when the spring tide was setting out at its worst. At other times they might have had slack water.

There are no serious shoals in the route between Coates island and Mansfield island and through the strait out to the ocean, and the land is so high that even at night you can see the outlines of the hills against the sky, but an occasional light, and a telegraph line connecting them would be useful. There is one island, Charles island, with one hundred miles or more to the north of it in which to choose your course. You need not go near that island. A stranger by keeping clear of what he sees would not be in any danger of striking rocks. Dr. Bell said he did not know any more desirable piece of navigation in the world, excepting the middle of the ocean, and even then a common sailor who could not take an astronomical observation could sail through the straits with perfect safety. That is what Henry Hudson's men did after putting him and part of the crew into an open boat and leaving them behind.

AIDS TO NAVIGATION.

In his opinion all that is necessary to be done in the way of aids to navigation through the strait, the whole distance from the Atlantic ocean to Hudson bay, is the installation of probably three lights on each side with telegraphic lines connecting them. Even one light in Hudson strait would be better than none, two better still, and six would be still more so.

As to the preparation of reliable charts of these waters, a good deal requires to be done yet. The north side from about Charkbok to a point north of King's cape, or King Charles cape, is badly charted, so badly that there are two lines, one overlapping the other, representing the same coast. The chart makers were so uncertain as to where to place the line that they put both down. The existing chart was made in London largely from information furnished from time to time by captains of vessels. Afterwards Lieutenant Middleton, of the Royal Navy, sailed through the strait and bay on a Hudson Bay Company's ship, and made observations for latitude and longitude which improved the chart a little. The department has a geological survey of the east coast of the bay. The witness surveyed that coast from Moose Factory northward, that is the east coast of James bay and up Hudson bay to Cape Dufferin. The rest of the shore north of Cape Dufferin was surveyed by Mr. Low, up to Cape Wolstenholme. Dr. Bell came south himself in a small boat from Digges islands to a place called Ponga. He thought it was the place where Henry Hudson's men went ashore and were attacked by the natives. The mutineers who put Hudson ashore had wintered in 1610-11 at the mouth of the Nottaway river. They had passed a miserable winter. Soon after sailing on the return voyage in spring, the men mutinied and took possession of the vessel putting the officers off in a boat somewhere near the east shore of James bay and proceeded northward. Afterwards they landed, probably at the place called Ponga, and proceeded to help themselves to the provisions they found in the caches of the Eskimos, who thereupon attached and killed several of them. The survivors ran away, boarded their ship and sailed through the strait and across the Atlantic to the coast of Ireland.

Dr. Bell said he thought an exploration was necessary in order to get a reliable chart of that route and for the purpose of correcting existing charts. There was some correspondence about that matter more than twenty years ago. The imperial government did not think it important enough to justify the expenditure. They replied that they had only a few ships for such purposes, and that those ships were then employed on the coast of China, &c., getting information which was very important to British trade. They said the trade through Hudson strait was then of such comparatively little importance that they would not be justified in making a survey at that time. It would not be difficult to equip one of the Dominion's own ships for the purpose. While it is not immediately necessary, it should be done in the interest of navigation