

## Letter from Alexander Graham Bell to Mabel Hubbard Bell, undated, with transcript

ALEXANDER GRAHAM BELL TO MABEL (Hubbard) BELL Cabin Hubbard. Wednesday, 1899? Dear Mabel:

Now method of mapping works well and quickly too — and yet we have been here since Sunday and have only about half the lake completed.

Weather has been very bad. Yesterday was the only fine day we have had — but we lost the early morning hours not getting to work until eleven. After eleven did half the lake myself — just walking in the water in my rubber boots — and setting up the tripod every 40 or 50 feet — and observing three or more of my established points. The outline of the shore developed itself in dotted lines on the map. Two points are enough to observe if your map is set truly by compass — but if it is skewed a little round — you may be a good deal out. By taking three bearings I have a check upon my compass bearings. If everything is O.K. the three lines drawn meet in a point. But if the North and South of your map do not show true magnetic N. or S. or if your board is not quite horizontal you get, or at all events the three lines do not all meet in one point.

I now secure horizontally by means of a saucer of water — standing upon the tripod. The level of the water is a guide how to move tripod.

My greatest difficulty has been the compass. There are steel pegs upon which the tripod legs work. Frank Mackeen removed these and substituted wooden pegs. We then fastened 2 to the drawing board a wooden bridge under which the compass could stand. This turned out to be an admirable thing — for Frank — but the moment I tried to look at compass the needle moved.

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The frames of my glasses are of steel — and well magnetized too. I could not see the compass clearly at short range without my glasses — and could not set the map properly with them. Frank would set the drawing table in position and then all would be O.K. But when I tried setting it there.

Have finally adjusted the compass to my eyes instead of my eyes to the compass — by cutting off about 15 or 16 inches off the legs of the tripod. It now stands with the drawing board so much lower that I can sight the compass without my glasses.

Thick fog today — can do nothing now.

Unwilling to leave without completing what I have begun. Have sent Frank in with this. Let Angus (or Mr. McInnis) come out tomorrow (Thursday) leaving horses at settlement. He can build up fires for me here and get dinner ready — and stay here with me Thursday night — and I will decide to leave Friday morning. Lake or no lake.

Wanted .

A good supply of matches. In water-tight box. (The tin box with the camp supply had two inches of water in it and we would have had a hard time of it if it had not been for 3 matches in our pockets.)

Rubber boots reaching to the thigh.

A waterproof.

No provisions wanted — lots of everything — bread and meat going to waste — Oh! one thing more — Tobacco.

Your loving, Alec.