tell you.' He took out an oar, and plunging it down, found about four or five feet of water. The land is exceedingly low and covered for miles with grass next high water mark, then bsuhes, and finally with small trees. You have to go a long distance inland before you get tall trees. The tide in James bay is less than at Churchill and York, but no two tides are alike. If the wind is blowing from the north it may rise 15 or 20 feet, but if it is blowing from the south it does not rise more than 7 or 8 feet.

THE PROPOSED RAILWAY ROUTE.

At the request of the chairman, Dr. Bell proceeded to give some information regarding the country between Churchill and the north end of Lake Winnipeg, and to express an opinion as to the practicability of building a railroad through there.

Leaving Warren's Landing at the outlet, there is good land with points of rock near the rivers, along both the Nelson and the canoe route by Hayes river, but it may not extend everywhere inland. Of course these streams follow the greatest depressions, and the fine clay soil close to the river may have been deposited there, because it follows the deepest depression. He explained that he went down to York Factory in 1878, 1879 and 1880. He once took the route from Churchill to the Nelson which Mr. Tyrrell traversed. He went down the Little Churchill to its junction with the main Churchill, which he followed to its mouth. The route surveyed by the engineer who worked for a Montreal company some thirty years ago, followed Deer river in approaching Churchill harbour. This was George Baynes, of Charlottetown, P.E.I. He cut out a line from the foot of the navigable water north of Playgreen lake. There is navigable water there and he commenced to survey from the north end of it. That carries navigation probably forty or fifty miles below Lake Winnipeg.

In traversing that country, Dr. Bell explained, he explored to ascertain the agricultural value of the tract lying mainly to the west of that route, to the south of Split lake. West of the Nelson valley, there is a pretty good country. He had not been over much of it. He had been up and down the Grass river in that region. There is a post of the Hudson Bay Company called Nelson River House. It is really on Churchill waters at Three Point lake, and the country beween this and the Nelson river, Dr. Bell believes, is pretty good. On the route he followed from Nelson river to Churchill river the land consists of a hard clay surface. A good deal of the country is burned, and you can see the clay land. The rise from Split lake to the head of Little Churchill river is very considerable. The main Churchill flows at a general elevation of probably 500 feet above the Nelson river, but after you get down the main Churchill to a point about 50 or 100 miles from the sea, you can see nothing on either side excepting muskeg. A streak of bushes follows the river. Beyond that you cannot see anything, and long before you come to Hudson bay you can see Fort Prince of Wales looming on the horizon.

Asked for a definition of the word muskeg, Dr. Bell explained that muskeg is the same class of country you find up on Lake Superior. The word is just the Cree or Ojibway name universally used for what would be called wet barrens in Nova Scotia. It would be from half a dozen feet, upward, in depth. Many travellers have noted the clay banks along the Hayes river all the way down to York Factory, and they have declared the soil was frozen to a depth of fifty feet or more, and near the mouth of the Nelson river it would be over 100 feet. It shells off in summer in great slabs, ten feet thick, and leaves a hard surface as hard as ice. Dr. Bell, however, stated that he had shown that the frost in such places did not pass down from the surface, but horizontally. Towards the top, there is a solid three-cornered prism of frozen ground, owing to the frost penetrating it from the top, and also from the side. He once had some time to spare at York Factory and went out with all the men he could get and tested the matter. He found it was not frozen permanently to any great depth. He