EVIDENCE OF ROBERT BELL, M.D., C.M., F.R.G.S., C.E., &c., OF THE GEOLOGICAL SURVEY OF CANADA, GIVEN BEFORE THE SELECT COMMITTEE MARCH 12, 1907.

Dr. Bell explained that he had been through Hudson strait nine times. The first time was in 1880 in a ship called the Ocean Nymph, a small sailing vessel, and the last time was in 1897 with Commander Wakeham. His trips were distributed over those seventeen years between 1880 and 1897. Commander Wakeham took him out in the Diana with his yacht on her deck and let him off at Big island, on the north side of the strait. Then he worked west with the yacht and returned after his survey. They entered the strait on June 22 in 1897, and went completely through and back again before he left the Diana. Commander Wakeham lowered his yacht into the sea at Big island and he surveyed the coast westward as far as he thought safe, so as to return and meet the Diana there. As he had ten days to spare after reaching Big island, he surveyed the coast for some distance eastward of it.

Dr. Bell was not sure, but he thought that date (June 22, 1897) was the earliest date he entered the strait on any of his voyages. They did not see any ice at the entrance, but encountered it later, especially towards Fox bay. The latest period he passed through the strait was, he thought, with the *Ocean Nymph*. They cleared the strait before the middle of October—between the 1st and 15th he would say. All his trips were between June 22 and about October 10.

In navigating the strait during the season between those dates, with a steamship, they never had any difficulty, nor was there any difficulty with the Ocean Nymph, which was a poor ship for sailing. He is of opinion that the straits are navigable for steam merchant shipping during the season between these two dates. He saw no trouble or difficulty, in his own experience, in passing through. In some parts of the strait he saw ice, but it was near the north side. Captain Wakeham wished to land him at King's cape, that is the angle formed by Hudson strait and Fox bay, but owing to the movements of the ice it was impossible at the time. In fact the witness did not want to go ashore there, because the shore was so badly charted he did not feel that it would be safe. He wanted to be picked up at some well-known point, and if he had been landed at King's cape the chances were Wakeham could not find him, nor witness Wakeham. It was agreed, therefore, that the witness should be landed on Big island. There the *Diana* picked him up again. When the ship came on the date appointed, it was a stormy day and the captain could not take the witness on, but came back the following morning.

Dr. Bell never passed through on a very powerful steamer with high speed, in fact, on no more powerful steamer than the *Neptune*. He went through on the *Neptune*, and afterwards on the *Alert* and then on the *Diana*. The *Neptune* has only 110 nominal horse-power, but she makes eight knots an hour easily. The *Diana* is smaller, but more easily handled, and did very good work. On the *Diana* expedition the greatest trouble they had with ice was off the east coast of Labrador. Until the middle the summer set off East Labrador is filled with ice for a long distance out from the land.

The *Alert* was specially built for ice. She was very strongly built. Up to the date the Dominion government had her, she had been further north and further south than any other ship in existence. She was a mass of wood with little accommodation. The *Neptune* is also a very strong ship.

The Neptune and Diana were built for use in the seal fisheries where they have water to move about in. They do not get into trouble needlessly, do not break the ice