

From my experience of the last two Winters' work, I am confident that the removal of the barrier is possible by means of explosives. I was quite satisfied with the result of our work last April. The total cost of the operation was \$144.00, which included travelling expenses of \$37.

Some years ago a pier was built in the River near Cap Rouge, for the purpose of insuring an "ice-bridge," but it was eventually carried away by the ice.

If I can give any further information in the matter, pray command me.

Yours sincerely,

(Signed) W. H. COTTON.

With regard to the influence of the ice-barrier at Quebec upon the ice formation at Cap Rouge, it is most important to consider that the bend in the River St. Lawrence which forms the basin or harbor at that City, extending from above Hadlow Cove to the point called Point Levis,—a distance of about four miles,—diverts the flow of the current nearly at a right angle to its course through the Cap Rouge channel, besides materially checking it, so that in the harbor proper the speed of the current is less than at almost any other point from Lake St. Peter to the sea. It must be evident, therefore, that when the harbor of Quebec becomes frozen over, the ice can only move away when thoroughly rotten, and *must* retard that at Cap Rouge from breaking up. The foregoing tabular Statement [see page 3 of this Report] proves that such is the case, when it shows that, in the 38 years when no ice-barrier formed at Quebec, the navigation between that City and Montreal opened in the month of April 35 times, notwithstanding that the ice must always have "taken" at and above Cap Rouge;—while, when the "bridge" had formed at Quebec, that same navigation had been delayed until well into the month of May.