Lunenburg (Mr. Duff) the main channel is only about half a mile wide at the docks, and several of the engineers state that outside the channel on the flats the water is so shallow that the waves do not rise higher than three feet, and that there would be very little interference with the ships lying at anchor off the docks. The channel never freezes to any extent, on account of the swift current and the heavy rise and fall of the tide. Engineer, R. B. Fry, who was sent in there by the Laurier government in 1905, stated that with a light ice-breaker Nelson could easily be kept open all winter. The port of Archangel in northern Russia has handled a large trade for several hundred years, though it is situated 400 miles further north than Nelson and the most northerly point in the track of the ships to and from that port is over 200 miles north of Hudson strait; yet it has been demonstrated that with the assistance of ice-breakers the Archangel route can be kept open practically all winter.

The bay is open all year, and notwithstanding some of the statements we have heard here I am convinced that the straits are open most of the year. There are no difficulties in the way of navigation in the bay itself; in the straits it is evidently the ice flows that interfere with navigation in the fall and the early spring. All navigators whose reports I have gone into agree that with wireless stations and planes to advise vessels regarding the location of ice, the period of navigation can be greatly extended and much delay saved at all times.

An engineer, Mr. J. W. Tyrrell, was sent up there by the government to make observations. He occupied a position in the rocks from which he could view the straits; there he spent the whole winter. He stated that there was no time during the whole winter that the ice was not constantly on the move, and that there were open spaces through which a vessel could pass in all except two months of the year, January and February. In 1903 Mr. A. P. Low was sent into the bay in charge of the steamship Neptune. He wintered inside the straits and came out in the spring. After observing the ice conditions for the season he stated in his report:

There is little doubt that a specially constructed ship for ice navigation might pass through Hudson strait at any season, but the voyage would be long and the difficulties and dangers would be great.

I do not suggest that it would be advisable to try to make a winter route of the Hudson bay, but there is some ground for believing that that is within the bounds of possibility. Sir George Foster, speaking in the House of Commons in 1913 said:

[Mr. Campbell.]

We know from personal observation that we have found greater obstacles in the straits of Belle Isle and north of Belle Isle than we found going through the Hudson straits on our trip last year; and from which I gained a most favourable opinion as to the feasibility of that route,

Captain Bernier gave testimony before the Senate committee of 1920—and I would commend this report to the hon. member for Lunenburg, because I do not think there is an hon. gentleman in this House who will question the words of Captain Bernier. He is an old navigator; he has spent months around those northern waters and should be in a better position to speak on the subject than almost anyone else. He said:

The average season is four months, with wireless I would say four and a half. Aeroplanes would be an immense advantage to get a bird's eye view and report location of ice.

The Senate report of 1907 stated:

All witnesses agree that under ordinary circumstances the minimum period of navigation would be four months and the maximum would not likely exceed five.

This report also states:

The consensus of opinion of witnesses is that Hudson bay remains open all year, strait also open all or nearly all year and would be open all the time except for drift ice from the channel. Aids to navigation would greatly facilitate and extend length of season.

But, Sir, I am one of those who believe that the Hudson Bay railway will eventually develop local traffic sufficient to make it profitable, and the development of the resources of that great north country would mean added trade for the industries of eastern Canada as well. The country surrounding the bay is, on the whole, not heavily timbered, but according to reports this is due largely to frequent heavy fires, very often set by the Indians. These fires have kept the forests depleted. Along the Nelson, the Churchill, and other northern rivers there are large forests of spruce and various other woods, and over large tracts of land south and west of the bay there is an immense quantity of wood suitable for Pulp manufacturing is an industry that should have a great future in that coun-Some hon, gentlemen have already dealt with the water-power resources. Along both the Churchill, the Nelson and several other northern streams there is a vast amount of water-power waiting to be developed. Mr. McInnes, an explorer who spent some time in this territory in 1896 and again in 1905 and 1906, stated that along the Nelson were some of the most magnificent power sites in the world capable, he said, of untold development. The country adjacent to the Hudson Bay railway is not usually considered in connection with agriculture. There is little doubt, how-