

Calendar No. 592.

60TH CONGRESS, }
1st Session. }

SENATE.

} REPORT
No. 580.

TO ESTABLISH GLACIER NATIONAL PARK IN MONTANA.

APRIL 29, 1908.—Ordered to be printed with map and illustrations.

U.S.C. S.
Mr. DIXON, from the Committee on Public Lands, submitted the following

REPORT.

[To accompany S. 5648.]

The Committee on Public Lands, to which was referred Senate bill 5648, reports the same back with the recommendation that it do pass.

This bill proposes to create a national park, which will be fittingly called "Glacier National Park." The territory embraced contains about 1,400 square miles, with approximately equal areas on the east and west of the summit of the main range of the Rocky Mountains immediately south of the international boundary line.

The park will embrace about forty glaciers and a large number of lakes and streams. From this area waters flow to the Hudson Bay, Gulf of Mexico, and the Pacific Ocean. The mountain scenery is of unparalleled grandeur and beauty. Mount Cleveland, the highest peak, reaches an elevation of 10,434 feet above the sea, and there are numerous rugged mountains in the proposed park ranging from 6,000 to 10,000 feet above sea level.

There is practically no agricultural land and no mineral-bearing formations of any significance or commercial value within the exterior limits of the area described in the bill. Mountain goats, mountain sheep (Bighorn), black bears, deer, elk, and moose abide in the country proposed to be embraced in the park as well as a great variety of birds, and it is believed that these game animals and birds will increase in numbers, if protected by law from interference, to such an extent as to furnish in the overflow from the park a tempting supply to sportsmen for all time to come, whereas in the absence of such protection of the breeding ground many of the animals, particularly the sheep and the goats, will become practically extinct within a very short time.

In order to open this region of superb and unique scenery for the public a few main roadways will be required along the streams, together with horse trails to points of especial interest.

8-35464

Lake McDonald, near the southwestern boundary of the proposed park, is a sheet of water of an unmatched beauty, surrounded by scenery of such signal grandeur as to make a roadway along its eastern shore extremely desirable; but the question of making the region accessible will be the subject of future consideration by Congress.

By a majority vote of the committee the boundary of the proposed reservation is changed so as to bring the west boundary of the proposed park down the middle line of the Flathead River, as the majority of the committee believe that unless some natural boundary line be established there that it will lead to much confusion as to the territorial limit of the proposed park and result in the slaughter of the elk, deer, and other animals that might use this country as a feeding ground during the summer months.

Amend the bill as follows:

Page 1 strike out all of lines 8 to 13, inclusive.

Page 2 strike out all of lines 1 to 9, inclusive, and all of line 10 down to the word "to," and insert in lieu thereof the following:

Commencing at a point on the international boundary between the United States and the Dominion of Canada at the middle of the Flathead River; thence following southerly along and with the middle of the Flathead River to its confluence with the Middle Fork of the Flathead River; thence following the north bank of said Middle Fork of the Flathead River.

Page 3, line 16, after the word "dead," insert "or,"

Page 3, line 16, strike out the words "or decaying."

Page 3, strike out all of line 17 and the word "states" in line 18.

Page 4, after the word "power," in line 3, insert the following:

And provided further, That the Secretary of the Interior is hereby authorized to grant a right of way for the construction of railroads under the provisions of the acts of Congress authorizing and permitting the construction of railroads over and across the public lands within the limits of forest reservations to any person or corporation who may desire to construct such railroads along the said Flathead River or any of its tributaries within the boundaries of said Glacier National Park.

The letters of the Secretary of the Interior and the Secretary of Agriculture in relation to the proposed bill are as follows:

DEPARTMENT OF THE INTERIOR,
Washington, April 15, 1908.

SIRS: I am in receipt of your request that you be furnished with such facts and information as may be in the possession of this Department touching the subject-matter of S. 5648, entitled "A bill to establish the Glacier National Park west of the summit of the Rocky Mountains and south of the international boundary line in Montana, and for other purposes."

In reply I have the honor to state that the lands embraced within the boundaries given in this bill aggregate 915,000 acres, of which 15,000 acres have been surveyed and the remainder are unsurveyed. This Department can not advise you as to the area within the boundaries given which may be embraced in valid locations under the mineral laws or within valid settlement claims initiated under the agricultural land laws, but existing entries embrace about 6,000 acres.

Since the land embraced in the proposed park is also embraced within the Lewis and Clark National Forest, I have consulted the Department of Agriculture before submitting this report, and learn that the area lying within the limits of the park and west of the Continental Divide is covered with a heavy growth of timber, much of which is mature and should be removed for the good of the forest; also that much of this timber is practically accessible for market, and that there will probably be a great public demand for its use in the near future.

I do not believe the citizens of Montana and near-by States should be deprived of the use of such mature timber as may be removed without injury to the forest or without interfering with the purposes of the proposed park, and that the Secretary of Agriculture should be given power to authorize the removal of such timber. The bill (S. 5648) does not permit the use of mature timber and restricts the use of it by

JUN 3 1908
D. of I.

lines 16 and 17, page 3, to actual settlers in the adjacent country within the United States. It seems to me that the privilege should be enlarged to include mature timber and extend to all citizens of the United States.

I believe that section 2 of your bill should be amended by striking out all beginning with the word "said," in line 10, to and including the word "power," in line 3, page 4, and by inserting in lieu thereof the following:

"Provided, That any use of the products, land, and resources of the park in aid of or not inconsistent with the objects of its creation and reservation may be permitted by authority of the Secretary of Agriculture, on such terms of payment, tenure, and other conditions as he may by rules and regulations prescribe; but the said Secretary is not authorized to permit such use for a longer period than fifty years, except by extension for similar recurring periods to be granted in his discretion upon the readjustment at times, if necessary, after the expiration of the original permit."

I believe that the provision in the bill leaving this particular park to supervision of the Secretary of Agriculture is proper, because he has a supervisor, rangers, and other necessary officials all ready to care for the area. For that reason the park would be fully protected without extra expense to the Government.

Unless the bill is amended as I have suggested, I do not think it should become a law.

Very respectfully,

JAMES RUDOLPH GARFIELD,
Secretary.

The COMMITTEE ON PUBLIC LANDS,
United States Senate.

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, April 16, 1908.

DEAR SIR: Senate bill 5648, with the indorsement of the clerk of the committee, is received.

The area which the bill purposes to include within the Glacier National Park is in the Lewis and Clark National Forest. The forester informs me that the lands lying within the proposed park and west of the Continental Divide are covered with a heavy growth of timber, much of which is mature and should be removed for the good of the forest. He also informs me that the flow of the streams and topography of the country make this timber accessible for market and, in his opinion, there will be a great public demand for its use in the near future.

He also says there is a large amount of available water power throughout the park and that this can not be properly utilized unless timber may be cut from some of the proposed reservoir sites, and unless other timber may be taken from land in the park near to the sites of proposed dams and flumes for the construction of such dams and flumes.

The forester thinks, and I agree with him, that the bill should permit the use of timber necessary for the construction of such reservoirs and dams, and that the citizens of Montana and nearby States where such mature timber will soon be needed should not be deprived of its use, especially since it would contribute to the good of the forest to permit its removal, and since such removal would not, if properly made, interfere with the purpose of the park.

The bill (S. 5648) does not permit the use of such mature timber and restricts the use of the dead, down, and decaying timber permitted by lines 16 and 17, page 3, to "actual settlers in the adjacent country within the United States." Since the public demand for the timber will not be confined to actual settlers, I believe that the privilege to use the timber which may be removed without injury to the forest or park should be extended to citizens of the United States.

I therefore recommend that section 2 of the bill be amended by striking out all beginning with the word "said," in line 10, page 3, to and including the word "power," in line 3, page 4, and inserting in lieu thereof the following:

"Provided, That any use of the products, land, and resources of the park in aid of or not inconsistent with the objects of its creation and reservation may be permitted by authority of the Secretary of Agriculture, on such terms of payment, tenure, and other conditions as he may by rules and regulations prescribe; but the said Secretary is not authorized to permit such use for a longer period than fifty years, except by extension for similar recurring periods, to be granted in his discretion upon the readjustment of terms, if necessary, after the expiration of the original permit."

The forester also informs me that he has learned that the Minneapolis, St. Paul and Sault Ste. Marie Railroad, a branch of the Canadian Pacific Railroad, will

probably be extended down and west of the Flathead River to develop the country west of such river and west of the proposed park. He says that he is informed that this railroad is projected to be built through Kishenehn Pass, north of the proposed park, and down Kishenehn Creek to and across Flathead River, and that there is some doubt whether or not that part of the route down Kishenehn Creek is practicable, and that it may become necessary to build such road down Starvation Creek to Flathead River.

I do not think the construction of the railroad down Starvation Creek would in any way interfere with the park and, in my opinion, if such route becomes necessary it should be made available, since the country lying west of the Flathead River should not be deprived of the means of transportation which it would afford and which is necessary for proper development of such country.

The amendment which I have suggested would enable a railroad company to secure a right of way under which it might construct a road down Starvation Creek.

Unless the bill is amended as I have suggested, I do not think it should become a law.

I have the honor to be, sir,
Very respectfully,

JAMES WILSON,
Secretary.

HON. KNUTE NELSON,
Chairman Committee on Public Lands, United States Senate.

There is also attached to this report a topographic map of the country, prepared by the Geological Survey, list of illustrations, and an article written by Mr. R. H. Chapman, of the Geological Survey, descriptive of the proposed park.

DESCRIPTION OF THE AREA OF THE PROPOSED GLACIER NATIONAL PARK.

BY R. H. CHAPMAN.

The area of the northern Rocky Mountains which lies to the north of the Great Northern Railway and to the south of the Canadian boundary is one of the most beautiful mountain regions in the world. To the east of the mountains the plains region, drained by the Missouri and Saskatchewan river systems, stretches mile upon mile of open grass land, practically treeless.

In sharp contrast to the plains rise the mountains, which, seen from the distance, present a rock wall of great steepness, extending apparently unbroken for miles. This, the eastern face of the range, is actually cut by long, deep U-shaped canyons, which have been largely formed by the great glaciers which once flowed from the mighty snow-covered peaks and ridges forming the divide between the waters of the Atlantic and Pacific oceans.

In the canyons are roaring streams, which head in the melting ice and snow, flow into placid lakes and eventually into the arroyos of the plains. Between the canyons the long, finger-like ridges rise to considerable heights, the timber-covered foot sloping steeply until a region of brush-covered broken rock is reached, which in turn leads to the base of precipitous cliffs.

The canyons at the head usually terminate in great amphitheaters, rising cliff over cliff in a stairway of tremendous proportions, many steps of which retain an ice mass slowly flowing across it, each fed from a large ice field above, until a region of huge snow banks is reached. The main Rocky Mountain mass is actually made up of two principal ranges, generally parallel, with axis in a northwesterly and southeasterly direction, the easternmost of which is the Lewis Range, which extends but a short distance across the Canadian boundary. The western, or Livingston, range, persists much farther northward. At a point about 11 miles south of Canada it becomes the watershed of the Continental Divide, which has previously followed the ridge of the Livingston Range.

These ranges are the remnants of what was once a much wider plateau-like region of rock which has been carved and shattered by the forces of erosion, principally those of the glaciers. Upon this great mass are the higher peaks, huge pyramids and blocks, with cliffs and precipices hundreds and sometimes thousands of feet plunging away to the roaring streams of the valleys, or ending in the great crevasse at the head of some glacier.

To the westward the mountains break precipitously, and from the foot of the steep, long, timber-covered ridges reach out toward the valley of the Flathead River.

Between these ridges and extending up the canyons of the higher range are many miles of lakes, joined by rushing streams similar to those on the eastern side.

The whole region is inhabited by wild animals. The streams and lakes abound in fish of many varieties. In the higher barren rock areas the white goat is found in great numbers, while on the slightly lower ridges, where some protection is afforded by stunted timber growth, brush, and slide rock slopes, the bighorn Rocky Mountain sheep has his haunts. In the valleys and on the lower spurs are many deer and moose; in places a few elk are found, and over the whole area, from high glacier and snow field to huckleberry bush of valley and flat, the grizzly roams.

All the game animals use the higher mountain districts for summer range only, as the area is too high and the snowfall too heavy to permit of winter use. It would seem advisable to have a protected area include at least that part of the North Fork Valley which lies to the east of the river in order to supply feed under all circumstances. This would not prevent the use of the west side of the valley for railway purposes, as later suggested. A portion of the plains to the east of the mountains might be added to facilitate this condition.

The experience of the Government in the Jacksons Hole, in relation to the animals of the Yellowstone Park, need hardly be referred to.

The rocks of the whole region are largely of sedimentary origin—limestone, sandstone, and shale—and the conditions are particularly adapted to the study of the structure and history of mountain ranges of these materials, as great folding of the once horizontally bedded rocks is frequently evident and faults of some importance are plain.

At one time prospectors for copper flocked to the region, but no finds were made that warrant the belief that the region is one of any value for this metal.

Indications of oil have been found on both the east and west sides of the range, but none of the explorations have proved productive.

There are numerous passes through the higher ranges. Across these the game trails lead from valley to valley; following the game came the Indians; the hunter and the trapper, looking for easy routes of travel, followed the Indians; then the Government engineers exploring and mapping, and finally the hardier of the tourists and lovers of nature. Most of these passes are closed for many months of each year by snow; some of them are available only after the use of the ax to give footing on the hard ice of glaciers lying close to the divide, but one or two of them are of such a nature as to eventually accommodate wagon roads, by which persons unfitted for the strenuous efforts now required to reach the higher country may have opportunity to view it at close range. None of them that are south of the Canadian boundary will ever be used for a railway route. At some future day the locomotive may cross from Canada to the waters of the Flathead River and wend southward to the towns and farming valleys adjacent to Columbia Falls and Kalispell and form a link with the Great Northern Railway. A route on the west side of the Flathead River is very available for the location of a railroad track. In the valley of the Flathead River are several square miles of land which are admirable for grazing purposes, but over the greater part of the area the soil is so thin as to preclude its extensive use for farming.

The area shown on the map herewith incloses about 1,340 square miles. Within these limits there are 250 lakes, ranging from 10 miles to a few hundred feet in extent; there are more than 60 glaciers between 5 square miles and a few acres in area; there are animals, plants, and rocks in numbers and quantity to satisfy the most ardent student, and views of great variety, beauty, and grandeur to gratify the artist and lover of nature.

The area is in every way suited to the purposes of a national park and game preserve.

The benefits which would come to the persons living close to or within the area would in a very short time compensate them generously for any temporary inconvenience they may experience.

REFERENCES.

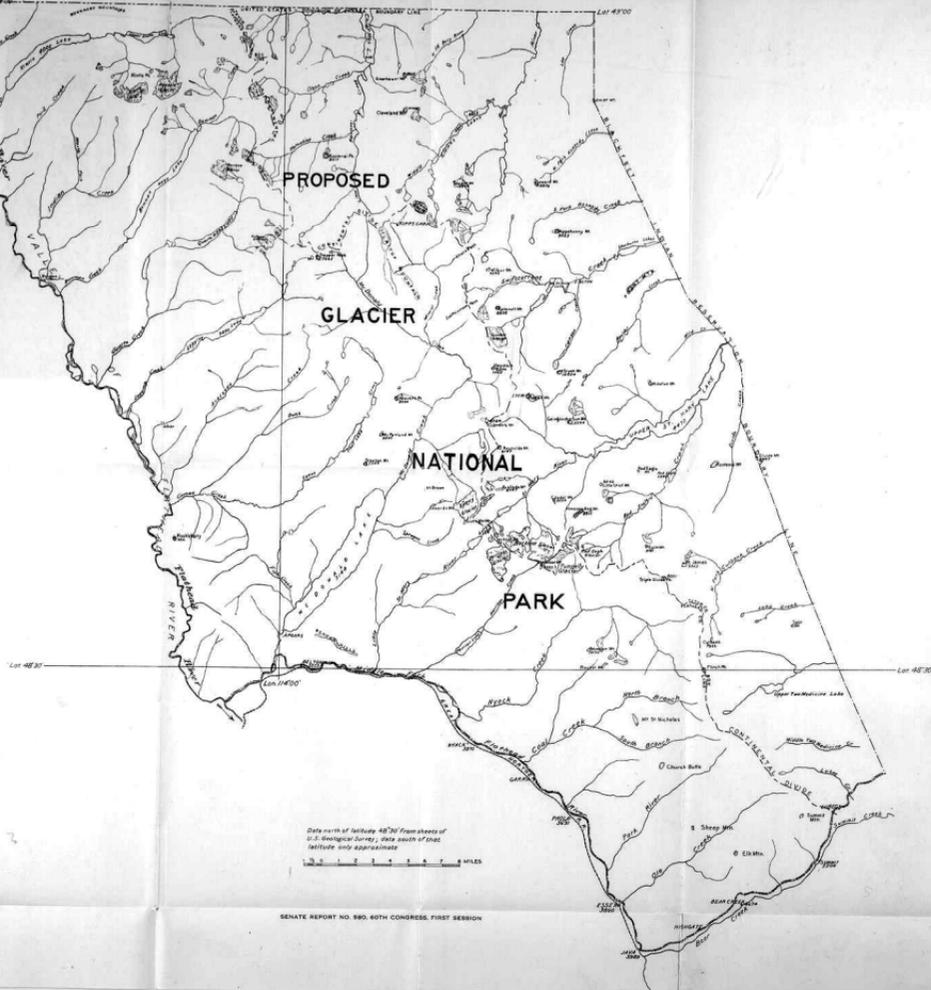
- Northern Boundary Report. U. S. C. & G. S. and U. S. G. S., pp. 45-54. B. Willis.
 Oil of the Northern Rocky Mountains. Engineering and Mining Journal, vol. 72, p. 782. 1901. B. Willis.
 Bulletin Geological Society of America, vol. 13, pp. 305-362. B. Willis.
 National Geographic Magazine, vol. 13, No. 10, October, 1902. R. H. Chapman.

THE UNIVERSITY OF CHICAGO LIBRARY
1215 EAST 58TH STREET
CHICAGO, ILLINOIS 60637
TEL: 773-936-3000
WWW.CHICAGO.LIBRARY.EDU

THE UNIVERSITY OF CHICAGO LIBRARY
1215 EAST 58TH STREET
CHICAGO, ILLINOIS 60637
TEL: 773-936-3000
WWW.CHICAGO.LIBRARY.EDU

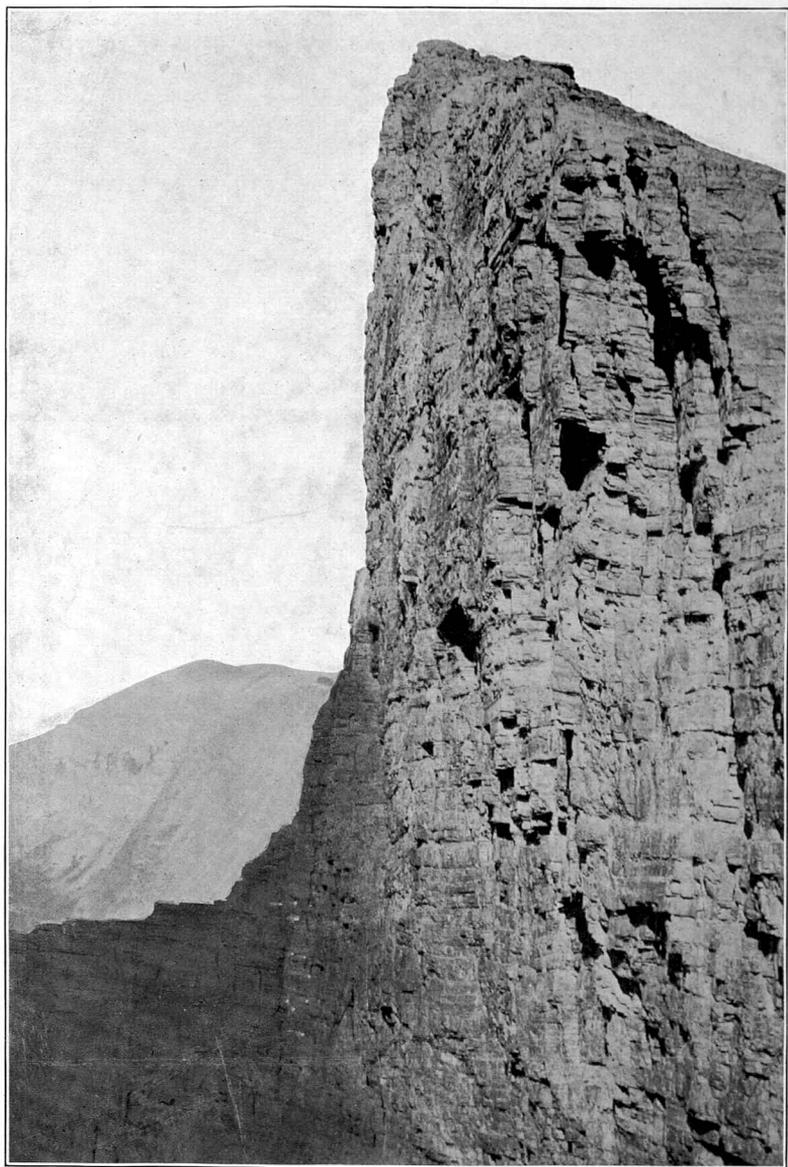
THE UNIVERSITY OF CHICAGO LIBRARY
1215 EAST 58TH STREET
CHICAGO, ILLINOIS 60637
TEL: 773-936-3000
WWW.CHICAGO.LIBRARY.EDU

THE UNIVERSITY OF CHICAGO LIBRARY
1215 EAST 58TH STREET
CHICAGO, ILLINOIS 60637
TEL: 773-936-3000
WWW.CHICAGO.LIBRARY.EDU

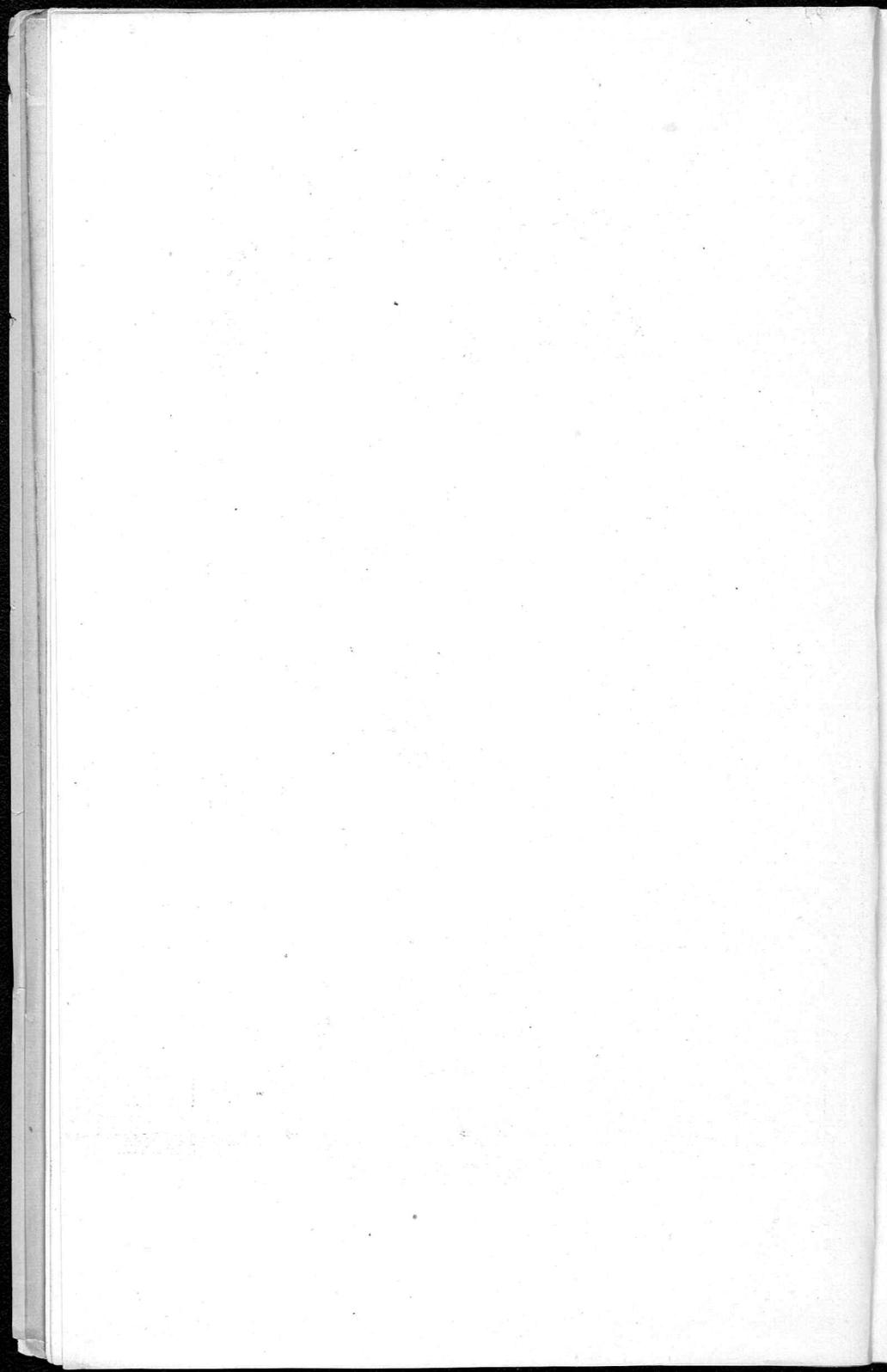


Date north of latitude 46°30' from sheets of U.S. Geological Survey; date south of that latitude only approximate.

0 1 2 3 4 5 6 7 8 9 10 MILES



GOATHAUNT CLIFF, NEAR MOUNT CLEVELAND, LEWIS RANGE.

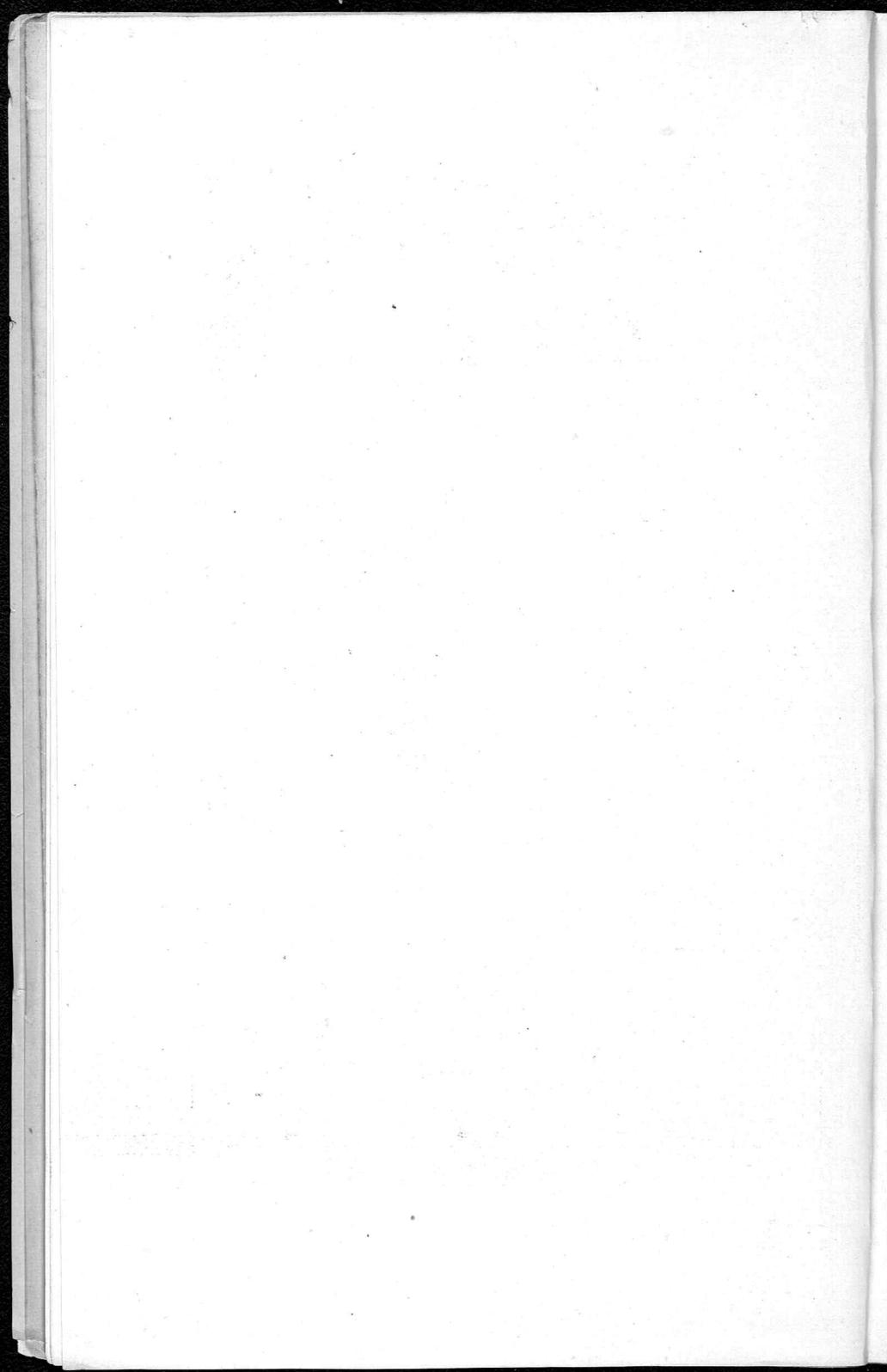


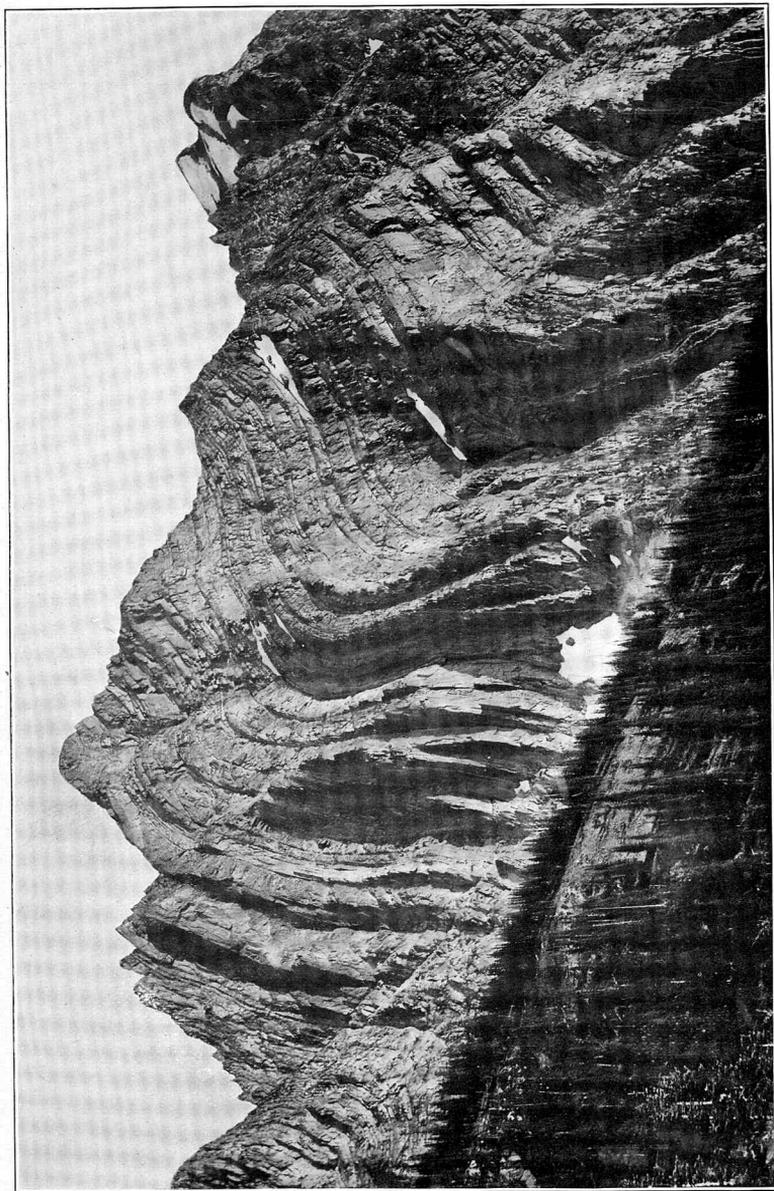


PACK TRAIN CROSSING PLAINS EAST OF MOUNTAINS, NEAR ST. MARY LAKES.

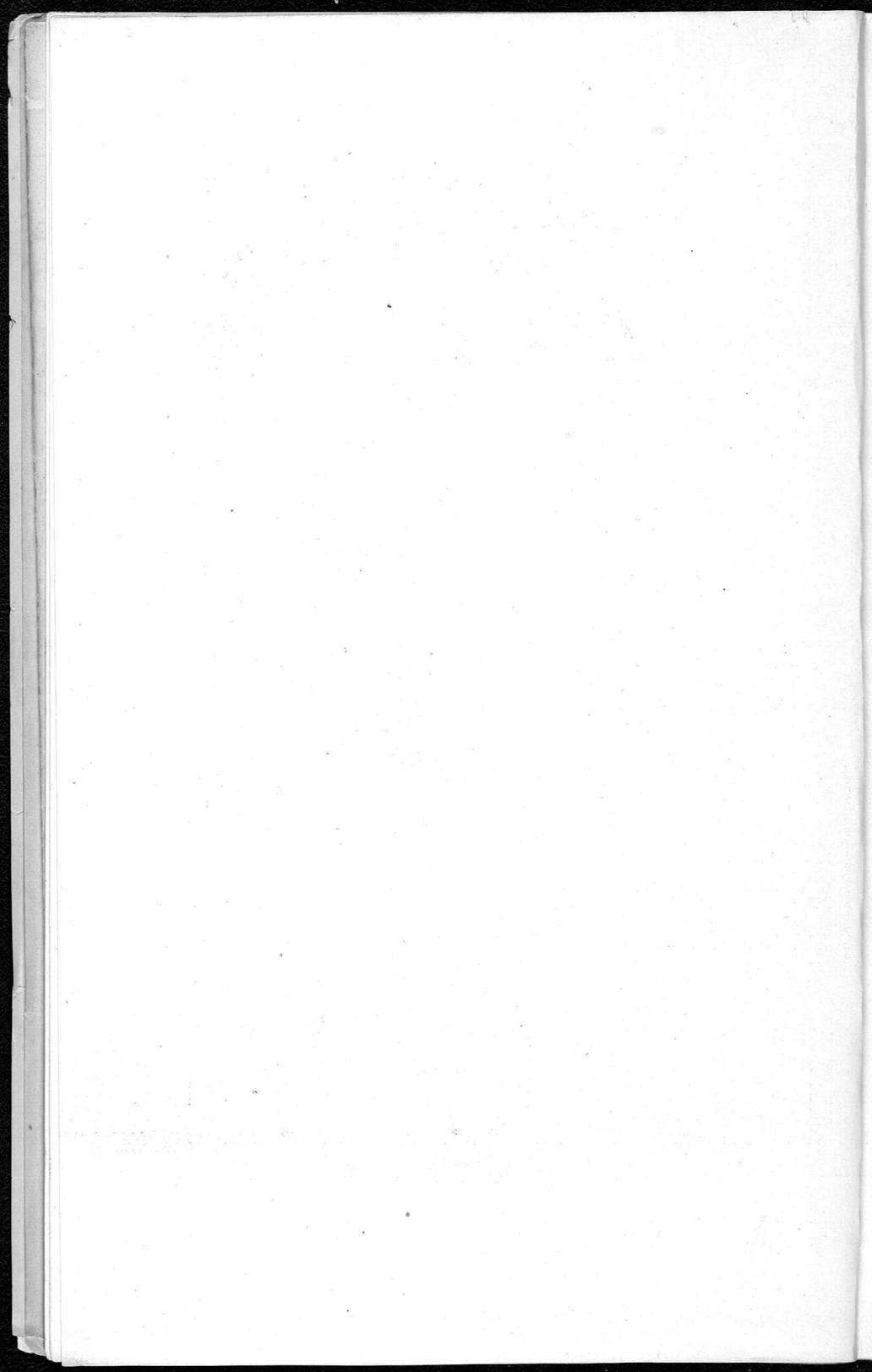


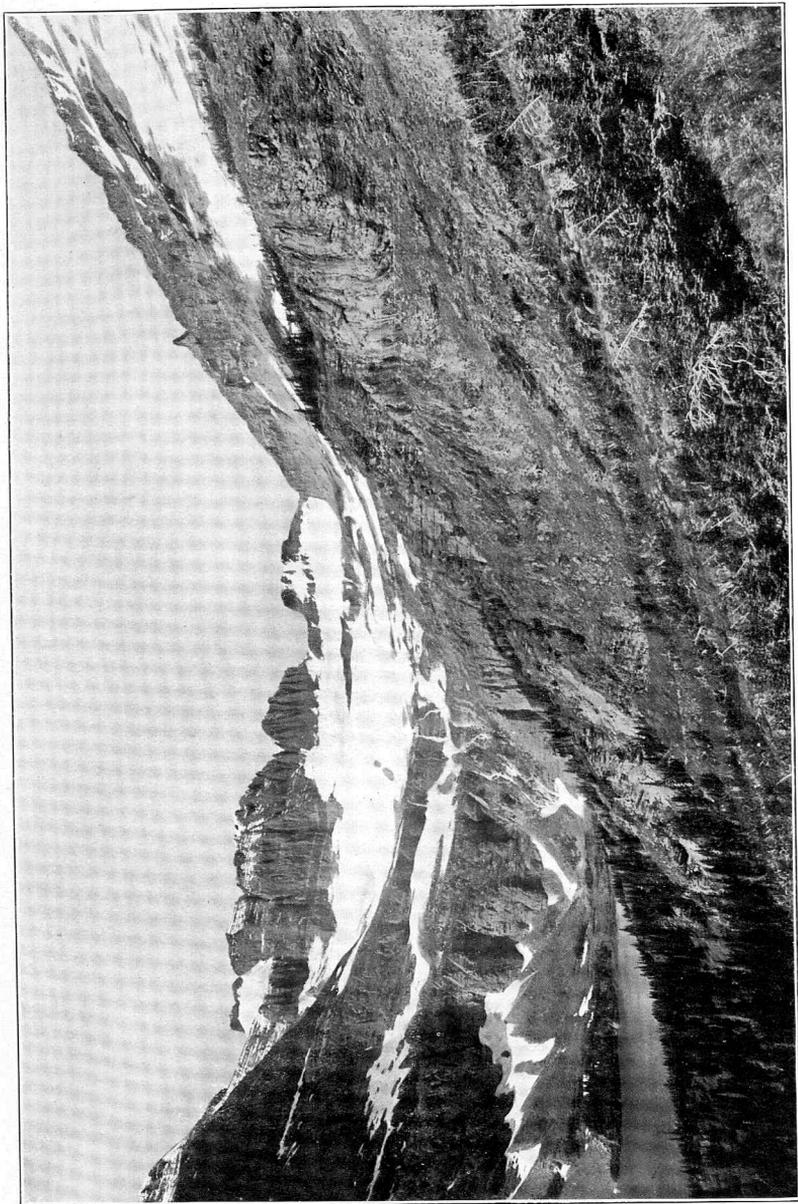
VULTURE PEAK, FROM OUTLET OF QUARTZ LAKE.



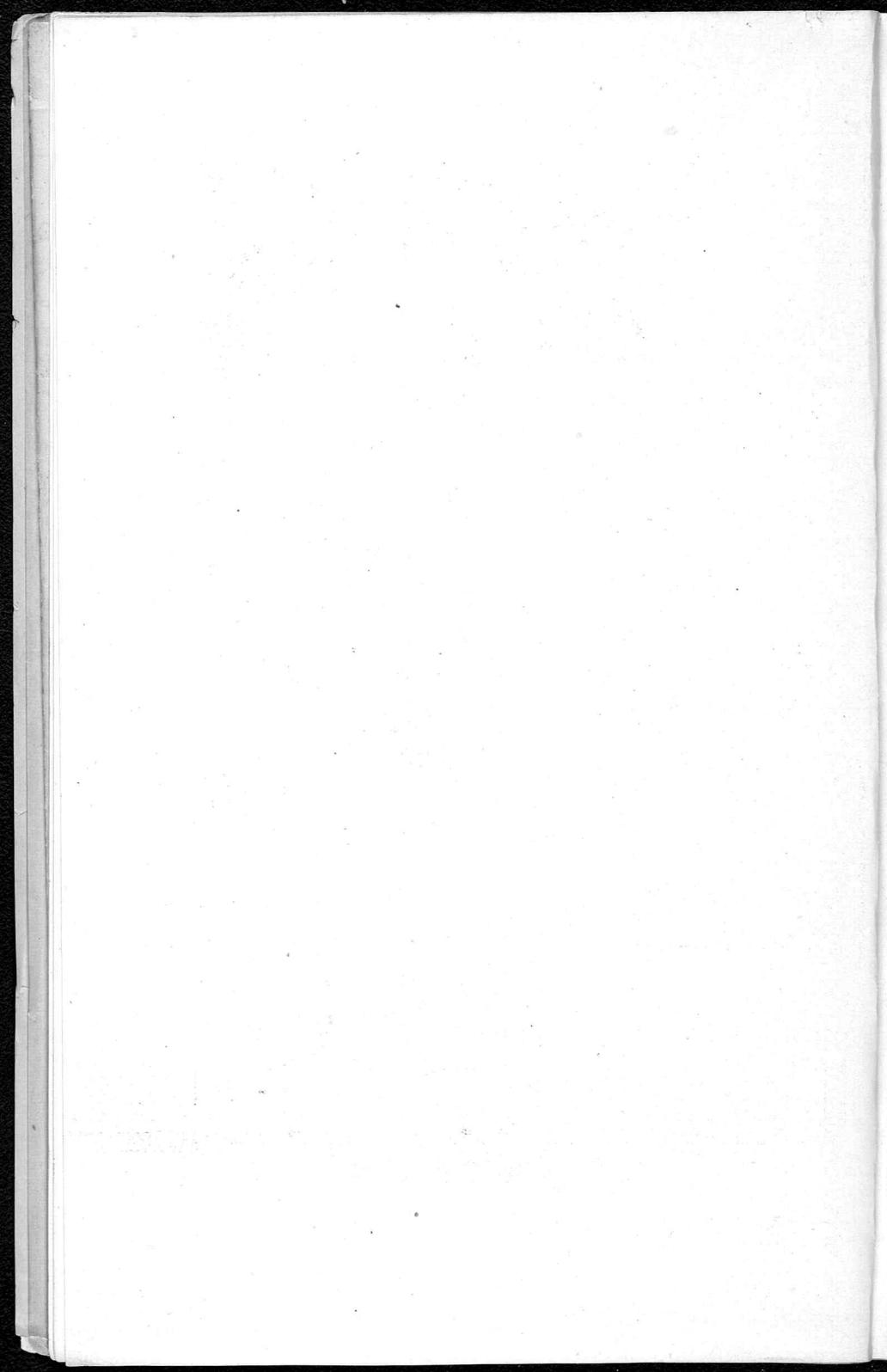


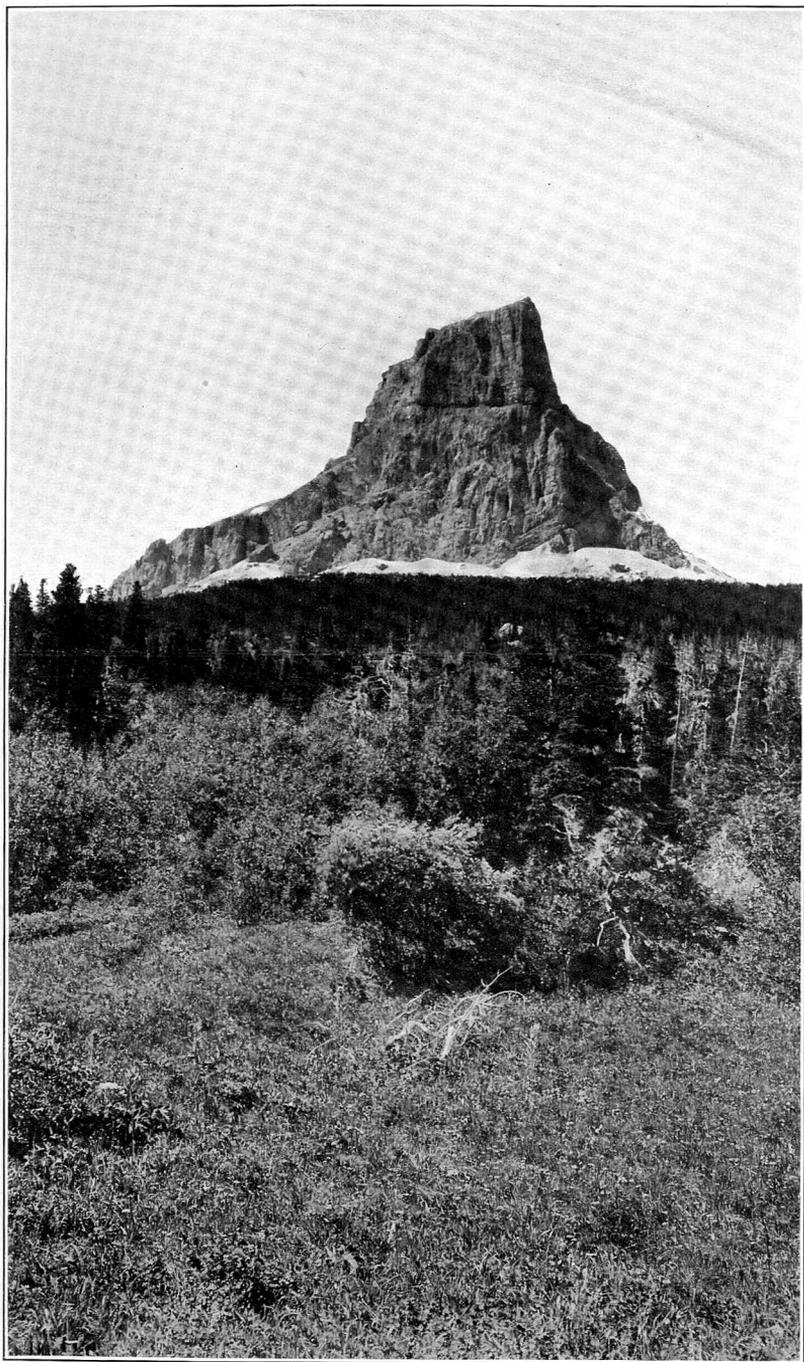
PEAK IN LIVINGSTON RANGE, SHOWING FOLDED ROCKS. FROM SNOW BANK TO SUMMIT OF PEAK IS ABOUT 2,000 FEET.



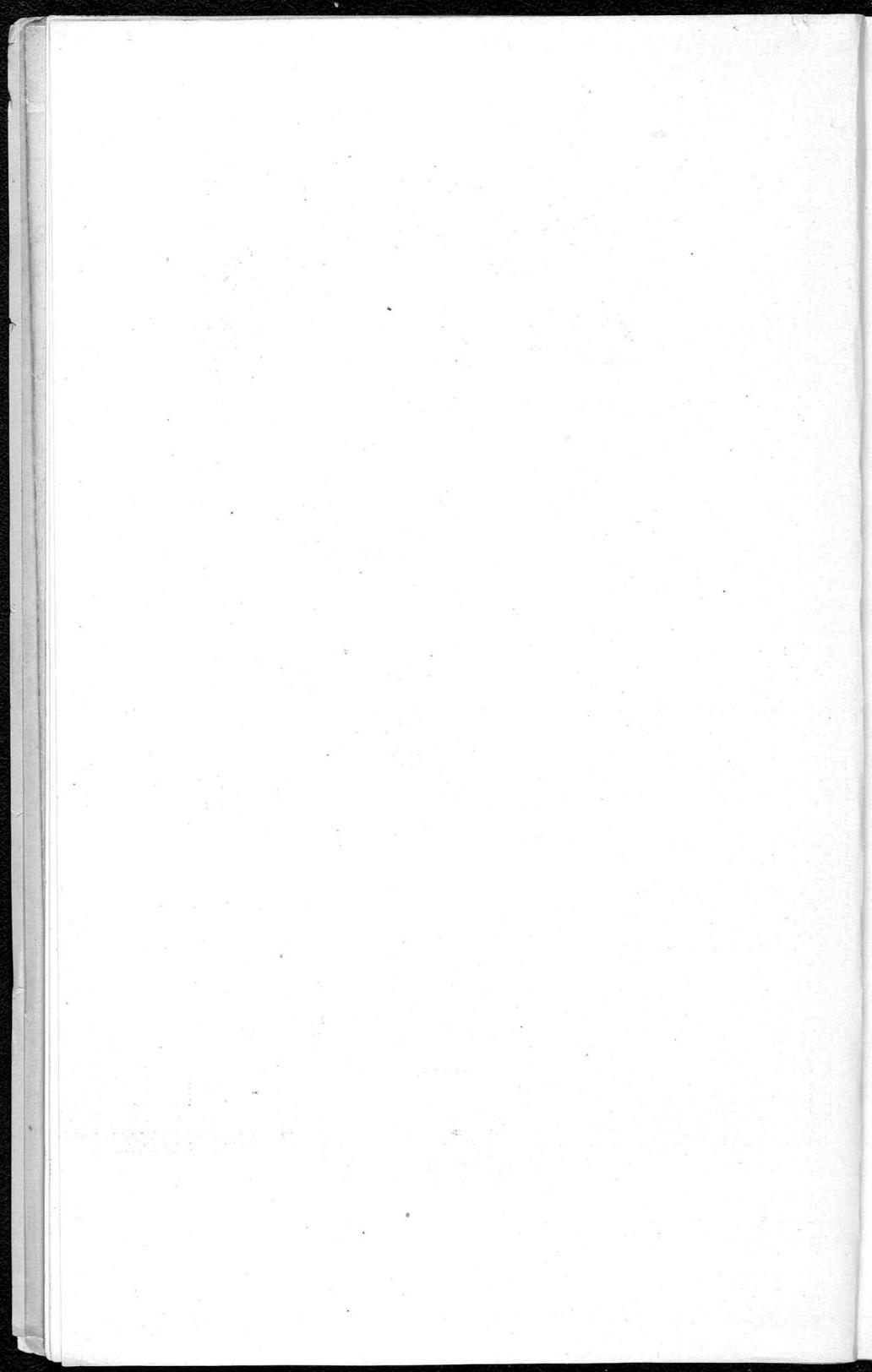


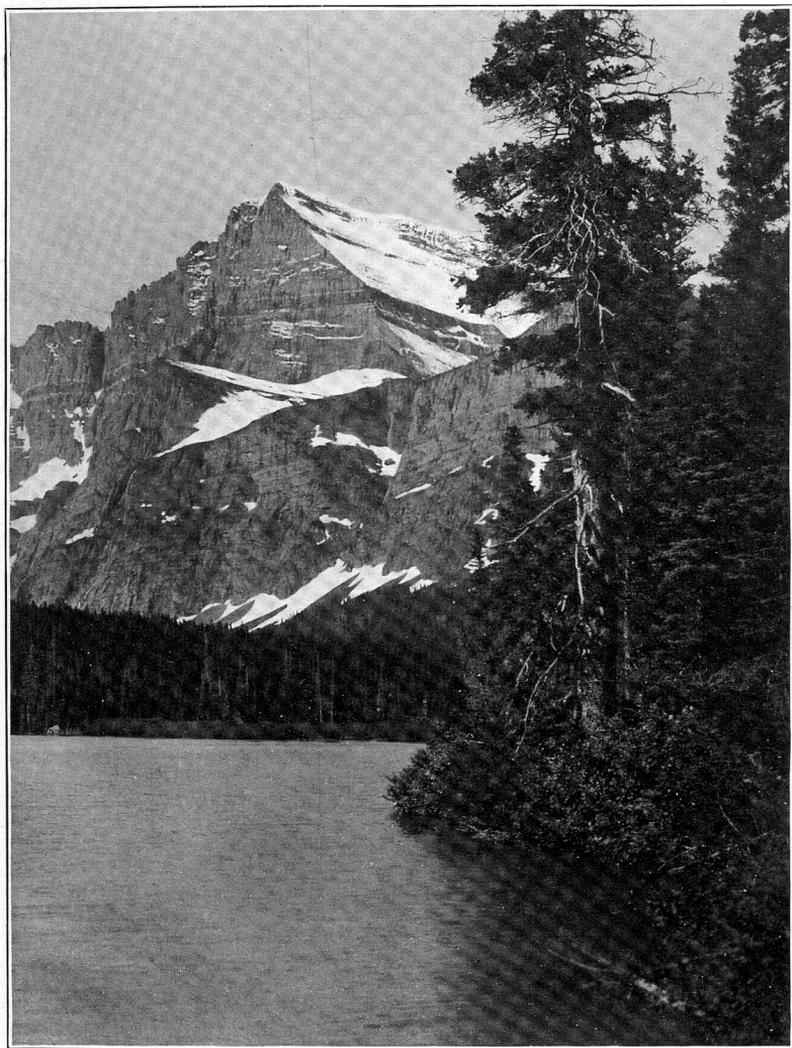
AMPHITHEATER CLIFFS AND GRINNELL GLACIER, AT HEAD OF SWIFTCURRENT VALLEY.



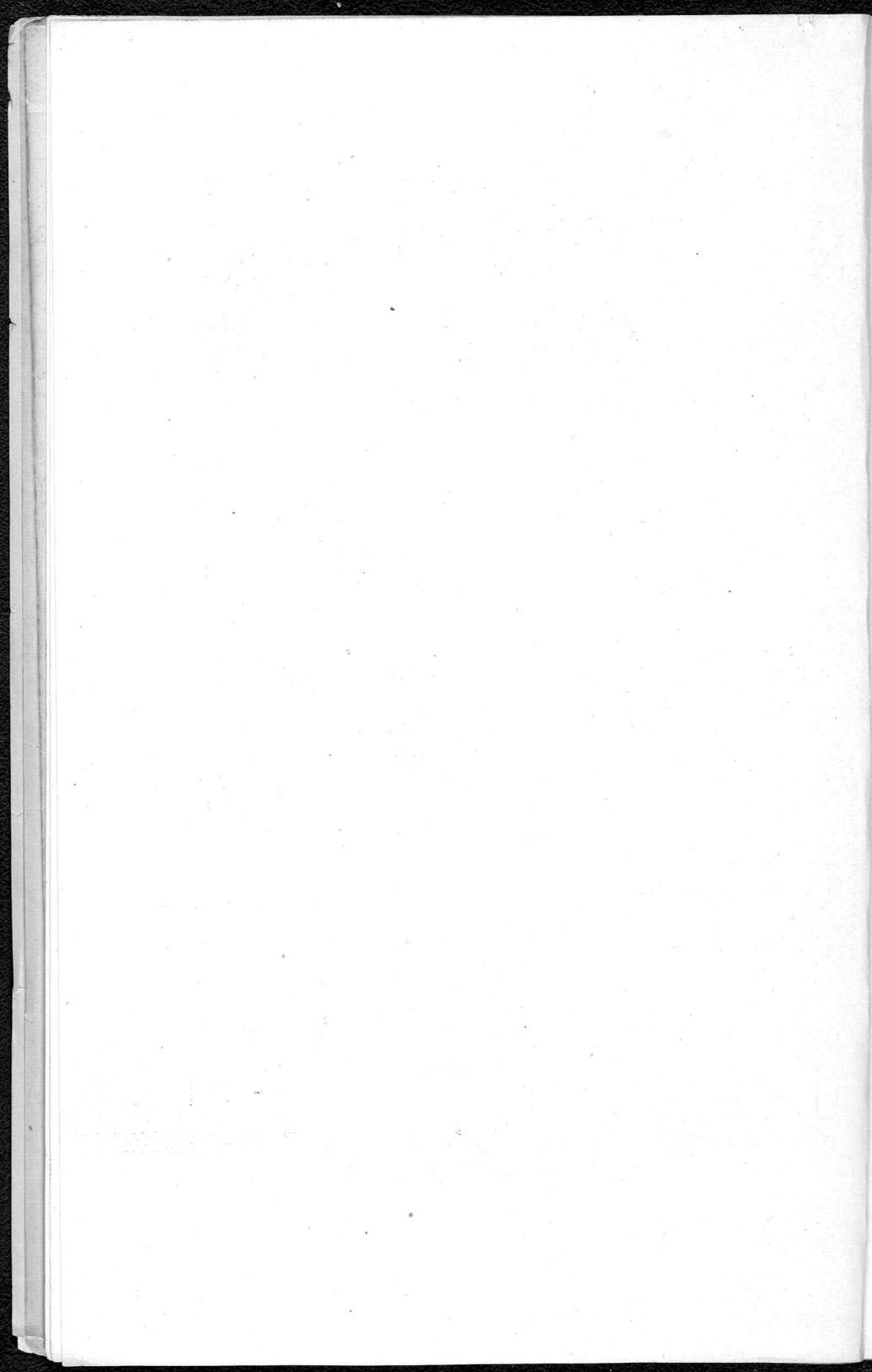


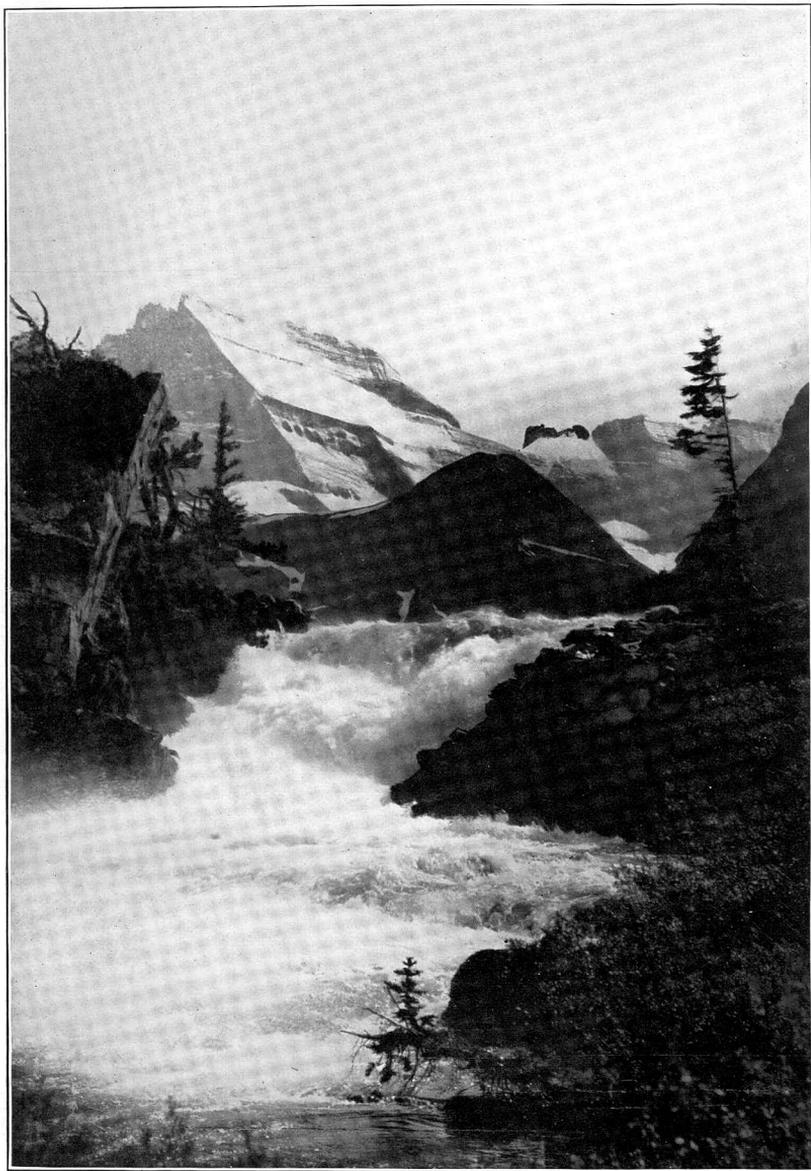
CHIEF MOUNTAIN, FROM KENNEDY CREEK VALLEY. A NOTED LANDMARK.



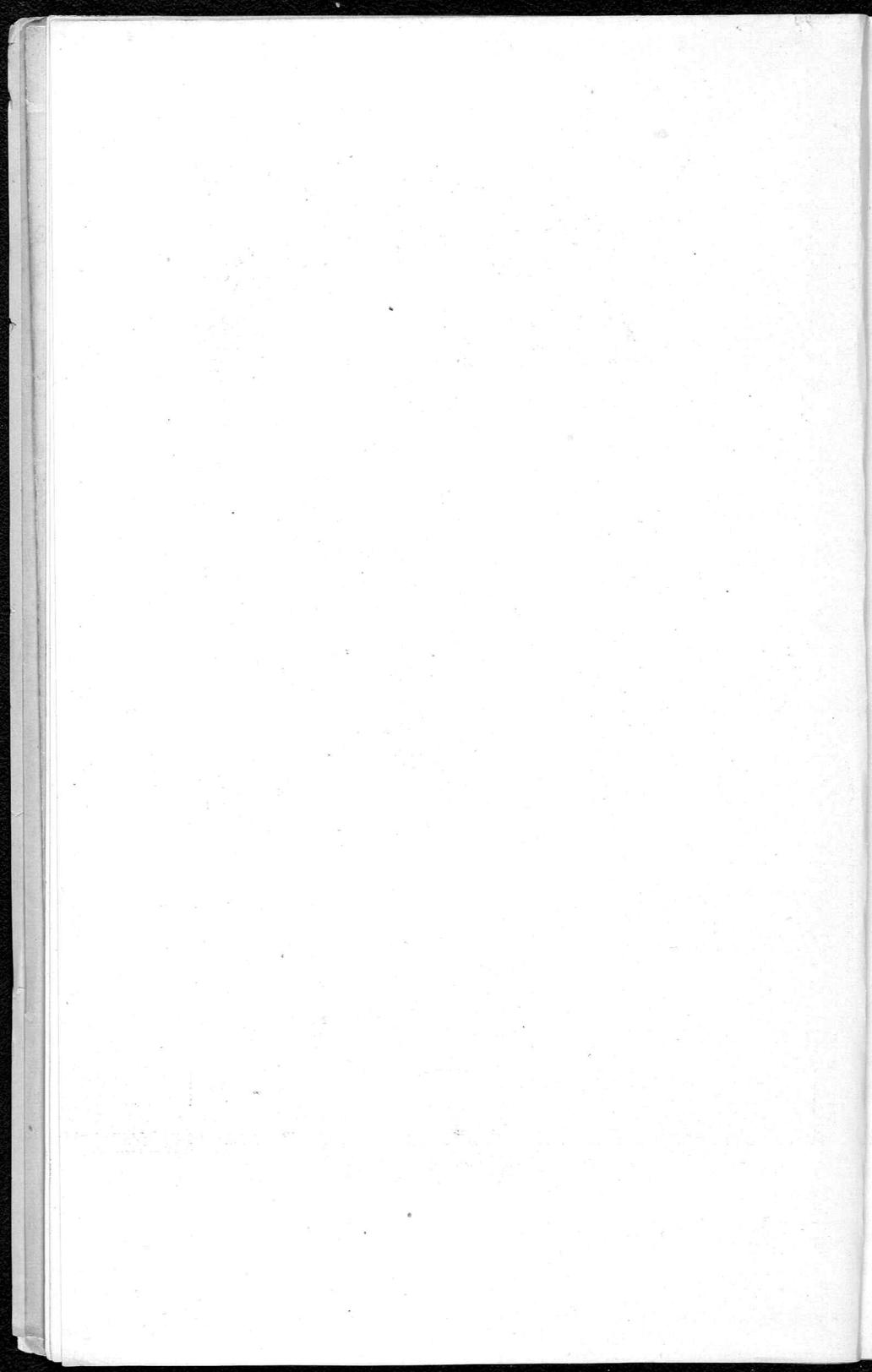


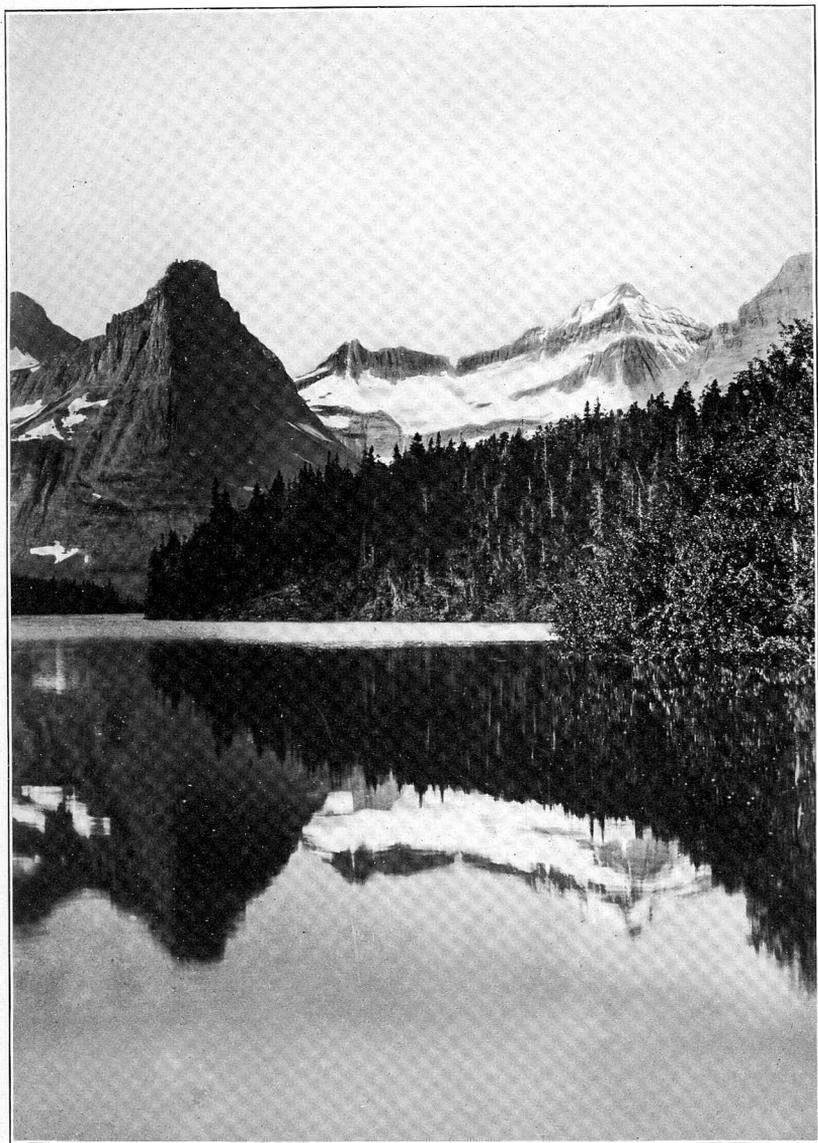
MOUNT GOULD, FROM McDERMOTT LAKE, SWIFTCURRENT VALLEY.



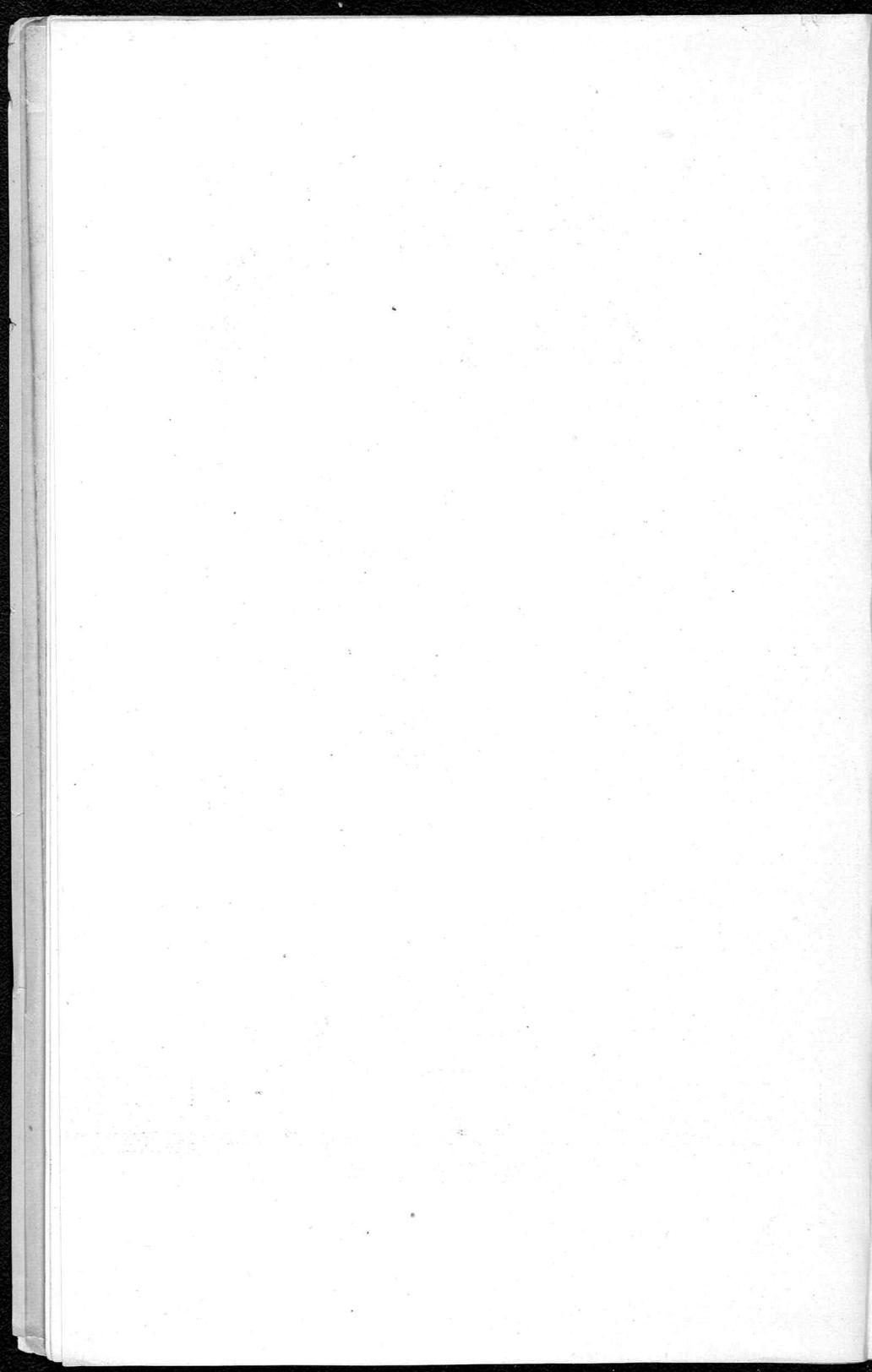


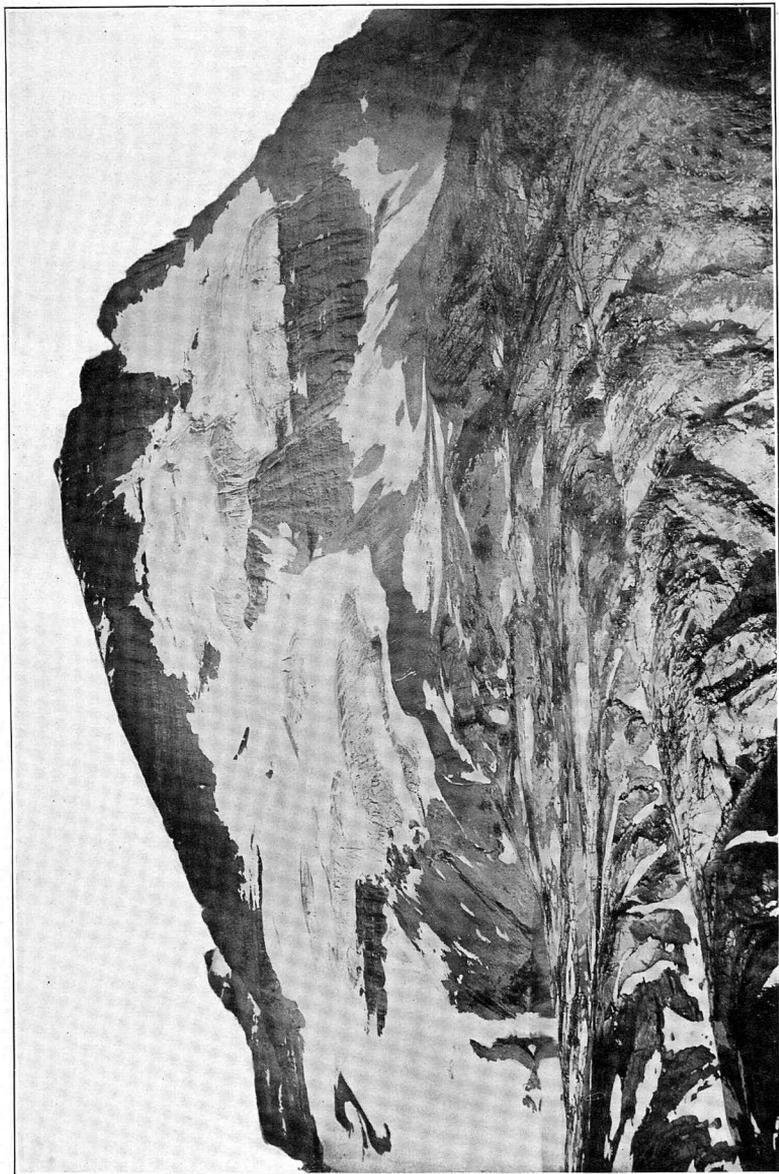
CASCADE OF SWIFTCURRENT CREEK AT McDERMOTT LAKE. MOUNT GOULD IN BACKGROUND.



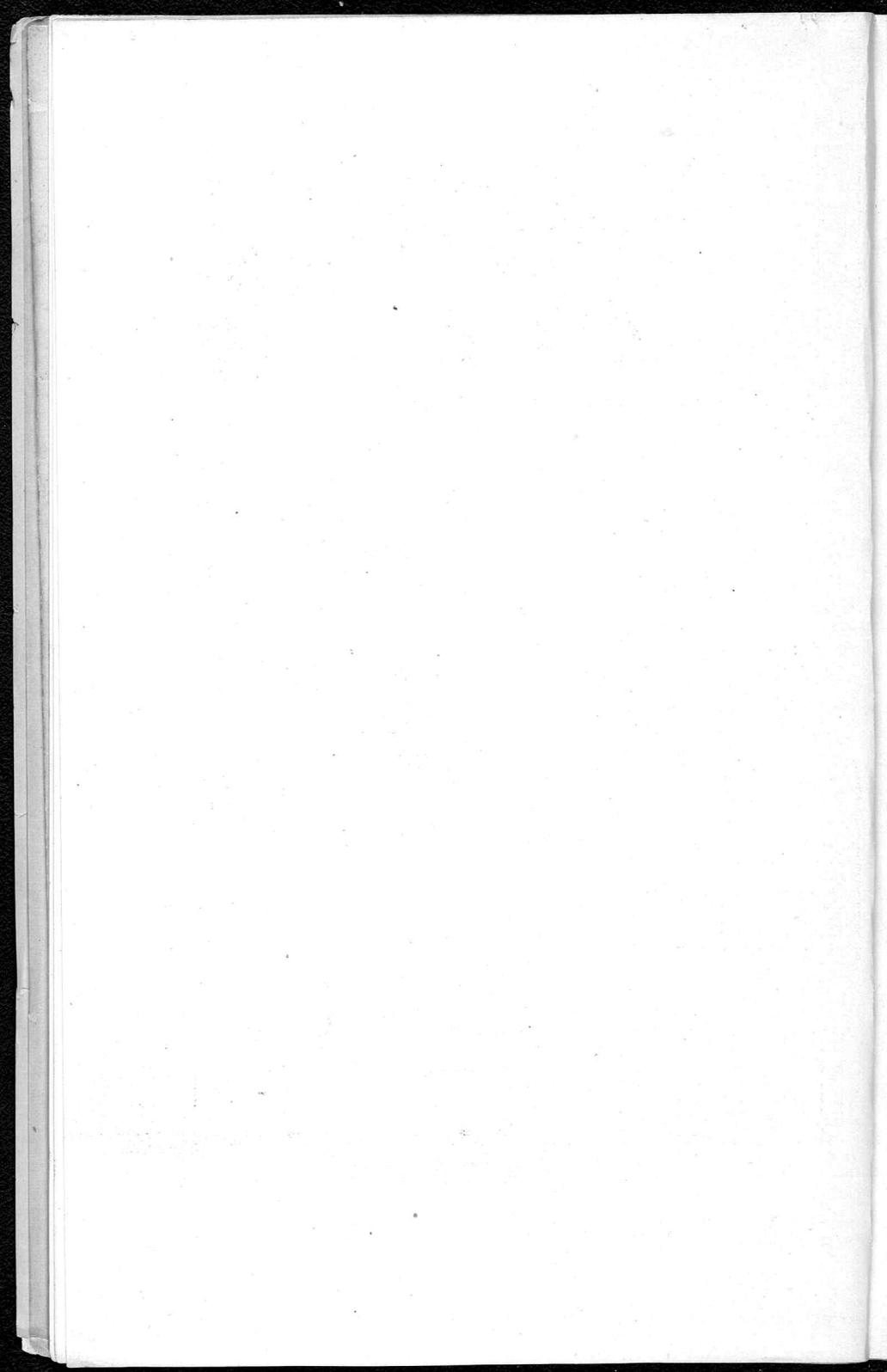


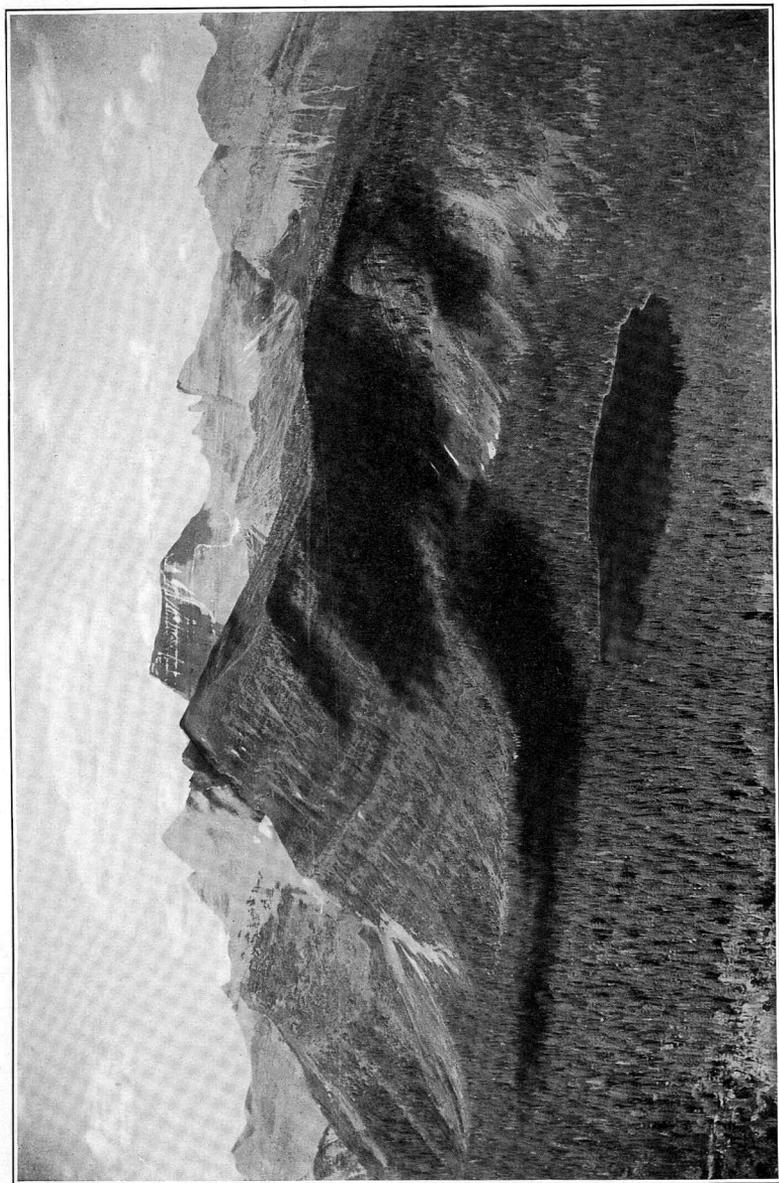
UPPER LAKE, WITH REFLECTIONS, NORTH FORK OF BELLY RIVER.





LIVINGSTON RANGE, LOOKING SOUTHWEST FROM BENCH WEST OF CONTINENTAL DIVIDE TO VULTURE PEAK, WITH THE HANGING GLACIERS.





CONTINENTAL DIVIDE NEAR VULTURE PEAK, LOOKING NORTHEAST ACROSS VALLEYS AT HEADWATERS OF SASKATCHEWAN. MOUNT CLEVELAND
IN THE MIDDLE DISTANCE. CLOUD SHADOWS IN MIDDLE FOREGROUND.

