

During the month of July we crossed the bay to Churchill, and I spent some days apparently surveying the mouth of the river. Since that I have made a more complete and accurate survey of it. Later we went on to the mouth of the Nelson and to York Factory, and I made a survey of the mouth of the Nelson river. We took a great many soundings. We went up the Nelson as far as Flamborough Head, a distance of about 30 miles by river. At Flamborough Head the banks rise high, although they are very flat. It was about the first of August when I finished the survey at Nelson. I did not see any ice there and remember it was very hot and that the mosquitoes and black flies were as bad as I have seen them anywhere.

I do not recollect on that tour having any difficulty whatever in connection with the navigation after our first obstruction, which was in the month of June. I do not think we saw any more ice. We passed out through the straits to the station, where I spent the winter. I occupied the time during the winter months with my dog sleds taking journeys east and west and surveying the coast. I had two men. We got a continuous observation, night and day, during the winter both of the meteorological conditions and of the action of the tides and the temperature, winds, and snowfalls. The lowest temperature we had was 42 below. I have experienced it colder than that in Winnipeg. We had Government tested thermometers. There are very strong tidal currents through the straits, particularly at the narrow points, like the entrance, the centre and where the channel is congested by islands. We took our observations every hour of the day and night for a year and a half. There are no big icebergs in Hudson strait—they do not go across the straits; they went on to the west.

We had an observation point 400 feet above the sea, and I had a telescope built into a cairn on top of that cliff, and I used to go up every day to look at the conditions through the telescope. I could see a long distance, clean out to the middle of the straits. The ice was almost constantly on the move as in the tidal current, the maximum of which was 8 miles an hour.

Outside of two months there were open leads all the time. They were the months of January and February, I think. My belief is that the straits are navigable for about five months in the year, figuring on aids to navigation—July, August, September, October, and November. I think the ice at the eastern and western extremity of the straits would not interfere particularly during those five months.

On the 5th of June, 1886, I was still occupying my shack at the Ashe point and a whaling steamer came into the strait and anchored right in front of our station without knowing we were there. The ice in the harbour was still firm but there was no ice to be seen in the straits. The captain told me that he had not seen a pan of ice in Hudson strait up to that time and he passed on the next day into the west. His ship was a Dundee whaler. I think she was wood. He got through all right and returned in the autumn.

We met a great number of seals. A friend of mine, Senator Blanchard, from Newfoundland, established a very successful cod fishery in Ungava bay. We got great numbers of other kinds of fish—salmon, white fish, sturgeon. Seals frequented all the shores of the straits and bays.

My second trip to Hudson bay was a good many years later, in company with my brother, J. B. Tyrell. It was in '93. I went overland from Edmonton, through lake Athabaska, down the river Dubawnt, and entered Hudson bay through Chesterfield inlet. On the Thelon river, which is a magnificent stream, I found the banks well timbered with fine spruce, well developed white and black spruce. It did not extend back a great distance from the river but occupied the valley. I came across the remains of moose along the banks of this river. I did not see any living animals. I saw great bands of musk oxen which I photographed. The stream is about a quarter of a mile wide—about the size of the Ottawa river. It was teeming with fish, splendid white fish. It is navigable up to a certain point from the bay.