

THE HUDSON BAY RAILWAY

- BY -

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Section One

The Development of the Idea to 1820.

The question whether the Hudson Bay Railway should or should not be completed is one which has now officially passed from active argument into history. For weal or for woe the Canadian government is committed to its completion and most of the actual construction has been done. The question of ^{the} wisdom of such a course as yet lies on the knees of the gods, and a few years must elapse before judgment can be passed in regard to the value or futility of the scheme.

The history of the development of the idea of the route is almost as old as the history of Western Canada and is inextricably bound up with the growing consciousness to the Canadian people of the value of western lands.

The Hudson's Bay Company from the first recognized the importance of the route in reaching their fur preserves, and by practical experience seem to have found it an economical one. Its value during this phase of its history however is somewhat complicated by their need of a route free from Montreal and the influence of the Nor'Westers, and this need of a certainty of making port without engaging in hostilities gave an enhanced value to the route. The same complication of course holds good as to why the Nor'Westers preferred the route now nearly traversed by the Trans-Continental railways. Their traders and trappers could not with safety have gone the other way if they had wished. Whether they wished to do so or not is one of the questions upon which history is more or less silent.

Before 1752, Joseph Robson,¹ a former employee of the Hudson's Bay Company seemed to have had a vision of the possibilities of the route as a practical means of ingress and egress to the country of the Hudson's Bay watershed. He said:

"The companie's ships generally enter the straits in the beginning of July as the straits are never frozen over, nor always unavigable, even when there is much ice in the Bay; I imagine that a safe passage may be often found in the beginning of June".

Nor is he any the less firmly impressed with the fact that the company is not desirous that the knowledge of the route and the potentialities of the country served by the route be made known to the world.

That Robson was not incorrect in his surmising is shown by the 1857 Report² Sir George Simpson is quoted as follows:

"I do not think that any part of the Hudson's Bay Company's territory is well adapted for settlement; the crops are very uncertain". In referring especially to the straits he remarks. "No great extent of traffic can be carried on through Hudson's Bay, inasmuch as the season is exceedingly short; the Bay is never free from ice About how long? Two months.

Sir George's testimony is greatly at variance with his book written some eighteen years before, but this he explained by stating that much of the book referred to the vicinity of the Red River; an explanation however that leaves the reader impressed rather with the idea that there may have been ulterior motives for his testimony.

We are forced to agree with Tremaudan,³ "It may be added here that Sir George Simpson while occupying the position of governor of the

¹
Joseph Robson - Account of Six years Residence in Hudson's Bay. 1733-1736 and 1744-1747. London, 1739. Page 58.

²
Report from the Select Committee of the British House of Commons on the Hudson Bay Company, 1857.

³
A.H. de Tremaudan, The Hudson Bay Road, J. M. Dent, 1915. Page 195

Hudson's Bay Company was strongly reprimanded for having written a report favorable to the settlement of the country, in which he made mention of the untold wealth along the agricultural, timber, mineral and other lines of natural resources. He was ordered either to retract the statements he had so made, or to resign. Hence the type of testimony he gave before the House of Commons 1857."

Not only since 1670 had the Hudson's Bay Company found the Hudson Straits a feasible entrance to their fur preserves but the Selkirk settlers made it their means of ingress, and therefore established the route as one practical for immigration, unfraught with serious danger. From 1811 to 1815, four parties came by this route to the Fort Douglas settlement and neither loss of life nor undue hardship seems to have been incurred from either the Straits or the Bay.

Section Two.

Transportation, 1820-1870.

Up to 1820 there were the two recognized routes to the settlement, this one by way of the Hudson Bay, Hayes river and Lake Winnipeg and secondly, the Kaministiquia route by way of the Ottawa and French rivers, Georgian Bay to Fort William and thence, if it was a fur brigade, to Fort Alexander. During these years neither of these routes were entirely satisfactory to the settlers of the Red River valley. The route to Eastern Canada was of course in direct defiance of all geographical features and had been made possible only by the energy of the Nor'Westers. Only high priced articles such as furs could be carried profitably this way. The Hudson Bay route was also far from satisfactory. In the first place there was a tedious and often difficult river journey from Lake Winnipeg to York Factory and secondly only articles which might not be used in any way that would

conflict with their monopoly, would be carried by the company's boats. We thus have the Company refusing to bring out some British manufactures to James Sinclair for this reason. Still more drastic use was made of this power when in 1844, they refused to carry a consignment of tallow to England for the same person because he was suspected of trafficking in furs. However in spite of these drawbacks from 1821, and the union of the Hudson's Bay Company and the North West Company, the overland route to Montreal was more or less discarded, partly because it failed in competition with the Hudson Bay route, partly tradition on the part of the Hudson's Bay Company and largely because the northern route kept the trade away from the eyes of eastern merchants and entangling competition.⁴ It is interesting to note that after all a route to Liverpool by way of Port Nelson is but a reversal to type. This route is but following the lines of least resistance which the transcontinental routes went in sheer defiance of.

From about 1845, there began to be a fair volume of trade carried on over a new route. This was south to St. Paul and American routes. By 1856 five hundred wagons carrying tallow and other articles of commerce left Fort Garry for St. Paul. So important did this third route become that by 1859 we have the Hudson's Bay Company contracting to carry their supplies to the Red River posts through the United States.⁵ In 1859 we find the first steamer on the Red River, the "Anson Northup" and in the same year a regular stage route was established to the south.

⁴Report of the Select Committee - 1857 - Page 387.

⁵L. Shere - Transportation in Western Canada - 1785 - 1885. Page 10.

Section Three.

The First Phase of "On-to-the-Bay" by Rail - the 70's and 80's.

Reaching England by the Hudson Bay route on a commercially profitable basis awaited the advent of the development of the railway, the practical means of rapid, bulk transportation overland.

The first railway in Canada - the Champlain and St. Lawrence Railway - did not begin to operate with steam locomotives until 1837, although horse drawn cars were in use the year before. Although railway expansion was fairly rapid - by 1867 there were 2,529 miles of railway in Canada - it was not until the completion of the Canadian Pacific Railway in 1885 that real railway expansion began in the Dominion. The first railway service for Manitoba, was secured in 1877, when a line from St. Boniface joined the St. Paul and Pacific at Emerson.

Interest however was keen for an alternative route to that one via St. Paul and the possibilities of one by way of the Hudson Bay began to stir the imaginations of the Manitobans. In 1878, the Free Press⁷ quotes a long letter written by the Newfoundland correspondent of the Toronto Globe. The whole tone of the letter is favorable to the possibilities of navigation in the Hudson Straits, while the advantages of the new route - nearness to England and a road for immigration, rather than by New York are strongly stressed. Again in 1879,⁸ interest is revived by the return of Dr. Robert Bell of the Geological Department, Ottawa, from a prolonged stay in the region of the Nelson and Churchill rivers.

⁶ Id. Page 13.

⁷ Manitoba Free Press, June 8, 1878.

⁸ Id. January 14, 1879.

Besides the fascination of an all western route for the transportation of western goods to the sea, and the reason of getting away from the American route and all the dangers of an exit through a foreign country there was another motive for the Hudson Bay road. It would have been thought that the steady pushing on of the C.P.R. would have satisfied fully the people of the west. The greatest motive of all however for the northern route came from this very source. As an inducement to the C.P.R. there had been inserted in their charter the famous 'monopoly clause'. This stated that for a period of twenty years from the date of the enactment of the charter there should be no charter issued to any railway running north-east or south-west within fifteen miles of the boundary line. The purpose of course was to prevent American lines from tapping the resources of the west and thereby impairing the earning capacity of the Canadian Pacific. The people of Manitoba, however, saw in this two dangers - first - the invasion of what they considered their legislative rights in not being able to grant railway charters as the necessity arose, and secondly, the fastening of a commercial disadvantage upon them in the form of excessive rates. The following passage will suffice to indicate the attitude of the western people. Commenting upon the C.P.R. purchase of the Duluth, South Shore and Atlantic Railway, the Free Press Stated:⁹

"But while the Dominion continued to lavish millions wrung from an overtaxed people upon this pampered corporation, they will have no difficulty in buying up whatever roads they require to tighten the chains of monopoly upon Manitoba. This is the same road that refuses to build a few miles of branch lines to relieve the people who were induced to settle in the Souris district by the lying representations made them by C.P.R. managers. It is impossible to understand the fatuity which inspires Canadians to continue in power a government whose sole aim appears to be

⁹ Id. July 26, 1888.

the enriching of this foreign corporation".

Two means of combating the alleged monopoly were attempted by the Manitoba government. One was the issuing of railway charters to railways running south and the boundary line despite the disallowance of Dominion legislation and the second means was the Hudson Bay Railway.

That the building of the C.P.R. was the most potent of the contributing motives for a northern route is evidenced by the fact, that when the Dominion government abrogated the monopoly clause in 1888, interest in the Hudson Bay Railway began to wane, both on the part of the people in Manitoba and also their representatives, the Greenway government.

Section Four.

Legislation in Regard to the Railway - 70's and 80's.

Of the many charters issued by both the Dominion and Provincial governments for companies wishing to reach the Hudson Bay, the two first, in time and in importance, were given in 1880.

On May 7, 1880, a charter was given by the Dominion government ¹⁰ to a company, the Nelson Valley Railway and Transportation Company, to construct a road between a point on the north shore of Lake Winnipeg and the mouth of the Churchill river. They were given power also to construct and use steamships.

On the same date a second bill was assented to, ¹¹ to construct a line from the city of Winnipeg to Port Nelson, either in a straight line or to use the navigable waters leading to the Port. This company

¹⁰ 43 Victoria - C.57.

¹¹ 43 Victoria - C.59.

was known as the Winnipeg and Hudson's Bay Railway and Steamship Company, and we find amongst the promoters - Hugh Sutherland, Wm. Bannerman and J. C. Schultz. It is curious now to note that construction was to begin within two years and be completed within six years. These two rival companies were neither able to finance the roads for which they had received charters and hence on May 25, 1883, a Dominion Act ¹² was assented to entitled, "An Act to unite the Winnipeg and Hudson's Bay Railway and Steamship Company and the Nelson Valley Railway and Transportation Company into one corporation under the name of the Winnipeg and Hudson's Bay Railway and Steamship Company". Thus there disappeared the main rival of the Sutherland railway with a promise of payment of \$10,970.00, a year for the franchise and property of the Nelson Valley Railway. The Winnipeg and Hudson's Bay Railway and Steamship Company was the one venture of the many that gave the greatest promise for an outlet to the north. In fact, with the exception of the Red River Valley Railway Company, which reached to the south and an American outlet, created the chief interest in railway building of that time. This railway has an even greater claim to remembrance, though it was destined never to be completed. The Dominion government's land policy up to 1908, was largely due to exigencies of financing this road, while it was also a determining factor in the fate of the Norquay administration and the operations of the Greenway government.

Following the precedence of giving land grants to railways - a precedence set by the help given to the C.P.R. the Dominion

¹² 46 Victoria - C.69.

government in 1884 passed the Dominion Lands Act ¹³ to help this and ^{other} infant railway projects. This act promised 6,400 acres for each mile of railway built in Manitoba, and not more than 12,800 acres for each mile built in the North West Territories.

Because of the high feeling engendered by the fear of a C.P.R. monopoly on Manitoba exporting facilities, the Provincial government embarked on a policy of granting aid to railway projects rather lavishly and altogether in accordance with a policy of 'good business'. In 1885 an act ¹⁴ was passed by the provincial government granting aid to the Winnipeg and Hudson's Bay Railway and Steamship Company, giving one million dollars worth of provincial bonds and bearing interest at the rate of four percent. This aid was conditional upon the Company beginning construction within two years, a time limit which was extended the next year to three years. ¹⁵ This offer allowed the President of the road, Hugh Sutherland, to interest outside capital. As a result, Messrs. Andrew Onderdonk and James Ross, representatives of an American syndicate of capitalists, took up the question of finances. They requested the Greenway government to change the nature of the aid granted to one of guaranteeing of $4\frac{1}{2}\%$ interest on four and a half million of bonds for a period of twenty-five years from the completion of and commencement of operation of the railway. This was done in 1886 ¹⁶ while a second act in 1887 ¹⁷ confirmed this and made

¹³ 47 Victoria - C.25.

¹⁴ 48 Victoria - S.55.

¹⁵ 49 Victoria - C.27.

¹⁶ 49 Victoria - C.25.

¹⁷ 50 Victoria - C.40.

changes to make the guarantee more available. The promoters now made arrangements in England for four and a half millions of capital, and the construction result was the building of forty miles of railroad. This portion long since torn up began from near the location of the old race track west of Winnipeg and extended nearly to Shoal Lake.

In the meantime a change of attitude in regard to this railway was taking place on the part of the Manitoba government. The reasons for this and the resulting attitude of the Onderdonk and Ross syndicate can best be told by quoting the following letters. 18
On September 12, 1888, Messrs. James Ross and Andrew Onderdonk wrote to Premier Greenway reviewing the story of the Manitoba government's failure to keep their pledges as follows:

"In the meantime, (i.e. after passing 49 Victoria - C.25 and 50 Victoria - C.40) in July last, Mr. Onderdonk and Mr. Kingsmill, (who had visited Winnipeg), made an offer to the government on our behalf, and after discussing the same with your executive council were informed (as they understood) by yourself, that your government was not prepared to deal with the matter before the then approaching meeting of the legislature, as a change in the Guarantee Act might be necessary respecting the appointment of trustees, and possibly in regard to the payment of interest on the unguaranteed bonds. No other changes were suggested by your government at the time.

On the 3rd of August you addressed a letter to Mr. Kingsmill stating that he was in error in supposing that your government was not prepared to deal with the question, but that your government could not do so until satisfied that such financial arrangements were made as would enable the company to construct the road. This letter further stated that at the proper time your government were willing to do "anything that is reasonable, and in the power of the government to secure the construction of an all - rail route to Hudson's Bay"..... Mr. Ross completed his arrangements in England and hastened to Winnipeg to meet the government, when he was met with the statement, made to us for the first time, that the government were contemplating a recommendation to the legislature to reduce the guarantee from \$4,500,00.00

to \$2,500,000.00, and further, that your government declined to give the \$35,000.00 voted for the completion of the forty miles".

This evident change of attitude on the part of the Manitoba government called forth the bitterest resentment of the promoters of the scheme, and from the Manitoba Free Press ¹⁹ - one of the staunchest supporters the company ever had.

In a long letter written September 15th, 1888, Joseph Martin, Railway Commissioner, reviews the various negotiations between the two companies, and explains the reasons for the change in attitude on the part of the Greenway government, and incidently, irreparably widens the rift between the promoters of the road and the government. The fact of the matter was that there were two strong reasons why the scheme fell through. First, there was not the same necessity for the road as in 1885-6 ²⁰ and second, the province had lost faith in the men responsible for the Winnipeg and Hudson's Bay Railway. ²¹ Mr. Martin in his reply stated:

"In 1886 the position of the province was very different from what it is today.

The monopoly given to the Canadian Pacific railway by their charter bound a large part of the province till the year 1901 Relief from this monopoly seemed only possible through the construction of the Hudson's Bay railway.

The large liability assumed by the province extending such an offer of guarantee was fully appreciated by the House, but it was felt that the existence of the C.P.R.

¹⁹ e.g. See copy of September 27, 1885.

²⁰ The Sun - September 20, 1889.

²¹ The name had been changed to this June 23, 1887. 50-51 Victoria-C.81

monopoly was such a serious detriment, that the province was justified in assuming almost any liability, if the effect would be to give relief at an early date."

The sting lies in the last few words. To the government of Manitoba the Hudson Bay Railway Company did not construct the railway with the requisite expediency. Summing up their delinquencies

Mr. Martin said:

"It ill becomes, under these circumstances, a company, which has never kept a promise made either to the government or to the public, to accuse the government of bad faith".

The government therefore hesitated in assuming such a liability as would entail an expenditure of \$180,000.00 per annum for the coming twenty-five years.

There was also the growing idea - later so prominent - that the building of a railroad of this type should be one of national enterprise. Mr. Martin voiced this when he stated:

"While no doubt the building of the Hudson's Bay railway would be of great benefit to the province of Manitoba, a glance at the map will show that the benefits afforded to the Northwest Territories by the construction of such a line would be much greater..... If that be so, then clearly the guarantee of \$4,500,000.00, is much too large a share of the cost to be borne by Manitoba, considering the proportional benefits to be derived by her as compared with the North-West Territories". Therefore because of this benefit that would be obtained by those districts outside Manitoba from the construction of the road the Manitoba government, "has come to the conclusion that the amount of the guarantee should be reduced to \$2,500,000.00."

That there was a widespread belief that the promoters were "clever manipulators" can be gleaned from the columns of the Sun ²² published at this time. Such expressions of opinion as "like to see it in the hands of a good company", "not a dollar given unless an absolute guarantee the road would be finished", "go slow in

²² For example copy of August 23rd, 1888.

dealing with these men, whose only object was to fasten a big liability upon us for their own benefit." ²³ are found scattered freely through its pages.

Although the Greenway government did not feel in the same generous mood as when it was the opposition party of the Honorable John Norquay and later when it first took over the administration, yet the scheme was not abandoned entirely. The act giving aid to the extent of guaranteeing interest on $4\frac{1}{2}$ million bonds had been repealed, ²⁴ but other aid was forthcoming. In 1888 because the Dominion government had declined to give title deeds to the land securing the \$256,000.00 worth of provincial debentures already given the government an act was passed ²⁵

"Whereas under the provincial Railway Aid Act of 1885: ²⁶

"Debentures of the Province for \$256,000.00, have been delivered to the Winnipeg and Hudson's Bay Railway Company and whereas forty miles have been completed but not to the satisfaction of Canada - and whereas the Dominion will not transfer land grant for the forty miles until completed to their satisfaction, therefore the Provincial Treasurer pay to the company money to the extent of \$35,000.00, to complete the railway to the Dominion government's satisfaction".

In 1890, ²⁷ the Province agreed to pay the railway, "a sum not to exceed \$3,000.00 per mile as a cash bonus for that portion of the line within the province" - for an amount not exceeding 250 miles when the railway is completed or \$1,500.00, per mile as the work progresses. Again in the next year ²⁸ the Manitoba government agreed to pay the company \$1,500,000.00, provided the first hundred miles was completed by December 31st, 1892, and the whole

²³ See the newspaper clipping book entitled, "Railways, 1888-1912."

²⁴ "Page 98. Manitoba Legislative library.

²⁵ 52 Victoria - C.39.

²⁵ 51 Victoria - C.40.

²⁶ 48 Victoria - C.42.

²⁷ 53 Victoria - C.41.

²⁸ 54 Victoria - C.22.

railway within five years of May 31, 1891. Even with this aid the financing of the road became a difficult matter and in 1891 the Dominion government proposed aid;²⁹

"In order to enable the Winnipeg and Hudson Bay Railway Company, to construct so much of their railway as reaches from Winnipeg to a point on the Saskatchewan river the Governor in Council may enter into a contract with such company for the transport of men, supplies, materials and mails for twenty years and to pay for such services during said term \$80,000.00, per annum and to be paid annually".

Although the company did not measurably respond to such offers there was no lack of other companies applying for charters in order to reap the benefits of land grants and cash subsidies. One of the most important of these and the one destined to become linked with the Winnipeg and Hudson's Bay Railway Company was the Lake Manitoba Railway and Canal Company, incorporated in 1889³⁰ by the MacKenzie Mann and Company, a company whose name had become synonymous with success in railway construction in Western Canada. Their charter gave them rights to build from Portage la Prairie to Lake Manitoba and also to improve the navigation of Lakes Manitoba and Winnipegosis and the North Saskatchewan river.

On July 23, 1894,³¹ this company completed negotiations with Hugh Sutherland by which it absorbed the Winnipeg and Hudson's Bay Railway. The new railway was to be called "The Winnipeg and Great Northern Railway Company". The Dominion

29

54-55 Victoria - C.81

30 52 Victoria - C.57.

31 57-58 Victoria - C.94.

Land's Act of 1884 was interpreted differently by MacKenzie and Mann and the Dominion government with the result that instead of building so as to receive the government grant of 12,500 acres per mile from lands lying to the north of the Province of Manitoba, they built rather towards the west and claimed the original grants to the old Hudson Bay Railway company for this work. This claim the Dominion government recognized and gave to them nearly five millions of acres. This was the condition that existed in regard to the road to the Bay up to the formation of the two new provinces of Alberta and Saskatchewan in 1905.

SECTION FIVE.

Scientific Investigation.

It is doubtful if there has been one national undertaking in Canada that has called forth a more sustained and widespread controversy than that of the building of the Hudson Bay Railway. The inevitable result of this difference of attitude has been the numerous attempts to arrive at the facts of the problem by means of expeditions and investigations, Provincial investigations, Dominion House of Commons' investigations and Senate investigations. Because of this there has accumulated a mass of material dealing with every possible advantage and disadvantage of the route. Seemingly every angle of the situation has been reported upon and more than thoroughly discussed both in the House of Commons and out of it. If success to the project will come as a result of long deliberation the railway is surely destined for a happy termination.

Barring other expeditions to the west that were not primarily concerned with the investigation of the Hudson Bay Route - we have the Gordon Expedition as one of the first. In 1884, Lieut. A. R. Gordon, under the direction of the Dominion government commanded an expedition for gathering of material relative to the period of navigation of the Bay and the Straits, and the possibilities of harbors on the west coast of the bay. The next year - 1885 and also in 1886 he commanded a second and a third expedition for the further investigation of the route. The report of Dr. Bell F.R.S. who was with Lieut. Gordon forms a valuable commentary on the value of the route.

In conjunction with these expeditions the governments of both the Dominion and Manitoba carried out investigations by special committees for the gaining of more accurate information on the subject. In 1884, there was a Special Committee of the Dominion House of Commons and of the Manitoba Legislature. In 1883, there were also gathered by a committee the opinions of the Captains of American Whalers operating in the Hudson's Bay in regard to the probabilities of successful navigation of the Straits and Bay. ³² In another fifteen years, in 1897, ³³ a second special expedition was sent out by the Dominion government in the steamship 'Diana' under the control of William Wakeham, while in 1903 a third expedition of ^{the} 'Neptune' with Captain A. R. Low in charge made a further study of the problem. Again in 1912 we have the 'Minto', 'Burleigh' and 'Chrissie C. Thomey' under F. Anderson visiting these waters for the same avowed

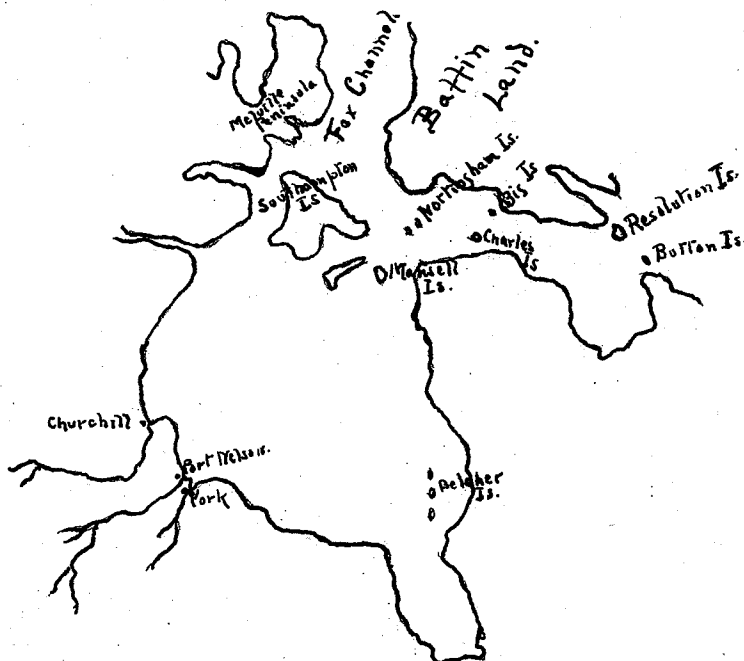
³² Sessional Paper # 104, 1883.

³³ Sessional Paper # 11B-1898.

purpose. ³⁴ Keeping pace with these we have special Senate investigations in 1907 and again in 1921.

The Findings of the Investigators.

Nearly every argument that could be found or invented has been put forward at one time or another by both the opponents and well-wishers of the route, as to the probable economic success of the road. There are at least three cardinal points around which most of the controversy has swung - the navigability of the straits - the length of season and thirdly the possibilities of harbourage. From the following map it will be seen that this ocean route presents problems peculiar to itself and to be found at no other place on the great trade routes of the world.



The bay itself is admitted to be, even by the most determined opponents of the scheme, practically free from any serious

³⁴ Sessional Paper #101a - 1912.

danger. It is a different question with the straits however. There is a strong current coming down Fox Channel and swinging out through the Straits. Flowing from the polar regions it brings with it large masses of ice. The nature of this ice flow can be seen from Lieut. Gordon's 1886 report :

"I consider that they (the ice floes) may be divided into three types or classes: First, there are in Hudson's Straits at all times of the year, icebergs; second up to the end of July or beginning of August there is much young flee-ice, by this is meant the ice which has been formed during the winter immediately preceeding.

Its thickness is variously reported from 7 feet 6 inches covering this ice is a sheet of snow packed solid and hard as the ice itself thus making the total depth of ice and snow together from 7 to 9 feet. The third type heavy Arctic ice. This ice is of every thickness, from 10 to 40 feet. In early July large masses of this heavy old ice are met in Hudson's Straits".

To Lieut. Gordon the ice presents a real barrier, not only in the amount but also in its movements it presents unexpected difficulties.

"The tidal currents in the Straits flow with great rapidity, especially at the eastern end of the Strait, any vessel getting entangled in the running ice in these currents is sure to meet with hard usage, if not with actual disaster. The ice does not move with uniform speed, but wheels and whirls in every direction, the heavier flee pieces some of them approaching the size of small bergs tearing through the pack".

In spite of the evident hesitation as to the possibilities of an open route, he still does not actually discourage the route - fixing the dates of opening and closing of navigation as from July 15th to October 15th.

In appraising the rather pessimistic attitude of this investigator it must be remembered however, the 'Alert' was only

a vessel of 240 tons and fifty horse-power - a fact that called forth such caustic comments from the Free Press - as 'toy engine' - '50 h.p.punt' - 'handful of coal'.³⁵ Owing to the dissatisfaction produced by this report in limiting the navigable season to three months, the Dominion government sent Wm. Wakeham in 1897. The results were hardly more gratifying however. In Captain Wakeham's own words:

"I now conclude this part of the report by saying that I absolutely agree with Captain Gordon in fixing the date for the opening of navigation in Hudson Strait for commercial purposes, by suitable vessels, at from 1st to 10th of July. I do not consider that the strait can be successfully navigated in June I consider that navigation should close from the 15th to the 20th of October".

The third official expedition - that under Captain Low - 1903-4³⁶ gave dates that were more cheering :

"Period of safe navigation for ordinary ships is July 20 - November 1st..... There is little doubt that specially constructed ships for ice navigation could pass through the straits at any time".

The chief hope in this estimate lies in the slight extension of time at the end of the season. This is when every day is valuable.

"What Gordon discovered, and Wakeham confirmed, Anderson 'glinched' when in 1912, Captain F. Anderson reported in regard to actual conditions met by him:

"The straits were entered on July 25th with the two steamers in tow. Considerable ice was met with and caused a certain amount of difficulty, yet the 'Minto' was able to

³⁵ See FreePress issue of May 6 - 1886.

³⁶ Sessional Paper #146 - 1905.

get through with both vessels in tow, and cleared the straits by August 4th, arriving at Churchill August 7.

Captain Anderson however stated in extenuation of these figures the report of Mr. Derome in charge of the Revillon Frères trading post at Wakeham Bay, that the season that year was at least three weeks backwards. His return did not seem to set a final date either. In his own words:

"The expedition left Port Nelson September 28. Sometime was spent in returning through the straits in doing survey work in Sugluk harbour, but arrived in Port Burwell October 7th. On the passage frequent snow squalls were the order of the day, but no ice was met with although we passed south of a large field off the south side of Coates island".

Besides the above official reports - extracts from the logs of the following private vessels or reports of captains throw a certain amount of light on ice movements:

Captain Clisby - 1863 -	Open early July.
James Hackland - 1860 -	July - no ice.
Northern Light - 1863 -	July 8 - no comment on ice.
Ansel Gibbs - 1866 -	July 21 - no ice.
	July 26 - fast in ice.
	July 1 - beating through straits.
Captain Andrews- 1863 -	June 15 - 25 - working through ice.
	August 3 - fast in ice.
Abbie Bradford - 1878 -	June 24 - fast in ice.
	July 20 - ship in Bay.

During the years 1911 - 1913 the government had a fleet of steam vessels carrying material to Port Nelson. The Beothic - Cearense - Alette - Acadia - Alcazar - Bonaventine - Bellaventure and Sindbad. Testimony to the fact that these vessels did not always find the straits easy to navigate is found from their logs. The Beothic

in 1911 found "much ice" from July 25 - 29, and again in 1912 "considerable" July 15 - 20, while the Bonaventure experienced "heavy ice" from July 16 to August 16, 1913. The leaving dates show a greater variation of ice movements. The Acadia in 1911 on October 10, at Cape Chidley reported "no ice" and the Boethic in 1912 from the 2nd to 6th of November also found the same satisfactory condition. The Acadia on October 22nd, 1913, however found the straits practically closed, while the Alette on October 10, 1913, stove in her bow. She returned to Nelson in a sinking condition and was finally beached.

Besides the ice there are however several other climatic considerations that need to be taken into account in settling the question of the utility of the road as a commercial route for Canada. One point over which there has been a good deal of controversy especially in the earlier days of navigation was that of variability of the compass as it approached the magnetic pole. The 1886 report of Captain Gordon gave cause for much apprehension from this source:

"The last, and indeed the most serious difficulty that I anticipate is in the faulty working of the compasses, especially about the critical ground off Digges Island nothing but the most sleepless vigilance and the greatest caution will save a ship from disaster".

Captain Wakeham however twelve years later did much to allay this bogey of navigation. He reported:

"The standard compass gave us the greatest possible satisfaction. Once properly compensated it never varied".

Again in 1912 Captain Anderson similarly reported:

"Our standard compass which had been placed on board where it would be least affected and therefore require little adjustment, was a great comfort. It was hardly affected by the comparatively close proximity of the magnetic pole and proved very efficient".

The report of W. J. Stewart, the Hydrographer on the vessel Stanley swept away practically every vestige of this danger:

"As regards the great 'bugbear' of Hudson Bay navigation, the reported local attraction and inaccuracy of the compass, I found nothing to justify this evil reputation ... Being exceptionally fortunate in having clear sun and stars, my observations for error were almost hourly, and showed that the change of variation though rapid, was normal and I think no more difficulty will be found in the navigation by account than is experienced in the approaches to the Gulf of St. Lawrence, where the rapid change of variation necessitates hourly alterations of the course".

Besides the presence of ice and possibilities of magnetic disturbance, the whole question of general weather conditions has given scope to much investigation and has opened up a whole field of potentialities both for evil and for good. General weather conditions have a threefold aspect. Storms, fogs and temperatures must all be taken into account. The first two of these are undoubtedly unmixed evils. With the low temperature to be expected from this region elements more beneficent however may enter into the question. Low temperatures will adversely affect haulage power both on sea and land, and also change harbourage conditions, yet these may be offset or more than offset by their action on the produce likely to be exported by this route.

The effect of the temperature of this region upon ice conditions in the harbours will be dealt with later. As far as the bay itself is concerned there are no temperatures low enough to cause troublesome ice conditions. Reports bear out the fact that the average temperature of the bay waters is higher than those of Lake Superior. The members of the Dominion House of Commons 1884 report stated: "The temperature of the Hudson Bay

in summer is some 14° higher than Lake Superior". Commander Gordon reported: "The highest bottom temperature recorded was 41°, and the lowest 37°". In 1886 in a full report he stated: "The average daily temperature of sea-water at the surface- August 5th to 28th when the ship was passing through the straits - varied between 29.8° and 36.7°. On September 1st, off Churchill the temperature was 42.8°. From September 2nd to 6th, in Churchill harbour, the temperature ranged from 43.6° to 45°". Captain Anderson in 1912 also found: "Temperatures in the bay and strait were not low, the air averaging between 31° and 40° F., the sea-water between 30° and 40° F.

The advantage of a low temperature on the sea route upon the cattle shipping and chilled meat shipping industries are apparent.

The Hudson Bay does not seem to be notorious for storms. There is perhaps less stormy weather in these waters than in most others of the same size and latitude. It is true that the Honorable W. J. Christie, an old officer of the Hudson Bay Company testified before the 1884 Dominion Select Committee, that storms were prevalent. In answer to a question on this subject he says:

"Yes, fearful storms. On one occasion we experienced a heavy gale in crossing the Bay, and the vessel heve to for twelve hours".

The whole tenor of his testimony however leaves a strong impression that he was biassed towards the traditional Hudson Bay Company attitude to settlement of this country. That he did not altogether impress his questioners is evidenced by the fact that the committee in their general report came to the conclusion that,

"Storms are very rare and by no means formidable". We have besides a weight of testimony on the other hand as to the general calmness of the bay. Henry Johnston who was with the Hudson Bay Company for thirteen years testified before the Manitoba Legislative 1884 Select Committee:

"I do not consider Hudson's Bay a stormy bay. There are squalls sometimes but not frequently. The severest storm I remember was in the fall of 1861. The "Prince of Wales" was not blown from her anchorage".

Captain James Hackland with thirty-nine years of service in the company testified at the same time to the fact that; "the Hudson's Bay is not a stormy sea". Captain Gordon in 1885 found:

"From August 31st to September 7th, we remained in Churchill, the weather being very bad; it blew a gale almost continuously from the night of the 31st to the evening of the 6th".

We also find however from his same report that the number of days that the wind reached the velocity of a gale were as follows:

Port Burwell - 18, Nottingham Island - 11, but for Belle Isle, the regular Trans-Atlantic trade route the number of days was 69.

W. J. Stewart also reported in 1912;

"As a general rule, in the strait and bay proper, no lasting heavy weather need be anticipated during July and August, although in the vicinity of Nelson river, heavy 'northers' in August are reported by the Hudson Bay vessels, sometimes lasting from 36 to 48 hours".

In regard to the third feature of the general weather conditions, i.e. the prevalence of fogs, the general weight of testimony is that no real danger need be apprehended from this quarter. The Dominion 1884 Select Committee gave it as their opinion that "fogs are of rare occurrence and short duration". The following table of Commander Gordon's compiled in 1885 would tend to bear out this statement - especially when the comparison is made be-

tween points in straits and bay proper to the Belle Isle Route.

Table of Fog Comparisons. 1884 - 1885.

<u>Date</u>	<u>Pt. Burwell</u>	<u>Nettingham Is.</u>	<u>Churchill</u>	<u>Belle Isle</u>
Sept. 1884	48 hours	28 hours	No observation	76 hours
Feb. 1885	4 "	8 "	"	72 "
June 1885	32 "	12 "	16 hours	248 "
July 1885	100 "	132 "	32 "	288 "
Aug. 1885	148 "	152 "	32 "	171 "

A second table compiled at the conclusion of the 1886 expedition of the same investigator would tend to prove the above relationship is the normal one.

Table of Fog Comparisons. 1886.

<u>Date</u>	<u>Port Burwell</u>	<u>Digges Is.</u>	<u>Churchill</u>	<u>Belle Isle</u>
January	0 hours	0 hours	48 hours	168 hours
February	0 "	0 "	0 "	144 "
March	0 "	8 "	0 "	312 "
April	28 "	16 "	42 "	24 "
May	24 "	76 "	0 "	216 "
June	204 "	124 "	44 "	248 "
July	44 "	188 "	8 "	368 "
August	196 "	208 "	16 "	104 "

It would appear from the above tables that the comparison is entirely favorable to the Hudson Bay route in regard to fogs when compared to the present main summer route from Montreal to

Europe. The general conditions that produce fogs are more or less absent in the region of the Bay. The Gulf Stream more or less swerves to the east before the entrance to the straits is reached and the only remaining condition is the mingling of the slightly warmer summer waters of the bay with the Arctic currents passing out through the strait. As will be noted from proceeding temperatures given there is not difference enough between these two to give rise to any amount of foggy weather.

General conclusions in regard to Navigation of the Bay and Straits

From the examination of the above reports the whole question of navigation, commercially feasible turns on the question of the ice movements. Storms, low temperatures and general weather conditions do not seem to offer serious difficulties. Neither does magnetic attraction and repulsion offer insurmountable obstacles. In fact trouble from this direction has largely ceased with the improvements made on the compass during the past quarter century. There is no doubt but that in many years traffic could be carried profitably through the straits over a considerable portion of the season, but no certainly of an average date can be arrived at. The effect of this on insurance rates is at once apparent. Working in conjunction with the other routes via Montreal or Vancouver the straits in good seasons could be put to advantageous use. Whether the ice conditions will allow the Hudson Bay Route to be more than an auxiliary route is another question. Of Course it must be kept in mind that the whole value of the route does not lie in its utility as a grain and cattle exporting route. This

phase of the question however will be considered later. The ice coming down on both sides of Baffin's Land and crowding out of the bay in the early part of the summer constitutes a real danger. This however is not the only source of difficulty. There is possibly a greater danger outside the entrance of the straits where on the open sweep of the Atlantic the great icebergs of the Arctic come down from the Davis Straits. Is the danger here however any greater than at the mouth of the St. Lawrence and the Straits of Belle Isle? There are at least two mitigating aspects of the question to be considered. The northern part of our globe gives eighteen or nineteen hours of daylight in this latitude during much of the shipping season. The effect of this on detecting and avoiding bergs can be easily appreciated. The second consideration is, in how far will the danger disappear with comprehensive charting and adequate aids to navigation? W. J. Stewart, Hydrographer on the 'Stanley' drew attention to this. He said in part:

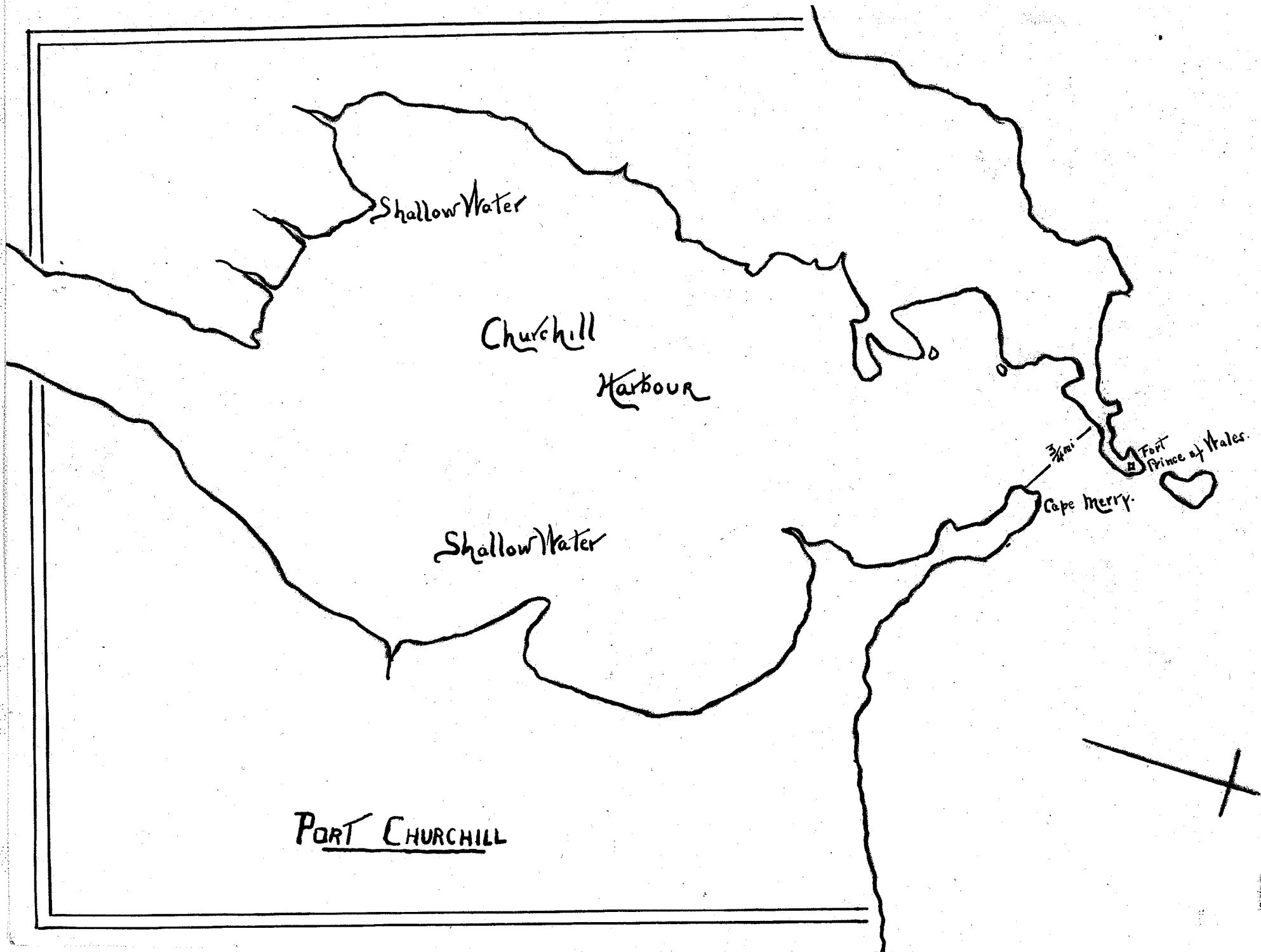
"Apart from the ice question which it will be seen is by no means insurmountable, the dangers and difficulties of navigation of Hudson Strait and Bay arise chiefly from the inaccuracies of the charted positions of salient points".

When one considers how charting and other aids have robbed such waters as the St. Lawrence river, the Bay of Biscay or the Persian Gulf of many of the terrors which had previously existed, the outlook for Hudson Bay navigation becomes much brighter.

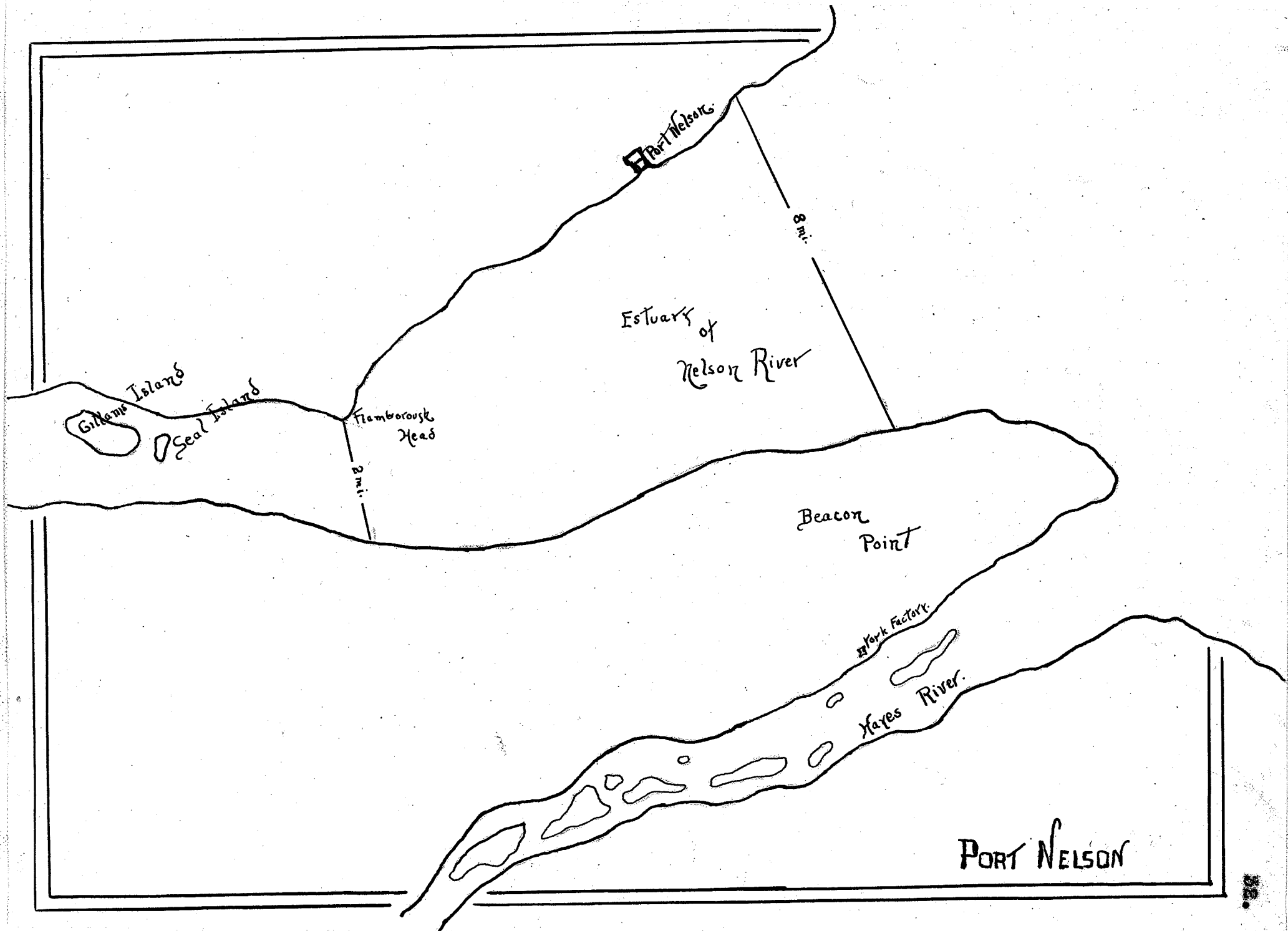
One of the latest authoritative documents in regard to this vexed question is the report of the Special Committee of the Dominion Senate of 1921. After calling twenty-one witnesses this body came to the following conclusion in regard to ice conditions:

"There was some variation among the several witnesses regarding the length of season of navigation, but all agreed that the minimum would under ordinary circumstances be at least four months, while the maximum would not likely exceed five months The concensus of opinion is that Hudson's Bay remains open all the year through and that the ice does not extend beyond thirty or forty miles from the shore. The strait is also open for the greater part of the year, and would probably be open all the time except for the ice which comes down late in the autumn from Fox Channel and obstructs navigation in the Straits".

This ice ^{low} however must be of several months duration as much of it is encountered well on in the early part of the next summer. It will no doubt be found that ordinary tramp steamers would receive severe buffetings which in many cases would be disastrous. The question whether boats can be specially constructed, and yet give sufficient tonnage to carry the grain on a paying basis and during the closed season compete with the other type of steamer with a large cargo space, is one which is difficult to determine without actual experience. The fact remains the west is hopeful for the success of the route and it is difficult to alter the set opinion in regard to a popular project. If for no other reason the route is worthy of every consideration from the Dominion.



PORT CHURCHILL



Port Nelson

8 mi.

Estuary of
Nelson River

Gillies Island

Seal Island

Flemborough
Head

2 mi.

Beacon
Point

Hark Factory

Hayes
River

PORT NELSON

SECTION SIX

The Harbour Question

The question of navigation in the Straits was provocative of much argument, but the question of harbourage has led to more contentious discussion than any other phase of the Hudson Bay Route. This fact has, of course, been largely brought about because there are two harbours, each allowing possibilities of development, and each possessing certain advantages over the other.

The Hudson Bay Company had to a certain extent used both, as Fort Prince of Wales is at the mouth of the Churchill river, while York Factory was on Beacon Point which separates the Nelson and the Hayes river. It is true that York Factory was their main place for loading and unloading their supply ships. This however was not that York was situated at the better location from the standpoint of the loading facilities, but rather that it possessed certain advantages for the interior trade. It was the more direct, and closer location for the fur brigades which generally came down Lake Winnipeg and thence to the sea by way of the Hayes River.

The general outline of the harbours can be seen from the accompanying plans, while the appearance of each with their natural advantages and disadvantages will best be gleaned from the words of the various people who investigated their possibilities.

Joseph Robson in 1752 did not enter into a discussion of their relative merits. He merely notices that, "the soil about

York Fort is much better than that at Churchill river". In fact the Churchill harbour had until quite recently always been looked upon as the sure terminus of a railway running to the Bay. Dr. Bell in 1884 had testified in answer to the question to describe Port Nelson:

"There is no such port. Notwithstanding that it is a name frequently used I do not know where to locate it".

The same attitude seems to have been held by those who were interrogated before the Select Committee of the Manitoba Legislature. Walter Dickson who had been with the Hudson Bay Company for twenty years, stated:

"Churchill is the only real harbour known to me on the west coast of the Hudson's Bay. The other so called harbours, as at York Factory, being only roadsteads of a very low order, and not always safe".

At the same time George A. Bayne C. E. stated:

"The harbour at Churchill is one of the finest I have ever seen. Nature has done so much for it in the way of protection from storm and in depth of water, that without farther improvements it is fitted to take rank among first class ocean ports".

Captain Gordon in 1886 went thoroughly into the question of the relative merits of the two harbours. To appreciate the question his arguments must be given in extenso. In regard to Churchill he says:

"The estuary itself is narrow, being only about 600 yards in width..... the basin for anchorage, with a depth of over four fathoms at low water, is about 1500 yards north and south, by about 1000 yards east and west The holding ground is excellent, the bottom being mud, and though the tide runs very rapidly this harbour is an eminently safe one..... This harbour is admirably suited for a railroad terminus. The necessary docks could be

easily and cheaply built, and the deep water basin enlarged at small cost. Stone is lying at the water's edge ready to be laid into docks and piers, and nature seems to have left little to be done in order to make this a capacious port fit for doing business of great magnitude".

His report on Port Nelson was as unfavorable as that of Churchill had been favorable. He says:

"In thick weather a ship must keep right out in thirty fathoms of water, or she may find herself carried in by the tide, when she cannot get out again It is undoubtedly true that a channel does exist in the lead of the Nelson river, but is both narrow and somewhat tortuous, and would have to be closely buoyed throughout its entire length from the anchorage to Seal Island, a distance of about 27 nautical miles..... The cost of construction and maintenance of a harbour at this place together with the inevitable risks of navigation in approaching it, even after all has been done that could possibly be done, to render it safe and accessible, would, in my opinion, far outweigh the construction of the additional mileage required to reach the port of Churchill..... I consider that the estuary of the Nelson river is one of the most dangerous places in the world for shipping to go I can only now repeat my previously expressed opinion, that the Nelson river is no port, nor would the expenditure of any amount of money make it a desirable place for shipping".

It will be seen there is no doubt in the mind of Commander Gordon as to the relative merits of the two ports.

The above opinion is representative of the general attitude towards the question. In fact so prevalent was this idea, that speculators already had bought and subdivided large areas in the vicinity of Churchill, in expectation of reaping huge profits. In October 1909, however, Mr. W. J. Butler, Deputy Minister of Railways and Canals, made a report based on the investigation of his Chief Engineer, John Armstrong and which was directly at variance with all previous reports and which affected materially the whole policy of the Laurier government in regard to this

railway.

Mr. Butler in a somewhat lengthy report goes minutely into the relative merits of the two, and does much to convince the reader that he has arrived at his conclusions, only after careful study. In regard to Churchill he says:

"The area available for townsite and railway development was found to be very inadequate. The western side of the lagoon is practically impossible for railway development and the area on the eastern side is very restricted.

At the present time the area required for terminals used at Fort William and Port Arthur is about 650 acres. Such an area cannot be had except at a very great expense at Port Churchill in less than three or four miles from the present harbour Port Churchill has often been spoken of as a fine natural harbour. This may be true for a very limited number of ships, two or three, but keeping in view the object of this route, it may be said to be no harbour but rather a breakwater.

The basin in which ships could ride in shelter behind this breakwater would practically all have to be dredged out, and every indication is, that this would have to be done in solid rock.

The waters at the entrance to the harbour is very deep and allows the full strength of the ocean swells to enter, thereby creating a surge throughout the harbour which may somewhat inconvenience a ship trading at a dock.

At ebb tides the currents are very strong, rendering it impossible for anything but strong powered ships to enter the harbour. The strong current also creates a serious condition of affairs when the harbour is full of ice. When the heavy ice begins to break up in the spring and commences to run back and forth in the harbour at the rate of six or eight miles per hour, it is evident some extra substantial form of construction will be necessary to withstand this.

The Churchill river while it may be valuable as a source of power is not likely to ever furnish a means of communication by water".

To Mr. Butler on the other hand Port Nelson has all the advantages of a natural harbour. His report concludes in regard to this harbour:

"The area available for townsite and railway terminal development was found to be practically unlimited on either side of the Nelson river or on both sides Near the mouth of the river at Beacon Point a shoal or bar exists where the depth of water falls to about 17 feet at low tide although a narrow deeper channel appears to exist at either side. Inside the bar the water deepens to as much as 90 feet and a depth of 22 feet may be carried for upwards of 12 miles from Beacon Point. Beyond this the water shoals to 19 or 20 feet at the proposed dock site some 15 miles from Beacon Point. With the channel properly buoyed and marked any ship likely to come to Hudson's Bay may safely enter Nelson river drawing from 22 to 24 feet of water for 18 hours out of 24.

Considerable dredging will be required in the channel near the proposed docks and to provide a turning basin and anchorage for loading ships If the route is successful it will probably also require the dredging of a channel through the outer bars and the removal of some shoal spots in the inner channel.

The material to be dredged is clay and can probably be done by suction dredges at a very low cost At ebb tide the strongest currents are about $3\frac{1}{2}$ miles per hour. From the Hudson Bay Company's records at York Factory, and other reliable authorities, it is apparent Port Nelson will be available at least seven months each year, and possibly eight months in favorable seasons The best authorities place that of Churchill at an average of about five months, sometimes falling to a little over four months, with occasional ice blockades during summer months. Port Nelson is situated at the mouth of one of the largest rivers in the world and one which some day may be converted into a highway for ships into the interior".

The above report although directly at variance with practically all previous opinions of the harbours, evidently impressed the Liberal regime of the day and when the work was actually started, the surveys were made and the line proceeded towards Port Nelson. Doubts were not as yet completely allayed, and after the general election of 1911, which brought into power a Conservative government a halt was made for consideration of this same question. That the decision of the Liberal government was adhered to was

largely because of the impracticability of changing harbours after the amount of work done on Port Nelson.³⁷ By March 29th of the same year however, Mr. Cochrane stated: "There is no doubt Port Nelson is the better harbour of the two, but it will cost more to develop it". The government also did not escape the charge that ulterior motives had caused the selection of Port Nelson. Mr. W. E. Knowles in the session of 1914³⁸ claimed the location of the terminal was not decided on the merits and demerits of the two harbours. Mr. Cochrane however denied this stating that the land had been withdrawn for half a mile each side of the track as well as for two miles where the town-site is to be located.

This condition of indecision in thought, although not in action, continued down through all the years of building activity. When the whole question was reopened by the Senate enquiry of 1920, the commission felt this was a question upon which much might yet be said. They reported in part:

"Your commission took a large amount of evidence regarding the relative merits of the two western ports, Churchill and Nelson, and there was considerable divergance of opinion among the different witnesses as to which of the two should have been selected".

Following these differences of opinion, and after weighing the evidence the only conclusion they felt they could come to was:

"Here the commission advises the appointment of a committee of engineers to examine the relative merits of the two

37

Honorable Frank Cochrane, Jan. 15, 1912. "I have to say were it not that the route had been surveyed, and the road located and the contract let, I would not, with the information now before me, consider that the location was the best one I find it too late to alter it".

38

Dominion Hansard - page 686.

harbours In the meantime, the laying of rails could be completed to Nelson, and that port could be used for the present in its present state".

The examination of the evidence in regard to this question leaves the reader in a state of perplexity. It hardly seems possible that the earlier investigators should have been so blind to the defects of Churchill or the advantages of Port Nelson. As a result we feel with the Senate Committee that a more thorough investigation needs to be made before it can be definitely settled which harbour would be the better to develop.

It is one of the questions of the day, wherein we find but very few neutrals. Almost everyone who has been connected with the development of the route, or become interested in it, has become a violent partisan one way or the other. Current opinion seems as sharply divided on the question as it has been at any time in the past.

The line however has now been developed beyond Kettle Rapids, which is the last point wherein a divergence can be made, for an extension to Churchill. This would, it is hoped, either dispose of the old controversy or at least relegate it to the realm of academic discussion. Whether this hope is to be fulfilled however is as yet a doubtful question. There is at the present time no absolute knowledge whether the port engineer, Frederick Palmer, retained by the Dominion government for investigation next year, is to report on the relative merits of the two ports or whether he is to confine his activities to

the best method of developing Nelson Harbour. ³⁹

SECTION SEVEN

The Road 1906 - 1926.

After the failure of negotiations in the early 90's, the whole question was left more less in abeyance for a number of years. The formation of the two new provinces of Saskatchewan and Alberta in 1905, however created a new impulse to the question of the Hudson Bay route. Backed by western opinion, on February 27th, 1907, Mr. W. E. Knowles, member for West Assiniboia, moved an amendment to a previous motion. This amendment stated:

"In the opinion of this House it is urgently necessary that the government should take all possible steps for the speedy construction of a railway to the shores of the Hudson Bay".

The question was thoroughly gone over by western members and every reason was stressed for beginning the work immediately. Although many of the old stock arguments were brought forward, the one which had the greatest weight was that of getting an opening to relieve the grain congestion, which at that time was becoming acute. The grain production for the two or three previous years had increased at a greater rate than either the storage or transportation facilities of the country, and the inevitable result was as Mr. Knowles stated. "I think I can certainly say not more than 33 1/3% of the wheat grown last season in Saskatchewan..... has ^{not} yet been marketed".

The winter 1906-07 was one unprecedented in the history of

³⁹The Free Press - March 9, 1926, contains an account of Russel Guill - a Canadian government engineer proceeding to Hudson Bay to investigate the merits of Churchill as a port. Presumably he is being sent by the government.

the west for cold, snow and stormy weather. There was a certain amount of hardship experienced by the new settlers on the prairies. This fact gave an additional argument that was stressed a good deal at that time. It was hoped the Hudson Bay railway, by bringing Nova Scotia coal closer, would materially relieve the fuel storage.

During the session the liberal party pledged themselves to the construction of the road, through the words of Sir Wilfred Laurier. After G. E. Foster had assured the members that the east was in sympathy with the project, Sir Wilfred went on to say:

"I agree that the time has come for the construction of this railway and that at this very moment the subject is engaging the attention of the government I hope before the end of the session we will have something to declare upon the subject".

The session of 1908 was one of the most important in the annals of the railway, as it was during this session that the government revised its whole land policy in the west in regard to giving aid to railways. In the early eighties the government had reserved all of the odd numbered sections or one-half of the total area of the country in order to have a land reserve to aid the construction of new railways. Out of this huge reserve came the C.P.R. grant of twenty-five million acres, besides other grants to the Manitoba and Southeastern, the Canadian Northern, etc. This policy of course was one imitated by the conservative government and hence did not meet with the full approval of the Liberals after 1896. The result was, the Liberals did not give new grants after this method to a greater extent than was necessary to fulfill pledges but

as the old grants were earned, patents were issued, or forfeited if not earned. This resulted in an alienation of lands totalling some thirty-one or thirty-two million acres, and a practical closing out of the grants by 1907.

The Hudson Bay Railway had been benefitted to the extent of 6800 acres per mile for the part built in Manitoba and 12,800 acres per mile for that part built through the territories, in so far as the MacKenzie and Mann interests had built to the Saskatchewan river the railway now known as the Canadian Northern railway.

In 1908 there was a feeling that railway aids were as urgent then as at any time in the history of the west. Hence the Honorable Frank Oliver brought in an amendment to the Dominion Lands Act in this session. By this amendment it was hoped to make provision for new developments in railway building. The method of securing this is important as it reacted so strongly upon settlement conditions in the west. The method can be best explained by Mr. Oliver's own words.⁴⁰

"The Bill as it was presented last year proposed to meet the case by what was called a revival of the pre-emption privilege instead of setting aside a certain area of land to be granted to a railway company it was proposed last year to revive the pre-emption privilege. That is to say in regard to certain sections to allow the homesteader to buy an adjoining quarter section at a fixed price under settlement conditions. We believed that by the revival of this privilege we would create a new source of revenue to the Dominion treasury that would be adequate to meet the responsibilities which would have to be assumed by the construction of the railway to the bay Any man who was entitled to a homestead entry would have the

⁴⁰ Dominion Hansard - 1908. Pages 11126. f.f.



privelege of taking up alongside of that homestead a pre-emption for which he would pay three dollars an acre, subject to the completion of certain settlement duties,

To make sure there would be a fund created sufficient for the purpose that was intended to be served, we proposed to allow a settler who already had a homestead, who had earned his patent to that homestead, to take up another quarter section of land, a single quarter section in this case, to pay for it and earn his patent by the performance of settlement duties. We have the two classes to deal with, the new settler who would be entitled to one free homestead and to pay for an adjoining pre-emption, and the old settler who already had a free homestead and was allowed to take up another homestead of 160 acres on payment and settlement condition.....

The right of pre-emption was restricted to the part of the country in which the railways had not taken the odd numbered sections speaking in a general way, to the more central, southerly prairie area extending from Moose Jaw on the east to near Calgary on the west and from the international boundary line on the south to somewhere near the latitude of Battleford on the north. Within that area, the right to pre-emption would apply, because, within that area, the railway company's had not seen fit to select the odd numbered sections as their land grants.....

The new settler, then, who wanted a pre-emption had to take it south of the railway land grant or north of the railway land grant; the old settler who wanted what we call in this Bill a purchased homestead could take that purchased homestead anywhere that he could find it..... The pre-emption provision of the Bill of last year was placed in the Bill for the purpose of ensuring and securing the building of the Hudson Bay Railway. It was placed there in the room and instead of the provision which had been in the Lands Act since 1882 setting aside a matter of 6,500,000 acres of northwest lands for the building of the railway This Land Act proposes to repeal it (i.e. the old grant).....

Our estimate is that there are twenty-eight million acres of land subject to the provisions of this Bill,... It would therefore require the sale of five million acres of pre-emption lands to realize the total estimated cost of the 500 miles of railway We do not propose that the building of the railway shall await the sale of five million acres of this land, but we want to be able to say to the people of the country, that if we find it necessary to pledge the credit of the country to an extent to raise sufficient money to aid in the build-

ing of the Hudson Bay Railway, here is a new source of revenue that will relieve them of the burden of the responsibility they thus undertake. We hope by this proposition to be able to secure the early construction of the railway, and we have every confidence that the burden upon the general treasury of the country will not be thereby increased to the amount of one cent".

In this way there was launched the enterprise providing for the construction of the Hudson Bay Railway by the Liberal government. In the same session an item was included by the Committee of Supply, for \$100,000.00, "to provide for survey and location of a line of railway from the Saskatchewan river to Hudson Bay".

The first survey line was run on September 14, 1908, and for the remainder of that year and during 1909, most of the time was spent on survey work. In the 1910 session we find an item of half a million to begin work on the bridge crossing the Saskatchewan river at the Pas. The tenders for this were let to MacKenzie and Mann and the Canadian Foundry Company at a cost of \$276,370.00. By the end of 1910 we find the sale of purchased homesteads and pre-emptions has brought a total of over one and a quarter million dollars to the treasury.

During 1911 the Borden ministry came into power, and this inevitably slackened work for a time. The Honorable Francis Cochrane ordered all work suspended in order to make an investigation. Western members were strongly against such a course, and largely due to pressure from this group, the work was ordered to continue, and the decision in favor of Port Nelson upheld, although not without some misgiving on the part of the new Minister of Railway and Canals. ⁴¹

⁴¹vide, Page 37.

By the time the session of 1912-13 was reached, contracts had been let to the J. D. McArthur Company, for 418.5 miles of the railway, and of this seventy miles had been cleared and fifty miles graded. With an item for four and a half million in the supplies for this year, the completion of the road within a reasonably near future date seemed assured.

Opposition to the road was by no means allayed as yet. In this session we hear the opening shots of a fusillade that well nigh put a stop to the whole project. Mr. German, the member for Welland, made an attack on the road using as his basis the perennial favorite - the unnavigability of the straits:

"but the straits are impassable, no boats would attempt to go through there excepting for about three months of the year. No insurance company would insure them".

This forms the burden of his and other speeches of eastern members. The alternative to the eastern members, who were in opposition to the scheme was the development of the St. Lawrence waterway.

The year 1912 was one of especial importance in the history of Manitoba in the fact that the boundaries were extended to the present limits and this has a bearing on the Hudson Bay railway in so far as the port is now to be in a province and not a territory. As a result Ontario and Manitoba took issue as to the extent of control over the harbour area that each was to have. This was a question over which there had been many years of negotiations. In 1909 Laurier had sent a draft bill to Manitoba in regard to the boundary extension. The boundaries were to be extended to practically the same position as arranged in 1912,

but the Provincial and Dominion governments could not agree over the amount of subsidy given in lieu of the natural resources, hence the whole question was dropped for the time being.

On November 20th, 1911, Premier Roblin returned from a conference with Premier Borden at Ottawa, with the news that the boundary question had been settled. On November 23rd, however, Sir James Whitney in speaking for Ontario stated that the matter was not finally settled as Ontario hoped to have a port on the Hudson Bay. The next step was when the Honorable Robert Rogers, representing Manitoba and the Honorable Francis Cochrane for Ontario arrived at a semi-agreement in which Ontario proposed to have Port Nelson a joint port, by having the boundary strike the Nelson river ten miles from the mouth and then let it be the dividing line to the Bay.

The Rogers - Cochrane agreement did not meet the approval of either Premier Roblin or the western members in the Dominion House. There were two reasons for this; in the first place the whole mouth of the Hayes river would be in Ontario while at that time it was thought the harbour constructed would be on the south-east side of the Nelson river and hence ^{on} Ontario soil.

This condition of affairs lasted until February 27th, 1912 when Premier Borden announced that Ontario was not to have a port on the Bay on the Nelson or Hayes rivers, but was to be given a strip of land five miles wide, beginning on the boundary line at any point Ontario may choose, but the total strip not to exceed fifty miles in length and ending at Port Nelson. If Churchill

was to be chosen as the port then Ontario may have if she wishes a right of way two hundred feet wide from Port Nelson to a junction on the Hudson's Bay railway and running rights over the road. This solution met with much opposition from the eastern Ontario members, but was approved in general by the Liberals from western Ontario and Manitoba and as a result there was a certain falling away of some members from the ranks of the Liberal party. The bill passed its third reading on March 13th, after a good deal of obstruction in tactics by the members of Eastern Canada, who brought up amendment after amendment. The Manitoba Boundaries Extension Act ⁴⁴ became law on April 1st, 1912, the same date as the Ontario Boundaries Extension Act ⁴⁵ and the Quebec Boundaries Extension Act. ⁴⁶

There is nothing in any of these Acts about the arrangement in regard to the 'five mile strip' and as far as known it was dealt with by the Department of the Interior, by giving title to the territory involved on the same basis as a piece of private property; this title which is undoubtedly held by Ontario today. ^{46a}

In spite of the opposition the work continued in a very satisfactory manner. By the session of the winter of 1914, there were 86 miles of steel laid and 137 miles of grading done.

⁴⁴ 2 - George V - C.32. ⁴⁵ 2 - George V - C.40. ⁴⁶ 2 - George V - C.45.

^{46a} "The 'five mile strip' however, was granted to the province as to a railway corporation and with no rights but those of economic ownership". Chester Martin - Canada and its Provinces - Volume 19, page 137.

But in spite of this the year on the whole was a rather discouraging one. On February 11th of this session an arraignment of the government's policy was made by Mr. A. K. MacLean of Halifax. He charged the government with carelessness and maladministration in the construction of the work and the forwarding of supplies in connection with Port Nelson. Whether this charge had any foundation or not there at least was much of an unfortunate nature connected with part of the operations. To carry supplies to Port Nelson the government had a fleet of ships. During 1914, two of these, the 'Cearense' and the 'Alette' met with misfortune. The 'Cearense' was a total loss and the 'Alette' was badly damaged. There were of course mutual re-eriminations on the part of the department and the captains as to the responsibility for the damages done. The attitude of the Department of Railways was explained by Mr. Cochrane.⁴⁷

"I may say the steamer Cearense is a total loss owing to its own captain. They arrived there sometime in the evening..... The captain started off in the morning without asking the captain of the Acadia for information +++++ the Cearense's wireless was out of commission he went on without taking any soundings at all he did not go where the buoys were In reference to the 'Alette' Captain Freakley tells me Captain Robertson's boat is hurt through his own fault he gave too much chain while swinging to the tide at slack water Later when re-entering Nelson river with the Acadia following her into port as a convey, Captain Robertson, for reasons not yet explained, turned his vessel about and ran her aground".

The captains of these vessels reputed these assertions laying the blame chiefly on the lack of aids to navigation etc.

What the real reason will remain probably more or less a matter

of conjecture. Even in 1916, Mr. Reid the Acting Minister of Railways was able to refer to the accidents as "two vessels cast away at Nelson, under circumstances which have never been satisfactorily explained".

In fact there is much more that is unfortunate than appears at the first reading of these losses. Whether there was anything of a sinister nature in regard to the accidents probably never will be determined, yet Mr. Cochrane in 1915, in speaking of them stated;⁴⁸

"I am satisfied that both these boats that were lost were deliberately stranded. That is a strong statement to make, but I am sure I am right".

Even if this is not true, the impression that such is the case, certainly exists and that is almost as damaging as the actual fact. It has placed such a stigma on opposition tactics, that it forms one of the strongest reasons for completing the road, in order to remove doubts in that there has been this kind of obstructionist practice.

Besides the above phase of the question, there remains the obvious reflection that is cast upon Canadian engineering. The harbour work does not present nearly as difficult problems as continuously came up in the construction of the Panama Canal, and other engineering works that are being carried on in all parts of the world, yet the whole affair gives an impression of incompetency. It also needs the adequate completion of the road and harbour in order to vindicate Canadian engineering.

It is in fact very unfortunate that some very regrettable incidents, of which the above is one, has embittered the whole issue.

Much criticism was levelled at the Department of Railways over the purchase of the tug "Kathleen". As there were no docks at that time, the cargoes of the vessels had to be taken to land by lighters. These were scows towed by a tug. The department had bought for this purpose an ex-lobster tug the "Kathleen". As this tug had a speed of nine knots an hour, and as the current of the Nelson was about seven or eight knots an hour, the possibilities of condemnation from the opposition benches can be easily appreciated.

By the time the 1915 session had arrived 214 miles of steel had been laid, but with the advent of 1916 we find the beginning of the tendency to slacken up on the work. This reaction to the previous support is chiefly due to the changed national outlook caused by the war. Besides the bending of all energy to the prosecution of the war, it was felt that there was not the same necessity for the road. As a grain route it was not so imperative with the opening up of the United States markets. The colonization question also assumed an entirely different aspect with the drying up of the natural sources of immigration. Work however was carried on during this year and also during 1917. By June of this year the rails had been laid as far as mile 332. This was the crossing of the Nelson at Kettle Rapids. The expenditure to the completion of the road to this place now reached \$12,565,000.00, and with a further amount of \$5,610,000.00, expended on the harbour, we have a total of

\$18,175,000.00, as the cost of the road and terminal up to this date. This lessening of interest was also influenced by the report of Drayton - Acworth - Smith Commission. This commission had been appointed to investigate the entire railway situation in Canada. This report was pessimistic in the section referring to the Hudson Bay Railway.

This report stated in regard to this railway as follows:

"And if work on the line is begun again we think it should be done in the most economical manner possible, and only up to the standard of a local line, bearing in mind that it cannot be expected for many years to come to be self-supporting. Considering the small advantage in rail mileage from the grain growing areas, which the Hudson Bay possesses over the existing routes to Port Arthur, and that from many districts it possesses no advantage at all; considering further the short and uncertain period of navigation in the bay, and that grain consigned to Port Nelson will consequently always be liable to be detained there for nine months till navigation is again opened; considering that higher ocean freights may be expected to absorb any possible saving in rail rates we cannot believe that this route will ever secure any serious share in the export trade. Still less can we think that it will handle any important business. Unless considerable mineral wealth should be discovered in the territory which this line will open up, it must, we fear, continue to be almost indefinitely a burden upon the people of Canada".

Mr. Oliver's was practically the only voice raised in support of the project, and even his chief argument was more in the form of an apology. To him it would not be wise to discontinue work when it was so near completion.

During the sessions of 1918 and 1919, the whole scheme was practically a dead issue in the House. Hardly a reference is made to it. All work had ceased on the terminal in November of 1917, and the work on the road in 1918. Up to this time 332 miles of steel had been laid, and in the harbour, the artificial

island had been built and the bridge connecting it to the mainland.

In 1920 interest begins to revive. This interest comes more from the outside at first than from the government circles. The Yorkton Board of Trade proposed to the Minister of Railways, that bonds be sold in order to complete the road. Officialdom is however as yet untouched. The governments policy was stated by Mr. Reid, the Minister of Railways:

"The government has decided that no more work shall be done on that (the H.B.R.) during the coming year. It is the intention to use every effort to extend branch lines into districts where settlers are much more in evidence, and in much greater need of railway communication. The Hudson Bay Railway will therefore stand until financial conditions will permit of its resumption".

Trains were running over the road as far as mile 214, although there was only one train every two weeks. To keep this portion of the road in shape an item of \$80,000.00, was included in the supplementary lists.

The interest that began to revive in 1920 assumes respectable proportions in 1921. John A. Campbell the member for Nelson introduced a resolution in the House;

"That, in the opinion of this House, work on the Hudson Bay Railway which was commenced in 1910 and continued to the end of 1918, should be resumed as early this year as possible, and the project completed without any further delay".

Debates of considerable length took place following the resolution. It is to be noted that the western members have changed their position in regard to the arguments for the road. The development of the natural resources is the prime consideration rather than transportation facilities. The fact was that the

increase in grain production did not come at as great a rate as was anticipated in 1906-8.

The government was unsympathetic to the project however. Expenses had been growing year by year, and the Canadian National Railway system was responsible for a considerable portion of this. In 1910, the total money vote of the country was about \$130,000,000.00. This, in 1921, had increased to \$300,000,000.00, of which \$170,000,000.00, had been in connection with the railway system. Of this \$20,000,000.00, alone was for deficits of the railway. Eastern Canada felt that this had been largely due to overdevelopment of the west, and that the east was now called upon to pay for some of the extravagance entered into because of western enthusiasm. As a result of this we find eastern opposition much more determined and outspoken during this session than in sessions ten years before. Finally an amendment to the resolution was made, so that the resolution should read - "the railway be resumed as soon as financial conditions permit, and that the project be completed with the least possible delay. The more radical feeling found expression in the speech of Mr. Campbell when the debate was resumed on the amended bill. In a sweeping condemnation of the whole government policy, he referred to other expenditures, such as the drydock at Esquimalt the Welland and Trent Canals etc. Nor was it forgotten that there had been a sale of twenty-eight million dollars worth of western lands, an amount which was practically pledged to the construction of the Hudson Bay Railway. However as the resolution as it stood amended was robbed of all benefit

that might accrue from it he withdrew it. Thus in 1921 did the Conservatives shelve the question of the Hudson Bay Railway.

In 1922 there was much discussion over the question of proceeding at once with the railway and harbour, or the alternative of waiting until the financial situation improved. The net result however in money, was the item of \$40,000.00, "to take care of goods and chattels at Port Nelson belonging to the government". The Senate Report of 1921 which upon the whole was favorable, was made good use of by the western members to support their claim to have the road completed without delay. For the time being Mr. Steffansson's project in regard to utilizing the barren lands of the north by raising reindeer, caribou and musk-oxen raised a certain amount of interest and was seized upon as a proof that the lands contiguous to the railway may possess a hitherto unknown value.

The agitation that took place in 1922 was carried on in 1923 with increased vehemence and although no money was voted for actual new construction, George P. Graham, the Acting Minister of Railways announced:

"I am going to ask my colleagues to allow me to bring down an item for the purpose of beginning the work, at least of putting that 118 miles in condition when that is done we will be in a position to discuss what is the next step to take".

The result of this was a voting of \$350,000.00, for expenditure upon the existing 118 miles although only \$60,000.00, of this was actually spent.

In 1924 the question was made the occasion of a vote of

non-confidence in the government when Mr. McKenzie King moved ^{that the house go into supply. Mr. Knox moves} an amendment that, "In the opinion of this House, failure to complete the Hudson Bay Railway means a serious loss to the people of Western Canada". An amendment on the motion to go into supply is taken as a vote of non-confidence. This year brought forth an incident of much interest in regard to the route when Mr. Stevens, the member for Vancouver Centre unearthed a bundle of letters between Mr. McLachlan and his chief of which the tone, in regard to ice conditions and the harbour, to say the least was pessimistic. This for a time strengthened the bands of the opposition, and we find such proposals as that of Sir Henry Drayton's:

I would suggest that what ought to be done, would be to give the project and every cent put into it to the western provinces that want it".

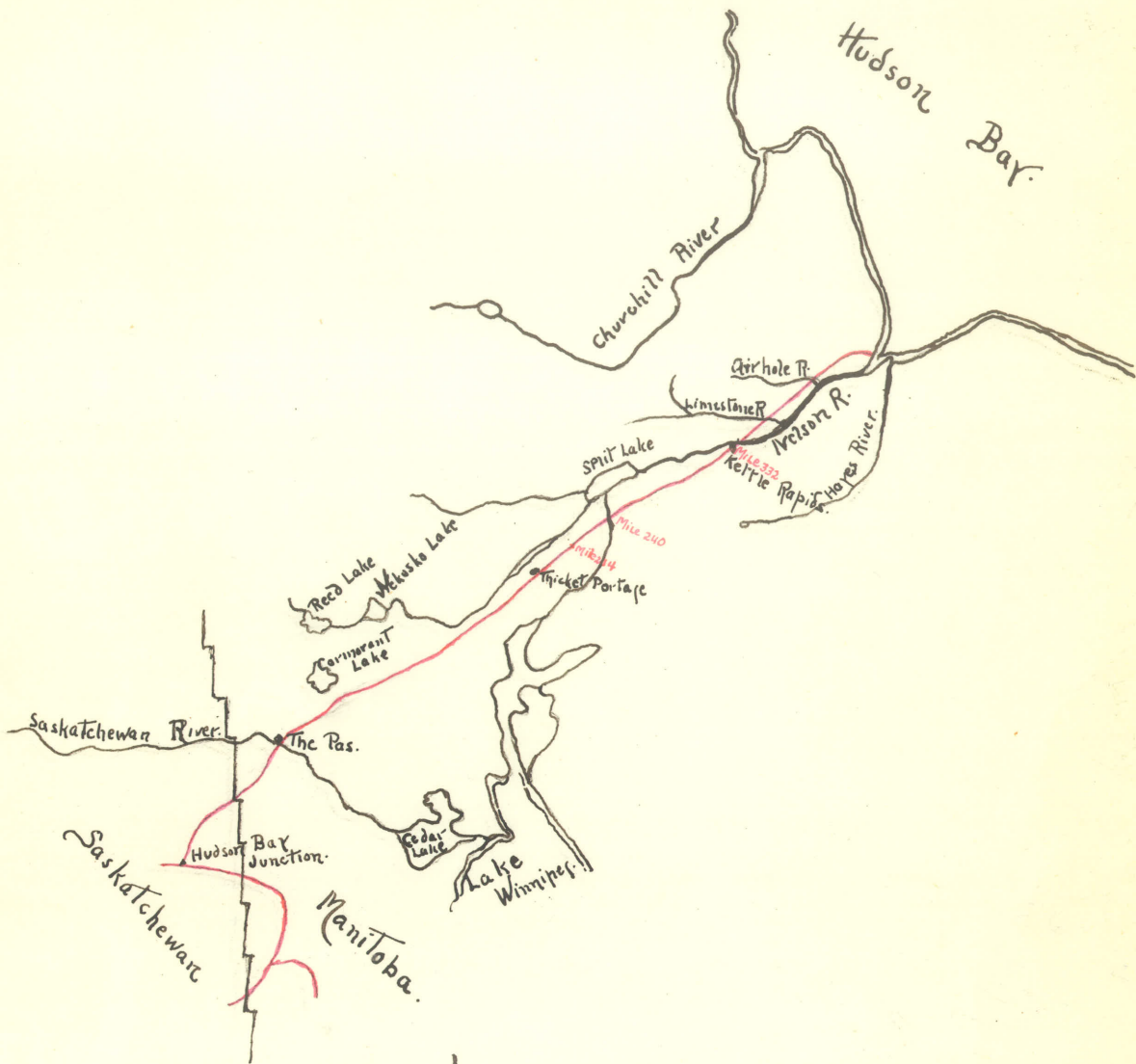
This of course brought forth the inevitable query if "the honorable member advocated the return of the natural resources, on a fairly equitable basis, at the same time".

A proposition of much greater value was made during the session by Mr. Evans, member for Saskatoon, that Port Nelson be made a free trade port. This suggestion has much in it to commend itself. If as the opposition states, the straits are unnavigable, there can be no harm done to Montreal and other eastern ports. On the other hand if the economic pressure of a non-tariff brings trade to this port, proof of their navigability will be established.

The season of 1925 did not see much greater material progress in the story of the railway. The grant of this year was

another \$350,000.00, for the road and \$40,000.00, for the harbour. The question was given of course a thorough airing in the House, and although the money expenditure was small, there was a more optimistic note in the speeches of the western members than there had been for years, while at the same time the opposition from the members of Eastern Canada was not so pronounced.

The pressure of these four or five years previous bore fruit in 1926. There was a return to old times when an item of three millions was included in the Supply List. The results of this is not fully completed at the time of writing, but much progress has been made. The Bimestone river has now been crossed and some twenty miles of steel laid. Work has been confined rather to the road than the harbour, and it may reasonably be expected that the uncompleted section will soon be a thing of the past and the dream of half a century be finally realized.



The Line of Railway.

SECTION EIGHTDescriptive

A. On the Road to the Port.

With the heavier appropriations of this last year or so, there has been not only extensive repair work carried on, but there also has been added some twenty-two miles of new steel. With the appropriations of eight million dollars within two years and corresponding construction any description must be at this date incomplete.

When the work ceased on the railway in October 1918, and on the harbour in the autumn of 1917, the rails had been laid to mile 333. This left a distance of 99 miles to go before the bay will be reached. This last section was graded however and ready for the steel.

At first regular trains ran over the total section that was built. As time went on, with no money whatever being spent on the part already completed, there was much deterioration. At the present time or at least until construction recommenced a few months ago, a train ran every week as far as mile 82. This is the point from which the route leaves for the Herb Lake Mining region. From mile 82 to mile 214 a train is run every two weeks. The remainder of the distance through neglect has reached such a condition that traffic over it with a steam engine has become impossible. Even as far as mile 214, it has become impracticable, and almost impossible to travel more than about eighteen miles an hour, while during the hours of dark-

ness traffic is suspended entirely. From this point to the end of the line at Kettle Rapids, the district is served by a track motor with a platform built over it. If a person wishes to reach the Port resort must as yet be made to canoe. It is interesting to note in this connection, that the man in charge of the canoes is a Mr. Luke Clemens, nephew of Samuel C. Clemens (Mark Twain). To the sightseeing tourist much of the country through which the road passes, possesses less than the usual interest of a railway through a level country. To one who has enthusiasm however, whether his enthusiasm be of minerals, timber or agriculture there is much of latent possibilities to awaken his interest. Around the Pas we have an agricultural country. Within a short time the traveller will run into a low swampy belt, covered with many glacial boulders. This type of landscape continues to about mile 90. From mile 90 to approximately mile 150, the swamp becomes less pronounced, but the soil is as yet too thin to be of any practical agricultural value. At about mile 150, however, we enter the agricultural clay-belt. This is a region of about ten thousand square miles "characterized by a heavy clay soil entirely free from boulders."⁴⁹ It is not a country of the paririe type however. It is covered more or less with timber. The timber is not of great commercial value except as pulpwood. There is some birch and poplar, but there is greater abundance of tamarac with the black spruce in the wetter portions and white

⁴⁹ Mr. Wm. McInnes- quoted by J. A. J. McKenna - "The Hudson Bay Route". Page 22.

spruce in the upland regions.

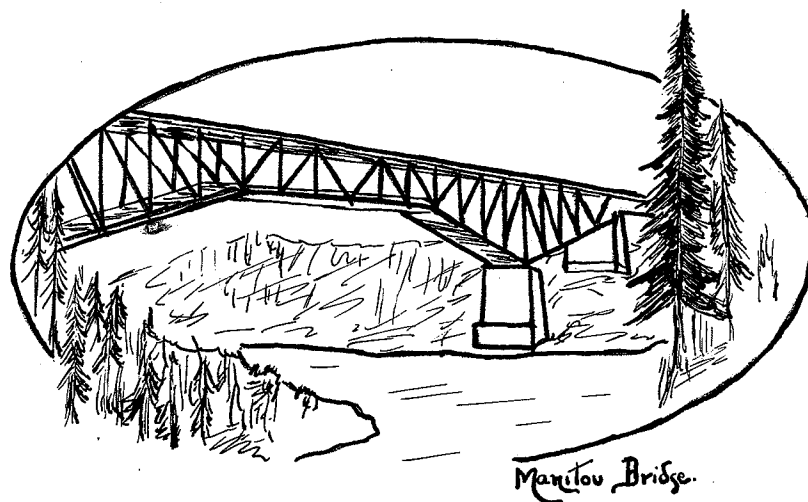


The general nature of this territory can be gleaned from the above photograph. The view is that of the air station at Cormorant Lake, mile 42. The type of forest growth is quite discernable.

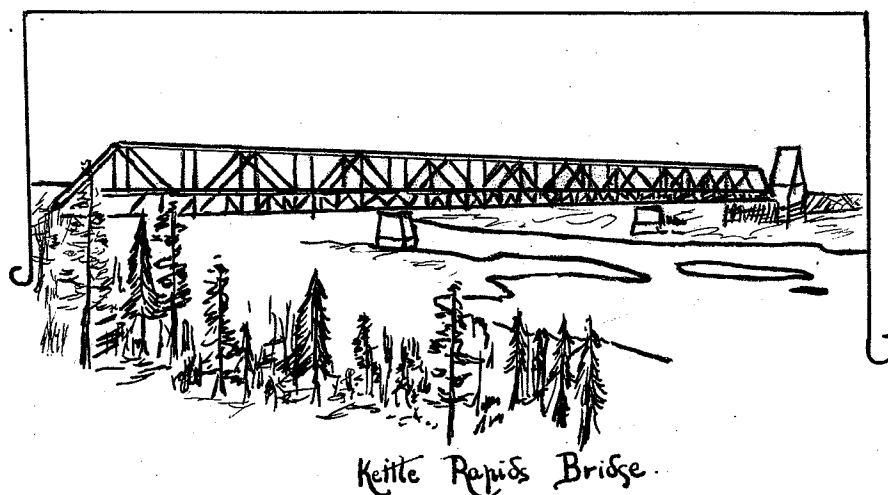
While the mineral regions are not just along the line of the railway, yet the shield of Pre-Cambrian rock which hides the traces of precious minerals can be seen at one or two places adjacent to the railway. Between miles 42 and 80 are found outcroppings of this rock and again between mile 185 and 205.

From mile 214 the country becomes much less promising from an agricultural standpoint. There is more swamp and rock. Near the Manitou Rapids occurs one of the real muskeg sections of the line. The rails at present are carried over the muskeg on a rock filling. At first a trestle work was used but this led to a disaster with a construction engine. It still lies in the muskeg.

It is here also the Manitou rapids, mile 214, that we have the first crossing of the Nelson. At the Manitou bridge is one of the pretty bits of scenery of the road.



There will be need of five bridges of fair size on the road. The first one is over the Saskatchewan at the Pas. The Nelson has to be crossed twice. First at the Manitou rapids and then again at the Kettle rapids, mile 332, the point at which



construction ceased. At Kettle rapids a person gets one of the best glimpses of scenery of the road. Just above the bridge jutting rocks narrow the river so that the water is caught in a sort of kettle beyond, and from this leaps out to the wider section of the river below the ledges of rock. It is this appearance of the rapids that gives the name to them. It will also be necessary to build structures over the Limestone and the Airhole rivers to carry the rails over. The twenty-two miles between the Kettle rapids bridge and the Limestone river is the result of the past seasons work.

The last lap of the road passes over territory of a barren and rocky nature. In the accompanying photograph the tortuous



Airhole river is shown winding down to the Nelson. Across the intervening sixty miles can be seen the mouths of the Nelson and the Hayes rivers, separated by Beacon Point.

Part B. - The Port.

Work was carried on at Port Nelson simultaneous with the building of the line. There was not, however, the same amount of money expended on the port as there was on the railway. Not only was there not the same net expenditure, but there also was not as great a proportion spent when compared to the total expenditure needed. The expenditure on the railway has totaled \$14,944,000.00, to 1926 with an estimated amount of \$3,153,000.00, yet required to complete the line.⁵⁰ On the harbour the expenditure has been \$6,244,000.00, with a further total of \$20,200,800.00, to complete the work.

Port Nelson cannot be called a natural harbour. If made one it will no doubt entail a heavy expenditure. From the map it will be seen that the Nelson widens out to a wide esturary at the entrance to the bay. The esturary is twenty miles across at its mouth but narrows down to about four and a half miles at the point where the port is located. Through this esturary winds the main channel of the Nelson, and, opposite the location of the harbour, the channel is three-quarters of a mile from the shore. The intervening space has a tide fluctuation

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Mr. Dunning - Page 4196 - Hansard 1926.

"The total already spent on both the road and the port is \$21,189,000.00. That is what the country has invested in the project up to the present time. Of that amount \$14,944,000.00, has gone into the railway, and \$6,244,000.00, into the port. That does not include this year's estimate".

It will be noticed that the total of the two expenditures gives \$21,188,000.00, instead of \$21,189,000.00.

of about thirteen feet. Hence at low tide the mud banks extend quite a distance from the beach that exists at high water line. The sloping banks and the fairly great difference between high and low tides makes it an almost impossible task to have a harbour at the shore line.

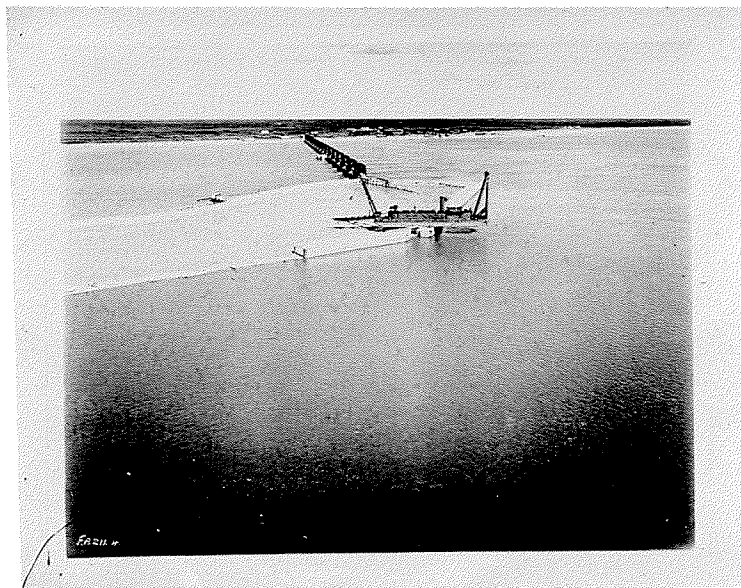
The difference in the river levels can be best appreciated from the photograph. With the low tide the steammers are left stranded on the mud.



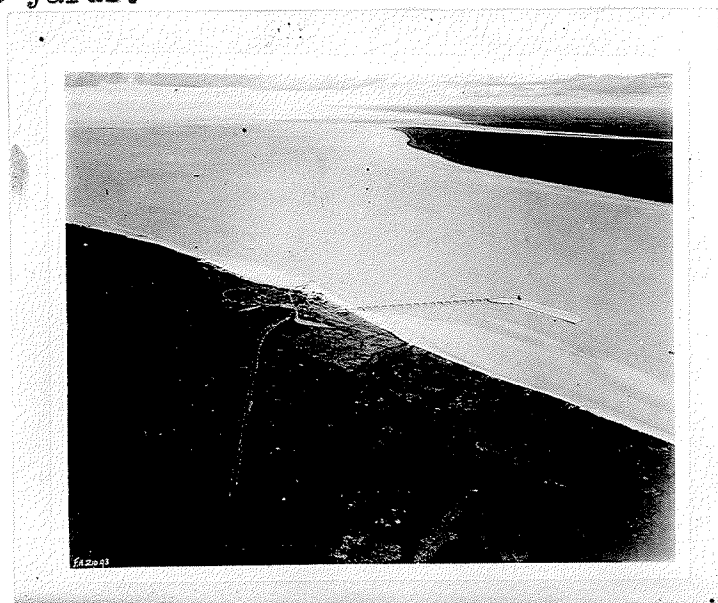
When the tide is at the full again the vessels will be afloat. The drydock in the foreground shows what preparations have been made in the past for harbour development.

About three-quarters of a mile from the shore however there exists a natural sand-bar and this has been utilized for the location of the new docks. This island is to be surrounded by a crib work and filled with material dredged from the bottom of the river. As it will need about eight-hundred feet of dredging to make water deep enough for the vessels from the

channel to the crib side, there will be a double value to the labour. At the present time there is part of the crib work completed at the island, and the work has advanced to such a stage



as to be ready for the sinking of the cribs which will permit the construction of the deep water dock facing, according to the Honorable Charles A. Dunning, Minister of Railways and Canals. There is still a large amount of dredging to do some 5,470,000 cubic yards.



When this work is completed it will not give anchorage for ships

calling at the terminal, but will give accomodation for loading facilities only for ten 7000 ton ships having a draft of twenty-six feet. Anchorage must be obtained at a distance of about twenty-two miles from the proposed docks.

In the photograph in the foreground we have the famous million dollar sand-sucking dredge poised rather neatly over the cribbing. This was blown loose from its moorings a year or so ago, and reaching this point when the tide has ebbed sufficiently, it was deposited on the wall.

As the island is about three-quarters of a mile from the mainland, there has been built a long steel bridge connecting the two. Over this bridge will pass the grain to the elevators on the artificial island. It is interesting as an argument in favor of the harbour, that eight years of neglect and exposure to ice, wind and storms has not materially damaged the bridge. This fact augers well for the port when all work is completed.

The town itself does not present a very prepossessing appearance at the present time. At one time with the great numbers of workmen stationed here, it was a thriving spot of industry. With the withdrawal of the men, and the subsequent eight years of neglect it presents a picture of desertion. Deserted dry docks falling into decay because of disuse, with dredges and boats deserted on the shore and exposed to the climatic ravages of eight years makes it Canada's silent seaport.

SECTION NINEConclusions in regard to the Hudson Bay Route.

The examination of the evidence in regard to the route, opens up a mass of alluring speculation, through which runs a long thread of probability. The road was begun chiefly as a protest against monopoly, and a contest between east and west, and it seems it is ending somewhat in the same spirit, rather than for what intrinsic values the line may possess.

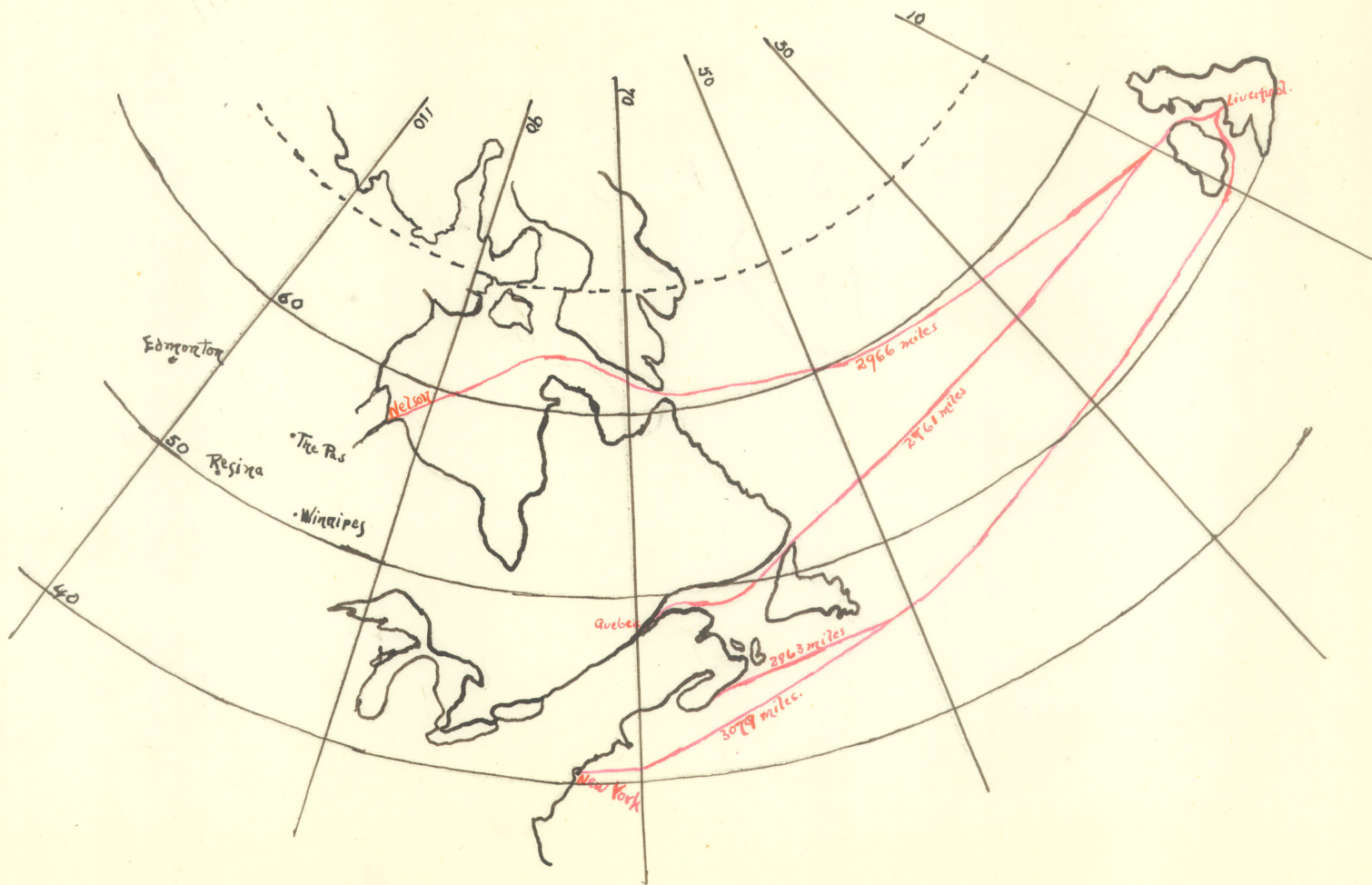
The probabilities of its commercial success as a carrying route to European markets have yet to be demonstrated. All official evidence is in favor of the navigability of the route for a period of from two to five months per year. Unofficial evidence has varied widely on both sides of this limit. Some believe the straits to be open practically the year round while others as well informed have no faith in any certainty of navigation at any time of the year. There is however reasonable room to draw the conclusion there exists an open route through the straits. The question is not in general however one of navigability. Rather it is one whether this route with the advantages it may possess, can commercially compete with the Montreal and New York routes. Eastern Canada on the whole thinks not. Yet the very vehemence with which they combat the undertaking leaves one with the impression, that they fear, not its failure, but rather its success.

Of course the big argument against the project as a trade

route between Canada and Europe is the straits. If these are impossible to traverse, all argument ceases. If they are commercially feasible much can be said in their favor. The greatest argument of all of course is the tremendous saving in distance, a saving of practically eleven hundred miles of rail transportation. This relative distance can hardly be appreciated by the ordinary map. It takes a globe to show that the saving in distance comes from the fact, that the route is passing over the top of the earth instead of over the large bulge that a more southerly route has to traverse. Opponents of the route however urge that much of this saving will be lost in the extra insurance rates that will be charged. ^{50A} They also argue that the boats that will be needed to carry the grain will have to be of a different construction. They will have to be especially re-inforced to meet the added strain of Arctic ice conditions. This re-inforcement will, they argue, reduce the carrying capacity by 25%. ^{50B} As they will be required on the Hudson Bay route only part of

50 A. e.g. Mr. German, member for Welland - "No insurance company would insure them". This is an argument used extensively during the years 1910 - 1923.

50 B. Lieut. A. R. Gordon in the 1886 report speaks of need of: "steamships fortified for ice navigation and at the same time capable of being used profitably as freight carriers".....



Relative Distances of Routes.

the year, they will be sadly handicapped for any other tramp work that may be open, in competition with the regular tramp steamer. To the above a third argument, and a potent one at that, must be added. Port Nelson is the loser by the fact that there are no alternative routes by which grain may be sent out when the straits once close. When the harbour at Port Arthur closes for the season there is still the overland route to Montreal or New York.

How shall these arguments be answered? In regard to insurance, quite possibly the rates may be somewhat higher at first. However as insurance rates are based upon actual experience, we can assume that after a year or so, if what the supporters of the scheme assure us is true, that there is less danger of navigation, than by the other routes, then the rates will be lowered to a point equal to the Great Lakes route. This fact is two-edged; may they not go even lower? No amount of theorizing will solve that question now. A practical test under ordinary working conditions and that only, will give us the solution.

The second argument, that of reduced carrying capacity was made use of recently in the Dominion Parliament by Mr. Cantley the member for Pictou.⁵¹ He said in part:

"I do not think any man with practical experience particularly in connection with ice navigation will seriously propose or maintain that the ordinary type of freighter can successfully navigate these waters. I hold that the

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Hansard 1926. Page 4217.

vessels carrying on that trade, if it is ever carried on, must be vessels of practically the same type as those prosecuting the seal fishing around Newfoundland".

It is in this last clause that the ray of hope is found. Is it necessary to have a type of vessel that cannot be successfully used in any other type of work for the rest of the year? Casual mention of one industry using the same vessel leads to investigation of what other uses the Hudson Bay tramp steamer may be put to. If to no other, the Newfoundland seal industry is no small one.

This is of course assuming that a vessel of a different construction is needed. There is not very strong grounds for asserting that this necessarily will be the case.

In regard to the question of the alternative route. This argument was answered by Mr. Miller, Member of East Algoma: ⁵²

"May I point out that it has not been the custom of those who ship grain to ship it all out in a very short time? It would be impossible to do that even if they wished, and it would not be desirable. I have figures here, from government statistics, showing that on the 31st of March, 1924, 177,000,000 bushels of wheat were in the terminal elevators, in the hands of farmers, in the country elevators, or in other places in Canada. If this line is built that grain is going to be fed to the market. It is the policy of the pool to feed grain to the market gradually, not rush it on the market in a few months. Great Britain, for example, will take about 12,000,000 bushels a week, and it is the policy of the pool to feed that grain to that market just as it will take it. That grain is going to be fed to the British market in the months of May, June, July, August, and September and it must be stored somewhere before the new grain comes in. Is there any reason why that grain that is to be taken to Great Britain in July or August cannot be stored in the elevators at Port Nelson?"

If our elevator capacity is at present limited and new ones need to be constructed, there is much strength in the argument. That there is shortage of elevator space at the shipping points is a fact strongly brought before every shipper each fall.

Considered still as a commercial route for its primary value we have a large export trade in other commodities besides wheat. As a cattle transporting system, it obviously has many advantages over the Montreal road. The greatest drawback to the cattle export trade is the long rail haul especially during the summer months. The saving in railway mileage and the northerly direction are two powerful features that will offset this drawback.

So far the arguments have all been in regard to the export trade. When the question of import trade is brought up, another field of possibilities enter into the calculation. The Henry report ⁵³ gave figures showing imports of about fifteen million dollars of merchandise in to Western Canada from 1911-14. That much of this might come by the Hudson Bay is not an extravagant assumption. That there is a tendency this way is borne out by the statistics of the customs department for 1925-26. ⁵⁴ The import duties for the above mentioned period was \$1633.44 for York Factory, and excise taxes of \$504.95.

⁵³ Dominion Hansard, 1926. Page 4251.

⁵⁴ Free Press, February 21st, 1926.

Apart from the carrying question entirely, are there other features that would make the Hudson Bay railway a commendable object to warrant an expenditure of fifty million dollars? Possibly, the most attractive feature of the whole scheme is the latent possibilities of the natural resources of this northern region. Which of the natural resources will ultimately prove the most valuable, is as yet difficult to determine. The one which is attracting the biggest share of popular attention at the present time is that of minerals. This is partly due to the rather spectacular discoveries of gold in 1914 in the Herb Lake district and of Copper in 1915 in the Flin Flou region. The precious metallic minerals also appeal more strongly to the popular imagination than do building clays, stone, etc.

There are some four or five fairly well defined mineral areas of what may be termed the Hudson Bay Railway area. The first in importance of these is the Pas mineral district. This is a large triangular area north of the Pas bound on the west by Kississing and Athapapkuscow Lakes and on the east by Wekusko and Reed Lakes. This is as far as known the richest area of the northland. In this area is found the greatest gold and copper deposits of Manitoba. From this region the copper began to be produced in 1917, when 1,116,000 lbs. were taken out. The high water mark was reached in 1919 when 3,348,000 lbs. were produced.⁵⁵ Since 1920, with the drop in price of copper

⁵⁵ Dominion Bureau of Statistics, In "The Mineral Resources of Manitoba". Professor R. C. Wallace.

following the war, there has been but very little production. Altogether however, production has reached a total of \$2,039,942.00.

The chief gold area of Manitoba is located in this region also. Up to 1924 there was a total of \$217,382.00, produced in Manitoba. Of this amount possibly \$50,000.00 was obtained in other areas not tributary to the Hudson Bay Railway. The production from these mines is largely hampered by lack of transportation facilities. The Hudson Bay Railway is hardly in the best possible location to serve this area as it is rather too far south. It will however serve as a trunk line from which feeders will tap the mining district.

Besides this Pas mining district there are other regions of the northland which have indications for possible mineral development some time in the future. One of the most important of these secondary areas is that of the iron ore deposits of the Nastapoka and Belcher islands on the east side of the Bay. The results of investigations in these areas have not possibly justified as great hopes as was raised at first. The ore is not as concentrated as for example the ore near Duluth, but as the area is only partly explored and as it is a large region there is hope yet of discoveries of a more valuable nature.

The three other areas from which hope yet may be held are the copper areas of the Coppermine River, the copper area of the Chesterfield Inlet, where J. B. Tyrell in 1894 found indications of possible orebodies, and the Mica mines of the

Eastmain River on the east side of the Bay. Professor Wallace in regard to these as yet almost undertermined areas has this to say:

"There is a unanimity among the investigators that the iron deposits of the eastern islands of Hudson Bay, the copper sulphide deposits south of Chesterfield Inlet, and the native copper and copper sulphide bodies of the Arctic, warrant fuller investigation". 56

Most of these areas have lacked the proper investigation largely because of their inaccessibility. The need of the railroad for this purpose is apparent, and if investigation warrants development, the success of the route from the mineral standpoint is assured. Not only will railway development be needed for transportation of the ores, but for the movement of the large amounts of coal that will be needed for smelting purposes. This need of coal will also solve one of the problems of the route, that of providing a return cargo for the grain boats. Nova Scotia or even Welsh coal are well within the range of possibilities of commercial competition with Alberta coal, especially when we consider that most of the Alberta coal is not of a good smelting type. There are indications of lignite coal beds in Baffin Land and some of a higher grade in the Western Arctic Islands, but whether these will be of commercial value, has as yet to be determined. 57

Although it appears that mineral will ultimately form the most valuable of the natural resources of this region opened

56 Mineral Deposits of Hudson Bay Territory, 1925. Prof.R.C.Wallace.

57 Id. Page 2.

up by this railway yet there are other resources which will probably be of more immediate value because of the quicker and greater returns for the capital invested. These would include the timber, fur, and fish resources of the northland.

In regard to the timber, there is very little of commercial value from the standpoint of lumber from the Hudson Bay Railway region. There is much however that will be valuable as pulpwood. This, connected with the fact that we have at the White-mud Falls on the Nelson one of the best power sites of the north country make the pulpwood possibilities one of the most attractive features of the natural resources for the railway to tap. These falls are about forty miles from the railway, and if the pulpwood industry is developed (as there are strong indications that this is the case) there will be run a valuable feeder to the main line.

The fish resources of Hudson's Bay and its tributary rivers, have never been developed, obviously because of lack of transportation to the centres of population. In fact they have not as yet been fully investigated. The best report so far of a reliable nature has been made by Nap. A. Comeau who was sent by the Dominion Government in 1914 to report on this aspect of the natural resources of the region.⁵⁸ Mr. Comeau reported a goodly amount of Trout and Sturgeon, while in regard to the Whitefish:⁵⁹

⁵⁸ "The Fish Resources of Manitoba, Page 23. J.B. Skaptason, 1926.

⁵⁹ Id. Page 25.

"At Seal Creek on the Nelson, we got close to a ton of fish in three hauls of our seine. This seine of ours was only twenty fathoms long, and only intended for experimental fishing".

He reports pickeral also in the Nelson River, and he had reports come to him of the presence of codfish. That the development of these fisheries is dependent upon the construction of the Hudson Bay Railway is stated by Mr. Cameau:

"Little or no benefit can be derived for the moment, from the fisheries on the western side of Hudson Bay, beyond supplying the local demand. This distance is too great and the difficulties of reaching it too numerous, to enable any sailing vessel from the Maritime Provinces or Quebec, making profitable trips, no matter how considerable these fisheries might be. They must be developed by local fisherman and this will only be done profitably when the Hudson Bay Railway is completed. Then I have no doubt they will prove of great value to the northwestern provinces".⁶⁰

The third of what might be called secondary resources of the Hudson Bay Railway region is that of furs. Furs do not in general form a bulky article of transportation, but often a very valuable article. Hence the value of these as a source of income to the railway will not be as great as a source of revenue for the country. The muskrat is of the greatest total value in Manitoba, giving returns in 1923-24 of \$578,445.00.⁶¹ It is not necessarily the most valuable of the Hudson Bay region furs as it is an animal scattered over a much wider territory than some of the other fur bearing animals. The beaver which at one time far exceeded in number and in value all other fur bearing animals, has now sunk to third place in total value and fifth

⁶⁰Id. Page 30.

⁶¹Fur and Game Resources of Manitoba 1926, Page,44.V.W.Jackson.

place in numbers caught. Of the 14,806 caught in Manitoba in 1923-24, practically all came from the region between the Nelson and the Churchill rivers, the northern limit of the birch and poplar. The trapping of these will no doubt be affected by the completion of the railway. Besides these two, the fox, lynx, fisher, weasel, martin, etc., are found possibly the bear in the territory served by the Hudson Bay Railway. The effect of this railway on the fur areas is best stated in Professor Jackson's own words: 62

"South of the 56th trappers go in in increasing numbers from the Hudson Bay Railway, which has made access to the trapping grounds much easier than formerly, and hence has reduced the trapping area per trapper and increased the competition to a point of conflict".

A possible resource closely allied to the above, is that of the production of reindeer, caribou and musk-ox in the barren lands. This feature has been ably championed for quite a few years now by Mr. Stefansson of Arctic fame. His faith in this was such that it influenced the Senate Enquiry Committee of 1921, and in their conclusion they recommended that this matter be taken up by the government. Mr. Stefansson is convinced that the barren lands, hitherto considered worthless, could support at least 50,000,000 head of reindeer and 10,000,000 head of musk-ox. The effect of this on the world's food supply is obvious.

The greatest resource of the road however, and the one which I have left until the last is its possibility of opening up the agricultural areas ^{it} is contiguous to ~~N~~, and hence becoming a great colonization and incidentally an immigration railway.

Mention has been made of the 'clay-belt' region. From experiments that have been carried on by the Dominion government the possibilities of agricultural development are very favorable. At mile 137, different varieties of wheat were sown, and returns gave a yield of from 46.3 bushels to 64.3 bushels per acre. Oats yielded from 68.5 bushels to 125.2 bushels per acre while barley went from 28.5 to 106.4 bushels per acre. Farther east and north at mile 185 a second series of experimental plots were planted. Here Garnet wheat yielded 40.05 bushels per acre, but graded No.4. The Prelude gave returns of 32 bushels per acre and graded No.1, while oats gave a yield of 73.5 bushels per acre.⁶² It must be remembered of course that these were fairly small experimental plots, and show rather what can be achieved in grain growing. Over larger areas with probably less care returns would be less. These yields however are abnormally large, and give evidence that much may be expected with a greater development of these areas. The wheat was harvested at mile 185 from August 29th to September 15th, and with the grading given, must have escaped practically all frost. This is possibly the most satisfying feature of the experiments, as this is a feature which holds good under pretty nearly any condition.

⁶² Dominion Hansard, 1926. Page 4272.

Even in this clay belt much of the country is quite wet and would require fairly extensive drainage development in order to make it a great grain producing area. Grain is not however the only agricultural resource of any area, and at the present stage it is quite probable that cattle raising may be safer than grain raising. From reports, the native grass is there in sufficient available abundance not only to give summer pasture but produce sustenance for the winter as well. The cattle raising feature also has another attractive aspect. Grain can not be shipped from Port Nelson without elevators and proper terminal facilities for handling it. This will even yet entail the full expenditure of \$20,200,800.00, as estimated and quoted Mr. Dunning on June 8, 1926. On the other hand cattle can be handled with much less expensive terminal facilities and in this way the road would have a chance to vindicate itself, and at the same time, the cattle shipments would give a thorough test of the Straits.

A consideration of these potential resources will I think justify the completion of the road as a development proposition, even if there were no other inducements. Besides these natural resources, which has been set forth in some detail, other quite valid arguments can be advanced. One that has arisen in late years, due to outside considerations, is that of the recent drop of levels in the Great Lakes. A fairly large grain boat on the Great Lakes, requires about 960 tons loading in order to make

it sink one foot.⁶³ This gives about 32,000 bushels of wheat which can be loaded in this space. If then conversely, the lake levels be lowered one foot by the Chicago Drainage Canals, the cost of transporting wheat by way of Fort William must be considerably increased and the value of the Hudson Bay route in the same ratio enhanced.

At the present time perhaps the strongest argument for the completion of the road is psychological rather than economic. During the forty odd years that this route has been in the eyes of the public, there has grown up a feeling in the west that hostile interests in other parts of the Dominion have prevented the consummation of the project. The result has been that the west enters into the building of the road as a sort of contest, which they must carry through in order to vindicate not only their rights but their status as a province.

That this feeling does exist is evidenced by such speeches in the House of Commons, of which the following is an example. Mr. T.W. Bird the member for Nelson, speaking on June 10, 1922, stated:⁶⁴

"I for one stand very solidly for the loyalty of the west, despite its 50% European population. I think there is no section of Canada more loyal than the west. But, mark you, I am not inclined to get sentimental about it, just the same, because I recognize that loyalty, sterling

⁶³ Mr. Miller, Dominion Hansard, 1926. Page 4222. There is evidently a discrepancy in his figures, as he gives 2960 tons equalling 33,000 bushels, which is obviously incorrect.

⁶⁴ Dominion Hansard, 1922. Page 2789.

virtue as it is, is always finally over-ridden by economic necessity, the first law of our being".

This feeling has given a value to the road in the eyes of the west, possibly out of all proportion to its intrinsic worth. It has naturally led to many wild statements and arguments in regard to the road, and because of this, it can no doubt be safely anticipated that when the road is completed and some of the dreams rather slowly materialize, as dreams usually do, there is going to be a tremendous loss of faith in the whole undertaking. There will possibly be a period of as severe pessimism in regard to the railway as there is optimism now.

The psychological argument raises the rather involved and highly conjectural problem, as to how far the east is in opposition to the route, and to what extent they are justified in this opposition. Premier Taschereau of Quebec gave voice to at least a section of the eastern viewpoint when he stated;

"The west is creating our national problems, because having involved themselves heavily in subsidies to railways, we as a nation have been forced to take them over. Had we not done so the obligations to the MacKenzie and Mann roads would have bankrupted the west. Now the west wants reduced rates, while we having paid for them want to see them make both ends meet".

The above argument presupposes^{not} only, that the national trans-continental lines were built for the benefit of the west almost entirely, but also that they were built without the full knowledge and concurrence of the east. That this is the case is not quite so apparent to the average westerner. His attit-

65 The Canadian Provinces - John Nelson - Quotation.

ude of mind is one that would more readily believe, that these roads were carried through so that the granaries of the prairies would have their spouts in Montreal.

It may be stated here that it is very unfortunate that a number of regrettable coincidences have embittered the whole issue. The changing of the harbours, at first caused suspicion in the minds of many people that politics was entering in the project. The loss of the 'Cearense' and the 'Alette' was even more to be regretted from the standpoint of creating sectional feelings. The fact that the interests of both C.P.R. and C.N.R. are against the project has done harm not only to the Hudson Bay Railway but also to the two great transcontinental lines. The new transportation projects of the east such as the deepening of the St. Lawrence river route for ocean vessels, and the Georgian Bay Canal scheme, have not received the support of the west because of the feeling they are antagonistic to the Hudson Bay route.

The question of payment for the railways is one that involves a considerable balancing of argument in regard to national control of lands and resources. In regard to the Hudson Bay railway especially, the west feels that this road has been and will be financed largely by the west.

The Honorable Frank Oliver's Land regulations of 1908 up to March 31st, of 1926⁶⁶ gave figures that showed that 12,763,040 acres of pre-emptions were sold yielding a sum of

⁶⁶ Dominion Hansard - 1926. Page 4220.

\$38,289,120.00. In addition 1,322,840 acres of purchased homesteads were sold yielding \$3,968,520.00. This gives a total sale price of \$42,257,640.00. Of course this total is by no means collected, while a certain amount of that which has been sold has been or will have to be repossessed. The amounts actually collected have been \$16,635,639.39, for the pre-emptions and \$3,191,648.98, for the purchased homesteads, an amount totalling \$19,827,288.37.⁶⁷ In regard to these sales there are two or three points to notice.

Much of the east, especially the maritimes, rather resent the fact that the crown lands of the Dominion should be set aside for the particular benefit of that section wherein those lands are found. They look rather to the United States where the newly opened areas were used for the benefit of all parts of the Union. To argue on these grounds of course brings up the whole question of natural resources again.

There is another phase of the question, which the west however has need to regard. A scrutiny of these land grant sales will show that up to the present they have not yielded a revenue sufficient to complete the undertaking. They have not even produced an amount equal to the expenditure that has already taken place. That they will ultimately do so, there is no reasonable room to doubt, but if the road is to be built from revenue arising from these sales, it will hardly be finished even to the bay in 1927. There is only one way to make

⁶⁷ Id. Page 4220.

th^e road a success. It must be built as a national undertaking, and not in any spirit of narrow sectionalism. The route without the support of the Canadian National Railways would never be successful as a grain or cattle carrying route.

In fact this whole argument of the road being paid for by one section of the country has a very unattractive side. Any public expenditure needs to be carefully scrutinized. Just because there is a source of revenue for proceeding with an expenditure is no argument for so doing unless there are other worthy considerations for this expenditure. For this reason this phase of the question should not be stressed, either from the standpoint of economy or from the standpoint of promoting national goodwill.

The fact however that a goodly sum of money has already been spent upon the road, and it is probably two-thirds completed as a working proposition, is a strong argument for spending an additional amount for completion. If left now, what has been spent would be a serious waste. If after over half carrying on the experiment - if experiment it be - and the truth is no nearer in sight, there is only one thing to do, and that is to complete the experiment and be sure of the result.

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