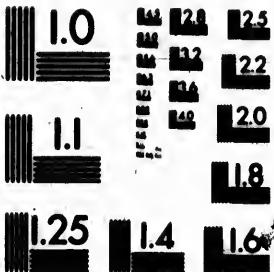


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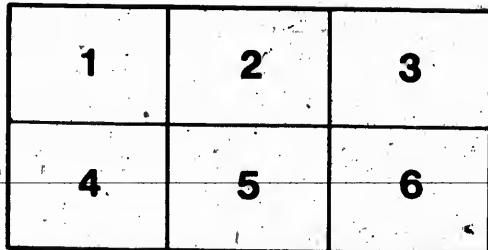
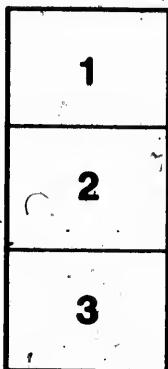
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THE GREAT NORTHERN SEA

CANADA...

HOW TO UTILIZE IT MOST
EASILY, ECONOMICALLY,
EXPEDITIOUSLY, EXTENSIVELY,
and PROFITABLY.

SPECIAL REPORT

OF THE
ORIGINAL (CHARTER) DIRECTORS

OF THE
SAULT STE. MARIE

AND
HUDSON'S BAY RAILWAY COY

WITH A
SUPPLEMENTARY STATEMENT

BY THE
TORONTO DIRECTORATE.

TORONTO:

1897.

HERN SEA

A...
MOST
NOMICALLY,
TENSIVELY,
TABLY.

REPORT

DIRECTORS

MARIE

LWAY COY

STATEMENT

ORATE

RB14514

DOCUMENTS

RELATING TO THE

SAULT STE. MARIE & HUDSON'S BAY RAILWAY CO.

...1896-7...

PROVISIONAL DIRECTORS' SPECIAL REPORT.

Sault Ste. Marie, Ont., December 18, 1896.

TO THE SHAREHOLDERS

Your Provisional Board of Directors have decided to make a Special Report at this time in order to place before you the first official communication received from the Acting Chief Engineer of this Company. See note 1.

The exhaustive treatment in this document from an engineering and commercial standpoint of the elements of superiority which your enterprise possesses, as the best land route for immense island sea and river connections, reaching to the furthest bounds of this continent, is a revelation of possibilities which no other persons in this Corporation, or probably in the Dominion itself, have had suggested to their minds, in practicable form.

During the seven years since the first grant of the Charter of this Company its Directors have considered its prospects of success as limited to a commencement of way traffic, first upon the sections nearest the St. Mary's River, by the carriage of forest products of pulpwood, spruce, pine, and hardwood lumber, and by grapevines extending northward until the main line of the Canadian Pacific Railway was reached; thence to progress very gradually to the Great Sea beyond. Of course the depression of business for the last few years has accentuated even this extremely conservative policy. In the light, however, of the facts and reasons set forth so clearly in the Engineer's Report, your Directors are convinced that the former aims should be promptly and entirely reversed. That instead of "piece-meal" work

Note 1.—The Report referred to is made by Charles T. Harvey, C.E., after making a reconnaissance of the most difficult portions of the route in 1884, which comprised the section north of the St. Mary's River and from the vicinity of Lake Superior across the "Heads of Land" to and along the valley of the Moose River, beyond the last station of the Hudson's Bay (Pun) Company, northward from the Company's "Factory" at tide water in that river.

He also examined the Government surveys at Ottawa and at Toronto during the same year in making a special study of governmental, and other surveys and explorations in the regions referred to in his Report.

Mr. Harvey's previous record, comprised the presenting as "General Agent" and builder as Chief Engineer of the original Lake Superior Ship Canal at Sault Ste. Marie, the then largest work of its kind in the world. He recommended enlarging the dimensions by one third over those shown

Note 2.—One of the great recent enterprises provides for a railway line extending west from Port Charron for five hundred miles, in part through what are known as the "Barren Lands," where human existence from local mineral resources is entirely impossible. Its western terminus is to be at a lake where not more than three white families live, one at each Hudson Bay Company's post for trading posts. But this is simply part of a system which is to touch the north end of Lake Winnipeg and then sweep down to the Rocky Mountains, a distance of fully a thousand miles

on the Southern section, the first attention should be given to the construction of the Northern portion as an entirely between the C.P.R. and tide water at the best terminal point at or near the mouth of the Moose River.

If any reasonable inducements will insure the immediate construction of that all-important connecting link of only 250 miles between the 200,000 miles of railway now in operation on this continent, and the 6,000 miles of landlocked sea coast beyond, such inducements should be made without any unnecessary delay. The paramount public interests of the Dominion demand this, and the Province of Ontario will irretrievably miss a fundamental element of permanent expansion and prosperity if it allows the greatest possible internal improvement within its borders to continue in abeyance while other Provinces, not so well situated gain the earliest sea port, from which the commerce of Hudson Bay may radiate without contributing to the prosperity of Ontario.

Heretofore it has been assumed in the public mind, that of the various schemes and routes advocated for railway transit to Hudson's Bay, one was about as good as another, and all of doubtful utility. So little was known of the characteristics of the great Canadian sea coast and of the regions bordering on it, that the Federal and Provincial Statute Books are cumbered with special Charters, for various impractical routes. See note 2.

The time for such ignorance to be tolerated must end when the facts and suggestions which the accompanying Engineering Report disclose, are made public, and which may be summed up as follows:

In previous plans, and after sharp contention his views were largely adopted. After successful operations for over a third of a century, it has been replaced by one of more than double its capacity to meet the requirements of the ever expanding commerce of the great "North Woods."

He organized the Railway Company which built the first line to Lake Superior from the south; planned the first Harbor where the plan of navigation was need (subsequently adopted by the engineer in charge); Ende to deepen the entrance to the Mississippi River; built the largest water power structure on the shores of the Great Lakes, (which to be continued next); projected and built the first elevated railroad in N.Y. City; and recently made a special report upon the Inter-Oceanic Canal of Nicaragua, while a member of the Board of Consulting Engineers, appointed on that work.

from the eastern terminal, where are less than a hundred residents, not two-tenths of whom are whites. Nor are there so many as any point on the route, until the "Rockies" are reached, over hundreds of miles of the roughest and most uninhabitable regions north of the Arctic Circle. Yet in the Charter referred to, out of the 175 Miles of roads in the Ontario Statute, 164 are absorbed in provisions relating solely to the telegraph and telephone structures and business of the Company, especially in "the municipal limits of or through which the same may be located."

(a) The "ice lock gates" at the Button Islands entrances between Hudson's Harbors and the Atlantic are a perpetual and irremovable obstruction to early trans-Atlantic communications with the "Great Canadian Sea," and hence its commerce must seek its base of supplies convenient to overland transit and on the cheapest route.

(b) That base will be at the point where leading products of the sea, to wit, its fishery industries will find the best market, at least transit cost.

(c) This route fulfills these fundamental conditions.

First: Because it is much the shortest as well as by far the easiest constructed and operated line, and therefore its sea terminal will be the best base of supplies.

Second: Because it is also the shortest and cheapest route to the best markets for this produce of the regions bordering on Hudson's Bay, and of its sea food industries, with connecting railway lines diverging in all directions.

(d) The short season of navigation through the Straits to the Ocean renders the establishment of regular commercial steamship lines impossible, hence no rail line to Hudson's Bay dependent upon such marine connections can be made to pay even its expenses if no return or way freights can be secured.

(e) Another unique circumstance of great significance is that the west shore of Hudson's Bay from Moose Factory to Chesterfield Inlet, has but one known natural harbor, namely, the Churchill River. Elsewhere along the shore, mud and boulder flats extend seaward in a coast-wise zone of belt ten miles or more wide, where at low tide canoes often become immovably stranded in mud and among boulders out of sight of land. Such marine conditions are probably not to be found on such a large scale elsewhere on the globe. The description in the Engineer's Report of the effect of this feature at the mouth of the great Nelson River, should be especially noted as explanatory of the cause of the abandonment of the subsidised railway route thence to the City of Winnipeg, yet even these prohibitive natural features do not deter promoters from publicly advocating a scheme of water ways connected with that wild torrential river to accommodate the Winnipeg grain traffic by terminating at the same unapproachable point, or from wearying the official caretakers of the public interests, by demanding legislative attention to the same.

(f) Considering all the natural advantages of Churchill River as a harbor, your engineer points to the facts that being 600 miles due north of the Moose River terminal the "open season" as compared with that at the last mentioned port is curtailed thirty days in spring and a month each fall on account of its higher latitude. That to reach the Churchill Harbor from the City of Winnipeg would require at least 750 miles of new railway, of which 450 would be through a very rough country,

involving very heavy mileage cost. No considerable way or return traffic could be reasonably expected therein, while the conceivable object for building the line, namely, as an outlet for the grain of Manitoba, can be immediately served via the C.P.R. from Winnipeg over this route, of which three-fourths is already built; towards the best harbor on the Bay, when its practicable improved shipping facilities are duly provided. There, the latest build of "tramp steamers" of 12,000 tons might find cargoes for profitable conveyance to Liverpool immediately after the harvest in each year when such traffic is hereafter developed on that route to the Atlantic and beyond.

(g) The point is also made that on no other route but this, would fish in any considerable quantity, be worth more at the land than at the sea terminal, for want of a commensurate market. This is a point too well taken to be gainsayed, but it means the difference between commercial success or failure, to the routes thus compared.

Leaving the negative points respecting prospective competition from other possible rival lines, your Directors take great satisfaction in asking your careful attention to the grand possibilities of your enterprise, as sketched by the experienced hand of the author of the Engineer's Report.

It is assumed that the north section is to be completed first, for reasons so conclusive as to need no further argument.

With this accomplished, the aforesaid report points out a way to extend its connections north-westerly to the shores of the Behring Sea, a route distance of nearly 5,000 miles! Astonishing as this revelation is in the outline, a closer inspection not only confirms its reliability, but brings to the front the surprising fact that about 86 per cent. of the whole distance is already navigated by steam power. Thus from the mouth of the Yukon, which is navigable by steam-boats for 2,300 miles, a route can be established via the Porcupine branch reaching 1,500 miles eastward from Behring Sea and to within 80 miles of the Mackenzie Delta. Here the Hudson Bay Company have an ox road cut out for transfer of goods between the two rivers. Upon the latter stream steamers ascend uninterruptedly to Great Slave Lake and its eastern extremity a distance of over 1,400 miles. Thence a portage railway of about 175 miles, according to the latest Government maps, will reach Chesterfield Inlet, whence 1,900 miles of deep water navigation is available for a direct line of steamers with Moose River. Thus to 3,600 miles of inland river steamer routes, but 225 of portage railways need be added to utilise 1,300 additional miles of salt sea transit and connect the whole with your railway! This means a route extending from Toronto as the nearest commercial centre, to the shores of Behring Sea in a continuous line of about

5,000 miles! But this is not all; steam boats on Athabasca River and lake come within a few miles of those on Great Slave Lake and Mackenzie River, at a point on Slave River where a rapid 16 miles long occurs and where a wooden tram railway is reported as provided by the Hudson Bay Co. for its traffic transit purposes. With a few miles of portage-railway facilities provided there, and at one or two points on Peace River, from 1,000 to 1,200 miles more of navigable routes on Athabasca Lake and its tributaries or affluents can be connected with those before mentioned, and the magnificent aggregate of over 6,000 miles of internal communication added to the resources of Canada! Not only is this far-reaching transit route available for a region where railway extension from the south must be slow at best, but is in one where evidences of fabulous wealth in gold, petroleum, coal and oil are being announced in constantly increasing instances, as the hardy explorer is pushing more and more into its immense but undeveloped districts, to say nothing of the agricultural and forest values, which plainly appear upon the surface of those vast territories. That the opening of this interior transit connection via Chesterfield Inlet and Great Slave Lake will immediately add many millions of dollars to the national wealth of Canada is beyond question. In honor of the Engineer who has first suggested it, your Directors propose to designate the name of this "Harvey Route" following the precedent made in giving an individual name to the first route projected in Canada between Lake Superior and Lake Winnipeg, known as the "Dawson route."

With this grand object attainable, how shall it be most wisely made available?

In the line of solving this problem your Directors propose to adopt certain lines of action subject to your approval, briefly outlined as follows:

First—As to Construction Cost.—The Board will adopt the recommendation in the Engineer's Report that \$80,000 per mile (See note 3) be made the basis of calculation as the cost of a railway built and equipped upon the standard of the Lake Superior Division (Sudbury to Fort William) of the Canada Pacific Railway—to be hereinafter referred to by its initials C.P.R.—if for locomotive service, or for equivalent electrical equipment and style of construction upon a standard to be approved by the Government after inspection of an illustrative section of the same, upon a full scale in actual operation. Out of the gross sum mentioned, the Company will reserve not less than five nor more than ten per cent for preliminary and incidental expenses, including surveys and inspection outlays, as may be agreed upon with contractors. Within those limits the financial standing and business

experience of propounding parties should largely determine the acceptance of bids, and thus naming the shortest construction period to be preferred, other considerations being equal.

Second—Proposed stage and means.—The length of the route from the St. Mary's River to tide water on the Moose River being estimated at 400 miles, and the cost at \$80,000 per mile, \$32,000,000 is ultimately to be provided; but for the north section of 250 miles \$7,500,000 only will be required in the first instance, and with which expenditure an earning traffic can commence.

To provide for this capital it is proposed that the Dominion be applied to for a land grant of 12,000 acres per mile (already authorized by law, see Chapter 54, 40 Victoria (1868) for a railway from the line of the C.P.R. to Hudson Bay), to be allotted near the mouth of Hudson Bay in the Territories under Dominion control north of Ontario's boundaries, and which have no present commercial value for want of the transit facilities which this Company's railway can furnish. Also for a money bond of \$7,500 per mile, payable pro rata, one-half on each ten-mile section as built, and the balance upon completion of the north section from the C.P.R. to tide water. Subsequently the south section to the St. Mary's River to be likewise aided.

This is a low rate in money, and the same in lands, as sanctioned for subsidizing the abandoned route from Winnipeg to the mouth of the Nelson River.

Also that the Province of Ontario grant to this its usual subsidy of \$3,000 per mile in money, payable pro rata, one half on each ten-mile section is completed and remainder when railway is completed from the C.P.R. to tide water; also subsequently in like manner as to the Southern section.

As a provincial "colonization railway" this line must out-weigh in importance all the others now, or heretofore projected, combined. Its prompt inauguration will secure the pre-eminent and permanent location of the leading commercial entrepot of the Great Canadian Sea near the centre of the coast line of Ontario, and confer an importance upon the northern section of the provinces which no other colonising policy can do.

It is more than probable that at the point of contact with the six thousand miles of inland sea coast line by the shortest possible railway connection, not only with the trans-continental system of the Canadian Pacific, routes east and west, but also with the unrivaled waterways via the Great Lakes and the St. Lawrence, a city will speedily develop, whose industries will support many thousands of wealth producers and the exports from which will in a surprisingly short period equal

*Note 3.—This estimate was made after consultation with leading engineering experts in the service of the Canadian Pacific Railway Company, and with data before them obtained by extensive surveys by that Company.

of the territory to be traversed by the route of this Corporation and government privately to the sum named by them.

them of the other cities in the province east of Lake Superior. See note 4.

Hurly ad for colonization transit purposes can not be hindered by the Provincial Government so wisely in any other direction, especially in view of the fact that a movement is already taking form to concentrate the infant commerce of Hudson Bay at Churchill River which is about as far to the north of Ontario as Newfoundland is beyond its eastern limits.

If the Moose River route is first opened to these waters, all question as to the administration of the Great Bear traffic will be finally decided in its favor, but if it remains dormant a rival port will be formed into existence as a commercial necessity, and Ontario's unequalled natural advantages may not overcome the lack of timely practical statesmanship in its behalf.

The Province owns about ninety-six millions of acres of unsurveyed and mainly unoccupied lands adjoining Hudson's (or James) Bay on the south and south-west. The line of this company's route will divide this vast area into two nearly equal parts and develop its resources to an extent not possible in any other way.

That the Province will largely profit by donating a small per centage of these vacant lands to secure the advantage of having them rendered accessible and carefully explored by capital directly interested in developing any value they may possess, is too evident to need argument.

Your Directors take pleasure in reporting that the situation in this regard has been and is appreciated by the Provincial authorities.

The Provincial lands mainly traversed by this route are similar to those made over after survey to settlers as "free grant lands" or offered for sale at 50 cents per acre subject to timber reservations.

It has been ascertained that the Dominion Government has never had an application for the purchase of any of its lands in the Hudson Bay region, and a valuation of 25 cents per acre will be a liberal estimate of actual average value.

The charter of the Company limits its issue of stock to \$8,000,000, or a pro rata of \$7,500 per mile, and it is proposed to provide for balance of needed capital by sale of five per cent First-Lien Debenture Bonds.

On the foregoing basis the capital account will result as follows:

Capital stock	\$2,000,000
Money subsidy from Dominion \$7,500 per mile	3,000,000
Land subsidy from Dominion valued at \$2,000 per mile	1,200,000
Money subsidy from Province \$2,000 per mile	1,200,000
Land subsidy from Province valued at \$2,000 per mile	1,200,000
Roads to balance \$5,000 per mile	2,500,000
	\$12,000,000

NOTE 4.—The effect of railway facilities in a few years in stimulating production was demonstrated at Arderne, Labrador, which is a town about halfway up the lower shore of the North West River, about 100 miles west of the mouth of the river. It is a port of call for the steamer "Harvey" which is now made a railway terminus, and a landing dock of nearly 1,000 feet is

It is need be borne in mind that the railway and equipment does not represent all the necessary outlays before traffic can be properly accommodated, and that a wide margin must be allowed for cost of terminal facilities on Hudson Bay and on the St. Mary's River \$10,000,000 should be reserved for these and collateral traffic outlays in the general financial scheme, making the aggregate investment \$18,000,000.

To this the capital of a subsidiary company of not less than \$8,000,000 should be added for 300 miles of the before mentioned portage railway, also for steam barge lines on the inland lakes and rivers, with a coast wise steamer line for Hudson Bay and Herschel, and the aggregate will be \$20,000,000 capital to utilize 600 miles of railway, connecting with 10,000 miles of the aforesaid sea and inland lake and river routes, of which all except about 800 miles in Alaska will be within Canadian limits.

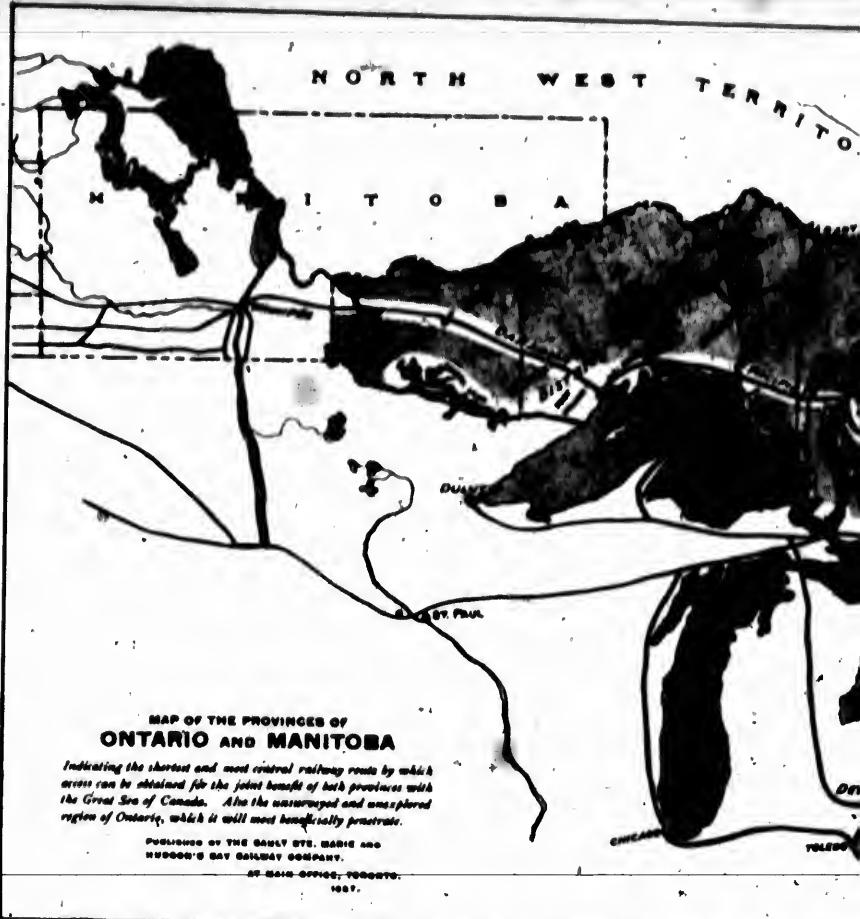
Let these results be compared with those of the three great Canadian transit lines as follows:

Canadian Pacific, mileage of railway owned	6,000
Mileage of railway leased	9,000
Total	15,000
Capitalized cost (see Gov't's report) at	8194,000,000
(Approximate and per mile of those owned, \$54,000.)	
Grand Trunk, miles of railway owned	2,000,50
Miles of railway leased	11,375
Total	3,100,00
Capitalized cost (see Gov't's report) at	8941,10,112
(Approximate and per mile, \$90,500.)	
Inter-Colonial (Portersmome) railway, miles owned	1,300,00
Miles of sea coast navigation	8,58,300,700
(Approximate and per mile, \$40,000.)	
North Western Transit System, first mentioned.	
Miles of railway	800
" lake and river steam navigation	4,000
Miles of sea coast navigation	8,000
Total	10,800
Estimated Cost	880,000,000
(Average outlay for combined rail and water transit per mile, \$1,500.)	

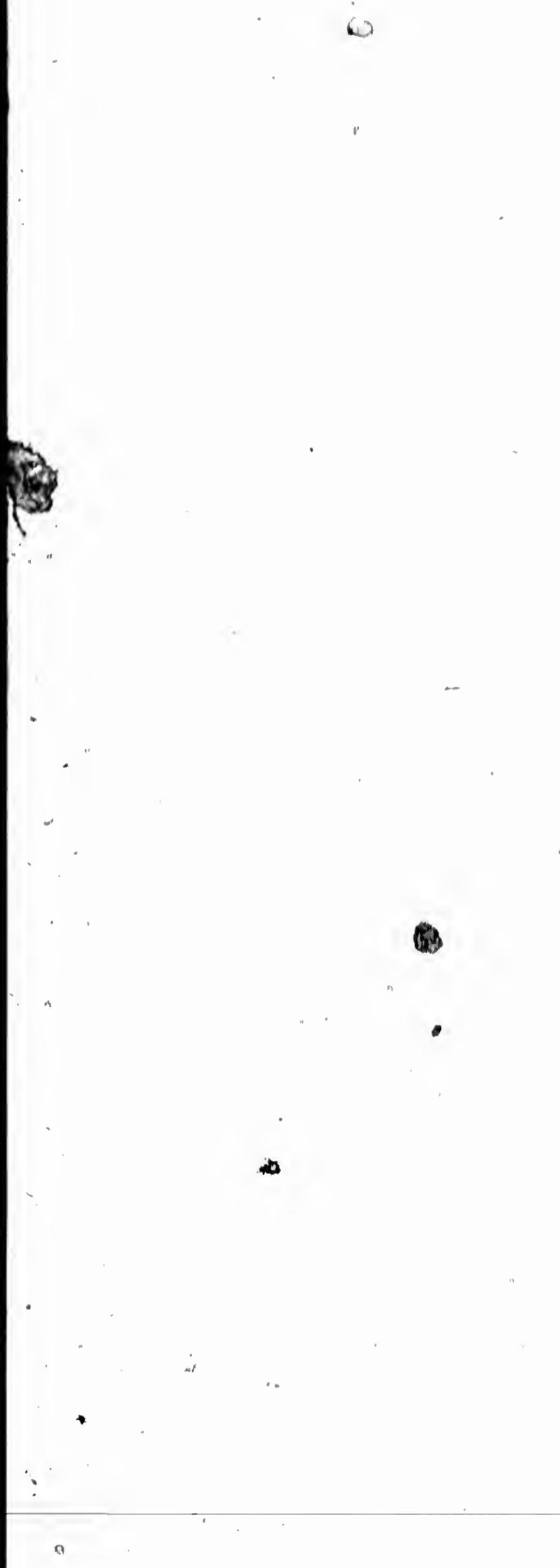
Provision should be made by this company for siding the subsidiary "portage" railways on the "Harvey route" west of Chesterfield Inlet. A certain amount of first lien debentures to be issued pro rata per mile upon them should be guaranteed by this company, and stock subscription by it authorized. Surveys of the "portages" should be proceeded with at once, in which the Federal Government will no doubt assist, as well as grant liberal subsidies in lands and money for the short distances involved.

All necessary charter powers should be forthwith obtained and the whole route from the St. Mary's River

to the Great Lakes, with our trucks, was provided as a landing place for the sailing fleet. The inland routes above 600 miles of 10,000 tons burden, employing 1,000 men, in using these facilities, and upwards of 20,000 tons of coal are landed annually at this single outlet.



NOTE—DISTANCES: Milwaukee Junction to side track at Moose River near Fort Bay, 100 miles; branch route estimated 100 miles. From junction to Fort Kipawa, via C.P.R., 150 miles (this may be reduced about 20 miles, by "cut off" between Barroway and Kipawa and elsewhere). To Moosejaw, 150 miles, being 50 miles less than from Liverpool to New York by most direct route. The Milwaukee route to Hudson's Bay from the railway line to that direction can prove profitable. The Milwaukee route often finds these conditions requisite to financial success, and, in, therefore, great confidence can.



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to the Yukon should be managed as a unit to secure final success.

The hints contained in the Engineer's Report that a cheap but efficient style of railway can be utilized at those points are the result of professional studies devoted to that problem and your Directors feel warranted in stating that the saving in cost and time of construction will enable those connections to be made within a year after the completion of this route to Hudson's Bay if commenced at about the same time.

The river traffic connections will not require a large amount of capital. A moderate number of spacious but light draft freight barges can move an immense tonnage at the lowest possible cost. The steamers towing them can have sufficient passenger accommodations, without expensive accessories and extra outlays to attain high speed.

The effect of this system will be to draw the products and trade of a large part of Alaska as well as all of Canada north of Athabasca River valley and eastward of the Rocky Mountains from the Pacific coast, and concentrate the same at the commercial centre via the new Hudson's Bay route.

Third, Corporate Management. Your Directors recognize the fact that an affair of this magnitude cannot be managed properly at Sault Ste. Marie, but should be controlled from a central point in touch with capital and with competent executive and Governmental supervision. Hence they recommend that the main office be established at Toronto.

Considering that this new system of transit will furnish means of access to the vast regions of Northwestern Canada, greater in extent than now covered by its present entire railway system, the Provisional Directors will not allow their personal, or local, interest, to retard the earliest possible realization of its invaluables benefits, which they desire to see controlled by representative Canadians not only at present, but in the future.

To secure this object they decided to make the construction contract, payable in the proportion of the stock,

bonds and subsidies made available, but with the reservation that at least sixty per cent. of the stock shall be deposited in trust at Toronto and reserved for resident Canadian subscription at par until after the railway is opened to the shores of the Great Canadian sea.

The Provincial and Dominion Governments are to have a similar option for the same period by which Canadian control can be permanently assured.

Your Directors have been prosecuting negotiations with capitalists of ample means, and with professional engineering talent of the highest order, and have the satisfaction of assuring you that if the Governmental action sought for is promptly obtained, there is no doubt of the work in opening the proposed route from the C.P.R. to Hudson's Bay being entered upon without delay under the terms of a contract already agreed upon and of being pushed to completion with all practicable speed and that this grand result may be actually realized before the close of this century.

To prepare the way for this achievement several preliminary reconnaissances have been made of the route as a whole, and of various sections of the same, including a survey of the harbor in the tide water area at the mouth of the Moose River and of the entrance to it which is the only place along the entire Ontario coast where adequate harbor facilities are possible.

Your Directors now conclude that the next step in the line of progress is to secure the co-operation of representative men in business affairs at the Provincial capital who will consent to assume Directorate control of its affairs, that the aims herein set forth may be carried out in a satisfactory manner.

To that end the Executive Committee of the Board is authorized to conduct suitable negotiations at Toronto and a successful termination of the same is most earnestly desired by the present Provisional Board of Directors.

Respectfully submitted by order, etc.

* JOHN MCKAY,
Secretary.

JOSEPH COZENS,
President.

TORONTO CORRESPONDENCE.

JOSEPH COZENS, Esq.,

President Provisional Board of Directors of the Sault Ste. Marie & Hudson's Bay Railway Company.

DEAR SIR.—After considering the statements set forth in the Special Report of your Board, dated December 18, 1890, and the personal explanations of yourself and other members of the Executive Committee, we agree to become Directors of the said Company, with a view to facilitate a re-organization of the Board after the main office of the Company has been transferred to the City of Toronto.

Yours respectfully,

STAPLETON CALDECOTT,
S. H. BLAKE,
J. W. LANGMUIR,
ROBT. KILGOUR,
JAMES SCOTT.

TORONTO, MARCH 20, 1897.

TORONTO, March 30, 1897.

MESRS. CALDECOTT, BLAKE, LANGMUIR,
KILGOUR & SCOTT, TORONTO.

GENTLEMEN.—I have the honor to acknowledge the receipt of your favor of the 20th instant, and beg leave to report that after your consent was made known, a meeting of the Provisional Board of Directors of the Sault Ste. Marie and Hudson's Bay Railway Company was duly held at Sault Ste. Marie, Ontario, at 10 a.m., on Saturday the 27th instant.

A By-law was unanimously adopted changing the Main Office of the Company to the City of Toronto, by virtue of the powers conferred by the Charter amendment of 1890.

Action was also taken as authorized by the Charter to add to the number of the Directors, with a view to maintain the original number.

To this end the first four of the signers of your letter before me were at that meeting duly added to the number by election, with the expectation that another vacancy would

over and be filed by the election of the remaining signers at the first Toronto meeting.

The Board after the transaction of the business before it, adjourned to meet in Toronto, at the Bank of Commerce Building, on Wednesday the 1st instant, at 8 p.m., or as soon thereafter as a quorum may be present.

I will be pleased to meet with you at that time and place or at such later date as may suit your convenience.

Yours very respectfully,

JOSEPH COZENS.

President Sault Ste. Marie & Hudson's Bay Railway Co.

P.M.—An adjourned meeting of the Board was held April 6, 1897, agreeably to the President's letter, and the gentlemen named were present as Directors.

Mr. Cozens tendered his resignation as President, and Stapleton Caldwell, Esq., was elected to fill the vacancy.

Alderman James Scott was elected Vice-President, Mr. Emilie Jarvis was appointed Treasurer, and Charles T. Harvey, C.E., Manager and Chief Engineer.

SUPPLEMENTARY STATEMENT BY THE TORONTO DIRECTORS

The foregoing Special Report of the original Provisional Board of Directors of the above named Company will explain the general status of the enterprise, and the reasons which led the members of the same to recommend a reorganization of the Board and the removal of the main office to the City of Toronto.

The undersigned believe that such action will contribute not only to the prosperity of this City but also specially promote the interests of the Province and of the Dominion.

They arrived at this conclusion, in view of facts and features of the case stated in part as follows:—

First—That the extension of the system of Canadian railways to the shores of the great Northern Sea can be undoubtedly made most readily and economically from a point on the Canada Pacific Railway at or near Missanabie Station thence northward along the valley of the Moose River to tide water at its mouth.

Second—That a railway upon that route will accommodate a larger section of the Dominion than any other line than can be projected to Hudson's Bay as it affords a sufficiently direct line of communication with Winnipeg and Manitoba on the West, the great lakes on the South, and Toronto and the populated section of Ontario on the East.

Third—It will most centrally penetrate the vast body of unexplored crown lands situated along the sea coast and south and south-east of James' Bay and will most rapidly develop whatever value they contain.

These views are endorsed by one whom all will recognize as an expert in these matters, having made them a study in the management of the great corporation of which he is the head, and who has had a large part of the region to be traversed by this line, surveyed or explored in locating the C.P.R. The following letter from that source in reply to Toronto enquiries as appended, had great weight in forming the opinion of the undersigned.

TORONTO, January 30, 1897.

SIR WILLIAM C. VAN HORNE,
President The Canadian Pacific Railway Company.
MONTREAL.

MY DEAR SIR WILLIAM.—

When the Engineers of the Sault Ste. Marie & Hudson's Bay Railway Company first saw me in connection with this

undertaking, I strongly recommended him that he should see you in order to ascertain what view you took on the part of your Railway Company. After an absence of six months spent largely in obtaining information and procuring such a substantial interest in the undertaking as would warrant him in the conclusion that he might fairly say the road could now be built, I again recommend him to see you and discuss the matter in view of the fact, that, owing to the increased interest taken because of mining and the general development of the country, others had taken up the question of communication with Hudson's Bay. After very naturally considering the matter with Mr. Harvey I had come to the conclusion that it was of very vital moment to the success of the enterprise to touch the C.P.R. at the shortest line of distance from Hudson's Bay. This was thought to be in the vicinity of Missanabie. Another line is now contemplated to the East covering a length of nearly 400 miles; another one again to the West of much more considerable length. As between these two it seemed that in the interest of the Province and of the C.P.R. there could be no question but that the shorter and the direct line was the one to be adopted. It appeared to me, also, that as this line ran so largely in the valley of the Moose River it would make the work easier of accomplishment and would also furnish means of testing fairly the capability of electricity as applied to a railway. The gradual fall through this valley gives the opportunity of short intervals of supplying running power.

In order to carrying out of any of these schemes it will be necessary to procure substantial assistance from the Government. The Government should aid that line which will best answer its purposes in the general development of the country, and act best as a feeder to the great trunk line which it touches. To my mind there seems to be no question but that the short direct route should meet with the larger measure of encouragement from those whose duty it is to ascertain what will in the long run be the most feasible and least expensive line, having for its object the development of what may be found worth developing in this Northern territory. I cannot exaggerate the importance of a communication from you in the strengthening of our hands, in presenting to the Government the claims of the route, which Mr. Harvey and his Company have thought to be the most feasible means of opening up communication with, and developing the resources of the Hudson's Bay territory. *** We are most anxious to work in entire harmony with you in this matter, and to endeavor, so far as the commodities of the North will enable it, to make this line a feeder to the Canadian Pacific Railway.

Yours faithfully,

R. H. BLAKE.

On TRAIN, OTTAWA BURTON, January 14, 1897.

Dear Mr. BLAKE,—

I have your letter of the 20th instant. I am not sufficiently acquainted with the resources of the territory between the main line of the Canadian Pacific Railway and James Bay, and of the lands and waters beyond, to express an opinion on the merits of Mr. Harvey's railway enterprise. Such a railway would not be among those which the Canadian Pacific Company regards as necessary to its general system, and therefore this Company would not be disposed to take any part in its construction or to be financially interested in it in any way. I can only say that if the enterprise should reach the construction stage the Canadian Pacific Company would afford it the most favorable terms as regards rates on construction materials, supplies and workmen—rates as liberal as could be expected by a friendly connecting line from another—and it would further agree to the most liberal divisions of rates on all traffic interchanged in the future, and would make an arrangement as to this interchange for as long a time as might be desired.

If a line to James' Bay is to be built it seems to me that the route from Missanabie or from some place in that vicinity is by all odds the best that can be selected. Much information as I have indicates that there are no material physical difficulties to overcome between Missanabie and Moose Factory. A line by way of Lake Abitibi would be somewhat shorter in point of through distance, but not enough could be saved in distance to justify the much greater extent of line to be built. Moreover, the line from Missanabie, as will be seen by a glance at the map, would afford a short route from the west, the importance of which should not be overlooked.

I am, yours very truly,

(Signed) W. C. VAN HORNE.

S. H. BLAKE, Esq., Q.C.,
TORONTO.

Fourth—It is well known that other routes have been projected to James' Bay from Toronto but there are conclusive reasons for considering that they cannot supply business facilities as advantageously for this city as the line of this corporation, because: (a) the better service which a trunk line like that of the C.P.R. can furnish from the junction with the branch to this city over existing connections. (b), It is safe to assume that lower rates of freight and passenger transit and faster time can be furnished for Toronto business with Hudson's Bay via Missanabie than by any other route that is at all probable to be built for many years to come. It must not be overlooked that with the connection via the C.P.R. to Heron Bay on Lake Superior a water route is *at once available*, by which goods in bulk can be delivered to or from our city at lower rates per ton than by any all rail route between the terminals at Hudson's Bay and this city. (c), Again, no export trade from Hudson's Bay southward could be diverted to railways with an eastward trend when a shorter southern line to the great Lakes was offered as via "Heron Bay" or the "Soo," and any railway to those northern waters must evidently secure that traffic in order to become self supporting. (d), But a still weightier consideration is that while the Missanabie route can reasonably satisfy the demands of Winnipeg

and Manitoba for a railway connection to Hudson's Bay, the alternative of having no other access but by a route bearing eastward on a direct line to Toronto would not be satisfactory to the Western City and Province; but a more direct line would certainly be agitated until realized, and Ontario would lose the great advantage of the concentration of the widest range of business now possible at a point on the sea coast within its own limits.

While these are not all the arguments that can be used, they are deemed sufficient to demonstrate the fact that the interests of Toronto, of Ontario, and of the Dominion will be most advantageously promoted by favoring the Missanabie route, as the pioneer line between this City and Hudson's Bay.

Hence the undersigned have accorded to it their personal support, and invite their fellow citizens desiring to see the business connection of this city extended as fast as possible, to do likewise, and secure permanent control of the Missanabie route to Hudson's Bay, in and for this city.

As to the financial programme set forth in the Special Report, it may be well to remark that statistics show that the total cash subsidies granted to the railways of Canada average over \$13,000 per mile, and unquestionably none of them presented as large proportion of public advantages for the mileage involved as the railway now under consideration. That a short link of but 250 miles will connect the 15,000 miles of Canadian railways, and the 200,000 miles of Continental railway transit, with 6,000 miles of inland sea coast, in our own territory, is an unparalleled case, and when to that, nearly 6,000 miles, additional of inland, lake and river navigation can be added in the manner and by the means therein set forth, the result can be truly termed wonderful.

The proportion in resources to be provided are about four-tenths in private capital, three-tenths in cash subsidies, and three-tenths in crown lands, at an estimate which cannot be considered as convertible into cash assets for many years to come, and the disposal of which as an element of industrial development is really a greater benefit to the Crown than withholding the same would be. The terms therefore seem to be not only warranted by precedent but as favorable to the public interest as could be reasonably expected.

That the realization of this new development of the resources of Canada will form an important epoch in its history there can be no doubt.

STAPLETON CALDECOTT,
S. H. BLAKE,
J. W. LANGMUIR,
ROBERT KILGOUR,
JAMES SCOTT.

TORONTO, April 6, 1897.

ADDENDA

CONCERNING THE GREAT COMMERCIAL OPPORTUNITY OF CANADA.

INDUSTRIAL PHENOMENA.

Modern progress, in developing the resources of unexplored sections of the globe, has no more marvellous history than is exemplified in the record of the last five years concerning that part of Western Canada known as the Kootenay district of British Columbia. In 1892 the stillness of all the preceding ages rested upon the now famous section of the Rocky Mountains.

Explorers demonstrated the presence of the hidden wealth of precious metals, and now thousands are at work following up the "leads" so recently discovered, and from the bowels of the earth are brought forth millions, with the volume increasing in an astonishing ratio. (*See note).

Meanwhile the surface vicinage is manifesting marvellous changes. The primeval forests are disappearing. Cities are springing into position. Lakes are being utilized by lines of passenger and freight laden steamers; while railways are penetrating into "passes" hitherto solely trodden by the hunter. The question of lines of railways to connect with the general transit system of Canada and of the Continent is now engaging the attention of the entire Dominion.

Another field of similar possibilities, but covering a vastly greater area, and with far more diversified resources, is just now emerging from the desuetude of hoary ages and forcing itself upon the attention of the far-sighted statesman, and enterprising capitalist because of the results of explorations made by the pioneer explorers who have commenced searching into its unknown recesses. The vast region referred to, while including a part of British Columbia, extends far beyond that Province to the eastward and northward, and may be most accurately designated as the Basin of the Mackenzie and Yukon Rivers, the second and third, in size, of those on this Continent; the Mississippi alone taking precedence in magnitude.

Over one hundred years ago (1789) Mackenzie, having the extension of fur trading facilities in view, descended the river bearing his name to its mouth. To him the surface indications of sustenance for fur bearing animals constituted all the wealth to be sought for. The salt and sulphur springs, the asphaltum and petroleum rivulets and pools, the cliffs of coal lining the river for hundreds

of miles or the auriferous sands on which they unwittingly trod, had no commercial significance or industrial values to them. His party started a fire in one of the coal ledges, and a Canadian surveying party found the fire still burning one hundred years later. (See Report of R. G. McConnell, R.A., page 98).

The Nineteenth Century has since come, and is nearly gone, with little change in the economic condition of that vast region, except that Russia has sold Alaska to the United States; the herds of buffalo, and with them the hordes of migratory Indians, have disappeared from the "Plains" of the Saskatchewan and Mackenzie Valleys; but now a mighty change is evidently impending, for the mining explorer has entered those regions, and rich prizes are already found to exist, which no rigors of climate, will deter the resolute energies of the mining adventurer from making known to the world.

Before noting the local evidences of wealth which they have disclosed, a more general survey of the region will be first presented.

This can be done by taking advantage of the examinations made by a Select Committee of the Senate of the Dominion of Canada, and published by authority of Parliament in 1888, in a document of 310 pages, and from which copious extracts are made.

The Committee was "appointed to enquire into the resources of that part of the Dominion lying north of the Saskatchewan watershed, East of the Rocky Mountains, and West of Hudson's Bay, and comprising the Great Mackenzie Basin—its extent of navigable rivers, lakes and sea coast, of arable and pastoral land, its fisheries, forests and mines, and to report upon its possible commercial and agricultural value."

The Committee reported that the Mackenzie Basin comprised an area estimated at 1,200,000 square miles; also that the three great lakes Athabasca, Great Slave Lake, and Great Bear Lake, have navigable coast lines of over 4,000 miles, with an area probably exceeding that of the great lakes of the St. Lawrence Basin, excluding Lake Michigan.

That there are 2,750 miles of navigable water in the Mackenzie River and main tributaries, of which 1,360 miles are north of the rapids of the Great Slave River, and can be navigated by ocean steamers of medium capacity, which can, via Behring Sea and the Arctic Ocean and the Mackenzie, reach and traverse Great

"Now—it is already clear, says a correspondent of The London, Eng., Mining Journal, dealing with British Columbia, that this province's yield of gold and silver-bearing ores, in amount and in leading the value of all the world's output, will, in the next few years, reach a total worth of at least \$10,000,000, even making contingent allowances for a possible further fall in silver value."

The Kootenays will themselves certainly contribute \$10,000,000 worth of

precious metals ore, for whilst the iron country of the Rockies is rapidly increasing its output from a number of mines, to which every month new shippers are added, Bremerton's yield is also steadily increasing, and it is now certain that the silver-bearing districts of the interior of West Kootenay and Eastern Kootenay—will begin to justify by large outputs of precious metal the high hopes long entertained of them."

Slave Lake, and on its eastern extremity approach within the shortest possible distance to the navigable waters of Hudson's Bay.

The following quotations are made verbatim from the Report:

ARABLE AND PASTORAL LANDS.

That within the scope of the Committee's enquiry there is a plausible area of 680,000 square miles fitted for the growth of potatoes, 377,000 square miles suitable for barley, and 314,000 square miles suitable for wheat.

That there is a pastoral area of 880,000 square miles, 20,000 miles of which is open prairie with permanent grasses, the remainder being more or less wooded; 374,000 square miles, including the prairie, may be considered as arable land.

That about 600,000 square miles of the total area is useless for the pasturage of domestic animals or for cultivation. This area comprising the Barren Grounds and a portion of the lightly wooded region to their south and west.

That throughout this arable and pastoral area latitude bears no direct relation to summer isotherma, the spring flowers and date of deciduous trees appearing as early north of Great Slave Lake as at Winnipeg, St. Paul and Minneapolis, Kingman, or Ottawa, and earlier along the Peace, Liard and some minor western affluents of the great Mackenzie River, where the climate resembles that of western Ontario.

That the native game and varieties are equal, and in some districts superior to those of eastern Canada.

That the prevailing northward summer winds of the country in question bring the warmth and moisture which render possible the far northern cereal growth, and sensibly affect the climate of the region under consideration as far north as the Arctic circle and as far east as the eastern rim of the Mackenzie basin.

MINERALS, FORESTS AND MINES.

The immense lacustrine area of the eastern and northern portions of the area under consideration implies, from the evidence given regarding the quantity and quality of fresh water fish, the future supply of a great portion of the North American continent. While, though no great amount of reliable evidence regarding fish has been obtained, the following have been found on the northern and eastern coasts within the scope of the present enquiry, viz.: salmon, on four of the rivers emptying into Hudson's Bay on its western shore, and in all the rivers flowing into the Arctic Ocean, except the Mackenzie, where an entirely different but also valuable species, the *Halmo Mackenzi*, having the local name of the *Innuks*, exists in great numbers. The *vapeling* is found on the coast of the Arctic Ocean and Hudson's Bay, thus implying the presence of cod upon the banks near by, and the rock cod has been frequently taken.

The forest area has upon it a growth of trees well suited for all purposes of house and ship building, for mining, railway and bridging purposes, far in excess of its own needs, and of great prospective value to the treeless regions of Canada and the United States to the north, the growth near the Laurentian formation being small, but the alluvial portion having it (on the river of its name) and elsewhere) the "Liaud," a balsam poplar, sometimes called *Balm of Gilead* or rough bark poplar, 120 feet high, with a stamp diameter of five to six feet. The white spruce, 180 feet high, with a stamp diameter of four to five feet; the larch, of about the same size, and the balsam pine, whose straight stem is often 100 feet long, with only two feet of diameter at the stump.

Of the mines of this vast region little is known of that part east of the Mackenzie River and north of Great Slave Lake. Of the western affluents of the Mackenzie enough is known to show that on the headwaters of the Peace, Liard and Peel Rivers there are from 180,000 to 200,000 square miles which may be considered auriferous, while Canada possesses west of the Rocky Mountains a metalliferous area, principally of gold-yielding rocks, thirteen hundred miles in length, with an average breadth of four to five hundred miles, giving an area for greater than that of the similar mining districts of the neighbouring Republics.

In addition to these auriferous deposits, gold has been found on the west shore of Hudson's Bay, and has been said to exist in certain portions of the Barren Grounds. Silver on the Upper Liard and Peace Rivers, copper upon the Coppermine River, which may be connected with an eastern arm of Great Bear Lake by a tramway of forty miles, iron, graphite, ochre, brick and pottery clay, mica, gypsum, lime and sandstone, sand for glass and moulding, and asphaltum, all known to exist, while the petroleum area is so extensive as to justify the belief that eventually it will supply the larger part of this continent and be shipped from Churchill or some more northern Hudson's Bay port to England.

Salt and sulphur deposits are less extensive, but the former is found in crystals equal in purity to the best rock salt, and is highly saline brine, while the latter is found in the form of pyrites, and the fact that these petroleum and salt deposits are mainly near the line of division between deep water navigation and that fitted for the lighter craft, gives them a possible great commercial value. The extensive coal and lignite deposits of the lower Mackenzie and elsewhere will be found to be of great value when the question of reducing its iron ore and the transportation of the products of this vast region have to be solved by steam sea-going or lighter river craft.

The evidence submitted to your Committee points to the existence in the Athabasca and Mackenzie Valleys of the most

extensive petroleum field in America, if not in the world. The uses of petroleum and consequently the demand for it by all nations are increasing at such a rapid rate, that it is probable this great petroleum field will assume an enormous value in the near future and will rank among the chief assets comprised in the Crown domain of the Dominion.

In referring again to the navigation of this region the evidence has been given to the greatest extent of unbroken navigation, and that the best hope of making use to the Hudson's Bay Company, who have always used the waterways, even when circumstances difficult, rather than resort to land carriage, and their inland posts to as far north as the Arctic circle are now supplied from their central depot at Fort Garry with only 147 miles of land carriage, four of this being by tramway at the Grand Rapids of the Saskatchewan. Sixty miles of wagon transport from Edmonton to Athabasca Landing, thence by steamer and flatboat to Port Smith on the Great Slave River, where twenty miles of wagon road connects the shallow with deep water navigation, and the steamer Wrigley distributes them to the various posts down to the mouth of the Mackenzie just above its estuary, where the river is joined by the Peel and the long Peel River which joins the Mackenzie, that point to Fort McPherson, on the high bearing streams. The great lakes which receive the drainage of this vast region and give an equal flow to the Mackenzie, all have deep water navigation, and like most lakes of the Laurentian formation are studded with islands.

The most northern source of the great Mackenzie River is a stream fed by the glaciers of Mounts Hooker and Brown, two of the highest of the Rocky Mountain chain, in latitude 60° 20', and this soon becomes a navigable stream, preserving that character except at the breaks mentioned, during the nearly 2,000 miles of its course to the Polar Sea. As already mentioned these western affluents will form valuable links as a means of taking in machinery and mining supplies to the upper waters of the Peace and Liard Rivers, which are now inaccessible for heavy machinery from the west road, and the effect of taking in provisions, made in mining and prospecting areas, will be an important factor in the future food supply to the great mining region of the upper Yukon and Peel Rivers.

Of the fresh water fish-fishes of the region, *Bacchus' Grayling*, an excellent species not prevalent elsewhere, seems to be found everywhere in its rivers, and even west of the Rocky Mountains, but the staple product of its lakes and large rivers, seems to be whitefish of great weight and excellent flavor, and trout often reaching forty pounds in weight, and evidence goes to show that the farther north the greater the yield of fish till the quantity becomes enormous. As an illustration the following is given from the evidence of Prof. Macoun, who quotes Mr John Richardson to the effect that one of the early overland Franklin expeditions took fifty thousand white fish on a north-eastern arm of Great Bear Lake, and Sir John Richardson also states that the great lake trout abounds in all the northern great lakes.

In regard to the salmon fisheries, it would appear from the evidence that salmon are abundant in the rivers and along the coast of the north-west side of Hudson's Bay as well as in the rivers of the northern shore of the continent. Your Committee consider it advisable that means should be adopted to ascertain more accurately the extent and value of the salmon fisheries of these regions, with a view to utilising them for the purposes of commerce and for the revenue which they may afford.

The Indian population is sparse, and the Indians, never having lived in large communities, are peaceable, and their general character and habits as given by witnesses justify a hope that the development of the country, as in the case of the Indians of British Columbia, may be aided by them without great danger of their demoralisation and with a reasonable hope that, as in the case of the Indians mentioned, their condition may be improved.

Your Committee, desirous to refer briefly to the evidence upon which they have based these conclusions, may explain that very early in their investigations they became convinced that very little more was known of the northern and eastern portion of the area committed to them for investigation than was known of the interior of Africa or Australia.

Your Committee regret they have made up a long report, but trust that an excuse will be found in the fact that upon a map of similar projection and scale the region in question occupies an area greater than the Australian continent or two-thirds of Europe, covering part of the British Isles, Norway, Sweden, Denmark, Germany, Austria, and a part of France and Russia.

Your Committee have reason to believe that a comparison of the capabilities of this extent of country in our own continent, exceed in extent of navigation, area of arable and pastoral lands, valuable fresh water fisheries, forests and mines and in capacity to support population, the continental part of Europe to which they have referred.

The chief present commercial produce of the country is its furs, which as the region in question is the last great fur preserve of the world, are of very great present and prospective value, all the finer furs of commerce being there found, and the sale in London yearly amounting to several millions of dollars.

Your Committee feel that with this report and the evidence herewith they will have done all that it was possible to do since the date of their appointment and the receipt of their instructions, to inform your Honourable House and the people of this country upon the resources of Canada's Great Reserve.

All of which is respectfully submitted.

JOHN SCHULZ,

Chairman.

Thus far from the report which dates back only ten years, and yet the decade now ending is showing a wonderful progress in the development of the industrial resources of the north-west section of the continent including Alaska, which in view of the pioneering difficulties to be overcome,—caused mainly from scant modern methods of transit,—seems almost incredible.

The best illustration of these new conditions will be found in extracts from some of the items published in the Press during the last few months, of which a few selections will be furnished in a supplement annexed for the information of those who may not have noticed them in their original form.

The following advertisement is unique not only as an indication of the commercial trend of development in a region heretofore considered to be valuable only as a fur game preserve, but also from the fact that the Dominion Government has no available means of access by public conveyance to the location proposed to be leased, except by sending across the continent, thence northward via the Pacific Ocean to a landing upon and conveyance across the territory of another nation, and with a longer time requisite than would be necessary to reach the auriferous regions of South Africa!



**TENDERS FOR A LEASE FOR THE EXCLUSIVE RIGHT TO
MINE FOR GOLD IN A PART OF THE BED OF
STEWART RIVER, A TRIBUTARY OF
THE YUKON RIVER, NORTH
WEST TERRITORIES.**

SEALED TENDERS addressed to the undersigned, and marked on the reverse, "Tender for a lease to mine for gold in a part of the bed of the Stewart River, subject to the conditions below referred to, to be drawn by the Office of the Commissioner of the Yukon River, Fort Selkirk, Yukon Territories," will be received at the office of the Commissioner of the YUKON RIVER, Yukon Territories, Yukon, North-West Territories, until the 1st day of May, 1897.

The conditions under which a lease will be issued may be obtained on application to this Department.

Each tender to be accompanied by an accepted cheque on one of the chartered banks in favor of the Minister of the Interior for the amount of the sum which the applicant is prepared to pay for a lease.

No tender by telegraph will be entertained.

The highest or any other tender not necessarily accepted.

JOHN R. HALL, Secretary.

Department of the Interior,
OTTAWA, May 1st, 1897.

Limitation of space compels the omission of a most interesting report dated Ottawa, April 1st, 1897, from Mr. William Moore, mail agent of the Dominion Government, wherein his experience in forwarding mails from Victoria, B.C., to the Canadian section of the Yukon Valley is narrated. The mail leaving the last mentioned city Aug. 14, 1896, via Juneau, U.S., reached its destination at Fort Cudahay on the 11th of September or 26 days, but returning left September 15th and did not reach Juneau until the 10th of Feb., 1897, and Victoria, B.C. at the end of the fourth month of transit. He met a steamer on the Yukon River having 300 tons of freight for Canadian points, and towing two barges carrying 300 tons each, or 900 tons in all on one trip. An agent of the U.S. Government reported in 1897 to the

Washington officials that there was no longer any doubt that the gold fields of North Western Canada and Alaska were the richest and most extensive in the world, and estimated the production of the year at ten millions of dollars.

Enough, it is believed, has already been stated to demonstrate that the control of the trade of the Yukon and MacKenzie Basins coupled with that of the portion of the Hudson Bay Basin not yet reached by modern transit facilities is the most important commercial problem now before the people and Government of Canada.

Up to 1896, the most enterprising business minds of Canada did not realize that the traffic of the Basin of the Yukon and of the MacKenzie north of Lake Winnipeg, was of any special importance, or deem it possible to compete for it successfully against the inducements of projected lines of transit from the Pacific Coast.

Now all this is changed. No one longer doubts that the mineral wealth of those regions is to be developed with marvelous rapidity and to a practically unlimited extent. That faith in such a future extends beyond as well as permeates Canada is indicated by the fact that a charter is being applied for at the present Session of the Dominion Parliament by English capitalists under the lead of the Duke of Teck (See Supplement), for the purpose of opening a combined rail and water way from the Pacific Coast, in U.S. territory, to Fort Selkirk on the Yukon. To overcome the excessively steep grades of the passage over the intervening mountain range a cog-wheel system of railway locomotion is proposed for use thereon.

It is obvious, however, that the tendency of this, and similar western transit projects, is to drain commerce away from Canada, instead of into and through it as the proposed easterly system of transit, via Ontario's seaport will most beneficially accomplish.

The conclusion arrived at in the report first mentioned in these pages, that the traffic of the main portion of the vast MacKenzie Basin lying north of Lake Winnipeg and nearly all of the Yukon Basin is a geographical heritage of Eastern Canada from which it can not be evicted except through misapprehension or negligence, is one of unlimited importance to Canadians generally.

The more careful the study made of this proposition, the more clearly its certainty appears, until those whose names are hereto appended as accepting the official control of the Corporation are unanimously convinced of its reliability, together with all others to whom the elaborate line of reasoning referred to has been shown.

The wisdom of the selection of the Western extremity of Chesterfield Inlet as the point for a railway portage from the Basin of Hudson's Bay to that of the MacKenzie at the eastern end of Great Slave Lake will be more

universally appreciated in the future than it can be at present. On both sides of that short connecting railway, is deep-water navigation to be found. The Dominion Senate Committee reported that ocean steamers can pass from the Arctic Ocean to the east end of the Great Lake in ample depth of channel, without a single obstruction a distance of at least 1,300 miles inland, while the same conditions exist on Hudson's Bay for at least 1,300 miles of clear deep water to the seaport of Ontario. A "portage" section with about 50 miles of railway will connect this deep water route with the navigable waters of the Yukon via its Porcupine river branch. Here steamer and freight barges will have a favoring current about half way and a favorable channel for the remaining distance to Fort Selkirk.

MERCHANDISE CAN EVENTUALLY BE DELIVERED FROM ONTARIO'S SEAPORT TO FORT SELKIRK, VIA THE MAC-KENZIE AND YUKON ROUTE, AT A LOWER PAYING RATE THAN CAN BE DONE FROM ANY PACIFIC COAST SEAPORT IN OR SOUTH OF PUGET'S SOUND.

This fact clearly controls the question of the tributary traffic affiliations of those regions. The wholesale merchants of Montreal and Toronto will find that vast territory their peculiar field of trade in Canadian goods, and largely for foreign importations also, as, the spring trade will always be theirs by having at least sixty days earlier access than possible by the Hudson's Strait route.*

Among the many unique and specially interesting features of this newly projected continental route, which must be omitted for the sake of brevity, but one exception will be made, namely in calling attention to the fact that while the railway across the "divide" between the waters of Hudson's Bay and Great Slave Lake will be at the mileage centre of the 2,600 miles of navigable water route between Ontario's seaport and the "portage" railway to the Yukon, in a northwesterly direction, it will also connect with quite a remarkable water course of about the same navigable distance to the south-west, namely 1,300 miles, with but one obstruction for the entire distance! This is obtained by following Great Slave Lake to the mouth of Great Slave River, about 280 miles, thence up the Slave River 260 miles to the mouth of Peace River, thence up the Peace River to the base of the Rocky Mountains a distance of 770 miles, making 1,310 miles.

Professor Macoun testified before the Senate committee (see Report pages 66-75) that he had traversed the whole length of the river from its source to its mouth in a boat, and that a steamer drawing six feet of water could readily pass to the foot hills of the Rocky Mountains.

On the Eastern Section of the Peace River freight barges of 1,000 ton burden can doubtless be used, which will reduce the cost of freight transportation

to the lowest rates. In the Slave River there are rapids for about thirteen miles where the Hudson Bay Oil's steamers come from above and from below and transfer cargoes over a trans-railway. Whether navigation can be improved at that point to permit barges to pass the same loaded, is an undecided question, but with the probabilities in favor of overcoming the obstruction.

Professor Macoun testified that a rapid of ten or twelve miles existed on the Peace River at the base of the Rocky Mountains but when that was passed the river lay deep and sluggish for fifty miles through the same, with elevations of 5,000 feet or more rising on either side. Bending to the south there was 75 miles more of deep water-way through the Parcump branch to McLeod's Lake, making the aggregate of navigable water-way on the Peace River about 900 miles.

His observations showed that the river was open for eight months in the year or from April 1st to December 1st.

His interesting description of its characteristics must be omitted except one answer as follows-after stating that he was out upon the great plains east of the Rocky Mountains.

"When we reached the bank of the river we came upon it like as if we were walking across this room. The country was perfectly level and there was no appearance of the river until we came upon the verge of almost a steep bank. We could see the country on the opposite side of the river. Seven hundred feet below us there flowed a mighty river." Mr. Herodoty and I measured the bank and found that "the river was that distance from (below) the prairie."

That such water-courses as this can never be superseded by railway transportation is beyond doubt. That the products of the forest and the mines in the very heart of the Rocky Mountains, can be floated for over 1,400 miles, entirely through favoring currents or slack water to the terminal of the short "portage" railway connecting with Hudson's Bay and the shores of Ontario, is a stupendous fact, pregnant with commercial possibilities, which the most enthusiastic business optimist can hardly overestimate.

Professor Bell testified that Chesterfield Inlet was 230 miles long and navigable for its entire distance.

Hon. M. Christie, late inspecting factor of the Hudson Bay Company, testified that the maps of Great Slave Lake were all very inaccurate and that he thought that it was longer than Lake Superior, having been on both. His estimate was that it was nearly 800 miles long. It was very deep and clear water and navigable from end to end.

This statement will be closed by a mention of the fact that wheat raised on the shores of Lake Athabasca took the first premium at the centennial fair at Philadelphia. A volume could be filled with verified statements of the superior agricultural and forest resources

* Note.—The peculiar features of navigation by this route were extensively considered in the engineering report before mentioned, and the examinations to be made by the Government steamers this season, cannot

materially affect the conclusions which are not favorable to its regular commercial use.

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of that vast region, to which Ontario and Quebec hold the commercial key of the shortest and cheapest transit route thereto.

Will it be promptly utilized?

The history of the achievements of Canadian energy and enterprise in the past affords ample assurance that this momentous question will be answered in the affirmative!

UNEQUALLED TRANSIT FACILITIES FOR NATIONAL DEFENCE PURPOSES

The advantages of this line of communication cannot be adequately considered without mention of its superiority as a means of the national defence of Canada as an integral part of the British Empire.

It is well-known that under possible political complications the only railway line of communication between Central Canada and the Atlantic, situated entirely within Dominion territory, would be subject to complete interruption by a small hostile force, and that the same contingency exists in respect to the only national waterway via the St. Lawrence. But with railway commun-

cation opened to the seaport of Ontario, a national avenue of access will become available, by which men and munitions can during the open season be transported from Woolwich, directly to Ottawa and to the Central Provinces, with a minimum of liability to interruptions and with a celerity not to be exceeded by any other route.

This unique feature stamps this enterprise as having a bearing upon the efficiency of the general system of Imperial defences, well worthy of the special attention and support of Her Majesty's Government.

MAP EXPLANATIONS.

The map following page 19 is specially engraved to accompany this Statement, demonstrating the fact that while the proposed railway to the only possible seaport in Ontario dwarfs all other public enterprises of that Province into comparative insignificance, it also offers to Manitoba the most practicable route to the Great Lakes of Canada, because 75 per cent. of the distance from Winnipeg to those shores is already constructed on this line in connection with the C.P.R.

The map following page 19 reveals a far wider area of utility as inherent to the same undertaking. This not only includes more than two-thirds of the Dominion of Canada but a like proportion of the Territory of Alaska, as indicated

by the section colored green upon one and purple upon the other. Thus this enterprise will change the original commercial and industrial conditions of a portion of the earth's surface greater than the continent of Europe, and is without doubt the most important trunk line of railway with a minimum length of mileage, as yet projected on the globe. The only rival to this honor is in the case of the railway across the Isthmus of Panama, but this is not deemed analogous because it had, and has, only marine connections, whereas this is the geographical apex of a continental system of over 100,000 railway miles!

REGIONS RENDERED ACCESSIBLE BY THE
GREAT NORTHERN ONTARIO AND NORTHWESTERN CANADA TRANSIT ROUTE
INDICATED BY THE COLOR

NOTE.

The continuation of the route shown on map, via the Soo St. Marie and Hudson's Bay Railway to the junction with the C.P.R. at Minnedosa, and of Sandy St. Marie with the St. Marys River, completes a transit line from the Great Lakes of the St. Lawrence Basin to Bering Sea, and between the governmental and commercial centres of Ottawa and Toronto, Montreal and Winnipeg, with an area which includes more than two thirds of the entire surface of Canada, as well as with an equal proportion of Alaska, comprised in the valley of the Yukon.

It is the most extensive and important combined rail and waterway transit line on the continent of North America.

Distances by the direct route from the Great Lakes to Bering Sea..... 5,000 miles.
Coast and river lines of navigable waters connected by it..... 10,000 miles.



SUPPLEMENT

SELECTED PRESS NOTICES

A NEW EL DORADO.

GOLD DISCOVERIES AND FINDS IN YUKON VALLEY.
Official Reports of the Discovery First in Yukon-Mile are Making One
Fascinating Pictures For You.

OTTAWA, April 4 (Special).—Mr. Ogilvie, the Canadian land surveyor who has been working along the Fort Yukon and Whitehorse roads, while he was out and about in the Yukon Country, has sent a number of reports to the Government during the past few months, pointing out the mineral wealth of the Yukon Territory. And full he exaggerated that additional production should be given to the speculators and those entering the country. The result of this is that an additional company of Mounted Police is also being sent out there from Regina.

Mr. Ogilvie has just received from Mr. Ogilvie a remarkable report as to the vast discoveries of gold which are made there. Mr. Ogilvie says that at Chinditay, which is some 60 miles south-east of Fort Yukon, and further into British territory, some men are making from \$1,000 to \$2,000 per day. This is done by placer mining in the most primitive methods. The report is altogether a most remarkable one, showing gold to be found in abundance.

A DOLLAR AN HOUR.

(World's Work, April 1, 1901.)

GOOD WAGES PAID TO MINERS IN THE CANADIAN YUKON COUNTRY.

Writing from Forty-Mile in the Yukon Country, N.W.T., Mr. Byron B. Jones says of the mines of that region:

This winter there are about 1,200 men in the country, distributed as follows: About 750 at Circle City and the tributary diggings, probably 30 on Seventy-Mile and American creeks between here and there, about 120 at Forty-Mile and the diggings on the head of Forty-Mile and Sixty-Mile Rivers, and at least 200 in the new Bonanza and Hunker districts.

A fair idea of the general location of these places can be had from a U. S. Coast and Geodetic Survey map. Bonanza and Hunker Creeks are tributaries of the Klondike River near its mouth. It is about fifty miles above here and three miles above old Fort Reliance, on the east branch of the Yukon. The town started at the mouth of the Klondike River has been named Dawson, and already boasts a new mill, three stores and about 500 people. Dawson (Dawson) is the district name in the latter part of Argenteuil, and in one month the discoverer took out \$1,000. Since the cold weather began, on that holes could not be thawed by throwing the gravel, commonly called "burning," the creek proved to be as rich as any yet found in the Yukon country. One of the richest claims has a pay streak thirty feet wide of three feet of bed-rock and four feet of gravel, which will average, it is claimed, \$1 to the pan, but I think fifty cents is nearer it. For two miles each way from this claim good pay ore has been located at short intervals.

A foot half a mile above the Discovery claim is a tributary of the Klondike called 33 Durada, which has a very good pay for a mile and a half from its mouth, though it is not equal to that on the first claim mentioned.

Hunker Creek has not been prospected much yet, but will doubtless have some good claims. Bonanza Creek is about twenty-five miles long, and on it and its tributaries are located probably 600 claims of \$100 foot each, and half that in Hunker district. Of that number some will never pay, many will pay wages and maybe a little more and a goodly number will give their owners large sums.

The prevailing wages of the country are \$1 per hour, depending on the distance from the supply point. From five to eight hours is a winter day's work.

The diggings at the head of Forty-Mile and Sixty-Mile Rivers are from one to ten years old, and, while none of them are as extensive as Bonanza's, they have had diggings as rich as any but the very best on Bonanza.

Now, as to the methods used: The diggings are of two classes—summer and winter. Most of the creeks have a slight fall and wide bottoms, the gravel being covered by one to ten feet of mud or soil (not glacial drift). The bedrock is often twenty feet deep, and since the ground never thaws more than two or three feet from the surface, drains and ditches are expensive; so each winter more "burning" is done, which consists in thawing the gravel by fire, removing it and repeating. The rock thus left is little, and makes a good road for drifting. The dumps are situated with the first water in the spring. Sometimes, the creeks do not freeze up solid and the water gives trouble—that being the case this year in places where the average temperature for the past five weeks has been below zero. This is promise of a cold spring—the coldest forty-five degrees below zero, being recorded to-day. Last year at this time the daily mean was fifty-five degrees diastrophic degrees.

Summer diggings are expensive to open for work, but the net returns are often more than if "burning" had been the

method. In hard cases however, must be abandoned, the average cost being \$100 per thousand feet. Other things being in proportion, considerably expense is incurred before the ground is ready to shovel into the sluice boxes.

In all probability there will be work for all who come to the spring. Estimated is to be unexplored parts of the country, though there may not be many new creeks found. We should think of buying unless he can load with \$100. If he purchases his outfit at Julian, and takes that if he purchases after arrival here.

But little attention has been paid to quartz particularly, as the hills and valleys are covered by a heavy growth of moss, so far nothing but small stringers have been found in the bedrock. Nephrite is often found which are more than half quartz.

THE GOLD FIELDS OF ALASKA.

TEN MILLION DOLLARS REPORTED TO BE TAKEN OUT THIS

YEAR.

(New York Tribune, April 6, 1901.)

(By Telegraph to the Tribune)

WASHINGTON, April 6.—One sometimes hears pretty big stories in Washington about the extent and richness of the gold fields down in Alaska. Yet, until I met him I never heard that there are forty with one another. The latest contributor to the fund of information on this subject is G. H. Hamilton, who is the secretary and assistant manager of the North American Transportation and Trading Company, which maintains a line of steamers between Seattle and the Yukon, and has trading posts at Fort Yukon, British Columbia, and at St. Michael, Ware and Circle City, Alaska.

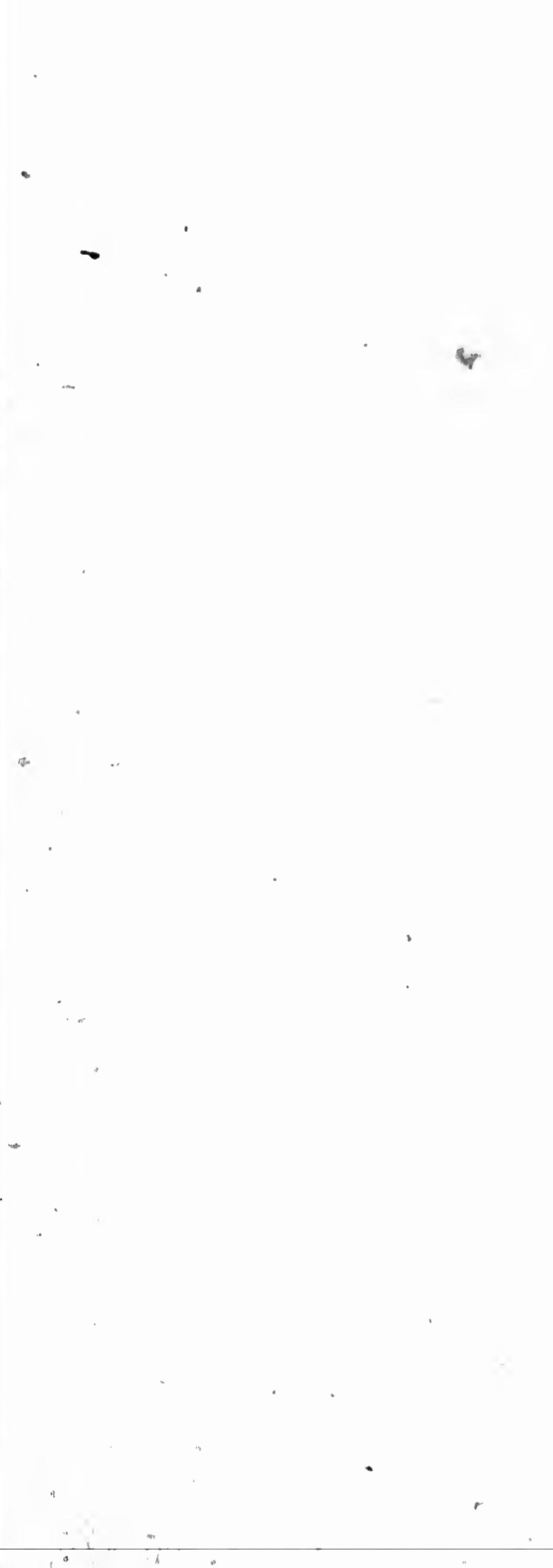
"We are a long way from civilization at Fort Yukon," said Mr. Hamilton, "and it takes one of the company's steamers thirty-five days to make the trip from Seattle. The route is west on the Pacific to the Aleutian Islands, thence north through Behring Sea to the mouth of the Yukon, a distance of 800 miles, and then up that river 800 miles more, a total of 1,600 miles. I have been there for the last five years and have seen an enormous development of the gold fields. Last year \$4,000,000 were taken out, and I think that the output this year will be nearly double that. There are over 4,000 miners in the basin of the Yukon. It is a poor place to mine, only a small fraction of the gold-bearing district has been touched. As soon as the country is opened up fully, it will, in my opinion, go far ahead of the California boom in 1900. There is no room with us for anybody except miners, as the country is not fit for agriculture."

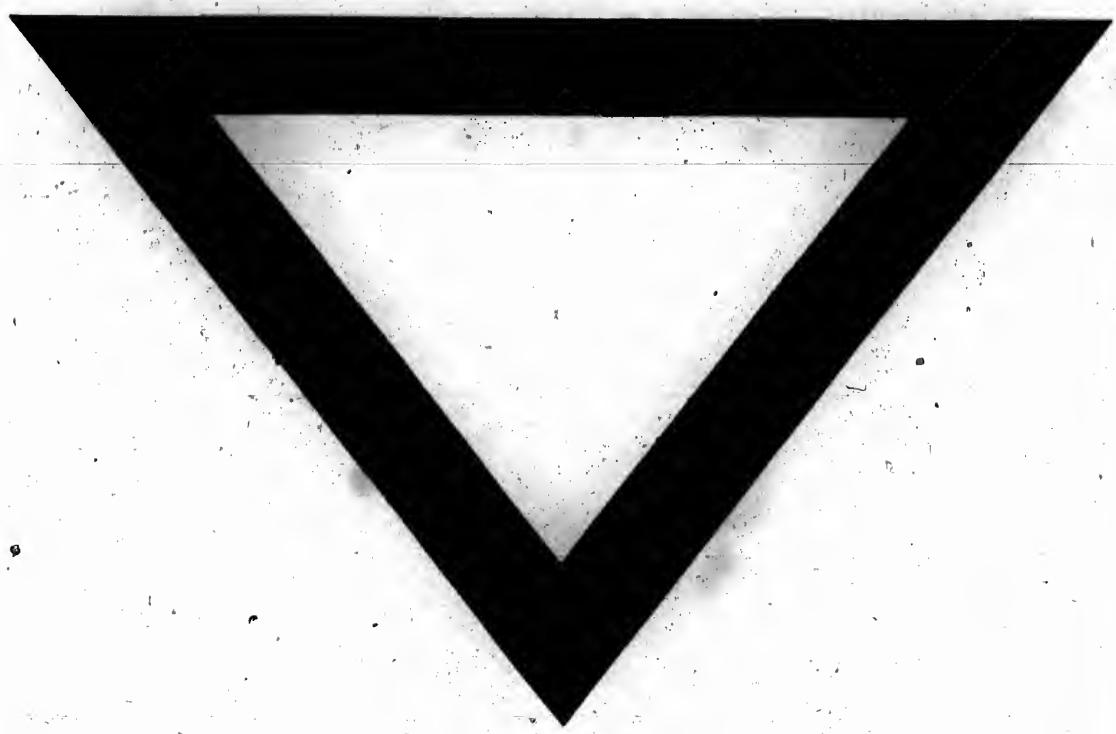
"It has only been within the last year or two that operations have been carried on during the winter months. Now the miners work every day in the year, while formerly they were employed but four months. They do this by building a succession of fires over the ground known to contain the ore. As fast as the earth is thawed by one fire it is removed, another fire is built, and so on till bedrock is reached. The dirt is piled up and lies there till ready for the sluice boxes in the spring, when it takes several weeks to wash the accumulated material.

"There are no hard times in our region, although a dollar is never seen. Everything is purchased for cash, but gold dust is the circulating medium. A man comes to our stores and buys \$10 worth of goods, handing a bag of dirt, from which we weigh out the amount due. An ounce goes for \$17, because there is no deduction of dirt and sand, which would be taken from the value of an ounce of the pure metal. The weather is quite cold for open mining, ranging from fifty to eighty degrees below zero—but we wear furs and there is little suffering. I have never seen any case of extreme privation during my five years' residence in that country. There is plenty to eat always, even if we are a trifle on luxuries. Wages are high, \$10 per day being the standard for laborers."

"Rich as are the gold fields of Alaska, I would not advise any one to strike out for that country who is not pretty robust physically, and who has not with him a reasonable amount of money to live on for a while after his arrival. It might take some weeks, even months, for a prospector to make a strike, and hence it is very unwise to go if one has barely enough money to pay the expenses of the trip. The cost of living is high, as it is in all mining camps, and with greater reason on the Yukon, since it is a costly business to transport supplies to that distant region."

"But the men of some means, grit and patience, who goes up there is pretty sure to succeed in his quest for gold. There are two big rivers and the adjacent country to the west of the gold-bearing dirt has yet to be touched. People are leaving the country, naturally realising the enormous area of the Alaskan possessions forever. The country is 1,000,000 square miles in extent, or twice as big as the State of New York. Its mineral wealth is simply incalculable."





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