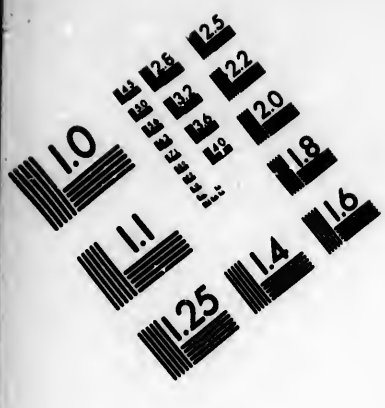

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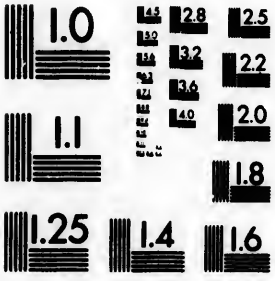

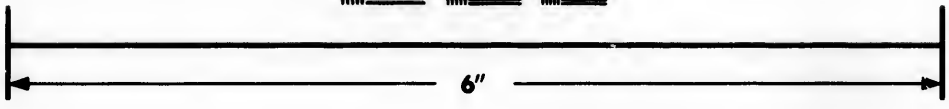

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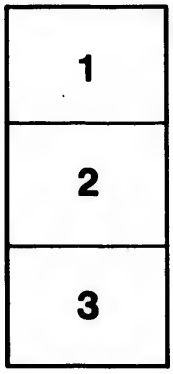

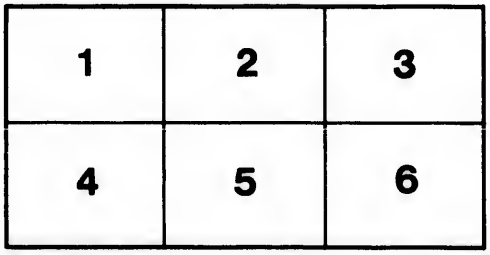

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PRELIMINARY REPORT
ON THE PROJECTED RAILWAY,
BETWEEN THE PORTS OF
HALIFAX AND QUEBEC.

MONTREAL, 13TH MAY, 1847.

SIR,

In obedience to His Excellency's command, conveyed to me by your Letter of the 21st July last, I proceeded to Halifax, and on the 3rd August following placed myself in communication with Captain Pipon of the Royal Engineers, the Officer appointed by the Imperial Government to make the Survey and Estimates for the proposed Rail-Road between Halifax and Quebec. Captain Pipon having but recently arrived could not supply me with any such designation of the probable line of Road as would enable me to commence upon that part of the duties assigned to me by the instructions which related to the statistics of the Districts through which it was to pass. It was agreed that I should join him in the neighbourhood of the Tobique, after he had made a certain portion of his exploration. I occupied myself in the mean time in acquiring a knowledge of those general details of the Provinces of Nova Scotia and New Brunswick as would serve for my Report on the natural productions of those Countries, their present industrial resources, and the probable augmentation of those under the favoring influences of a Rail-Road.

Before my departure from Halifax, His Excellency Sir JOHN HARVEY arrived from Newfoundland, to assume the Government of the Province. I had no difficulty in enlisting His Excellency's warmest efforts, in favor of a project so important to the interests of Nova Scotia and the Empire. His Excellency declared his resolution to promote by every means at his disposal, the completion of this great work, and he has since imparted his views, and earnestly pressed their adoption on the Legislature.

Among the many from whom I received assistance, most cordially rendered, while I was in Halifax, I must not omit to mention Mr. G. R. YOUNG, with whose untiring and well directed efforts, to rouse public attention, and gain supporters to the scheme of a Rail-Road between Halifax and Quebec, His Lordship the Governor General is well acquainted.

From the fullness of Mr. Young's knowledge upon a subject he has so attentively studied, I could not fail to derive the most valuable information; and I have only to add that the information obtained was most freely communicated.

At Fredericton, I was honored with several interviews with Sir WILLIAM COLEBROOKE on the subject of the Rail-Road, and I found His Excellency, equally with Sir John Harvey, disposed to second with all his efforts, a work calculated in an eminent degree to develope the resources of the Province, and powerfully aid in case of need in its Military defence. From Fredericton I proceeded on towards the mouth of the Tobique, wherefrom information I expected to find Captain Pipon, who was continuing his exploration from Fredericton to Boystown, and from thence to the Tobique, on the line to the Grand Falls on the St. John River. Captain Pipon had not emerged from the woods, when I reached the mouth of the Tobique. Upon his arrival, we at once started on the route towards the Grand Falls.

About eighteen or twenty miles above the Grand Falls, Captain Pipon diverged in quest of a better line than he had yet discovered, in order to avoid a great ascent, by a curvature and lower land, and hoped to accomplish this object before the cold weather arrived.

But, he was driven from the field, by the early setting in of the winter. It was already late in October, and Captain Pipon pronounced against the practicability of further exploration, and we separated to meet again in Montreal, from thence to proceed to the United States, for the purpose of collecting information, essential to our common object.

This meeting it was destined should not take place. When about to start for Quebec, a sudden mildness in the weather induced him to return to the head-waters of the Restigouche, and on the 28th October, returning from thence to the Grand Falls to the rendez-vous, where all parties were to unite on the termination of their labours, I lament to have to record that in this attempt, his valuable life was sacrificed. Upset in a rapid he by swimming effected his own approach to the shore, so as to secure a safe landing, but perceiving that the boy who attended him was still drifting with the Pirogue in the centre of the dangerous current, he generously turned to save him, and in the effort perished.

In his untimely end, I may be permitted to remark, the service lost a zealous and talented Officer, and society, a most amiable, and accomplished Gentleman. From my personal observation of him, I can bear testimony to the persevering energy of his character; to his high daring, which no danger could appal; to his scientific attainments; and his possession of a light, and cheerful temper, which under all discouragements, lessened the weight of difficulties.

Further proceedings under my Commission in this direction, were necessarily stayed, by the melancholy event narrated; and I employed the winter in prosecuting enquiries in the United States, into all those matters, connected with the actual working of the Rail-Roads in that Country, that could possibly have a bearing on the main question in the projected undertaking between Quebec and Halifax, the practicability of making a profitable operation of it. Until the line shall have been completely surveyed, the extent, cost of construction, and amount of Capital required ascertained, and the gradients known, it is obvious, that the materials for even commencing the calculation, will not exist.

In the mean time, whilst collecting the general statistics of all Rail-Roads, upon which authentic details were attainable, I have particularly directed my attention to the important question of the cost of motive power.

The amount of profit in a Rail-Road will be found to be a resulting sum, from the amount of capital absorbed, the degree of motive power acquired, and the extent of the traffic. Upon the motive power, and the extent of traffic, I will submit those established facts, from which alone, in the present stage of the enquiry, an approximative estimate can be formed. It is an ascertained fact, that an inclination of the Rail, rising at the rate of only 15 feet in a mile, an inclination not distinguishable from a level, without the aid of levelling instruments, would double the resistance of a Railway. An engine of 20 tons, capable of drawing a train of cars carrying 800 tons, on a level, could carry on an ascent of 15 feet in a mile, only 400 tons; and were that ascent to increase to 60 feet, only 220 tons. Mr. Joseph Pease, Chairman of the Stockton and Darlington Rail-Road in England, recently stated to a Committee of the House of Commons, upon the subject of motive power, that in the transportation of coal, on the proposed London and York Rail-Road, one farthing per ton, per mile, would be found ample to cover all transportation expenses, including 5 per cent interest on the capital employed in the moveable stock, and the proportion of the maintenance of way, belonging to this branch of the traffic. At this rate, the transportation expense of a ton of mineral ore, or 11 barrels of flour, would be 12s. 6d. Sterling, or 1s. 4½d. Currency, per barrel, between Quebec and Halifax. The lowest cost of the motive power that has come under my observation in the United States, is that on the Philadelphia and Reading Road. This road was made to contend against the Scuylkill Canal, in the conveyance of coal to Philadelphia; the design was, for a heavy tonnage, passing in one direction, and its grades are perhaps unparalleled for such a business. The road is 94 miles in length, 40 miles are level, and 37 vary from 2 to 15 feet per mile.

On this road the items of cost in detail of hauling coal for the year ended the 30th November, 1845, were, per round trip of 186 miles, from the coal region to tide water and back, with the empty cars transporting on an average a load of 295 tons of coal:

Wages of Engineer 2 days at $2 40 per day	$ 4	80
" Fireman 2 " at 1 32 "	2	64
" Conductor 2 " at 1 40 "	2	80
" Breakman 5 " at 0 97 "	4	85
Wood for fuel 12 $\frac{88}{100}$ cords $3 50 per cord	44	17
Oil for Engine and Tender 3 $\frac{6}{10}$ gallons at 90 cents per gallon.	3	24
Oil and Tallow for Cars 295 tons at 1½ ct. per ton	4	42
Repairs of Engine and Tender, 186 miles at 4 cts. $\frac{6}{10}$ per mile	9	11
" Coal Cars, 295 tons at 5 cents $\frac{6}{10}$ per ton	17	11
Renewals of Sundries, Ropes, &c. 295 tons at $\frac{6}{10}$ of a cent	1	77
Supplying Water 13 M. gallons at 8 cents per M	1	04
Use of Assistant Engine at Falls-grade 295 tons at 1 ct. & $\frac{6}{10}$ p. ton	3	25
Car-couplers, Greasers, Time Keepers, Despatchers, and Turning Crews 295 tons at $\frac{1}{10}$ of a cent per ton	2	65
Allowance for Engine laying over, Assistant Engines in Snow Storms, Broken Trips, and sundry petty expenses 295 tons at 2 cents $\frac{88}{100}$ per ton	7	61
	$109	46

equal to $\frac{369}{1000}$ or 2-5ths of a cent per ton of coal per mile. As these 2-5ths do not include the interest on the moveable stock, nor the maintenance of way, both of which are in the price stated by Mr. Pease, in order to contrast the transport expenses of the two countries, it will be necessary to add to that above of the Philadelphia and Reading Rail-Road,—

The interest on the cars and engines $\frac{75}{1000}$	75
Maintenance of way $\frac{108}{1000}$	108
Motive power per ton	399
	582

being $\frac{582}{1000}$ of a cent per ton per mile.

In this calculation, I have taken every thing against the cost of motive power; I have supposed there will be no back carriage, as on the Philadelphia and Reading Road; and the wood, one of the chief items of expense, at the high rate of 17s. 6d. Currency per cord, when it would not cost more than 3s. 6d. Currency, leaving back carriage still in doubt, and therefore counting the double distance, but taking the price of wood, at what it would be, the expense of transport would be nearly ⅓rd less.

Total cost as stated above	$109	46
Wood 12 $\frac{88}{100}$ cords at $3 50	$44 17	
" 12 $\frac{88}{100}$ " at 0 70	8 82	
	35	35
	$74	11

295 : : $74 11 = 25½ cts. per ton per 93 miles—93 : : 25$\frac{1}{10}\frac{8}{00}$ cents = $\frac{270}{1000}$ of a cent per ton per mile 270

Interest on Engines and Cars	75
Maintenance of Way	108
	453

$\frac{453}{1000}$ or 9-20ths of a cent per ton per mile.

$\frac{1353}{1000}$ x 600 miles = $2 71 per ton between Quebec and Halifax.

Under the former calculation, the wood at $3 50 cents per cord, the expense of transportation per ton between Quebec and Halifax would be 349 cents, or.....£0 17 6
The Wood at 70 cents per cord only 271..... 0 13 6¾
According to statement of Mr. Pease 12s. 6d. Sterling..... 0 15 2½

The London and York Road is not yet built, the distance 186 miles; contemplated cost £5,000,000 Sterling, £26,881 Sterling per mile.

The average cost of all the Roads in England is £27,000 Sterling.

£26,881 0 Stg. is $130,820 per mile	£32705	0	0
The Philadelphia and Reading cost $94070 per mile.	23517	0	0
with the annual saving of Interest on	£9188	0	0

per mile on the Philadelphia Road, it is difficult to account for the Estimate of Mr. Pease being less than the actual cost on that Road. It cannot consist in the difference between the Levels of the two, for on the Philadelphia, an Engine starting from the Coal Region, with her train of Cars, has no greater difficulty to contend with, than that presented by an actual level, except in a short ascent of 42 feet per mile, in one mile and four-tenths, which is overcome by the help of an Assistant Engine for eight-tenths of cent per ton per mile. At this rate of one farthing per ton, "Mr. Tucker, the intelligent and very able President of the Philadelphia and Reading Road, in the Report 10th January, 1846, observes the expense of conveying Coal from Pottsville to Richmond, would be about 47 cents per ton; or deducting interest on Engines and Cars, 40 cents, including maintenance of way, or about 30 cents for mere transportation. This is rather less than our experience hitherto; though if the Rail-Road was exclusively stocked with the large Cars and Engines, the expense would be diminished within the estimate of Mr. Pease. Some of the elements of expense may be greater, and some less than here; but if on the whole this is somewhat in favor of the English Lines, it must be observed, that our gradients are infinitely more favourable than those on the proposed London and York Road, to which his evidence refers. The great knowledge of Mr. Pease upon this subject must be regarded as the reason for this reference to his views."

In 1845, the number of Tons of Coal carried on the Philadelphia and Reading Road, was 814,279, at a cost of 37 & ⅓ cents; but for the year 1846, it is estimated on an increased tonnage of 1,250,000 at 33 cents only, which will be within 3 cents per ton for 93 miles,—scarcely a difference with that of Mr. Pease.

The fact is, however, evident, if the Motive Power cost less on the English Lines than on the Philadelphia and Reading, the actual charge for the carriage of freight on the latter must be at the lowest rate.

The elements of expense are: interest on the Capital, whether expended in the formation of the Roads, or the purchase of the Loco-motive Engines and Cars on it, the Repairs of that Road, Engines and Cars, and the expense of Motive Power.

Although the cost of the Philadelphia and Reading Road, be $68,643 more per mile than the average of 83 American Roads, it nevertheless cost within $37,230 of the average of the English Lines. This difference exists between the most expensive Road in the United States, and the average of all the Roads in England. Admitting that the Quebec and Halifax Roads may be 600 miles, and the average cost of the American Roads be, $26,427 per mile, the cost of the Quebec and Halifax Road would be 26,427 x 600 = $15,856,200 or £3,964,050 Cy., the Capital required for an English Road, the same distance would be £19,710,000 Cy.

I have cited in this instance the most expensive Road in the United States, on the one hand, where the lowest cost of Motive Power is obtained, by means of the favorable gradients, that vast outlay has procured.

The tonnage of that Road is only limited by its capacity to carry; each additional ton carried will lessen the expense of transport; particularly on the greatest element of expense, the permanent Interest on the Capital for the Road, and the moveable Stock.

On this Road the supply and the demand are alike inexhaustible; it runs parallel with the Schuylkill Canal, and conveys Coal at a lower rate than by water; in the same way that Coals are brought to London cheaper from Newcastle, by Rail, than by the Colliers sea-wise.

If the projected Rail-Road can contend with the ordinary mode of Transport between Quebec and Halifax, as Carriage by Rail does between the Coal Region and Philadelphia by Canal, and that of Newcastle and London by Sea, the question of profit, I apprehend, is placed beyond a doubt. Seaborne freight has to contend against more than the actual expense of transit; and if the cost of the two modes approach each other, the difference of Insurance and Interest, would decide in favor of the Rail Route; and in proportion as the Road may approach a level, will the guaranty of profit be found.

That I might not be deceived by the low rate of transport on the Philadelphia and Reading Road, and the lower rate resting on the authority of Mr. Pease, I took great pains to satisfy myself, that depending, as every thing connected with profit on Rail-Roads must do, as to gradients obtainable; and these being favorable, that Coals and Timber can be carried at the rate asserted by Mr. Pease, and I have the best practical authority for saying, that Loco-motive Engines, similar to those on the Baltimore and Ohio, or the Philadelphia and Reading, weighing 23 tons, with eight wheels, will draw over a well constructed Road, if level, having no curves of a less radius, than a thousand feet, a gross load of 800 tons; of which, if of Coal, the Net Load would be about 575 tons; of Lumber 550; if of Produce or Merchandize, requiring protection from the weather, 466 tons.

That the cost of transport on such a Road, inclusive of 6 per Cent. interest on the Capital invested in Machinery, wear and tear of Machinery, wages of Men, fuel, (Wood at $1, 50 per Cord, prepared for the Engines,) oil, and other contingencies, would be about ⅛ of a cent per ton, per mile, for Coal and Lumber; or ¼ of a cent. for produce or merchandize. This is on the assumption that the Coal and Lumber Cars, run in one direction without load; and that the merchandize and produce Cars are fully laden one way, but only one third loaded on the other.

"Upon the Baltimore and Ohio Road, the Cost is greater than here given, in consequence of the severity of the gradients, and curvatures of the line. I have no doubt but that in some situations in this Country (U. S.) Coal could be carried over a well constructed level and moderately curved Road for 40 cents per ton, per 100 miles, actual cost, embracing the several items mentioned by Mr. Pease."

The cost upon the Philadelphia, and Reading Road which is a Road of favorable gradients and curvatures was at the rate of about 40 cents per ton, per 100 miles, during the year 1846. The interest on the Capital of the Road, and the Machinery on it, will be a permanent charge constituting a principal item of the cost of transport. The cost of motive power can be exactly ascertained when the level is known, but the remunerating price of transport can only be calculated on the quantity of freight transmissible.

Though the quantity carried will add to the cost of maintenance of way, every ton will go in reduction of the interest on the Capital expended.

If the projected Road can contend against Freight by sea to Halifax, the gradients may possibly admit of it contending against it from there;—in that case it will have an advantage over the Philadelphia and Reading Road, which, carrying only one way, performs a distance of 186 miles to deliver Coals 93.

On this Road, then, if the gradients, are favorable, the Trains carrying the exports to Halifax might bring back Freight to Quebec, either in the imports from Great Britain, Coal from New Brunswick, or Plaster from Windsor; and although the imports from Halifax, would not be of equal tonnage, they would nevertheless bear a higher rate of transport.

It must be borne in mind, that the cost of motive Power has been on the calculation of the Philadelphia, and Reading Road, of Freight only one way. Whatever then the freight from Great Britain, Halifax, or New Brunswick, would yield, would be without expense; therefore, entire profit. The gradients may be more favorable than those on the Philadelphia Road, or they may be altogether of an impracticable nature; except at an outlay of Capital to overcome heights, by tunnelling, that no transport of produce or merchandize, can bear.

Considering the water level between the extremities, it seems natural to imagine easy gradients may be found. The survey between Quebec and St. Andrews was made in 1836, by Major Yule, an Officer of the Royal Engineers; and I have authority for saying that the line of Country was found to be highly favorable.

The St. Andrews and Quebec Rail-Road Company was incorporated in that year; but the action of the Company was stopped, by a remonstrance of the United States Government; that the Rail-Road Company was about to interfere with the disputed Territory, on the Maine Frontier. Howison, in his European Colonies, observes, " of all the physical pecularities of British America, the most remarkable is, the general levelness of its surface, for in her vast extent of Territory comprehended between the coast of Labrador, and the Rocky Mountains, there does not exist one range of hills, nor even a single peak of moderate elevation. The highest lands in that part of the globe seldom rise more than 400 feet above the level of the surrounding country, and in many places, unbroken plains are found, the same number of miles in circumference."

The gradients whether favorable or unfavorable in proportion as they diminish or increase, the power of transport, must regulate the price of that transport. If then, they should be such, that a Cargo of produce could be forwarded to Halifax by Rail, and from thence to the Ports of Great Britain, at less cost, than *directly* by *sea*, from the Port of Quebec; then the cheaper mode of conveyance being also the speedier, would be universally adopted. If on the contrary the expense should prove to be greater, *then* the Rail-Road would only be resorted to, during the *winter* months; probably, from the 1st of October to the 1st of May, when Insurance is at the highest, or the navigation closed. The following statement, by one of the most respectable houses, and of long standing in Halifax, on this subject may be relied on.

" Statement showing the comparative expense of transport of a Cargo of 4000 bls. of Flour to Liverpool from Montreal and Halifax respectively in October, and November, 1845.

From Montreal: Freight to Liverpool, 4000 barrels at 6s.						
Sterling				£1200	0	0
Insurance on cost, £4000, at 5 per cent				200	0	0
				£1400	0	0
From Halifax, Freight to Liverpool, 4000 barrels at 3s.						
Sterling	£600	0	0			
Insurance on cost £4000, at 2 per cent	80	0	0			
				680	0	0
				£720	0	0

a difference of £720 Sterling,—3s. 7d. Sterling per barrel, or 4s. 2¼d. Currency. I have no doubt if a regular business were established, it would be taken at 2s. 6d. per barrel, and the same the year round."

Supposing then, the saving of 1s. 8¼d. Currency on a barrel of flour, would draw the freight *via* Halifax, it remains to be seen how far the Interest on the Capital to be expended on the Road, being a permanent charge, may militate against it.

If, however, instead of estimating the sum to be invested in the formation of the Road by the average of the cost of all the Roads in the United States, where some of them cost

£25,000 Currency, per mile, the calculation were made on six of the least expensive Roads of that Country, viz:

On the Berkshire 21 miles	$250,000
Attica and Buffaloe, 31 miles	336,211
Buffaloe and Niagara, 22 miles	200,000
Hudson and Berkshire, 31 miles	575,613
Saratoga and Schenectady, 22 miles	303,658
Philadelphia, 30 miles	400,000
	$2,065,582

equal to $13,156 per mile. Or, relying upon our own experience and management, we adopt that of the Champlain and St. Lawrence,—15 miles, at a cost of $212,000, equal to $14,140 per mile. The Capital required then at that rate would be 14,140 x 600—$8,484,000 ..... £2,121,000 Cy.

The permanent charge or Interest would be £127,260 0 0 Currency, and calculating the expense of transport on Coal and Timber, at $\frac{1}{10}$ of a cent, and on merchandize, at $\frac{4}{10}$ it remains to be seen what prospect the Trade from Quebec affords in transmissible tonnage, at the saving of 1s. 8d. $\frac{1}{4}$ Currency, per barrel.

The Tonnage arriving in Quebec, in 1845 & 1846, was

in 1845, 1475 Vessels	559,712 tons.
in 1816, 1439 "	573,208 "
	1132,920
an average of 566,460 tons, considering the difference between Registration tonnage, and actual tonnage to be at least 50 per cent	283,230
	566,460
	849,690

Taking 1-5th part, that is to say, all the provisions being equal to 830,769 barrels and 100,000 tons of Lumber as likely to be diverted to this new Channel—the one at a loss, that is instead of going down empty, say, 100,000 Loads of Lumber.

	Dr.	Cr.
Cost of Transport on 100,000 tons of Lumber, at $\frac{4}{10}$ of a cent per ton, per mile, or 240 cents per Load	£60,000	
Freight received at Halifax for the same at 7s. 6d. per Load		37,500
100,000 tons of Coal, brought back cost 4s. per ton, at a profit of 15s. per ton		75,000
830,769 barrels of Flour, &c. at 2s. 6d		107,694
Cost of transport on the above 830,769 barrels=75,524 tons at $\frac{4}{10}$ of a cent per ton per mile, $3,60 per ton per 600 miles	67,971	
50,000 tons of Merchandize brought back from Halifax at 27s. 6d		68,750
	127,971	
		288,944
		127,971
		£160,973

I have calculated on 100,000 tons of Lumber, at 7s. 6d. per load, because the difference of freight from Halifax and Quebec, to the British Ports would leave that quantity at least, at the option of the Rail-Road; and supposing that 100,000 tons of Coal and Plaster could profitably be brought back; insuring by this means, a profit on the round trip.

I have estimated 50,000 tons as the *least* quantity likely to be obtained from the Imports from Great Britain, Halifax and the West Indies, on Merchandize, Salt, Sugar and other Colonial Produce.

I have limited the estimate to the interchange between the termini, and that interchange to the supposition, of only 100,000 loads of Lumber, and 75,524 tons of Produce of Exports, and 100,000 tons of Coal and Plaster, and 50,000 tons of Merchandize Imports from Great Britain; when in 1844, there was imported more than 22,000 tons of Salt only; and of Goods, paying an ad-valorem duty of £2,111,154, besides £50,384 free.

I have excluded from this estimate, all profits derivable from Emigrants, or Travellers from New Brunswick, and Canada, Passengers, and way trade from Settlement to Settlement, or Province to Province, Canada Produce for the supply of New Brunswick and Nova Scotia, in Flour, Pork, Beef and Grain, the quantity of Lumber brought down the River St. John, above the Falls to the Port of St. Johns, or the further quantity procurable through the Land, on the Line; or Coal to Halifax for shipment to the United States.

On the Pugwash River alone, there were, I was informed, 44 Vessels of from 300 to 500 tons loaded up to September last, almost entirely with deals, and the difficulty of getting them to the port, is such, that they could better afford to pay 1s. per ton, per mile, on the rail, to ship them to Halifax, than carry them for shipment at the port of Pugwash, added to which the port of Pugwash is closed as long by frost as the port of Quebec.

From Truro in Nova Scotia, through New Brunswick, a distance of 260 or 270 miles, is well timbered with white and red pine, an inexhaustible deal country, with hard timber. Here also abound exhaustless fields of coal, and lumber, within a profitable distance of the port of Halifax; both of which could afford to pay a remunerating rate of carriage, though the cars might return empty.

Considering the probable revenue these excluded sources are capable of yielding, and their boundless supply, the least sanguine might not unreasonably deem them, if not principal sources of profit, at least, *most powerful auxiliaries*, but as these profits will depend on the amount of capital to be expended, and the gradients procurable, it is unnecessary to offer further speculation on the subject.

That I may not mislead as to the importance of favorable gradients to the success of an enterprize demanding such an outlay, I beg to shew the items of cost of transport on other roads where the gradients are less favorable.

On the Baltimore and Ohio Rail-Road, the several items of cost in detail, per ton, per mile, for the years 1843, 1844, 1845 and 1846, were:

	1843	1844	1845	1846
Average of Motive Power	1,097	1,055	0,748	0,804
Repairs of Rail-way	828	833	574	603
" Bridges	063	063	240	183
" Depots	046	048	045	056
" Water Stations	009	006	007	011
Pumping Water	018	021	015	015
Watching Bridges	027	048	043	035
Repairs and Renewals of Cars	268	327	241	216
Transportation Department including salaries of Superintendent, Agents, and Clerks, ($8,689,75,) Conductors and Breakmen of Passenger trains ($3,577,56) Tonnage Trains ($5,534,26,) Labor at Depot ($7,299,77,) Oil for Cars ($2802,13) and Contingencies ($4,794,10)	311	307	218	199
General Expenses including Salaries of President, Secretary, and Clerks in Secretary's Office, Taxes, Insurance, &c	159	110	057	039
	$2,826	2,818	2,188	2,161

Being 2 cents 4-5ths for 1843 and 1844, 2 cents and 2-5ths for 1845 and 1846.

The average number of tons carried by each Train, was.....	22½	21 ⅘	29 ⅘	31 ⅘
The average charge for Freight per ton, per mile	3,962	4,097	3,106	3,021

Contrasting with the statement of Mr. Pease, the Baltimore and Ohio and the Philadelphia Roads, it will be seen that from the difference of level the one carried on an average during the year 1845, 295 tons, whilst the other attained only 31½ tons.

The cost of a Train of Cars on the Philadelphia and Reading Road was $109,46 for 93 miles, carrying 295 tons; that on the Baltimore and Ohio, $56, or, returning with empty cars, $112 carrying only 31½ tons. The actual cost of transport, being 21 ⅘ cents per ton, per mile, or for the 93 miles, to equal that on the Philadelphia and Reading $201 or 10s. Currency.

By the Philadelphia and Reading.....	2s. 9d.
London and York.....	2 4½

Borne in mind, as it should be, that neither of these costs of transport affords any interest on the capital invested in their several roads, they establish no ground for the abandonment of the enterprise. The water levels at the ports of Quebec and Halifax must be nearly the same; and it is yet to be ascertained whether the levels by land differ materially from it.

On the Boston and Providence, the New Jersey or the Washington branch, for a tonnage train of 12 double cars loaded with 48 tons of freight, a distance of 80 miles at a speed of 8 miles an hour, would be $44,35, being at the rate of 1 cent ⅘⅘⅘⅘ per ton, per mile.

The Locomotive expenses, were.....	0,6727
Car.....	0,3136
General.....	0,1687
	1,1550

A Passenger Train same distance, 2 cars containing 60 passengers each and 1 containing 15, with baggage, $35,78.

Locomotive Expenses.....	0,2354
Car.....	0,0935
General.....	0,0600
	0,3889

⅘⅘⅘⅘ 4-10ths of a cent per passenger per mile.

On the Baltimore and Ohio Road, Main Stem, for the year ending 30th Sept. 1846.

Motive Power.....	0,352
Repairs of Railway.....	0,248
Do and Renewals of Bridges.....	0,075
Do Depots.....	0,023
Do Water Stations.....	0,005
Do Pumping Water.....	0,006
Do Watching Bridges.....	0,015
Do and Renewals of Cars.....	0,178
Sundries.....	0,126
	1,028 cents

1 cent ⅗⅗ per Passenger per mile; the passage 3 cents ⅘⅘⅘ per mile.

	In the years 1844	and 1845.
Motive Power—Passengers per mile.....	1,054	1,041
Charge for Passengers, per mile.....	3,141	3,151
Motive Power—Tonnage per mile.....	2,818	2,188
Charge per ton per mile.....	4,097	3,106

According to the revised Estimate, the Cost of transporting Coal from the Mines to Baltimore with the Coal Car, as recently improved, the Locomotive Engines 20 tons weight, the Cars 2½ tons, with capacity to carry 7 tons of Coal, each Engine will haul 182 tons, the Cars are returned empty; that equal to four days are required to make the round trip; that Six Locomotives are required to keep four in constant service.

Trip round	$212 74
Cost of Motive Power per ton, per mile	0,622
Wear and Tear of Road	0,324
Contingencies	0,100
	1,046

1 1046/1000 cent per ton, per mile.

Cost of transporting Coal from Cumberland to Dam No. 6, on the Chesapeake and Ohio Canal, with the Coal Cars as recently improved—distance 45 miles.

Locomotive Engines 20 Tons weight, Cars 2½ carrying 7 Tons each, each Engine to haul 217 Tons of Coal, Cars returned empty, that one round trip, 90 miles is made per day by each Engine, 3 Locomotives are required to keep 2 in constant service.

Cost of One Train per day	$51 19
Cost of Motive Power	0,524
Wear and Tear of Road	0,237
Contingencies	0,100
	0,861

861/1000 of a cent per ton per mile.

Cost of transporting Coals from the Mines in the vicinity of Frostburgh to Baltimore, distance 188 miles, Locomotive Engines 20 tons weight, to haul 25 Cars carrying 7 Tons, each, or 175 Tons.

Round Trip	$220 29
Cost of Motive Power	0,670
Wear and Tear of Road, Ferry, &c	0,337
Contingencies	0,100
	1,107

1 cent 107/1000 per ton, per mile.

On the sixteen of the following principal Rail-Roads, viz: The Mohawk and Hudson, Troy and Schenectady, Utica and Schenectady, Utica and Syracuse, Auburn and Rochester, Auburn and Syracuse, Tonawanda, Attica and Buffalo, Boston and Lowell, Boston and Maine, Boston and Providence, Boston and Worcester, Boston and Portsmouth, Boston and Fitchburgh, Norwich and Worcester, Western, or Albany and Worcester, the average cost of running a Train of Cars in the year 1845, was 70⅜ cents per mile, excluding the Trains run for repairing the Road. This charges on the Freight and Passenger Trains, the total Cost of repairing Roads, Engines, Cars and Stations, and all other expenses general and special required to conduct the business of a company for the year. The average length of the above Roads, was 54 miles. Supposing the Road from Quebec to Halifax to be 600 miles x 70⅜=$422 25 £105 11s. 3d. Cy., would be the cost of a Train, with a 15 Ton Engine. A 15 Ton Engine could transport 300 Passengers through in 20 hours. According to the estimate made for the Hudson River Rail-Road, in June last, at 85 cents per mile, £127 10s. Cy. per trip, about 9s. Cy. per passenger, between Quebec and Halifax. An Engine of 18 Tons could transport 500 Passengers, through in 24 hours, at an additional expense of £25, being 6s. per Passenger.

I cannot terminate my references to the Statistics of the United States Rail-Roads without acknowledging the ready assistance I received from the American Citizens during the period of my researches.

This acknowledgment is an obligation I owe to truth; and it is with sincere pleasure I declare, that notwithstanding the feelings of rivalry, that might be supposed naturally to arise in that land, at the project of a Rail-Road that was especially designed as a military defence, and to obviate the necessity of resorting to the American soil for any transatlantic advantage; a better, a nobler feeling inspired all classes, from the President downwards, with the desire to give every practical facility, to shew every possible courtesy to the Commissioner of the Canadian Government.

In the present stage of the enquiry, it is difficult to pronounce on the indirect profits likely to accrue from the Investment required for this vast and comprehensive project, as it is, on other advantages derivable from it, without a knowledge of the price at which those results may be purchased. The advantages are Political, Commercial, and Agricultural, alike important to Great Britain, and her North American Provinces; and it would be delusive to imagine that Great Britain will, or that the Provinces can, unassisted, undertake such a work.

If it be the interest of the Metropolitan and Provincial Governments, that such a line of communication should exist, although the one may be unable, and the other unwilling to accomplish it—it is not difficult to fore-see that the joint object of the two, may draw a third party—the Capitalists of England to their aid; and although the interests of neither may be paramount so as to induce the attempt, self sustained, yet, each having separate and important objects to gain, may by combination, deem it prudent to secure those objects, even at some sacrifice.

To effect this co-operation for a common object, it may not be unnecessary to enquire, What the Provinces may be able to do—What the Imperial Government may be willing to do—and what will induce the Capitalists to become actively interested in the Road.

All, who are in any way connected with the Trade and Commerce, between the Mother Country, and her North American Provinces, or in the intercourse, social, or political, must view the project with unabating interest.

Vast as the project may appear of connecting Quebec and Halifax by a Rail-Road, 600 miles in length, the Rail is a universally demonstrated improvement, so much so, indeed, as to have become a modern exigency—more caculated to excite increasing exertions, to accomplish it, than to lessen them, by a doubt of its practicability.

Without extending the sphere of our vision to the Asiatic portion of the British Empire, attainable by this Western Route, contribute how it may hereafter to that magnificent end—this first link in the great chain of communication, is, at least, within our reach, and may be encompassed without endangering the Capital that may administer to it.

It seems desirable, that however impossible it may be in the present stage of the enquiry to prove the remunerative result, yet the inevitable consequences that may ensue from its abandonment, it may be prudent, by almost any effort, to avert.

As it presents itself, though the speculation, as a mere money investment, afforded no prospect of adequate advantage,—it may draw with it, ulterior benefits, which now but faintly show themselves, and to which an expenditure, great as it may be, would not be unprofitably applied to secure. Amongst the most obvious consequences would be a dearer Military Defence,—the loss of an opportunity of strengthening that defence by the settlement of the Country, by the infusion of an industrious population, by the proper and only use, to which the Waste Lands in a New Country should be applied, viz: to the relief of the surplus population of the Mother Country.

Fore-most among the manifold advantages, would be the rapid communication with Great Britain—Her Northern Provinces would then be as near to her as Edinburgh and York were, forty years since—they would become, what they ought to be—integral parts of her Great Empire.

The moral influence and growth of public opinion, thus brought immediately to bear, would open a large field of improvement, and otherwise advance the destinies of these Provinces, more, in twenty years, than their unaided progress could, achieve in two hundred.

Within ten or twelve days distance from the Parent Shores, these Colonies could be more easily defended, than Edinburgh or York could have been.

It would bind her Colonies together, and to her in the closest ties of Commercial interests, and friendly intercourse, quickly, and easily reciprocated.

If Great Britain desire to continue the possession of these Colonies, nothing could more strengthen her relations with them, or her means of defeuding them, as well by her own power, as by enabling the Provinces individually, by this speedy intercourse to unite their own numbers in their own defence.

The thousands of Nova Scotia, New Brunswick, and Canada, could unite then, on any given point of either Province in fewer hours, and with less fatigue, than the hundreds of any County, in either without this aid could connect themselves on any given point in that County. In Military language, the whole population of the Country could, as it were, form square, against a sudden enemy, and with facility, and celerity disperse upon the disappearance of the danger.

The Military Stores and Munitions would be with facility transported, at seasons, when without it, it would be impossible, were the wealth of Great Britain applied to it; and at less cost, than the transport of a Company now.

In the prosecution of a defensive War for the protection of these colonies, Great Britain, will depend much on her Steam Navy, whose element of Strength, is speed.

A means whereby the Fortress of Quebec, inaccessible for five months in the year, would be brought to within thirty hours travelling distance of all seasons, of the great Naval Station and Depot of the Military strength of Great Britain on this continent; Halifax, would be only another but a mighty step in the policy that appreciates all the advantages of a Steam Navy.

The value of such a communication need not be insisted upon. It must be clear to every vision.

Looking at the progress of causes, and at all the circumstances that naturally present themselves, in fore-shadowing the future of this Continent, to a reflecting mind it will appear by no means chimerical to suppose that the Military safety of these distant possessions of the British Crown, may hereafter depend wholly upon the question of time, that is to say upon the promptitude with which succour can be transported to certain parts of the Territory.

In bettering the condition of the labouring classes, it is unnecessary to dwell upon the important agency of a Rail-Road. Labour is the poor man's only property; but of how little comparative value, without quick and cheap means of transporting the Fruits. Apart from association with his kind, the human being, isolated in the wilderness is in a position to develope only a fraction of his faculties. Ceasing to know, he ceases to care for the business of the great world beyond his view; and all feeling for the interests of his neighbours or species gradually sinks, until it becomes almost dead within him. On the other hand, intercommunication, through locomotive facilities, aiding the barter of produce, leading to the interchange of thought, exciting emulation, and multiplying dealings between man and man, under such auspices, the vital principle of communities quickens, and civilization advances at its most rapid pace. It would seem, indeed, to be a principle of modern discovery, that the developement of mind increases in the ratio of numbers, and facility of intercourse. This moral impetus, these Provinces require. It is the great desideratum of their condition; and it would be almost impossible to overrate, the vast, and beneficent results, the national wealth and power, that would be seen to spring with rapid growth from the now inert masses, and slumbering human energies, scattered over the regions of British territory in this hemesphere, were the means taken for knitting them together, by the capacity of easy transition from place to place.

The early periods in the settlement of un-reclaimed lands, exhibit only a scattered population, each individual depending upon what he can raise for his own consumption, of little use to his neighbour, and of none to the commonwealth. The early settlers tax the soil for enough only to supply their own wants. If they raised a surplus, it would be labor wasted; for it would have no exchangeable value but at a distance unattainable by the grower or his purchase. Such populations contribute nothing to the State, by the consumption of dutiable articles, because these also are at a distance, and out of reach. Beyond the pale of Citizenship, they perform none of its duties, and for all the benefit they confer on the land of their birth or adoption, they might as well be the subjects of another. Unregulated settlement originates in a band of squatters, who begin by clearing no more land than may promise a bare supply for their own wants. They remain uncivilized, because isolated from the rest of mankind, with few wants, and fewer enjoyments; content with the lowest line of labor, for the lowest line of subsistence.

Capital cannot be expected to follow and seek out labour in the Wilds of the Forest, and labour, remote and sequestered, and sunk in apathy, will not emerge from its slothful seclusion, to go in search of Capital, and the elements of national wealth must remain inoperative, until the slow progress of time, or the vivifying principles of locomotion bring them into contact. Then, exchanges commence, and the thousand employments, sympathies, and interchanges belonging to freedom of intercourse, spring into existence; labour is encouraged, and capital rewarded, and thus a union of purpose, sentiment, and feeling infusing itself, gives a social turn to the once inert, and disjointed mass.

One of the most important consequences of the change thus wrought, is its tendency to elevate the lower classes in dress, manners, and acquirements. The improved manufactures of Great Britain, are brought within the reach of the settler, at one tenth part of the labor necessary for the rude substitute of his own loom; and thereby so much labour is released for the common objects of national wealth. Labour becomes no longer valueless or the field of production to the mere line of subsistence. In 1750, before Arkwright's, invention, the whole amount of the Cotton Manufactures of England did not exceed the value of £200,000 at that time, the quantity manufactured could not have been equal to one 500th part of that now manufactured for home consumption only. What has locomotion done for the manufacturing interest there. It has given to Manchester an inland manufacturing Town, a Sea Port at Liverpool. Within an hour after the arrival of the Cotton from India, or America, at Liverpool, it may be undergoing a process of manufacture at Manchester, and in another hour, returning to Liverpool, on its passage to other climes, in payment of the Cotton, or the silk, the material of its manufacture.

There was a communication by water between Liverpool and Manchester, as there is between Quebec and Halifax, yet time was the great object sought, and to gain this, an expense of £1,774,000 was incurred to overcome a distance of Thirty miles. Twenty years since, Cotton crossed the Atlantic to Liverpool, for less money, and in less time, than between Liverpool and Manchester.

Here the advanturous spirit of trade made the first grand and successful experiment, nor has it slumbered since in America, or in any of the Great European States, Germany, France, Russia. From Boston it has extended an unbroken line to the Great Northern Lakes. From New York southward, another traversing the States of New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North and South Carolina, Georgia, terminating near the Bank of the Alabama River, drawing the products of the distant interior to the Atlantic Cities.

England is intersected by her 2000 miles in every direction of the compass, on which thirty-four millions annually travel—the German States their 3500 miles communicating with each other—France, her 537 miles open to commerce, and her 1800 in progress of construction—joining the Mediterranean with the Adriatic and the Atlantic—Paris, with Lyons 357 miles—and from Marseilles to the East the means of internal transport for the commerce of the Levant. Belgium has her 400 miles, reaching the French and Prussian Frontiers—

Russia has her thousands in progress and contemplation. India is awake to the necessity of its introduction there—three quarters of the world imbued with the same irrepressible spirit of enterprise.

Had the genius of Arkwright been doomed to contend against inaccessible Alps, or endless forests, he might have rivalled the world in the articles of Lace, or manufactures transportable by human labour,—but he never could have extended the empire of our Commerce to every habitable latitude of the Earth's surface. Had the Collieries of New Castle been as unapproachable as the Millions of feet of Timber through which this Rail-Road will pass and give value to, two millions of People could not have formed a City on the Banks of the Thames. London might have been in the Palatinate of Durham, and Middlesex a Pastoral County, to supply it with food. A Watch-maker, might establish himself on the Northern Confines of Lake Superior, and compete with his rivals in London or Paris,—the transport of a chronometer could not cost 6d. to Paris or London, but the exportable Products of the Provinces, are of great weight, but little value where they abound, owing nearly all their value to the expense of transportation to the place of shipment. There are millions of acres fit for settlement—millions of tons of Timber fit for commerce—and inexhaustible fields of Coal in the uninhabited wilds of New Brunswick alone, but inaccessible—yet all this wealth is pent up where it grows—requiring only the possibility of outlet to give value to them all, employment to labour, and food to man.

If the power of Locomotion has such an important influence on mind and matter, what efforts can the Provinces make to secure the application, of it, as the great permanent and a speedy High-way between them.

They can each pass an Act, empowering the Commissioners or Company of the Rail-Road, to appropriate to its use 100 feet, on the Line of Road free of cost on all the ungranted Lands through which it may pass—and the right of purchasing that quantity at the price purchased by the owner, with liberty to take all the necessary materials of construction free of cost.

They might by a guaranty sufficient induce the Capitalists of England to supply the Funds for the construction of the Road. This they might do, by embarking in some of the risk, and thus give confidence, or, on the other hand by insuring, those who would embark in it an interest in the Capital for any given or satisfactory period, equal to what that Capital would receive if invested in the funded debt of Great Britain.

Supposing the Capital required to be, £4,000,000, and the Provinces should guaranty 3 per cent, per annum for 10 years, on £3,000,000, in addition to any Dividend under 3 per cent. the Rail-Road might pay.

Under this contingency, the Capitalists might require some assurance beyond the period of ten years against the total loss, should the project prove unproductive.

The guaranty might be any given quantity of Land, on the Line of Road wherever grantable—or by a mortgage of all the Lands of the Provinces, between Quebec and Halifax, on the condition of settlement. Canada, has 6,242,000 acres, (besides 1,000,000 disputed by New Brunswick,) between Quebec and New Brunswick on the south side of the St. Lawrence alone.

To the Capitalist the advantages are of an extraordinary nature; whatever profit the Road may yield, that profit will belong to him.

During the progress of the work, when on other works, the Capital expending is unproductive, he will receive 3 per cent. as much as if the money were still in the Funds—He will have the Rail-Road itself in security—Perhaps, 8, or 10,000,000 acres of Land, as collateral. He is guaranteed the interest for ten years and the principal afterwards. He may double his Capital, if the enterprize be profitable. And he is indemnified against loss if it fail; during the ten years he will have learned the result of the investment whether it will maintain itself or not, should it prove only 1, 2 or 3 per cent, his Dividend will be 4, 5 or 6 per cent. If at the end of ten years it will not pay an equivalent for the Capital, the

Road may be sold, and the deficiency made up, out of the collateral Fund established by the 8 or 10,000,000 of acres, the money received for the sale of land, during the period accumulating, to be set apart, for that purpose.

The inducements to the Capitalists to embark in the enterprise are plain, protected as they are against every contingency, of Principal or Interest.

Whether Great Britain can promise to herself advantages sufficient to counterbalance the sum of assistance required by the Provinces, may depend on events. But Canada has a claim on her justice. The change of her commercial policy compels her to continue the chain of internal communications which her former protection induced her to commence.

Large amounts of money are now in progress of expenditure in Canada and Halifax in Fortifications. Unassailable as each is by sea, each is alike approachable and weak by land,—at present incapable of speedy combination of force—to strengthen or support each other. A Military Road, at whatever expense it could be made, or afterwards maintained, could seldom if ever afford a passage to Troops in less than thirty days, whilst on the Rail-Road it could be effected in as many hours. The defence of a Country which is the first obligation of a citizen, is also the paramount duty of a Government. Perhaps then the speedy, easy and constant communication,—the free passage of Troops and munitions of war, so necessary to defence, may offer an equivalent for the difference between the cost of a Military Road, which must be made, (and which can only be maintained at great annual expense) and the sum of assistance, beyond the power of the Provinces to contribute to the construction of a permanent, and when once constructed, but little costly Rail-Road. Keeping in view, the expense of moving the Troops, in the one case,—with the free transport and expedition in the other—the military combinations it would admit, and the readiness for action on their arrival—the strength of defence this ready and common line of communication would afford to the native force of the Provinces,—in their mutual assistance—the commercial facilities of an uninterrupted interchange of the Imports and Exports of the Parent State and her Colonies—the transmission of her Mail quicker through her own territory—the settlement of the country through which the Road will pass, and the consequent increase of the strength and wealth of the Provinces—the means of permanent relief to the over-populated districts of the Mother Country, to the under-populated lands of this—giving value to labour,—and value to land,—each valueless apart—making unproductive land increase the means of human support, and building up a vast population for the consumption of her manufactures,—in exchange for food. These prospects may, if they appear worthy of consideration, induce the Home Government to co-operate with the Provinces in an enterprise of common benefit. The natural desire to advance interests so long fostered may incline them to embark with the Provinces in this enterprize, at once national and colonial; and we cannot assign to her justice,—her generosity—or her munificence,—a less portion than one quarter of the liability. If, therefore, the Mother Country will advance One Million without interest for ten years, the achievement of the proposed Rail-Road may be found to be within the compass of Provincial resources.

This great work, whilst it would cause a stream of wealth to flow to the Parent State, would become, by increasing its power to defend, the fountain source of Colonial safety. It may be objected, that a State should become a money lender, in competition with private interests, and that the securities a Rail-Road afford, are inadequate; and, it may further be questioned, whether the Provinces should be burthened with a large debt to construct it. But the assistance invoked, is in aid of private advantage, and to invite it; there are other securities besides the Rail-Road, and the Provinces will have ample remuneration for a debt not forced on them, but willingly incurred to bring into culture and habitation improvable wilds; and out of the recesses of these wilds, find power not only to redeem those burthens, but to better the condition of every Colonist, and render easier of attainment all those things for which men plough, build, or sail. However carefully Her Majesty's Government has avoided any Proprietary interest, or interference with other undertakings of a magnitude

sufficient to excite suspicion,—or entitle them to favor, it seems extraordinary that a most important innovation,—the adaptation of Steam to land carriage, has eluded all cautionary measures, and effected a revolution in travel and transit, *taking the thoroughfares and highways of the Kingdom out of the custody and control of the Crown.*

Other Governments have been more vigilant or more apprehensive, and by extending assistance *they have secured the power of control.*

Out of the 3,565 miles of German Rail-Roads, 1,214 have been constructed by the Government, 190 miles guaranteed an interest of 3½ per cent. and 65 an interest of 4 per cent.

The Government of France guaranteed 4 per cent. on the Capital of the Paris and Orleans Rail-Road during its construction, and 3 per cent. after its completion for 46 years, and one per cent. for the re-imbursement of the Capital.

Of the 386 miles of the Belgian Rail-Roads, 326 were built entirely by the Government, and 4 per cent. interest on the remaining 60 miles was guaranteed by the Belgic Government for 46 years.

In the United States, 212 miles in Pennsylvania, and 178 in Michigan have been built by the United States Government; and with the exception of the Erie Canal, the only State projects, that have yielded any return for the outlay. On this subject, the joint Committee of the Senate and House of Representatives of the Common Wealth of Massachusetts, in their Report of the 17th March, 1845, observe "while millions have been expended for the portions of the State and Country, which are interested in commerce and the Fisheries, by the improvement of Harbours and navigable Rivers, by the erection and support of Light-houses and other Safeguards, by fortifications, and Ships of War, and by unnumbered other provisions for the accommodation, and protection of those interests, surely no complaint will be heard from any part of the Sea Board, that the distant interior for once derived some direct aid from the expenditure of public money. It would be gratifying if the system of internal improvement, of which the Western Rail-Road, in part had been the result of national expenditure. But the policy of the General Government leaves the interior to the sole care of the States, and improvements there, must be effected, if at all, by the States separately. It stands on the footing of a great public enterprize, too vast for individuals, or private Corporations to accomplish, and requiring the resources of the State to carry it forward to its consummation. It has been deemed worthy of the State, and one to which its energies might well be directed. As a means of developing the resources of the western part of our State, and bringing into closer connexion with the rest of the Common Wealth, it has been regarded with great interest for many years by the Legislature and the People."

The three Provinces unite in their ardent desire to procure this great channel of communication,—whether it may be prudent in the absence of further information to pledge the future resources of their revenue to accomplish this desirable end,—may be a subject for their calm deliberation.

In the mean time, it may be relevant to the subject, to enquire, whether nothing can be done, advantageous in itself,—yet auxiliary to the great, and primary object,—whether that object would not be promoted as well as assured, by making the settlement of the land through which the Rail-Road will eventually pass, *antecedent*,—rather than *consequent*, upon its construction.

With this view, to facilitate, as well as hasten it, I take the liberty to suggest that the Provinces invite Emigration, not that indiscriminate emigration, which would overwhelm the Provinces, without relief to the unhappy subjects of it, but in such numbers only, as would admit of settlement; and of that class only, which would secure it. "We are not friendly," said an enlightened leading journal of the Mother Country a short time since "to those wholesale schemes of deportation which at different times have been dignified by the title of emigration. We have no feeling but that of extreme aversion for the plans which are perpetually promulgated under specious pretexts of shipping off helpless poverty, and starving weakness, to the sands of Australia, or the Forests of North America. If there is

to be any emigration at all, let it be of every sort and class. Let the high born emigrate, as well as the low born. Let colonization be, what it pretends to be, let it be what it was, when the Spaniards colonized Mexico and Cuba, and the French, Canada. The establishment of a nucleus, round which, a body politic may hereafter develope itself. Do not turn the ignorant, the vicious, the helpless adrift to found States and direct Legislatures. Do not intrust the infancy of a Country destined perhaps to become independent and wealthy to the caprices of the unlearned, and the audacity of the unprincipled. See that the foundations of your remotest settlements be laid in the humanities of learning, integrity, and wisdom, and that this may be brought about, a consummation devoutly to be desired by the present age, and essential to the happiness of future ages; see that the constitution of the Colonies be formed, so as to encourage the patriotism, stimulate the energies, and reward the attainments of those who devote their lives to them."

Every effort has been made by the Metropolitan and Provincial Governments, to encourage *Emigration*,—but, with the exception of Perth in 1815, and Peterborough of a later date, little or nothing has been done to promote *Settlement*.

It is in the power of the Legislatures to connect them inseparably, by a judicious encouragement of Emigration only, as the basis of settlement. The simplest, and most expeditious mode of doing this, is not by crowding together multitudes of men on board of Ships, but by removing the obstacles to settlement, not by the aggregation of masses of human wretchedness, on our shores, but by preparing before-hand the means of settlement for such as may bring with them moderate means to establish themselves. The only way to make settlement certain and prosperous, is to conduct it, through its first difficulties; and there is no reason to be assigned why these difficulties may not be removed, before the arrival of the Immigrant, rather than after, by the substitution of labour purchased before-hand for him, rather than by labor to be performed or purchased afterwards by him. Securing for him and his family *on his arrival* by the expenditure of a few pounds, a hearth and a home; placing him more than twelve months in advance, at a less cost than his own labour, or labour hired by him, could place him.

He has then lost no time at public offices, none, in the search after land, as well as avoided the expenses of Cities; he places his family at once in the house already built for him, takes the hoe, the rake, or the harrow, to the four acres already cleared for him. and thus makes the first year's labor produce the means of subsistence for the next year's labour. What has he not surmounted!!

The Earl of Selkirk, in 1803, accompanied 800 Highlanders from Scotland to Prince Edward's Island. They reached it in August, before the middle of September they were all dispersed on their separate lots, and began clearing their land. In September following, His Lordship, returned to the Island, and found them gathering their harvests. The potatoes alone he said, would have been sufficient for their entire support. The extent of land in cultivation, was at an average of two acres, to each able bodied working man. It took then, an able bodied Immigrant a year, to clear and crop two acres of land—at the present rate, at which land could be cleared, the food and labour of an able bodied British Immigrant for the first year, applied to land, is not worth more than four pounds sterling, for two acres of land could be cleared for him at that price, a sum, inadequate to sustain existence during the period. Forty days' labor, therefore, on the public road,—would purchase an equivalent for the food and labour of a British Immigrant during the first year.

Is it not evident then that labor so employed, is misemployed. That by the substitution of the labour of another accustomed to clearing land, and the proper direction of his own that the British Immigrant can clear his land. That by a proper system adapted to his capacity and habits, he may become at once a settler, when the commencement of the Rail-Road shall create a demand for his labour.

The proposition then I have the honor to submit to the consideration of the Legislatures of the Provinces, is, by the temporary advance of funds, to prepare the land for the

reception of Immigrants, thus surmounting the first difficulties of settlement by the labour of others. To make the British Immigrant indirectly, clear his own land, by the substitution of the spade, the hammer, or the anvil, which he has been accustomed to instead of the axe, which he has not. To give labour, a current, and negotiable value, when required on public works, whether Rail-Roads, Canals or ordinary Roads, in payment of land, on which a log house has been erected and four acres cleared.

The course of Rivers in New Countries, is the base of settlement, as affording the easiest means of communication,—at first, the only one. The line, on which the Rail-Road will run, may form the base of settlement for its whole length. Supposing that 350 or 360 miles divided into Farms of 3 acres front, by 17 in depth, would make 2800 farms of 51 acres, on each side of the Rail-Road. To clear 4 acres on each of these farms, it would be necessary to clear a continuous strip of 3 acres wide leaving a width of 100 feet for the high road, and Rail-Road, and to erect 5,600 log houses. It is probable at the most, that this could be done, by contract, for $70 to $80 per farm, clearing, building, and fencing—at the rate of £20 currency,—preparing 5,600 farms for the reception of Immigrants beforehand, would cost £112,000—285,600 acres of land, would be settled, and the Settlers themselves not more than 50 yards apart.

Were the settlement continued 10 Concessions deep, 2,856,000 acres would be thus applied, 56,000 families would be established upon them. The sale of the land through which the Rail-Road would pass on this 350 miles would, perhaps, more than supply all the labour required on the whole line of the proposed Rail-Road. Estimating the

1st Concession, 285,600 at 10s. per acre	£142,800
2nd & 3rd Concessions, 571,200 at 7s. 6d	228,400
7 other Concessions, 1,999,200 at 5s	499,800
they would produce the sum of	£871,000

It would not be difficult to procure 5,600 persons annually at least, ready and willing to come out, worth £10 Sterling each, if they were assured of such an arrangement having been made for them. This, would reimburse, the £112,000 already advanced, and lay the foundation of a fund of £142,800 for the settlement of the remaining nine Concessions in the same manner. Such a mode of settlement would ensure a steady, industrious, and well conducted Emigration on the line.

The other concessions might be sold on payment of the £20 advanced for the clearing, and the payment of the land be received in labour on the Rail-Road, from the parties who had become Settlers by the deposit of the £20.

So far the proposition refers to Immigrants possessed of £20 and £40, but when the Rail-Road is about to be commenced, it might be advisable to bring it within the compass of skilled and able bodied men, without means, so as to make the land, actually to pay for the labor of the Rail-Road. To this end it may be necessary, either to continue the Concessions on each side the road from that last settled, or to survey and lay out new Townships in other parts of the Province on the same system, if the system has been found to answer.

There will be one manifest advantage in making the Settlement, as deep as it can be made, on the Road; Towns will rise into existence, which the back settlements will support.

Under the system here supposed, when workmen will become necessary for the Road, there will be candidates or applicants for Location Tickets. While working, such candidate might receive one-third price of his labor for food.

At the end of 180 days, he would receive a certificate of 120 days, at 2s. 6d. or 3s., or such sum as would pay for the settlement duty already performed. He might then be entitled to take possession of his land, and following up the same course of labour, might in the same way, pay for the land.

In England, it is supposed, that one quarter of the cost of a Rail-Road is actual labour, and that the average number of labourers employed per mile is about thirty for the

whole year. In this country the average would be greater, as with the exception of the iron, the materials are on the spot. Taking it, however, at 30 men per mile, it would require at least 18,000 labourers, who would, at 51 acres each, settle on 918,000 acres, with a population, perhaps, of 90,000 souls, or calculating 50, as the more probable number required here, would require 30,000 labourers, who would settle 1,530,000 acres, and establish a population of, probably, 150,000 souls. The system proposed has a double operation; both beneficial to the country. The certainty of Settlement induces Emigration, and the *Lands* are sold; the certainty of employment on the Road draws labourers to it, which *that land* pays for.

Emigration and Settlement are thus connected, and the Provinces may be able to supply the whole labour on the Road, without a burden on the people.

In the former part of this Report, I have proposed one method of making the Road, viz: Her Majesty's Government lending One Million for ten years, without interest; the Provinces paying an interest of 3 per cent. on £3,000,000 for the same period, with the establishment of a Land Fund for the redemption of the Capital, if the Rail-Road failed to remunerate. Another mode suggests itself, which I have reason to believe, Capitalists may be found favorably to entertain.

It is, that the Government supply the One Million, free of interest for the 10 years; that the Provinces give all the land, which will represent in value, and supply all the labour required on the Road, and supposed to be another Million; that the Capitalists supply the remainder, taking all the risks and all the advantages of the enterprise.

I am not without apprehension, that the organic changes I propose to secure settlement, may to some appear visionary, if only from its novelty; or impracticable to others from its magnitude: but the Rail-Road is not without its opposers, who deem it both visionary and impracticable.

The settlement of the country, however, is of vital importance, whether as a principal in itself, or secondary in promoting a Rail-Road; and confident as I feel in the practicability of the scheme, I have the less hesitation in recommending it, as a great means to a great object; the quick and certain Settlement of the Waste Lands of the Crown.

In obedience to His Excellency's commands, I have reported upon the question of profits likely to arise from the investment of the Capital required for the construction of the projected Rail-Road, so far as the imperfect information attainable at the present stage of the enquiry could authorize me to hazard opinions. I have stated the basis of the calculation, rather than the calculation itself, for the obvious reason more than once adverted to, that no exact estimate of the profits can be made, until the estimate of outlay shall be known.

To the next head of enquiry to which my attention is directed, viz: the quality, state, and present value of the several tracts of land through which the Road will pass, their adaptation for Settlement and agricultural improvements generally, and for the growth of Hemp, Wheat, Flax, &c. in particular; the climate, whether favourable or unfavourable for any of these objects; the description and quality of the Timber; and the extent to which the Rail-Road may be expected to increase the value of the lands, and the amount and value of their production. I have to report generally, that the greater portion of the 7,242,000 acres covering the surface of the North Shore of Canada, from Quebec to New Brunswick, is well timbered with rich growth of White Pine and Spruce, with Birch and Beech Ridges, and occasionally Maple. The soil is light, and of easy culture; but it is not generally adapted to the growth of Wheat, Hemp or Flax. For the cultivation of Rye, Barley, Maize, Buckwheat, Potatoes and Turnips, the soil is as well adapted as any other in the District of Quebec; the climate of this Region for all agricultural purposes may be stated to be the same as that of Quebec. The line of Rail-Road not having been yet surveyed, I am compelled in my answer to confine myself to generals.

The present value of these lands does not exceed 2s. 6d. per acre, from their distance to any settlement, but as the value of all lands in their natural state increases in proportion as settlement approaches, and as the Rail-Road must pass in the vicinity of these lands, their value must increase fourfold.

As far as can be judged by careful observation, by such views as the Highway may be supposed to afford, there is little appearance of Oak, or Elm Timber, so that no accurate estimate can be made of the quantity of Staves, or Oak or Elm Timber procurable on the line.

The whole Country however abounds in Pine and Spruce of the finest quality, the quantity therefore of Deals and Pine Timber of the best description, as well as Wood for Fuel will be inexhaustible. The proximity of these vast stores to the Ports of Quebec, St. Andrew's and St. John's, and the prospect of the facility of transport, which a Rail-Road would afford, will give instant value to all the Woods of Commerce within reach of either side of the Rail-Road.

The transport of the Timber to the Sea Ports of Quebec, New Brunswick and Nova Scotia, would be less than the expense of like Timber from the upper parts of the Province, which now so amply supply the market of Quebec; the transport of Staves for instance from Port Dalhousie, on Lake Erie, to Kingston, is £3 15 0 per 1000, and from Kingston to Quebec, £6 5 0—being £10 from Lake Erie to Quebec, per m.

The cost of Oak and Elm, from the same place, Port Dalhousie, is £20 per m. feet, or 20s. per load; of 50 cubic feet.

The expense of bringing Oak and Elm, from either side of the River St. Lawrence, below Kingston to Quebec, is £35 for every 8000 feet, about 5s. per load, and £35 for every 11,000 feet of Pine, 3s. 6d. per load of 50 cubic feet.

On the Ottawa, above Bytown, it is said owing to the Slidage charge being heavy, and the great detention occasioned in passing, the cost of Red Pine from Lac au Calumet to Quebec, is 1½d per foot, or 6s. 3d. per load.

The freight at the different Sea Ports, will occasionally vary, but last year, from Quebec for Timber it ranged from 42 to 45s. For the last five years, the average has been 37s. 6d. to Liverpool, and 38s. to 40s. to London. Deals £6.

Seldom more than two voyages are made from Quebec.

The rate of freight from Halifax is 32s. per Load of Timber; 65s. to 70s of Deals per Petersburgh Standard; and as this Port is always open, four voyages can be and are made per annum to the Ports of Britain.

From St. John, during last year, the freight for Timber was from 34s. 6d. to 36s. per Load; £5 5s. to £5 10s. for Deals.

The Harbour is never frozen, the Port always open, and draught of water for any vessel, and they can load a thousand ton ship in ten days in summer. Three voyages are made commonly to Europe.

As to the "probability, or otherwise, of the Rail-Road being made to serve as a means of communication during the whole year," I have to observe that the Rail-Roads of the United States, of Boston, New York, and Maine suffer little more than occasional and temporary interruption from snow; and the opinion generally of intelligent men there, seemed to be, that the Line from Quebec to Halifax, would be less liable to interruption from snow than their own, the difference of climate preventing the thawing and freezing; the mere snow is easily removed when it has not been thawed and frozen. It is then the interruption and difficulty begins. It would therefore open a permanent communication during the whole year between the Metropolitan State and Canada.

Upon the next comprehensive enquiry in my Letter of Instructions, viz: Whether any and what description of *Trade*, either within the Province, or between it and the Sister Provinces and the Parent State, are likely to be created; or, if existing, encouraged and encreased, by the construction of the Rail-Road, I can only remark, that the general effect of speedy intercoure has been stated before.

The diversion of Trade, by the introduction of the projected Rail-Road, in my opinion, will be the natural and inevitable result of its success; as that success must depend upon the power to carry freight from Quebec to Halifax by Rail, and from thence by Sea to

the Ports of Great Britain, at a cheaper rate than from Quebec to Great Britain by sea. In this case, Canada gets Halifax, St. Johns and St. Andrews: three sea ports accessible *all* the year, for one closed nearly half of it.

I have already made such observations as appeared to me pertinent to the question confided to my investigation, on the subject of "the Provinces aiding in the construction of the Rail-Road by Provincial Grants, or the engagement of the public credit." I cannot doubt that the policy of such a course would become speedily manifest, in the advantages of a direct, prompt, and independent means of communication with the Atlantic Board, open at all seasons, passing through the British Territory, and tending actively to promote settlement, extensive cultivation of the soil, and the augmentation of the industrial resources of the most valuable Colonial Possessions of the British Crown.

I cannot conclude this imperfect Report, without offering an expression of my regret at its deficiencies. To attempt to report in detail, the features and statistics of the several tracts of Country, through which an intended Rail-Road may pass, before the line has been run, or its direction known, must appear to be a somewhat premature task; and I should not myself have thought it desirable to put forth a document so necessarily defective. I have however endeavoured in the best manner possible under the circumstances, to meet the demand made upon me, avoiding specific details of a too local character, and giving such general information as I thought pertinent to the ultimate question to be decided.

I am nevertheless too sensible of my own inefficiency, from materials so inadequate to work out, in a satisfactory manner, the comprehensive and important problem involved in my instructions, as not to desire earnestly to bespeak an indulgent consideration of the effort.

I have compiled, for the more prompt and ample information of His Excellency, a tabular view of all the Rail-Roads in Great Britain, and in addition of six continental Rail-Roads shewing the length of each, the cost, ruling gradients, charges, amounts of receipt and expenditure, and profits, which I beg leave respectfully to subjoin.

I have the honor to be,

Sir,

Your most obedient humble servant,

J. SIMPSON.

The Honorable D. DALY,

Provincial Secretary, &c. &c.

TABLE OF RAIL-ROADS

Shewing their Length, Number of Stations, Gauges, Gradients, Rise per Mile, Cost per Mile, Fares, Receipts, Expenditure & Dividend.

GREAT BRITAIN.	Miles.	Stations.	Gauge.	Gradients.	Rise per Mile.	Cost per Mile.	Fare 1st Class.	Fare 2d Class.	Fare 3d Class.	Receipts 6 Months.	Expenditure 6 Months.	Dividend per Annum.
			Ft. In.	Feet.		£	£ s. d.	£ s. d.	£ s. d.	£	£	£ s. d.
London and Birmingham..	112,10	40	4 8½	1 in 330	16	52,882	1 7 0	0 18 0	0 9 5	450,478	182,543	10 0 0
Great Western.....	118,20	37	7 0	1 " 100	52	56,372	1 7 0	0 18 6	0 9 11	440,046	143,279	8 0 0
South Western.....	70,55	19	4 8½	1 " 250	21	27,874	1 0 0	0 14 0	0 6 6	190,000	89,439	8 0 0
South Eastern.....	66,20	20	4 8½	1 " 264	20	44,415	0 18 6	0 12 0	0 7 3	130,042	103,599	3 1 4
London and Brighton.. ..	42,33	13	4 9	1 " 264	20	56,981	0 12 0	0 8 0	0 5 0	135,532	82,074	6 0 0
Eastern Counties.....	51,10	13	4 8½	1 " 100	52	46,355	0 12 6	0 9 6	0 4 3	68,668	45,851	2 14 0
Northern and Eastern.....	53,11	27	4 8½	1 " 3 0	16	31,256	.....	.....	.....	47,161	19,647	5 0 0
London and Croydon.....	10,26	7	4 8½	1 " 100	52	80,400	0 1 3	0 1 0	0 0 9	36,027	18,722	6 0 0
London and Greenwich....	3,60	3	4 8½	.....	Level	266,322	0 0 8	0 0 6	0 0 4	27,661	27,391	
London and Blackwall....	3,38	6	5 0	1 " 106	59	288,177	0 0 6	0 0 4	.....	32,164	24,706	1 4 0
Grand Junction.....	82,50	25	4 8½	1 " 177	29	22,203	1 3 0	0 18 0	0 9 2	229,169	99,703	10 0 0
Manchester & Birmingham.	31,0	12	4 8½	1 " 378	13	61,204	1 1 0	0 16 0	0 7 1	64,482	34,545	5 0 0
Midland Counties.....	47,36	16	4 8½	1 " 330	16	30,012	0 6 6	0 4 6	0 2 3	68,153	40,830	4 5 0
North Midland.....	38,68	15	4 9	1 " 339	15	24,683	0 11 0	0 8 0	0 4 0	36,063	23,563	2 16 0
Liverpool and Manchester.	30,53	11	4 8½	1 " 88	59	50,923	0 6 0	0 4 0	0 2 6	141,252	64,885	9 0 0
North Union.....	22,1	7	7 8½	1 " 100	52	27,326	0 7 6	0 5 0	.....	47,845	24,788	6 15 0
Birmingham & Gloucester.	51,30	23	4 8½	1 " 37	142	20,934	0 14 0	0 10 6	0 5 6	70,090	41,739	4 0 0
Bristol and Gloucester....	22,10	8	7 0	1 " 330	16	22,700	0 8 0	0 5 0	0 3 0	27,544	19,685	4 0 0
Bristol and Exeter.....	76,10	13	7 0	1 " 127	41	23,676	0 17 6	0 11 6	0 6 4	.....	.....	4 0 0
Cheltenham & G. Western.	42,0	8	7 0	1 " 180	29							
Great North of England..	45,10	12	4 8½	1 " 330	16	26,855	0 13 0	0 9 0	0 6 0	54,048	26,800	6 0 0
York and North Midland..	23,11	5	4 8½	1 " 484	10	23,960	2 16 0	1 18 6	.....	75,474	35,825	10 0 0
Newcastle and Darlington.	23,0	17	4 8½	1 " 330	16	20,000	.....	.....	.....	29,142	7,993	8 0 0
Leeds and Selby.....	20,0	7	4 8½	1 " 137	38	11,000	0 4 0	0 3 0				
Hull and Selby.....	30,51	9	4 8½	1 " 240	22	22,390	0 5 0	0 4 0	0 2 6	39,572	21,990	7 0 0
Manchester and Leeds....	49,78	20	4 8½	1 " 150	35	40,968	0 13 6	0 8 0	0 5 6	161,819	93,281	8 0 0
Chester and Birkenhead...	14,71	6	4 8½	1 " 330	16	34,198	0 2 6	0 2 0	0 1 6	15,109	8,238	2 0 0
Durham and Sunderland...	13,20	9	4 8½	1 " 60	88	14,281	0 1 6	0 1 3	.....	17,347	11,334	3 0 0
Stockton and Darlington...	25,30	6	4 8½	1 " 104	50	9,000						
Newcastle & Northshields.	8,79	6	4 8½	1 " 180	29	44,233	0 0 9	0 0 6	0 0 4	19,152	15,002	3 0 0
Newcastle and Carlisle....	61,67	10	4 8½	1 " 106	50	17,838	0 11 0	0 8 6	.....	78,484	64,501	4 0 0
Mary Port and Carlisle....	28,3	6	4 8½	1 " 209	25	11,500	0 5 6	0 4 0	.....	.....	.....	5 0 0
Sheffield and Manchester..	40,66	11	4 8½	1 " 120	44	....	.....	.....	.. ..	.....	.....	6 0 0
Manchester, Bolton & Bury.	10,0	7	4 8½	1 " 160	33	67,000	.....	.....	.....	31,816	15,909	5 15 0
Sheffield and Rotherham..	5,26	3	4 8½	1 " 377	14	17,000	.....	.....	.....	9,142	5,556	4 10 0
Bolton, Kenyon and Leigh.	9,60	5	4 8½	1 " 30	176							
Bolton and Preston.....	14,46	7	4 8½	1 " 132	40	25,000						
Preston and Wyn.....	19,60	6	4 8½	1 " 264	20	22,261	0 4 0	0 3 0	0 2 0	13,537	7,581	2 0 0
Lancaster and Preston....	20,18	6	4 8½	1 " 500	10	20,102	0 3 6	0 2 0	.....	13,822	.....	3 4 0
Chester and Crewe.....	35,44	6	4 8½	1 " 400	13	....						
Yarmouth and Norwich....	20,0	6	4 8½	.....	Level	....	0 3 0	0 2 6	0 1 8	8,859	5,186	5 0 0
Taffvale.....	24,0	9	4 8½	.....	....	25,000	0 4 0	0 3 0	0 2 0	22,092	16,898	3 0 0
Leicester and Swannington.	10,5	5	4 8½	1 " 119	44	8,700	.....	.....	.....	6,317	2,207	5 0 0
Aylesbury.....	7,0	2	4 8½	.....	....	7,500	0 9 6	0 6 0	0 3 8	.....	.....	3 0 0
Glasgow, Paisley, Kilmarnoch and Ayr.....	40,0	13	4 8½	1 " 440	12	20,607	0 4 0	0 4 0	0 3 0	42,720	21,706	5 0 0
Edinburgh and Glasgow...	46,0	14	4 8½	1 " 880	2	35,024	0 8 0	0 6 0	0 4 0	61,047	30,783	5 0 0
Glasgow,Paisley&Greenock	22,22	6	8 8½	1 " 330	16	35,015	0 2 6	0 1 6	0 1 0	23,447	16,680	2 0 0
Dundee and Arbroath.....	16,50	6	5 6	.....	....	8,570	0 2 6	0 2 0	0 1 0	.....	.....	5 0 0
Arbroath and Forfar.....	15,50	15	5 6	1 " 130	40	9,213	0 2 6	0 2 0	0 1 3	.....	.....	2 10 0
Dublin and Kingstown....	6,4	4	4 8½	1 " 440	12	15,652	0 1 0	0 0 8	0 0 6	53,740	20,263	9 0 0
Ulster Rail-way.....	36,0	7	5 6	.....	....	13,946	0 2 6	0 2 0	0 1 4	14,713	5,190	6 0 0
Dublin and Drohedа.....	32,0	13	5 3	.....	....	16,533	0 4 0	0 2 6	0 1 6	21,572	13,313	4 0 0
CANADA.												
						Cy.						
Champlain & St. Lawrence.	15,0	..	....	.....	....	3,533						
BELGIAN.												
						Stg.						
North Line.....	27,¼	..	....	.....	....	11,194	0 2 3	0 1 8	0 1 1	.....	.....	3 0 0
West Line.....	76,¼	..	....	.....	....	8,114	0 6 4	0 4 9	0 3 2	.....	.....	3 0 0
East Line.....	82,¼	..	....	.....	....	20,445	0 6 11	0 5 1	0 3 6	.....	.....	3 0 0
South Line.....	51,0	..	....	.....	....	12,031	0 4 3	0 3 2	0 2 1	.....	.....	3 0 0
Ghent to French Frontier and Tournay.....	48,0	..	....	.....	....	7,280	0 4 0	0 3 0	0 2 0	.... .	.....	3 0 0
Branch to complete to Namur.....	41,0	..	....	.....	....	13,000	0 3 5	0 2 7	0 1 8	.....	.....	3 0 0

MONTREAL—CANADA GAZETTE OFFICE.