

Between Churchill and Nelson we were further from the coast than twenty miles. The distance from Churchill to Nelson in a straight line is 120 miles. We were probably thirty or forty miles in from the coast. The country bore chiefly tamarack and small spruce. Near the coast it is bare.

My third trip was a railroad exploration trip. On the trip now being considered, we followed the regular route of the Hudson bay, travelling from the fort to York Factory, then up the Hayes river to Oxford House, and from there to Norway House.

In 1900 the Department of the Interior asked me to go out and make an exploration of the divide between Great Slave lake and Hudson bay, with a view to railway construction between the head waters of the Hudson bay and the Mackenzie river. I went out and spent eleven months on that work. We found the country covered with grasses and large herds of reindeer or caribou.

On the last expedition we started from Prince Albert and passed through to the head of lake Winnipeg, followed the route of the Nelson river as far as Split lake, and from Split lake we portaged north. The proposed route would go on the north side. I did not actually locate a railroad. I went through taking notes of the character of the country with a view to locating a route, and the north side was the route that we selected. From Split lake I portaged across to what is known as the little Churchill river and descended into Great Churchill and followed the Great Churchill to its mouth. That is the route we followed and I stopped to take official photographs, etc., on the way.

When descending the Great Churchill river, from fifty to one hundred miles up the stream there were very remarkable sand ridges, so remarkable that I exclaimed to my companions, "Why, here the railroad is already built for us." That was on the south side of the Churchill in the direction in which the railroad would be built if it were built to Churchill.

There is continuous solid land to the mouth of the Churchill from the head of lake Winnipeg. I saw nothing, and I was there to investigate the possibilities of railway construction, I saw nothing between the head of lake Winnipeg and the mouth of the Churchill river in the way of serious objections. I saw some swamps, but no railroad that ever was built was built without getting some swamp. There was nothing in the way of impossible or impassable barriers. Of course, I did not see it all the way across, but from what I did see following the route I did, I would say it was quite feasible. The character of the country as far as I could see, it is quite suitable for railroad construction, not a difficult country at all. I have been right across there from a point about thirty miles from Churchill to Churchill. I have travelled down there in the winter time and never saw anything in the way of impassable land. As a matter of fact it is hardpan boulder clay, meaning that it is old beach bottom. Many years ago the bay covered all that territory.

I have made a chart of the Churchill river, which chart indicates that there is a natural harbour land locked at Churchill which at a comparatively small cost could be greatly enlarged by dredging. It is only sufficiently deep for immediate use. It has been used for years.

With the *Arlotte* we steamed right up and cast anchor and remained safe and comfortable during the survey work.

I have been at Nelson on several occasions. The broad flats are an indication of just what the bottom is. beyond it is hard boulder clay. It would be possible to dredge with a dipper dredge at Churchill. It would be too hard for a suction dredge. Dynamite would assist, but it would have to be dredged also. The boulders do not run very large, from pebbles up to two or three feet across. The large ones are comparatively rare. I do not think one-twentieth of the material would be boulders. I have a very decided opinion which I have expressed on many occasions as to which of the two, Nelson or Churchill, is the more desirable harbour.