

HUDSON BAY ROUTE

Official Report by Jas. Fisher, M.P.P.

The report of Mr. James Fisher, M. P. P., to the Hon. Thomas Greenway on the Canadian government expedition to Hudson's Strait and bay has been handed in. Mr. Fisher was selected to represent Manitoba on the expedition and has taken ample time in which to prepare a report. It is therefore well considered and prepared with that care and judgment which Mr. Fisher would be expected to bring to the task.

"My only instructions," says Mr. Fisher, "were to the effect that I would be expected through every available means to make the most full and careful observations and the most diligent and thorough inquiries as to the length of the navigable season and as to all the conditions that affect the feasibility and the comparative advantage from every practical point of view of a commercial route between this country and Europe by way of Hudson's strait and bay."

The importance of the inquiry to the province of Manitoba and the keen public interest here in it are briefly pointed out by Mr. Fisher, who goes on to describe the voyage which began at Halifax, June 3, 1897, on the steamer "Diana."

IMPRISONED IN ICE.

On June 7 the ship got into a great field of ice in the Strait of Belle Isle and remained firmly beset in the solid pack ice from June 9 until the 17th. Open water was reached on the 19th but failing to reach the Labrador coast retreated, but on June 22nd managed to make the entrance into Hudson's strait in perfectly open water. No barrier was reached until the following day, when they came to the edge of a heavy pack of ice stretching in a solid mass as far as the eye could see. After ineffectual attempts to get through the Diana was driven into the pack on the 25th but a few hours steaming with very little progress found them "helplessly imprisoned," where they remained until July 10, until an opening in the ice enabled them to get through, reaching Cape Wostenholme at the western end of the strait on the 12th of July. They proceeded some 50 or 60 miles into the bay and found nothing but very loose ice and the ship was put about for the return voyage to the strait, which was accomplished by July 21. Turning about the same day the second inward passage through the channel was begun and the round trip again completed by July 27. They went through once more in the middle of August, this time going to Fort Churchill in Hudson's Bay. No ice was seen in Davis' strait or Cumberland sound ice lying in heavy masses to the north and west was observed coming out of Fox channel, on August 21. That was the last they saw of ice for the season. Churchill was left on the return trip September 2, completing the sixth passage through the strait on September 20. After visiting Newfoundland for coal the Diana again reached the entrance to Hudson's straits October 15, remaining until October 30, without ice being seen,

and returned to Halifax.

FACTS AS TO NAVIGATION.

Mr. Fisher was unable to trace one authentic instance in which the passage of the strait was accomplished in June, and there are but half a dozen instances in which the strait was even entered in that month prior to the voyage of the "Arctic" in 1886 and that of the "Diana" in 1897. In so far as it is affected by ice formed on its own waters, "Hudson's Strait is never closed." Mr. Fisher adds: "With a depth throughout its entire length in the centre of the channel of from 150 to 300 fathoms, and having a remarkable strong tide always rushing inwards and outwards, with a rise and fall and consequent speed scarcely exceeded on any known waters, it never freezes over, and the ice that is found packing the entrance to so late a period in the season comes from the Arctic pack drifting down through Davis Strait."

Reference is made by Mr. Fisher to the opinion expressed by a good many navigators that once past this pack on the east no great obstruction was to be expected further west, but these opinions are held to be unjustifiable. There is a strong current coming through Fox channel and "this at least is certain, that while the Davis Strait pack fills up the entrance and eastern part of the strait, the channel is equally liable to be blocked right to the west end by a very heavy pack down to a late period in the season."

ICE 40 FEET THICK.

The experiences in regard to the western pack between the year 1631 and the present day are all carefully noted in Mr. Fisher's report and the opinion of Commander Gordon quoted to the effect that ice 40 feet thick was found in the western pack in the end of August.

Treating of the pack on the Labrador Mr. Fisher observes that although the "Diana" got through the Strait of Belle Isle on the 6th of June they were indebted to good fortune because they learned afterwards that this strait was blocked up with heavy Arctic ice from the Atlantic the very next day, and remained closed until nearly the end of the month. The ice which closed around the "Diana" from June 9 to 17 is described as capable of being measured by acres and many of the pieces 10 to 15 and even 20 to 30 feet thick. Some of the party walked over the ice a distance of three quarters of a mile. Had the "Diana" been from Liverpool instead of from Halifax she would have avoided the ten days imprisonment, but would have struck the pack on June 22. After describing the pack in Hudson's Strait, the thickness of which varies from 4 to 40 feet, Mr. Fisher goes on to point out that it bears no resemblance whatever to the ice through which specially built steamers force their way in other places and the experiences of the Baltic do not apply because the ice in the Baltic is light, not a pound of Arctic ice ever entering that sea. Mr. Fisher adds:

"I believe the harbors of Hudson's Bay, if the Arctic ice were excluded, could be navigated for nearly six months, but no one well informed on the subject will for a moment suggest that because powerful ships of modern build can break a passage through ice three or four feet thick, the like or any class of ships, much less the freighters of commerce, can drive through the huge and heavy masses, 'hard as flint,' of a close Arctic pack, driven about as they are and crushing against each other by force of the powerful tides and currents that prevail in the strait."

Mr. Fisher describes the natural causes leading to the packing of Arctic ice in the strait, showing "that the entire body of Arctic ice coming down on both sides of Greenland, passes the Atlantic entrance of Hudson's strait, and is by the forces of nature, driven into that channel."

"This, at all events, is clear, that the whole body of ice that moves to the south from the entire polar area comes through either the eastern or western entrance through Hudson's strait, and by natural currents is pressed into it. All but a comparatively small part comes to the Atlantic entrance, being the combined east and west Greenland packs, while the remainder, coming through Fury and Hecla straits, at the head of Fox channel, which is really the extension of Hudson's strait, passes into the west through Fox channel. Nansen's studies convinced him, and his voyage proved that the theory of solid ice of immense depth in the polar basin was all a mistake. It consists of myriads of massive floes packed together in endless variety of form, always in motion under the influence of winds and currents, and ever driving against one another and breaking and rapping and piling over each other, as Nansen says, 'a shifting expanse of drift ice continually breaking.'"

REMARKABLE FACT.

"A more remarkable fact still, and one that affects the question before us, was established by Nansen. The drift of the Arctic ice on both sides of Greenland and also on the north of the American continent, is from the pole towards the south. This much was known long before Nansen's time. But what he has shown is that the drift of the Arctic ice on the Asiatic side is from the Siberian coast northward towards the pole. The result is that not only do all the streams of ice that are carried from the Arctic and sub-Arctic towards the south pass either one end or the other of Hudson's Strait, influenced by natural forces that press them at both ends into that channel, but the whole of the Arctic ice formed on the Asiatic side of the hemisphere drifts slowly across the polar area, occupying years in its passage, growing in weight and thickness all the while, to feed the mass of the more solid pack of heavier ice on our side from which the never ending drift to the south is supplied. There are considerations which help me to realize the striking contrast between the massive Arctic floes that fill up Hudson's Strait and the light ice of the lakes, and the Baltic and other more temperate waters."

LENGTH OF NAVIGATION.

The Gulf Stream and its influences, the tides and currents in the strait, the ice and climatic conditions of Fox channel are all gone into by Mr. Fisher until he comes to the question, which