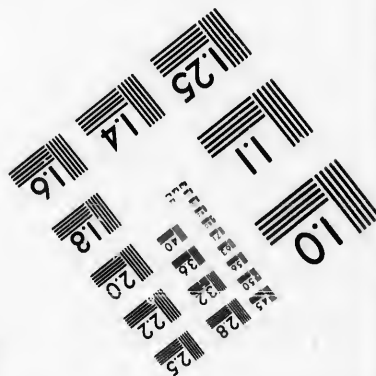
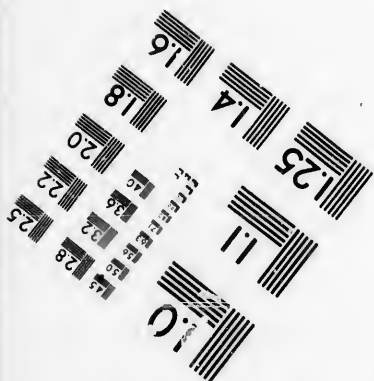
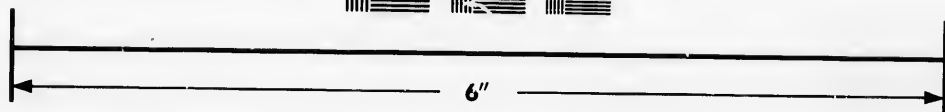
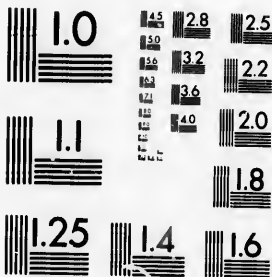


**IMAGE EVALUATION
TEST TARGET (MT-3)**



**Photographic
Sciences
Corporation**

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

14 28 25
16 32
18 22
20

**CIHM/ICMH
Microfiche
Series.**

**CIHM/ICMH
Collection de
microfiches.**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

10
14

© 1986

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure
- Blank leaves added during restoration may
appear within the text. Whenever possible, these
have been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Includes supplementary material/
Comprend du matériel supplémentaire
- Only edition available/
Seule édition disponible
- Pages wholly or partially obscured by errata
slips, tissues, etc., have been refilmed to
ensure the best possible image/
Les pages totalement ou partiellement
obscurcies par un feuillet d'errata, une pelure,
etc., ont été filmées à nouveau de façon à
obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
						/					

This copy filmed here has been reproduced thanks to the generosity of:

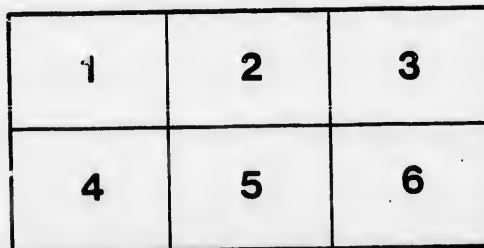
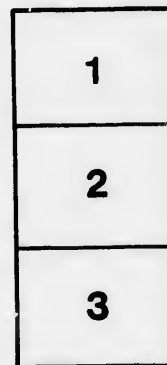
Législature du Québec
Québec

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol \rightarrow (meaning "CONTINUED"), or the symbol ∇ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

Législature du Québec
Québec

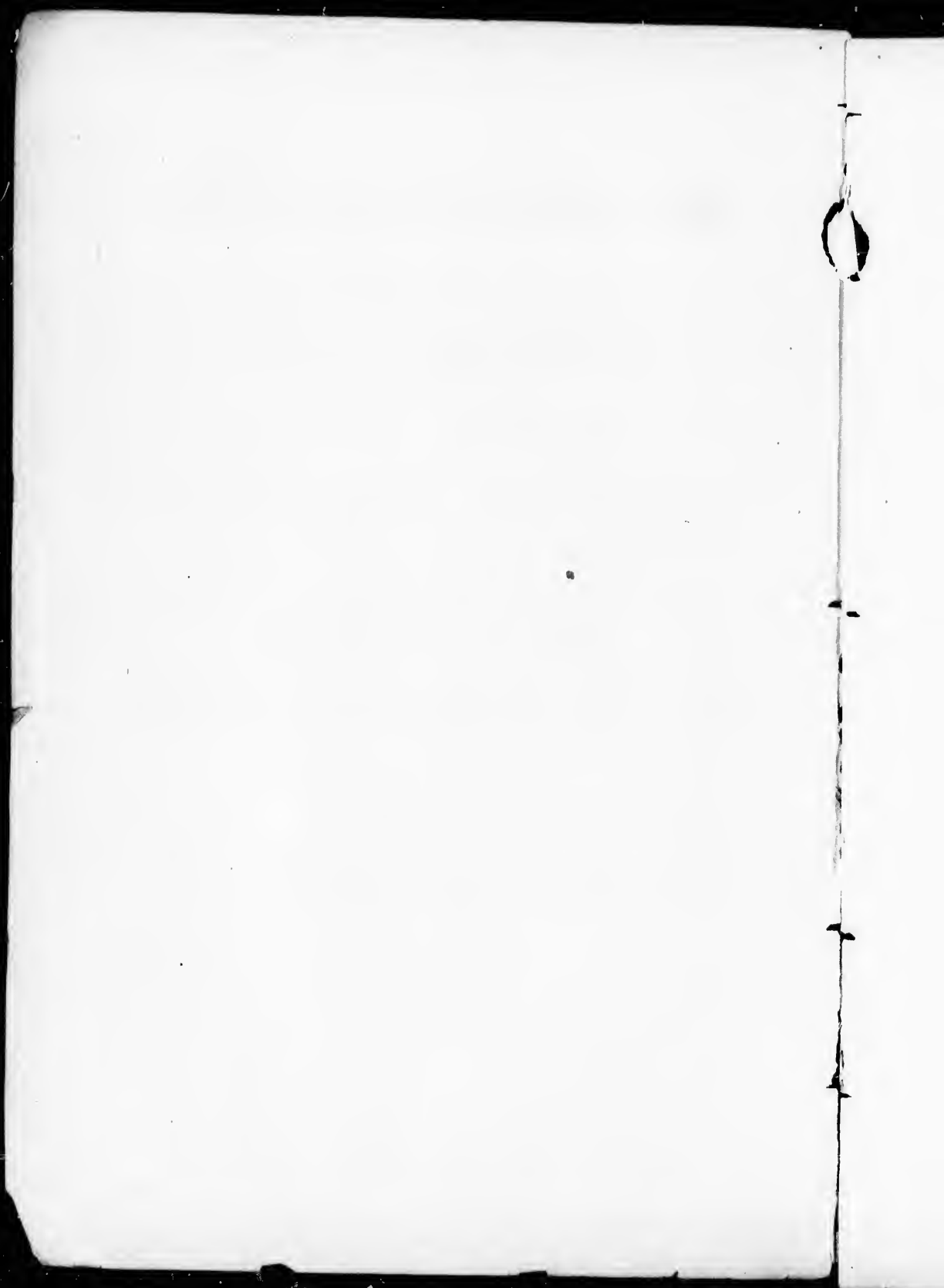
Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont le couvercle en papier est imprimé sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole \rightarrow signifie "A SUIVRE", le symbole ∇ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

REPORT
ON
EXPLORATION OF ROUTES
NORTH AND SOUTH SIDES OF OTTAWA RIVER,
FOR THE
MONTREAL
NORTHERN COLONIZATION RAILWAY
FROM
GRENVILLE TO OTTAWA CITY.
BY
CHARLES LEGGE, Esq., C.E., AND DUNCAN MACDONALD, Esq.



Montreal Northern Colonization Railway.

REPORT

OF

C. LEGGE, Esq., C. E.,

AND OF

DUNCAN MACDONALD, Esq.

The following is the report of Messrs. Legge & Macdonald, which was presented at a meeting of the members of the City Council, and a delegation from Ottawa county, held in the City Hall, on Thursday, the 2nd March, 1871:—

MONTREAL, 28th February, 1871.

SIR,—In accordance with instructions received from the Directors of the Montreal Northern Colonization Railway Company, we have visited and examined the country lying between the cities of Montreal and Ottawa, for the purpose of ascertaining, in so far as could be done by a cursory examination, the relative advantages presented for the location of the railway, on either the north or south sides of the Ottawa River. We now beg to furnish the following report, as the result of our investigations, extending from the 20th to the 28th of the present month.

In order to comply with the conditions generally admitted as necessary, that the line should be an independent one, or, in other words, proceed direct from the city of Montreal, in the direction of the Ottawa valley, and unconceded lands lying to the north of it, so fulfilling its functions as a colonization line, and unite with the Canada Central Railway, it was evident that no point of departure from the Grand Trunk line could be had, west of Montreal. The country lying between this city and Grenville, a point on the Ottawa about sixty miles from Montreal, being extremely favourable for railway location, and no great difference of opinion existing as to the route to be followed over the intervening space, our attention was more particularly directed to the country lying between Grenville and Ottawa city, and about which the utmost diversity of opinion existed in regard to its adaptability for a line of railway, particularly on the north side, both with reference to physical difficulties, as well as to the amount of traffic which would be obtained, were the line to follow that shore.

The failure of the Canada Central Company to obtain from the Province of Ontario a renewal of the Land Grant of 12,000 acres per mile, in aid of the work, if located on the south side of the river, between Ottawa City and Hawkesbury, a village opposite Gren-

ville; while at the same time the Quebec Government offered and gave a renewal of the Land Grant, to the extent of five thousand acres per mile from Montreal to Grenville, a distance of sixty miles, with an increased grant of fifteen thousand acres per mile from Grenville to Aylmer, a village on the Ottawa River about eight miles above Ottawa City, or a total distance from Grenville of sixty-eight miles; making an aggregate amount of assistance of 1,350,000 acres, coupled with the imperative condition, however, that the line should be located entirely within the Province of Quebec; it therefore became a question of great importance to the successful carrying out of the enterprise, to determine as to the possibility of complying with this condition, and so securing the grant.

On the other hand, a partial promise had been made by the Ontario Government of a money grant of from two thousand dollars to four thousand dollars per mile in aid of new railways, provided they headed in the direction of Crown lands, and opened them up; but not payable until the completion of the work. The uncertainty as to whether the line, if located on the south side of the river, between Hawkesbury and Ottawa City, could lay claim even to this moderate assistance, under the stipulations mentioned, will naturally cause the Company to view the north side with favour, providing the expense of construction be not so largely in excess of that on the south shore, as to exceed the value of the Quebec Land Grant.

Against the north shore it has been alleged that the Laurentian Mountains approach its margin, thus rendering the construction of a railway one of great cost,—that there is but little arable land, and that consequently no freight can be expected from agricultural productions; that, even in the great item of sawed lumber, the south shore

exceeds it; that the population is sparse, and from the nature of the ground, but small increase can be anticipated; while, on the other hand the country lying to the south of the Ottawa, or within the Province of Ontario, offers peculiar facilities for a line of railway, being comparatively level, with but few rivers to cross, and a fine agricultural district, well settled, and promising a considerable amount of local freight in addition to the great lumber traffic.

How far the foregoing characteristics have been realized, our investigations will presently show.

We will first give a brief description of the line and country explored along the north side, afterwards of that on the south, with comparative statement of the principal products, &c., &c.

Leaving the upper end of the Carillon and Grenville Railway, no difficulty is experienced in reaching the mouth of the River Rouge; at this point a spur of the Laurentian chain approaches within a short distance of the Ottawa River, but with a sufficient space of plateau between for several lines of rails, at an ample height above high water. From the Rouge to Papineauville, the plateau or space existing between the Ottawa and base of the Laurentides varies from one-fourth of a mile to a mile in width, with a height of from 20 to 40 feet above the river. The soil is clay, nearly all cleared and cultivated, and admirably adapted both in grades and directness of line for a first-class railway. In this distance but few gullies, and those containing only small brooks or streams, are encountered, presenting no difficulty in crossing.

From Papineauville to Buckingham the same general character of country is found, but with a considerably wider plateau, in some places possessing a width of six miles. The plateau, in fact, is divided into a series of terraces of from 20 to 30 feet in height, and each upwards of half a mile in width, running parallel to each other, and also to the Ottawa river. The line of railway could follow on either of the terraces so formed with equal facility, but as the most favourable point for reaching the Nation River exists near its mouth, it is probable that the lower terrace would be the most desirable one to adopt, affording, as it does, ample height over the flood waters of the Ottawa. We were greatly struck with the agricultural capacity of this section, much of which is under cultivation. The large and flourishing village of Buckingham, with a population of 2,000 souls, is situated several miles back from the mouth of the Riviere du Lievre, and is about 100 miles distant from Montreal. The village possesses several very extensive establishments for the manufacture of sawn lumber, with an enormous water power yet available. The lumber is carried several miles by slides from the mills to the Ottawa river, where it is either rafted or placed on barges for transportation to market. The railway line could pass through

the village, and short sidings be placed in immediate connection with the mills, or by following the lower terrace, easy access can be had to the piling grounds at the ends of the slides and points of shipment.

From Buckingham to Hull, opposite Ottawa city, a distance of nearly 20 miles, the same favourable conditions for a first-class road still continue, with a fine fertile belt of from seven to fifteen miles between the Laurentian Hills and the Ottawa River. The Gatineau, one of the most considerable streams encountered, enters the Ottawa at Hull. Its average width is upwards of 600 feet, with level banks and fine approaches for crossing.

It is navigable for several miles from its mouth by barges, &c., to the lumber piling grounds of Messrs. Gilmour & Co. The most favourable point of crossing, both with reference to grades, and access to Hull and Ottawa, will be found near the mouth of the stream; here either a high level bridge to permit barges, &c., to pass underneath to Messrs. Gilmour's depots, or one at a lower level, with a swing bridge, may be placed.

By keeping the line further north, on a higher plateau, or above the head of navigation, the river may be crossed by an ordinary fixed bridge. The line into Hull by this latter route will not, however, be so direct, or perhaps so cheap, as that by the front.

Arriving at Hull, a connection can be had with the Canada Central Railway, on the Ontario side of the Ottawa River, by a low level fixed bridge placed a short distance above the Chaudiere Falls. The total width of the river at this place is in the neighbourhood of 4,100 feet, but it is very shallow, with rock bottom, and may be crossed in the greater part of the distance by slight embankments, as the adjoining banks are low, and the main channel only about 100 feet wide. Timber and saw logs being the only things passing this point, the lower side of the bridge requires to be elevated only a small height above high water. This point of crossing the Ottawa by a railway bridge will neither interfere with buildings nor streets, and is, in our opinion, by far the cheapest and best site for the purpose between St. Auns and Ottawa city.

From Hull to Aylmer village the line will follow the margin of the river, over a direct and level route. The road, so located, will present great facilities of communication with steam sawmills to be placed on the banks of the Ottawa, and drawing their supplies of logs from the upper river.

Between Hull and Aylmer a very good agricultural country is found, and many fine farms already exist. We were informed that the next county to the west, Pontiac, was even superior and well settled, offering great inducements for carrying the railway through it, and crossing into Ontario at Portage du Fort; but as Aylmer was the western limit of our explorations, we had no opportunity of a personal examination of that county.

At Aylmer the railway would form a junction with the steamers of the "Union Forwarding Co," plying to a considerable distance on the Upper Ottawa, and we applied to the officers of this company in Ottawa for information respecting the tonnage of freight carried annually by their line, a considerable proportion of which the railway might reasonably expect to carry from Montreal to Aylmer, and thus avoid the expensive transshipment at the portage from Ottawa and Hull to Aylmer. This information we were unable to obtain, but that the amount would be considerable is evident from the fact that during the seven months of navigation ten large teams are constantly employed for freight, and eight stages, making two trips a day, for passenger traffic.

As we have to do more particularly with the County of Ottawa, on the north side of that river, and with the Counties of Prescott and Russell flanking it on the south side, as the rivals to the railway, we will confine our remarks to these localities.

From the Warden and several Mayors and leading inhabitants of Ottawa County, we learned—that the settled portion extended north from the Ottawa river to an average distance of about forty miles; and that along the lines of several of the rivers to a distance of from eighty to one hundred miles, settlers could be found—that in this northern region excellent cereals and root crops were raised; for instance, a yield of wheat had been obtained of from 13 to 17 bushels from a bushel of seed sown, the land producing, of Indian corn 25 bushels per acre, potatoes 200 bushels, coarse grains about 30 bushels, and hay two tons to an acre.

They moreover assert that, even with the Laurentian Hills occupying part of the county, fully three-fifths of the total area is fit for tillage, and that many of these hills are susceptible of cultivation to their very tops. From the table of agricultural productions, &c., of this county, which we have compiled from the census returns of 1861 (to be found further on), it will be seen that even at that period the aggregate amount of farm produce compares very favorably with the returns from the southern rival counties.

The population, as returned by that census, amounted to 27,757 souls, and is now estimated to equal 45,000. The gentlemen referred to, claim, in the event of the railway being built on the north side, that it will be perfectly feasible to construct cheap narrow-gauge roads, branching from the main line, and penetrating into the northern part of the county, and unconceded lands beyond; that, by the railway connections and facilities so obtained, vast and otherwise undeveloped mineral wealth would become productive; that, owing to expense of transport, even the rich plumbago mines of Buckingham, in which a large amount of capital has been expended, are to a large extent unproductive, or at least yield but a small percentage of profit, to that which they otherwise would; and that many

branches of industry, connected with the products of the forest and mine, would spring into existence, by the aid of a railway, giving cheap and expeditious transport.

They claim to have from five to six thousand men engaged in lumbering operations, and that the production of the forests would be much augmented by enabling the hard and non-floatable timber to be sent to market.

These gentlemen also point out the fact that the western peninsula of Ontario, or the section of that Province east of a line drawn from Prescott to Ottawa city, and lying between the St. Lawrence and Ottawa rivers, does not possess an average depth of over 40 miles. That on the south side, this narrow belt is already served by the Grand Trunk, the year round, and also in addition, during the summer season, by the navigation of the St. Lawrence, and that of the Ottawa river on the north side. That the influence of the Grand Trunk railway, for freight and passengers, is felt, and would continue to command the traffic of a belt of country at least twenty miles in depth from the St. Lawrence, and thus leave only the remaining comparatively narrow strip of twenty miles for back country to the Canada Central, or any other road, if built along the south shore of the Ottawa. That a considerable portion of this country is occupied by peat bogs, and is, therefore, unproductive in an agricultural point of view, that there is no mineral wealth and but little timber left; the supplies of saw logs, &c., now cut on the south shore, being drawn principally from the north, or Quebec side of the river. That the surplus coarse grains, grown on the south side, together with pork, butter, hay &c., now actually find their principal market on the north shore, to supply the lumbering establishments. That even were the railway placed on the south bank, it would have to be several miles back from the Ottawa, to avoid many deep gullies, and therefore be brought more immediately within the area of Grand Trunk influence. That in fact, it would have no back country at all, and but little traffic, with the exception of lumber, and even of this latter item, the principal supply would be drawn from Hawkesbury, half way between Montreal and Ottawa city, the lumber cut at Ottawa having two other lines of railway, striking the St. Lawrence at Prescott and Brockville, for its transportation, and which would be rivals to the south shore line.

On the other hand, the railway placed along the north bank, while having a back country stretching to the North Pole, could also accommodate the ordinary traffic of the south side, to the Grand Trunk dividing line before referred to. The Ottawa, being comparatively a narrow river, with long stretches of still water, freezes over during the winter season, and on the ice bridge so formed, freight and passenger traffic can be conveyed from all points on the south side of the river to the different stations of the railway on the north shore, while during the period of navi-

gation, the same duty can be performed by ferry boats, in a cheap and expeditious manner. Under all these circumstances, it is claimed that the maximum amount of utility to the city of Montreal, the agricultural, lumbering, manufacturing, and mining industries, as well as to the country at large, for colonization purposes, would be attained by the location on the north shore of the Ottawa River, of this section of what may eventually be termed the "Canada Pacific Railway."

These views appear to be founded on just and correct principles, and demand the best consideration of all parties interested in the work, even apart from any question of difference in cost of construction, by the rival routes.

Before concluding our special remarks with reference to the north shore route, some allusion will be made to the subject of the rivers and streams encountered, with the extent of bridging necessary for the same, more especially as the public have been led to believe that this work would be found to be of a formidable character.

Leaving out, (in making a comparative statement,) the two branches of the Ottawa at Isle Jesus, and the North River at St. Andrews, which will be common to either of the two routes, we find existing, between Grenville and Hull, nine rivers, three of them being brooks or small creeks, and therefore scarcely entitled to the name of river. The aggregate length of the bridging required for the nine streams will be 1650 lineal feet.

To this should be added the length of the bridge over the Ottawa River, above the Chaudière Falls, where the total water way across the main channel and bays on either shore amounts to 4,100 feet. As before stated, the water over the greater portion of this distance is extremely shallow, in fact the rocky bed of a considerable section is bare during the dry season, and, as already mentioned, may be traversed by a cheap earth embankment, reducing the bridge proper to a distance of about 1000 feet, which, added to the previous length for other rivers, will make a total of 2650 feet of bridging between Grenville and Ottawa City, or the junction with the Canada Central Railway. Navigable streams not existing, no draw-bridges are required, for as already remarked, the Gatiniau barge navigation is accommodated by keeping the bridge sufficiently high to permit vessels of that class to pass underneath.

We will now refer more particularly to the proposed route on the south side of the Ottawa, from Hawkesbury, opposite Grenville, to Ottawa city.

We find that two distinct lines have been surveyed, the first by Mr. Kingsford, C.E., about the year 1855, under instructions from the Vaudreuil and Bytown Railway Company, and the second by Mr. Starke, C.E., engineer of the Canada Central Railway Company. The first, between the city of Ottawa and Vaudreuil, formed a junction with the

Grand Trunk Railway at the latter place, keeping several miles back from the Ottawa river, in its entire distance, to avoid gullies, and therefore not striking the water at Hawkesbury. This line passes over an exceedingly favourable country for grading, and in this respect, is about equal to the North-shore route previously described. In the item of bridging, however, it is largely in excess of its northern rival, especially if crossing the river between Hawkesbury and Grenville.

On this route we find between Ottawa and Hawkesbury four rivers and canals to cross, which, with several minor streams, require an aggregate of 2,260 feet of bridging; and if to this be added the length required to span the Ottawa river and canal at Grenville (2000 feet), we have a total of 4260 lineal feet of bridging, as against 2650 feet by the North side.

Mr. Starke's survey, from Ottawa to Hawkesbury, does not extend so far inland as that of Mr. Kingsford. His line also passes over an extremely favourable country, but giving an additional amount of bridging. The estimate by this line is 3000 feet, and if to this be added, as before, the bridge to Grenville, 2000 feet, we obtain a total of 5000 lineal feet, or 2350 feet in excess of the bridging on the North shore.

It may be asked: Why cannot the river at Hawkesbury and Grenville be contracted by embankments similar to the plan proposed at Ottawa? We reply, for the following reasons:

During high water in spring, vessels descend the river and return by the Carillon and Grenville Canal; if, then, the bridge be placed on a low level, two swing bridges will have to be provided for the navigation. These two fruitful sources of danger, together with a third one over the Rideau Canal, at Ottawa, are objectionable features in the route, more especially in the event of its becoming the great through line.

When we speak of a "low level bridge" in this connection, it is but in a comparative degree, as since during the period of high water the surface of the Ottawa rises to a considerable height above the summer or low water line, the lower chords of the bridge would require to be sufficiently high above the upper level to permit rafts of timber, with cabins, etc., to pass freely through either of the spans. The rail level under these conditions would be at a considerable height above the bed of the river, and necessitate heavy embankments to carry the line on either side to the river banks, which are also of considerable height. These extensive embankments, if made, would probably cost as much per lineal foot as the bridge superstructure. On the other hand, if we eliminate the swing-bridges, and adopt a high level crossing above the navigation, similar to the Grand Trunk Railway bridge at St. Ann's, the embankments, abutments, and piers will become proportionally higher and more expensive. In view of these considerations, we can see no means of lessening

the length of this bridge from about the figures given.

Having had access to the maps and profiles of the two lines surveyed, and from these documents obtained as reliable information as if we had gone over the ground, we decided on following the travelled road from Ottawa City to Hawkesbury, as it would give us an opportunity of examining the country bordering more immediately on the river. For most of the distance, we ascertained that a fine agricultural country existed, with no special difficulties in the way of a good railway line, with the exception of the gullies before referred to, and that the line might not be quite as direct as those surveyed.

The relative distances between the two points, Ottawa City and Grenville, by either the north or south shores, may be considered equal, and the total length of line to Montreal be taken at about 120 miles. A saving in cost of construction will no doubt be obtained by the adoption of the north shore or Quebec line, owing to the extra cost of bridging *via* the south shore routes.

What the precise cost of either route will be, we cannot state, without determining the actual amount required for the bridge at Grenville. We are enabled, however, to form a pretty close approximation from estimates, actually made, of the lines on the south side, to which we have added the usual sum per mile for rolling stock, plant &c., &c.; and also a sufficient amount to cover the three large bridges required. From these data, we estimate that the railway between Montreal and Ottawa, built in a first class style, and completely equipped, will cost, by either of the lines described, about \$30,000 per mile, or a total sum of \$3,600,000.

To assist in arriving at a decision as to which of the routes should be adopted, in view of monetary considerations, the following figures are submitted:—

First—Line from Montreal to Ottawa City, *via* North Shore; distance, 120 miles:—

Total cost, as above..	\$3,600,000
To meet this expenditure the Company will have the land grant of 1,200,000 acres, worth, say, \$1 per acre.....	\$1,200,000
Montreal municipal grant.....	1,000,000
Municipal grants of intervening counties, &c.....	500,000
	<hr/>
	\$2,700,000
Leaving amount required to be raised by private subscriptions for stock, and sale of bonds.....	\$ 900,000
	<hr/>
	\$3,600,000

Second—Line from Montreal to Ottawa City, *via* South Shore; distance, 120 miles:—

Total cost as before..	\$3,600,000
To meet this expenditure the Company would have: Montreal municipal grant as before.....	\$1,000,000
Municipal grants of intervening counties as before.....	500,000
Assumed maximum aid from Ontario Government of \$4,000 per mile for 60 miles.....	240,000
	<hr/>
	\$1,740,000
Leaving amount to be raised by private subscriptions for stock, and sale of bonds.....	1,860,000
	<hr/>
	\$3,600,000

The Company will, therefore, be in the following financial position:—

North Shore Line.—Amount required to be raised from private sources.....	\$ 900,000
South Shore Line.—Amount required to be raised from private sources.....	\$1,860,000

From this comparison, it is evident that the northern rival carries off the palm in the financial interests of the company to the extent of \$900,000, an amount sufficiently great to turn the scales in its favour, even apart from other considerations, which make it still more to preponderate.

In explanation of the foregoing values given to the governmental grants of the Provinces of Ontario and Quebec, we may observe, that, in the opinion of many well informed persons, the money value we have attached to the land granted by the Province of Quebec is far within the mark. Various values have been assigned by the parties in question, varying from \$2,400,000 to \$46,000,000, basing their opinions on the valuable timber limits, mining properties, &c., covered by the land itself. We have endeavoured, in making this comparison to keep safely within reasonable limits, and think our estimate a fair one. The greater portion of the land is at present inaccessible to settlers, and must continue so for some years to come; it cannot therefore at present be sold for anything like its intrinsic value; but if the company, by municipal and private aid, can raise the greater portion of the amount required to construct the road, the land will eventually, no doubt, become of greater value, and furnish good collateral security to the municipal and private stockholders in addition to the actual railway itself, of which they will be the proprietors.

We presume the most enthusiastic friends of the scheme do not anticipate very large

direct returns on the investment, beyond working expenses, at least while the work continues in its present proportions, terminating at Ottawa or Aylmer.

A union with the Canada Central, and, by this means, an extension westward along the Ottawa valley, crossing at the Sault Ste. Marie, and forming a junction with the American Northern Pacific Road, now in course of construction, will reduce the distance of the overland railway route from Pacific to Atlantic oceans between 400 and 500 miles, over the shortest existing American line.

With this connection effected, at an early date, and it has already strongly recommended itself to the promoters of the great Pacific line, the enormous traffic east and west will flow over our link in the chain, and rich returns will follow, or the line be leased at a figure which will furnish a good percentage on first cost, the municipal and other stockholders also retaining their interest in the remaining portion of land grant, assuming that we have not estimated its value sufficiently high, and that it will not all be required to aid in the first construction of the road. It will thus be seen that apart from the immense indirect advantages and profits to be derived by the city of Montreal, and the intervening municipalities traversed by and bordering on the railway, a great direct value may attach itself to their investment before many years.

In reference to the aid supposed to be given by the Ontario government to that section of the road within the province of Ontario, we have taken the most liberal view possible in favour of the financial grant to the south shore line.

The act of the Ontario Legislature, passed last session of Parliament, authorizes the Lieutenant Governor in Council to grant aid in construction of railways to the extent of \$1,500,000.

The amount of aid so extended "is not to be less than \$2,000 nor more than \$4,000 per mile, and in favour of lines leading to, or through sections of the country remote from existing thoroughfares, or passing through thinly settled tracts, or leading to the 'Free Grant Territory,' or to the inland waters."

Whether the section of the country traversed by the proposed line in the counties of Prescott and Russell will come under the above conditions of the act is doubtful; or, if the right to the grant be decided affirmatively by the Ontario Government, whether these two old settled and comparatively wealthy counties will be entitled to more than the *minimum* amount of \$2,000 per mile is still more uncertain. We have, however, given the line in our estimate the benefit of the maximum sum of \$4,000 per mile.

We will now bring our report to a close by drawing your attention to the following table, giving the amounts of the leading products of agriculture and of the forest, &c., for the counties of Prescott and Russell, on the south side, and of the county of Ottawa on the

north bank of the river. These returns are official, being extracted from the census of 1861, and shew most conclusively that, even at that period, the county of Ottawa possessed a much more considerable amount of wealth and population than the two rival counties combined:—

Comparative table of products, &c., of Counties, North and South sides of Ottawa River.

(Extracted from statistics of Census, 1861.)

Products.	Surplus.	
	North side of Ottawa River.	South side of Ottawa River.
Cereals.....	561,917 bush.	61,225 bush.
Root crops.....	487,976 bush.	
Hay.....	48,861 tons	
Cash value of farms & farming implements	3,106,806 dollars	2,762,644 dollars
Live stock.....	39,002 head	38,888 head
Value of live stock.....	633,103 dollars	510,597 dollars
Butter.....	296,621 lbs.	417,543 lbs.
Wool.....	6,889 lbs.	38,732 lbs.
Wool in bales of 200 lbs.	1,882 bales	1,481 bales
Wool in bales of 100 lbs.	27,752 bales	26,623 bales
Population.....	120,000,000 feet	69,000,000 feet
Sawn lumber.....	200,000,000 B. M.	140,000,000 B. M.

N.B.—This last item is not derived from the same source as the preceding ones, but is founded on data obtained very recently.

The census returns for 1871 are not yet in a sufficiently forward state to enable us to ascertain the relative gain in products, but, no doubt, they have increased proportionably

with the population, the latter of which is about as follows:—

	Souls.
Population of Prescott and Russell, contains by census of 1861.....	22,323
" " " for 1871, as estimated by Mr. Hagar, M.P., for the counties	35,000

Increase of..... 12,677
or say at the rate of 57 per cent in the ten years.

	Souls.
Population of Ottawa County by census of 1861.....	27,757
" " " for 1871, as estimated by Mr. McKay, Warden of the county.....	45,000

Increase of..... 17,243
or at the rate of say 60 per cent in the same time.

As before stated, the agricultural products of the north side are principally for home consumption; large supplies are also imported from the south shore of the Ottawa for the use of the northern lumbering establishments, such as coarse grains, pork, flour, butter, &c.

The County of Pontiac, adjoining Ottawa County on the west, and which will make use of the railway from Aylmer, and no doubt soon be traversed by it, makes the following exhibit in the census of 1861:

Cereals.....	547,810 bushels
Root Crops.....	379,586 "
Hay.....	10,711 tons
Cash value of farms and implements....	\$1,263,054
Live Stock.....	25,619 head
Value of do.....	\$380,676
Butter.....	262,212 lbs
Cheese.....	4,597 "
Population.....	13,257 souls.

From all we could learn, the increase in this county has been even greater during the past ten years, than in either of the three counties before mentioned.

For some years to come, it is not probable that the city of Montreal will draw any great amount of farm produce from any, or all of these counties, but on the contrary will, by the railway, have an opportunity of furnishing to the lumbering establishments large quantities of supplies now forwarded by other cities or towns. The counties of Terrebonne, Two Mountains, and Argenteuil, traversed by the road will form the principal sources of supply for market and other produce required by the city.

A large passenger traffic may reasonably be expected, as all in and east of Montreal will take this route to the capital.

It is however in the trade in sawn lumber that the road must principally look for its traffic returns.

By the table it will be seen that the amount cut annually in the county of Ottawa is variously estimated at from 150,000,000 to 200,000,000 feet, but we will assume the lesser quantity as correct. It is further stated that only about two thirds of this quantity is moved forward by water during the season of navigation, leaving, say, 50,000,000 feet on the piling grounds: that there is a trade springing up in Canada and the United States by which some dealers supply themselves from time to time during the winter, or even during the summer, with one or more car loads of lumber as they require it, and so avoid the extra charge demanded by the large dealers at Montreal, Burlington, and Albany: that with increased railway facilities, this trade will be largely augmented: that during the summer months, the canal navigation of the Ottawa is quite unequal to the task of accommodating the greatly multiplied demands on it: that, by carrying the railway from Hull to Ottawa City, an increased annual production of 180,000,000 feet is found, at least one third part of which could be moved forward by railway, making a total for both sides of the river of 110,000,000 feet as a reservoir of freight, for the railway to draw from.

The lumber merchants of the Ottawa also assert that a large trade with South America and southern ports is coming into existence, and is destined to assume great importance; that with the railway in operation, a constant stream of sawn lumber will be poured into Montreal, meeting the shipping at Hochelaga, with suitable dock accommodation at that place; that, in fact they require all the additional outlets for this traffic, which can be furnished, either by water or by rail, to the mother city of Montreal, if possible, but failing her, in some other direction; that they, as well as the municipalities, are prepared and anxious to give all the assistance in their power, in furtherance of the work, and except a helping hand from the city.

From a careful examination of what has been advanced, either with reference to engineering features, cost, with sum of money to be raised, amount of trade to be accommodated, and colonization purposes to be effected, it is thought you will have no hesitation in arriving at the same conclusion we have, and which, it is hoped, may be unanimously endorsed and accepted by Montreal and other municipalities, that the location of the railway from this city to Ottawa should be on the north side of the river, or entirely within the Province of Quebec, and that the sum of \$1,000,000 be appropriated by Montreal, for this, to her, most important railway.

We have the honour to be, Sir,
Your obedient servants,

CHARLES LEGGE, C. E.,
DUNCAN MACDONALD.

To E. LEF. DE BELLEFEUILLE, Esq.,
Secretary Montreal Northern Colonization Railway Company, Montreal.

The following letter, addressed to Alonzo Wright, Esq., was also read:—

OTTAWA, 1st March, 1871.

Sir,—We regret that we are just now unable to comply with your request that we would accompany you to Montreal to be present at the meeting to be held in that city in advocacy of the Montreal and Northern Colonization Railway. A business experience of from twelve to fifteen years in Central Canada has fully taught us the almost imperative necessity to the North Shore of the Ottawa of the construction of the proposed road, and it would therefore afford us great pleasure to be able to advance in any degree the interests of so important a project.

In the construction of a railroad between Montreal and Ottawa, the proposed North Shore route seems to us to possess vastly superior advantages to any other. The country through which the road would pass is well adapted to agricultural purposes, and also abounds in undeveloped mineral wealth, which two facts of themselves in our view would be sufficient inducements to guarantee its construction, because giving positive promise of an immense local trade. There still remains, however, another consideration, that cannot be urged in favor of any other route than the North Shore line, but which, in the absence of any other motive, might well be deemed sufficient importance to warrant the extension of railway communication from the commercial metropolis of the Dominion through a section of country so prolific of trade as that between Montreal and Ottawa, North of the Ottawa river, will be found to become. We refer to the fact that the whole section in

question is a vast pinery made accessible by some three or four large rivers, draining in the aggregate a vast area of country, and requiring in its development an amount of supplies that alone would constitute a very large item of trade to any business centre. Nor is this timber rendered valueless through want of a market, but commands within easy distance the best lumber consuming country in North America, viz., the United States. This opening up of a winter communication; this joining of manufacturer with consumer, by a *narrow gauge*, all rail route, reliable and at all times available, is obviously of so great an importance as to require no argumentation.

Looking at the matter in a local point of view, and as affecting our own interests, we can only say that the more perfect and direct the communication between Montreal, the head of navigation on the St. Lawrence for ocean vessels, and Ottawa, and the more intimate connection between the lumber consuming cities and towns of the New England States and the manufacturing interests of our city, the better.

We regret that we cannot accompany you to assist in the furtherance of this great scheme.

We remain, dear sir,

Very truly yours,

H. F. BRONSON,
A. BALDWIN,
PERLEY & PATTEE,
J. R. BROSCH,
LEVI YOUNG.

To ALONZO WRIGHT, Esq., M.P.P.,
Hull,

ERRATA.

Page 2.— *For* "reaching" the Nation River, *read* "bridging," etc.

" 3.— *For* "Western" Peninsula of Ontario, *read* "Eastern," etc.

