

Letter from Alexander Graham Bell to Mabel Hubbard Bell, October 6, 1896, with transcript

ALEXANDER GRAHAM BELL TO MABEL (Hubbard) BELL Beinn Bhreagh, C. B.
Tuesday, October 6, 1896. My dear little wife:

Made my first break — didn't write to you last night. Felt tired and sleepy at 10 P. M. — so went to bed. Thought if I could sleep, I might run over to Baddeck in the morning to see Lina McCurdy off.

I did so this morning and she seemed much pleased to know that she had not been forgotten.

Lost yesterday at laboratory as Mr. Ellis had to go to Grand Narrows to see Mrs. Ellis and Bertha off. No experiments Saturday — and no experiments Monday. Sometimes feel away down — things go so slowly here. My hands tied behind my back all the time.

Many important things have actually been waiting years to be tried — and I suppose never will be tried now. One man can do so little.

Mr. Ellis has put Mr. McCurdy's engine in order as well as he can. There is just one little difficulty — it won't go! He hasn't found out what the trouble is.

Mr. Ferguson, the carpenter, has come over to the laboratory to help Mr. Ellis. Hope this may hurry matters up.

Yesterday spent afternoon out of doors — partly on mountain — and partly in a boat with Duncan — trying to find out something about those curious slicks — or calm 2 streaks upon the water which have so puzzled me. I have not heard any satisfactory causes assigned.

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Mr. Kennan says he sailed through one, and lost the wind as he passed it regaining it on the other side. I have no doubt that calm streaks like this are sometimes encountered but I have satisfied myself that this experience is not general with the ordinary calm streaks observed here. If absence of wind in particular places — is the cause — we should be able to verify the observation. I have been unable to do so.

Mr. McCurdy's suggestion that the slick is caused by a ricochet of the wind from the surface of the sea — is also inadmissible — for the streaks are nearly always in the direction of the wind — and not across it.

The slick does not show an entirely calm surface. I notice that the ripples on the water cross the slicks just as they do at other places. It may be possible that some of the finest vibrations are damped — but ordinary wind ripples cross them.

The more I study them the more I am inclined to discard any wind theory — and look to the water itself for the cause. The whole appearance is consistent with the supposition of a very thin surface, larger of liquid of different density from the rest. Not thin enough to create iridescence — but thin enough to produce a visible effect when viewed at the proper angle — by reflected light.

I think the point is important — that every stream of water flowing into the lake from Beinn Bhreagh forms the terminal of a slick. This is not always observable close at hand — but from a distance the effect seems to me unmistakable.

I cannot trace every slick to a stream of fresh water — but I can trace every stream of water to a slick.

Fresh water might float on the surface for some time without much admixture (?) with the salt — especially if there was some slight wind to cause a drift. I must collect some of the surface water myself carefully and test its specific gravity. The film must be very thin —

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and Duncan probably scooped up too deeply — when he collected some for me when you were here.

Yesterday I tied some rags dipped in Kerosene to a float and anchored the float off the point by means of a stone.

Close at hand, in a boat I could plainly trace an iridescent film from the oil — but from shore could detect nothing.

Got Duncan to empty a basket of fresh water into the lake but could not detect any appearance from shore resembling the slick effect.

A common theory here is that the effect is produced by the tide — and that the slick represents a line of separation between the still water — and the tidal current.

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current. Probably these are effects due to tidal currents — but the direction of most of the slicks is against this supposition — and in favor of effect being produced in some way by fresh water running into lake. No explanation yet offered satisfies me as conclusive.

This morning Duncan and I rowed over to Baddeck about daybreak. When half way over — was struck by an appearance of breakers ahead. You know the appearance of the ordinary white-cap wave. Well this appeared like a white-cap more than a mile long! Every now and then — a straight white line appeared on the water — stretching from the light-house as far as Crescent Grove! When we came near it we found it a slick — running down the bay from away beyond Mr. Kennan's down past the light-house and island and up into St. Patricks Channel as far as the eye could see. But the peculiar feature of this slick was that it was covered with a peculiar consistent white foam. It was a narrow — slightly sinuous — river of foam. The foam consisted of masses about the size of our bath sponge — standing above the surface some three or four inches — and crowded closely together. I then noticed that the whole bay was covered with little specks of foam (each

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about the size of a quarter dollar) — but the river of foam was very remarkable. We had nothing with us to dip into the water — but we took out several handfuls and wrapped them up in newspapers.

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In this way I succeeded in bringing home a little of it. Some that I put in a finger bowl — still remains as foam — although it must be 18 hours since I took it from the water.

While we were gathering it — an east or northeast wind began to blow. This increased soon to quite a gale. The foam streak was blown into St. Patricks Channel so I shall not be able to gather any more specimens until the next appearance of foam streaks. I have not noticed such a streak before. The foam has a slimy appearance — and is remarkably persistent. It tastes quite salt. No odor that I could detect — but my olfactory organ is not very trustworthy.

Mr. Gesulcher — the Pennsylvania Dutchman, who brought a model of a gate here one time — and at another time a model of a saw-mill to be worked by a mouse — called here yesterday.

Saw my name in papers as interested in oil — and came to see me. Was brought here from the Pennsylvania oil fields many years ago by Mr. Harrington — and dug several wells at Lake Ainslie and Big Baddeck. He claims to have now — oil leases on many thousands of acres of land.

Does not approve of Harrington. Tells queer stories about him. There have evidently been queer dealings between them in the past. He showed me a map with all the wells marked upon it. Was evidently open for a bid for his old leases — also would undertake to bore if we wanted. Claims to be an experienced oil-borer. Mr. McCurdy took 6 him over to see Mr. Kennan.

He and Mr. Kennan were closeted together for a long time. Don't know the result.

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Another slight appearance of oil from Mr. McCurdy's well.

Your loving husband, Alec.