Sir HECTOR LANGEVIN. That depends altogether on the extent of the shelter to be afforded. It will vary from \$150,000 to over \$200,000—perhaps \$250,000. But the intention is not, for the present at all events, to go to an extreme estimate. If the company, as no doubt they will, furnishes a reasonable amount, this \$50,000 from Parliament, and \$25,000 from the locality will cortainly be sufficient to build a breakwater which will shelter a portion of the harbor. With regard to the hon. gentleman's reminiscences perhaps this harbor was better sheltered than the other, though it may not be as good as we might desire.

Mr. BLAKE. If it is better sheltered than the other port I am much mistaken. I understand the hon. gentleman to say that all the public money he proposes to expend is \$50,000?

Sir HECTOR LANGEVIN. For the present at all events. Of course if these improvements are to be extended very much—if they are to cost from \$200,000 to \$250,000 we may have to supplement this vote by a smaller one, but my idea is that this vote will be sufficient for the present.

Mr. BLAKE. The improvements will be in the nature of a breakwater?

Sir HECTOR LANGEVIN. Yes.

Mr. DAWSON. With regard to Prince Arthur's Landing, it is now the terminus of the railway, and a very large traffic is likely to go through there this summer, so that it is highly necessary that something should be done to provide accommodation for shipping. Prince Arthur's Landing is decidedly a well-sheltered harbor. It is in a bay which is completely land-locked—a bay, however, which is of somewhat large dimensions—and, of course, a little surge rising may sometimes occasion inconvenience. A sure proof that it is a good harbor is the fact that although for the last ten years a large amount of shipping has gone there—last year it was 190,000 tons or something approaching that amount—early in the spring and late in the fall there has not been one single accident. A breakwater is required for the reason I have stated, but within a year past the people of the Landing have laid out themselves about \$100,000 in building wharves. They are very commodious, one of them being 1,100 feet long, by 100 feet wide, and others of lesser dimensions. They are very strong vertically, but are too slightly built for the lateral pressure of the ice shoving upon them, and therefore a breakwater is required, which, if built, will protect all this property, and they will be perfectly good as wharves. A great deal used to be said in old times about the Kaministiquia River, which is far from the Landing. I believe some \$60,000 or \$80,000 was expended on that river in dredging, extending over a period of some five or six years, during which dredging was carried on continuously in the summer season. The results of that dredging have been nearly obliterated by a cause which may occur any year, but which has never been taken into consideration. It is, that that river is at times subject to ice-gorges, which form a jam, and dams the water back, heaving up banks and greatly altering the soundings in the soft, alluvial bottom. In order that the House may better understand what occurs, I shall read a description from a local paper, of what took place on the 29th of April, 1881:-

"Fort William submerged—An ice gorge on the Kaministiquia—Schooner Richardson high and dry—Davidson's boom and dock demol-

Schooner Richardson high and dry—Davidson's boom and dock demolished—Steam dredge under water—Hudson Bay Co.'s dock a total wreck—Tug Lizzie leaking badly—Two scows carried out into the lake and lost—The range lights out of range—Hundreds of cords of wood washed away—Ice piled six feet high on the road.

"On Monday last persons arriving from Fort William reported an inundation of the fields belonging to the Hudson Bay Co., caused by the rapid rise in the Kaministiquia, which had swelled to an enormous extent, overrunning its banks to a considerable depth. From those who witnessed the rushing of the water we learn that for about a mile along the road leading from the Hudson Bay Co.'s Fort to Prince Arthur's Landing, the water was of such a depth as to admit of boats being Mr. Blake.

rowed from the Fort buildings to within a short distance of a second river bridge; the road being considerably higher than the surrounding land, it was estimated that the water at one time must have risen to a

height of nearly four feet above the banks of the river.

"Quite early in the afternoon the ice began moving towards the "Quite early in the afternoon the ice began moving towards the entry, and without much warning the water rose very rapidly, soon submerging the banks and allowing but little time for escape; in fact, the people living there had barely time to secure boats before the water was three or four feet in depth, and extending on both sides for about a mile beyond the banks. Women and children were seen on the tops of houses, and one (supposed to be Mrs. Stevenson, wife of the manager of Davidson's Mill), with her child, were distinctly seen across the river, on top of a lumber pile.

"The fields on both sides of the road gave every indication of the rushing of many waters; on the north side especially was this the case.

rushing of many waters; on the north side especially was this the case, and for a long distance the ice covered the entire surface. Arrived at Fort William the scene was grand beyond description, it was of that mournful grandeur that surrounds old ruins. The road at this point was rendered impassable by immense cakes of ice, which were piled one upon another in some places to a height of six feet. The ice seemed to have a special liking for the road bed, as it was there found in greater

quantity than at other points. As far as the eye could reach along the river banks, these miniature icebergs were the only objects discernible. One that was measured was found to be over three feet in thickness, and

about eight feet in length.

"Finding Mr. Richards, who is in charge of the Hudson Bay Co's. store and property at this fort, we learned that the water commenced to recede about half-past ten o'clock at night, and that by twelve o'clock it confined itself to the river bed, so that they anticipated no further danger, although a strict watch was kept all night long. On this reserve is an old stone building used in former times for storing fur, to this Mr. Richards removed his family in a row boat. Mr. Morrison, who has

charge of the lighthouse, also brought his family to the same place by

means of a boat.

"During the winter the schooner Richardson, the steam dredge, the tugs Lizzie and M. I. Mills, two scows belonging to the dredge, and a number of small boats have been harbored at this point, and all have been more or less demoralized. The schooner Richardson brought up late last fall, a load of nitro-glycerine, &c., for the use of the Hamilton Powder Co., and being too late after unloading to return to the Sault Canal before the time announced for closing, she was moored below the dock, near the time announced for closing, she was moored below the dock, near the mouth of the river. It was very fortunate for the owner that she was so moored, as there is no reason to doubt that she would otherwise have been a complete wreck. As it now is, she has been lifted high and dry on the bank, and is only supported on one side by the jammed ice. The steam dredge was completely under water, and her shovel carried away and deposited inland. The tug Lizzie was also shoved upon to the dock, but by prompt attention given her by Mr. Richards, Captain Coxetter and others, she was safely launched into her usual position, though found to be leaking badly. Men placed at the pumps found the water in the hold gaining upon them and eventually she had to be beached and allowed to fill. The tug M. I. Mills is on the opposite side of the river, and has the appearance of trying to crawl up the bank, as she is a rotten, and has the appearance of trying to crawl up the bank, as she is a rotten, old hulk it does not matter much whether she has sustained any damage

or not.

"One of the scows in attendance on the dredge was taken away by the flood, and cannot be seen; it is supposed that she was carried down and drawn under the ice in the lake, or sunk in the river channel. Another scow, belonging to Davidson's Mill, has suffered a similar experi-

"The plank walk leading to the outer range is a thing of the past, and the force of the water landed the range light into a swamp, carrying it completely off its underpinning, and of course in its present position,

it completely off its underpinning, and of course in its present position, is of no use.

"The oil house, another large building in the same vicinity, is also moved from its foundation. The light-keeper's residence formerly occupied by Captain J. W. Plummer was flooded to a depth of about three feet, and trunks, furniture, and other articles were floating around inside. The bedding, bedsteads, carpets, &c., were rendered almost worthless by the deposit of mud and sand that the water left upon them.

"The Hudson Bay Company will be heavy losers, the fences were entirely destroyed along the west side of their land, and their docks are a total wreck. The latter had lately been repaired at considerable expense, but the deluge has wrenched large timbers and piles asunder."

I need not read further from this description. I think it is very necessary that the attention of the House should be drawn to this, so that hon. members may know what sort of a harbor the Kaministiquia is-the expenditure of \$60,000 or \$80,000 produced no permanent result.

Mr. BLAKE. Are there any plans or estimates or surveys of this work?

Sir HECTOR LANGEVIN. There is an estimate and there must be a report in the Department. During 1880 surveys were made by an officer of the Department, and the information then obtained is now used by the Chief Engineer in proposing the construction of a breakwater. I stated the extreme cost would be \$250,000, but I see it is \$240,000.