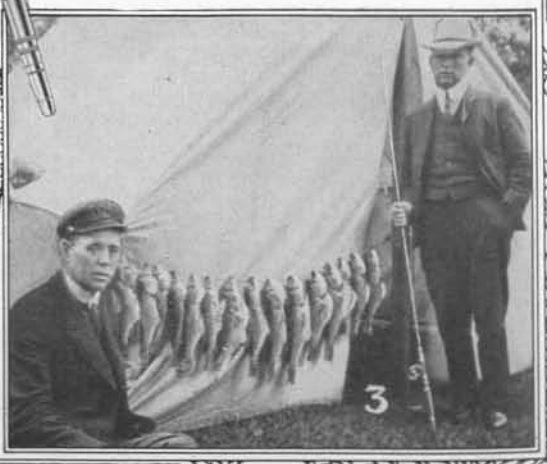
We guarantee advertising on this page provided you mention FIELD AND STREAM

A Family

Fishing runs in some families. It ought to run in all families. It is the most healthful and wholesome sport on earth. On these two pages we take great pleasure in showing the picture of "A Family of Fishermen," of which there are 20 in the three families.

1. B.C. with a Brook Trout measuring 22 inches long, caught on a "Bristol" at Isle Royal, Mich.
2. C.P. (son of J.S.) and M.S. (son of B.C.) with a 7 lb. Lake Trout caught on a "Bristol" Rod at Isle Royal.
3. J.S. and B.C. with a 47 lb. string of Bass caught on "Bristol" rods in Leech Lake district, Minn.
4. M.S. and C.P. with a string of 9 Brook Trout weighing 26 lbs. caught on "Bristol" Rods at Isle Royal.
5. B.C. with a creel of Brook Trout weighing 16 lbs. caught on a "Bristol" Rod at Isle Royal.
6. M.P. with a 10 lb. string of Brook and Lake Trout caught on a "Bristol" Rod at Lake Placid, N. Y.



"Bristol"

The Prize Winning Rods

For the last three years "Bristol" Steel Fishing Rods have won more than twice as many prizes as any other kind or make of rod in the National Fishing Contest conducted by FIELD AND STREAM MAGAZINE.

This is a splendid contest—a great benefit to the sport of fishing. "A word to the wise"—if you want to take one of these great National Prizes (totaling over $4,000) you had better use a "Bristol" Rod for the reasons given on the next page. ☞

All advertisements are indexed—See page 2A

# of Fishermen

They all use "Bristol," The Prize Winning Rods, because they have the agility and the snap to drive the hook into the quickest fish before he can spit out the lure. They have the proven strength to hang on until the fish is tired out and netted. They have perfect balance for whipping, casting and trolling. They have the right lengths, sizes, weights and trims. Their mountings and finishes are elegant to the last detail. There are absolutely no other rods to compare in value with

"Bristol"

TRADE MARK REG. U.S. PAT. OFF.

The Prize Winning Rods

19,000 dealers sell 38 different styles of "Bristols" ranging from $3.50 to $25.00 each. Every Rod Guaranteed Three Years. If you want a particular rod which your dealer does not have, he, or you can order by mail from our catalogue at no additional expense.

FISHING SCALES FREE

Until September 1st, 1916, you can get a beautiful pair of fishing scales, FREE with every "Bristol" Rod purchased. Write for full particulars and FREE CATALOGUE.

The Horton Mfg. Co.

81 Horton Street Bristol, Conn.

Pacific Coast Branch: Phil. B. Bekeart Co., 717 Market Street, San Francisco, Calif.

FISH AND FISHERMEN

WORM "STORAGE BOX" FOR ANGLERS

By Ernest Warren Brockway

The majority of trout anglers who do not confine themselves to fishing with flies exclusively secure their supply of angle worms in a "hand-to-mouth" way. That is, if they plan a fishing trip for a certain day they will leave the task of digging or "unearthing" worms until the afternoon or evening before said day or else on the morning of that very day. But it is a poor plan or habit, and the angler should break away from it.

Perhaps in most instances it will work out satisfactorily, but there are times when it will not. I know whereof I write, for I have experienced many of the latter times. There are hardly any sections of the country but in which at some time or another drouths prevail. And when a drouth is paying a visit angle worms get as near China as their efforts will permit. And the average angler doesn't have such a super-abundance of leisure at his command that he wants to use it in an attempt to strike some of the high places of the Celestial empire. He wants to get a supply of worms as quickly as possible and be off to the brooks. But when there is a drouth he'll be tantalizingly held up, unless, perchance, he knows of some everlastingly wet soil which produces worms in comparison with the springing up of weeds in the average garden.

But these wet places are rare, or, at least, the worm-producing ones, and the angler should not wait until the last moment in the hope of finding such a paradise. I have done this many times with the result that much time that might have been employed most happily on a brook was spent in the irksome task of digging *for* wrigglers.

Now, these trying delays may easily be averted. When worms are to be found almost anywhere in abundance, then is the time to do your harvesting. Get a wooden box of fair dimensions, a foot and a half long and eight or ten inches deep is a good size, fill it partly full of black, damp soil and then toss in worms as fast as you can find them. When the surface of the soil is pretty well covered with them, cover with a layer of soil about two inches in depth and then put in more worms, as at first. Repeat this until the box is filled. As a rule, worms will not work their way up and out of the box, but to safeguard a possibility of this place a cover over the box, boring several holes in the cover that the worms may have air. The box should be placed in a damp cellar or, if a cellar is not available, dig a hole in the ground and set the box therein, though placing but little soil over the top, and leaving the airholes open. In place of a top layer of soil, a covering of cedar or hemlock boughs will do equally well. The purpose of shielding the top of the box is to prevent the sun's drying the soil in the box too quickly.

By sprinkling a little water over the surface of the soil occasionally the worms will keep in excellent condition for weeks. By this method, you can readily perceive, the angler can start for the brooks at only a few moments' notice. And there are many times that the angler whose duties are in the office or in the shop has opportunities for unexpected visits to the streams. If he hasn't used all his worms when he returns they should be put back in the "storage box" with their companions for future use.

Not until a worm shows signs of losing his activity should he be considered useless in tempting trout. I have even used worms that were partially shriveled and caught trout with them. But I wouldn't advise any angler to get in that habit. I didn't get in the habit, but used them because I had no others. They became that way by keeping them in a small box and I couldn't find any healthy ones by digging. I didn't use the "storage box," you see.

So if the angler will employ the method I have described he will save many hours of exasperating and oftentimes futile toil, which hours may just as well be happily spent on inviting, singing brooks.

PERSISTENT ANGLERS' CLUB OF CHICAGO NOTES

MR. CHAIRMAN:

The committee appointed to suggest a plan of awarding prizes to members who achieve the best fishing record for the season of 1916, makes the following recommendations:

1. That one merit be awarded to each member attending each club fishing trip.

2. That one merit be awarded to the member catching the largest fish on each trip, weight to govern.

3. That one merit be awarded to the member catching the largest number of fish on each trip.

4. That one merit be awarded to the member catching the largest fish during the season, weight to govern.

5. That one merit be awarded to the member catching the largest number of fish during the season.

6. In case of tie, each member tying, to receive one merit, except in case of tie of total merits at the close of the season, such tie to be decided by an arbitration committee to be selected by the president.

7. The member receiving the most merits during the season to be awarded first prize, member receiving next highest number of merits, second prize; member receiving the lowest number of merits to receive a booby prize, this booby prize to be purchased by the members receiving first and second prizes, to cost not exceeding $1.00. The selection of this prize must have the approval of the president.

8. The term "fish" refers to "game fish" of legal size and weight, caught either in casting or trolling.

9. That each member attending a club fishing trip be assessed 25 cents on each trip, this amount to make up a prize fund; at the close of the season the fund to be equally divided between the winners of the first and second prizes, the winner of the first prize to receive in addition a silver cup submitted by Field & Stream Publishing Company.

10. That the proposition submitted by the Field & Stream Publishing Company to give a silver cup for a certain number of entries be accepted. This cup, when presented to the winner of the first prize to be engraved with the club's monogram, winner's name, and the year.

J. C. PAYTON.

CAUGHT ON CHICKEN WORMS

By Allyn H. Tedmon

As the days grow longer and the sun gets warmer and the snow

Best For The Camp

Bears The "GOLD MEDAL" Stamp

The "Gold Medal" trade mark on a piece of Camp Furniture, a FOLD-UP Portable House or a Folding Tent Frame, is a *guarantee* of quality, utility, reliability, value. For more than twenty-five years "Gold Medal" products have been the camp standard of the world. Recognized as the strongest, lightest, most convenient. We supply U. S. Army with thousands of folding cots, chairs, litters, etc.

"GOLD MEDAL" FOLD-UP Portable Houses

(Patented No. 1170188)

Fold-up compactly—for Camping, Out-door Sleeping and Children's Summer Playhouses. Quickly and easily erected—quickly taken down for transporting elsewhere or storing for next season. Weather-resisting—waterproof—ventilated—swiftly closed against storms. Open to the air, but screened against mosquitos and all insects.

Send At Once For Catalog "B"

—it explains the wonderful "Gold Medal" Complete Folding Unit Frames used in our FOLD-UP Portable Houses and Folding Tent Frames, with full details of construction, sizes and prices.

"GOLD MEDAL" (Trade Mark Reg. U. S. Pat. Off.) Folding Camp Furniture

does away with old-time camping hardships. Preferred by experienced campers. Known the world over for **Lightness—Strength—Compactness—Reliability.** See our name and trade mark stamped on every genuine "Gold Medal" article.

The "Gold Medal" line includes Camp Beds, Cots, Chairs, Stools, Tables, Folding Bath-tubs, Washstands. Cooking Outfits and many other articles needed in camps.

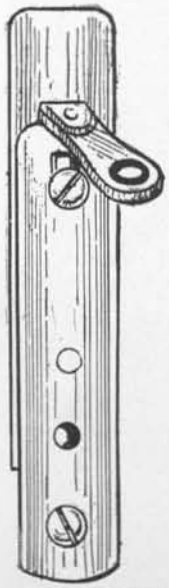
Write Today for Catalog "A" of Camp Furniture and name of nearest dealer.

Enclose 10 cents in stamps and we will send a valuable **Camper's Manual.**

If your local tent-maker cannot tell you about the unique FOLDING TENT FRAMES that we also make, **ask us.**

Gold Medal Camp Furniture Mfg. Co.
Dept. N RACINE, WIS.
World's Largest Exclusive Manufacturers of Camp Furniture.

Gem Line Guide



NO SNARLS
NO BACKLASHES

Guides your line on Reel to avoid trouble in casting.

Remember
you do not have to buy a New Reel

You simply attach Guide to any ordinary multiplying Reel, by drilling two holes in Reel plate to correspond with the two round head screws on top piece of Guide.

Sent by mail on receipt of price.

$1.50

H. H. KIFFE CO., N. Y. Agents
521 Broadway, New York

THE BAIT SENSATION

This is the bait that took fishermen everywhere by storm; fishermen the country over entered the Gold Prize Contest which this bait made possible. No other bait has ever made such wonderful catches.

RUSH'S TANGO MINNOW

is the bait that gets them all; new, lively, ideal for trolling or casting, appeals to amateurs or professionals. Hooks being behind body of bait makes it practically weedless; floats when not in use—can't catch on bottom. Made of wood, enameled and finished in brilliant colors; our "Radiant" Bait glows at night—bates 'em all!

At Your Dealer—*75c each, or $3.00 for complete set of four assorted brilliant colors. If your dealer can't supply you, remit to us direct, giving your dealer's name, and we will supply you postpaid.*

Dealers, this is a big proposition for you; if you haven't the Rush Tango in stock, send us your jobber's name and we will see that you get a "New Dealers" special proposition.

U. S. SPECIALTY CO.
941 S. A. & K. Bldg., Syracuse, N. Y.

All the wabble, dip and dive of a live Minnow in action

TRIED SEVERAL OTHER LIKELY LOOKING HOLES

scarcer, the prospects for gnats and bugs in general closer, the blood of an Izaak Walton flows faster. Yours truly doesn't claim to be an I. W., but there is something about his system and general makeup that recognizes the fact that there is a lot to be gotten from the big end of a fish-rod besides a sweaty hand.

With this fact in mind you will not wonder that under the back seat of "Old Henry" will be found an old fish-rod with hooks and line ready for the smallest chance at the game.

Not so very long ago the Little Mrs. and I, with the help of "Old Henry," pushed our way up a beautiful mountain cañon. In the seven miles of crooked and twisting road we rose over one thousand feet in elevation. No wonder "Old Henry" coughed and sneezed and wheezed and spluttered. The road was slick but not especially muddy, and with the exception of a bad hole that "Old Henry" slid into, we went along pretty well. This one hole was a corker though, and it took the united efforts of "Old Henry," the Little Mrs. and yours truly to get that hind wheel out on dry land again.

At the road's end we were welcomed by our hosts, Mr. and Mrs. H., and believe me, there are no more genial hosts in this land. Then, after running "Old Henry" into an out-of-the-way place and covering him with a tarp, he was forgotten and left to his own good company.

We spent two very pleasant days there. The creek runs close by and its gurgling and bubbling sounded good to me as it rambled on between its icebound shores.

In my younger days, when a game law didn't mean as much as it does now, my brother and I had caught many a speckled beauty through the ice of a certain mountain torrent that winds its twisted way through Colorado hills. It now occurred to me: Why not try for one here? It wouldn't be against the law here, so what was the hinder? The subject was put up to Mr. H. and the old fisherman, the whipper of many a stream, grabbed hold like a good sport.

I hunted out my old rod and tackle, and lo and behold! I had only one hook. Mr. H. got down his trusty rod from the end of the house, with the remark that "He never did try to get them so early," but it was worth trying. He was short of hooks, too. And what about bait? Never had thought about that. No worms up here, and a fly no good probably. It looked like our trip had come to a sudden end before it had started. But nothing daunted, we sallied forth to find bait, and where do you suppose we found it? In the kitchen. The women folks were cleaning a chicken and the intestines looked wormlike enough to be real. The hooks were rigged with chicken worms and it wasn't long before the fun started.

It was my luck to hook the first one. Say, but he was a good one; a real whale. Hooked him right out from under a big rock. As I pulled him out I sure felt like yelling but postponed this till he was safely landed on shore. But "alas and alack," this was never to come to pass. The hook had lain too long and the gut was rotten. To hold against his struggles it could not, and just about as I had my hand on the beauty the gut gave way and my prize was lost. As he glided through a hole in the boulder into the silvery depths below, my astonishment knew no bounds. Fish gone, hook gone; what luck!

Mr. H., just coming up, donated me the only extra hook we had and while I was baiting up he hooked a good one, but it, too, got away. Fisherman's luck for sure.

For some time we used our best efforts to get a raise. I had the good fortune, if you call it that, to hook a something; at any rate I lost my only hook and was afoot as far as fishing was concerned.

It remained for Mr. H. to save the day, and he did so by landing one beauty. But nevertheless IT WAS THERE. Mr. H. about this time called across the creek to me in a low tone: "Look at the bear back of you." Naturally I cast a casual glance behind me and was quite relieved to find the bear mentioned was none other than the Little Mrs., who had "snuck" up on me while I was absorbed in watching Mr. H. land his fish; and as I drew a long breath, that bruin inermis, or whatever they call him, was not real. The other two had a good laugh.

This cut the fishing short. Mr. H. tried several other likely-looking holes, but as the chicken worm failed to entice out any more of the dwellers of the chilly depths we hied ourselves homeward.

Now this experience only whetted my appetite and formed in me a resolution to own a better fishing outfit for trout without delay. Think of it: lost the only one of the day due to a faulty or, rather, a worn out hook. Never again; the best is not good enough at times. Think of the time I lost that big one because the line was no good. No, sir; good tackle or none for me if these Wyoming trout are the game.

My business and "Old Henry" take me to many such places and we, the Little Mrs. and I, count on many a trout dinner this summer. Here's hoping you will be as lucky, but if you aren't, don't forget that I, for one, if I do have any luck, will often think of the poor angler that has to do his fishing once or twice a month when the good old sporting magazines come around. Say, brother, did you ever stop to think what in the name of time would we do without them, anyway?

PIKE AND PICKEREL

Kindly let me know if there is any difference between a pickerel and a pike.

The fishermen of this city have had some discussion of late in regard to the above, so would like to settle their arguments.

ERNEST HAARER.

Ans.—Both fish belong to the genus Esox, but are different species: that is, the males and females of the two species cannot

Ahead of the Bunch

LET the other fellows tumble out of bed early and tire themselves out tugging away at a pair of oars in an effort to get to the fishing grounds first. You can sleep longer and still get there ahead of the bunch—fresh and full of energy—if your skiff or rowboat is equipped with an

EVINRUDE

DETACHABLE ROWBOAT & CANOE MOTOR

A turn of the flywheel and you're off—smoothly, noiselessly—8 miles an hour if you wish, or slowly enough to troll.

The new 1916 EVINRUDE four-cycle Twin makes a strong appeal to fishermen. It furnishes more speed, more power and is free from vibration. There's more speed, too, and other improvements in the single cylinder models. Both single cylinder and twin models are equipped with the Automatic Reverse and the EVINRUDE Magneto—Built-In Fly-Wheel Type.

The 1916 Evinrude Catalog tells all about the Evinrude line. Write for it today

EVINRUDE MOTOR CO., 342 Evinrude Block, Milwaukee, Wis.

Distributing Branches:
69 Cortlandt St., New York, N. Y. 214 State St., Boston, Mass.
436 Market St., San Francisco, Cal. Front and Morrison Sts., Portland, Ore.

Over 60,000 Sold

intermate. The "chain pickerel" is *Esox Fasciatus*, a long, narrow fish never exceeding 8 lbs. weight, with reticulated markings on back and sides. The pike is *Esox Lucius*, thicker and heavier, with longitudinal stipplings along the flanks. Weight up to 30 lbs. Great Northern pike are often called "pickerel," whence the confusion in identity.—Ed.

THE TROUT GAME FOR BEGINNERS

By Warren H. Miller

The barrier that keeps a sportsman well versed in only one line of the great outdoors from learning another is mainly prejudice. He *thinks* that he doesn't like the other fellow's specialty, and so he never takes the time or spends the money necessary to acquire an outfit and learn how to use it. Yet, let me remind you, there is no adage more deeply rooted in human nature than that one about the kid and his new toy! Try the other fellow's game. No branch of the outdoors is lacking in interest, skill or sportsmanship, for otherwise each branch would not have such a large following as it now has.

For years my attitude towards trout fishing was of amused tolerance. It seemed to me a minnow game; taking fish that would hardly make bait for the kind of salt-water fish that I was raised on. I could appreciate the scenery that trout fishing is staged in, in fact I made many a camp and pilgrimage to just such scenery merely to live in view of it for a day or so at a time. To a sailor such scenery is particularly appealing because of its charm and novelty. I even tried the benighted tackle used in taking trout—with the result of a totally empty creel and a soused suit of clothes! Then, in hunting big game, the fact that such country abounded in trout streams was borne in upon me most forcibly, and I realized that I was missing something when my companions took their rods for a few hours' sport, returning with a fine mess of fish for the pan, an agreeable change from pork and game diet.

And so I learnt how to cast a fly and take a trout, with their rods, and finally bought an inexpensive yet good outfit of my own; and since that day I have never overlooked a bet when an opportunity to whip a trout stream turned up. In fact I have so far succumbed to the charms of trout angling as to set aside the April camps exclusively for that purpose.

As my case is no doubt typical of thousands who think they have no use for trout fishing, I will give here a few pointers on how I was taught better, and how I got together a good outfit for a beginner. I was more than lucky in my teachers; some of the best trout men in the country being among them, so the "dope" herein is good.

Yes, you can get a good trout rod for as little as a dollar. I won't tell you where, but there *is* such a rod, made by one of the best tackle manufacturers in New York City. But you will play surer if you get something costing around five dollars. Such a rod, in the five-ounce weight, will be serviceable and well built for beginner's use. Later, when you get more interested in the game, a fifteen-dollar rod will be the least you would want for tournament work, and when you become a regular "bug" you will spend as much as you did for rifle or shotgun, say around thirty dollars.

Assuming that you are willing to gamble $5.00 on the rod, get one of 9 to 9½ ft. in length, 5 oz. weight, snake guides, three-piece with extra tip, German silver ferrules and solid metal reel seat at bottom of grip, handle of cork on a solid foundation of wood, and material of the rod split bamboo of dark shade, wound frequently throughout its length. The rod when set up should turn over in the wrist with exactly the same droop, should show an even curve with no tendency to onesidedness and have plenty of action when you whip or bend it.

Now that we are in the tackle store, the line will be the next selection, for it must fit the rod if good casting is to be done. Size E for a 5-oz. rod is the right weight, and you will get it preferably double tapered, for then the main body of the line comes up the rod and receives its casting impetus while the lighter part of the line and the leader constitute the part that is thrown and are best as light as possible so as to offer little resistance to being cast by the heavy part of the line. In the same way the second or reel half of the taper aids in long casts, for the middle body will be that part thrown by the rod, while the lighter taper following it will shoot easily through the guides. Such a line of the best quality will cost some six dollars for thirty yards, which is plenty long enough. Size E may be bought level for $2.50, but will not cast as far, for the ends of it are equally heavy and therefore unnecessarily clumsy. The reel has not much to do in trout fishing except to stow away line; it must be light, cheap and single click; in rubber or nickel, costing about a dollar. A stock of leaders, tapered somewhat from butt to end, will be wanted; say four at 30 cents each, six feet long. Then a half dozen each of flies, say the four all-around wet flies, Parmacheene Belle, Cow Dung, Coachman and Silver Doctor, and the same in dry flies, say Wickham's Fancy, Whirling Dun, Pale Evening Dun, and Jonney Spinner, and you are ready with a fair beginner's outfit that will do to get started on and will not throw you down with impossible tackle.

(To be continued.)

CATTARAUGUS CREEK AND THE NET MENACE

Field & Stream Pub. Co.:

I wish to take this occasion to advise you, if you do not know it already, that certain commercial fishing interests have applied to have the law restricting netting at the mouth of Cattaraugus Creek rescinded so they may use nets on these grounds.

I believe this creek mouth is the only one now which restricts the use of nets within five miles of the mouth, all others allowing netting within a half mile. Of course this means blanking the fishing here in the Cattaraugus Creek, and I am writing to ask that you kindly give notice to this if you can, as it would be appreciated by all fishermen who fish in the Cattaraugus Creek for sport alone. It seems as though the commercial fellows were asking a good deal when they seek to take away what little we have left, and at its best is none too good. Besides, this creek mouth is the natural spawning grounds for black bass and pike and would probably be worth a great many thousands of dollars to the State in the way of natural breeding places for replenishing the supply in the lake.

This matter but needs to have the airing before the public and have the sportsmen fully aware of what is meant by this application to allow their netting within half a mile of this creek mouth to receive a wave of protest from every lover of the rod and reel. It seems that it is asking but little for this whole territory that is entitled to this recreation ground, and I believe if the Conservation Commission or the State Legislature were fully informed by the clubs and individual members that this last stream would not be turned over as a business proposition to interests that seem now to have things pretty well coppered as it is.

Thanking you in advance for any notice you may give of this matter that will tend to awaken the sportsmen to the fact that unless they sit up and take notice they are about to be "handed one," I beg to remain,

J. G. Keyes.

Morning and a Mullins Boat

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Wherever you live it's easy for you to buy from the Mullins big boat book—free—write today.

THE W. H. MULLINS COMPANY, 722 Franklin St., Salem, Ohio

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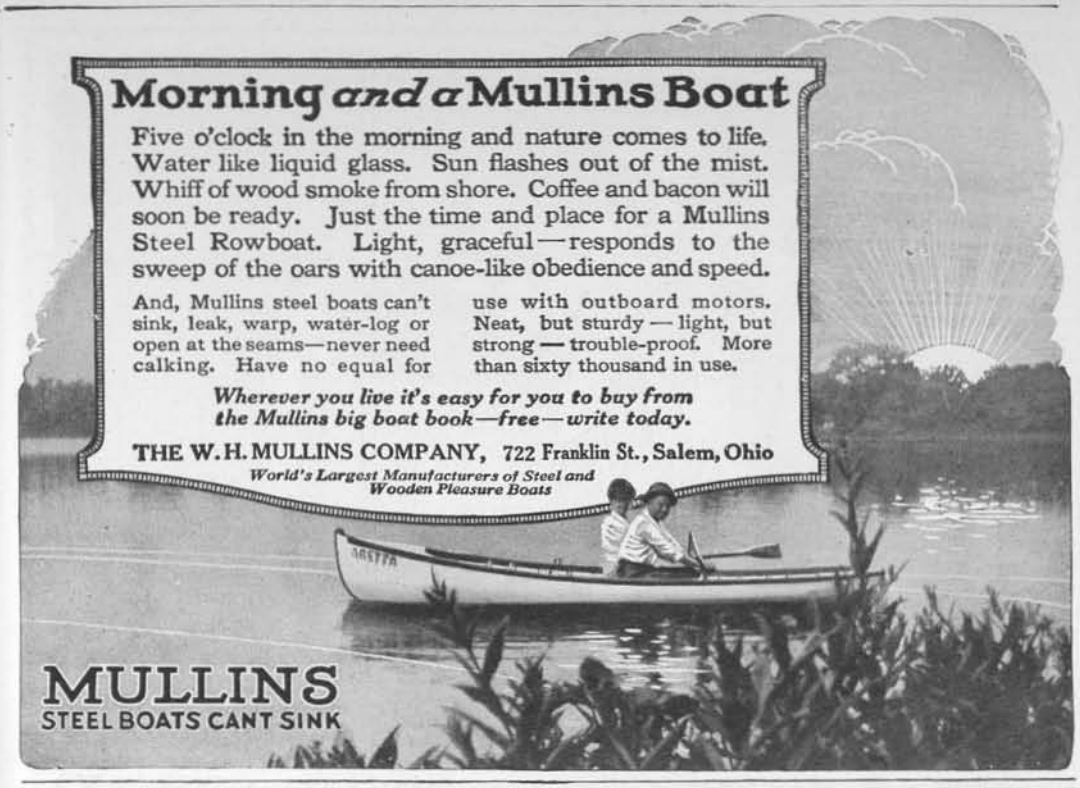

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¶ It places our great stock right at your disposal.
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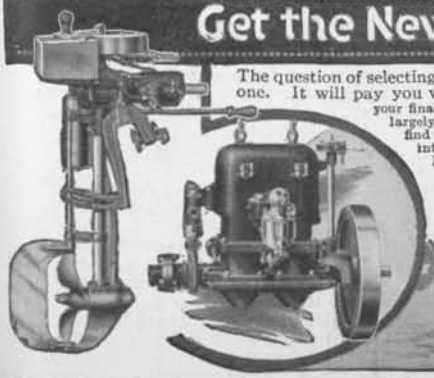
AN L-A ENGINE FOR EVERY PURSE AND PURPOSE



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Field & Stream PRIZE FISHING CONTEST

MY LAKE GRIFFIN LARGE MOUTH

By E. Geary

Winner Second Prize Large-mouth Bass, Class B, South, 1915 Contest.

For any fisherman who has not fished in the fresh water lakes of Florida I feel compassion; he cannot realize what fishing here means! Lake Griffin is about twelve miles in length and has an average width of three miles. It consists mostly of open, clear water with deep bays and inlets full of "bonnets" or lily pads, which form an ideal home for the gamey large-mouthed black bass and immense numbers of other varieties of fish.

I was sitting on my porch overlooking the river or arm of this lake when my wife informed me that I had to produce a bass for that day's dinner or else take my gun and shoot something. I suggested that the poultry farm would prove a fine place to hunt in, as it was certain to prove productive!

To tell the truth the wind was blowing strongly from the northeast, a point that, as a rule, is fatal to fishing, and for another thing, I did not feel like pulling a boat against it, but as I was expecting a party to buy my crop of oranges and grapefruit some time in the morning, I didn't want to go out of sight of the bridge over the river that he would have to cross to get to my house, so I decided to try for a fish.

My rod, a Heddon casting rod, was soon fixed up for business with a South Bend anti-backlash reel and 50 yards of South Bend blue seal silk line, but when it came to selecting a lure it was somewhat of a puzzle. The water was rough, so it must be large and attractive, the wind was so strong it had to be heavy so as I could cast against it and to make the lure go deep in the water, so after due consideration I selected a Welles bait, painted a silver color. I had only tried this bait in calm water previously, but it struck me as being very suitable for deep water when it was blowing hard.

Before going further I must describe my method of fishing or, rather, handling my boat, for I fish, as a rule, by myself. My boat, flat bottomed and 14 feet long, I built expressly for one fisherman's use. I sit facing the bows and push her along with a pair of six-foot-six oars and cast ahead of the boat at every likely spot while I drift along with the wind, taking the oars inboard for this purpose.

As I went down to the boathouse I met a neighbor and asked him if he wanted to go fishing with me, as he sometimes does. "No," he replied; "it is too cold and rough for fish to bite, and I have to pick oranges." "The very morning to catch a big one," I replied.

Once out on the water I found the wind a good deal stronger than I expected, so commenced to hug the bank and cast into small, sheltered holes and was rewarded with a pair of moderate-sized fish inside of ten minutes. As these were really more than we required for dinner I decided to turn the boat around and drift back with the wind, casting ahead of the boat under a "sawgrass" bank where there was good, deep water and a favorite place for "big ones."

The boat was going fast, so I took the oars in and made a long cast under the bank. The bait fell exactly where I intended, and I began to retrieve, but I found the line didn't come. I looked at my reel, thinking the line had caught on the handle, but found it clear and I saw it was not wound around

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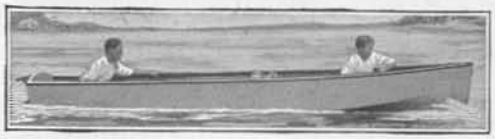

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On your next fishing trip be sure to have **"Ideal" Fishing Floats**—the float with the knob. The guide is cut from solid brass—the knob prevents it from ever coming off. (Note A-B) The brass ferrule at the bottom of the cork (Note C) is put on to stay — no strings to rot and break. The birch stick extends clear through the cork—one piece. They are cheaper because they last longer. For sale by dealers or sent post paid upon receipt of price. For the angler who knows, "Ideal" Floats are made in the following sizes and finish:

Red and	2 and 2½ In.	10c
Green	3 and 3½ in.	15c
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or Plain Cork

SPECIAL OFFER
Complete Set of Corks—6 in all. Packed in handy box..... $1.00

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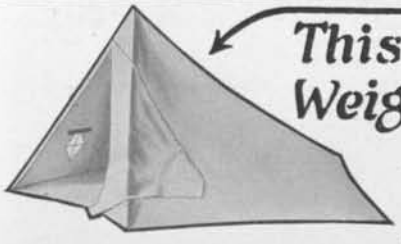

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COMPAC TENT

as shown in illustration. For an early Spring visit to lake or river, or for your camping or tramping trips in Summer and Fall, a "Compac" is the ideal tent equipment. Sportsman's Style is 6 ft. wide, 8 ft. long and 4 ft. to peak. Carries in roll 4 x 16 inches! Can be pitched without poles. Weighs only 3¾ pounds.

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COMPAC TENT CO. 300 West 10th St. INDIANAPOLIS, IND.

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any of the rings on the rod. About this time I felt a strong jerk and decided that I had caught on some vegetation under water and the jerk was caused by it breaking. The boat in the meantime was drifting down wind to where my bait was and I saw she would soon foul my line and probably break it, so I took up an oar and commenced to paddle her off with one hand. I had been slowly letting line run from the reel to relieve the strain when I noticed that my line was traveling *against the wind*. I immediately put down the oar and gently "felt" with the rod and was rewarded with a vicious plunge and rush. I knew then I was fast to a heavy fish, but concluded it was a catfish. My line was very old and rotten and as my fish decided he was going into a thick lily patch about twenty yards away I had not much hope of landing it but did not want to lose my bait, so I put the pressure on gently and he, by degrees, turned for the open water. About this time a voice shouted "What you got, a 'gator?" I looked up and saw a neighbor watching from the bank. I replied "I think it is too cold for alligators to bite." As my fish was sulking I had time to look around and found that an auto had stopped on the bridge and that the two occupants were standing up in it watching the fight. As I concluded that they were the parties I was expecting about my fruit I decided to hurry matters with my fish. I got a good tight line on him and with my left hand struck my rod a smart tap. The results were satisfactory though somewhat surprising. My fish came to the surface for the first time and I knew I had a bass instead of a catfish as I thought. I then thought of my rotten line and decided I had to play a waiting game. He tried once more for the lilies, then for deeper water and at last came right for me and got under the boat before I could check him. I kicked the bottom of the boat and he made for open water once more, but the strain I kept on him was telling and I gradually got him to the surface again. By this time he was nearly "all in" so I gently worked my hand under him and my fingers into his mouth and without further trouble lifted him into the boat. I decided that I had enough fish for one day and started home. In going under the bridge the parties who had watched the fight from their auto asked me "How much that cat weighed?" I showed them the fish and they decided he weighed 15 pounds and was the largest bass they had ever seen.

Prize Contest Certificate Record, Second Prize, Large-mouth Bass, Class B, South.

Weight—14¼ lbs.
Length—31 in.
Girth—21 in.
Caught—Oct. 25, 1915.
Where caught—Leesburg, Fla.
Rod—Heddon.
Reel—Anti Backlash.
Line—South Bend.
Lure—Welles Bait.

THAT CRANBERRY LAKE TROUT

A WINNING TROUT FROM CRANBERRY LAKE

By Chester A. Minds

Winner Fourth Prize Brook Trout, Class A, 1915 Contest.

I happened to be in the Adirondack Mountains in the latter part of May, and having heard of the excellent trout fishing in Cranberry Lake and the small streams emptying into it, I decided to try my luck.

Accordingly on the 23rd of the month six of us started up the lake with John Howland as guide. We went up the lake in the guide's motorboat and that evening fished in the Brandy Brook flow. We had a very nice catch, but none of them were very large. Early next morning we started and were fishing in the "promised waters" at half past six. We fished from small boats and, of course, had to troll.

It was a cold, gray day and anything but promising for good fishing. We trolled conscientiously from half past six until after ten o'clock before anyone had a strike. Then we heard a yell from the other boat and went over to see what it was all about. You can imagine we all felt pretty good when we saw a speckled beauty that weighed two and three-quarter pounds. I was getting rather tired of the trolling and made the statement that I would give anything for a leader. My partner said he had one and he gave it to me. He had a pole that was too stiff for fly casting. While I was rigging up the leader with flies a trout jumped directly behind me and gave me such a start that I nearly fell out of the boat. I got so excited that I got the leader snarled in my hurry to have a try for the big fellow. By the time I had things straightened out he, no doubt, was far away; at least he did not rise after I had made repeated attempts to lure him.

At another point about two hundred yards distant we could see where they were jumping, and we rowed over. One jumped about sixty feet away and I quickly cast to that spot, but nothing happened. I cast again and just as I pulled back for another cast there was a swirl and splash of water that made my heart beat like a trip-hammer. I cast again and this time he took hold. What happened after that until we had him safely in the boat is more like a nightmare than a reality to me. The line fairly sang in the water and I was afraid the fish would run away with my line before he stopped in his rush. Finally it turned and came back toward the boat, and I reeled in for dear life. In the meantime my companion had reeled up his line and had the landing net ready for the moment when the fish would be played out so that we could net him. Around the boat the fish fairly flew, darting in and out, sometimes going almost straight down. Finally I could see that he was beginning to tire. I led him gently up to the side of the boat, but the sight of the landing net instilled him with new life and the fight began all over. Three or four times I had him within reach, but each time he would start out like a flash. I was terriby afraid we would never land him, but finally he came up to the side and my partner deftly slipped the net under him and I had my three-pound beauty safe at last.

Prize Contest Certificate Record. Fourth Prize Brook Trout, Class A, 1915 Prize Fishing Contest.

Weight—3 lbs.
Length—18 in.
Girth—11½ in.
Caught—June 24, 1915.
Where caught—Cranberry Lake, N. Y.
Rod—Lancewood.
Reel—Rubber click.
Line—Kingfisher.
Lure—Royal Coachman fly.

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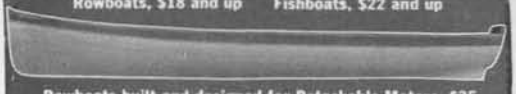
Rowboats, $18 and up Fishboats, $22 and up



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Power Canoes, engine installed, 15 to 20 miles an hour, $78

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It doesn't matter what success you have with rod or gun, a poor smoke spoils the sport. Be sure of the cigars you take before you start on the next trip. Try them first. I am going to help you to see that they are good, mellow, satisfying cigars. I want your next outing to be solid pleasure from the smoke standpoint.

Out-of-door Men

Men who spend much time in the open want a cigar that adds to the exhilaration of the great outdoors. I have found one that my friends consider the most delightful of all campfire smokes.

During one of my trips to Cuba, my attention was brought to a leaf that grew only in the famous Vuelta district of the island. It made up into a deliciously smooth smoke, but I found it could not be grown so as to retain its rare flavor in any but that locality.

I began importing the leaves for my own use. My friends came to know of this mild, sweet smoke, and at their request I imported enough to supply them. Men of like tastes were many, and soon thousands were looking to me for their cigars.

Now I keep one expert busy selecting the leaves. I have given my name to this cigar. It is called the "J. R. W. Panetela." What started as a hobby has become a business with me. Last year I sold over 2,000,000. In 40 years of smoking I have found nothing to equal my "J. R. W."

I'LL BUY FIVE

I want you to smoke five J. R. W. Panetelas free. I want you to know that these cigars are *your* kind of smokes before you buy them. Simply pin your business card or your letter-head to the coupon below and mail it. Enclose 10c. to cover packing, postage and revenue. If you like the trial cigars you may order as you wish them. My price is close to my cost—$5 per hundred, $2.60 for fifty. Charges will be prepaid.

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Please send me a box of your J. R. W. Panetelas. I'll smoke five at your expense. If I'm delighted with them I will send you a check and you will replace the five smoked. If not I will return the box to you collect. Enclosed is ten cents to cover revenue, postage and packing.

Name.....

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SPORTSMAN'S WORKSHOP

SURF ROD BUILDING

By Chas. H. Hall, Jr.

We have frequently noticed that men who find pleasure and anticipation in surf fishing are inclined during their many intervals of watchful waiting to relapse into critical moods regarding their weapons of offense.

Should the tide not be right or the gamey bass be chasing the sand eels or bankers somewhere east of the Gulf stream, then is the time when two or three votaries of the sport gravitate together, and while waiting for something to turn up, almost invariably drift into technical discussions about rods and tackle.

The use of rod and reel for surf fishing appears to be of recent date, at least on our Atlantic beaches. On the Jersey shore, perhaps forty years would be a full measure of time since the sport first appeared, but during that time many improvements in rod, reel, and tackle have been made.

The old types of stock outfits have given way to those of special make, and not a few are now made to order. Many who seek pleasure and recreation in the sport of surf fishing make their own rods.

In making a rod the amateur must bear in mind that he does not have the benefit of the many mistakes which the experienced rod maker has profited by, and so must make haste slowly.

The size and weight of a surf rod is generally governed by individual taste, some getting better results with tips of six feet to six feet eight inches, others with tips of five to six feet. A surf rod should be moderately stiff to cast the common four-ounce lead, and the diameter of the top effects this; 8/32 to 10/32 of an inch are good diameters.

Having decided upon the style and size of rod desired, the question what wood to use comes up. Unless a preference be had, then selection must be made from the various woods usually used, viz.: Calcutta bamboo, split bamboo, greenheart, lancewood, bethabarra, degama, snakewood and hickory.

It may be presumed that those who have had any experience in surf fishing are familiar with these various woods, but a few hints upon the subject may aid those who have not had experience in that line. These woods have their own characteristics as to strength, resilience, and tendency to set. While personally we believe more dependence can be placed in good white hickory, the difficulty of getting it and the skill required in shaping it appear to be difficulties rather hard to overcome, although a number are in use on the eastern and western coast of the United States. This wood possesses fine elasticity and its knitted grain makes it practically unbreakable. The writer has a hickory tip that has been in use every season for over twenty years, and it is still perfectly straight.

A rod may be made of a natural stick of bamboo; a rod of this sort is the easiest to make, but lacks the necessary life and action. Split bamboo is considered by many to be the best rod but in the writer's opinion lacks the action of a good wood rod. Tips of split bamboo may be purchased already glued together ready for mounting.

Greenheart is a large tree, native of tropical South America and the West Indies, its wood is of a dark green color, sap wood and heart wood being so much alike that they can with difficulty be distinguished from each other. Greenheart, tested either by transverse or by tensile strain, is said to be one of the strongest woods, and it is also exceedingly dense; it is quite easy to work, and makes a rod possessing an excellent action for surf casting.

Snakewood is a tropical wood similar to greenheart, deriving the name from its curly grain which presents an attractive appearance when finished. It has the same character and action as greenheart.

Lancewood is a straight, tough light, elastic wood, obtained from the West Indies and Guiana. There are two kinds of lancewood, the black lancewood or carisiri of Guiana (Guatteria virgata) and the yellow lancewood (Duguatia quilarensis, yari-yari of Guiana) is found in tolerable abundance throughout Guiana and West Indies. This latter is the kind generally used for rod-making, being easy to work and a rod made of it is very flexible.

Bethabarra is similar to greenheart in color, by some is considered a superior wood. Degama is yellow in color like lancewood possessing a fine grain and quite flexible in action.

Large dealers in fishing tackle and anglers' supplies generally carry in stock a supply of the various woods used for making rods. In selecting wood for a rod too much care can not be used in picking those pieces which have straight grain. Many hard woods shrink lengthwise with the grain, hence the pieces having a waving grain will necessarily shrink.

Too great care can not be exercised in selecting a plane for the work, this tool should be about the size of a wooden jack plane having a bitt with a cap, and when used the cap should be set just as close to the cutting edge of bitt as possible. This means about the fortieth part of an inch, otherwise

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HAWKEYE BASKET REFRIGERATOR

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Write for Booklet 23 and name of nearest dealer

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Exhausted or Debilitated

NERVE FORCE

Every reader of this magazine, who is under a nervous strain, lacks nerve force, power and energy, and particularly those who are subject to weakness and excessive drains on the nervous system, should not fail to send to **Winchester & Co.**, the Pioneer Manufacturers of Hypophosphite Preparations (Est. 58 years), 614 Beekman Building, New York, for their free literature on Nervousness.

"I know of no remedy in whole Materia Medica equal to your Specific Pill in Nervous Debility."—Adolph Behre, M.D., Professor of Organic Chemistry, N. Y.

No C. O. D. or Treatment Scheme. Price $1.00 per box or bottle. Sent prepaid in the U. S.

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Ever hike through wet woods?
Ever buck a head sea in a canoe?
Ever hunted in the snow or waded a trout stream?

If you have then you can appreciate that wool is the only material for out-door clothes—warm when wet.

See recommendation on page 1235

If your dealer does not carry our garments write direct to
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Comfort SPORTSMAN'S FIRST ESSENTIAL

Feet Stand Hardest Knocks. Protect Them With

Witch-Elk Boots

Lightest, easiest boot made. All heights for men and women.

Ask dealer to order pair or write for Catalog "F"

Also Moccasins, Golf, Tennis, Baseball and all Athletic Shoes

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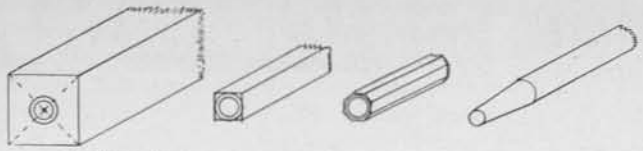


SHOWING THE VARIOUS STEPS IN PLANING DOWN THE ROD

the wood will be torn up when the plane is used. This close setting of the cap permits any hard woods to be smoothly planed against the grain.

It has been found that the best way to overcome this tendency of the wood to spring is to plane the stick perfectly straight as the first operation in making a rod. The straightening process should begin on that side of the stick which is concaved and that side should first be made straight. By so doing the fibres which are bending the stick from a straight line are more or less cut off, and their tension neutralized.

Having planed the hollow side of the stick straight, it is only necessary to straighten the remaining sides. Having now planed the stick so it is straight, the next operation is to square the stick making the four sides about equal in diameter. Then center both ends and describe with a pair of compasses a circle at one end of stick suitable in measurement for the tip, and at the other end a circle the size of the ferrule to be used.

Now secure the stick to a straight and firm base, an ordinary bench will do if the surface is straight, otherwise a piece of two-inch plank secured in the bench-vise will make a good bed to work upon, providing the edge is made straight, which is easily done by planing. To this the rod should be secured by cutting a notch in a thin piece of wood about three-eights of an inch thick to receive the tip end of the rod; in this wedge the tip securely. The butt end can be secured by using a bench knife which is a thin piece of steel from one to two inches long, the long edge of which can be forced into the bed supporting the rod and driven up against the butt end of rod to hold it securely in place while the planing process is going on. Any thin piece of iron would answer the purpose just as well, a piece of an old case knife or thin saw-blade would do, or a screw set down at the end of rod would hold it in place.

The shaping of the rod should always be done *from the butt to the tip*, the butt end always being nearest to the workman.

Having secured the rod proceed to plane down the four sides of the stick equally until the diameter approaches close to the circles which have been struck at either end, care being used to *always drive the plane the full length of the stick each stroke* (or if not the whole length of the stick then that part in which you desire to have a uniform taper), the four uniform sides are the lines upon which the rod will round up for, it is only necessary now to plane the four corners off until you have an octagon shaped stick, all sides being equal.

It is only necessary then to cut down the eight corners with a fine set plane and sandpaper the stick perfectly round: Commence with coarse sandpaper then finish with the finest.

(*To be continued*)

A HANDY CANDLE-STICK HOLDER

By E. E. Buchanan, Jr.

An excellent candle-stick holder may be made from an old Williams holder-top shaving-soap box. After removing the remaining soap from the top with a knife a candle may be inserted and fastened in place with wax or melted paraffine. Have the candle short enough so that the cover will go on the box. A candle-stick made in this way is fine for traveling or camping, as the candle is protected while carrying and will not get broken. A good scheme is to keep a few matches in the cover around the candle.

PHOTOGRAPHIC CONTEST

Field and Stream offers three prizes for the best three photographs submitted each month in this Contest, reserving the right to publish at our own discretion the orders submitted. The prizes for next month will be: First Prize—Three years' subscription to Field and Stream. Second Prize—Two years' subscription to Field and Stream. Third Prize—One year's subscription to Field and Stream. For all others, 50c. will be allowed when used.

Contestants submitting photographs will please place name and address on the back of each one submitted, state make of camera and type of lens used, light conditions, time of exposure, and any other explanatory matter which would be of interest. Address all entries to Photographic Contest Department, Field and Stream, 331 Fourth Ave., New York City.

FIRST PRIZE PHOTO.

Made by Allen F. Brewer. No. 1A Special Kodak, R. R. Lens, Stop F.16. Bright light. Subject—Woodcock in snow.

SECOND PRIZE PHOTO.

Hade by Howard T. Middleton. Premo Camera, R. R. Lens, 1/100 sec, Stop F.8. Flashlight. Subject—Great Horned Owl.

THIRD PRIZE PHOTO.

Made by W. L. Beaty. Eastman 5 x 7 Box Kodak, Stop 16. Bright sun. Subject—Clark's Crows.

ARE YOU INTERESTED IN THE FIELD AND STREAM TROPHY CUP FOR GUN CLUB AND FISHING CLUB TOURNAMENTS?

PERFECTION

AT LAST

And it is all yours for the nominal sum of

50c

Every fisherman buys it on first sight

Pat. Aug. 3, 1915

The very last word on tops for fishing rod tips—tops which never cut, loop, snarl, or chew up your cherished enameled line; never crack, break, bend, or cause trouble at the critical time when a single hitch means the loss of that biggest of all big ones. Tops which are file-proof, fool-proof, indestructible, light in weight and smooth as satin in action, exquisite in finish and an ornament to any rod. Endorsed by both anglers and the trade as the most valuable offering made to the guild in years.

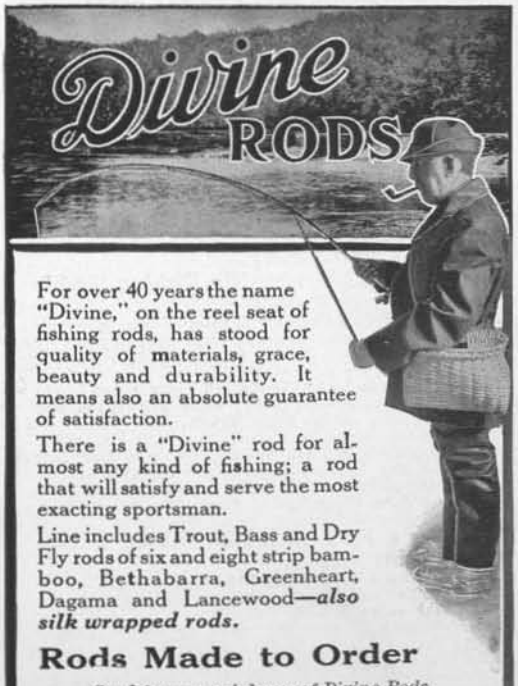
Every PERFECTION top sold under unqualified guarantee. Your money refunded if they do not give full satisfaction.

Descriptive booklet and testimonials free on request; send for one—a postal card will bring it promptly.

THE PERFECTION TIP CO.

513 Seventeenth Street, Denver, Colo.

Divine RODS



For over 40 years the name "Divine," on the reel seat of fishing rods, has stood for quality of materials, grace, beauty and durability. It means also an absolute guarantee of satisfaction.

There is a "Divine" rod for almost any kind of fishing; a rod that will satisfy and serve the most exacting sportsman.

Line includes Trout, Bass and Dry Fly rods of six and eight strip bamboo, Bethabarra, Greenheart, Dagama and Lancewood—***also silk wrapped rods.***

Rods Made to Order

Send for new catalogue of Divine Rods

THE FRED D. DIVINE CO.

508 Roberts Street Utica, N. Y.

BOYS AS WELL AS MEN

who go fishing, hunting, camping, in fact, everyone who spends any considerable time in the woods should send for a copy of our

Free Camp Guide

This camp guide contains exactly the information that is needed by all persons, men or boys, who enjoy life in the open, who play military games, or who take part in *boy scout* activities.

Wall Tents

7 x 7 feet

$5.50

The illustration shows a serviceable, durable, water, weather and wind-proof wall tent, which is perfectly suited for long or short camping trips, and is sold for $5.50. This is a light tent, easy to erect, or take down. It is made with a fly. 8-oz. single-filling duck, of first quality is used. The experienced camper will appreciate at once the many advantages in this style of tent. It is made in various sizes.

7	x 9 foot	. .	$ 7.15	14	x 24 foot	. .	22.60
9	x 9 "	. .	8.50	16	x 16 "	. .	22.75
9½	x 12 "	. .	9.50	16	x 18 "	. .	25.90
9½	x 14 "	. .	10.60	16	x 20 "	. .	27.50
12	x 12 "	. .	11.15	16	x 24 "	. .	31.40
12	x 14 "	. .	12.60	16	x 30 "	. .	38.25
12	x 16 "	. .	14.50	16	x 35 "	. .	42.80
12	x 18 "	. .	15.40	18	x 18 "	. .	27.90
14	x 14 "	. .	15.60	18	x 20 "	. .	29.75
14	x 16 "	. .	17.00	18	x 24 "	. .	34.50
14	x 18 "	. .	18.25	18	x 30 "	. .	41.80
14	x 20 "	. .	20.50	18	x 35 "	. .	46.75
	18 x 40 feet	. .	52.00				

Scout Tents

No. 1

$2.50

These are similar to the tents that are used by the U. S. soldiers on active duty. They are also excellent for use by boy scout troops, by fishermen, hunters, trappers, etc. They are easy to carry, put up and take down, being very light and compact when folded. They are also called shelter tents. Being wind, water, and weather-proof, they are just the thing for boy scouts when out on long hikes. Size 5 ft. 3 in. by 4 ft. 6 in. wide and 3 ft. 9 in. high.

No. 1, Special white cloth	$2.50
No. 2, Special khaki cloth	3.00
No. 3, Yacht drill	3.75
No. 4, Khaki drill	4.75

Indian Wigwams

These are first-class lawn tents for children's use, Set with tripod. All clear space inside. No center pole. Decorated in handsome designs. Two sizes; four styles. Large size, 7 ft. 6 in. high and 7 ft. 6 in. in diameter. Special size for boys or children, height 4 ft., diameter 5 ft., $1.50.

No. 1, Extra heavy white drill	$4.00
No. 2, Made of 8-oz. duck	5.00
No. 3, Made of standard khaki drill,	5.00
No. 4, As above described	1.50

$1.50

Send for Catalog

Be sure to send today for the free Camp Guide and large catalog of campers' supplies. Feel absolutely free to ask for any information you desire as to the proper equipment to buy for any camping trips which you may contemplate.

H. Channon & Co.

Dept. 54 Chicago, Ill.

THE FIELD AND STREAM

SIXTH NATIONAL PRIZE FISHING CONTEST FOR THE RECORD FISH TAKEN IN 1916

CONDITIONS

First—The fish must be caught with rods and reels as specified,* and in legal season.

Second—The fish must be weighed on tested scales and measured with a tape measure, length to be taken from end of lower jaw with mouth closed, to tip of tail.

Third—The affidavit blank printed on the last page of this announcement, or an exact copy, must be used in applying for a prize and signed by the man who caught the fish, together with two witnesses, and sworn to before a Notary Public and his seal affixed. In case any contestant catches a fish when accompanied by a single guide, the affidavit as signed upon coming out of the woods by himself and guide before a Notary Public stating the circumstances will be duly considered.

Fourth—The weight, length and girth, date, place, and manufacturer's name and full specifications, if possible, of the rod, reel, line and lure (or bait) used in taking the fish must be stated.

Fifth—The winners in each class must send us a short account of how, when and where the fish was taken, and what tackle was used in catching the fish. The account to be published in **Field and Stream.** These accounts will not be asked for until the prizes have been awarded.

Sixth—All affidavits must be sent to the Editor of the Prize Fishing Contest, **Field and Stream,** 331 Fourth Avenue, New York. All affidavits in classes designated by A, B, and C, must be in our hands within 5 days from closing date of class. **In all other classes affidavits must be in within 15 days from closing date.**

Seventh—No fish caught from State or private hatchery will be allowed in this contest.

Eighth—In the Pike and Wall-eyed Pike Classes an outline drawing of the fish must be sent in with affidavit, drawing to be made by placing fish on side on large piece of paper and drawing an outline of fish with pencil on the paper with fins of fish all erect.

Ninth—In event of two fish weighing and measuring exactly the same number of pounds, ounces and fractions, duplicate prizes will be awarded in each case.

The Judges of this contest will be: Robert H. Davis; Will H. Dilg, Chicago, Ill.; W. H. Miller, Editor, FIELD AND STREAM; E. F. Warner, Publisher, FIELD AND STREAM; Charles R. Riley, Horton Mfg. Co.; Lou S. Darling, E. J. Martin's Sons; Andrew Imbrie, Abbey & Imbrie; Chas. Heddon, James Heddon's Sons; W. J. Jamison, The J. W. Jamison Co.

In Tarpon Class length of fish is only measurement required. It is not necessary to give weight or girth.

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* Where no special kind of tackle is specified, any tackle is allowable, provided it consists of rod, reel, line and lure.

Be sure to get a photograph of yourself with fish, if possible

BROOK TROUT (Salvelinus fontinalis)

CLASS A—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between opening of season and July 31st

FIRST PRIZE: One pair Albion Wading Stockings, one pair "Mill's Special" Wading Shoes, one pair Heavy Wool Sox, made by William Mills & Sons, value $16.00; also one Ingersoll Wrist Watch, made by R. H. Ingersoll & Bro., value $2.50; and one Eagle Folding Landing Net, made by Eagle Folding Net Company, value $3.50. **Total value $22.00.**

SECOND PRIZE: 50 yds. Martin's De Luxe Enamel "E" Line, made by "Kingfisher" Lines, value $5.00; also one No. 455 Cream City Tackle Box, made by Geuder, Paeschke & Frey, value $4.00; and one Alaska Hunting Jacket, made by George F. Webber, value $5.00. **Total value $14.00.**

THIRD PRIZE: One Persian Alligator Leather Cooper Fly Book, made by Cooper Fly Book Co., value $4.50; also one Ingersoll Wrist Watch, made by R. H. Ingersoll & Bro., value $2.50; and one pair Ves Tong Hunting and Fishing Trousers, made by Ves Tong Mfg. Co., value $5.50. **Total value $12.50.**

FOURTH PRIZE: 50 yds. Martin's De Luxe Enamel "H" Line, made by "Kingfisher" Lines, value $3.50; also one complete Auto Strop Safety Razor outfit, made by Auto Strop Safety Razor Co., value $5.00. **Total value $8.50.**

CLASS B—For largest Brook Trout caught casting a FLY with Fly Fishing Tackle between July 31st and October 31st

FIRST PRIZE: One Vernley Fly Rod, made by Horrocks-Ibbotson Co., value $15.00; also one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.50; and 50 yds. Martin's De Luxe Enamel "G" Line, made by "Kingfisher" Lines, value $4.00. **Total value $21.50.**

SECOND PRIZE: One Lewis Medical Case of Leather containing 20 remedies made by Lewis Medical Case Co., value $5.00; also one Eagle Folding Landing Net, made by Eagle Folding Net Co., value $3.50; and one selection from catalogue of Abbey & Imbrie to value of $5.00. **Total value $13.50.**

THIRD PRIZE: 50 yds. Martin's De Luxe Enamel "F" Line, made by "Kingfisher" Lines, value $4.50; also one improved Martin Automatic Fish Reel No. 2, made by Martin Automatic Fish Reel Co., value $3.00; and one Sackett Camp Grate Broiler, made by Weyburn Sales Co., value $1.50; and one No. 1 Kraemer Pathfinder Compass, made by U. S. Compass Co., value $2.25. **Total value $11.25.**

FOURTH PRIZE: One Improved Martin Automatic Fish Reel, No. 4, made by Martin Automatic Fish Reel Co., value $3.50; and one Hand-knit Woolen Shooting Jacket, made by H. H. Kiffe Co., value $5.00. **Total value $8.50.**

GRAND PRIZE: Oil Painting of Brook Trout by H. A. Driscole. Value $75.00.

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates. **Value $4.00.**

(Continued on following left-hand page.)

Let the Facts Speak!

In the 1915 "Field & Stream" contest there were 89 prizes awarded to contestants in classes where silk lines are usually used. 7 winners failed to give the name or make of the lines they used so they could be identified. 7 used lines other than silk (wire, cuttyhunk, linen, etc.). The remaining 75 winners gave the name or make of the lines they used (silk) and the official list is as follows:

"Kingfisher"—The Old Reliable—36

Von Lengerke & Antoine	4	"Robt. Ogilvy"	1
"Saline"	4	"Classic"	1
"Invincible"	4	"David Harum"	1
Abbey & Imbrie	2	"Otselic"	1
Abbey & Imbrie—"Lake Shore"	2	"Black Warrior"	1
Mills Standard	1	"Whirlpool"	1
"Intrinsic"	4	"Crimson Beauty"	1
Abercrombie & Fitch	2	"Neverbreak"	1
Gold Seal	2	"South Bend"	1
"Kelso"	1	"Black Italian"	2
Kalamazoo "Expert"	1	Hildebrandt	1

"Kingfisher" Lines Used by Winners, 36
All Other Makes Combined, - - - 39

Every Other Winner Used a "Kingfisher"

We believe this is the most wonderful showing ever made by any similar article. And this kind of a showing really means something. The taking of record fish puts a line to a supreme test. Experienced fishermen know this. And if the "KINGFISHER" did not stand at the head of the list in popularity and favor, would all these experts choose it when so much was at stake? No, sir—not on your life! These men chose "KINGFISHER" because they wanted to be sure. They could not afford to take a chance when they went after record fish.

Do You Intend Entering the 1916 Contest?
If so, write us for "Special Information."
It will interest you.

E. J. MARTIN'S SONS, Rockville, Conn.

RAINBOW TROUT (Salmo irideus)

GRAND PRIZES—For Rainbow Trout caught between April 1st and October 15th

FIRST PRIZE: One Dirigo Fly Rod, made by F. E. Thomas, value $15.00; also one Kennedy All-Steel Tackle Bag, 14 x 7 x 9, made by "Kennedy Kits," value $4.50. **Total value $19.50.**

SECOND PRIZE: One selection from catalogue of Abbey & Imbrie to value of $10.00; also one "Pflueger Golden West" Fly Casting Reel, made by Enterprise Mfg. Co., value $6.25. **Total value $16.25.**

THIRD PRIZE: One No. 29 Fly Rod, made by Horton Mfg. Co., value $6.50; also one Icy Hot Bottle, made by Icy Hot Bottle Co., value $4.00; and one Sterling Silver Medal, made by Wm. C. Dorrety, value $3.00. **Total value $13.50.**

FOURTH PRIZE: 50 yds. Martin's Highest Quality Enamel "E" Line, made by "Kingfisher" Lines, value $2.50; also one selection from catalogue of Abbey & Imbrie to value of $5.00. **Total value $7.50.**

SPECIAL HONOR PRIZES—For Rainbow Trout Caught with Fly on Fly Tackle

FIRST PRIZE: One "Mills Standard" Hand-made German Silver Mounted Split Bamboo Fly Rod, made by Wm. Mills & Son, value $18.00; also one Sackett Camp Grate Broiler, made by Weyburn Sales Co., value $1.50. **Total value $19.50.**

SECOND PRIZE: 50 yds. Martin's De Luxe Enamel "C" Line, made by "Kingfisher" Lines, value $6.00; also one Russian Leather Cooper Fly Book, made by Cooper Fly Book Co., value $4.50; and three cans Michigan Mosquito Dope Paste, made by R. C. Kruschke, value 75 cents. **Total value $11.25.**

LADIES' SPECIAL PRIZE: One five-pound box of Huyler's Assorted Chocolates, value $4.00.

BROWN TROUT

GRAND PRIZES ONLY—For Brown Trout caught casting a FLY with Fly Fishing Tackle, between April 15th and October 1st

FIRST PRIZE: One "Peerless" Dry Fly Special Rod, one "Neversink Jr." Reel, one "Intrinsic" Tapered Fly Line, three Dry Fly Leaders in leader box, 12 Eyed Flies in fly box, Floatline Compound for waterproofing flies, Line Greaser and Landing Net with strap, made by Wm. Mills & Son, value $18.00; also one Folding Army Camp Bed, made by Indiana Bent Rung Ladder & Mfg. Co., value $4.00. **Total value $22.00.**

SECOND PRIZE: One Duxbak Hunting or Fishing Coat, made by Bird, Jones & Kenyon, value $5.00; also 50 yds. Martin's DeLuxe Enamel "D" Line, made by "Kingfisher" Lines, value $5.50; and one improved Martin Automatic Fish Reel No. 3, made by Martin Automatic Fish Reel Co., value $3.25. **Total value $13.75.**

THIRD PRIZE: One Utica Automatic Reel, made by Horrocks-Ibbotson Co., value $5.00; also 50 yds. of Martin's Highest Quality Enamel H Line, made by "Kingfisher" Lines, value $2.65; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $10.15.**

FOURTH PRIZE: One assortment of Fishing Lines from catalogue of Ashaway Line & Twine Co., to value of $5.00; also one improved Martin Automatic Fish Reel, No. 1, made by Martin Automatic Fish Reel Co., value $2.75. **Total value $7.75.**

LAKE TROUT—TOGUE (Christivomer namaycush)

GRAND PRIZES ONLY—For Lake Trout caught between April 1st and October 1st

FIRST PRIZE: One No. 1 Film Pack Premo Camera, size 5x7, made by Rochester Optical Co., value $16.00; also one two-piece Razor Set, made by Geneva Cutlery Co., value $5.00. **Total value $21.00.**

SECOND PRIZE: Three Miller's Original Reversible Spinner Wood Minnows, made by Union Spring Specialty Co., value $3.00; also one pair No. 041½ Moose Head Brand Knee-high Sporting Boots, made by John Palmer Co., value $10.00; and one assortment of Fishing Lines from catalogue of Ashaway Line & Twine Co., to value $5.00. **Total value $18.00.**

THIRD PRIZE: A $10.00 selection of Hunting or Fishing Clothes from catalogue of Gem Shirt Co.; also two Detachable Folding Seats, grade C, made by Motor Boat & Supply Co., value $3.00; and three cans Michigan Mosquito Dope Paste, made by R. C. Kruschke, value $0.75. **Total value $13.75.**

FOURTH PRIZE: One set Knowles Automatic Striker Spoon Baits, made by S. E. Knowles, value $5.00; also one pair Double-sole Goodyear Stitched Oxford Moccasins, made by M. L. Getchell Co., value $3.50. **Total value $8.50.**

SMALL MOUTH BLACK BASS (Micropterus dolemieu)

CLASS A—For Small Mouth Bass caught between opening of season and July 15th.

FIRST PRIZE: One "Mills Standard" hand-made German Silver Mounted Split Bamboo Bait or Bait Casting Rod, made by Wm. Mills & Son, value $18.00; also one dozen "Jim Dandy" Fish Baits, assorted colors, made by Wise Sportsman's Supply Co., value $6.00. **Total value $24.00.**

SECOND PRIZE: Four Wilson's Fluted Wobblers, four Wilson's Wing Wobblers, four Wilson's Cupped Wobblers, four Wilson's Six-in-One Wobblers, made by Hastings Sporting Goods Co., value $12.00; also one Free Spool Tripart Reel, made by A. F. Meisselbach & Bro., value $5.00. **Total value $17.00.**

THIRD PRIZE: Two Keelings Expert Under Water Minnows, two King-Bee Wigglers, two St. John Wigglers, made by Fred C. Keeling Co., value $4.50, and one No. 00-A Gillette Combination Set, made by Gillette Safety Razor Co., value $8.00. **Total value $12.50.**

FOURTH PRIZE: One selection from catalogue of Abbey & Imbrie to value of $5.00; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $8.75.**

CLASS B—For Small Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Free Spool Takapart DeLuxe Reel, made by A. F. Meisselbach & Bro., value $13.50; also four Wilson Fluted Wobblers, four Wilson Wing Wobblers, four Wilson Cupped Wobblers, four Wilson Six-in-One Wobblers, made by Hastings Sporting Goods Co., value $12.00. **Total value $25.50.**

SECOND PRIZE: One "Pflueger-Redifor" Anti Back Lash Casting Reel, made by Enterprise Mfg. Co., value $7.50; also one Style E Sextoblade Razor in leather case with soap and brush, made by Edward Weck & Son, value $5.00; and one Hand-knit Woolen Shooting Jacket, made by H. H. Kiffe Co., value $5.00. **Total value $17.50.**

THIRD PRIZE: One South Bend Anti Back Lash Casting Reel, six assorted No. 973 Bass-Oreno Wobbler Baits, made by South Bend Bait Co., value $10.50; also one Style B Night Hawk Permanently Luminous Compass, made by Luminous Compass Co., value $2.75; and one dozen Kinney's Weedless Hooks, made by H. A. Kinney & Co., value $3.00. **Total value $16.25.**

FOURTH PRIZE: Two Keeling's Expert Under-water Minnows, two King-Bee Wigglers, two St. John Wigglers, made by Fred C. Keeling Co., value $4.50; also one Klunk Unit Stove and bag, made by Klunk Unit Stove Co., value $3.00, and one Ingersoll Dollar Watch, made by R. H. Ingersoll & Bro., value $1.00. **Total value $8.50.**

CLASS C—For Small Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One 8x10 Wall Tent, height 6½ ft., 10-oz. Army Duck, made by George B. Carpenter & Co., value $15.00; also one selection from catalogue of James L. Donaly to the value of $10.00. **Total value $25.00.**

SECOND PRIZE: One "Pflueger-Worth" Jewelled Reel, 60 yds., double handles, made by Enterprise Mfg. Co., value $7.00; also one Kingfisher Bait Casting Rod, all agate mountings No. 310, made by Edward K. Tryon Co., value $6.00; and one Rush Tango Minnow Set, six colors, made by U. S. Specialty Co., value $4.50. **Total value $17.50.**

THIRD PRIZE: One selection of Marble goods from catalogue of Marble Arms & Mfg. Co., to value of $10.00; also 200 yds. Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $4.00. **Total value $14.00.**

(Continued on following left-hand page.)

Hildebrandt *Baits Hook & Land 'Em*

"302 Sizes and Kinds for all Kinds of Game Fish"

"They Spin So Easy"

Standard

Slim Eli

Idaho

The object of a fishing trip is to CATCH FISH—to catch fish you must have the right kind of bait—**HILDEBRANDT BAITS** are the right kind. Three shapes—"Standard," "Slim Eli" and "Idaho"—Six finishes, Nickel, Copper, Brass, Gold, Aluminum and Black. Ball-bearing, "Spin so Easy" blades, mounted on steel tinned music wire with our reversible hinged lug. Flies in endless variety, feather, bucktail, fox, squirrel, etc., all interchangeable, making possible any color or combination of colors, at a small expense, for any locality or any kind of game fishing, either bait casting, fly fishing or trolling. You will also find our line of specialties particularly interesting. Send for

FREE–1916 COMPLETE TACKLE CATALOGUE–FREE

With color sheet of spinners and flies (actual sizes) and some excellent pointers on how to "Hook and Land 'Em" with **Hildebrandt Spinners.** "302 sizes and kinds for all kinds of game fish" are shown in our free CATALOGUE in actual sizes and colors as well as a high class line of reels, lines and other specialties. A 2c stamp brings catalogue, colored insert and "Fishing Dope." Send for it.

THE JOHN J. HILDEBRANDT CO. **134 High St., Logansport, Ind.**

302 Sizes & Kinds For All Kinds Of Game Fish

FOURTH PRIZE: One dozen "Jim Dandy" Fish Baits, assorted colors, made by Wise Sportsman's Supply Co., value $6.00; also one No. 3 Kraemer Pathfinder Compass, made by U. S. Compass Co., value $2.00; and one No. 100 Acetylene Camp Lamp, made by Justrite Mfg. Co., value $1.50. **Total value $9.50.**

GRAND PRIZE—For largest Small Mouth Bass caught during season.

One Jim Heddon Casting Rod, made by James Heddon & Sons, value $15.00; also six Bait Casting Lines selected from Redifor Sample Line card, made by Redifor Rod & Reel Co.; also one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75; also two dozen Kinneys Weedless Hooks, made by H. A. Kinney & Co., value $6.00; one Abercrombie Perfect Pack, made by David T. Abercrombie Co., value $5.00; and six Bass Baits assorted, made by Immell Bait Co., value $5.00. **Total value $44.75.**

SPECIAL LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates, value $4.00.

SPECIAL JUVENILE PRIZE: One No. 25 Daisy Pump Gun, made by Daisy Mfg. Co., value $3.00; also one set of Ideal Floats, made by Ideal Float Co., Inc., value $1.00; and one No. 29 Baldwin Camp Lamp, made by John Simmons Co., value $1.50. **Total value $5.50.**

SPECIAL HONOR PRIZES—For Small Mouth Bass caught on Fly with Fly Tackle

FIRST PRIZE: One hand-made Trade Mark 6-Strip Split Bamboo Rod, made by T. H. Chubb Rod Co., value $13.00; also one No. 3 Moats Folding Gasoline Camp Stove, made by Prentiss-Webers Mfg. Co., value $9.50. **Total value $22.50.**

SECOND PRIZE: One Kennedy All-Steel Combination Rod-Kit-Tackle Case, made by "Kennedy Kits," value $6.00; also one 300-candle-power Coleman Arc Lamp, made by Coleman Lamp Co., value $10.00. **Total value $16.00.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

NORTHERN DIVISION—North of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between opening of season and July 15th

FIRST PRIZE: One Ithaca Hammerless Shotgun, Damascus Barrels, 1½ grade, made by Ithaca Gun Co., value $50.00.

SECOND PRIZE: One "Peerless" Bait or Bait Casting Split Bamboo Rod, one Quadruple Multiplying Reel, one "Mills Record" Line, Tackle Box, and assortment of Leaders, Hooks, Sinkers, Swivels and Casting and Trolling Baits, made by William Mills & Son, value $18.00; also 200 yds. of Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $4.00. **Total value $22.00.**

THIRD PRIZE: One selection from catalogue of James L. Donaly to the value of $10.00; also 100 yds. Silver Sheen Casting Line, No. 15, made by "Kingfisher" Lines, value $2.75; and one set Knowles Automatic Striker Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $17.75.**

FOURTH PRIZE: Six assorted No. 973 Bass-Oreno Wobbler Baits, six assorted No. 973 Surf-Oreno Minnows, made by South Bend Bait Co., value $6.90; also one nickel-plated Miner's Searchlight with battery, made by Interstate Electric Novelty Co., value $3.00. **Total value $9.90.**

CLASS B—For Large Mouth Bass caught between July 16th and August 15th, inc.

FIRST PRIZE: One Abercrombie Snow Tent, 7¾x7¾, made by David T. Abercrombie Co., value $30.00; also two Detachable Folding Seats and Back-rests, grade B, made by the Motor Boat and Supply Co., value $4.00. **Total value $34.00.**

SECOND PRIZE: Four Keeling's Expert Under-water Minnows, two King-Bee Wigglers, two St. John Wigglers, made by Fred C. Keeling Co., value $6.00; also one Pennell-King Casting Reel, German silver, quadruple multiplying, No. R-25, made by Edward K. Tryon Co., value $7.50; and one Rush Tango Minnow Outfit, six colors, made by U. S. Specialty Co., value $4.50. **Total value $18.00.**

THIRD PRIZE: One selection from catalogue of Fred F. Sabey Co., to value of $12.00; also 100 yds. Dreadnought Casting Line No. 15, made by "Kingfisher" Lines, value $2.75; and one "Pflueger-Lewis" set Interchangeable Spinners, made by Enterprise Mfg. Co., value $1.00. **Total value $15.75.**

FOURTH PRIZE: One dozen "Jim Dandy" Fish Baits, assorted colors, made by Wise Sportsman's Supply Co., value $6.00; also one Improved Kelso Automatic Reel, with Sliding Jewel Line Guide, made by H. J. Frost & Co., value $5.50. **Total value $11.50.**

CLASS C—For Large Mouth Bass caught between August 16th and October 31st, inc.

FIRST PRIZE: One No. 3 Jewelled Meek Reel, made by B. F. Meek Sons, value $32.00; also four Miller's Original Reversible Spinner Wood Minnows, made by Union Springs Specialty Co., value $4.00. **Total value $36.00.**

SECOND PRIZE: Four Wilson's Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, four Wilson's Six-in-One Wobblers, made by Hastings Sporting Goods Co., value $12.00; also one selection from catalogue of Abbey & Imbrie to value of $5.00; and one Hastings Casting Reel, made by Hastings Sporting Goods Co., value $3.75. **Total value $20.75.**

THIRD PRIZE: One pair Pelletier hand-made Snow Shoes with harness, made by Jud Landon, value $9.00; also 100 yds. Diamond Back Casting Line, No. 20, made by "Kingfisher" Lines, value $3.10; and six Vacuum Bass Baits, made by Vacuum Bait Co., value $4.50. **Total value $16.60.**

FOURTH PRIZE: One Jim Heddon Casting Rod, made by James Heddon Sons, value $6.00; also one Klunk Unit Stove and bag, made by Klunk Unit Stove Co., value $3.00; and one set Ideal Floats, made by Ideal Float Co., Inc., value $1.00. **Total value $10.00.**

GRAND PRIZE—For Largest Large Mouth Bass caught between opening of season and October 31st: One Model 14 Miami Power Bicycle, 2½ horse power, completed equipment, made by Miami Cycle & Mfg. Co., value $100.00

LADIES' PRIZE: One pair Pelletier hand-made Snowshoes with harness, size C, made by Jud Landon, value $6.00.

SPECIAL JUVENILE PRIZE: One bronze medal, made by Wm. C. Dorrety, value $2.00; also one Ingersoll Junior Watch, made by R. H. Ingersoll & Bro., value $2.00; and one style A Night Hawk, permanently luminous Compass, made by Luminous Compass Co., value $2.75. **Total value $6.75.**

LARGE MOUTH BLACK BASS (Micropterus Salmoides)

SOUTHERN DIVISION—South of Mason and Dixon Line.

CLASS A—For Large Mouth Bass caught between January 1st and June 30th, inc.

FIRST PRIZE: One No. 23 Sapphire Jewelled Talbot Reel, made by Talbot Reel & Mfg. Co., value $26.00; also one pair 10-inch height Hunting Boots, No. 210, made by Mohawk Moccasin Co., value $6.00. **Total value $32.00.**

SECOND PRIZE: One pair 12-inch height Witch Elk Hunting Boots, made by Witchell Sheill Co., value $10.00; also one selection Skinner's Famous Fluted Spoon Baits, made by G. M. Skinner, Inc., to value of $10.00; and one No. 6 Kraemer Pathfinder Compass, made by U. S. Compass Co., value $2.00. **Total value $22.00.**

THIRD PRIZE: Four Keeling's Expert Underwater Minnows, two King-Bee Wigglers, two St. John Wigglers, made by Fred C. Keeling Co., value $6.00; also one four-piece Razor Set, made by Geneva Cutlery Co., value $10.00; and one Sackett Camp Grate Broiler, made by Weyburn Sales Co., value $1.50. **Total value $17.50.**

FOURTH PRIZE: One dozen "Jim Dandy"" Fish Baits, assorted colors, made by Wise Sportsman's Supply Co., value $6.00; and one Tripart Reel, made by A. F. Meisselbach & Bro., value $4.50. **Total value $10.50.**

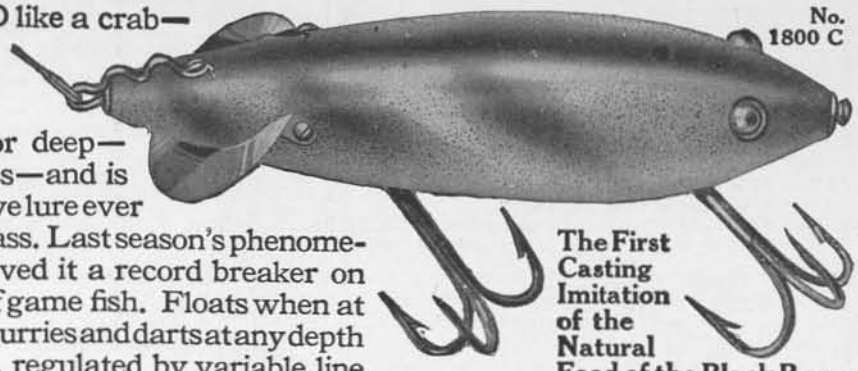
CLASS B—For Large Mouth Bass caught between July 1st and Dec. 31st, inc.

FIRST PRIZE: One Redifor Combination Fly and Bait Automobile Rod, made by Redifor Rod & Reel Co., value $25.00; also one Ecruette Sportsman's style Compac Tent, made by Compac Tent Co., value $11.50. **Total value $36.50.**

(Continued on following left-hand page.)

"If I could have only one Dowagiac in my tackle box, it would be a Crab Wiggler," -Jim Heddon.

COLORED like a crab—dives and zig-zags backward—runs shallow or deep—almost weedless—and is the most effective lure ever tossed to Mr. Bass. Last season's phenomenal success proved it a record breaker on every variety of game fish. Floats when at rest but dives, scurries and darts at any depth when reeled in, regulated by variable line fastening. The only wiggler with full zig-zag motion at any depth.



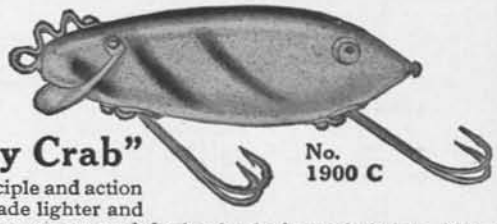
No. 1800 C

The First Casting Imitation of the Natural Food of the Black Bass.

What the Heddon Rods and Minnows Did in the "Field and Stream" Prize Contest

24 prizes taken on Heddon tackle. Think what that means when you consider that no fly-tackle is made by us. It's a big win for Heddon followers. So get in right, and insist on seeing the Heddon name on the reel seat of the rod you buy and on the metal parts of the baits.

The two types of genuine Heddon Crab Wiggler are undoubtedly the best single lures ever devised—in attractiveness, killing power, practical weedlessness and ease of casting.



No. 1900 C

The New "Baby Crab"

EXACTLY the same principle and action as the large one but made lighter and provided with the wonderful new upturned double hooks instead of triple. They are actually more certain of hooking than trebles. Scientifically placed so they cannot scratch enamel, yet are protected from weed-catching by the body. Don't let doubts keep your from enjoying the cleanest casting, surest-hooking bait ever brought out. Take the Heddon word for it—this is the one. We stand back of that claim to the last notch.

Regular	"Baby"	Either Size
No. 1809 C	No. 1909 C, Imitation Crab	At your
No. 1800	No. 1900 Fancy Green Back	dealer's
No. 1800 S	No. 1900 S, White Body, Red and Green Spotted Effect	or
No. 1801	No. 1901 Rainbow	
No. 1802	No. 1902 White Body with Red Head	
No. 1805	No. 1905 Yellow body, red and green spots, green back	85c
No. 1809 A	No. 1909 A, Yellow Perch	
No. 1809 B	No. 1900 B, Imitation Frog	Postpaid

JAMES HEDDON'S SONS, BOX 4 DOWAGIAC, MICH.

If not made by Heddon, it's not a Genuine

Dowagiac

SEND for beautiful, free catalog of Heddon's Genuine Dowagiac Rods and Minnows, containing splendid fish pictures, new fishing chart, and all the facts you want to know about the "Sport of a Thousand Thrills."

SECOND PRIZE: One Yawman-Erbe No. A Reel, made by Horrocks-Ibbotson Co., value $7.00; also one selection from catalog of Moonlight Bait Co., to value $10.00; and one dozen Kinney's Weedless Hooks, made by H. A. Kinney & Co., value $3.00. **Total value $20.00.**

THIRD PRIZE: One dozen men's heavy-weight Silk Socks, made by Phoenix Knitting Works, value $9.00; also one dozen "Jim Dandy" Fish Baits, assorted colors, made by Wise Sportsman's Supply Co., value $6.00; and six Perfect Weed Repellers for trolling hooks, made by R. C. Kruschke, value $1.50; and one "Ves Tong" Automatic Cleaning Rod for shotgun, made by Ves Tong Mfg. Co., value 50c. **Total value $17.00.**

FOURTH PRIZE: One "Pflueger-Worth" Jewelled Reel, 80 yards, double handles, made by Enterprise Mfg. Co., value $7.50; also 100 yards "Kingfisher" Black Wonder Line, No. 5, made by "Kingfisher" Lines, value $2.50; and one Ruck Sack, made by Compac Tent Co., value $2.00. **Total value $12.00.**

Maryland, Delaware, Virginia and West Virginia Division

For Large Mouth Black Bass Caught during the season within the State laws

FIRST PRIZE: No. 33 Bait Casting Rod, made by Horton Mfg. Co., value $12.00; also one Beetzsel Reel De Luxe, made by Redifor Rod and Reel Co., value $25.00; and one set Knowles Automatic Striker Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $42.00.**

SECOND PRIZE: Four Wilson Fluted Wobblers, four Wilson's Winged Wobblers, four Wilson's Cupped Wobblers, four Wilson's Six-in-One Wobblers, made by Hastings Sporting Goods Co., value $12.00; also one Free Spool Takapart Reel, made by A. F. Meisselbach & Bro., value $6.00; and one set Knowles Automatic Striker Spoon Baits, made by S. E. Knowles, value $5.00. **Total value $23.00.**

THIRD PRIZE: Assortment of 18 South Bend Weedless Spinner Hooks, Buck Tail Spoon Baits, made by South Bend Bait Co., value $7.80; also one Takapart Reel, made by A. F. Meisselbach & Bro., value $5.00; and 200 yards Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $4.00. **Total value $16.80.**

FOURTH PRIZE: One Sutton "Shurluck" Metal Bait Outfit of spoons, swivels and gangs, made by the Sutton Co., value $8.55; also one Ves Tong Auto Shell Bag, made by the Ves Tong Mfg. Co., value $2.00. **Total value $10.55.**

GRAND PRIZE—For largest Large Mouth Bass caught during season: One Waterman Porto Motor, High Tension Magneto, Dual Ignition and Reversing Propeller, made by Waterman Motor Co., Value $86.00

SPECIAL LADIES' PRIZE: One five-pound box Huyler's Assorted Chocolates. **Value $4.00.**

SPECIAL HONOR PRIZES:

FIRST PRIZE: One German Silver Automatic Reel, made by A. F. Meisselbach & Bro., value $5.00; also one Lewis Medical Case of leather, containing 20 remedies, made by Lewis Medical Case Co., value value $5.00; and 200 yds. Hastings Silk Casting Line, made by Hastings Sporting Goods Co., $4.00; and five Miller's Famous Reversible Spinners, made by Union Springs Specialty Co., value $3.00. **Total value $17.00.**

SECOND PRIZE: One No. 00-A Gillette Combination Set, made by Gillette Safety Razor Co., value $8.00; also one No. 2 Kraemer Pathfinder Compass, made by U. S. Specialty Co., value $2.25; and 100 yds. "Kingfisher" Black Wonder Line, made by "Kingfisher" Lines, value $2.15; and one set Ideal Floats, made by Ideal Float Co., Inc., value $1.00. **Total value $13.40.**

GREAT NORTHERN PIKE (Esox Lucius) *(See Condition No. 8)*

GRAND PRIZES ONLY—For Pike caught between May 1st and October 31st, inc.

FIRST PRIZE: One Two-man Aluminum Cooking Outfit, made by David T. Abercrombie Co., value $12.50; also one selection from catalogue of Hartung Bros. & Co., to value of $10.00; and one Rush Tango Minnow Outfit, made by U. S. Specialty Co., value $4.50. **Total value $27.00.**

SECOND PRIZE: One dozen men's heavyweight Silk Socks, made by Phoenix Knitting Works, value $9.00; also one No. 11 Bait Rod, agate guide and top, cork reversible handle, made by Horton Mfg. Co., value $8.50; and one Hawkeye Refrigerator Basket, made by the Burlington Basket Co., value $5.00. **Total value $22.50.**

THIRD PRIZE: One selection of Fishing Tackle from catalogue of Schoverling, Daly & Gales, to value of $10.00; also one German Silver Redifor Free-spool Reel, jewelled Kentucky type, made by Redifor Rod and Reel Co., value $6.00; and one No. 100 Acetylene Camp Lamp, made by Justrite Mfg. Co., value $1.50. **Total value $17.50.**

FOURTH PRIZE: Three Keeling's King-Bee Wiggler Minnows, three St. John Wiggler Minnows, made by Fred C. Keeling Co., value $4.50; also one Rush Tango Minnow Outfit, six colors, made by U. S. Specialty Co., value $4.50; and one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.50. **Total value $11.50.**

MUSCALLONGE (Esox Nobilior)

GRAND PRIZES ONLY—For Muscallonge caught between May 1st and Oct. 31st, inc.

FIRST PRIZE: One Evinrude 1916 Row Boat Motor, model A, all improvements, made by Evinrude Motor Co., value $80.00

SECOND PRIZE: One Neptune Muskie Reel, made by A. F. Meisselbach & Bro., value $10.00; also one No. 2 Moats Folding Gasoline Camp Stove, made by Prentiss-Webers Mfg. Co., value $8.50; and 200 yds. Hastings Silk Casting Line, made by Hastings Sporting Goods Co., value $4.00. **Total value $22.50.**

THIRD PRIZE: One assortment of Fishing Lines from catalogue of Ashaway Line & Twine Co. to value of $10.00; also four Keeling's Expert Underwater Minnows, two King-Bee Wigglers, two St. John Wigglers, made by Fred C. Keeling Co., value $6.00. **Total value $16.00.**

FOURTH PRIZE: One Triton Muskie Reel, made by A. F. Meisselbach & Bro., value $6.50; also one dozen "Jim Dandy" Fish Baits, assorted colors, made by Wise Sportsman's Supply Co., value $6.00. **Total value $12.50.**

LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates. **Value $4.00.**

WALL EYED PIKE—PIKE PERCH *(See Condition No. 8)*

GRAND PRIZES ONLY—For Wall-eyed Pike caught from May 1st to October 31st

FIRST PRIZE: One 9x4x11 "Preferred" Grade Wall Tent, 7 ft. high, 10 oz. double filled duck, made by St. Louis Tent and Awning Co., value $11.75; also one selection Hildebrandt Spinners from catalogue of John J. Hildebrandt & Co., to value of $10.00; and one Redifor-Pflueger Anti-Backlash 1916 model Reel, made by Redifor Rod & Reel Co., value $7.50. **Total value $29.25.**

SECOND PRIZE: One model 1912 Savage .22 Automatic Rifle, made by Savage Arms Co., value $12.00; also one Redifor-Pflueger Anti-Backlash 1916 model Reel, free spool, with case, made by Redifor Rod & Reel Co., value $8.75. **Total value $20.75.**

THIRD PRIZE: Four Keeling's Expert Underwater Minnows, one King-Bee Wiggler, one St. John Wiggler, made by Fred C. Keeling Co., value $4.50; also one Sutton "Shurluck" Metal Bait Outfit of spoons, swivels and gangs, made by the Sutton Co., value $8.55; and one .22 calibre Maxim Silencer, made by Maxim Silencer Co., value $5.00. **Total value $18.05.**

FOURTH PRIZE: Heddon Dowagiac Minnows to the value of $9.00, made by James Heddon's Sons; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $11.50.**

SALT WATER GAME FISH

BLUEFISH (Pometomus Saltatrix)

GRAND PRIZES ONLY—For Bluefish caught between May 1st and October 31st

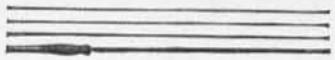
FIRST PRIZE: One selection from catalogue of Abbey & Imbrie to value of $10.00; also one hand-knit Woolen Shooting Jacket, made by H. H. Kiffe Co., value $5.00; also one Komfort Lantern, made by

(Continued on following left-hand page.)

SUCCESS!

So much depends on Good Tackle

A good fisherman is a hard man to satisfy when he buys his tackle. The requirements for successful fishing are so exacting that a rod or reel must be *just* right or it's not right at all.



The Vernley Rod
Staunch—Sure and
The best rod value ever produced

This rod is the result of our *manufacturing* success—it will be the cause of your *fishing* success. Experienced fishermen say no better value was ever produced.
Hand-made from selected Calcutta Bamboo stock. German silver mountings. Solid sectional cork grip. Hand-made reel seat. Genuine agate guide on butt. Agate Fly Tip. In 5 sizes—from 8½ ft.—5 oz., to 10½ ft.—7¼ oz.

The Y. & E. Automatic REEL

This reel puts new life and new success into fishing. A touch of the little finger applies tension to the line when your fish turns so fast that the line slackens—he can't get away from the Y. & E. With a single touch you can rewind your line for another cast. Y. & E. reels are proven successes. Insist on a Y. & E. "The little finger does it."

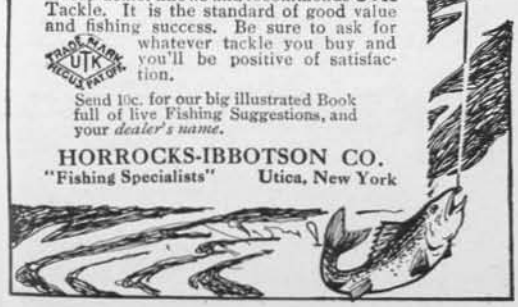
TRADE MARK UTK REG. U.S. PAT. OFF.

Always look for this Trademark

Every dealer knows and recommends **UTK** Tackle. It is the standard of good value and fishing success. Be sure to ask for whatever tackle you buy and you'll be positive of satisfaction.

Send 10c. for our big illustrated Book full of live Fishing Suggestions, and your *dealer's name.*

HORROCKS-IBBOTSON CO.
"Fishing Specialists" **Utica, New York**



Fishermen— Here's a New One

Wilson's SIX-IN-ONE WOBBLER

Another wonder worker—based on the original Wilson Fluted Wobbler, the largest selling and most successful artificial bait ever produced. Has an adjustable diving guide which gives six different depths, ranging up to six feet. In one position, the bait skims on the surface of the water; the others, underneath. Each change in depth gives a different wobbling movement. Changes in depth can be made instantly, as easily as closing a knife blade. Where frequent changes are necessary, Wilson's Six-in-One is the bait to use.

The adjustable diving guide is made of metal and is simple and positive in action Not liable to breakage or derangement The body of the bait is made of selected **red** cedar, finished with Hastings Improved Enamel, the most durable enamel obtainable. All metal parts are brass, heavily nickel plated.

OTHER STYLES. Winged Wobbler, deep-water lure; Cupped Wobbler, a surface bait; Night Wobbler; Small Fluted Wobbler, a light-weight lure. 75 CENTS EACH. Weedless Wobbler, $1.00.

Complete your success by using Hastings *Getsem Tackle, Hastings Special-Value Reel, Senter-Brade Silk Casting Lines.* They have both core and outer casing braided—means 20% more strength than the ordinary silk casting line of the same size. Greater durability. Never pulls flat. Sold by dealers that sell Wilson's Wobblers.

FREE, *Bait Casting* Booklet and Tackle Folder. Address *Dept. B.*

HASTINGS SPORTING GOODS WORKS

HASTINGS, MICHIGAN

R. C. Kruschke, value $4.50; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $22.00.**

SECOND PRIZE: One dozen men's heavyweight Silk Socks, made by Phoenix Knitting Mills, value $9.00; also Ves Tong Hunting and Fishing Coat, made by Ves Tong Mfg. Co., value $7.00; and one Sackett Camp Grate Broiler, made by Weyburn Sales Co., value $1.50. **Total value $17.50.**

THIRD PRIZE: One High-grade Coat Sweater, made by George E. Wye Co., value $7.00; also one Lewis Medical Case of leather, containing 20 remedies, made by Lewis Medical Case Co., value $5.00; and one Key Socket Trouble Light, made by Motor Boat & Supply Co., value $1.00. **Total value $13.00.**

FOURTH PRIZE: One selection from catalogue of Abbey & Imbrie to value of $5.00; also one Ingersoll-Reliance Extra Thin Model Watch, made by R. H. Ingersoll & Bro., value $3.00; and one No. 29 Camp Lamp, made by John Simmons Co., value $1.50. **Total value $9.50.**

WEAK FISH

GRAND PRIZES ONLY—For Weakfish caught between May 1st and October 31st

FIRST PRIZE: One No. 35-E Impervo Long Coat, made by E. A. Armstrong Impervo Co., value $10.25; also one selection from catalogue from Abbey & Imbrie to value of $5.00; and one Ingersoll-Reliance Extra Thin Model Watch, made by R. H. Ingersoll & Bro., value $3.00. **Total value $18.25.**

SECOND PRIZE: One Lewis Medical Case of leather, containing 20 remedies, made by Lewis Medical Case Co., value $5.00; also one assortment of Fishing Lines from catalogue of Ashaway Line & Twine co., to value of $10.00; and two cans of Michigan Mosquito Dope, made by R. C. Kruschke, value $1.00. **Total value $16.00.**

THIRD PRIZE: 200 yds. of "Kingfisher" Pure Flax Cuttyhunk No. 9, made by "Kingfisher" Lines, value $2.10; also one four-piece Razor Set, made by Geneva Cutlery Co., value $10.00; and one set Ideal Floats, made by Ideal Float Co., Inc., value $1.00. **Total value $13.10.**

FOURTH PRIZE: One Ecruette Poncho, made by Compac Tent Co., value $4.50; also one No. 10 Acetylene Lantern, made by Justrite Mfg. Co., value $3.50; and one Sackett Camp Grate Broiler, made by Weyburn Sales Co., value $1.50. **Total value $9.50.**

STRIPED BASS (Roccus lineatus)

GRAND PRIZES ONLY—For Striped Bass caught between May 1st and October 31st

FIRST PRIZE: One pair Gokey Hunting Boots, made by Wm. N. Gokey Shoe Co., value $10.00; also one selection from catalogue of N. Y. Sporting Goods Co., to value of $10.00; and one assortment of Fishing Lines from catalogue of Ashaway Line & Twine Co., to value of $5.00; and one Ocean King salt-water Reel, German silver, "Takapart" 300-yard size, made by H. J. Frost & Co., value $13.00. **Total value $38.00.**

SECOND PRIZE: One Remington model 12A .22 calibre Repeating Rifle, made by Remington-U. M. C. Co., value $11.55; also one selection from catalogue of Abbey & Imbrie to value of $5.00; and one No. 38 Baldwin Camp Lamp, made by John Simmons Co., value $2.50; and one Key Socket Trouble Light, made by Motor Boat & Supply Co., value $1.00. **Total value $20.05.**

THIRD PRIZE: One No. 58 heavy all-worsted Sweater, made by American Knitting Co., value $7.00; also one vulcanized fibre Searchlight with battery, made by Interstate Electric Novelty Co., value $3.00; and one Klunk Unit Stove and bag, made by Klunk Unit Stove Co., value $3.00; and one Six-Cell Waterproof Battery Box, made by Motor Boat & Supply Co., value $1.00. **Total value $14.00.**

FOURTH PRIZE: One pair Herman Munson Shoes, made by Joseph M. Herman Shoe Co., value $5.00; also one selection from catalogue of Abbey & Imbrie to value of $5.00; and two cans Michigan Mosquito Dope, made by R. C. Kruschke, value $1.00. **Total value $11.00.**

LADIES' PRIZE: One five-pound box of Huyler's Assorted Chocolates, value $4.00; also one Ingersoll Wrist Watch, made by R. H. Ingersoll & Bro., value $2.50. **Total value $6.50.**

CHANNEL BASS (Sciaena ocellata)

GRAND PRIZES ONLY—For Channel Bass caught between April 1st and Oct. 31st

FIRST PRIZE: One Ithaca Hammerless Shotgun, Damascus barrel, 1½ grade, made by Ithaca Gun Co. **Value $50.00.**

SECOND PRIZE: One pair Russell Neverleak Moccasin Boots, double soled, made by W. C. Russell Moccasin Co., value $9.00; also one selection from catalogue of Abbey & Imbrie to value of $10.00; and one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50. **Total value $21.50.**

THIRD PRIZE: One Duxbak Hunting or Fishing Coat, made by Bird, Jones & Kenyon, value $5.00; also one assortment of Fishing Lines from catalogue of Ashaway Line & Twine Co. to value of $5.00; also one No. 44 Acetylene Head Light, made by Justrite Mfg. Co., value $3.00; and one Klunk Unit Stove and bag, made by Klunk Unit Stove Co., value $3.00. **Total value $16.00.**

FOURTH PRIZE: One Interchangeable Lens Brilliant Search Light, made by R. C. Kruschke, value $7.00; also one Stopple Kook Kit, made by Stopple Kook Kit Co., value $2.50; also one Ingersoll-Reliance Extra Thin Model Watch, made by R. H. Ingersoll & Bro., value $3.00; and two cans of Michigan Mosquito Dope, made by R. C. Kruschke, value $1.00. **Total value $13.50.**

LADIES' PRIZE: One selection from catalogue of Abbey & Imbrie to value of $5.00; also one Ingersoll Wrist Watch, made by R. H. Ingersoll & Co., value $2.50. **Total value $7.50.**

TARPON (Megalops Atlanticus)

GRAND PRIZES ONLY—For longest Tarpon caught Jan. 1st, 1916, to Jan. 1st, 1917

FIRST PRIZE: Original oil painting of FIELD AND STREAM cover, value $50.00; also one solid gold front Medal made by W. C. Dorrety, value $5.00. **Total value $55.00.**

SECOND PRIZE: One No. 26 Tarpon Rod, cork handle, made by Horton Mfg. Co., value $14.00; also one Alamo Motion Picture Camera, made by Simplex Photo Products Co., value $25.00. **Total value $39.50.**

THIRD PRIZE: One Solid Gold Medal, made by Wm. C. Dorrety, value $12.00; also one No. 3 Multiplex Enlarging Lamp, made by Simplex Photo Products Co., value $8.00. **Total value $20.00.**

FOURTH PRIZE: One selection from catalogue of Abbey & Imbrie to value of $10.00; also one No. 95 Acetylene Hand Lamp, made by Justrite Mfg. Co., value $2.00. **Total value $12.00.**

ATLANTIC COAST TUNA

GRAND PRIZES ONLY, for largest Tuna caught from Jan. 1st to Jan. 1st.

FIRST PRIZE: One assortment of fishing lines from catalogue of Ashaway Line & Twine Co., to vale of $10.00; also one selection from catalogue of Abbey & Imbrie to value of $5.00; also one Lewis Medical Case of leather, containing 20 remedies, made by Lewis Medical Case Co., value $5.00; also one No. 58 heavy All-worsted Sweater, with collar and pockets, made by American Knitting Co., value $8.00; and one three-years' subscription to FIELD & STREAM, value $4.50. **Total value $32.50.**

SECOND PRIZE: One selection from catalogue of Abbey & Imbrie to value of $10.00; also one Style E Sextoblade Razor, in leather case with soap and brush, made by Edward Weck & Son, value $5.00; also one Lewis Medical Case containing 20 remedies made by Lewis Medical Case Co., value $5.00; and one Style C Night Hawk Permanently Luminous Compass, made by Luminous Compass Co., value $2.75. **Total value $22.75.**

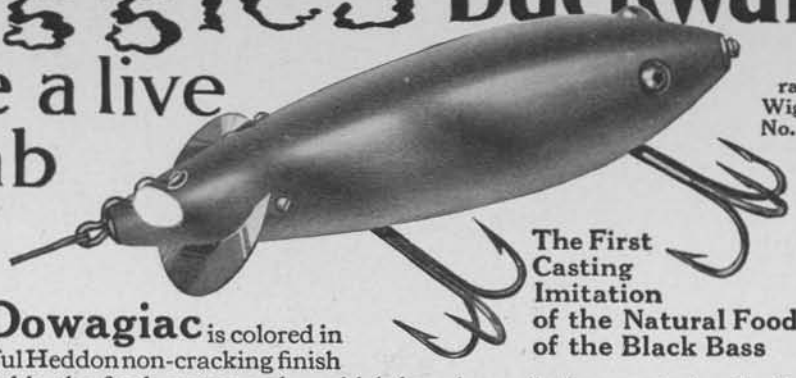
SPECIAL PRIZES FOR ALL WINNERS

A. F. Meisselbach & Bro, will present to each and every prize winner in the Contest one of their Utility Scales, one "Good Luck" Fish Scraper, and One Drop Oil Can. **Total value 50 cents.**

E. F. Sparks will present to every winner in the Large Mouth Bass classes a Sparks Practical Fish Stringer, **value 50 cents.**

Wiggles Backward

Like a live Crab



rab Wiggler No. 1809

This New Genuine Heddon Dowagiac is colored in the wonderful Heddon non-cracking finish

The First Casting Imitation of the Natural Food of the Black Bass

to exactly resemble the fresh water crab—which is universally known to be the favorite natural food of Mr. Gamefish—and ingeniously constructed to exactly imitate the crab's hurried, lively zig-zag when scurrying backward to cover. The triumph of all wiggling, wobbling baits, swimming and diving deep or high at will, floating when at rest, with non-fouling hooks, almost weedless. Variable line fastening governs depth and action. No movement like it ever achieved in a casting bait before—no finish so natural and alluring, nor hooking so certain. Quick—add it to your kit! At your dealer's or mailed prepaid for 85c. Also supplied in other Heddon colorations at same price **85c**

It's a Year of Wigglers

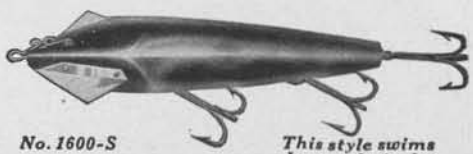
Wiggling, diving baits have the call this season—more will be used than all other styles put together. They have proved their effectiveness. Even hard-shell "live baiters" have become converted to them. The pioneer Dowagiac "Wigglers" will naturally be in the big majority. It was Jim Heddon, you know, who put out the first diving and swimming minnow, half a dozen years ago.

Two More Popular Styles of Dowagiac "Wigglers"

No. 1709-B — *This style swims near surface and wiggles*

A deadly lure for any depth of water, but specially suited for in-shore work, in the shallows near weed beds and reeds. Floats when at rest, but darts and dives when reeled in, yet stays near the surface. This style in six colorations:—

No. 1700—Fancy Green Back, White Belly
No. 1700-S—White body, Red and Green Spots
No. 1702—White Body, Red Head
No. 1705—Yellow Body, Red and Green Spots
No. 1709-A—Imitation Perch
No. 1709-B—Imitation Frog.



No. 1600-S — *This style swims deep and wiggles*

Another remarkable killer for bass, pickerel, pike and muskie. Generally used in deeper water than our No. 1700 style, though it's used effectively in shallows too. Its action is very lifelike, darting to and fro like a frightened minnow. Floats when at rest. Six colorations:

No. 1600—Fancy Green Back, White Belly
No. 1600-S—White Body, Red and Green Spots
No. 1602—White Body, Red Head
No. 1605—Yellow Body, Red and Green Spots
No. 1609-A—Imitation Perch
No. 1609-B—Imitation Frog

Heddon's Dowagiac "Wigglers" have the exclusive features that put them far ahead of other diving baits. Finished in the famous Heddon porcelain enamel, guaranteed not to chip, flake, crack or peel. Patented variable line fastening to regulate depth of diving. All hooks in patented "Dowagiac" Sockets—can't foul each other, twist the line or mar the enamel. Durability and workmanship unequalled. Price, either style and any color, **75c**

Art Catalog Free. The most elaborate fishing book ever printed. Shows all Heddon tackle in actual colors—minnows, lines and famous Jim Heddon's Casting Rods. Full of practical "hunches" on expert casting and more successful fishing. It's a book you'll prize—and a postal will bring it to you free.

James Heddon's Sons, Box 4, Dowagiac, Mich. **(Pronounce it "Doe-wah'-ji-ac")**

We guarantee advertising on this page provided you mention FIELD AND STREAM

The Most Popular Event

at a house party or week-end gathering is usually the

TRAPSHOOTING

THE DU PONT HAND TRAP

contest. Men and women of all ages join in The Sport Alluring with the same enthusiasm. Spacious grounds and permanent installations are not necessary to enjoy this fascinating pastime. At your own home, in camp or on your motor boat you can shoot to your heart's content by using the Du Pont

HAND TRAP

to throw your targets. It weighs only six pounds and will fit into suitcase with targets and shells. Price, $4.00 delivered. For our free booklets on trapshooting, write Dept. 55-S,

DU PONT POWDER CO.
Established 1802
Wilmington Delaware

HAND TRAP SHOOTING ON THE LAWN

MAXIM SILENCER

Fits Your Rifle

You fellows who stalk deer and enjoy shooting need one now. No more bruised shoulders. Double your fun and cut out scaring game. Increase accuracy of your aim. For target work.

Send to Us for Free Book

Read of the good times others enjoy after using one. It's full of good stories. Some about men who thought their gun had missed fire yet *the game fell.* Adds 200 per cent. fun to trip.

Ask your dealer for a Silencer. If he has none write us his name and we'll see that you're quickly supplied.

MAXIM SILENCER COMPANY
68 Huyshope Ave., Hartford, Conn.

HERMAN'S US ARMY SHOES

Army Surgeons devoted years to perfecting this shoe. It allows natural freedom to the toes while setting snug at the heel and will not chafe, bind, pinch or blister the tenderest feet under severe tests of climate and service. Every U.S. soldier, **most** militiamen and thousands of civilians wear this **foot-easing, efficiency-building** U.S. Army Shoe. Every sportsman **ought** to wear it. Ask your dealer or send to us for catalog and testimonials. The price is **$4.50 a pair;** sent prepaid and **guaranteed satisfactory.**

JOS. M. HERMAN SHOE CO.
160 Lincoln St., Dept. 22, Boston, Mass.

NEWTON HIGH-POWER RIFLES

Use FACTORY AMMUNITION. Now regularly on the market. HIGHEST VELOCITY RIFLES IN THE WORLD.

.256 NEWTON—123 gr. bul.; vel. 3100 f. s.; en. 2632 ft. lbs. .30 Newton—170 gr. bul.; vel. 3000 f. s.; en. 3440 ft. lbs.
Highest grade imported Mausers now ready for delivery, $40.00 to $55.00 each.

NEW AMERICAN MADE BOLT ACTION RIFLE ready for delivery next July
Uses Newton high power cartridges in .256 caliber; .280 caliber; .30 caliber; .33 caliber and .35 caliber; also .30 caliber Springfield. Price $40.00. Send stamp for descriptive circular.

NEWTON ARMS CO., Inc., 506 Mutual Life Bldg., BUFFALO, N. Y.

Guaranteed For Life!

Simplicity—only three strong working parts—all coil springs, and patented rotary bolt are three reasons why we can give you a guarantee on the Fox Gun *for life.*

All explained in the big Fox catalog. Get it by writing right now.

The A. H. FOX GUN COMPANY
4658 N. 18th Street PHILADELPHIA, PA.

All advertisements are indexed—See page 2A

The Ross Rifle

10 Shots in a post-card at 500 Yards

The Ross .280 Rifle using the Ross Sporting Ammunition will group 10 shots in a rectangle the size of a post-card at 500 yards. Try to equal this at 200 yards with any other sporting rifle and ammunition. But its wonderful accuracy is only one of the reasons why you should carry a Ross .280 on your hunting trip. —Another is the anchoring properties of the Ross .280 Sporting Ammunition with copper tube expanding bullet. This projectile delivers a smashing blow as it expands in the body of your quarry and fells the largest game instead of allowing it to escape and linger wounded in the bush as happens so often with other sporting bullets. The Ross .280 Rifle sells in New York at $55.00. .280 Sporting Ammunition, $7.50 per 100.

Full illustrated catalogue free on request.

ROSS RIFLE COMPANY, Dept. S-11, QUEBEC, CANADA

POST & FLOTO, 14 Reade St., NEW YORK, Agents for United States

The PARKER Gun

The manufacturers of the "Old Reliable" PARKER Gun wish to announce that the present is a particularly opportune time at which to place orders for guns built to the individual requirements of trap shooters,—a feature of the gun making business to which they have paid particular attention.

PARKER GUNS remain unexcelled in their power of holding together the shot charges under high velocity at extreme ranges.

Send for catalogue and booklet on 20-bore guns.

N. Y. Salesrooms
32 Warren Street

PARKER BROS., Meriden, Conn.

"Never-Leak" Russell's Famous BOOT FOR SPORTSMEN

Designed for general outdoor wear. Sturdy and staunch, for heavy service on the trail, yet light and yielding to the feet. The tough, double sole insures extreme durability, no matter how rough the ground. Soles hob-nailed or smooth. Toe pieces and vamp joined by our special never-rip "watershed" seam (patent applied for) which holds tight and keeps the water out. Made of (black) chrome, flexible cowhide. Built for business and guaranteed to fill the bill, or your money back. $6.00 to $15.00 per pair.

Worn by experienced campers, fishermen, hunters, canoeists, "hikers," trappers, skiers, surveyors, etc.

In any height. Made to your measure.

Send for book showing our complete line. ***Free on request.***

W. C. RUSSELL MOCCASIN CO.
Factory A **BERLIN, WISCONSIN**

SALE OF U. S. ARMY & NAVY GOODS
AT AUCTION BARGAIN PRICES

The U. S. Government procures best qualities only and the most practical articles partially listed here are especially adaptable for sportsmen's purposes, camp and outdoor life:

Army Blankets, $3.00, $5.00.
Army Sweaters, $4.00.
Navy Sweaters, $2.00.
Army Leggings, 70 cents, $3.00.
Army (folding) Cots, $2.40.
Army Canteens, 35 cents.
Army Riding Breeches, $2.00, $2.75.
Army Khaki Trousers, $1.00, $1.75.
Army & Navy Shirts, 70 cents, $2.00.
Army & Navy Socks, 10 cents pair.
Army Folding Chairs, 35 cents, $1.50.
Army & Navy Shoes, $3.50 pair.

Army and Navy Tents, all sizes, and 5,000 other useful articles. Catalogue No. 4 sent on request.

ARMY & NAVY STORE CO., Inc.
245 West 42nd Street **Bet. B'way and 8th Ave.** **New York**

THE MILLER PACKSACK SLEEPING BAG

Made by

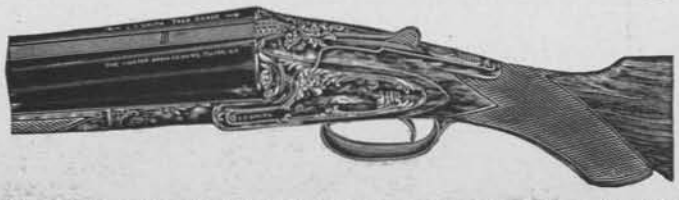
The Forester Equipment Co.
ASBURY PARK - NEW JERSEY

The pictures tell the whole story—a Packsack that unhooks to make a Sleeping Bag. Weight with mattress bag 7½ lbs., made of the best waterproof Army drab haversacking, lined with wool batting and two detachable thicknesses of tight-wove olive Army wool cloth warmer than any blankets. Bronze snap hooks fasten up sides of packsack and fasten it to browse bag.

Send for Illustrated Catalogue

A REAL GUN

L. C. Smith New Designs With Hunter One Trigger for TRAP and FIELD



With the characteristics of the ***Thoroughbred*** written all over it. This means *it will win.* Kindly let us mail you our new catalogue showing perfect illustrations and descriptions of all grades.

Prices $25 to $1,000

Manufactured by THE HUNTER ARMS CO. Inc., No. 30 Hubbard St., FULTON, N. Y.

All advertisements are indexed—See page 2A

New Idea in Tents

Lightest, Most Practical, Most Compact Shelter Tent Ever Made

George Shelter Tent

PATENTED

Endorsed by Experienced Men Everywhere

For every man who packs a tent. Light to carry, easy to put up, perfect shelter. No pole needed where there is a tree. No guy ropes to loosen in the rain. Up in one minute by one-man power. No. 2 Balloon silk, water and mildew proof. 7x7—7 feet high without sod cloth; weighs 5 pounds. $11.00. No. 3 Balloon silk, water and mildew proof. 7x7—7 feet high, with 9-inch sod cloth; weighs 6 pounds. $12.00.

If your dealer can't supply you, write for free booklet

Kennedy Bros. Arms Co. **St. Paul, Minn.**

The Brilliant Searchlight

This is the light to show your way through the woods when hunting, fishing, driving or any kind of night work. It has aluminum locomotive reflector. Flame is protected with a 3½ in. convex lens, may be tilted up or down, burns 8 hours with one filling, costs 3 cents, will shine the eyes of a cat for 300 yards.

Style 1—Single lens, $5.00. Dbl. L., $6.00. Int. L., $6.50
Style 2—Adjustable Candle Flame Burner, add 50 cents
Style 3—Adjustable Flat Flame Burner, add $1.00

Send for circular

R. C. Kruschke, F-1205 Superior St., Duluth, Minn.

NO FUR, NO FEATHERS NO BLOOD

Can ruin this Coat. Blood fires both barrels at once. One spots, the other rots. Makes old-time coat "dead bird" pretty quick. Our Patent BLOOD PROOF Game Pocket prolongs life of our Coat by years, not by a season. No "detachable bag" nuisance. Real Game Pocket built in Coat in proper place. Blood Proof. Reversible. Cleanable. SANITARY. Catalog shows complete line of Hunting Clothing and sample of goods. If you want one, write today.

THE GEM SHIRT CO.
255 West Fifth St., Dayton, Ohio

37 Practical Tools

Warranted Best Tool Steel

All For $1.00

Buy This Sportsman's Pocket Kit On MY Guarantee

FOR 22 years I have been a lover of rod and gun. I know what it means to go LIGHT but RIGHT. I know what it means to have your "pet rod" snap just when the "big fellows" are rising, and NO tools to fix it.

I've driven a hook into my finger, but WISHING did not bring me tweezers, or a dozen other tools I need in the woods.

A year ago I made a KIT for myself, just to hold the tools I wanted. My friends insisted on having one like it. That started me building this POCKET KIT for Sportsmen. My outfit has pleased thousands of men who love the big outdoors. I believe it will please you, too.

Send $1.00, mentioning May Field & Stream and get YOURS prepaid. Your dollar back if you want it, of course.

Yours truly,
H. A. GRANT, **Manager.**

CHASE SPECIALTY COMPANY
113-F, Pearl St. - - New York, N. Y.

Note: The most compact sportsman's KIT made. Weighs ONLY four ounces. Nickle plated. Besides the tools shown, the KIT contains: Tent Needle, Tweezers, Dividers, Stitching Awl, Sail Needle, Protractor, Gauge, Rule, Scale, T-Square, Bevel Edge, Target Marker, Outside and Inside Caliper, Universal Bevel, Tri Square, and 5 others.

AGENTS—Write for proposition. **DEALERS—Ask for prices.**

Davis Guns

"THE GUN THAT BLOCKS THE SEARS"

Made like a Gun by Gunmakers.

We can still supply Damascus and Twist Bands at regular prices. Don't miss this opportunity of getting a gun fitted with these handsome barrels.

N. R. DAVIS & SONS,

Lock Box 700. ASSONET, MASS., U. S. A. Established 1853.

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

The Right Boots Are Just as Important as the Right Flies

Be equipped to enjoy your trout-fishing trip. A good pair of wading boots are just as important as a well-selected lot of flies.

WOONSOCKET
ELEPHANT HEAD
RUBBER BOOTS

You will find Elephant Head Rubber Boots to be a perfect protection—yet not a burden. For an all-day tramp up-stream no other rubber boots will be more comfortable, and they wear.

The dealer who carries Elephant Head Rubber Boots carries the best of everything.

WOONSOCKET RUBBER CO., Woonsocket, R. I.

TENTS FOR SPORTSMEN
FISHERMEN — HUNTSMEN — CAMPERS

Tents made with and without poles and walls; with and without canvas floors. Quality of workmanship and material unexcelled. Extremely low prices on application. Write today.

Atlanta Tent and Awning Co., Box R, Atlanta, Ga.

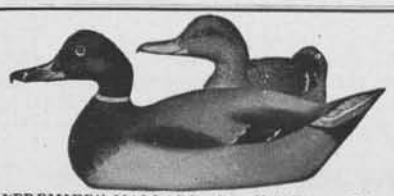
Open *Partly Closed* *Closed* *Rolled Up*

CLOSE-TO-NATURE OPEN AIR TENT HOUSE

Designed for **Sleeping** and **Living** in the **Open Air. A Fresh Air Retreat** on your lawn. Lets the **Air IN** but Keeps the **Insects OUT.** For camping, etc. Quickly assembled or collapsed without the removal of a bolt or the use of a tool. The canvas, except cover, permanently attached to the frame.

For tuberculosis, nervous troubles, ill-health, sleep in the open air. Made in 8 sizes from 6 by 7½ to 12 by 24 feet.

CLOSE-TO-NATURE CO., 345 Front St., Colfax, Iowa



"PREMIER" MALLARD. Reg. U.S. Patent Office

"Now They're Over! Let 'er Go!"

then you hear "Splash; Splash," the old birds come tumbling down, The wise old birds were fooled—and fooled right,—for your friends are using MASON'S DECOYS. With such perfect coloration—shaped so true to life—they look as "live as the 'live ones." Be sure on the next trip that all of your decoys are MASON'S. At all good dealers. Interesting booklet on request.

MASON'S DECOY FACTORY 455 Brooklyn Ave., Detroit, Mich.

The Filson Cruising Shirt for Fishing, Hunting, Outing

(U. S. and Canadian Patents)

Recommended by cruisers for whom it was originally designed. It is the most practical garment for all outdoor life. Has six pockets, one large **back** pocket, 30 x 21 inches, making a complete pack. Best material and weight guaranteed. Plain U. S. Khaki, $3.25; Waterproof Khaki, $3.75; 20 oz. gray or blue flannel, $5.00; 24 oz. plaid mackinaw, $6.50; 20 oz. Forestry Cloth, $7.00. Furnished shirt style, as shown, or open front coat style. State preference and collar size when ordering.

We make outing clothing for men and women—woolen shirts, khaki clothing, mackinaw clothing, corduroy clothing, woolen comforters, sleeping bags. Send for Catalog 11 which describes these and gives prices. We deliver all purchases amounting to $5.00 or over, free by Parcel Post.

C. C. FILSON, 1011 First Ave., SEATTLE, WASH.

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

Hunters! Campers! Tourists!

A New Sensation!

The Most Compact, Handy, Neat and Serviceable Camp Stove Ever Built.

WE want every reader of this publication to get full particulars about this Wonderful New Folding Camp Stove, the most useful, economical and covenient heating and cooking apparatus ever put before the public. By all means, write us today sure for our illustrated literature explaining it in detail.

Cook Your Meals in a Jiffy—Get More Pleasure—Save Time, Money and Needless Bother

by using this marvelous stove. You can't afford to be without it. Take it with you when outing, camping, fishing, touring or boating. Use it in the home as well. Handy the year around.

The Moats Folding Camp Stove

A marvel of completeness. Folds up into small space. **Carry it by the handle.** Set it up instantly for use. Has folding oven. Produces intense heat when desired. Can be taken down in a minute's time. Use it for boiling, frying, roasting, baking or heating purposes. Strong and substantial, perfect in operation, positively safe. Prices reasonable. Pays for itself many time in pleasure, satisfaction and saving of hotel bills. You can't appreciate it until you have used it.

Get our Illustrated Literature

You owe it to yourself for the sake of economy, pleasure, convenience and all-around satisfaction to learn all about this remarkable stove. We make Complete Kitchenettes for Auto Tourists. **Write today.**

Prentiss-Wabers Mfg. Co.
Dept. 1 GRAND RAPIDS, WISCONSIN

Dealers Wanted

Government Tests—The Final Authority

US CARTRIDGES

For all makes of firearms

have won more Government tests than all other makes combined.

They are standards of manufacture not only with our Government but with foreign governments. World's championship rifle teams use U. S. Cartridges.

For booklet telling vital facts about cartridges send postal to

UNITED STATES CARTRIDGE COMPANY
2258 Trinity Building New York City

NATIONAL LEAD COMPANY, General Selling Agents
JOHN T. LEWIS & BROTHERS CO., Philadelphia
SELBY SMELTING AND LEAD COMPANY, San Francisco

Will You Try This Lamp?

Cost Nothing if not Satisfied

PRICE $1.00 POST. PAID

HANDIEST
MOST POWERFULL
EASIEST CARED FOR
BEST LAMP MADE

For Night Fishing, Canoeing or Boating

Makes Nights in Camp Cheerful
Makes Night Boating Safe
Makes Night Fishing Possible

The Baldwin Carbide Lamp

Makes and Burns (Acetylene) Gas—Uses Carbide, which can be bought at any hardware store—a week's supply weighs less than a pound. The lamp is small enough to be carried in your coat pocket. More light than electricity and at half the expense. Gives as much light as four oil lanterns or a dozen candles. No oil or grease—no smoke—no wicks—no glass to break or clean. Automatically lights without matches, won't blow out—absolutely safe.

It will make your tent as bright and cheerful as your den at home. You can read, play games, overhaul fishing tackle, clean guns, etc. It projects a light 150 feet ahead—a safeguard against stumbles and falls when on hikes through strange woods or over dark roads. Can be worn on the cap or belt, leaving both hands free for rowing or handling rod or gun. A great lure for frogs or fish—ideal for casting, gigging, spearing or netting.

A fine emergency lamp for your automobile. It will help out in great shape if anything goes wrong or you have a puncture out on some lonely road at night.

Lamp only weighs five ounces ready for use—3½ inches high—made of brass; will last for years.

Try This Lamp For 10 Days

Upon receipt of $1.00, we will send you a lamp. Use it for 10 days. If you don't find it the greatest out-door lamp you ever owned, send it back and we will return your dollar.

Do You Want To Know How To Tie Knots?

Write us for our booklet "Knots and How to Tie Them." This tells by pictures and description how to tie all kinds of Knots. Write for it—it's free.

JOHN SIMMONS CO.
29 Franklin St. New York City

165 Bleury St., Montreal, Que., Canada. 255 Hansford Block, San Francisco, Cal.

For Sport with Comfort, Wear "YIPSI" GENUINE INDIAN SHOES

THE ideal shoe for canoeing, camping, playing tennis, etc. Made of Ypsilanti moosehide—hand sewed. Soft and pliable—wonderfully durable—every sportsman should have a pair. Send for a pair on trial. Money returned if not satisfied.

No. 900A illustrated at top.

Men's sizes, 5½ to 10.....Men's **$2.50**
Ladies' sizes, 2½ to 7.....Ladies' **2.25**
Boys' sizes, 2½ to 5.....Boys' **2.00**

No. 910A illustrated at bottom.

Men's sizes, 5½ to 10.....Men's **$2.75**
Ladies' sizes, 2½ to 7.....Ladies' **2.50**
Boys' sizes, 2½ to 5.....Boys' **2.50**

These prices include flexible *oak* soles. Order by number, stating size. We pay postage. Write for catalog.

YPSILANTI INDIAN SHOE COMPANY, 582 East Cross Street, Ypsilanti, Michigan
Dealers Send for Price List

Shooters Need the AUTO-GLAS

Pat. May 2nd, 1911

The Only Comfortable Goggle

The Only Efficient Eye Protector

This glass was originally designed as a Shooter's Glass and is without question the only glass made that is suited to the shooter's requirements.

The hinged centerpiece which is the distinguishing feature of the Autoglas allows the lenses to conform to the curves of the face and excludes all dust, wind and flying particles.

The lenses are ground glass and curved in shape, ensuring comfort and perfect sight and allowing unobstructed vision in all directions.

Regularly supplied with Amber colored glass, but procurable in any color or tint desired.

For Sale by All Opticians, Motor Supply Houses and Sporting Goods Dealers

F. A. HARDY & CO. Dept. G Box 804 CHICAGO, ILL.

When You Go Camping—Add This

Hundreds of sportsmen now regard one thing as a necessary part of their outfit—a sort of insurance or guarantee of restful sleeping—the

PERFECTION Pneumatic Mattress

With Sleeping Bag

Mattress and Sleeping Bag roll to a small, light package, easily carried, and the mattress is quickly inflated for use. It conforms to your frame and takes up all unevenness of the ground.

Absolutely impervious to water and perfectly sanitary—no place for dirt nor vermin to lodge. Comfortable in wet, dry, cold or hot countries. *Lasts indefinitely.*

Used by the Federal Government, Steamship Lines, Forest Service and well-known sportsmen and explorers. Read what users write about it and see our illustrated Catalog. Complete information on request—write for it now!

PNEUMATIC MFG. CO., 527 17th STREET BROOKLYN, N. Y.

The Keeley Treatment

TAKES AWAY THE APPETITE FOR DRUGS OR DRINK

Drunkenness and drug using are nervous diseases. Our scientific treatment restores nerve cells to original unpoisoned conditions—does not nauseate. No inconvenience experienced in discontinuing the use of our remedies. Half a million cured in thirty-five years.

FOR INFORMATION WRITE TO FOLLOWING KEELEY INSTITUTES:

Hot Springs, Ark.
Los Angeles, Cal., Marsh-Strong Bldg.
San Francisco, Cal., Douglas Bldg.
Jacksonville, Fla.
Dwight, Ill.
Marion, Ind.
Plainfield, Ind.
Crab Orchard, Ky.
Portland, Maine
Grand Rapids, Mich., 733-35 Ottawa Ave., N. W.
Columbus, Ohio
Oklahoma City, Okla.
Philadelphia, Pa., 812 N. Broad St.
Pittsburg, Pa., 4246 Fifth Ave.
Omaha, Neb., Cor. 25th & Cass Sts.
Salt Lake City, Utah
Seattle, Wash.
Waukesha, Wis.
Winnipeg, Man.
Guatemala City, Guat.
Mexico City, Mexico
London, England

All advertisements are indexed—See page 2A

Teach Your Son to Hunt

It develops precision, keen vision, and quick action—and makes him accurate in everything else. True marksmanship—the ability to "wing" a bird as well as to drop a panther—can be attained only with

MARBLES GAME GETTER GUN

because upper barrel shoots .22—lower barrel .44 shot or .44 ball. You get treble the experience to be had with the ordinary gun. Barrels 12, 15 or 18 inches long. Adjustable stock folds up when placed in shoulder holster or detaches for pistol practice. Give your son a

Valuable Gift

Teach him from the start the proper handling of a man's gun and he'll never have to learn over again.

Write for catalog of Marble's 60 Outing Specialties and sample Nitro-Solvent Oil. (Dealers everywhere.)

Marble Arms & Mfg. Co.

525 Delta Ave., Gladstone, Mich.

Find the best load for your gun—How?

From November *Recreation*—

"To find out what your gun, be it shotgun or rifle, will do with different loads and which is the load best suited to it, for each particular need, there is no way to get at the facts except to experiment, and none so good as to load your own ammunition and try it out."

From December *Field and Stream*—

"Every gun shoots better with some loads than with others. The man who loads his shells can easily make up a few shells in various ways, and when he strikes the one that is best for his particular gun, he may perfect it at his leisure."

Why don't you experiment? It's a mighty interesting pastime—you get better results—and save considerable money. You can **get empty shells at the gun club**—an assorted lot of all makes—after a trap shoot. (Every gun club should reload shells for practice, and cut down ammunition expense).

Free—the Ideal Hand Book—160 pages—tells all about the powders, bullets, primers, tools and methods for loading and reloading rifle, shotgun and pistol ammunition. Full information to reload your shells understandingly. **Free to any shooter who will send three stamps for postage. Send for your copy today.**

The Marlin Firearms Co.

3 Willow Street New Haven, Conn.

THIS handsome, well-balanced light weight gun is built especially for quick handling in upland shooting—for snipe, partridge, quail, woodcock, squirrels, rabbits, etc. Handling quicker, it cuts down the range; brings down the game cleanly and effectively. It's the new

Marlin

20-Gauge Repeater

Model 30

This standard Gun, No. 30A 20-gauge, has 25 inch full-choke **matted** barrel; 5⅞ pounds; retail price $21.60.

Has weight enough to avoid unpleasant kick from recoil; yet is so light you can carry it all day long without inconvenience.

Barrel is handsomely matted on top for its entire length—a high grade and desirable feature (not found in other makes) which facilitates quick and accurate aim. **It is built to handle 2¾ inch shells** as well as the ordinary 2½ inch shells, allowing **good stiff loads for trap and duck** shooting. **Optional length of barrel**—if you prefer a little heavier gun or want its benefits at longer ranges, you can have 28-inch barrel at same price as standard 25-inch.

$21.60

This is the only 20-gauge repeater with Visible Hammer. It tells instantly, day or night, whether the gun is cocked or not cocked; safe or not safe, without depending on hidden safety devices and indicators that might be overlooked. You can cock the hammer or let it down instantly and noiselessly; the absence of extra parts makes the lock extremely simple and quick; the half-cock notch provides a splendid "safety" in carrying the gun loaded.

If You Like a Hammerless, there is no gun equal to our Model 31, 20-gauge repeater—but if you prefer a hammer gun, the Model 30 has matted barrel like the hammerless; has the same light weight; carries the same barrel options; uses the same loads and shoots with the same splendid effectiveness—and costs you $2.40 less.

Send 3 stamps postage for complete 136 page catalog—tells about 12, 16 and 20-gauge hammer and hammerless repeaters—also all the Marlin repeating rifles.

The Marlin Firearms Co.

3 Willow Street, New Haven, Conn.

At the Head of the List—
the .250-3000 Savage

THE .250-3000 SAVAGE for the first time in twenty years puts the American hunting rifle ahead of the military arm.

In velocity, accuracy, trajectory and actual stopping power it is superior to every other American hunting rifle, and equals or exceeds the best military rifle in the world.

The .250-3000 SAVAGE has higher velocity than any other rifle made in this country—3000 feet per second. It makes 4½-inch groups at 200 yards, and possibles on the 800-yard military target. Its soft nose Spitzer bullet penetrates ½ inch in steel at 100 yards, and its trajectory for 300 yards is less than 6 inches.

In details and finish the .250-3000 SAVAGE is fully equal to the expensive European rifles which it *totally outclasses* in accuracy, convenience and efficiency. It has the original SAVAGE solid breech, hammerless, six-shot, repeating action, the only American action strong enough and safe enough for the highest concentration.

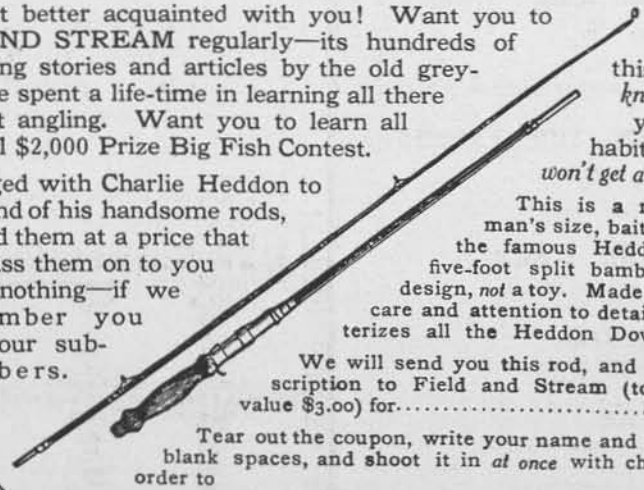
Take-down pattern, 22-inch tapered round high-pressure steel barrel with integral front sight base, checked extra full pistol grip stock and forearm, checked trigger and corrugated steel butt-plate, weight 7 lbs., price $30.00. Cartridges with soft nose or full metal cased bullets, $4.20 per hundred. Write us for particulars, SAVAGE ARMS CO., 245 Savage Avenue, Utica, New York.

.250-3000 SAVAGE Rifle

Brother Anglers, This Rod Is All But Free!

We want to get better acquainted with you! Want you to read FIELD AND STREAM regularly—its hundreds of crackerjack fishing stories and articles by the old greybeards who have spent a life-time in learning all there is to know about angling. Want you to learn all about our annual $2,000 Prize Big Fish Contest.

We have arranged with Charlie Heddon to take two thousand of his handsome rods, and have secured them at a price that enables us to pass them on to you almost for nothing—if we may number you among our subscribers.



We can afford to do this because we *know* that once you "get the habit" you simply *won't get along without it!*

This is a real, practical, man's size, bait casting rod of the famous Heddon Dowagiac, five-foot split bamboo—two-piece design, *not* a toy. Made with the same care and attention to detail that characterizes all the Heddon Dowagiac tackle.

We will send you this rod, and a year's subscription to Field and Stream (total value $3.00) for..... **$1.75**

Tear out the coupon, write your name and address in the blank spaces, and shoot it in *at once* with check or money order to

FIELD AND STREAM PUBLISHING CO.
331 Fourth Avenue **New York City**

OUR GUARANTEE: If this rod does not come up to your fullest expectation—shoot it right back and your money will reach you by return mail! What could be fairer?

May

FIELD AND STREAM
331 4th Ave., New York City

Gentlemen:

Enclosed find $1.75 for which send a Heddon Rod and Field and Stream magazine for one year to

Name.....

Address.....

All advertisements are indexed—See page 2A

DU PONT RIFLE POWDERS

Du Pont Military Rifle Powder No. 10
For .280 Ross, .30 Adolph, and similar cartridges.

Du Pont Improved Military Rifle Powder No. 15
(Progressive)
For .30 Springfield, .280 Ross, and similar cartridges.

Du Pont Military Rifle Powder No. 19
For .30/30 Winchester, .30/40 Government, and similar cartridges.

Du Pont Military Rifle Powder No. 20
For .30 Springfield, .22 Savage H. P., .25 Remington, and similar cartridges.

Du Pont Military Rifle Powder No. 21
For Remington Auto Loader, .30/30 and .303 Savage, and similar cartridges.

Du Pont Gallery Rifle Powder No. 75.
(Marksman)
For reduced and gallery charges in high power rifles.

Du Pont Sporting Rifle Powder No. 80
For .25/20, .32/20, and similar cartridges.

Du Pont No. 1 Rifle
For black powder rifles.

Schuetzen
For 200 yard target rifles

RSQ
For revolvers and automatic pistols.

Rifle Smokeless Division
E. I. Du Pont De Nemours Powder Co.
Wilmington, Del.

WINCHESTER

.22 Caliber

SPOTLIGHT CARTRIDGES

The bullets with which these cartridges are loaded emit a bright flash of light when they strike the target, which shows the location of the shot. The ability to tell instantly and without the aid of a glass where the shot hits adds lots of fun to target shooting. Try some of these Spotlight cartridges. They are novel and sport-making. They are loaded in .22 Short with either smokeless or "Lesmok" powder, and in .22 Automatic with smokeless powder. Remember

THE LIGHT SHOWS YOUR SHOT

Comfort SPORTSMAN'S FIRST ESSENTIAL

Feet Stand Hardest Knocks. Protect Them With

Witch-Elk Boots

Lightest, easiest boot made. All heights for men and women.

Ask dealer to order pair or write for Catalog "F"

We make a strong line of Golf, Tennis and Yachting Shoes.

Witchell-Sheill Company, - DETROIT MICHIGAN

GO CAMPING

The most fun for the least money.

We make TENTS that are built to stand all kinds of punishment.

We make CAMP FURNITURE and EQUIPMENT—designed and manufactured *for campers* by men who know the game.

Send for our New Catalogues:

No. 514—Campers' Book for 1915. Sent free; the sure, reliable campers' guide. You must have it.

No. 515—Marine Supply Catalogue. The finest marine book issued (550 pages). Sent on receipt of 20c, which will be refunded with your first order.

If you cannot buy Carpenter goods of your dealer, write us.

GEO·B·CARPENTER & CO.

401-411 Wells Street Chicago, Illinois

Fishing Tackle Parlance

Why buy the inferior grades of tackle when you can get the very best directly from the manufacturer? We have specialized in high-grade tackle since 1867. No diverting of energies among different kinds of merchandise—nothing but tackle. The result is the unquestioned superiority of our goods and they prove the truth of the contention that the highest efficiency is the result of specialization.

If you do not know the E. Vom Hofe Tackle our goods will be a revelation to you. If you do know the E. Vom Hofe Tackle we need only tell you our Catalogue is ready and will be sent you upon request.

E. VOM HOFE & COMPANY

93-94 FULTON STREET, NEW YORK

Improved Keepem-Alive Stringer LET-EM-SWIM

Hooks open like safety pins and are interchangeable. More can be added.

Folds up to carry in pocket or tackle box.

Made of High-grade Spring Steel Wire nickel plated.

Standard Size, Postpaid, **50c.**

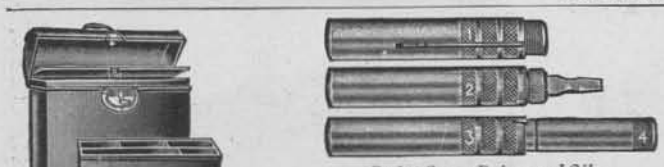
Extra Heavy, **$1.00**

Write for circular.

Watkins Mfg. Co.

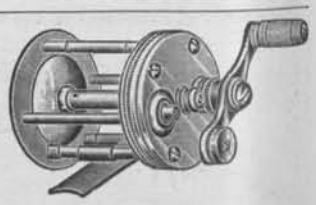
HOWELL, MICH.

PAT. U. S. AND CAN.



Pocket Screw Driver and Oiler.
Price 50 cents. *Pat. Sept. 1, 1914*

No. 99 Price $3.00



MEEK REELS

earned their reputation for superiority by giving years of satisfactory service proving that a good article is worth its price. Our aim is not cheapness but Perfection.

In ten years Meek reels have won four times as many International Trophies as any other reel and twice as many as all other reels combined. For sale by all first-class dealers. If your dealer will not supply you write us.

Catalog F free

B. F. MEEK & SONS, Inc., Manufacturers of Meek and Blue Grass Reels **1450 S. 18th St., Louisville, Ky.**

All advertisements are indexed—See page 2A

FISHING AND CAMPING OUTFITS

I have completed a revised edition of our catalog and want to send a copy to everyone who is interested in outdoor life, whether for health or recreation. I call it a

SPORTSMAN'S HANDBOOK

for it not only illustrates and describes the many things an outer-man or woman needs but tells of my personal experiences in the wilds when camping, fishing and hunting, with advice as to equipment and many "kinks" in wildcraft.

SEND FOR THIS CATALOG

It tells of the goods we supply the camper, the angler, the hunter and all who enjoy base-ball, golf, tennis or in fact, any game or pastime. Every article is reasonably priced and sold with the distinct understanding that the money you pay is yours until you are satisfied. This 472 page book will be sent you **free** if you mention No. 620.

Powhatan Robinson PRESIDENT

NEW YORK SPORTING GOODS CO.
15 and 17 Warren Street, New York

NYOIL

For **Talking Machines, Typewriters,** Phonographs, Adding Machines, Cash Registers, Guns and Tools and all Polished Instruments. THE FINEST OIL MADE. It absolutely *prevents rust.* NYOIL now sold everywhere by all hardware and sporting goods men. Large bottle (cheaper to buy) 25c.; trial size, 10c.

WM. F. NYE, New Bedford, Mass.

Patented April 21, 1914

Stewart's Phosphor Bronze Sight

The *Modern* hand finished sight with the correct shaped bead. Made to FIT ANY ARM. Guaranteed satisfactory or money returned. Price $1.50. Send postal card for complete description and Sporting Goods price list.

If your dealer cannot supply Stewart's Sights, order direct from

P. O. Box 955 **C. W. DU BOIS, Tacoma, Wash.**

A good gun is more than half the pleasure of a day's trip. For nearly 50 years we have been building

LEFEVER SHOT GUNS

They have been famous at the traps, as shown by the number of matches they have won. The Sporting Magazines every once in a while print an unsolicited letter from an old sportsman who mentions his Lefever Gun with pride.

Try Our 20 Gauge

Easy to carry in the field; saves your shoulder at the traps.

Made in all Gauges
$25 to $1000

Write for Catalog and Price List. Let us tell you why the Lefever has such great power for distance and penetration; why it can never shoot loose.

Enclose 75c for Ideal Cleaner that fits any gun.

LEFEVER ARMS CO., 205 Malthie Street, SYRACUSE, N. Y.

UP EARLY—OUT LATE

Use an EVEREADY Light dark mornings for getting out your fishing tackle, packing lunch, digging or catching bait.

Repair engine break-downs; steer past rocks, snags, shoals; make safe landings; pick your way home over the rough path, and go to bed by the bright, powerful light of an

EVEREADY FLASHLIGHT

75 styles of sturdy, beautiful, water and oil proof Flashlights, each with a scientifically designed Mazda Lamp and an EVEREADY Tungsten Battery: made to L-A-S-T and give *real*, honest, long-time service.

4702

Two popular styles (illustrated) are No. 4702, Nickel Plated Search Lantern, Powerful Reflector, Price, $5.50; and No. 2659, Nickel Plated Portable Searchlight, Price, $3.00.

40,000 dealers testify to EVEREADY quality. If yours cannot supply you with a *real* EVEREADY, write us. Send for illustrated catalog No. 57.

2659

AMERICAN EVER READY WORKS
of National Carbon Co.
LONG ISLAND CITY NEW YORK

For Sprains Lame Muscles

Absorbine, Jr., brings quick relief. Keep it always at hand for instant use.

Athletes use Absorbine, Jr., for the muscle that has been strained, for the cut or laceration that runs a chance of infection; for the abrasion that pains and the limbs that are stiff and lame from over-exertion.

Absorbine Jr.
THE ANTISEPTIC LINIMENT

When applied to cuts, bruises and sores, it kills the germs, makes the wounds aseptically clean and promotes rapid and healthy healing. It allays pain and inflammation promptly. Swollen glands, painful varicose veins, wens and bursal enlargements yield readily to the application of Absorbine, Jr.

Absorbine, Jr., is made of herbs and is non-poisonous—safe to use anywhere, even by the smallest member of the family.

It Combines Efficiency with Safety

Only a few drops of Absorbine, Jr., are required at each application, which makes it an economical liniment to use. One ounce of Absorbine, Jr., added to a quart of water or witch hazel makes an antiseptic, general liniment of more than ordinary efficacy.

Absorbine, Jr., $1.00 4-oz., and $2.00 12-oz. bottle at most druggists or delivered

A Liberal Trial Bottle will be sent to your address upon receipt of 10c. in stamps

W. F. Young, P. D. F., 422 Temple St., Springfield, Mass.

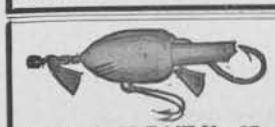
Read This

Our Celebrated Trout Flies on 4 inch Gut Snells, looped or eyed hooks, 25c per dozen. Split Wing or Dry Flies, 35c per dozen. Post free to any address. American patterns copied. 6 foot Gut Leaders, 8c each; 9 foot Gut Leaders, 10c each; 6 foot Gut Leaders with two extra loops, 10c each; 9 foot Gut leaders with two extra loops, 15c each; 30 yard Enameled Silk Waterproof Line, fine, $1.00 each; 30 yard double tapered, $2.50 each. Catalogue of Flies, Leaders, Rods, Reels and Lines, free on application.

WHITE BROTHERS
OMAGH - - - - - IRELAND

DON'T BLAME THE REEL

if it fails you at a critical moment. Don't give it a chance to fail you—use "3-in-One" and it *never* will! This oil keeps the reel's sensitive mechanism in perfect order. "3-in-One" is the one sure and safe reel lubricant. Won't gum; won't dry out. Contains no acid. It absolutely *prevents* rust. Apply it to rod joints, they will come apart easily. Use on rod, —it's good for wood—promotes pliability. Rub on line, prevents rotting. Trial bottle sent FREE by 3 IN 1 OIL CO., 152 New St., New York City.



REDFIN PRIZE WINNING BAITS

WEEDLESS BAIT No. 67
PRICE, 75 CENTS
At Your Dealers or by Mail
JAMES L. DONALY, 137 Court Street, NEWARK, N. J.

NEVER LOSE A FISH - use - The Greer Patent Lever Hooks

No. 8, 10¢ each
" 1-0, 10¢ each
Post-Paid

No. 3-0, 15¢ each
" 5-0, 15¢ each

The Greer Mfg. Co. Atlanta, Ga.

THE THREE BEST LIVE MINNOW BAITS

Price 85c

Magnifying Glass Minnow Tube
Minnow will remain alive all day

Live Minnow Hook, held by top fin
Price 25c

Minnow not harnessed, hooked nor mutilated—remains alive and active

Live Minnow Cage
Price 50c

Ask your dealer or by mail prepaid from
DETROIT GLASS MINNOW TUBE CO.
55 W. Lafayette Blvd., Detroit, Mich.

All advertisements are indexed—See page 2A

Style WITH Comfort

For both Sportsmen and Sportswomen

Outdoor Clothes must have comfort and wearing qualities, but they have style also if they are

Duxbak

SPORTSMAN'S CLOTHING

DUXBAK Clothes are made of high grade Army Duck and are proofed with our exclusive Cravenette Rainproof Process. Both of these facts are guarantees of wear and protection.

Simple lines, a comfortable fit and the manner in which DUXBAK Garments hold their shape through all weather, make them the most popular with Outdoor men and women who *know*.

Hunting Coats, Norfolks, Pants, Riding Trousers, Leggins, Hats, and Caps for men. Norfolk Jackets, Plain, Divided and Saddle Skirts, Bloomers, Leggins, Hats and Caps for women.

If you want Outing Clothes (not rainproof and less expensive) your Dealer will recommend to you KAMP-IT for both men and women.

FREE CATALOG BOOK

Send today for our Catalog Book which describes with profuse illustrations our complete line of DUXBAK and KAMP-IT Hunting and Vacation Garments.

Your copy is ready to be mailed to you tonight—drop us a postal now while you think of it and be *sure* to mention your regular Dealer's name.

BIRD, JONES & KENYON, 2 Hickory St., Utica, N. Y.

DUXBAK and KAMP-IT Garments are sold by leading Sporting Goods Stores in the United States.

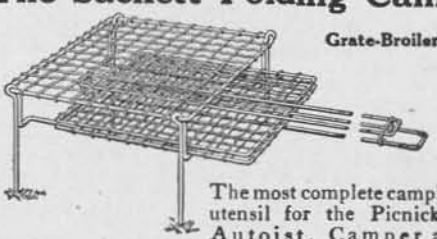
SHOOTING GLASSES REVOLUTIONIZED

by our new Rifleite Akopos, already used and endorsed by professional Shooters and over 30 Commissioned Officers of the Regular Army and National Guard who saw and used the glasses at Camp Perry. We can actually guarantee the Rifleite will improve your vision and shooting whether with Rifle, Revolver or Shotgun. Write at once for circular.

Patented Feb. 20th, 1912

THE F. W. KING OPTICAL CO.
Euclid Arcade Dept. E Cleveland, Ohio

The Sackett Folding Camp



Grate-Broiler

The most complete camping utensil for the Picnicker, Autoist, Camper and Hunter ever made. If your dealer can't supply you, we will. Insist on the genuine Sackett.

Write for circular and price.

WEYBURN SALES CO., 19 S. La Salle St., CHICAGO

Special $4.75

Liberal Offer to Boys!

7 x 7 Feet—8 oz. Duck, Full Weight Wall Tent

Bargains—This genuine, full weight, regular size duck wall tent, complete with poles, ropes and pins; rock bottom price before summer rush of business begins. Stands the hardest kind of usage. Health building, strength giving. Direct from the manufacturers. No middleman's profits; away below dealers' price. We guarantee our goods of highest class. Don't miss this big bargain.

Write for Free Camp Guide

Our new 1915 Edition catalog and Camp Guide is ready. Send for it. It tells all about camp life. A valuable asset to man or boy living outdoor life. ***Send the coupon today*** and we will mail it prepaid. (If Canadian inclose 10 cents.)

Name .....

Address .....

Camp Guide Coupon!

H. CHANNON & CO.
150 No. Market Street
Dept. 1725 Chicago

Please send me the new 1915 Camp Guide and full details of your tent and camp outfit offers.

Send the Coupon Now!

H. Channon Company 150 North Market Street, Dept. 1725, Chicago, Illinois

---

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

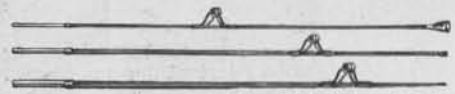
Our Expert Casting Line

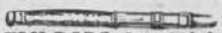
Hard Braided, of the Highest Grade of Silk. The Strongest Line of its size in the World. Used by Mr. Decker in contest with Mr. Jamison. **Nuf sed.** Every Line Warranted. **50 Yard Spools $1.00**

Trout Flies

For Trial---Send Us

18c	for an assorted dozen. Regular price....24c.	Quality A
30c	for an assorted dozen. Regular price....60c.	Quality B
60c	for an assorted dozen. Regular price....84c.	Quality C
65c	for an assorted dozen. Regular price....96c.	Bass Flies
75c	for an assorted dozen. Regular price...$1.00	Gauze Wing
2.00	for an assorted dozen. Regular price...$3.50	English





Steel Fishing Rods

FLY RODS, 8 or 9½ feet	$ .80
BAIT RODS, 5½, 6½ or 8 feet	.70
CASTING RODS, 4½, 5½ or 6 feet	1.25
BAIT RODS, with Agate Guide and Tip	2.25
CASTING RODS, with Agate Guide and Tip	2.75
CASTING RODS, full Agate Mountings	3.50

ORIGINAL and GENUINE

OLDTOWN CANOES

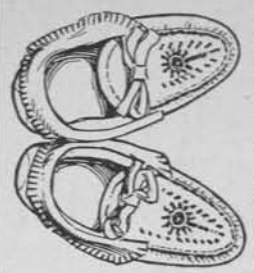
Introduced and made famous by us.

16 to 19 ft.

The H. H. Kiffe Co., *521 Broadway, New York*

Illustrated Catalogue free on application

CANADIAN MOCCASINS



Made of genuine Indian tanned Moose hide. Ornamented with beads or Porcupine quills. A long wearing, serviceable, comfortable Moccasin.

Men's Sizes,	8 to 12	$2.00
Ladies' "	3 to 7	1.50
Misses' "	11 to 2	1.00
Child's "	7 to 10	.75

Guaranteed Eskimo-made waterproof Mucklucks, knee length, all sizes, $4.00.

Send 2c. in Stamps for our New Illustrated Catalogue —Showing the largest collection of Indian Souvenirs on the Coast, typical of Alaska and the Northwest.

HUDSON BAY FUR CO., Inc.

918 First Avenue **Seattle, Wash.**

The Rod of Quality

This phrase is certainly substantiated by the record of my rods in the Prize Fishing Contest. One landed the First Grand Prize brook trout, 1914—a 6 5/16 pound one at Upper Dam, Me.

My hand-made, split-bamboo rod bears my name and behind this stamp of my approval and supervision stands many years' accumulation of experience and reputation—and I'm not fearing the loss of this by heartily and conscientiously recommending the rod to you.

The finest bamboo in the world perfectly united and finished with a guarantee of satisfaction.

F. E. THOMAS

117 Exchange St. Bangor, Me.

Ask for my booklet

Fish Bite

like hungry wolves and keep you busy pulling them out, whenever, or wherever, you use our

Wonderful Fish-Luring Bait

Best fish bait ever discovered for nets, traps, and trot lines. No poison. Not unlawful to use. We guarantee satisfaction. Write to-day and get a box to help introduce it. Agents Wanted.

Walton Supply Co., Dept. 45, St. Louis, Mo.

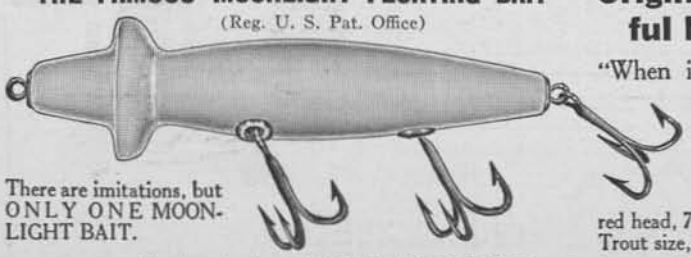
THE EXCELSIOR SPORTSMEN'S BELT SAFE

Just what I have been looking for —has been the expression of every man we have shown it to—Made of Brass, Nickel Plated, Gun Metal or oxidized and furnished complete with fancy Canvas Belt for $1.00.

Will keep money—jewels—watch—cigarettes or matches perfectly safe and dry. **HYFIELD MFG. CO., 48 Franklin Street, N.Y. City**

THE FAMOUS MOONLIGHT FLOATING BAIT

(Reg. U. S. Pat. Office)



There are imitations, but ONLY ONE MOONLIGHT BAIT.

Original and Only Successful Night Fishing Bait

"When in doubt, use a Moonlight—Safety First," says a well known writer. FIELD & STREAM PRIZE WINNER.

Four Styles: No. 1, Plain white self-glowing, 65 cts; No. 1-R, Self-glowing, red head, 70 cts; No. 2 Weedless, 75 cts; No. 3, Trout size, 35 cts, all postpaid.

Catalog showing ZIG ZAG, FISH NIPPLE and other standard baits, on request.

THE MOONLIGHT BAIT COMPANY **Dept. A,** **Paw Paw, Michigan**

All advertisements are indexed—See page 2A

In Camp or on the Trail You Need a Stopple Kook-Kit

With it you can prepare a hot meal for two persons in a jiffy any time you get hungry.

It is a 6-piece outfit that nests so snugly that when in disuse it can easily be carried in the pocket. Thousands of outdoor men say they can't get along without the

STOPPLE KOOK-KIT

Claude P. Fordyce, well-known sportsman and writer says:

"It's as necessary on my trips as my bed and shelter."

The Stopple Kook-Kit will double your pleasure in the "big outdoors."

Price Complete $2.50

If your dealer can't supply you, we will send you a Kook-Kit outfit on receipt of price--$2.50.

STOPPLE KOOK-KIT COMPANY

Dept. 32 Alma, Mich.

THIS IS THE DOPE THAT KILLED FATHER "LETS GET A MOVE ON US"

FISHERMEN ATTENTION

You have been troubled with mosquitoes, and have tried everything on the market, but you probably have not tried Michigan Dope. This is the dope that will actually give you comfort while out fishing, hunting or camping. No insects will stay with you, if you use Michigan Dope. You have no risk to run, if the dope does not give satisfaction, I refund the money paid for it. Send for it now. Postpaid 1 oz. can 25c., 4 oz. can 50c. Write for circular.

R. C. KRUSCHKE, F1208 W. Sup. St., Duluth, Minn.

STEEL FISHING ROD

8½ Feet Long—3 Joints

Enameled Black, Trimmed with Snake Guides, Cork Hand Grasp and Nickel Plated Reel Seat.

78c

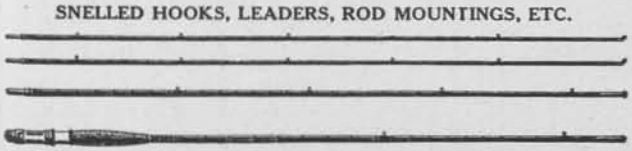
POST FREE. Send for our Bargain Catalogue of FISHING TACKLE

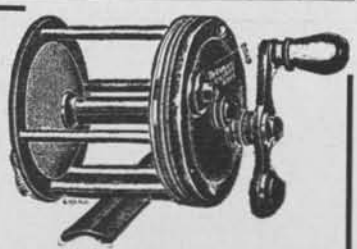
Gould & Gould

Dept. 4 Box 5143 **Boston, Mass.**

FISHING RODS—FISHING REELS

SNELLED HOOKS, LEADERS, ROD MOUNTINGS, ETC.





Ask for *Montague City* Rods and Reels. The Best on the Market

FOR SALE BY ALL JOBBERS

ROD FACTORIES: Montague City, Mass. Amherst, Mass.

Montague City Rod Company

REEL FACTORY: 251-253 Classon Ave. BROOKLYN, N. Y.

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

The "PFLUEGER-REDIFOR" Anti-Back-Lash Casting Reel

NO WIRES TO FRAY THE LINE

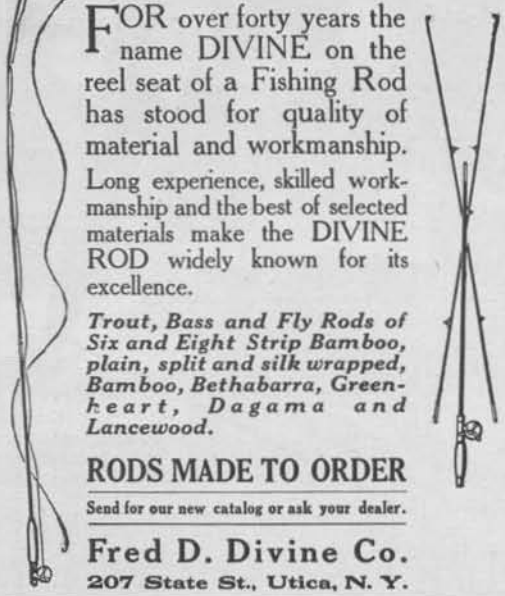
makes casting a real pleasure for beginners as well as experts. It cannot break or get out of order, and requires no adjustment. Automatic Thumbers, attached to the flange of the spool enclosed within the reel, free from all dirt and possibility of damage, thumb the reel mechanically, retarding the spool as the bait slows down.

This reel is made of best German Silver, satin finish, has genuine Scarlet Agate Jewels, balanced crank, fluted Pyralin Amber Handle, with Phosphor Bronze Bearing, and adjustable front sliding click and drag.

This reel will hold from 60 to 100 yards according to size of line used. Price, **$7.50** (Fully guaranteed against defects of all kinds for all time.) If your dealer does not carry this reel, we will send it postage prepaid on receipt of price.

The Enterprise Mfg. Co., Dept. No. 2 Akron, Ohio

Divine Hand-Made Fishing Rods



FOR over forty years the name DIVINE on the reel seat of a Fishing Rod has stood for quality of material and workmanship.

Long experience, skilled workmanship and the best of selected materials make the DIVINE ROD widely known for its excellence.

Trout, Bass and Fly Rods of Six and Eight Strip Bamboo, plain, split and silk wrapped, Bamboo, Bethabarra, Greenheart, Dagama and Lancewood.

RODS MADE TO ORDER

Send for our new catalog or ask your dealer.

Fred D. Divine Co.
207 State St., Utica, N. Y.

CATALOG FREE

TIME TO THINK OF

FISHING TACKLE

- ¶ Put new life in your body with a fishing trip.
- ¶ Start now by sending for a copy of our free Catalog.
- ¶ We need your patronage and you need our goods.
- ¶ Let's get together—you start it by writing for the Catalog.
- ¶ Any goods you might order of us would be promptly delivered at your door.
- ¶ It is a safe buy, for we return your money without question if the goods are not satisfactory.
- ¶ The Catalog is ready now and will be mailed to any address upon request. Write:

H. H. MICHAELSON
916 Broadway : Brooklyn : New York City

THE STANDARD LINE DRYER

OPEN

Something every fisherman should have as wet lines left to dry on the reel quickly rot.

Mailed to any address on receipt of $2.00.

The Standard Co.
New Britain, Conn.

CLOSED

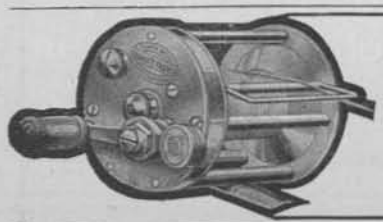
Fish Bite

like hungry wolves, in fresh or salt-waters, in good or bad weather, if you go after them with

MAGIC-FISH-LURE.

Best bait ever discovered for attracting all kinds of fish. Keeps you busy pulling them out. Price 25c, 50c, and $1. per box. Positively guaranteed. Write for Free Booklet and our special offer of one box to help introduce it.

J. F. GREGORY, Dept C, St. Louis, Mo.



BEFORE YOU BUY A CASTING REEL

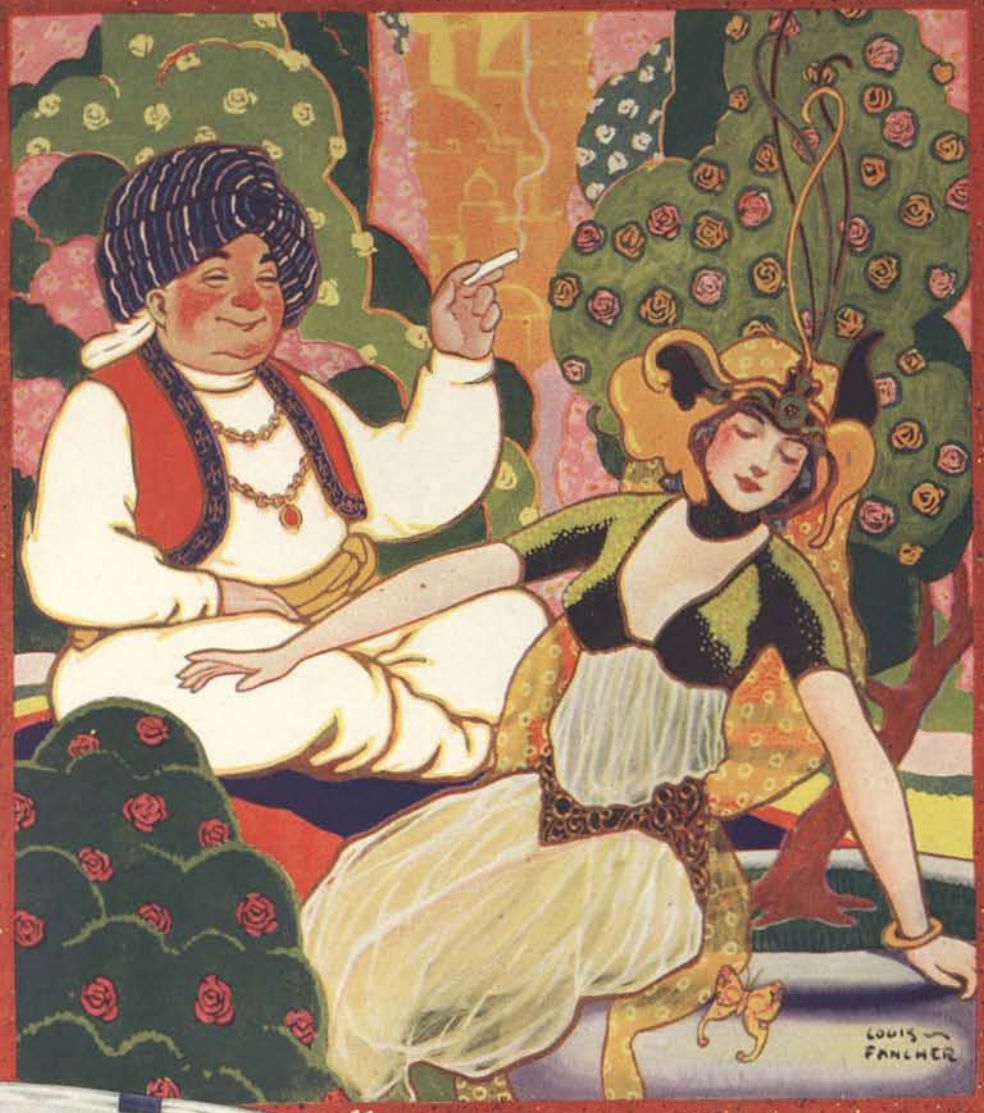
Investigate the merits of the South Bend Anti-Back-Lash—Ask your dealer to let you try it in comparison with any other reel on the market purported to be anti-back-lash or a minimizer of back-lashes—then decide for yourself.

It is the Original and only true Anti-Back-Lash Reel made—Is Convertible—Can be used as a regular reel or anti-back-lash by a turn of adjustment screw—Thumbs itself—Automatically stops when bait lands—and has many other exclusive wonderful features which no other reel possesses.

Absolutely guaranteed without time limitation—will fulfill all we claim—money back if not entirely satisfied.

SOUTH BEND BAIT CO., 2238 Colfax Ave., SOUTH BEND, IND.
Manufacturers of Quality Tackle for Bait-Casting.

All advertisements are indexed—See page 2A



"Look to the blowing rose about us" — OMAR

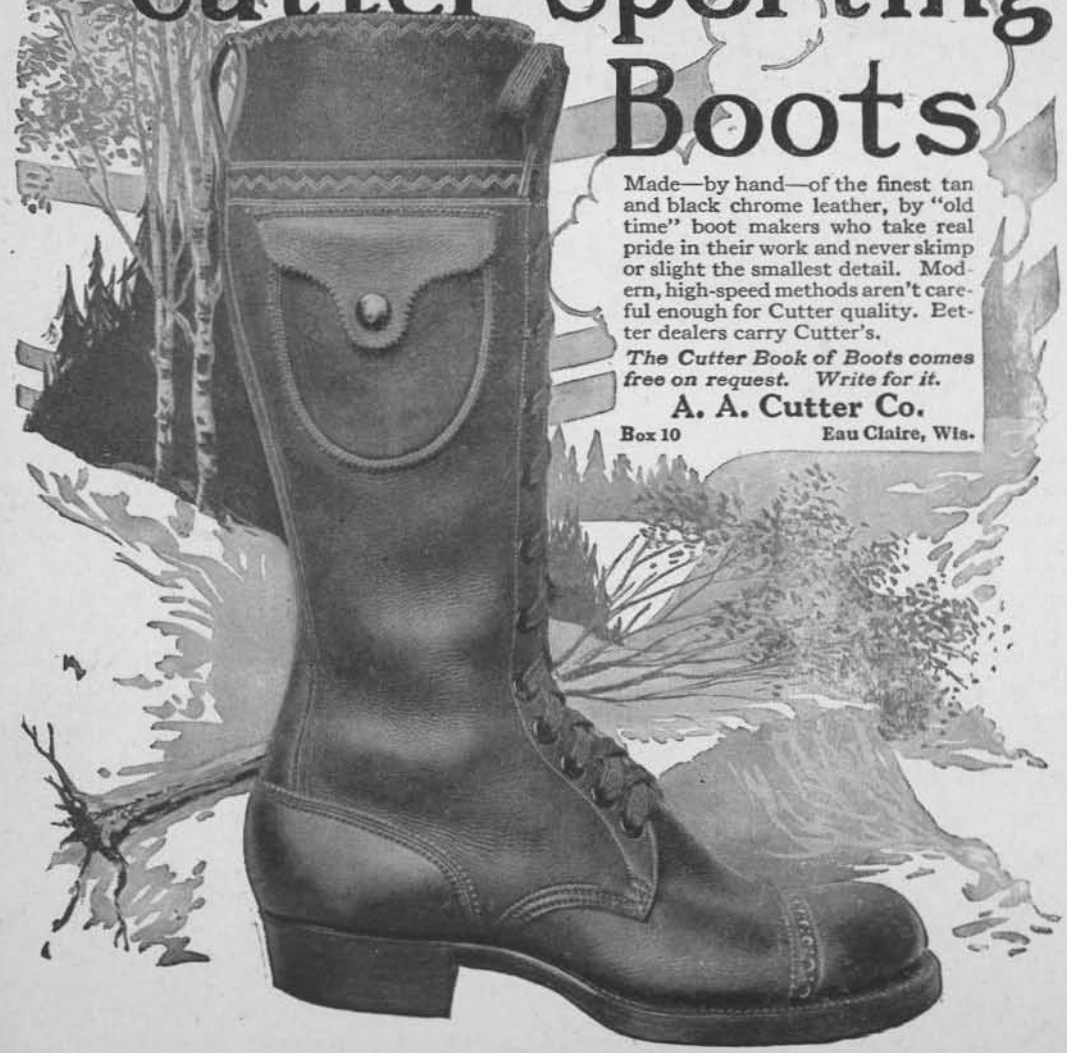
OMAR is made as carefully as any article of pure food – for the most particular class of consumers in the world

20 *for* 15¢

ADVT.

TOUGH and trail-proof as a moosehide moccasin—and much easier on "civilized feet." Heavy enough to stand the stab of snags and the rasp of rocky roads—but not stiff enough to chafe or tire you. Water shedding, too—in Cutter Boots properly cared for, you can slosh all day through swamp or snow, yet come to camp dry footed. What more can you ask of footgear, you who hunt or hike, heeding the Red Gods' call?

Cutter Sporting Boots



Made—by hand—of the finest tan and black chrome leather, by "old time" boot makers who take real pride in their work and never skimp or slight the smallest detail. Modern, high-speed methods aren't careful enough for Cutter quality. Better dealers carry Cutter's.

The Cutter Book of Boots comes free on request. Write for it.

A. A. Cutter Co.

Box 10 Eau Claire, Wis.

"FRAMERS OF THE CONSTITUTION OF THE U.S.A." NO. 2

James Madison—"Father of the Constitution"

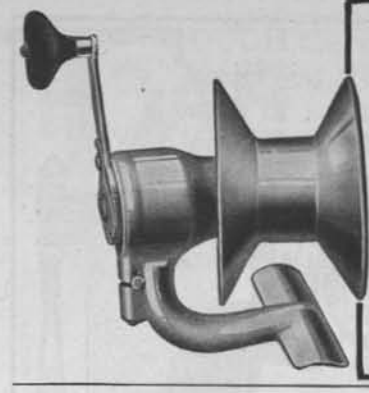
THE FOURTH PRESIDENT of the United States considered it a greater honor to be declared the Father of the Constitution than to have been elected twice to the highest office in the gift of his countrymen. No more ardent, intelligent, far-sighted and constant student of governmental problems ever lived than Madison. They were his life-long passion. He it was who labored with all his gigantic ability and indomitable will to have deeply imbedded in our National Law those vital principles which forever guarantee to all Americans Religious, Commercial and Personal Liberty. In private life he was genial and social—yet temperate. Many a foaming glass of good barley-malt beer he drank with his bosom friend Thomas Jefferson—"Father of the Declaration of Independence." Madison died at 85 and Jefferson at 83; both were unalterably opposed to tyrannous Prohibition Laws and advocated legislation which encouraged the brewing industry. Upon the tenets of the Constitution of the U.S.A. (to which Madison devoted the best of his genius) Anheuser-Busch 58 years ago founded their great institution. To-day 7500 people are daily required to produce and market their honest brews. Their chief brand Budweiser is sold throughout the civilized world—the drink of your forefathers—the drink of the noblest men who ever lived—the drink of the great triumphant nations. Budweiser sales exceed any other beer by millions of bottles.

ANHEUSER-BUSCH · ST. LOUIS, U.S.A.

Visitors to St. Louis are courteously invited to inspect our plant — covers 142 acres

Budweiser

Means Moderation



Here it is:—The Latest Word in Reel Design!

Even the best types of reels heretofore have had glaring faults awaiting the mechanical mind with initiative and energy to overcome them. In solving these problems we have made radical departures from old standards. The result, which has been tested through two years of actual service, is now for the first time presented to anglers.

THE GYRATORY REEL

has six definite and distinct claims to the angler's favor:—

1st. The line is automatically and perfectly spooled, *not* by level winding fingers, but by a gyratory motion of the spool itself, *without extra parts.* Uniform spooling aids the beginner enormously, adds yards to the cast of the expert.

2nd. Free running spool for the cast, no gears in mesh. A tried and proven feature of great value.

3rd. A *true* open spool design. Not a single cross bar to catch the "loop" caused when spool travels faster than line is going out, the throwing back of which causes the dreaded "backlash" snarl. This feature alone will do away with the great majority of your present backlashing. Open spool design makes for easy clearing of the few backlashes that *do* occur.

4th. *Automatic* click. Works only one way. Needs no "putting on," or "taking off."

5th. Automatic spool lock.

6th. Quick toolless take down; entirely demountable without tools. Write today for booklet with full particulars.

Don't buy a reel without investigating the Gyratory. If your dealer hasn't it yet in stock, send $6 and we will send one prepaid. Try it ten days, and if it fails to live up to every claim made for it—shoot it right back and your money will reach you by return mail, without argument.

W. C. Mfg. Co., 1142 Main Street, Racine, Wis.

THIS bait was a sensational killer in the 1914 Season. Has all the life-like swimming motions of minnow. The liveliest bait that floats. Made many record catches. Floats when not in action—can't catch on bottom.

ONE HOUR'S CATCH! Note Variety. By J. K. Rush (Patentee), Pulaski, N. Y., July 23, '14. Catch of three 3 lb. small mouth bass, two 4 lb. large mouth bass, two 3 lb. northern pike, one 10 in. perch and one 36 in. muscallonge.

The RUSH TANGO Swimming Minnow

Hooks behind body of bait, it is practically a weedless bait, but it DOES catch the game fish. **Ideal for trolling and casting.** Made of Wood, enameled and finished in brilliant colors.

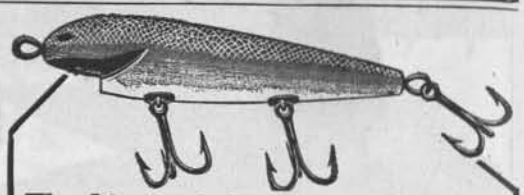
Packed in neat, compact box, in White, red head; White, yellow and green mottled back; Yellow, red head; Yellow, red and green mottled back. 75c. EACH.

Sample prepaid, 75c., with name of your dealer or complete set of 4 selected colors, for $3.00.

WRITE TODAY FOR DETAILS OF $50.00 GOLD PRIZE OFFER

Dealers and Side Line Men Please Write

U. S. SPECIALTY COMPANY. 941 S. A. & K. Bldg. Syracuse, N. Y.



The Livest of the "Live Ones"—Try This New Floater, Diver and Wiggler!

Brought out at the close of 1914's season, this new artificial minnow leaped into instant popularity. You will see all "the boys" with them this year—and they'll bring in more than their share of the big strings.

The result of thirty-four years of tackle-building experience, "The Pfluegers" present this

PFLUEGER "SURPRISE" MINNOW

to anglers in the belief that it is the highest development and refinement in artificial bait design and workmanship. Our reputation as "the largest fishing tackle builders in the world" stands behind this bait.

The "Surprise" is a floating bait which dives the instant reeling in is commenced, the depth being controlled by the speed of reeling. As it comes in its peculiar construction causes the bait to wiggle and dart about with the eccentric movements of a live minnow—the motions that arouse the combative instincts of the gamy bass. Upon stopping reeling, the bait rises to the surface.

Made in seven color blends, as follows:

No. 3914 Luminous Enamel all over—Red Throat
No. 3915 White Enamel all over—Red Throat
No. 3916 White Enamel Belly—Rainbow Back, Red Throat
No. 3917 White Enamel Belly—Green Cracked Back, Red Throat
No. 3918 White Enamel Belly—Green and Red Spots, Red Throat
No. 3919 White Enamel Belly—Green Back, Red Throat
No. 3920 Yellow Perch—Red Throat

See the "Pflueger Surprise" at your dealer's. If he hasn't his supply yet, send 75c for sample bait, or $2.50 for an assortment of 4.

THE ENTERPRISE MFG. CO., Dept. 2, Akron, Ohio

Notice—Write for free copy "Tips on Tackle" containing interesting information to anglers.

DO YOU WANT TO CATCH GAME FISH?—GET THIS!

I want to do something for you fellows who want to really catch fish. If your dealer hasn't got THE PRESCOTT SPINNER, I will send it post-paid on receipt of price, 25c.

THE PRESCOTT SPINNER MFG. CO.
PRESCOTT, WIS.

THE FISH THAT DIDN'T GET AWAY

that big one—landed him this time—thanks to this handy gaff. Spreads 7½ inches—length 18 inches. Holds fish from ½ to 20 pounds.

MARBLE'S
CLINCHER GAFF

is controlled by one hand; closes in a wink—hangs on like a bull terrier—can't mangle fish or pinch hands. Can be locked with points together. Far better than a landing net. Dealers or postpaid direct, $1. Catalog of 60 specialties for outers and sportsmen free.

Marble Arms & Mfg. Co.
525 Delta Avenue
Gladstone, Mich.

All advertisements are indexed—See page 2A

MEISSELBACH
FISHING REELS

If you use a fly rod, you will find the

Meisselbach Automatic Reel

"as good as the best, better than most." Holds 100 yards of line and recovers 65 feet with one winding of the spring, if the reel is full of line. Has a patented Speed Controller that recovers the line with a uniform regulated speed. **$3.50** postpaid by any tackle dealer.

For your Bait Casting use the

Swift and Silent
Takapart Reel

"A hundred thousand in use and every user a booster." 28 Prize Winners out of one hundred in the Field and Stream contest used Meisselbach Reels. "Takapart," price **$4.00.**

"The Reel with the Speed Governor."

Your local fishing tackle dealer can supply you. Ask him.

Send for illustrated catalog.

A. F. MEISSELBACH & BRO.
4 Congress St. Newark, N. J.

Original Tate's Best Copper Trolling Line

Absolutely invisible in the water, and with just enough weight to properly sink it. Very pliable, can be used on any reel. A one piece wire. No weak spots. Tested for 15 lbs. In 100 and 200 yards.

The Best Trolling Line Made.
If your Dealer can't supply you send 60 cents for 100 yards (post-paid).

Tate Mfg. Co., Inc., Boston, Mass.

DANERSK
DECORATIVE FURNITURE

Inexpensive Painted Furniture for Suburban and Country homes. Complete sets for any room. Your choice of color scheme.

Write for Literature "I."

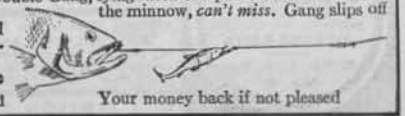
ERSKINE-DANFORTH CORPORATION
2 West 47th Street New York

Danersk Peasant Chair (P-1)
Made by hand of Oak and Hickory. Woven rush seat. Charming for Nursery or as an "odd" chair to lend a note of color. Price, $6.50.

LANE'S PERFECT HARNESS

WHEN THE FISH STRIKES HE'S HOOKED

The Double Gang, lying with one point on either side of the minnow, *can't miss.* Gang slips off the little rib and slides down full length of the double snell, giving perfect control over your fish. Keeps the minnow alive through hours of casting and is remarkably weedless. The best thing in years.

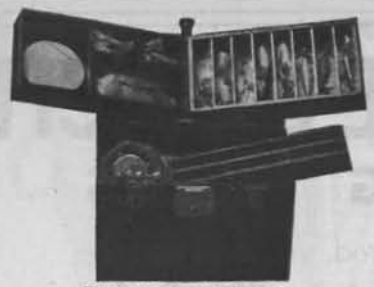


Size 1 for ordinary minnows; size 2 for large minnows; either size postpaid for **50c**

CHARLES W. LANE, Madrid, N. Y. Patented

Your money back if not pleased

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM



TACKLE BOX No. 202

A Tackle Box Worthy of the Name

This new Tackle Box will suit you. A place for everything. It is made of solid African Mahogany, Piano Finish, Waterproof. Tackle will not rust or rattle in this box. Not on sale in stores. Write to us for full description and our offer to send you this box to examine in your own home.

CABINET DEPARTMENT, STEVENS TANK & TOWER CO., AUBURN, MAINE

"JIM-DANDY" FISH-BAIT

They Can't Leave it Alone

Another 5000 "JIM DANDY" ($1 size) at low introductory price 75c

This 5000 will be sold in a few days—because it's the **greatest fish bait fishermen ever saw**—it gets them—**it's mechanically right**—patented by a famous angler—**note the shape**—it's protected by the most rigid patents—no other bait has it—no other bait can get it—the novel shape gives *"Jim Dandy"* the appearance of something in distress when going through water. **Fish grab it. It's right.**

NOW DIRECT BY MAIL

Get a letter off to us **NOW** and by return mail a *"Jim Dandy"* will come back to you that will make your fishing from now on so much more pleasant that you wouldn't take $10.00 for *"Jim Dandy"* if you couldn't replace it.

MONEY BACK—GUARANTEE

Put a half and a quarter into a letter today and mail it to us for one of these 75c specials; if it isn't the best bait you ever used **send it back**—we'll gladly return your money at once. Order two—you can't afford to run any chances of being without one. Write today and get one of these 5000—$1 size bait at the special 75c price.

Address: Wise Sportsman's Supply Co.
Dept. D, 120 W. Jackson Blvd. Chicago, Illinois

THE KING

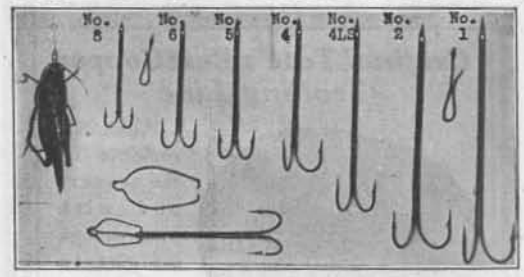
Once used, always used.

They are strong, neat, and dependable, guaranteed unconditionally for one year if broken in service. Your broken net and the guarantee tag is all we require to have net replaced by new one.

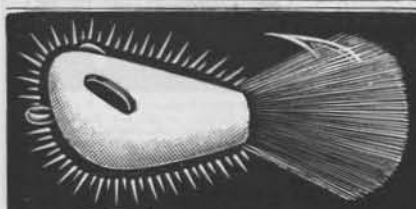
Insist on the King from your dealer. If he cannot supply you, will send prepaid on receipt of price. 4 x 4' $2.00, 3 x 3' $1.75, 2 x 2' $1.50.

W. H. REISNER MFG. CO.
Hagerstown Maryland

THE SURE CATCH HOOK



Bait Holders, 2 for 5 cents. Cuts one-half actual size. Hooks, sizes 1 to 8, 10 cents each; 1-0 and 2-0, 15 cents each; 3-0 and 4-0, 20 cents each; 5-0 and 6-0, 25 cents each. At your dealers. If he can't supply you, hooks will be sent postpaid on receipt of price. Descriptive booklet on request. Liberal discount to dealers. **VIERS & SCOTT, Box 391, RED LODGE, MONT.**



THE JAMISON SPECIAL
DESIGNED FOR CASTING
COAXER BAITS
50 Yds. 12 lb. Test
No. 5

LUMINOUS "COAXERS" CATCH FISH NOT WEEDS

The Big Ones strike at night and they fight harder than you ever even dreamed they could. When they hit the "Coaxer" it sounds like an explosion and it is followed by a series of the most savage leaps and plunges imaginable. As bass feed in the weeds close to shore at night a weedless bait is an **absolute necessity.** The Luminous "Coaxer" is **positively the only weedless night bait** on the market. We guarantee that you can cast into the thickest rushes or lilies in the dark without snagging. It is a surface bait with red wings and tail and a white body, which gives off a phosphorescent glow that is irresistible. Send stamp for color catalog of baits, flies, trout and bass spoons, leaders, fly dressing materials, etc.

Luminous Coaxer, 75c
Plain Weedless . 50c
Convertible . . 75c
(Has belly hooks)
Postage, 2 cts. Each.

Here's Our New Braided Silk Casting Line. Give it a trial. You will cast easier and farther and catch more fish than ever before. It is smaller, stronger and smoother than any other No. 5 line. Guaranteed to be the best that money can buy. Per 50 yd. spool, 75c, postage 2c. Can be had two spools connected. Our folder, "Care of a Bait Casting Line," will save you money. Free with each line.

W. J. JAMISON, Dep F 736 S. California Av., CHICAGO, ILL.

A DRY FLY THAT STAYS DRY

"Coaxer" Floating Flies are real sure enough floaters. They have solid cork bodies that are coated with celluloid enamel. Absolutely water proof, will outwear two dozen best flies, and they sure do get the fish.

Trout, 6 Colors, $1.35; 12, $2.65
Bass, 6 Colors, 1.65; 12, 3.25

All advertisements are indexed—See page 2A

HILDEBRANDT BAITS
HOOK & LAND 'EM

WHEN NOTHING ELSE WILL ---IT'S A FACT!

The object of a fishing trip is to catch fish—to catch fish you must have the right kind of bait—HILDEBRANDT BAITS are the right kind. **Why take a chance** when 50c or 75c will put two or three of them in your outfit? They are made in three shapes—"Standard," "Slim Eli" and "Idaho," and six finishes—Nickel, Copper, Brass, Gold, Aluminum and Black. Reversible, "spin so easy," ball-bearing blades and interchangeable flies—mounted on steel tinned music wire, making a very durable bait, and making possible any color or any combination of colors for any locality and any kind of game fishing.

FREE--NEW 1915 TACKLE CATALOGUE

With color sheet of flies and spinners (actual sizes) and some excellent "pointers" on how to "Hook and Land 'Em" with Hildebrandt spinners.

240 Sizes and Kinds for All Kinds of Game Fish

are shown in our FREE CATALOGUE in actual sizes and colors, as well as a high class line of fishing specialties. The cover alone is worth framing. A 2c stamp brings catalogue, color insert and "fishing dope." Send for it.

THE JOHN J. HILDEBRANDT CO. 125 High Street, Logansport, Ind.

Fish Line

Order today this new No. 42 double silk line for heavy casting. Thoroughly tested and fully guaranteed.

50 yd. Spool for $1.00

The smoothest line you have ever used. Really two lines in one. Inside woven silk with outside a beautiful maroon color. Though made for heavy pull it is not a heavy line and can be used for lighter fishing.

R. J. HILLINGER & CO.
1024-10 So. Wabash Ave
Chicago, Ill.

Mizpah Jock No. 44

Gives you a feeling of real comfort and the assurance of perfect protection while exercising.

Opening beneath Patent flap

Small amount of material between thighs

Perfect pouch

Welt-bound webbing

Can be cleaned by boiling without injury to rubber. Fits perfectly. Can't rub or chafe. Finest quality elastic webbing. Ask your dealer, and if he will not supply you with **Mizpah Jock No. 44**, send us 75c. in stamps and waist measurement and we will send by mail.

THE WALTER F. WARE CO., Dept. E., PHILA.

Tackle That Will *Land* Your Fish

It's all right to *tell* your story—but get your fish to *prove* it. Let us help you choose tackle that makes the fish *stay caught.*

RODS—split bamboo, wood or steel. All made with the Abercrombie adherence to rigid standards of excellence; each the best for the money—$1.50 to $45.00.

REELS—for heavy or light line. **HOOKS**—for big or little fish. **LINES**—for salt or fresh water—80c to $60.00.

FLIES—the right fly for the most fastidious fish. In books, too, to fit the pocket. Also leaders, floats and all other accessories.

Everything you need for outdoor life you'll find listed in our new illustrated Catalog F. Sent free on request.

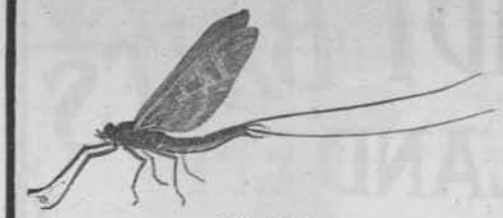
DAVID T. ABERCROMBIE CO.

311 Broadway ABERCROMBIE'S CAMP **New York**

Chicago Agents: Von Lengerke & Antoine

NOTE NAME AND ADDRESS

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM



WE ARE
SOLE AUTHORIZED MAKERS OF
LOUIS RHEAD'S
American Nature Flies

as described in his various articles in FIELD & STREAM during 1914, and in current issues.

We carry a stock of about 10 patterns (the ones Mr. Rhead recommends as best killers) for each of the months of April, May, June and July.

Price of these flies $2.00 per dozen.

32-page Tackle Booklet (which contains full descriptive matter regarding the above—giving list of patterns carried) with color page plate of Trout Flies, mailed on receipt of 2-cent stamp.

William Mills & Son
23 Park Place, New York City
Fishing Tackle Specialists

WE ARE EXPERTS—Can use, and use successfully, the articles we make and sell; our experience and judgment are yours for the asking.

ALMOST A CENTURY OF EXPERIENCE is behind our products.

THE PERSONAL ATTENTION of one of our Messrs. Mills is given to EVERY order.

GET THE

BIG ONES

WILLIAM MILLS & SON'S DRY FLY TACKLE

DRY FLY RODS

"PEERLESS" Special 9½ feet with 2 agates...$ 6.00
"NONPAREIL" Special 9½ feet with 2 agates 12.00
"CALEDONIA" Special 9½ feet with 2 agates 20.00
H. L. LEONARD Special 9½ feet..... 35.00

"INTRINSIC" DRY FLY LINES

	30 yds.	40 yds.
SIZE D: (for Heavy Rods)	$5.50	$7.00 each
SIZE E: (for Medium Rods)...	3.50	4.50 each

"INTRINSIC" DRY FLY LEADERS

Heavy, Light or Gossamer Weight, 7½ feet.
40 cents each.

ENGLISH DRY OR FLOATING FLIES

On Hooks, No. 12 or 15.....$1.00 per doz.
On Hooks, No. 10, Long Shank ..... 1.25 per doz.

208-page Catalog containing 13-page "Novel Index"—giving lists, and advice as to selection, of OUTFITS for PRINCIPAL METHODS OF ANGLING, sent on receipt of 10 cents to cover mailing charges.

IF IT'S FISHING TACKLE
WE HAVE IT

Sole Agents for
H. L. LEONARD RODS
The Rod You Will Eventually Buy

The GAIL Sleeping-Bag

is the outcome of years of practical camping experience in the woods. It is the embodiment of those features so essential to real camping comfort, and note this—**the GAIL Sleeping-Bag** weighs only 3¾ pounds—wonderful when the time comes to put your pack on your back.

Absolutely water-proof, insect-proof, and unexcelled for accessibility.

Write now and let us send you circular fully explaining this unequaled camping adjunct.

Box 502 **G. W. GAIL, Jr.** **Portland, Maine**

"THE IRRESISTIBLE"

If you want to capture the prize fish use the **BURTIS** celebrated **"IRRESISTIBLE"** Trolling Spinner, the greatest killing lure for all game-fishes on the market. Known in every sporting camp from Maine to California. Mr. James A. Cruikshank in Field and Stream, August, 1903, says: "This lure will take more and larger game-fish than anything I have ever used or seen used in Maine." Sent to any address, postage paid, for $1.00. **BURTIS** Rods and Flies have a national reputation. Write for prices. **GEO. H. BURTIS, Worcester, Mass.**

A Bottle full of Fishing Fun
JULIAN'S BAIT
The Liquid Lure for
EVERYTHING WEARING FINS
in Both FRESH and SALT Waters

"Makes Good" and "Keeps Good" always. For Still Fishing, Trolling, or Casting. No outfit complete without "JULIAN'S BAIT." PRICE, $1.00.
Order from your dealer or send direct to
GEO. W. JULIAN, Albany Building, Beach Street, Boston, Mass.
Same address for Fifteen Successive Years.

YOUR BOY

can earn his own spending money and at the same time get a splendid business training by selling *The Boys' Magazine* each month. A big profit on each copy sold.

Send no money. Write us today for 10 copies. All unsold copies can be returned. Address

THE BOYS' MAGAZINE
DEPT. B22 **SMETHPORT, PA.**

All advertisements are indexed—See page 2A

Cork Tip or Plain End 15¢

MOGUL EGYPTIAN CIGARETTES

KNOWLES
AUTOMATIC STRIKER SPOON

A NEW SIZE this No. 3 possible. It is a beauty—just the spoon and other game leases when fish sudden stop at the hook deeply Lifelike motion, other spoon or

The big success of the other four sizes of Knowles Automatic Striker has made for Bass, Trout fish. Hook re-strikes and the end of slot, sets into the jaw. Superior to any wood minnow.

The length of this new size is 2⅛ in. Price 35c postpaid.
Ask your dealer or send to us. Fully guaranteed. Catalogue free.
Other Sizes: 2¾in. 55c; 3¼in. 65c; 4½in. 80c; 5½in. $1.
ALL SILVER---SILVER OUT-COPPER IN---ALL BRASS
S. E. KNOWLES, 78 Sherwood Bldg. San Francisco, Cal.

BLUE BIRD *line of* MOTOR BOATS

16, 18, 20-foot Blue Bird boats ready to ship. Thoroughly guaranteed and tested. Most practical family boats afloat. Combine handsome appearance with speed, durability and seaworthiness. Best material and workmanship throughout. Engine Detroit, two cycle reversible, guaranteed **FIVE YEARS**, only 3 moving parts, starts without cranking, child can run it. Has auto boat seats.

SEND FOR FREE BLUE BIRD CATALOG TODAY

Demonstrator agents wanted everywhere. Agent's price to each first user of a Blue Bird in any locality. Ask also for **BARGAIN SHEET** on 20, 21, 23, 35' Runabout Motor Boats. **DETROIT BOAT CO., 1104 Jefferson Ave., Detroit, Mich.**

In the By-ways of the World—

As you glide over the water in your Mullins Canoe, every dip of the paddle will force the cares of yesterday farther into the background.

MULLINS CANOES

are worry-proof. Cedar, canvas-covered—beautiful, speedy, light and durable; easily handled—the kind you can trust. Why take chances when you can be sure? Mullins Indian type canoe is the World's standard. They cost no more than the ordinary kind. Write today for Mullins big, beautiful, Canoe Book. Free on request. Wherever canoes are sold, you'll find a Mullins.

The W. H. Mullins Company

472 Franklin Street **SALEM, OHIO**

World's Largest Builders of Pleasure Crafts

$35 FOR THIS KENYON HOUSE

It will bring to your very door all the fun and health of camping out without the discomforts of roughing it. Set it up on your back lawn and have a cool, shady refuge from the summer sun, an airy sleeping place on sultry nights. And when vacation time comes this weather-proof house will provide a comfortable summer home, rent free, at your favorite camping ground. Twenty other sizes, $16 to $320.

Write for beautifully illustrated catalog.

The R. L. Kenyon Company
407 Albert Street Waukesha, Wis.

EXPERT mixing—in exact proportions—gives the uniformly distinctive flavor that has made Club Cocktails famous. And the soft, mellow smoothness—that's the result of aging in the wood.

G. F. HEUBLEIN & BRO.
Hartford New York London
Importers of the famous Brand's A-1 Sauce

Get next to our
Money Saving Prices
in Motor Boat Catalog B
and Fishing Tackle Catalog G
Catalogs mailed free
E. J. WILLIS CO.
65 Chambers St. N. Y. C.

Don't Snag Your Fish—Hook Them Clean The two forward single hooks rest in individual slots, held by adjustable spring clips. The points are at the exact spot where Mr. Bass takes hold. When the strike comes the body of the bait pulls upward and the points of the remaining hooks **turn away from the fish.** Hooks them sure and clean. No damage to undersized fish. The best of all wobbling baits, has attractive darting motion. Finest O'Shaughnessy hooks, celluloid enamel. Hooks easily replaced. Works successfully with weedless hooks—a set supplied for 2be extra. Bait postpaid, 75c, or from dealers.

Payne's Woggle-Bug
The Wobbler Without GANGS

PAYNE BAIT CO., 3142 Edgewood Ave., Chicago, Ill.

WAR PRICES!
Take Advantage of Them

¶ Buy a high-grade Canadian canvas canoe at a price better than ever offered before—duty paid into the United States.

¶ *Ask for our illustrated booklet.*

Chestnut Canoe Co., Ltd.
FREDERICTON, N. B. CANADA
P. O. Box 150

SLEEP ON AIR
WITH A COMFORT SLEEPING POCKET

Recommended by the Forest Service, Campers, Physicians, Invalids, Tuberculosis patients and Sportsmen everywhere. A warm, comfortable, dry bed. Wind, rain, cold and moisture proof. Packs 6 x 25. We make air goods for home, camp, yacht, canoe, etc.

Illustrated Catalogue FREE

Metropolitan Air Goods Company
READING, MASS.
Box 185-C
Dealers Write

All advertisements are indexed—See page 2A

CLYSMIC

"King of Table Waters"

CLYSMIC is a natural saline water which tones up the whole digestive system and makes you feel solid and strong. It gives a steady nerve and a clear eye. And best of all Clysmic is

An American Product

Order from your dealer or from

CLYSMIC SPRINGS COMPANY
WAUKESHA, WISCONSIN, U. S. A.

Rowboat $20.00

MONEY IN BOAT LIVERY!

Can ship in any quantity. Need No Boat House. Never Leak, Rust, Check, Crack or Rot. **Absolutely safe.** Every boat has water-tight compartments, so cannot sink. 20 different designs **Demonstrator Agents Wanted in Every Community.** Write TODAY for FREE Illustrated Catalog and Special Factory Prices.

Michigan Steel Boat Co., 102 Bellevue Ave., **Detroit, Mich.**

WRITE FOR OUR BOOK FREE

Kennebec

Wonderful fun and health in paddling, sailing and motoring in a Kennebec. Write postal for new book FREE. Read why "Kennebec" means greatest beauty, strength, speed, lightness, steadiness and carrying capacity. Write today.

KENNEBEC CANOE CO.
17 R. R. Sq. **Waterville, Maine**

Barthel Juwel Boat and Camp Stove

Burns Without Odor

A-Meal-in-A-Few-Minutes

Generates Gas from Kerosene Giving Hot Blue Flame
Absolutely Safe Even If Overturned While Lit

6A like cut. Sent on receipt of Money

Price $4.00 each

Trade Mark G.-B. on Every Tank
Not genuine without this trade mark

Globe Gas Light Co.
27 Union St., BOSTON, MASS.

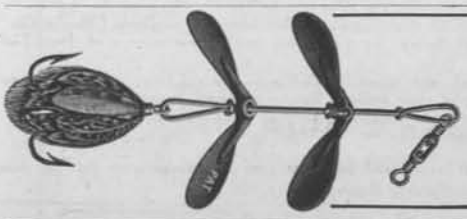
FISH ALL DAY WITH ONE LIVE MINNOW
IN A

½ actual size

NIFTY MINNE

A Practical, permanent, live fish bait for salt or fresh water fishing. Minnow, frog, grasshopper or other bait enclosed in patented, non-breakable, transparent case. Inlet and outlet holes allow water to flow through slowly, keeping minnow alive. No child's toy. No glass to break. Nickel plated fittings. Hooks interchangeable. Weight 1 oz. Success demonstrated for three seasons. For sale by all dealers or sent parcels postpaid for $1 in U. S., Canada $1.35. Made only by

JOS. M. NESS CO. **E-740 Plymouth Building** **MINNEAPOLIS, MINN.**



"JUNOD" baits are the surest of sure lures. They never fail.

They make satisfactory customers.
Made in six sizes for all kinds of game fish.
Your patronage solicited.

P. JUNOD & CO. **Celina, Ohio**
Inventors and Manufacturers

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

Patented Feb. 10, 1903, Jan. 22, 1907. Other Patents Pending.

The Fly Reel You've Been Waiting For

Responding to long recognized demand for a reel combining the individual merits of other good fly casting reels, but in the lightest weight compatible with strength and durability, the Pflueger designers set to work. After long months of experimentation and exhaustive tests, we now have pleasure in offering to anglers the

PFLUEGER GOLDEN WEST FLY REEL

In this reel the Pfluegers believe they are presenting the finest light weight, durable and efficient fly reel that can be produced.

Beside reduction in weight (carried as far as strength and durability permit) notable features of this reel are:—

Specially designed "line shedding" oil cups, click buttons, counter sunk screws and cranks, preventing the line from fouling. Patented reinforced flanges shaped to preserve their strength with maximum capacity and even tracking of line. Crank screws and oil cups slotted to admit a one or ten-cent piece (a convenient, always-at-hand screw driver). Improved adjustable click operates with SYNCHO resistance when line is going out, LIGHT when reeling in.

Workmanship and material are "Pflueger quality" and covered by our unqualified guarantee "without time limit!" Need more be said? Finest German Silver, satin finish; HARD RUBBER DISCS INTERLEAVED WITH ALUMINUM. Finely balanced flush crank, pivots, ratchets, click tongue, click spring, all of steel.

See this reel at your dealer's to-day. If he hasn't his supply yet, send direct. Prices (packed in velvet lined jeweler's case with Marvel oil can):—60-yards, $5.25; 80-yards, $6.25; 100-yards, $7.25 delivered.

THE ENTERPRISE MFG. CO. Dept. 2 AKRON, OHIO

Notice: Write for free copy "Tips on Tackle" containing much information for anglers.

KELSO BRAND TACKLE

You will find it at your dealer's and always of the highest quality

KELSO Automatic Reel

Beware of Imitations

The Kelso has had years to perfect and improve. It will save you trouble and money in the end

$5.00 from your dealer. If not in stock, send us his name and we will forward express prepaid.

H. J. FROST & CO., 90 Chambers St., New York

"MANUFACTURING FISHING TACKLE EXCLUSIVELY"

Guide for Campers FREE

Contains practical information concerning the every-day problems of camp life which will help make your out-door vacation more profitable and pleasant. Let us send it to you.

Rochester-Sabey TENTS
For All Purposes

We manufacture tents of all shapes and sizes at wide range of prices. Rochester-Sabey Tents are honest value, and will make good in actual service—backed by a full guarantee.

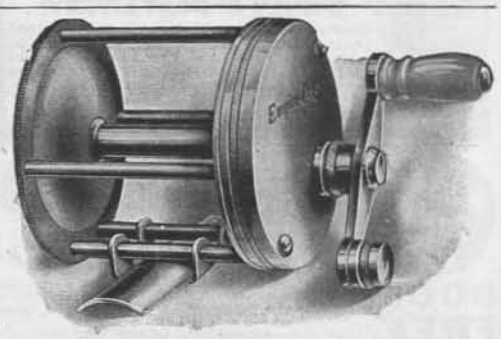
Write today for our Tent Catalog and Guide for Campers.

THE FRED F. SABEY CO., 152 South Avenue, Rochester, New York

GREAT BEAR SPRING WATER

ITS PURITY HAS MADE IT FAMOUS

You, Mr. Angler, Need Field and Stream! Every Number Brings Something You Can't Afford to Miss!



You've seen other fellows come in with strings of bass from the same old pond you've pounded in vain!

You've tried not to look glum when other chaps came in with broad smiles and full creels from the same stream where all you could find were wet feet and a forty-dollar grouch!

The reason is — those fellows are the "know how" kind. Years of experience have taught them the psychological moment to bump the hook into a bass, when to tickle a trout, and the why and wherefore of everything that wiggles a fin.

Twenty years on streams and lakes will give *you* that knowledge. But why not have it *now?* Why not learn the little tricks and dodges that other fellows have discovered and use them to make your *very next trip* a success?

You can do it by reading FIELD AND STREAM'S practical articles on every subject of importance to the angler.

Our editors for years have fished and camped around with those old gray-beards—those "know how" fellows—and we get first call on the very best "how to do it" articles they write. There is not a single number in which two or three or more of these fellows do not tell you some of the very things you have wanted to know. It's a practical education in angling for you! A chance to acquire experience with the "hard knocks" left out!

We want to get acquainted with you!

We want you to read FIELD AND STREAM regularly this coming year, for we know that once you "get the habit," we couldn't pay you to do without it.

So here's a special introductory offer you can't afford to overlook. The illustration shows the "Empire City" bait casting reel. It is made by Abbey & Imbrie, the well-known tackle manufacturers of New York City — and you know what that means!

This quadruple multiplying casting reel, with adjustable click and drag and ivory handle, would set you back a dollar and a quarter at your dealer's, but by a special arrangement we can offe you one—with a year's subscription to FIELD AND STREAM (total value $2.75), for **$1.75**

So send in the coupon to-day and commence your subscription with the big June "Special Camping and Vacation Number."

May

Field and Stream, 331 4th Ave. N. Y. City.

Gentlemen:

Enclose find $1.75 for which send an Empire City Reel and Field and Stream magazine for one year to

Name.....

Address.....

All advertisements are indexed—See page 2A

Lunch With Nature!

Take this basket—Pack the most dainty luncheon, bottles and all, in a Hawkeye Refrigerator Basket. Take the family for a spin in the car or launch, away from the city's heat to a shaded nook—enjoy the refreshment which is kept deliciously cool and appetizing.

"A Rest and a

Hawkeye

Refrigerator Basket
Add Zest to the Trip"

A small piece of ice in a sanitary, non-rusting, nickel-plated compartment, away from dust, germs and insects, is the secret. Does not drip. Write for folder R describing baskets priced as low as $4. Dealers, write for Special Proposition

BURLINGTON HAWKEYE BASKET CO.
Burlington, S. E. Iowa

His Favorite Color Gets Him

It's the **color**—not the shape or size—of bait, that attracts the game fish. **Somewhere, sometime** he has tasted something that has **pleased him.** He remembers its **color.** That's why he strikes and strikes **hard** when one of

SKVOR'S QUICK CHANGE **BAITS**

comes skipping along bedecked in his **favorite** color.

He may ignore baits of a dozen different hues, but with this **quick change outfit,** you're bound to get him, for—

"When the Fish Won't Bite, Change the Color"

36 different **combinations** from a **single pocket outfit,** easily **secured,** in rapid succession, **without tying or cutting line.** Made in three **convenient sizes**—No. 2 Trial Size; No. 9, 9 changes; No. 36, 36 changes. SEE YOUR DEALER—or write, TODAY, for our catalog, illustrated (in colors), and learn more about these economical and EFFECTIVE new fish lures.

SKVOR & COMPANY
103 1st Ave., W. Cedar Rapids, Iowa

JEWEL DETACHABLE ELECTRIC ROWBOAT MOTOR. Attaches to any rowboat, runs on 2 six-volt batteries. No odor, noise or dangerous gasoline. Complete without batteries, **$75,** with batteries, **$100.**

JEWEL OPEN WINDOW STORAGE BATTERY

Look inside your battery through the patented open window. See condition of plates and height of acid. **Jewel Special 6-80, $9; 6-80, $12; 6-100, $15; 6-100 Starting Battery, $18.** We make House Lighting Plants. Good Reliable Agents Wanted. Write for Catalog.

JEWEL ELECTRIC CO., Dept. F. S., 732 Sherman Street, Chicago

JOHN MURGATROYD

EXPERT TAXIDERMIST

Birds, Animals, Fish and Game Heads Mounted
Skins Tanned and made into Rugs

57 West 24th Street New York

FIRE FLY

PRICE $3.00

This Watch Is Made for Sportsmen. The Hands and Dial Shine at Night

No more scratching matches to tell the time in CAMP or HOME. As easy to read by day as ANY watch.

Why pay one or two dollars for an ordinary watch? The FIRE-FLY costs ONLY $3. The illumination of the hands and dial is PERMANENT.

Don't Risk Your High Priced Watch in the Woods

We guarantee the FIRE-FLY. It's not big or bulky. It's the only ILLUMINATED watch which sells at a popular price.

Send $3.00 and we will mail FIRE-FLY postpaid. At least write for literature. Kindly mention May FIELD and STREAM.

Look up our Sportsman's POCKET TOOL KIT advertisement on another page.

CHASE SPECIALTY COMPANY
115-B, Pearl Street New York, N. Y.

Dealers: We want the ONE best dealer in each town. Write for prices.

Agents:—Here's a splendid proposition. Write for particulars before ALL good territory is taken.

BAXTER STOVES for TOUR CAMP, BOAT or HOUSE

WRITE FOR FREE FOLDER S
W E Baxter Louisville Ky

THE FOOTWEAR OF A WOODSMAN

Surely if anyone knows what to wear for greatest comfort in the woods, that man is the woodsman—the man who spends not two, but fifty-two weeks of every year in the wilderness.

So when you see nine out of every ten men of the woods wearing the soft, pliable, glove-like moccasins, isn't it but common sense to conclude "mocs" to be the best for *your own* outdoorsing?

Palmer's Moosehead Brand Moccasins AND SPORTING BOOTS

are made in New Brunswick, in one of America's greatest sporting territories. Here we are closely in touch with woodsmen and their needs. The present Palmer moccasins are, we truly believe, the most practical, most durable, most comfortable, most altogether satisfactory, of any footwear for woodsgoers made.

On your own next trip use "The Footwear of a Woodsman."

Send to-day for catalogue "S" with styles and prices.

JOHN PALMER CO., Ltd.

Manufacturers of Oil Tanned Waterproof Footwear

FREDERICTON, N. B. CANADA

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

SOME GOOD THINGS FROM ENGLAND

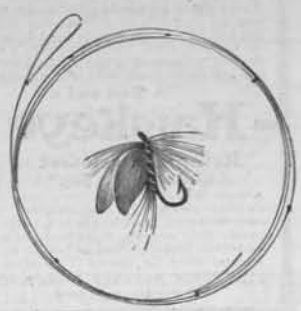
Farlow's "HERON"

Double tapered waterproof silk fly line
Smooth and pliant.
Casts beautifully.
Wears well.
A delight to use.
No. 1 for extra light rods.
No. 2 for medium rods.
No. 3 for Tournament rods.
30 yards, tapered to each end.

No. 1	No. 2	No. 3
$2.50	$3.00	$3.50

Farlow's Wading Stockings

Light.
Comfortable.
Healthy.
Do not impede your movements and can be easily carried.
Thoroughly waterproof, but soft and flexible.
$5.00 per pair.
Send sketch of foot when ordering.



Farlow's "Holdfast" Leaders

9 feet long, best gut only.
No. 121 finest, tapering to 4x.
No. 122 tapering to 3x.
No. 123 tapering to 2x.
$2.50 per dozen, any assortment.

FLOATING FLIES

All the best patterns: Olive Dun, Whirling Dun, Red Spinners, Governor, Alder, Blue Quill, Hare's ear, Sedge, etc.
60c per dozen.

All sent post-paid on receipt of Post Office Money Order for the amount

C. FARLOW & CO., Ltd.

10 Charles Street **St. James's Square** **London, S. W.**

England's Premier Fishing Tackle Manufacturers. Established 1840.

Here's a Tool Kit Every Sportsman Should Carry *Always*

You don't realize how helpless is the sportsman without a few practical tools until you are actually "up against it" yourself.

Suppose you are fifty miles from a tool chest and a tiny screw drops out of your best reel—something comes loose in your rifle action or any one of a thousand other things goes "out of kilter." Then is the time that the fellow with the L-E-B Pocket Tool Kit in his pack is going to win out when the fellow who hasn't it is "up against" a spoiled trip.

FIELD AND STREAM wants to get better acquainted with you. We want you to read the magazine regularly—for we know that once you "get the habit" you just naturally can't get along without it.

By ordering several thousand of these little kits we are able to buy them at a price which enables us to pass this along to you for almost nothing—if we can persuade you to become a *regular* subscriber to FIELD AND STREAM.

May

Field and Stream,
331 4th Ave.
N. Y. City.

Gentlemen:
Enclosed find $1.75 for which send an L. E. B. Tool Kit and Field and Stream magazine for one year to

Name.....

Address.....

Here's the proposition:

This kit at your dealer's would cost you $1.00 – the magazine $1.50. We will send you them both (value $2.50) for $1.75 if you send the coupon attached today with your name and address and check or money order.

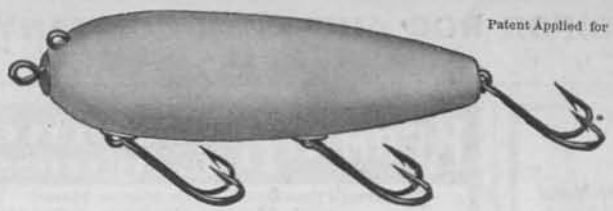
FIELD AND STREAM PUB. CO.
331 Fourth Avenue **New York City**

In addition to those shown above the list contains tools capable of being used as—protractor, straight edge, T-square, universal bevel, rule gauge, tri-square, scale, book rule and seven others.

All advertisements are indexed—See page 2A

THE "MASCOT" WEEDLESS BAITS

Wobble, Dive, Float, Surface or Underwater



Patent Applied for

THE WEEDLESS "MASCOT"
NEAR SURFACE OR SURFACE BAIT

We guarantee that you can cast this bait among thick lilies, rushes, underwater weeds, logs, stumps, snags, etc. Also that it is a sure killer. It runs at varying depths from the surface to two feet deep and will either Wobble or swim straight as desired. Is also reversible. Made with Red Head and White Body or all Red, White or Yellow.

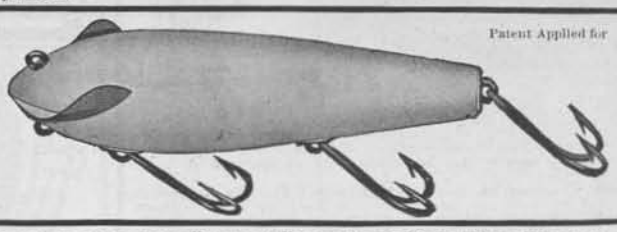
PRICE EACH, 75 CENTS, Postage 3 Cents

THE "ICE TONGS" Principle of the hooks on the "Mascot" Baits automatically hooks the fish instantly if he even touches the point of the hook. Get our circular and let us explain all about this greatest of all artificial bait inventions. We guarantee every claim made. Money refunded if not satisfied. Order one and see for yourself.

WEEDLESS No. 1 WINGED "MASCOT"
DEEP WATER OR SURFACE BAIT

This bait is also very weedless and a deadly killer. It can be used as a strict surface bait, throwing a spray of water, or as a deep water bait, running five feet deep or more. It "Wobbles," dives and floats when at rest. Fully guaranteed in every respect. Made with Red Head and White Body or all Red, White or Yellow.

PRICE EACH, 75 CENTS, Postage 2 Cents



Patent Applied for

OUR TACKLE CATALOG in colors shows "Coaxer," "Mascot" and "Nemo" Baits, "Coaxer" Floating Trout and Bass Flies, Trout Spoons, Imported Flies, Fly Dressing Materials, Weedless Hooks, Frog Harnesses, Anti-Back Lash Reels, Jamison Famous Casting Lines, Leaders, Sinkers, etc., etc.

THE W. J. JAMISON COMPANY, Dept. F - - - 736 S. California Avenue, Chicago, Ill.

PERFECTION LINE GUIDE FOR FISHING RODS

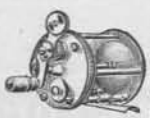
CASTING MADE EASY AND SURE

For sale at dealers or direct from

F. L. RUMBLE, 250 W. Wyoming Ave., PHILADELPHIA, PA.

B. C. MILAM & SON

BUILD REELS



For 76 years we have built, on one spot, the Milam Frankfort Kentucky Reel. Ask your dealer to show you our New $5.00 Reel. If he can't, write us.

At FRANKFORT, KY.

Prize Winner at the Seattle Exposition

The Booster Bait

Use with your favorite hook

A Substitute for

Attracts Fish by its Taste, Smell and Color

Natural Bait

Sample Bait by Mail, 15c.

MAN'F'D BY J. G. HENZEL 1313 S. Fairfield Ave. Chicago, Ill.

Pat. Nov 26. '07

1915 Model

30 Days FREE TRIAL

and ***freight prepaid*** on the new 1915 **"RANGER"** bicycle. **Write at once** and get our *big catalog* and *special offers* before buying.

Marvelous improvements. Extraordinary values in our 1915 price offers. *You cannot afford to buy* without getting our *latest propositions.* WRITE TODAY.

Boys, be a **"Rider Agent"** and make big money taking orders for bicycles and supplies. Get our *liberal terms* on a sample to introduce the new **"RANGER."**

Tires, equipment, sundries and everything in the bicycle line **half usual prices.** Auto. and Motorcycle Supplies.

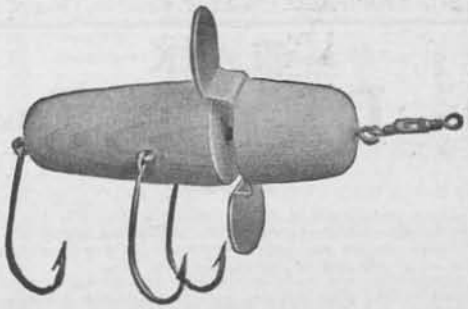
MEAD CYCLE CO., DEPT. H-230 CHICAGO

CATCH BIG BASS

With the

ANS. B. DECKER

Genuine Topwater Casting Bait

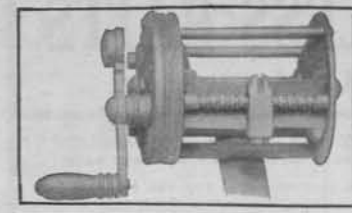


This floating bait was invented and is made at Lake Hopatcong, N. J., by the original Decker. Put up in YELLOW Boxes and must show the Decker signature on box to be the right one—look out for the imitation. For sale by all first-class dealers, or fifty cents by mail, postpaid.

ANS. B. DECKER

Lake Hopatcong, N. J.

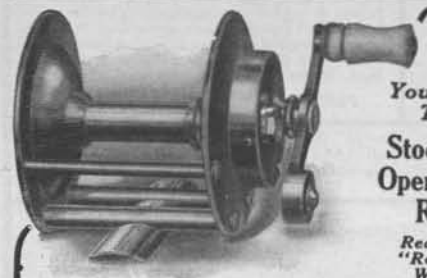
Try one of my Famous Ans. B. Decker Casting Lines, fifty yards, $1.00. We also make the famous "Decker Wobbler" for pickerel, thirty-five cents each.



BEETZSELL ANTI-BACK-LASH. FREE-SPOOL. LEVEL-WINDER.

NO ROD NEEDED. STEP ON REEL.
SPIT ON BAIT—THROW IT—WIND UP—COOK BASS.

REDIFOR ROD AND REEL COMPANY
WARREN, O.



You Need The

Stockford Open Spool Reel

Read the "Reasons Why"

No. 1.—**Almost does away with backlashing.** Backlashes are made by the spool traveling faster than the line goes out, forming a "loop" which "lashes back" on striking top pillars on ordinary reels. The Open Spool gives this loop free play. Does away with fully 75 per cent. of usual backlashes.

No. 2.—**Ease in clearing backlashes.** The few backlashes that do occur are cleared away in less than half the usual time, owing to free access to seat of the trouble. If you have spent wrathy hours untangling, you can appreciate what this means.

No. 3.—**Ease in spooling.** In reeling, the thumb has free play. This means cleaner spooling and again reduces chances of backlashing.

No. 4.—**Longer casts.** Absence of line friction on top and side pillars means more speed to running line. Adds distance to every cast.

You must see and try this reel to appreciate it. See our most liberal guarantee below.

Specifications: German silver, satin finish, open spool, 80 yards, 2-inch spool, backsliding click.

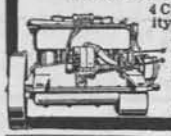
Guarantee: We absolutely guarantee the materials and workmanship of the Stockford Open Spool Reel to "stand the gaff" under any reasonable use. To any purchaser who has actually tried our reel on a fishing trip, and who is not fully satisfied with its performance, we will gladly refund purchase price in full.

Ask your dealer and see it there, if he has it. If your dealer can't supply you, send $6.00 for one by parcel post prepaid. FIELD and STREAM guarantees the reliability of our concern. Catalogue free on request.

STOCKFORD REEL CO., 326 W. Kinzie St., Chicago, Ill.

KERMATH Marine Engines

"America's Standard 4 Cycle Marine Motor"



4 Cycle, 4 Cylinder, 12 to 20 H.P. Highest quality. Silent operation. No vibration. Controls like the finest Motor Car engine. Extremely economical on fuel. Used as standard equipment by over 60 per cent. of the world's leading boat builders. Catalog on request. $180 to $360 depending on equipment.

KERMATH MFG. CO. Dept. 37 Detroit, Mich.

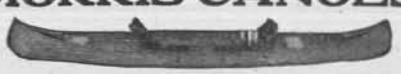
Minnows! Minnows!! Minnows!!!

This Minnow Conductor will screw on any size Mason fruit jar and make a sure catch. Minnow trap has brass ring for guy line. Made of zinc and brass wire. Will not rust. **Price 35c postpaid.**

SOLD BY LEADING DEALERS

WALTER C. McMAHAN
Desk S, 3447 Michigan Ave., Chicago, Ill

MORRIS CANOES



The canoe of refinement. Consult the catalogue.
B. N. MORRIS, Inc., 600 State St., Veazie, Me.

GRAY BOOKS FREE ON BOATS AND MOTORS

50 Leading Boat Builders have joined with the Gray Motor Co. and issued a catalog of **Specialized** Boats. 175 boats to select from, any kind of a boat from a $125 fishing launch to a $2500 mahogany finished express launch, powered with 6 cylinder self starting 4 cycle Gray Motor. **This Book is Free.** Write for it today. Also Big **Gray Marine Engine Catalog** showing complete line 2 and 4 cycle marine motors $55 upwards, 1 to 6 cylinders, 3 to 50 H. P. Write for it.

GRAY MOTOR CO., 542 Gray Motor Bldg., Detroit, Mich.

CLARK
Hand DRY FLY Made
RODS

Long experience in fishing with the Dry Fly has given me the knowledge necessary for perfecting a rod for this purpose, as the rod ordinarily used for wet-fly casting is not at all adapted to casting the Dry Fly.

These rods are made in the most careful manner, of the finest quality split bamboo, with best German silver waterproofed, welted ferrules. Narrow agate first guide and agate tops. Warranted perfect in workmanship and materials.

Price $25.00.

Write for complete description and terms of inspection.

H. B. CLARK **Bellaire, Mich.**

Buy Motors Direct

Why pay excessive dealer prices when we furnish you just as high grade motors and practically

Save Half

what the dealer asks! We are manufacturers—not jobbers. We ask but **one** small profit. Our line embodies the famous American rowboat and canoe motors as described in catalog "B;" also marine motors from 2 to 30 H. P., one to four cylinders, described in catalog "A." State which book you want. They're free. Get our prices.

AMERICAN ENGINE COMPANY
623 Boston St., Detroit, Michigan

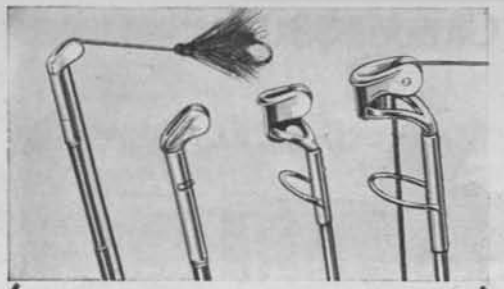
2 H.P. $29.95

Magnificent Steel Launch $96
Complete With Engine, Ready to Run

18-20-23 and 27 ft. boats at proportionate prices. All launches tested and fitted with Detroit two cycle reversible engines with speed controlling lever—simplest engine made—starts without cranking—has only 3 moving parts—anyone can run it. **The Safe Launch**—absolutely non-sinkable—needs no boathouse. All boats fitted with air-tight compartments—cannot sink, leak or rust. We are sole owners of the patents for the manufacture of rolled steel, lock-seamed steel boats. Orders filled the day they are received. Boats shipped to every part of the world. **Free Catalog. Steel Rowboats $20.** (83)

MICHIGAN STEEL BOAT CO. 1345 Jefferson Avenue, Detroit, Mich., U. S. A.

All advertisements are indexed—See page 2A



Frictionless. Saves the line.
It follows the line.

Save the Big Ones

Get one of Smith's Patent Pulley Tips and be a prize winner. Line cannot get off of pulley.

Practical—Guaranteed

Endorsed by Louis Rhead

For Fly or Bait Rod
Price, 50 Cents

TIP-TOP MFG. CO., Hartford, Conn.

Best grade cedar canoe for $20

Detroit canoes can't sink

All canoes cedar and copper fastened. We make all sizes and styles, also power canoes. Write for free catalog, giving **prices with retailer's profit cut out.** We are the largest manufacturers of canoes in the world
DETROIT BOAT CO., 183 Bellevue Ave., **Detroit, Mich.**

SPECIAL BOATS FOR OUTBOARD MOTORS

Our years of experience have enabled us to build the very best boat on the market for use with outboard motors. Strong, staunch—able to resist vibration—seaworthy and fast. Over 100 of these boats sold last summer.

For years we have been recognized as one of the best boat builders in the Northwest. Over 8,000 of our rowboats now in daily use, in every State in the Union. You can't make a mistake in buying here.

Our beautiful illustrated catalog showing the entire Kidney line will be mailed to anyone sending us 6 cents to cover postage.

DAN KIDNEY & SON WEST DE PERE, WISCONSIN
Von Lengerke & Antoine, Agents, 340 So. Wabash Ave., Chicago, Ill.

Attention is directed to the figure 8,000 in the next to the last paragraph above. This, in the March number, was, by a typographical error, printed "800." The correct figure is "8,000" as above. FIELD AND STREAM.

THERMOS

MORE than ten million Thermos vessels are in use throughout the civilized world by motorists, yachtsmen, travelers, explorers, hunters, fishermen, picnickers, office workers, and in lunch kits by children at school and workingmen at the factory.

Every member of the family from infancy to old age has daily use for Thermos. It is indeed a good servant, both in and away from home.

Thermos serves you right,
food or drink—hot or cold,
when, where and as you like.

In the nursery it saves work, worry and even life by keeping infant's milk ice cold, pure, sweet and bacteria proof.

It gives great comfort to the sick, aged and infirm—saving many steps for those who have them in care. Thermos carafes and jugs are ideal for keeping an ever-ready supply of ice-cold water, tea, coffee or other beverages for day or night use, or any liquid may be prepared in advance and kept piping hot until ready to serve.

Thermos Food Jars are convenient for keeping ice creams, salads, casseroles, chowders, etc., at the proper temperature until served.

Originally expensive Thermos vessels are now sold by leading dealers at popular prices.

Bottles from $1.00 up
Carafes and Jugs $3.00 up
Food Jars from $1.50 up
Lunch Kits $2.00 up

Do not accept as truthful representations that all temperature-retaining bottles are Thermos vessels. For your protection and ours look for the name THERMOS stamped plainly on the bottom.

Write for an interesting book on Thermos, which tells you why the same bottle keeps liquids steaming hot for 24 hours or ice cold three days.

American Thermos Bottle Co.
Norwich, Conn.
New York San Francisco Toronto

Special! 18-ft. Guide's Canoe, $30

This model "Old Town Canoe" is amazing value at $30. Built specially for sportsmen, has width for a big load, a flat floor that makes shallow draft and flat ends which give greater stability and speed. Ribs and full length planking of seasoned cedar, other parts of spruce and ash or oak. Altogether an honestly built canoe without ornaments, but guaranteed for wear and satisfaction. You should order at once. 4,000 canoes ready to ship. All models, all prices. Dealers everywhere.

OLD TOWN CANOE CO.
415 Middle Street, Old Town, Maine, U. S. A.

Send now for catalog of canoe facts.

"Old Town Canoes"

Fits Any Boat — *Away You Go*

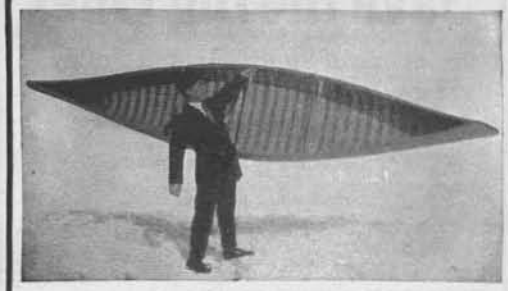
Will Drive a Boat Where'er 'Twill Float

Shallow water or weeds cannot stop you. Clamp an Aerothrust to any rowboat or canoe, give the crank a turn, and you are off at 10 to 12 miles an hour.

AEROTHRUST

will give you a taste of the most fascinating sport ever known. Burns gasoline or kerosene. A woman or child can carry, start or operate it. When not in use on boat can be used for stationary work. Get your order in early for an Aerothrust. Send for free Aerothrust book.

Aerothrust Engine Co.
338 W. Schiller Street Chicago, Illinois



WHAT?

A 15-ft. canoe so light that a man can hold it at arm's length? Why, you could take one of these back over the mountains to that little pond where you caught those nice trout.

You can get these special, light canoes of E. M. WHITE & CO., who employ only expert workmen, with years of experience, using only the best of material to produce the lightest yet most durable canoe on the market. Write for catalog.

E. M. WHITE & CO.
131-135 Water St., Old Town, Me.

$25 and UP

INDIAN GIRL CANOES
J. W. Rushton, Successor to
J. H. RUSHTON, Inc., 760 Water Street, Canton, N. Y.

Waterman PORTO

1915 Model has reversing propeller, high tension magneto and unrestricted speed control. 3 H. P. Weight, 65 lbs. **Sold direct from factory to you, freight paid.** Original outboard motor—tenth year—30,000 in use. Guaranteed for life. Fits any shape stern. Has automobile carburetor; removable bearings; solid bronze skeg protecting 10½ x 16 in. propeller. Steers by rudder from any part of the boat. Water cooled exhaust manifold; noiseless underwater exhaust; spun copper water jacket. **Demand these essentials if you want your money's worth.** *Write today for free book, showing both outboard and inboard engines. Our prices will surprise you.*

WATERMAN MOTOR CO.
311 Mt. Elliott Ave., Detroit, Mich

Makes Any Boat — A Motor Boat

JEFFERY'S SPECIAL MARINE CANOE GLUE
WATERPROOF, BEST FILLER FOR CANVAS

Any puncture or leak in boat, canoe or flying boat can be repaired in five minutes. It is as valuable to a canoeist as a repair kit to a bicyclist or automobilist. It is a Johnny-on-the-spot article that no boatman should be without. It does not dry up nor deteriorate in the can, but will be found equally ready for use in ten years as today. Friction top emergency cans, 25 cents each; by mail 30 cents each.

Send for booklet "Marine Glue, What to Use and How to Use It." At all Sporting Goods Houses.

L. W. FERDINAND & CO., 201 South St., Boston, Mass., U. S. A.

All advertisements are indexed—See page 2A

WHEN THE THROTTLE'S WIDE OPEN

Hear the rythmic s-w-i-s-h, s-w-i-s-h of the water—the soft purr of the motor—scent the brisk freshness of the air—see all the beauties of nature spread about you—enchantment! You in your Mullins Boat sweep along, swiftly—forgettingly.

MULLINS BOATS

are boats of quality. Designed by America's foremost Naval Architects. Planked from garboard to sheerstrake with clear southern cedar—paneled with mahogany—fastened with brass and copper—exquisitely finished. Powered with 2 and 4-cycle motors of the most approved type. Graceful, speedy and ultra-durable. Mullins boats cost no more than very ordinary craft.

Mullins Catalog of Steel and Wooden Motor Boats, Rowboats and Canoes will be a revelation to you—free on request.

The W. H. Mullins Company, 451 Franklin St., Salem, O.

World's largest builders of pleasure boats

"TITE-WAD" Mends Rubber Boots

Mends waders, ponchos, coats, tires—anything rubber. Fixes to stay fixed. Will not tear off after hard service. Is pure rubber gum. Just spread on like chewing gum—let dry—won't leak again. Does so much, costs next to nothing. Saves all rubber articles. Large size $1.00. Small size 60c. Postpaid.

Guaranteed to satisfy or money refunded.

RICHARD MORRIS CO.

602 Howard Building *Providence, R.I.*

Porto-PANAMA Hats

COOL AS A DROP OF DEW

Hand-woven, soft, durable, comfortable. Good as the South American Panama, but cooler, lighter, more dressy. Direct from maker to you at $1.50 postpaid. State size and send money order. Money refunded if you are not perfectly satisfied. Very stylish for Ladies this year.

MARTIN LOPEZ & CO.,
San Germán, Porto Rico.

P. O. Box 148—C17.
Reference: Bank de Economías, San Germán.

FIFTH ANNUAL

Prize Fishing Contest

Complete Announcement Begins on Page 102

POMMER—It's *the* boat for Detachable Motors

Designed by naval architects to give better service with detachable motors than any ordinary row boat. You get more speed, more safety, more comfort—and more economy. Travels level, like a launch.

It's a POMMER boat

Broad U-shaped stern supports weight of motor, so bow doesn't rise out of water. Built extra strong to stand vibration. Bilge keels make it positively non-capsizable. New "Horseshoe" Rear Seat gives nearly twice the room of ordinary seat. Spray Guards to protect passengers. Boat is carvel-planked in white pine, brass screw fastened, guaranteed not to leak. Write today for our Catalog — it's free.

Pommer Boat Building Co.
Wharf 24 Milwaukee, Wis.

FOLDING CANVAS BOATS AND CANOES

Light, easy to handle, no boathouse, leaks, or repairs. Safe anywhere, always ready, check as baggage, carry by hand. Safe for family, or bait casting standing. All sizes. Ribbed longitudinally and diagonally. Non-sinkable. Stronger than wood or steel. Used in the U. S. Navy and Army, and Canadian and Foreign Governments. Awarded First Prize at Chicago and St. Louis World's Fairs. We fit any of our boats for Outboard Motors. Catalogue.

KING FOLDING CANVAS BOAT CO. 691 Harrison St., Kalamazoo, Mich.

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

"Oh My Teeth!"

THE DREAD OF DENTISTRY IS PYORRHEA

(Sometimes called Riggs Disease)

It is characterized (among other symptoms) by bleeding, discolored gums, receding gums, sensitive teeth, bad breath and finally loosening and dropping out of the teeth.

DO YOU KNOW that 90 per cent of the people have it in the first, second or third stage—

DO YOU KNOW what causes it or know what a terrible menace it is to your health—

You should know how to recognize Pyorrhea when you see it and how to prevent and overcome it.

SEND ME YOUR NAME

and without obligation of any kind I will send you FREE my illustrated booklet about this most common but dreadful disease of the gums. Also testimonial letters from hundreds of people who have treated themselves at home under my simple directions, avoiding pain, loss of time and expense of dental chair treatment and false teeth. 23 *years' success.*

Dr. F. W. Willard, G 540 Powers Bldg., Chicago, Ill.

Joymotor

A Joy, Indeed, for All Sportsmen—

Takes all the drudgery out of fishing and shooting. Go as far as you like and back in real comfort. This wonderfully silent Joymotor runs your boat slow enough for trolling or up to 7 to 9 miles per hour. Weighs only 52 lbs. Easily carried; weight can be divided for long portages. Fits every type of boat—duck boat, fishing boat, canoe—square stern, pointed stern, or decked stern. With special bracket shaft may be run through bottom of duck boat or canoe. Attached and detached in a minute.

Sporting Goods Dealers Write for Agency

Reversing Propeller

makes Joymotor easiest controlled motor ever made. Just move steering tiller to right or left and Joymotor stops your boat within a few feet and backs it up without reversing the engine. No more danger of accidents. No drifting or paddling to shore or dock. Joymotor does all the work for you. Simple, efficient. Trouble-proof. A child can run it. You just move the tiller and Joymotor controls your boat at all times. A rudder would be useless. Study this picture.

High tension magneto, carburetor, no pump hose to get tangled up, real bearings, complete oiling system. Built to enjoy.—That's Joymotor.

Prices: Boat or Canoe Model, Battery Ignition **$65;** Magneto Ignition **$75.**

Write now for catalog giving full details and life size picture of Joymotor —"built to enjoy."

Write a postal now.

This picture shows position of steering tiller and propeller when slowing down or backing. Compare position of propeller with the large picture.

Joy Engineering Company
514 Tribune Bldg., Chicago, Ill.

You Can't Afford to Miss a Single Number! *You*, Old Sport, *Need* Field and Stream!

Jim and Bill can make a fire in a pouring rain. *You* can't—so you go shivering and supperless to bed!

You see Sam and Harry come in with big strings of bass from the very lake you have fished all day without a strike! You wonder why!

The reason is—those fellows are the "know how" kind. Years of experience have taught them the ways of the woods—how to be comfortable in all kinds of weather—the habits of big and feathered game—the times the bass will bite.

Twenty years in the outdoor world will give you that knowledge. But why not have it *now?* Why not learn the little tricks and dodges that other fellows have discovered and use them to make your *very next trip* a success?

You can do it by reading FIELD AND STREAM'S practical articles on every subject of importance to the sportsman.

Our editors pal around with those old grey-beards, those "know how" fellows—the kind who have spent years and years learning the ways of the woods, fields and streams. We pay them well to write for FIELD AND STREAM readers. There is not a single number in which two or three or more of these fellows do not tell you just the "how to do it" sort of practical information you want. A chance to acquire experience with the "hard knocks" left out!

We want to get acquainted with you!

We want you to read FIELD AND STREAM regularly during 1915, for we know that once you "get the habit," we couldn't *pay* you to do without it.

So here's a special introductory offer you can't afford to overlook. The illustration shows the "Baldwin" acetylene camp lamp. You will find it invaluable in lighting the camp, or fishing, canoeing, finding your way in the woods at night, autoing, and hundreds of other ways. A lamp of this kind is absolutely essential in any sportsman's kit.

This lamp, handsomely nickel-plated, would set you back a dollar and a half at your dealer's, but by a special arrangement we can offer you one —with a year's subscription to FIELD AND STREAM (total value $3.00)—for $2.00.

So send in the coupon today and commence your subscription with the big April "Trout Fishing Number."

May
Field and Stream,
331 4th Ave.
N. Y. City.

Gentlemen:
Enclosed find $2.00 for which please send a Baldwin Camp Lamp and Field and Stream magazine for one year to

Name.....

Address.....

This Speedy, Powerful Rowboat Motor Has Features You Will Admire

Faster than large launches

From R. C. Sanders, Madison, Wis., — "My boat is 16 feet long. Have made better than 12 miles an hour. No other rowboat motor can touch it for speed—we easily pass big launches"

Double the power
50% more speed
Does not shake boat

Battery Ignition or Built-In Magneto

If you are going to join the throng of rowboat motor enthusiasts this year, prove to your friends the wisdom of your selection by the purchase of

The Great 2-Cylinder KOBAN ROWBOAT MOTOR

If there is any satisfaction in having a smooth, quiet motor, **without the shake**—one that you can point to with pride for looks, mechanical excellence and performance, then the pleasure is yours if you select a Koban. Has two opposed cylinders which fire simultaneously. This explains absence of vibration. Simple, easy to understand, easy to start; reverses by simply pressing a button.

The Koban made great records last year—long ocean voyages—negotiated swift river currents—won trophies wherever entered in speed contests. Catalog gives full information. Write for it today.

Koban Mfg. Co., 292 South Water St., Milwaukee

Fun to Watch Little Giant Work

"I have been congratulating myself on the selection of your motor, and now I must congratulate you on the production of an engine such as the Koban. Traveled 200 miles, carrying two heavy boats with heavy baggage. The little giant did its work well."—Halifax, N. S.

Hat Off to the Koban

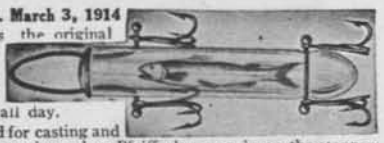
"My hat is off to you as having sent me the finest little piece of machinery I have ever handled."—Beaumont, Texas.

Want to Swap Guns?

I will pay cash for your gun, rifle, or pistol, or exchange with you for any other firearm you may want. Write me what you have, what you want, and I will make you an offer by return mail.

S. J. FRANCIS, Adams Sq., Boston, Mass.

Pfeiffer's Bait Pat. March 3, 1914



PFEIFFER'S is the original bait of its kind on the market today. It protects the minnow, keeps him alive all day. Specially designed for casting and trolling. None genuine unless Pfeiffer's name is on the stopper; Three sizes: Trout and small bass, 75c.; Bass and pike, $1.00. Muscallonge, $1.50. Sent prepaid. Sold by all reliable dealers.

Pfeiffer Live Bait Holder Company 52 Clark Court, Detroit, Michigan

DIRECTION?

A safe guide is always a good friend to the traveller—and a good compass is always a safe guide. No matter where you are, you can tell by a glance at a **Leedawl Jeweled Compass** what direction to take to your destination.

$1 The **Leedawl Compass** is world-famous for its accuracy. Is is guaranteed and has a jeweled needle—heavy and tempered steel point—silvered metal dial—screw stop and white metal non-tarnishing case.

Most dealers sell the **Leedawl Compass.** Go to your dealer first. If he does not have them, or will not order for you, send us his name and address with $1.00 and we will send you one direct from our factory.

Descriptive matter mailed on request.

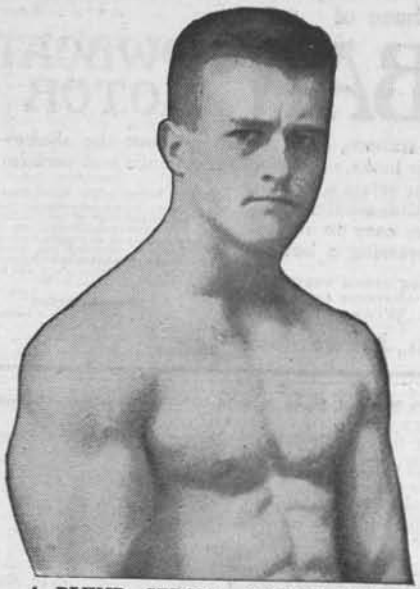
Taylor Instrument Companies
ROCHESTER, N. Y.
Made in America Compasses

"Gains 22 Pounds in 23 Days"

Remarkable Experience of F. Gagnon. Builds Up Weight Wonderfully

"I was all run down to the very bottom," writes F. Gagnon. "I had to quit work I was so weak. Now, thanks to Sargol, I look like a new man. I gained 22 pounds in 23 days."

"Sargol has put 10 pounds on me in 14 days," states W. O. Roberts. "It has made me sleep well, enjoy what I ate and enabled me to work with interest and pleasure."



A PLUMP, STRONG, ROBUST BODY

"Before I took Sargol people used to call me 'skinny,' but now my name is changed. My whole body is stout. Have gained 15 pounds and am gaining yet. I look like a new man," declared another man who had just finished the Sargol treatment.

Would you, too, like to quickly put from 10 to 30 lbs. of good, solid, "stay-there" flesh, fat and muscular tissue between your skin and bones?

Don't say it can't be done. Try it. Let us send you free a 50c package of Sargol and prove what it can do for you.

More than half a million thin men and women have gladly made this test and that Sargol does succeed, does make thin folks fat, even where all else has failed, is best proved by the tremendous business we have done. No drastic diet, flesh creams, massage, oils or emulsions, but a simple, harmless home treatment. Cut out the coupon and send for this Free package today, enclosing only 10 cents in silver to help pay postage, packing, etc.

Address The Sargol Co., 443-E Herald Bldg., Binghamton, N. Y. Take Sargol with your meals and watch it work. This test will tell the story.

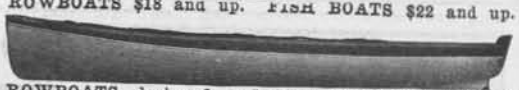
FREE SARGOL COUPON

This coupon, with 10c in silver, to help pay postage, packing, etc., and to show good faith, entitles holder to one 50c package of Sargol Free. Address the Sargol Co., 443-E Herald Bldg., Binghamton, N. Y.

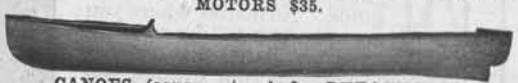
"SAFETY FIRST"

CANOES $18 and up. KAYAK (rough water) $22.

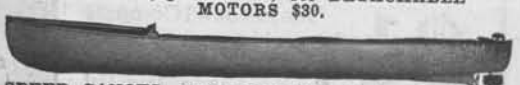
ROWBOATS $18 and up. FISH BOATS $22 and up.



ROWBOATS designed and built for DETACHABLE MOTORS $35.



CANOES (square stern) for DETACHABLE MOTORS $30.



SPEED CANOES, engine installed, 15 to 20 miles an hour, $78.

MOTOR BOATS, 16 to 24 ft. long, with engine installed, $93 and up. Without engine $53 and up.

The freight on 16, 18 and 20 ft. Motor Boats is figured according to the actual weight of the boat based on the hundred pound rate.

SEND FOR FREE CATALOG. Let us know what you are interested in.

THOMPSON BROS. BOAT MFG. CO.
26 Ellis Avenue **Peshtigo, Wis.**

All advertisements are indexed—See page 2A

SWEET Detachable Rowboat MOTOR

Long Stroke 4 Horse Power

So this is the summer you've actually decided to enjoy the fun of motor boating! And you've made up your mind to be on the safe side and buy a rowboat motor—the kind you clamp right onto any small boat—give 'er a twist—and away you go! **Great sport!**

But you want a carefree summer, so choose a **Sweet,** the motor that's built up to a standard, not down to a price.

Factory to You, Freight Prepaid

Finest and fastest. Detachable. Fits any boat. Long stroke, 4 h. p., ball bearing engine, 10½ inch weedless propeller. 3 ring piston, same as Packard car. Highly polished copper water jacket. Float feed carburetor. Battery or magneto. Reversible. Silent under-water exhaust. **Steers from any part of the boat.** Perfect control from trolling to racing. Drives 18 footer up to 10 miles per hour, 25 miles and up per gallon. Uses gasoline and oil mixed. No vibration. No noise. Needs no "tinkering." Guaranteed for life. Money back, P.D.Q., if not satisfied. Write for free catalog, owners' letters and special 30 day price.

Reversing Propeller

4 H.P.

This Is The Life

SWEET MFG. CO.
565 Griswold St.
Detroit, Mich.

Build Your Own Boat And Save 2/3

It's easy—good exercise—interesting—adds to joys of summer.

We send full-sized patterns or knocked-down frame and patterns, or complete knocked-down boat. Fully illustrated instructions always included.

Write for Brooks Boat Book—Mailed Free

See illustrations of beautiful cruisers, launches, motor boats, sailboats, rowboats, canoes, etc., that you can build.

BROOKS MANUFACTURING CO.
5905 Brooks Avenue, Saginaw, Mich.
Largest concern of its kind in the world.
Originators of pattern system of boat-building.

$3 and up Buys Boat Patterns

Only $37
for knocked-down frame and patterns for this beautiful 13-ft. oter.

Write for Boat Book

5 IN 1 JIFFEY TENT

This three and one-half pound jiffey tent made of fine balloon silk guaranteed waterproof, can be erected in any of five different forms in a jiffey.

It accommodates two people comfortably. Can be packed in a large cigar box.

$4.95 and postage

This is only one of more than a thousand articles of interest to sportsmen listed in our Spring and Summer catalogue.

"THE SPORTSMEN'S STORE"
GUS HABICH 142 E. Washington St., Indianapolis, Ind.

LIGHT AND POWERFUL ADMIRAL ROWBOAT MOTOR

Has everything that insures pleasure and avoids trouble. The strong points of all other motors with these strong points of its own: light, strong motor, strong rudder and propeller guard, the ability to steer from any part of the boat. Flywheel or gear drive Magneto or Batteries. Underwater exhaust if wanted.

ADMIRAL DETACHABLE ROWBOAT MOTOR

These are but a few of the exceptional points to be found in the Admiral. Send for our free literature and get them all. *Dealers and Jobbers Wanted.*

AFFILIATED MFG. CO. Dept. E
Main Office: Milwaukee, Wis., U. S. A.
Branches: Cincinnati and Los Angeles

L-A Rowboat Motor

Play Safe: Try it 30 Days

in your own boat. Test it thoroughly. Be your own salesman and keep the salesman's profit—and it is for you to say when the sale is completed.

Thousands of L-A Rowboat Motors sold and running everywhere. Light weight, detachable, reversible engine; speeds up to 8 miles an hour or slow enough to troll; silent muffler; steers with rudder; bronze under-water parts; can be had with either battery equipment or flywheel magneto.

Take us up on our 30 day free trial offer today; no sale unless you are satisfied. Catalog free—postal today brings it.

LOCKWOOD-ASH MOTOR CO.
534 Horton Street - - - Jackson, Mich.

Buy at the Factory Price

Direct from Factory to User

Sent on 30 Days Free Trial

DON'T GO ROWING, GO

FERROWING

ROW BOAT MOTOR

FERRO

When The Wind Gives Out

When you're "stalled" on the lake, don't kick if your fair passengers prefer to go home with the Ferro-man who comes skimming along. If the breeze comes up, you'll get in after a while—but next time, take them Ferrowing instead.

For with the FERRO, you needn't worry about wind, tide, or weather. It's "the motor that takes you there and brings you back again," swiftly and easily. Remember, too, you don't need a boat of your own—just rent one and in a minute your portable FERRO has turned it into a speedy motor boat.

When you think of rowboat motoring, think of the FERRO with its easy handling—its speed—its handsome appearance—its power, and remember the features of better design and construction that you can get only in a FERRO. The FERRO is the one rowboat motor that was built right *first* and priced *afterwards*.

Bosch High Tension Magneto—reversible and waterproof.
Genuine Float Feed Carburetor—not a mixing valve.
Scientifically Constructed Muffler—quiet, no lost power.
Weedless Propellor—gives a non-stop motor.

Any canoe fitted for FERRO more easily and cheaply than for other motors. No extra equipment needed, just our "well" plans for your carpenter.

Catalog of full information on request. Also literature of marine engines if you're interested in larger boats. If you can't find dealer, write us direct for motor.

Some good territory still open for men who can qualify as Ferro Agents. Write us today, giving references.

$85 with Bosch reversible waterproof magneto

$65 with waterproof battery ignition.

THE FERRO MACHINE & FOUNDRY CO.
546 Hubbard Avenue **Cleveland, Ohio**

Trolling *By* Motor

Now a Reality

You can use this *Federal Trolling Attachment* on the propeller of your out-board motor of any make and reduce the boat's speed to 1 or 2 miles an hour with the engine running normally. Get one and learn what real trolling pleasure means. The cost is slight.

FEDERAL ROW BOAT and CANOE MOTORS

Are as far ahead of other outboard motors as other motors are ahead of paddles.

It is a *2-cylinder engine* having *3 h. p. guaranteed.*

Its perfect balance *eliminates vibration*, making the Federal thoroughly practical for canoes. Can be attached without boring holes or even marring paint.

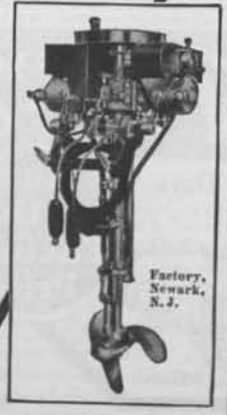
Boats and canoes are *easily reversed* within their length *without reversing engine.* Steers and reverses from any part of boat.

When beaching, launching or in shoal water, *engine* can be *swung inboard*, lifting propeller from water. No need to detach motor from boat.

Send for Catalogue Today

DEALERS and RELIABLE AGENTS are offered an unusual proposition. Address all correspondence to Washington office.

Federal Motor & Mfg. Co.
620-25 F St., Wash., D. C.



Factory, Newark, N. J.

The Hardest Wind and Rainstorm Can't Put This Lantern Out

This *New* Lantern Works Perfectly Up-Side Down

Lay it on its side—hang it bottom up—tuck it under your arm. It throws a big volume of clear—brilliant—always-steady light—makes no difference what position it's in.

The light is instantly switched on or off by simply throwing the handle up or down.

The Federal Electric Lantern

Just the thing for campers, hunters, fisherman and all others who have need for a portable light.

The genuine Tungsten filament light bulb set in the bottom of the lantern body throws the light *downward*—where every other lantern casts a shadow.

By swinging the lantern you throw a miniature electric search-light in any direction you wish.

If your dealer cannot show you this lantern send us his name and we will mail you a **Handsomely Illustrated Leaflet** fully describing it.

FEDERAL SIGN SYSTEM (Electric), Desk 104, Chicago
Dealers and Agents Wanted Everywhere (4)

All advertisements are indexed—See page 2A

MULLINS
STEEL BOATS

"Outboard Special" designed for use with detachable Rowboat Motors. Construction prevents harm to hull or stern from motor vibration. Does not "bury" at the stern—speedy—100% efficient.

SAFETY AND SERVICE

DOUBLE YOUR PLEASURES IN THE BIG OUTDOORS

On many a fair day while breakfast is in the making or just before bed time—or at fish-biting time—you'll get a lot of enjoyment out of your Mullins boat. You'll like it better than the ordinary boat because Mullins boats are built of strong, smooth steel. Light, graceful, easily handled—always dry. Guaranteed against leaks or punctures, non-sinkable and practically everlasting. You can get a Mullins boat for any purpose from a small duck boat or rowboat to a big launch.

More than 40,000 now in use.

Mullins open gunwale, canvas covered cedar canoes are now made with a "well" for use with Detachable Motors. The motor can be attached or detached in a jiffy.

Don't buy a boat (steel or wood) for any purpose until you have seen Mullins big Boat Book—a post card will bring it to you.

THE W. H. MULLINS COMPANY
481 Franklin Street Salem, Ohio
World's Largest Boat Builders

1. Reflector focuses light at any angle.
2. Exclusive patent device in base permits instant attachment anywhere — to chair, bed, door, piano, desk, table, sewing machine, writing machine, etc. etc.
3. Universal joint permits turning light in any direction.
4. Also, silk cord on reel in base allows lamp to be used anywhere within ten-foot radius of electric socket.

Keep Your Eyes Healthy

They are your most valuable possession. Don't wait until they begin to fail you and then rush madly to an oculist for advice and treatment.

Failing eye-sight is nearly always the result of strain, caused from reading in a light improperly focused. This cannot happen if your home is equipped with

The Leindorf Portable Electric Lamp $2.00

This little marvel of proper lighting puts the light where you need it, when you need it—in the hallway, in the library, on the veranda, in the garage or anywhere there is an electric light socket.

Sent on Approval—Try It at Our Risk

If your retailer does not carry it, send us his name and we will send you the lamp through him. Or send us $2.00 direct, and we will send you the lamp beautifully finished in satin brass, for ten days' trial, parcel post prepaid.

If for any reason you wish to return it at the end of that period, we will refund your money without question.

You can use this lamp wherever there is an electric light current. And is it not worth many times $2.00 to save your eyes from strain caused by poor or ill-directed light? The price of the Leindorf light puts it within the reach of every FIELD & STREAM reader. Write now to the

ATTRACTIVE OFFER TO AGENTS

Leindorf Electric Light Co., Inc., F.S.
220 West 42nd St., New York City.

Please find enclosed $2.00 in cash, money-order, or check, for which kindly send your Portable Electric Lamp on trial for 10 days to

Name.....

Address.....

SPORTING AND VACATION PLACES

Ne-na Mik-ka-ta

(Chippewa for) (Easy Portage)

A Wilderness Paradise

at Lake Vermilion, Minnesota

In the heart of the best hunting and fishing country of the Northwest. Just the place, for the real sportsman and nature lover. Lake Vermilion has 900 miles of shore line and 360 islands. Here the canoeist can explore 1500 different lakes and rivers; the hunter finds moose, deer, duck, geese, partridge, and prairie chicken; and the angler can catch big muskies, bass, pike, pickerel, brook and lake trout.

You Will Enjoy Your Vacation Better on Your Own Camp Site

at Ne-na Mik-ka-ta. Your wife and family will enjoy the forests of pine, birch, and balsam. The picturesque scenery, the parks, the docks, the bathing beaches, everything at Ne-na Mik-ka-ta will please you. Nature's best balm for tired bodies and weary minds.

We have sold many camp sites to Doctors, Dentists, Lawyers, Bankers, and other professional men, however, we have some very choice selections left, and we urge you to write at once for guaranteed description, maps, temperatures, and list of purchasers. ***Remember*** every lot sold on a "Money Back" guarantee. You make your own terms.

GRAY-WERTIN COMPANY
445 Alworth Building
Duluth, Minn.

North Star Camp

Hackensack, Minn.

On the banks of beautiful and famous Woman's Lake, 12 miles east of Hackensack, 186 miles from Twin Cities on N. P. and M. and I. R. R.; thoroughly refurnished; many new improvements; Bass, Pike, Muscallonge, etc.; plenty of boats and bait, tackle, guides, etc. Home cooking; abundance of home grown vegetables; fresh milk; butter; eggs and meat; log cabin cottages. Rates $2 per day.

W. J. SPAIN, Prop.

Muscallonge and Bass are Plentiful

as well as wall-eyed pike, croppies and northern pike in the Mantrap-Elbow Lake chain, near Dorset, Minn. At Fisherman's Lodge we have neat and comfortable log cabins, surrounding central dining hall. Plenty of good food; much of it from our own garden. Solid comfort combined with good fishing. Send for our booklet showing photos of our cabins, and map showing the many good fishing waters within easy distance. Have just bought new flotilla of boats.

FISHERMAN'S LODGE

A. O. Wambold, Prop. **Dorset, Hubbard County, Minn.**

At Pine CONE Camp

You will find the kind of bass and muscallonge fishing you have often dreamed of. The camp is finely located and commands a view of Big Sand and Loon Lakes. Separate log cabins, good food, fresh vegetables, milk and eggs. Camp outfits on hand. Good bathing beach. Partridge, ducks, prairie chickens and other small game. Good deer hunting. Reached by Great Northern Railway. Write for booklet.

THOMAS BROS., Props., **Dorset, Minn.**

CAMP IDLEWILD

Marcell, Itasca Co., Minn.

In very heart of uninhabited Lake Region and cool North Woods where it is really wild, and where Black Bass fishing is the best to be found. Crystal-water lakes, beautiful scenery, delightful climate—a perfect place for sport and vacation. Excellent deer and partridge hunting in season.

No large hotel—just a central dining place with cozy log cabins for rooms. Good accommodations $2 day, $12 week.

AMORETTI LODGE

Just the place you are looking for to spend a summer vacation. Situated in the grand old Rockies. Side trips planned with saddle-pack animals or wagon. Trout fishing and big game hunting unexcelled. For particulars write

E. AMORETTI **Dubois, Wyoming**

ALDRICH'S CAMPING RANCH. Eleventh Year

Located on South Fork Shoshone River, thirty miles from Cody, Wyo. Train arrives at Cody at noon. Two hours auto ride to ranch in the afternoon. Alt., 6,000 feet. Invigorating climate, picturesque scenery, pure mountain spring water, comfortable beds, excellent table, gentle horses.

For amusement and recreation, very fine trout fishing, small game shooting the year round, big game September 1 to November 15, horseback riding, mountain climbing, kodaking. Yellowstone Park trips, pack outfit camping trips through the mountains south and east of the Park, big game hunting parties.

Telephone connection with Cody. Mail three times weekly.

You will find ALDRICH LODGE a cool, comfortable resting place on your way to the Exposition. Make reservations early.

Write or telegraph for rates and booklet. References: F. & S. or Shoshone National Bank, Cody, Wyo. Address all letters, Ishawooa, telegrams, Cody.

S. W. ALDRICH, - - - - ISHAWOOA, WYOMING

FROST & RICHARD RANCH-RESORT

BIG GAME HUNTING, CAMPING

Sightseeing and Fishing Trips, personally guided by NED FROST and FRED RICHARD. The ranch is a ROCKY MOUNTAIN stock and hay ranch largely devoted to the care of summer tourists.

The HUNTING TRIPS are for elk, mountain-sheep, deer and bear. The CAMPING TRIPS are made over the trails with saddle and pack outfits thru all NORTHWESTERN WYOMING including the YELLOWSTONE PARK and JACKSON HOLE country. Best of references. Write for booklet to

FROST & RICHARD **CODY, WYOMING**

All advertisements are indexed—See page 2A

Remember that "See America First" means See Glacier National Park on the Great Northern Railway.

Vacations $1 to $5 Per Day.

Glacier National Park!

Season June 15 to October 1

Throughout its 1915 Season this tremendous mountainland, high up in the splendid Montana Rockies, may be enjoyed as never before.

A new mammoth mountain hotel, the "Many-Glacier," has been erected on Lake McDermott, in the Park's heart—one of America's most notable tourist hotels. The gateway hotel, the "Glacier Park"—at the Great Northern's track-side—and nine enlarged chalet groups complete a chain of hostelries thoroughly delightful.

Many new tours—by auto-stage and launch deep in among the mountains, a-saddle or a-foot over wonder trails onto the Continental Divide—of durations from one to thirty days—have been arranged.

California Expositions via Glacier Park!

By through overland trains, from Chicago, St. Paul, Minneapolis, Kansas City, via Glacier Park, Spokane, Cascade Mountains, Seattle, Tacoma, Portland—enroute a tour of Glacier National Park—aboard new steamships Great Northern and Northern Pacific a voyage down the Pacific, Portland via Astoria to San Francisco—travel this "Great Northern way" going to, or returning from, the Expositions.

"See America First"
GREAT NORTHERN RAILWAY
Glacier National Park

Send for new free Glacier Park Literature—"Hotels and Tours," "Aeroplane Map Folder" and "Walking Tours Book"—and Expositions Folder. Clip the coupon and mail.

H. A. NOBLE, General Passenger Agent, ST. PAUL
C. W. PITTS, General Agent, Passenger Department
210 So. Clark Street, CHICAGO
STEPHEN LOUNSBERY, General Agent, Passenger Dept.
1184 Broadway, NEW YORK

H. A. NOBLE, General Passenger Agent, Great Northern Railway, Department 48, St. Paul, Minn.
Please send literature about Glacier National Park and the Great Northern Railway's California Exposition tours.

Name..... Address.....
City..... State.....

Have a Vacation Spot All Your Own

where you can take the family. A private retreat to fuss over and fix up cozily as you feel able. A place that will solve the vacation problem and prove a splendid investment besides.

North Country Place

on beautiful Lake Vermilion

offers all the vacation advantages you could desire.

Lake Vermilion, 97 miles north of Duluth, is in northern Minnesota, the greatest fish and wild game region in the whole United States. It is 35 miles long, six miles wide, has about 800 miles of wild, picturesque shore line, and contains 355 beautiful islands.

Lake Vermilion teems with gamey fish and birds; ducks and moose are abundant.

The highest point in Minnesota is on its shore line. Hay fever is absolutely unknown.

North Country Place is on a peninsula. Beautiful bathing beaches on both sides, sheltered by islands. Lays high and well drained. Ideal for bathing and boating, fishing and hunting, eating and sleeping.

Send for a beautiful illustrated folder, telling all about it.

North Country Outing Co.
702 Manhauan Bldg.
DULUTH, MINN.

Gamy Fish

At Point au Baril, Georgian Bay, French and Pickerel Rivers

Black bass, muskallonge and other gamy fish in abundance. The waters of the 30,000 Islands of Georgian Bay are considered inexhaustible. Make Point au Baril your Georgian Bay center. Good hotels. French and Pickerel Rivers, only recently accessible, are each a veritable paradise for fishermen. Go there by the

Canadian Pacific Railway

Write for Booklet No. 507
W. H. SNELL, G. A. P. D.,
Canadian Pacific Railway Company
458 Broadway, New York, N. Y.

CANADIAN PACIFIC RAILWAY

Fisherman's Paradise

GRASS LAKE, MICH.

The finest Bass, Pickerel and Muscallonge fishing in Michigan. All varieties of Brook Trout. The adjacent streams, reached by launch or afoot, are alive with Speckled, Rainbow, and German Brown Trout. Reasonable rates. Send for my booklet. Great place for women and children. Perfect sanitary conditions.

H. D. SMITH -:- Bellaire, Mich.

Intermediate Lakes Region

The one satisfactory fishing place in Northern Michigan. We are pioneers in the business, handling our guests in a satisfactory manner. We furnish good board and boats at a reasonable price. Cottages for rent. All kinds of game fish—Bass, Pike, Muskies. Numerous Trout streams well stocked as well as all kinds of small fish.

For full particulars and folder write

W. C. GREEN, The Maples, Bellaire, Mich.

At Feely's Pike Lake Resort

you'll find fishing "what am." The musky and bass fishing can't be beaten. Ten cottages in addition to the hotel. Running water. Fresh milk and vegetables. Good food our specialty. Dandy boating and bathing. Good canoe trips and competent guides. Camping outfits at hand. Make your outing one to be remembered. Write for booklet.

J. E. FEELY, Mgr., Fifield, Wisconsin

Come to Idlehurst Lodge for the Summer

Situated on beautiful Round Lake, eight miles from Hayward, Wisconsin. We have 262 acres of land, our own cows, fresh vegetables and eggs. Fine table. Excellent bathing and boating. Dandy small mouth bass, Oswego bass, speckled and lake trout fishing in Round Lake. Muscallonge in Twin and Callahan Lakes. Season opens May 30th. Spend your vacation in the Great Outdoors. Send for booklet and rates.

C. D. BENACK, Prop.

Idlehurst Lodge **Hayward, Wis.**

Muscallonge, Trout, Bass

Fish where the fish *are,* not where somebody caught them last season. They are *here* and the fishing is actually better every year. Write to

CAMP-FIRE ISLAND CAMP
Box 25 - Grand View, Wis.

Muscallonge, Small-mouth Black Bass and Trout

At Round Lake Club, the coziest resort in Wisconsin, located on Round Lake, is the place to be May 31st with your casting lure when fishing is at its best. Good roads, boats, guides and beds. Cottage plan. Mother's cooking. Fresh eggs, butter, vegetables and cream in abundance. Write for booklet. Address

Round Lake Club, R. F. D. No. 1, Hayward, Wis.

MUSCALLONGE, BASS AND PIKE FISHING

Cedar Lodge Resort is on Squaw Lake, in the finest part of Wisconsin. Fine fishing in Squaw and ten other lakes. Good canoeing, bathing and woodland hikes. Separate cabins in addition to the hotel. Good food our specialty. Spend your vacation in the great woods. Write for circular and full information.

WILLIAM HILL, Proprietor

Cedar Lodge Summer Resort **Lac Du Flambeau, Wis.**

Do You Want to Catch a Prize Winner?

Then come to Dardis Lake for your fishing trip. We have the finest muscallonge, bass and pike fishing that you ever saw. Big ones—plenty of them waiting for you. Our rates are only $1.00 per day. Write for full particulars.

G. A. ANDREWS **Phillips, Wisconsin**

All advertisements are indexed—See page 2A

GRAND TRUNK RAILWAY SYSTEM

Algonquin Provincial (Ontario) Park

A Thoroughly Universal Vacation Territory

MIDST WILD AND DELIGHTFUL SCENERY

IDEAL CANOE TRIPS *A PARADISE FOR CAMPERS* *SPLENDID FISHING*

2,000 Feet Above Sea Level

"Nominigan Camp"

Getting Off at a Good Start

THE "HIGHLAND INN" affords fine hotel service. Camps "Nominigan" and "Minnesing" offer novel and comfortable accommodation at reasonable rates.

Write for illustrated advertising matter giving full particulars, rates, etc., to

J. D. McDONALD, 917 Merchants Loan and Trust Bldg., CHICAGO
FRANK P. DWYER, 290 Broadway, NEW YORK
E. H. BOYNTON, 256 Washington St., BOSTON
A. B. CROWN, 507 Park Bldg., PITTSBURG, PA.

G. T. BELL, Passenger Traffic Manager, Montreal
W. P. HINTON, Asst. Passenger Traffic Manager, Montreal

Are You Planning A Western Trip?

I guide parties on hunting and fishing trips in the Rocky Mountains. Many years experience in the best game country of the Rockies. Good trout fishing, finest of scenery, deer, bear, elk, goat and sheep hunting in season. If you want a camping trip or a fine head, write me for terms and full information.

CHICK GRIMSLEY VALIER, MONTANA

THE IDEAL VACATION TRIP

Take your summer vacation in the beautiful Jackson's Hole Country in Northwestern Wyoming. See the elk on the summer range. Camp upon the shores of beautiful lakes and streams. Forget your troubles and have a good time.

Special attention to hunting parties in the fall. Full information. Best of references. Write

FRED LOVEJOY, Jackson, Wyoming

SALMON FISHING

I have 3½ miles of good Salmon Fishing on the famous Nepisiquit River, and also good sea trout fishing, which I will lease in periods. There is accommodation for three or four Ladies and Gentlemen in a comfortable and well-furnished Lodge which is beautifully located and secluded, with ice house and smoking den and situated about midway of the fishing. Lodge is 9 miles from Railway station and reached over a good road. Experienced guides always on hand. For full particulars write to **H. BISHOP, Bathurst, N. B.**

Camping Tours in the Canadian Rockies

Horse and pack train through the wonderful Maligne Gorge, Rocky River Pass, Brazeau River valley to Nigel Pass, and thence to Wilcox Pass. The return will be made by another route, equally beautiful. Party will start from Jasper, Alberta, on July 9th. No physical hardships. Open to ladies and gentlemen. Fine chance for big game photography.

Mitchell-Petersen Camps, 4326 Pine St., Philadelphia, Pa.

Good Trout and Togue Fishing

at Riley Brook, New Brunswick. Also Moose, Caribou, Deer and Bear hunting. Photographing wild game. Many good canoe trips. We are opening up a new section of the country and can promise you a wonderful time.

ASA MARSTON **R. L. VANDERBECK**

Twenty years' experience as guides

Marston & Vanderbeck Sporting Camps, Riley, New Brunswick, Canada

FOR BASS, MUSCALLONGE AND PICKEREL

Fish in the French and Pickerel Rivers. Good board, comfortable quarters, fine canoe trips, daily mail. Camping parties outfitted. House boats, launches, boats and canoes for rent. Get your ticket for Pickerel Landing on the Canadian Pacific Ry. We meet you there. Write for further particulars.

M. H. FENTON, Prop.

Wanikewin Hotel **Wanikewin, Ontario, Canada**

To the Fisherman, Canoeist and Camper

ALGONQUIN PROVINCIAL PARK, ONTARIO'S

2,500,000-acre Forest and Game Preserve, offers a virgin Lakeland of 2,000 lakes and streams comparatively unfished. Rare opportunities for live game photography.

2,000 *feet elevation* *Immune from Hay Fever*
Highest and Coolest Resort in Ontario

HOTEL ALGONQUIN

at Joe Lake Station is the *Starting Point* of the direct canoe routes North and South through the Park.

The hotel affords every requisite and comfort for guests within easy reach of fine Trout and Bass fishing.

Complete Outfitting and Provisioning Store. Canoe and Boat Livery. Guides procured. Six hours from Ottawa, eight from Toronto. Pullman service.

Hotel opens June 25th, but a few fishing parties can be accommodated during May and June.

Information and booklet of

L. E. MERRELL, 500 James Street, Syracuse, N. Y.

"North and East Pond Camps"

Two Upper Famous Belgrade Lakes

Large and comfortable cabins, with and without bath. Fly and bait fishing phenomenal—40 to 100 bass per day. Trout streams nearby. Our own gardens, two automobiles, excellent roads, and only 78 miles east of Portland, or 5 hours from Boston.

Write for new descriptive booklet.

E. W. Clement, Prop., Oakland, Maine

Kidney Pond Camps

In heart of Maine Woods. Just the place to spend your outing. Separate Cabin for each party. Very best of fishing and hunting. Twenty-three fine trout ponds, handy to home camp, offer the best of fishing for all Summer. Boating, canoeing, bathing and some of the best side trips are to be had here, including the ascent of Mt. Katahdin. Best of accommodations. Fresh vegetables from our own garden. Fresh eggs, milk and butter. Canoes and boats furnished free to our guests. Reached from Norcross, Maine, on B. & A. R. R. By leaving Boston at 7 P.M. it is possible to arrive at Kidney Pond the next night. Write for Booklet and Rates.

I. O. HUNT

Hampden Maine

Belgrade Lake Camps

Situated on the Largest of the Famous Belgrade Lakes

the ideal spot for sportsmen. You will find all the fishing you want—brook trout, salmon, bass—and bully cabins with the best kind of simple, home-cooked food. Plenty of vegetables, milk, cream and fruit. Every cabin is well built, has running water and modern improvements. Make arrangements now and come early.

FRANCIS D. THWING, Prop.

BELGRADE LAKES, ME.

(Here's where the record salmon in Field and Stream's 1913 Contest was caught.)

Splendid Fly Fishing for Salmon and Trout

From the time the ice goes out—about May 1st—until late in June, we have the finest fly fishing for land-locked salmon and trout. Also trolling. This is the fishing that has made "The Rangeleys" famous all over the world. We have a group of seventeen rustic log camps on Loon Lake—where the best fishing is found—and we can assure our guests of privacy and every comfort, together with the benefits of living "close to Nature." One of FIELD AND STREAM'S grand prizes for big trout caught here. Many fine trout streams within easy distances. May we send you booklet?

J. LEWIS YORK

York Camps - Rangeley, Maine

For Fishing and Mountain Climbing

HUNTING IN SEASON

This is one of the sections of Maine where there is fishing and hunting such as made the name of Maine famous. Now is the time to make reservations for the fishing season. Come here this year for some of Maine's best trout fishing. Main Camps on west branch of the Penobscot river, out camps at Hurd Pond and Foss-Knowlton ponds. Main Camps 20 miles from Norcross, 12 miles of which is covered by steamer, the rest by canoes. Our Camps are in the real wilderness, but real solid comfort is provided our guests. We have a booklet telling all about us. May we send it?

KATAHDIN VIEW CAMPS

Waldo A. Davis, Mgr. Norcross, Maine

Address until May 10th

WEST ENFIELD, MAINE R. F. D. No. 1

See Maine First

Join one of our Tours this Summer, through "Maine's Waterways of the Wilderness," the famous Allagash and St. John River trips. See this beautiful Fish and Game region at its best. We furnish everything to make the trip a success. Talk it over with your friends and send for booklet giving places visited, side trips and cost. Remember the parties are limited to twenty, and there will be but three during the season, so it will be necessary to enroll early to secure accommodations.

Address :

Dr. G. E. HATHORNE, Mgr.

144 Central Street - Bangor, Me.

Square Tail Trout and Togue

In Spencer Lake and twelve surrounding ponds. Togue run to 15 pounds. Separate log cabins, fresh vegetables, milk and eggs from our own farm. Located in the heart of the Maine Woods, on the shore of Lake Spencer. Good bathing, canoeing and many woods trails. Partridge and duck shooting is excellent. Many deer and bear. Rates $2.50 a day; $14.00 a week. Special rate for Spring Fishing parties.

W. H. BEAN, Prop.

Spencer Lake Camps, Gerard, Maine

Camp Phoenix

NORCROSS, MAINE

Is in the heart of the best fishing and hunting country in the state. Trout fishing of the finest in Sourdnahunk Lake, Little Sourdnahunk and Sourdnahunk Stream. Black bear, moose and deer in abundance. Separate cabins, good wholesome food. Vegetables, eggs and milk from our own farm. Many fine canoe trips in this region. This is the place for your vacation. Write for booklet and prices.

C. A. DAISEY, Proprietor

Norcross Maine

All advertisements are indexed—See page 2A

LAKE SUNAPEE, NEW HAMPSHIRE

Is the place to spend your vacation. Fine salmon and trout fishing the entire season. Good canoeing and boating. Inn only 400 feet from lake, electric lights, steam heat, garage. Invigorating air. We open May 29th and close October 1st.

GEORGE E. JEWELL, Prop.

Ben Mere Inn — **Lake Sunapee, New Hampshire**

SPEND YOUR VACATION WHERE THE FISHING IS GOOD

Mattawamkeag Lake, the most entrancing spot in all the wonderland of northern Maine, stands foremost in this great sport. There's pickerel, bass, perch, trout and salmon in abundance. Good canoeing. Our camps are situated right on the lake and all have running water. Table laden with the bounties of lake, forest and farm. Big game shooting in Fall. Write for booklet.

W. W. SEWALL

Hook Point Camps — **Island Falls, Me.**

At Lake Pleasant, Maine

You will find the vacation spot you have been looking for. Best of trout fishing in this lake. Pierce Pond, where the big salmon are caught, only four miles away. Finest fishing and hunting grounds in the State of Maine. Cooking of the best. Separate cabins on the shore of the lake. Long distance telephone. Elevation 2,000 feet. Write us for further information.

J. C. MARTIN, Proprietor

Lake Pleasant Hotel — **Caratunk, Maine**

WEST CARRY LAKE CAMPS

Dead River, Me.

In selecting a place for your early Spring fishing, Summer vacation or Fall hunting, it will be to your interest to become better informed as to the brilliant possibilities at these camps.

We have individual log cabins, wood fires, excellent table, good beds, good, dry boats and a free illustrated booklet that describes it all.

R. B. TAYLOR, Prop.

THE ATTEAN CAMPS

at the headwaters of the Moose River in northern Maine, offer the sportsman and vacationist the best hunting, fishing and canoeing to be found in Maine. Finest of trout fishing. Separate cabins, excellent food. Fresh eggs, milk and vegetables. Many woods trails for the hiker. A vacation spent in this section will fit you for your winter's work. Write for our booklet.

RUEL E. HOLDEN, Prop. — **P. O. Jackman, Maine**

Round Mountain Lake Camps

Fine trout fishing both in lakes and streams. Fly fishing only. Lake recently stocked; lots of big fellows waiting for your fly. Excellent table. Separate cabins. Fresh milk, eggs and butter. Good bathing and canoeing. Scenery as fine as can be found. Good hunting for deer, bear and partridge in season. Write us for booklet.

DION O. BLACKWELL, Prop. — **Round Mountain, Maine**

Finest of Salmon, Lake Trout and Bass Fishing

at Green Lake, 14 miles from Bangor, Maine. This lake is one of the most beautiful in Maine, and well stocked with salmon, lake trout and bass. Best of accommodations at the hotel. Plenty of fresh vegetables, eggs, butter, cream. Log cabins or tents if desired. Boats furnished free. Write for illustrated booklet.

GREEN LAKE HOTEL

Andre Leyneek, Prop. — **Green Lake, Maine**

"Some" Fishing

Only five hours from Boston. Only ten from New York.

America's finest big game fishing, in

MAINE'S 1500 Forest Lakes

Salmon and trout. 6 and 8 pounders caught every day. Big bass.

Best of all spring outings. Good guides, good camps, good hotels.

Send for free booklets, "Fish and Game in Maine," "I Go-A-Fishing" and "Maine Guides." They tell you where and how to go. Address

VACATION BUREAU

171 Broadway, Room 100, New York

New York, New Haven & Hartford R. R.
Boston & Maine R.R. Maine Central R.R.

THE BEST PLACE TO SPEND YOUR SUMMER VACATION
IS IN THE HISTORIC, PICTURESQUE AND HEALTHFUL

CATSKILL MOUNTAINS

The high altitude of this great mountain sanitarium, ranging from 2,000 to 4,000 feet above the sea, is an important factor in the selection of a summer home.

In addition to the private parks there are over 1,000 hotels and boarding houses amid the green fields and towering crags in this country of scenic beauty and wildwood charms.

The Ulster & Delaware R. R.

in connection with West Shore R. R., offers superb train service without change of cars between New York and all points in this popular summer resort.

THE CATSKILL MOUNTAIN TROUT STREAMS ARE ALWAYS POPULAR WITH THE SPORTSMEN

An illustrated Summer Book, with map of the Catskills and list of hotels and boarding houses, will be sent free on receipt of 6 cents postage
N. A. SIMS, General Passenger Agent, Kingston, N. Y.

Bear Mountain Camp

Cranberry Lake, Adirondack Mountains; canoeing, bathing, fishing, beautiful water trips; running spring water throughout, separate bathrooms for ladies, open fire places; excellent cuisine, cool verandas and homelike rooms; perfect sanitation; boats meet all trains. For rates address

J. M. BALDERSON, Cranberry Lake, N. Y.

MOWAT LODGE

on Canoe Lake Algonquin Park

Come up here and we will show you some *real fishing* for trout and bass in Canoe Lake and nine others within an hour's paddle of the Lodge. Also salmon fishing in the larger lakes. Canoe trips to all parts of the Park. Good guides. First-class table and beds. Terms moderate. Don't waste your vacation—write us for booklet.

J. S. FRASER, Mowat P. O., Canada

LAKE OF MANY ISLAND CAMPS

are new and away from the old worn trails, lying in the district between Algonquin National Park of Ontario, Canada, and the Georgian Bay, with unexcelled small-mouth black bass and trout fishing, also good deer hunting. My home camp is most comfortable and delightfully situated on the Lake of Many Islands, no settlement near. Our recent guests enjoyed the trips to my camps at the outlying lakes. There you will also find ideal fishing and hunting. Our table is supplied with excellent food, all fresh from our farm and garden. Also clear, cold spring water. We'll take good care of you. Write now for rates and reservation.

FRED J. SCHMELER, Prop., Magnetawan P. O., Ontario, Canada.

SALMON FISHING

Have several excellent pools on the Margaree River, Nova Scotia. My services as guide, with fishing privileges, horse and wagon for journey to and from pools, $4.00 a day for one person, $7.00 for two, and $9.00 for three. Good accommodations. For further information address

P. A. GILLIS Margaree Forks, Cape Breton, Nova Scotia

Uganda Railway

Observation Cars pass through the Greatest Natural

Big Game Preserve

in the World.

The Highlands of East Africa have become the fashion as a winter home for Aristocrats.

Sportsmen

in search of Big Game make this district a hobby. Students of Natural History revel in this field of Nature's own making.

Most interesting literature sent free.

Address, D. G. LONGWORTH
Dewar House, Haymarket, London, S. W.

NEWFOUNDLAND

A Country of Fish and Game

A Paradise for the Camper and Angler
Ideal Canoe Trips

¶ The Country traversed by the Reid Newfoundland Company's system is exceedingly rich in all kinds of fish and game.

¶ All along the route of the Railway are streams famous for their SALMON and TROUT fishing, some of which have a world-wide reputation.

¶ Information cheerfully given upon application to

J. W. N. JOHNSTONE, General Passenger Agent

REID NEWFOUNDLAND COMPANY
ST. JOHN'S NEWFOUNDLAND

All advertisements are indexed—See page 2A

HUNTING, FISHING, CAMPING

THE CANADIAN ROCKIES offer Big Game Hunters the largest and least frequented Field in America: Big Horn, Goat, Grizzly Bear, Moose, Deer, etc., are to be found in close proximity to the Railroad.

The Lakes and Streams which abound in fish, chiefly Trout of several varieties, offer ample opportunity for the ANGLER to display his skill.

TO THE CAMPER desirous of escaping the Throng and World of Care for a few days or weeks, the Snow-capped Peaks and Beautiful Valleys of the Canadian Rockies offer a peculiar charm, nowhere else to be found.

Largest Outfitters in America:—

Branches at Lake Louise and Field, B. C.

Two Beautiful Illustrated Booklets sent upon receipt of ten cents.

Outfitting Department

THE BREWSTER TRANSPORT COMPANY, Limited

CANADIAN NATIONAL PARK **BANFF-ALBERTA**

Trout Fishing In Lake Edward

May and June are fine fishing months. No flies, no mosquitoes. Trout plentiful, rising early to the fly. Complete outfits, guides, canoes and board. Can't beat this country. Caribou, bear, partridge and duck hunting in the Fall. Send for booklet, map and rates.

LAURENTIDE HOUSE

Lake Edward **Province of Quebec, Canada**

MACKENZIE'S CAMPS

on the famous Southwest Miramichi River. Atlantic Salmon, Brook and Sea Trout Fly Fishing. Over 100 miles' Canoe Trip. Moose, Caribou, Deer, Bear and Partridge Hunting.

MURDOCK MACKENZIE

Sparkle, New Brunswick **Canada**

Telegraph Address, Bristol, N. B.

COME TO NEWFOUNDLAND

The home of salmon and caribou. Fishermen seeking salmon and sea trout will find the finest fishing at the Robinson Hotel on the famous Robinson River. From there four rivers may be fished, all with a world-wide reputation for big fish. Season opens last of May. Caribou in season.

THOMAS LEGGE, Prop.

The Robinson Hotel **Robinson, Newfoundland**

10,000 Acre Hunting Preserve

Mr. Sportsman. You who love good dogs together with plenty of game, deer, bear, fox, partridge, turkey and, last but not least, fine fishing. Natural lakes. Wanted: A few Congenial Sportsmen to join the writer in taking over ten thousand acres of land in the South. Big possibilities for future profits in land and timber.

Address: SPORTSMAN

BOX 494 **Charlottesville, Va.**

Moose, Caribou, Sheep, Grizzly, Brown and Black Bear

This variety from one camp in the best Big Game Country in America. Practically virgin. Expensive—but you get what you go after!

C. T. SUMMERSON

311 Broadway **New York City**

Bass, Lake and Brook Trout Fishing

At Blue Mountain Lake, New York. Finest bathing beach in the Adirondacks. Boating, fine walks, tennis, 1,800 feet above sea level. Separate cottages. Fresh milk, cream and vegetables from our own garden. Just the place for your Summer vacation. The scenery is wonderful. Write for circular and prices.

E. C. POTTER, Prop.

The Blue Mountain House **Blue Mountain Lake, N. Y.**

Brook Trout and Salmon Fishing

NONE BETTER IN THE ADIRONDACKS

Try Lake Meacham this season and make Lake Meacham Hotel your headquarters. Situated in the center of a tract of 7,000 acres of fine forest lands. Elevation 1,650 feet. All modern improvements, good rooms, and every comfort. Excellent table. Separate cottages if desired. Good bathing. Beautiful drives. Deer hunting in season. Write for booklet.

GEO. W. CUSHMAN, Mgr.

LAKE MEACHAM HOTEL CO., MEACHAM LAKE, N. Y.

GOOD TROUT FISHING

can be had at the Bay View Camp, at Old Forge, New York, on Fourth Lake, Fulton Chain of Lakes. Brook trout, lake trout, whitefish and bass. Season opens May 1st. Canoe and woods trips to North and South Branches of Moose River, and Indiana Creek and Red River. Comfortable camps and good guides. Good hunting during season. I do guiding in May and June, can give one or two sportsmen many fine trips and good fishing. Write for booklet.

O. C. TUTTLE, Prop.

Bay View Camp **P. O. Old Forge, N. Y.**

FOR YOUR SPRING TROUT FISHING TRIP

this year, come to The New Inlet House in the heart of the Adirondacks, situated on the banks of the east branch of Oswegatchie River, famous for its abundance of speckled trout weighing up to five and six pounds, noted for its excellent fly fishing. Good canoeing eighteen miles up the river. Milk, cream, butter, eggs, vegetables and berries from our farm in connection with hotel. Buy your ticket for Benson Mines, St. Law. Co., N. Y. Upon request a conveyance will meet you at Benson Mines, a distance of four and one-half miles from the hotel, where a welcome awaits you. There is a good automobile road from Benson Mines to hotel. Write or telephone. Address

Mr. & Mrs. F. L. MOORE, New Julet House, Wanahena, N.Y.

For Your Spring Trout Fishing Trip

this year try the justly famous old Sullivan County trout streams—the Willowemoc and the Mongaup. Restocking every year has kept these streams the most reliable for good sport of any in this section. You can put up at the Old Cooper Homestead—of high reputation for almost half a century as a fisherman's resort. A new house, all modern improvements, good rooms and every comfort—open fireplaces. Season opens April 4th. Make arrangements now and come early. Write for booklet and rates. Address

MISS ADA COOPER, De Bruce, Sullivan County, N. Y.

FOR TROUT FISHING AND BIG GAME

come to the Cold Spring Ranch. Fine trout fishing in the Gallatin River and the mountain lakes. Well-broken saddle horses for side trips through the mountains. See the Yellowstone National Park by way of the Bozeman route. Mountain scenery unsurpassed. Good accommodations in separate cabins. Fresh vegetables, milk, eggs. Finest of big game hunting in Fall—Elk, deer, sheep and bear. Write for booklet.

COLD SPRING RANCH

P. F. KARST, Prop. **Salesville, Montana**

We guarantee advertising on this and opposite page provided you mention FIELD AND STREAM

Charming Vacation Spots

await you in the beautiful lake and mountain country of Northern New York reached by the

Delaware & Hudson Lines

Shortest, Quickest and Best Between New York and Montreal

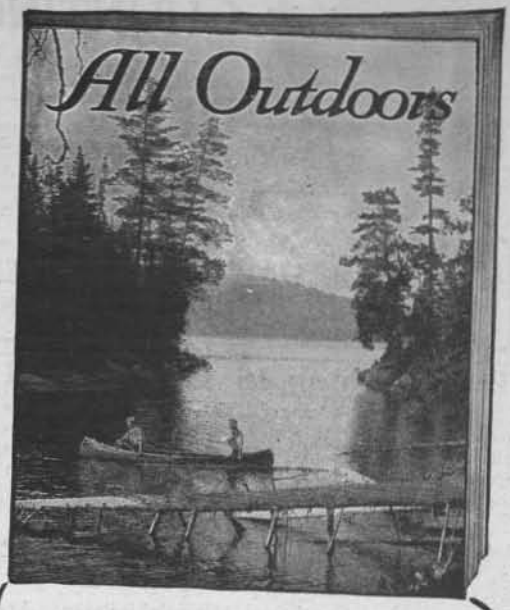
Saratoga Springs, Lake George, Lake Champlain, Ausable Chasm, Lake Placid and Cooperstown, with their historic associations and natural beauty, are among the best known of the many popular centres which attract a host of visitors during the Summer season.

"D. & H." through trains leave the New York Grand Central Terminal. Summer passengers on the Hudson River Boat Lines can make connections with "D. & H." trains at Albany and Troy.

"A Summer Paradise" contains photographs and descriptions of hundreds of delightful places to choose from—lake resorts with boating and fishing—hotels and cottages with finest facilities for tennis and golf. Send 6c in stamps to cover mailing. Ready May 1st.

M. J. Powers, G.P.A. Albany, N.Y.
New York City Information Bureau, 1354 Broadway

"The D & H" RAIL AND STEAMER LINES



The Editor of ALL OUTDOORS has two theories about you.

If you seek entertainment through stories of fishing, hunting, adventure, you want yarns that will give you the spirit of the real thing, not crude boastings of other men's doings.

If you wish to know how to fish, camp, shoot, canoe, feed dogs, you desire that information in the clearest, most condensed form.

Buy a copy of the May number at a newsstand for 15 cents and see how the editor has suited your needs. There are special pictures and articles for canoeists.

ALL OUTDOORS, Inc., 145 W. 36th St., N.Y.

Send me ALL OUTDOORS for six months on trial. 50 cents is enclosed. ($1.00 for a year.)

Name .....

Address .....

F. & S.

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COLUMBIA

RECORDS

Double-Disc

A new list of Columbia double-disc records—including the latest dance hits—goes on sale on the 20th of every month.

65 cents is the price of more than a thousand Columbia double-disc records! And in every class of music, too! Dance, vocal, instrumental—and every record faultlessly recorded and perfect in its reproducing qualities.

Go to your nearest Columbia dealer. Today! He is waiting to play any one, or a dozen, you would like to hear. There are more than 4,000 Columbia records in the big Columbia record catalog. A complete library of music.

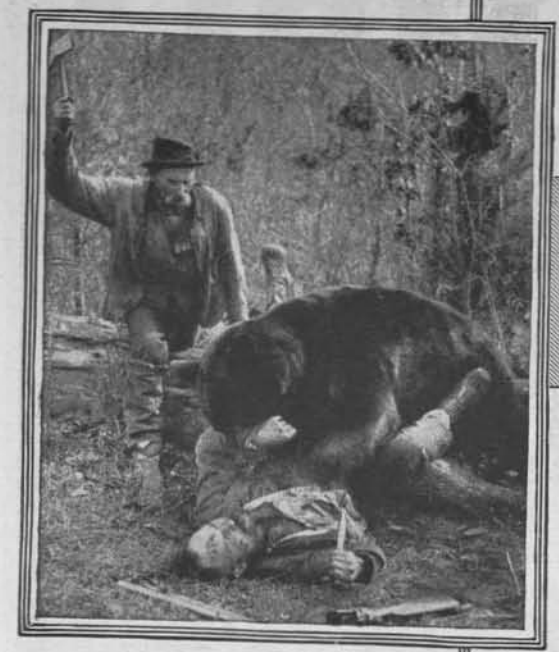
The Columbia Grafonola "De Luxe," as illustrated, is representative of the entire line of Columbia Grafonolas. At its price, $200, it typifies the perfection of every Columbia as a musical instrument. Other Grafonolas from $17.50 to $500—and on easy terms if desired.

Columbia Records — Note the Notes

COLUMBIA GRAPHOPHONE CO.

Box E277, Woolworth Bldg., New York

TORONTO: 365-367 Sorauren Ave. Prices in Canada plus duty. Creators of the Talking Machine Industry, Pioneers and Leaders in the Talking Machine Art. Owners of the Fundamental Patents. Dealers and Prospective dealers write for a confidential letter and a free copy of our book "Music Money."



Action! Plenty of It Here

Speed, sharpness of definition and reliability are all characteristic of

GOERZ
LENSES CAMERAS

Pictures that are brilliant and sharp from edge to edge — that's the kind Goerz Cameras and Lenses *always* take. Don't you want the "Goerz kind" of pictures?

Your dealer has Goerz goods. The new tariff makes prices lower — don't forget that!

Send for Special Catalog on High Grade "Lenses and Cameras."

C. P. Goerz American Optical Co.
319C East 34th Street New York City

Are you thinking about a Spring Fishing Trip?

THEN CONSULT OUR "WHERE TO GO" SERVICE

A disappointing trip is a disaster. Count not only the financial loss—in any case a considerable one—but add to it the fact that you have wasted your vacation days—the time you have looked forward to for months.

Unavoidable you say? Not by a long shot!

FIELD AND STREAM long ago realized the importance of reliable, up-to-the-minute information to the sportsman planning a trip. For the past five years we have been gathering reports on the shooting, fishing, canoeing and camping possibilities of the various sections of the United States and Canada. Inquiries are promptly answered by personally dictated letters giving fullest possible information. This service insures success.

Address all letters to

"Where to Go" Service Bureau
FIELD AND STREAM PUB. CO., 331 4th Ave., N. Y. City

FIFTH ANNUAL

Prize Fishing Contest

Complete Announcement Begins on Page 102

THE TELL-TALE CARD

If you ever saw a man (he was a REAL salesman) take from his pocket a case containing **Peerless Patent Book Form Cards** and detach a beautifully engraved, scrupulously clean, perfectly plain business card you were amazed at the absolutely smooth edges of the card. There wasn't the slighest indication of its detachment. No man ever witnessed such an act without a stirring of his curiosity. Most men test the credibility of their sense by feeling the edge of the card or ask how such a thing is possible. The card marks the man. It tells the tale you can't tell yourself. Peerless Patent Book Form Card is the best thing in cards. It doesn't appeal to NEAR salesmen. You can differentiate yourself. Send for a sample tab. See for yourself. Send now.

Appearance of tab of cards in case.

THE JOHN B. WIGGINS COMPANY
Engravers, Die Embossers, Plate Printers
72-74 Adams Street CHICAGO

NORTHWESTERN MARINE ENGINES

2 to 18 H. P.

The most compact, powerful and silent running motors for their size in existence. Sold at moderate prices and sent on thirty days trial before buying. Pay if satisfied, otherwise return at our expense. 2 H. P. with complete boat equipment $50. Other sizes in proportion. Send for 1915 Catalog.

NORTHWESTERN ROWBOAT MOTOR

Strictly high grade—nothing better made at any price. Finished in polished brass and aluminum, nickel-plated fly wheel, Battery or Bosch Magneto. Rudder swings separate from engine, and all other modern improvements. Complete with electrical equipment, $50. Send for 1915 Catalog.

$50

NORTHWESTERN MOTOR COMPANY, 1104 Spring St., Eau Claire, Wis.

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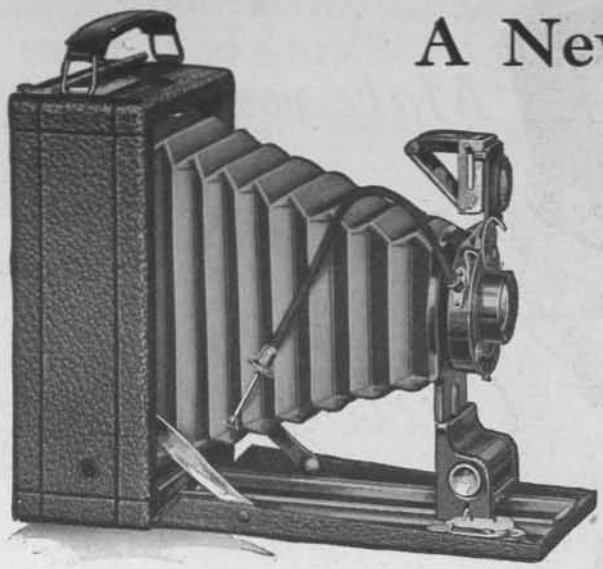

A New Camera

combining anastigmat efficiency with low cost and great simplicity

Premoette Sr.

A camera that marks a distinct advance in amateur photography. A camera that is remarkably easy to load and operate, that is simple in every detail, that is equipped with a *genuine anastigmat lens,* and yet is as low in price as the average camera for the same size pictures, with only an ordinary R. R. lens.

Every experienced amateur knows the advantage of the anastigmat lens, but the relatively high prices which have hitherto prevailed, have prevented him from owning one, in the majority of cases. The new Kodak Anastigmat lens, *f.*7.7, fitted to this camera, is equal in flatness of field, depth and definition, to the highest priced anastigmat made, and has a greater speed than any R. R. lens. And it is furnished at such a price that even a beginner can now well afford to start with an anastigmat equipment.

Prices—Premoette Sr. with Kodak Ball Bearing Shutter and Kodak Anastigmat lens, *f.*7.7, for 2½ x 4¼ pictures, $15.00. Ditto, for 3¼ x 5½ (post card) pictures, $17.50.

Get the new Premo catalogue. It's free at all dealers' or will be mailed direct on request.

Rochester Optical Division, ***Eastman Kodak Co.,*** **Rochester, N. Y.**

Make your

KODAK

Autographic

THE biggest new thing, the most important photographic development in two decades, is the Autographic Kodak. It makes the record authentic; answers the questions: *When did I make this? Where was this taken?* Every negative that is worth taking is worth such date and title, and with the Autographic Kodak you make the record, almost instantly, on the film.

It's all very simple. Open the door in the back of Kodak, write the desired data on the red paper with pencil or stylus, expose for a second or so, close the door. When the film is developed, the records will appear on the intersections between the films.

This autographic feature having been incorporated in all of the most important Kodak models, we have now arranged to take care of our old customers by supplying Autographic Backs for all Kodaks of these models.

The old camera can be brought up to date at small cost, *and there is no extra charge for autographic film.* Make *your* Kodak Autographic.

PRICE-LIST OF AUTOGRAPHIC BACKS.

No. 1 Kodak Junior,	$2.50	No. 4 Folding Pocket Kodak,	$4.00
No. 1A Kodak Junior,	3.00	No. 4A Folding Kodak,	4.50
No. 1A Folding Pocket Kodak, R. R. Type,	3.50	No. 1A Special Kodak,	4.00
No. 3 Folding Pocket Kodak,	3.50	No. 3 Special Kodak,	4.00
No. 3A Folding Pocket Kodak,	3.75	No. 3A Special Kodak,	4.25

EASTMAN KODAK COMPANY,

Ask your dealer, or write us for Autographic Booklet.

ROCHESTER, N. Y., *The Kodak City.*

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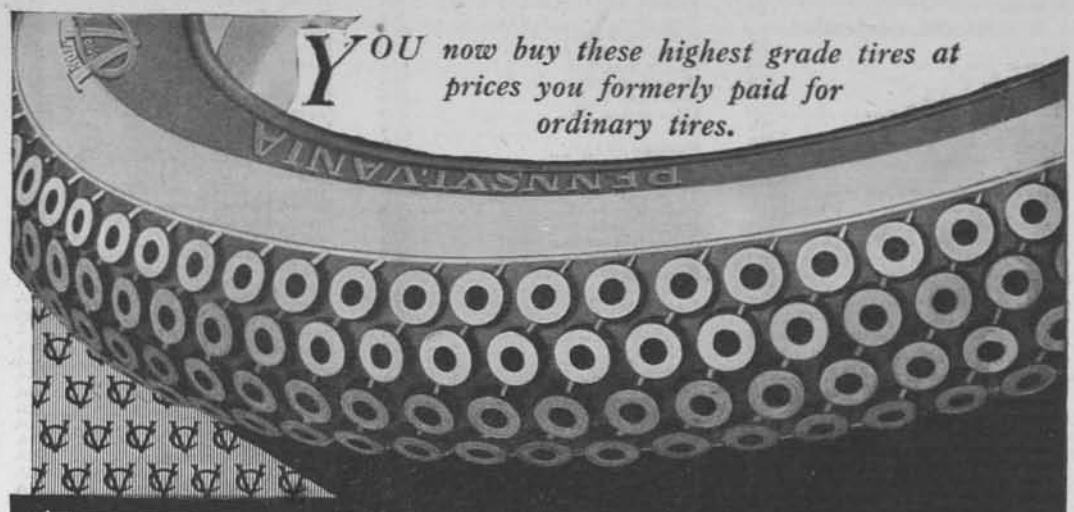

YOU now buy these highest grade tires at prices you formerly paid for ordinary tires.

CONSIDERING prices alone our downward revision of schedules is not unique. We were simply in position to more than proportionately meet the general reductions.

What brings our action on prices, however, so strongly and singularly into the limelight, is the fact that we have added fully 50% to the wear resistance of

PENNSYLVANIA Oilproof VACUUM CUP TIRES

Remember, it was our 1914 product that scored the *unapproached average mileage of 6,760 miles* in The Automobile Club of America official test. Think of what you get in the 1915—now!

Our undeviating policy to work, work, work to make our product better and better and better—instead of cheaper and cheaper—yielded us this enormous improvement.

And the transfer of our operations to the newest, best equipped tire plant in the world automatically took care of the problem of competitive prices.

Then there's the oilproof quality and the guarantee that Vacuum Cup Tires will not skid on wet or greasy pavements or returnable at full purchase price after reasonable trial.

Can you ask for greater assurance of tire economy and service than is so definitely offered in Vacuum Cup Tires? Dealers everywhere.

NON SKID

Pennsylvania Rubber Co. **Jeannette, Pa.**

Atlanta	Cleveland	Kansas City, Mo.	Omaha	St. Paul
Boston	Dallas	Minneapolis	Philadelphia	San Francisco
Chicago	Detroit	New York	Pittsburgh	Seattle

An Independent Company with an Independent Selling Policy

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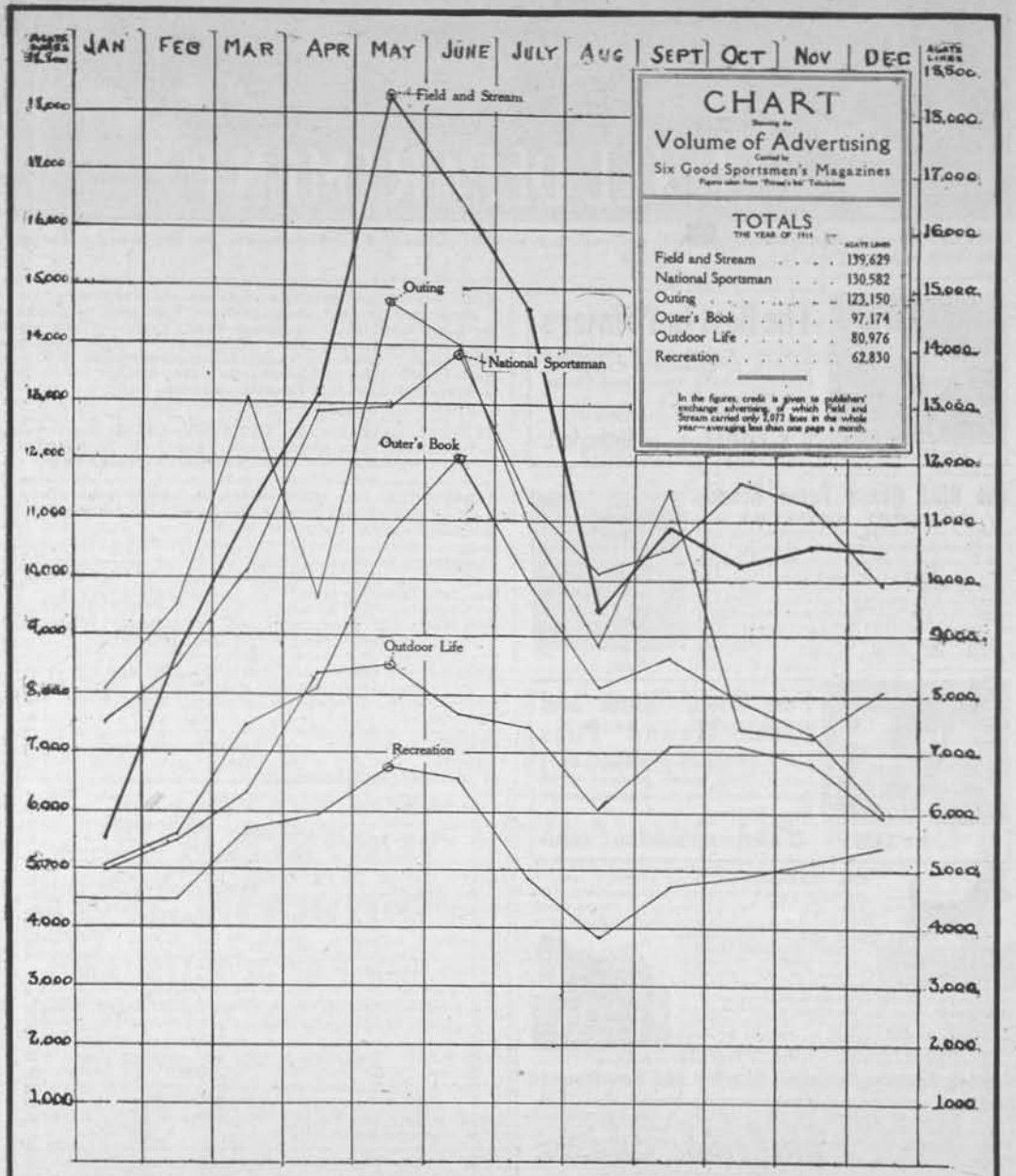

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