

## THE HUDSON BAY ROUTE TO EUROPE

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The question of a feasible route to Europe, from the prairie provinces of Canada, by way of Hudson bay, is of the first importance to the Dominion, for several reasons. It is the shortest possible course from the centre of this group of provinces to Liverpool, as it follows approximately a segment of a great circle between these points. Not only is the total length the shortest, but this route affords a greater proportion of transportation by sea, with a shorter land haul than any other. More than 1,000 miles of its water transportation is within the British possessions, Hudson bay having only one opening to the ocean may be considered a mare clausum. The land portion is the shortest, and it passes through an even country with a very gentle slope towards the sea. The bay and strait are free from rocks and shoals and may be easily navigated by the largest ocean-going vessels.

The advantage of utilizing this route have been discussed by public men and the press ever since Canada acquired the northern territories from the Hudson's Bay company. On the other hand, a great deal of nonsense has been written and strong opinions have been given against the practicability of the route, mostly by people who had no personal or direct knowledge of the subject. The history of the question and the various circumstances connected therewith, all tended to prejudice the public against it. A constant effort was made to associate Hudson bay and strait with the Arctic regions. Although the bay stretches for a thousand miles from south to north and the distance is still greater from the Atlantic ocean at the entrance of the strait to the western shore of the bay yet these waters do not anywhere reach the Arctic circle and the latitude of the southern extremity is south of that of London. The writer has devoted about twenty-five seasons to the exploration and survey of the shores of Hudson bay and the country lying to the south and west for long distances inland. He has passed through Hudson strait nine different times and has surveyed a great part of its northern coast.

The Hudson Bay company, which had successfully used the route in question for more than 200 years, regarded the bay and all the country extending thence to the Rocky mountains, as their own property and were jealous of anyone intruding on their preserves, who might some day dispute their monopoly of trade or their ownership of the country. Not only did their officers and men and their supplies enter the country every year by this route, but the military force and the first permanent settlers, in what is now Manitoba, came in by the same route. The Hudson's Bay company, however, was far the easiest and most direct way into the Canadian northwest.

Notwithstanding the fact that Hudson strait and bay have been navigated with success for 240 years by the company, there is no doubt that in the early days of sailing ships, the ice often retarded the progress of their vessels, and much has been made of the fact that the opponents of the proposal to use these waters as a high-way to Europe, but steam navigation has changed all the conditions. The writer was a passenger on one of the company's sailing ships in 1880, when a small steamer, the *Neptune*, entirely stopped our progress in the strait. Four years afterwards, when I was on board the steamship *Neptune*, in about the same part of the strait, we met a much worse field of ice and steamed through it with little or no loss of time.

The delay in attempting to develop this route for commerce has arisen from several causes, among which are the following: When the first advocates, as a modern commercial route, the population in the interior was so small that there would have been too little business to give employment to a railway and line of steamships. As soon as the Hudson's Bay company territories had been purchased and the Canadian Pacific railway had been constructed, both at the expense of the people of Canada, in order to secure the trade of the northwest for the older portions of the country, it was argued that it would be unwise to open a shorter and more direct route to Britain, which would divert the very trade and travel we were so anxious to obtain for that railway, in order to secure these advantages for the Canadians themselves. It was therefore, natural that the proposed route should be opposed by the Hudson's Bay company, the Canadian Pacific railway, the manufacturers of Eastern Canada and all others, who thought their own particular interests were menaced. The Canadian government was also opposed to it, for the time being. In fact, the Hudson bay route had few friends or advocates. The people of the western prairies who wanted the route opened up were not sufficiently numerous and had not the necessary political influence to secure for the project the consideration it deserved. No class of people of the eastern parts of the Dominion felt themselves called upon to take any active interest in the matter.

And so this great question has dragged itself along to the present time. In the natural course of events, the opening of this channel for trade, could only become a living issue when the exports became sufficiently great to force their way to the sea by the cheapest and easiest route. When this shall have been accomplished, a large proportion of the imports will, of course, come the same way and there will also be a considerable passenger traffic. The people of Great Britain will soon learn that the increase in their own trade, which this route will afford, is a matter of much interest to them.

To an outsider, the virtual obstructions placed in the way of developing this route by such means as I have mentioned, will appear to have been short sighted and unpatriotic; for, let us suppose that if, by any means, these obstructions were removed, a large population could be rapidly poured into that vast uninhabited region, would this not be the very best means of furnishing the desired trade for the Canadian Pacific railway and trade for the protected Canadian manufacturer?

Small as was the population of Manitoba, there was always a clamour from that quarter for some consideration of the Hudson bay route to the government. This was appeased by sending

an expedition on several occasions and this time was gained, to our evident satisfaction of the government of the day.

The writer accompanied three of these expeditions, as naturalist and geologist. On two of them he was also medical officer, but he was not asked to report anything as to the question of the suitability or otherwise of the strait and bay as part of a commercial route between our northwest territories and Europe. He had, however, previously written a number of papers on this subject for publication, including one for the geographical section of the British Association for the Advancement of Science, York meeting, and accompanied it with a map. But his most complete paper on this subject was one entitled "A New Route to Europe" (from the interior of British North America), published in Montreal, as a pamphlet, in 1880. Much of the general literature on the Hudson bay route, which has since appeared, is based on the information contained in this pamphlet.

In connection with the expedition of 1884, by the steamship *Neptune*, the government endeavored to send out six small parties to make meteorological and other observations, for one year each, at six stations, to be placed as follows: three pairs on the opposite shores of Hudson strait. One pair was to be at the entrance from the Atlantic, one pair on the north and the south side, midway up, and the third pair on each side of the outlet into the bay. All the stations were wisely placed, where intended, except the one which was to have been built on the north shore of the Labrador coast, about fifty miles south of the strait. Small, but comfortable wooden houses, each containing three good rooms, besides an attic, and having from one to three outbuildings, were erected for each station. The dimensions of the houses were taken out in the ship, but all the cutting and fitting was done on shore. The houses were placed on the ground. Only from two to three days were required to land the building materials, the fuel and supplies of all kinds for a year and to erect the buildings.

The officers and men left at these stations, kept similar meteorological records in uniform set of books. They were also instructed to ascend the highest peaks near their stations, and to make time, in order to make telescopic observations on the condition of the strait during the winter months.

At the end of the first year, or in 1885, fresh officers and men were sent out on the steamship *Alert* to replace the first parties, when they were then in the land near Lake Superior, northward to Repulse bay, the distance being equally great.

Hudson sea and strait are both easy to navigate. The former has an average depth of seventy fathoms, and is one hundred, towards its outlet. The west end of the strait has a depth of 150 fathoms and the narrowest part is 300 as it enters the Atlantic. There are many good harbours on both sides.

The bottom in all cases is stiff bottom, and the water is very clear. The land on the southern side rises to heights of from 1,000 to 2,500 feet, and is more precipitous than the northern side. The western half of which is not so high as the eastern. A few light and signal stations marked the route on elevated points, which could inform passing ships as to the position of any vessel in the strait. The water on either side could be easily and effectively lighted at a very small expense.

The country on the eastern side of Hudson sea is much higher than that on the west. From Cape Jones, on the east shore, where James bay widens into Hudson sea, to the north, all the way to Cape Dufferin, the east coast rises to a height of about 2,000 feet, and in parts is quite precipitous. The west side is everywhere low, with shallow water, from the southern extremity of James bay nearly to Chesterfield inlet.

Some of the rivers of the east shore are navigable except for light canoes between the portages, but some of those coming from the west, might be navigated during high water by steamers with powerful machinery. By such craft as the *Moose* and its west branch, the *Misamis*, might be ascended for 130 miles from the sea, the Albany and the Attawapiskat, to the north, all the way to the mouth of the Little Churchill. The *Attawapiskat* river, which enters the southern extremity of James bay, might be utilized for 80 miles up from its mouth during high water, but it is extremely shallow during the summer. In the central sections of this river and also of the Nelson, some stretches are navigable for steamers for many miles. In the event of steamships running into Hudson sea, the rivers I have indicated may be used for bringing the produce of the country to the coast for shipment to Europe or elsewhere. The small harbours at the mouths of these streams have an average depth of only about ten feet at high tide.

The mean rise of the spring tides on the west side of Hudson sea is eleven or twelve feet, and is pretty uniform, but it diminishes somewhat as we go south. At the south end of James bay, when a northerly wind blows at the time of spring tide, the water sometimes rises to nearly double the ordinary height. The greatest spring tides are at the mouth of Nelson river, where they rise fifteen feet. The tides are low all along the east coast. In the eastern half of Hudson strait the tides are very high, and the water is very shallow, about fifty feet. At Fort Chimo, twenty miles up the Ungava river, Commander Bolton, R. N. found a tide of 384 feet. At Ashe inlet, on Big island, the average spring tide was accurately ascertained to be 31 feet.

The resources of Hudson sea and of the adjacent regions, from which exports

may be expected in the future, include timber, minerals, agricultural produce, fish, fur and oil. These may some day furnish considerable business in addition to the great traffic passing through the sea from the regions west of Lake Winnipeg.

It is probable that nothing but experience gained after the opening of the Hudson bay route will dispel the bugaboo as to the ice and the supposed impossible climate. Not only has it been supposed that the strait is closed during the winter, but that the sea itself freezes across. A little reflection would convince anyone that this is quite impossible with a body of salt water 600 miles wide and a thousand miles long, within the latitudes of the British islands. It is equally impossible for this to happen to a deep channel like the strait, connecting this great sea and the Atlantic ocean, and having a high tide swinging rapidly through it twice every twenty-four hours. The presence of so much open water and the lower altitude, give Hudson sea and strait a milder winter climate than that of Manitoba or Minnesota.

The writer has in his possession a sheet of the climate, including seasonal and periodic events, for nearly a hundred years at an inland post on the Hudson bay route, and the other side of the strait. The former is fully 600 miles in width, the area being nearly half that of the Mediterranean of the old world, and has an area more than 50 per cent greater than that of Lake Superior. Having these large dimensions and being situated in the heart of the continent, the Hudson bay is the most striking feature in the geography of North America, and the writer long ago, suggested that it might be more appropriately and correctly called Hudson sea, being, as it were, the Mediterranean of this continent. Its stations were separated from the north by a very long strait and is really a mare clausum surrounded by British territory. Roughly speaking, Hudson strait measures 500 miles in length by 100 miles in width, and a very large extent of country immediately around Hudson sea, on the east, south and west, drains directly into it, by upwards of 30 good sized rivers and innumerable smaller ones. The great drainage system tributary to Hudson sea, the *Attawapiskat* basin, which derives its waters from all sides and sends them to the sea by a single trunk stream, the Nelson, one of the great rivers of the world. The *Saskatchewan*, which falls into Lake Winnipeg, originates west of the rocky mountains, and has a course of more than a thousand miles. The *Nez Perce* river, one of the largest of the north-western provinces, flows westward into the southern bay of Lake Winnipeg. The Red river, the most important affluent of Lake Winnipeg, has its source south of latitude 45 degrees. This with the *Arctic* river, on the north, drains the entire basin of Hudson sea, and in the following, gives a total north and south drainage of 1,500 miles. The limits of the basin of Hudson sea, on the north, extend from the centre of the Labrador peninsula west to the Rocky mountains, a distance of 2,100 miles, and from the source of the Red river and the *Nez Perce* land near Lake Superior, northward to Repulse bay, the distance being equally great.

The fact that the strait and this great inland sea have been navigated by sailing ships with scarcely any loss for 240 years, on the whole, is a very good indication, shows what might be done when a great carrying trade is in sight. The railways were built from the prairie provinces to Hudson sea, the farmers of these regions would be in as good a position in regard to a transport as those of the interlake peninsula of Ontario in relation to the St. Lawrence. If the average price of wheat throughout the northwest were increased by ten cents a bushel, owing to such improved facilities for marketing it in Europe, and if the annual value of the crop alone were increased by \$100,000,000 or enough (at a moderate price) to build a new transcontinental railway every year. The combined value of all other products would double this amount, and the value of the land itself would be correspondingly enhanced. These advantages, together with the many others of local importance, and the great reduction in rates for freight, would seem to justify the Canadian government and people for at least making every effort to establish this line of transportation.

The city of Winnipeg is near the southeastern corner of the whole area of Hudson sea, and is only about 100 miles from it to Liverpool by the Hudson bay route is 800 miles less than by the St. Lawrence, while the saving in distance in favor of all other points is greater as we advance northward into the interior. This may be illus-

trated by supposing that two travellers start for Liverpool from some point in that direction, one going by Lake Superior and Montreal, the other via Churchill, the latter arrives at Churchill as soon as the other reaches Winnipeg. From Winnipeg this traveller has still to go 1,291 miles by Lake Superior to reach Montreal, where he will still be no nearer to Liverpool than the other is when he reaches Churchill. In other words, the traveller by Churchill saves the whole distance between Winnipeg and Montreal. By way of New York the distance is, of course, still greater.

It will probably be found that some of the products of the northwest can be profitably exported by the Hudson bay route, which would not pay at all to send by the St. Lawrence.

For more than thirty years, the writer has advocated the consideration of this route. In 1878 a paper which he had prepared on the subject was published in the report of the minister of the interior for that year. During the session of 1878-79, the Hon. Thomas Ryan called the attention of the senate to the importance of this subject and stated his belief that a railway might be advantageously constructed from Manitoba to Hudson bay. In 1880, parliament granted charters to two companies for building such railways, and in the following year, one of them, the Nelson Valley Railway and Transportation company (of Montreal) appointed Mr. George Bayne as its chief engineer and caused a survey to be made from Playgreen lake to Churchill. The company also opened a right-of-way along its line for many miles.

The region between Lake Winnipeg and Churchill, which a railway would require to traverse, has been supposed to be hilly and rocky, but this is a mistake. In the wide-valley of the Nelson river, there is much good soil, consisting of a soft clay loam.

The railway might be originally constructed so as to be operated by hydro electric power, which can be furnished on a great scale by the falls and chutes of the Churchill and Nelson rivers, and also from those along the travelled boat route, via Hill, Steel and Hayes rivers.

Once the sea route through Hudson strait has been proved feasible, railways will carry to the coast of Hudson sea,

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### 8 KILLED IN COLLISION.

Midnight Flyer Crashes Into Stock Train in Chicago Yards.

Chicago, Sept. 28.—Eight men were reported killed and about twenty injured in collision at 12:30 o'clock this morning between the midnight flyer of the Pan-Handle railway and a Chicago-Milwaukee and St. Paul stock train at Fourteenth street and Rockwell street.

The killed were all passengers in the caboose of the cattle train, which was bound for the stock yards. It was on the Pennsylvania tracks and the heavy passenger train crashed into the rear end, reducing the caboose to splinters and demolishing four cattle cars, which were closely packed with stock. The passenger train, which is known as No. 12, left the Union station at 12:01 o'clock.

Killed are Stockmen. Officials of the Pan-Handle said they could not understand how the stock train of the other road came to be on the flyer's track. Most of the men who were killed were asleep when the crash came. They were stockmen from the North-West, accompanying cattle to Chicago.

A few of the passengers on the flyer were injured by being thrown from their berths and seats. The crew of the stock train and men engaged in watering and handling the cattle also were among the injured.

When the giant engine of the fast passenger train crashed into the frail caboose it almost obliterated it. The human beings who occupied the berths

were crushed together in a mass. The shrieks of the wounded were intermingled with cries of the animals in the stock cars which were telescoped one with another.

Awakened by Crash. Persons living in the neighborhood were awakened by the terrific crash and soon hundreds of rescuers were on the scene assisting in the work of chopping the victims from beneath the wreckage. Telephone calls brought scores of physicians from their beds and police ambulances were sent from all parts of the city. Automobiles were pressed into service to rush many of the injured to the hospitals. Identification of the dead was difficult because of the terrible manner in which the stockmen were killed.

INRADES RETURN TO HAMILTON

Will Take up Residence in House Where Ethel Was Murdered.

Hamilton, Sept. 27.—T. L. and Mrs. Kinrade and their youngest daughter, Miss Gertrude, have returned to Hamilton, and will take up their residence here, but not for a time at least, at 105 Herkimer street, the scene of the murder of Miss Ethel Kinrade. Mr. Kinrade, who looked like a nervous wreck and a broken-down man, for some weeks after the tragedy, looks like a new man now and is beginning to take life.

He, with his wife and daughter, visited the grave of the murdered girl Saturday and appeared to be very greatly affected. Mrs. Kinrade weeping bitterly.

Mrs. Montrose Wright, who was Florence Kinrade, and her husband, have not returned, but are continuing their extended honeymoon trip through the United States.

Mr. Kinrade resigned his position as principal of the Cannon street school some time ago, but will not feel the loss of his salary of \$1,200 a year as he has very valuable real estate interests that will bring him in very much more than that sum.

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