

vice, but of late years a steamer, the *Eric*, takes the place of sailing ships. Old sailing vessels could scarcely hold their own in a head wind, and if there were scattered ice in the strait, they could hardly get through at all, and then it would be reported that they were stopped by the ice.

There is an ice cap many miles long called Grinnell Glacier, the southern part of Baffinland. Baffinland is an island a little over 1,000 miles long, and part of it is some 500 miles wide. There is a good deal of glacier ice among the high hills in its north-eastern parts. There is only one place where Grinnell Glacier flows into the sea, and the little icebergs that break off there are carried into the current along the north shore of the strait.

CHURCHILL HARBOUR.

Asked by the chairman (the Honourable Mr. Davis) for information regarding the harbour of Churchill, Dr. Bell explained that Churchill river is the only stream on the western side of Hudson bay which enters the sea through solid rock, and has a fixed depth of water. He thought 12 fathoms was about the depth at the entrance. Then, when you get inside, there is good shelter with water shoaling to 8, 7, 6 and 5 fathoms at low water, with sufficient space to anchor a considerable number of ships. The entrance is like a slightly bent arm surrounding a point, and the moment that you turn the angle you are in perfect shelter. The entrance is regarded as quite safe. It is about half a mile wide. There is a lagoon at Churchill which fills up as the tide flows in. It is about eight miles long by over one mile wide, and all that water has to pass out of a narrow gap, is that when the tide goes out there is a rushing current from the lagoon. The spring tide is about 18 feet.

Dr. Bell explained that he piloted the first steamship that ever entered the harbour. Before that time he had been out and in with Hudson bay ships, and also often with canoes and sailing boats, and had sketched the place and knew there was no danger. He was the only man on the steamship who had ever been there before. As the vessel approached the harbour the sea was rushing out, and there was a tremendous foam. The captain hesitated to enter and steamed forward very slowly until he reached this place, when he became very nervous about entering. Dr. Bell told him he might throw him into the sea if he touched bottom anywhere along the course he directed. The captain kept a man sounding the depth, but the lead never touched bottom at all. The rushing tide, going out, carried away the lead long before it could reach the bottom. As soon as the steamship passed through the narrow entrance, there was very little current.

The harbour is large and fairly deep. From the time you turn the corner and get into complete shelter there is a space of half a mile to a mile in length where you can lay your ship almost against the shore, and there is deep water for perhaps a third of a mile out from the shore.

Dr. Bell explained that he had also gone to Churchill from inland. He had been in different years along the whole course of the Nelson, through the country north of Lake Winnipeg, down the canoe route ordinarily travelled to Hudson bay, and which takes in Pike river, Trout river, Hill river, Steel river and Hayes river. He was for a long time very anxious to get across from the Nelson to the Churchill, but for years everybody said it was impossible, but at last by inquiry from Mr. Roderick Ross, the Hudson Bay Company's officer at Norway House, he heard of an Indian who knew of a route. The witness crossed and surveyed it, and having mapped it out, it has been used a good deal ever since. Dr. Bell went first down the Little Churchill and afterwards the Big Churchill. No white man had ever gone down the river in the present generation, and it astonished them very much at Fort Churchill. He had two small canoes and four Indians. He camped at New Fort Churchill and proceeded to explore the country around, and find out about the rocks.