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TO THE OCEAN

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DOCKS AT MONTREAL.

CONSIDERED IN A LETTER TO THE HARBOUR COMMISSIONERS.

BY THE HON. JOHN YOUNG.

Montreal:

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TO THE HARBOUR COMMISSIONERS OF MONTREAL.

GENTLEMEN,

The Report lately laid before the Harbour Commissioners of Montreal and a Committee of Citizens on Harbour Improvements, by Mr. Trautwine, embodies opinions in reference to the Public Works of Canada and the route of the St. Lawrence from the interior, as to their power of competition with the Canals of the State of New York for the vast and rapidly increasing trade between the Atlantic and the Western States of the Union, as well as of Western Canada, so utterly at variance with all previously expressed views on the same subjects, that I deem it my duty to point out what seem to me Mr. Trautwine's erroneous conclusions. I shall at the same time examine his Report in reference to the construction of Docks at Montreal. On this subject, it is well known that I have always connected the subject of Docks at Montreal with the improvement of the St. Lawrence navigation from the Upper Lakes, and with the construction of a Canal to connect the waters of the St. Lawrence and Lake Champlain; and it is on this broad ground that I still urge the necessity of Docks, believing as I do that the whole subject must soon receive that attention from the Executive of Canada which its importance demands.

I shall confine my attention to Mr. Trautwine's Second Report on Docks, as there is nothing in his first Report on the improvement of the present Harbour which calls for particular notice. The improvement of the Island Wharf has been under consideration by the Harbour Commissioners for some time and had been

resolved on, and the mode of construction pointed out by Mr. Forsyth previous to Mr. T.'s arrival in Montreal. The plan suggested by Mr. Trautwine for the accommodation of the Ocean Steamers will not, in my opinion, upon examination, be found so desirable as that suggested by Mr. Forsyth; nor do I think it will be prudent to build any of the wharves on the slanting principle suggested by Mr. Tate, and approved by Mr. Trautwine.

To the people of Canada, there can be no object of so much importance as that of securing the great and growing carrying-trade of the interior, which was the chief reason for the construction of those expensive works which connect Lakes Erie and Ontario, and which line the St. Lawrence from Kingston to Montreal. It was not for the carrying-trade of Canada alone that these works were constructed. If they fail to secure their object—which, up to this time, is the fact—the result will be disastrous to the Province in a double point of view; for it will not only lose a great and flourishing trade, which in my opinion it is in the power of Canada to secure, but it will be burdened with costly and unproductive works, which, instead of being a source of revenue, are even now, as will be shewn, an annual drain upon the coffers of the Province.

Mr. Trautwine says :-

"The high rates of insurance incident to the navigation of the River and Gulf of St. Lawrence, and the expenses of pilotage and towage on the river, combine, with other causes, to raise the charge on the freight of a barrel of flour, to Liverpool, to 25 or 35 cents more from Montreal than from New York;—and so long as the bulk of exports shall exceed that of imports into Canada by 300 or 400 per cent., there is no assignable reason, that I can suggest, why this disparity should cease.

"Should the foregoing arguments prove insufficient to demonstrate the inexpediency of embarking in an extensive scheme of docks, it may be added that the State of New York, sooner than submit to the diversion of this branch of her exports, and permit it to seek Canadian channels, would, doubtless, choose the least of two evils, and reduce her canaltolls to such an extent as to paralyse all efforts to that effect.

According to this view, the efforts of Canada to make the St. Lawrence the great highway from the West have been blunders; even if she were successful in securing a diversion of Western trade into Canadian channels, the State of New York would paralyse all our efforts to maintain that trade by reducing her canal-tells. For these and other reasons, which I shall refer to hereafter, Mr. Trautwine advises the citizens of Montreal " to confine " their attention to the improvement of their present harbour, and "to lay aside all dock projects for years to come;" and that any " attempt to reduce the present charges on produce by the con-"struction of docks on any scale whatever, must be entirely futile; "and if persisted in, at this time, will but add one more to the "many grand but unremunerative works which have already " absorbed such immense sums of money in Canada. Under this " conviction, I feel it incumbent on me to caution the citizens of "Montreal against embarking in any system of docks, at least at " present. Should future developments of commerce bring about " a posture of affairs different from that which now exists, and " one which shall change the unpropitious aspect which the pro-"ject now wears, it will then be time enough to take the matter " up in earnest."

The opinions thus expressed by Mr. Trautwine go to shew that the route from the West through the State of New York to the ocean, must continue to have a decided superiority over the route through Lower Canada;—that the merchants and the great majority of the citizens of Montreal are not fit judges of what is requisite to obtain a share of that trade;—that it is useless to make further efforts at present for such an object, but should "future developments of commerce" "providentially" bring about a different posture of affairs, it will then be time enough to move in the matter. In such a policy I, as a Canadian, and especially as a Lower Canadian merchant, cannot coincide; and although it is a labour I would at present rather avoid, still, the matter is of so much public importance, I deem it my duty to give my reasons for differing with the views thus expressed by Mr. Trautwine.

The question presented for discussion by the foregoing extracts, is not whether Docks should be constructed at Hochelaga, or at Point St. Charles, or on the lands of the Grand Trunk Company, but whether the prospects of trade by the St. Lawrence

route warrant the construction of any Docks at all. As I before said, this is a subject of the greatest possible importance to every resident of Canada, but particularly to the residents of Lower Canada, for if the great and growing trade between the Atlantic, Western Canada, and the Western States, is to continue, as it does now, to centre in New York, to diverge from the St. Lawrence in its transit, and not to come nearer Montreal than Oswego or Lake Ontario, 250 miles above this city, then it is true that Docks will neither be required at Montreal or Quebec, and the construction of our canals as well as our railways must be considered blunders, and prove an annual drain upon the Canadian people. Let me first point out, as briefly as possible, the cost of our public works on the St. Lawrence route, and the amount for which the people of this country are now annually taxed to pay the interest on these works. By the Public Accounts of 1857, it will be found that the cost of the Welland and St. Lawrence Canals, up to 31st Dec. of that year, was £3,514,322.

Deductions from revenue for repairs, collections,		
&c., &c.—Welland Canal	£29,027	
St. Lawrence Canal	21,775	
Expense of general repairs, as per Table No. 13		
in Public Accounts, as per special appro-		
priation	33,529	
Interest on £3,514,322, at 6 per cent.,	210,859	
D 1 4441 14 C W 11 1 C 1	<u> </u>	£295,190
Deduct total receipts from Welland Canal	59,828	
" " St. Lawrence Canal	17,867	
-		77,695
T (1000) (1 777) 1 1 2 (1 7		
Loss for 1857 in operating Welland and St. Law-		
rence Canals		£217,495

In the next place, the advance to the Grand Trunk Railway Company by the Province, and the interest paid on the Debentures, amount to about £4,500,000, the interest on which is £270,000, so that the annual loss on our canals and the Grand Trunk Railway amounts to £487,495. If we add to this the loss arising from other unproductive canals and railways, we have an amount exceeding the sum of \$2,400,000 per annum, which the people of Canada are now compelled to pay by duties on imports.

These figures, which cannot, I believe, be contradicted, shew how great an interest the people of Canada have in the solution of the grand question whether the natural route for the great trade of the Western States and of Western Canada is to be through the St. Lawrence river to the Eastern States and the ocean, or whether that trade must continue to flow, as at present, through the more artificial canals of the State of New York, 250 miles above Lower Canada.

The question thus at issue between Canada and the State of New York is, therefore, as to which of these two great water lines can best supply the link wanted to connect the North-west with the ocean. This subject has been so ably argued by Messrs. Childe, Kirkwood and McAlpine, in their Report dated March, 1858, and addressed to the Harbour Commissioners of Montreal, that it is unnecessary for me to allude to the course of that trade, or to their statements in proof of its magnitude.

The works erected on these two routes to facilitate the transport of freight may be briefly described as follows:

At the outlet of Lake Superior, the first obstruction to navigation is overcome, on the United States side, by a Canal one mile in length, with two locks, which will pass vessels of 1200 tons. This work was constructed by the United States Company. The Welland Canal, on the Canadian side, connects Lakes Erie and Ontario, and is 28 miles long. The St. Lawrence Canals are made to overcome the various rapids of that river. And the Channel of the St. Lawrence between Quebec and Montreal has been deepened so that sea-going vessels drawing 18 feet at the lowest stage of water come up the river as far as Montreal, and operations are now being carried on to secure a channel of 20 feet.

The State of New York has built a Canal from Buffalo on Lake Erie, and from Oswego on Lake Ontario, to Albany on the Hudson River, a combined length of 569 miles, which now admit boats of about 100 tons, but will soon be completed for the passage of boats of 250 tons. The New York Canals were opened in 1825. The enlarged St. Lawrence Canals were opened in 1848. Both routes have been in use since the com-

pletion of the works; but it is matter which admits of no doubt, that the St. Lawrence route has hitherto completely failed to attract any considerable portion of the Western States trade; and that since the passing of the United States Bonding Act, in 1849, the great bulk of the exports from Western Canada, have been carried across Lake Ontario to Oswego and other Lake Ports, for shipment to Atlantic Ports, and for Sale in the Eastern States. This will be manifest from from the following statement:—

The receipts of wheat and other grain, and of flour reduced to grain at the rate of 4½ bushels to the barrel, at the Ports of Buffalo, Oswego, Dunkirk, Suspension Bridge, Rochester, Cape Vincent and Ogdensburgh,

in 1856 were	48,391,05 5	bushels.
1858 "	about 52,000,000	61
In Montreal the receipt	ts in	
1856 were	4,509,243	bushels.
1856 were 1857 "	4,509,243 4,392,453	bushels.

It thus appears that the receipts through our Canals at Montreal in 1856, were about ten per cent. of receipts at American Lake Ports, while in this year the receipts are also ten per cent.

Again, the Exports from Ports in Western Canada to the United States, per Trade and Navigation returns, were:—

Wheat.	Other Grain.	Flour	Total.
	re	duced to Gra	in.
1856-4,362,379	735,341	1,707,990	6,005,710 bushels.
1857-2,340,372	462,580	1,690,016	4,492,968 "

These figures shew that the exports from Western Canada to the United States Lake Ports, exceed the whole of the receipts at Montreal, which include receipts both by railway and canal and all that comes from the United States and from Canada West. In a letter written to the Hon. Mr. Lemieux, Chief Commissioner of Public Works, in 1855. I pointed out the tendency of this course of trade in the following words:—

"Let it be remembered that previous to 1849, before the United States bonding bill came into operation, there was no exportation of cereals from Canada into the United States, or next to none. But what has been the amount of wheat and flour so exported since that date? Reducing wheat into flour, the amount will be found to be as follows:—

In	1849 24,936	barrels
"	1852466,912	"
u	1854	**

"These figures establish but too clearly the course which the trade has been taking; and the results of the trade of this season, when officially known, will prove that a larger proportion than ever of Western Canada cereals has found a passage into the United States. In other words, that the carrying trade of Upper Canada products, by the St. Lawrence and the Canadian canals, is rapidly decreasing, and that of the State of New York rapidly increasing. A single fact will conclusively establish this disagreeable truth. During the four weeks ending on the 31st of October, the quantity of Canadian wheat received at the Port of Oswego alone, was 627,000 bushels, whilst the total receipts of Canadian wheat by canal and river at Montreal, from the opening of navigation to the same date, was only 104,677 bushels."

I then pointed out the remedy for this state of things, as I had frequently done before, but the Government was too busy about other matters to give any attention to such a paltry subject as that of the trade of the country, or to take any measures to stop the enormous annual loss which the inhabitants of this country have now to fear, from the unproductiveness of their Canals and Railways.

Now what is the reason that the trade from the Western States and from Western Canada, flows through the Erie Canal, and how is it that almost the whole imports into the Western States, and a very large amount of the imports into Western Canada do not come through the St. Lawrence, but are obtained from New York through the Erie Canal and over the New York Railways? It is said with truth, that our Canals are finer, better, and larger than the Erie Canal, which is sometimes contemptuously designated as a "mere ditch." Our tolls on a barrel of Flour from Lake Erie to Montreal are only 6 cents; on the Erie Canal, the toll is 15 cents. Moreover we "give back two thirds of the

toll to any vessel which comes through both the Welland and the St. Lawrence Canals,—we have built Tug-boats for the Lower St. Lawrence, to serve the double purpose of towing, and rendering aid to vessels in distress. Besides these advantages of the St. Lawrence, we can bring a vessel from any Port in the Upper Lakes, direct to Montreal, without breaking bulk, while by the Erie Canal to New York, there are two transhipments. Wheat has been carried this year from Chicago to Montreal, a distance of 1278 miles, at 11 cents per bushel, while the rate to New York has not been less than 17 cents; we have also the Grand Trunk Railway in full operation, with a full staff of employees, ready and willing to do business, yet, at the end of 1858, the great Canals of Canada and the great Grand Trunk Railway together, have failed to do more than attract ten per cent of the trade of the Western States and of Western Canada." As stated by Mr. Blackwell in his Report to the London Directors of the Grand Trunk Company, "disappointment has followed disappointment as regards the revenue of the Company, comparing the hopes with the actual results."

Now out of the 50,000,000 bushels of Grain and Flour reduced to Grain, received in 1856 at Dunkirk, Buffalo, Suspenson Bridge, Rochester, Oswego, Cape Vincent and Ogdensburgh, 40,000,000 bushels were received at Oswego and Buffalo. At both of these places there is very great capacity for flouring wheat, and there are elevators capable of storing four million of bushels So that wheat is rapidly transferred from Lake crafts to Canal boats, at a cost of one-fourth of a cent per bushel, and is stored, for a period not exceeding one month, at a cost of half a cent per bushel.

In Montreal it costs 3 cents per bushel to cart, store for one month, and ship grain on board of ocean vessel. Again, the great bulk of the 50,000,000 bus. arriving at Lake Ports is not shipped from the United States, but is mostly consumed in the non-producing States of New England; in the same way, although the receipts of breadstuffs at Montreal in this year are equal to 5,215,394 bushels, yet the exports by sea from Montreal are only equal to 1,790,856 bushels (including wheat and other grain, as

well as flour reduced to grain). These consuming markets of New England are open, under the Reciprocity Act, alike to Western Canada as they are to the Western States.

Oswego has divided the Western Trade with Buffalo for the reason that, although an 800 ton vessel can go to the latter port from any of the Upper Lake Ports to a greater advantage up to that point, than the Oswego vessel of 350 tons (the utmost capacity of the Welland Canal), yet the advantage gained by Oswego, of continuing the voyage in the same bottom for 171 miles by the Welland Canal and Lake, against 150 miles of parallel canal navigation, nearly balances the advantage gained by Buffalo from being able to employ the large vessel up to that point. Hence the trade of the Western States and of Canada West, may be said to be divided between the Lake Ports of Oswego and Buffalo, and this not only for exports but for imports, and it seems to me impossible, under our present means of transport below Oswego, that either the bulk of the products of Canada West, or of the Western States can pass below Oswego, for the reason that if they did, there are no means of transport from Lower Canada to compete in cheapness with those from Oswego to Albany. The Welland Canal may be enlarged, as I hope it will be, but the advantage of that work will be almost solely for the benefit of Oswego, for with that work completed, it would be impossible to reach the New England Markets by the way of the St. Lawrence Canals so cheap as could be done by the way of Oswego, unless other works than now exist were first constructed. This position is, I think, easy of demonstration. The only means of any considerable quantities of freight reaching New York, Boston, Portland or the interior of any of the Eastern States below Prescott, or in Lower Canada, is first by the Canada and New York Railway from Caughnawaga, next by the Victoria Bridge, which connects with the Railroad to Portland, and also with Rouse's Point, where connections exist to New York and Boston. inter-communication for such freight with Lake Champlain is by passing down the St. Lawrence to Sorel, thence up the Richelieu River to Chambly, a distance of 90 miles, and thence to St. Johns on Lake Champlain by canal, a distance of twelve miles more.

These are the only routes now existing for taking any considerable freight either on to Lake Champlain, or to Albany for New York from Montreal. And by the above figures it is clear, that property of all kinds, destined for a market in the Eastern States, can be shipped by the way of Albany from Oswego cheaper than if shipped from Montreal by any means of transport there, or at any point below Oswego. This fact is well known to all business men, and it is also well known that, to bring Western Canadian produce or Western States produce, destined for New York, Albany or Boston, down the St. Lawrence below Oswego, would be to add to the cost of transport from the St. Lawrence to New York, Albany or Boston, the cost of transport from Oswego to Montreal; in other words, if a barrel of Flour can be sent from Oswego to New York at 40 cents, it would cost at least 60 cents at present by the way of Montreal. I have not included the cost of freight from Toronto or other Canadian ports, as the cost of the ferry or bridge at Montreal will be fully equivalent thereto.

With this difference in favor of the Oswego route, it is utterly impossible that our commerce in Lower Canada can increase as rapidly as it might do. Our splendid canals on the St. Lawrence do not avail us; the Ottawa navigation might be completed, and when finished would be as deserted as are our St. Lawrence canals, without some cheaper connection with the Hudson and Eastern States than we now have. The Georgian Bay Canal might also be constructed, without Lower Canada or the St. Lawrence Canals being able to attract any more business than it now does. This view of the subject may also be supported by the following facts,

shewing the amount of Wheat and other Grain and Flour reduced to Grain at the rate of $4\frac{1}{2}$ bushels per barrel exported by sea from the Port of Montreal in the last 14 years:—

Wheat and other Grain.	Flour Meal, in bushels	Total.
1845— 600,713		3 070 0 4
,	1,051,632	1,652,345
1846— 698,887	1,133,640	1,832,527
1847 821,329	1,273,501	2,094,830
1848— 218,191	725,472	943,663
1849— 171,980	937,640	1,109,420
1850— 281,107	696,496	977,603
1851 188,335	1,256,227	1,444,562
1852 414,348	971,660	1,386,008
1853— 799,156	1,102,500	1,901,656
1854— 237,008	442,104	679,112
1855— 117,794	241,720	359,514
1856-1,142,057	887,783	2,029,840
1857—1,053,211	1,069,985	2,123,196
1858—1,111,717	649,509	1,761,226

The above facts prove how small has been the progress of our exports by Sea from this Port of interior products, notwithstanding all our expensive Canals. The inferiority of our power with only our present facilities, to compete with Oswego and Buffalo, through the Eric Canal, will be still more marked when the enlarged Eric Canal is completed.

But it is stated by the Managers and Directors of the Grand Trunk Railway, and has been believed by many in Canada, especially by the gentlemen of the learned Professions, who compose so large a part of the Parliament and of the Government of the country, that so soon as the Grand Trunk road was connected with the Western lines, it would inevitably command the trade of the West and bring it to Montreal. I shall show that although the road has been open for several years and fully completed west, it has failed to do so, and I shall further shew that it is impossible for a railway to compete successfully in the carrying of heavy freight with a navigation such as on our Lakes and Rivers, and how utterly fallacious is Mr. Blackwell's project of making Portland and Quebec the great emporiums for export and import

to and from Western Canada, and the Western States, by means of a railway. Railways on this Continent are not, as in Britain, the principal and almost the only means by which freight is moved from one point to another, but are rather auxiliaries and assistants to the great water lines. They do not carry any large amount of heavy freight, but where the water lines are successful, they are then fully employed in the carrying of passengers, light and valuable goods, live stock, &c.

At Buffalo, for example, the receipts of wheat by Lake, in 1856, were 8,465,671 bushels, and by the Buffalo and Erie and Buffalo and Lake Hudson Railways, only 4040 bushels were received. In 1857, the receipts by Lake Erie were 8,334,179 bushels, and by the above roads 14,430 bushels. The receipts of flour in 1856 at Buffalo,—

	barrels.
By Lake	1,126,048
By Railroads	85,141
1857.	
By Lake	845,953
By Railroads	46,301

Receipts at Montreal in 1858,-

	Wheat and other Grain.	Flour and Oatmeal.
By Canals and Railway	2,194,906	670,918
By Railroad from 1st Jany. to 31st Oct.	143,544	249,519

The lines of railway between Buffalo and Albany have been aided in their competition with the Canals, by an exemption from any of the State Tolls charged on property passing through the Canals, and hence rolling and other freight easily handled, had been carried to a considerable extent still, in small proportion to the quantity moved by Canal, for instance of Vegetable food there was moved in

New York Erie and	1853	1854	1855	1856.
New York Erie and New York Central Railway.	80,868	255,497	360,697	4 31,96 9
N. Y. State Canals	1,071,300	903,735	993,175	1,153,894

Again, it is a fact well ascertained, and acknowledged by those acquainted with the management of railways in the United States and in Canada, that the actual cost of moving heavy freight by rail, is not less than one and a half (11) cents per ton per mile, and that where freight is carried at a less rate than this a positive loss is the result. The distance from Chicago to Montreal by railway is 886 miles, and the cost of freight for the whole distance, at 11 cents per ton, is \$13.29, which for a ton of wheat (831 bushels) would be 39½ cents per bushel, or for a ton of flour of 10 barrels, would be \$1.32 per barrel. During the present season wheat has been carried by water from Chicago to Montreal at 11 cents per bushel, and flour at 50 cents per barrel, but even if we add 50 per cent. to the rates of this season, we have rates less than half of those which it would be necessary for the railway to have in order to pay. From Toronto, 333 miles to Montreal, the railway rate at 14 cents per ton per mile, would require to be 50 cents, and for wheat 16 cents per bushel; we all know that 6 cents per bushel is deemed a fair rate by vessel, and 25 cents per barrel on flour are deemed fair rates by vessels. From Kingston 180 miles, the railway rate should be 8 cents per bushel, and 27 cents per barrel for flour. Vessels bring wheat for 31 cents per bushel and flour for 10 cents. From these comparative statements, it is I think evident, that the railway cannot possibly compete with large sailing vessels in the transport of heavy and bulky freight, and that any attempt to do so, must result in a ruinous loss. I have shewn, that with our present means of transportation, we cannot move produce from Lake Ontario, down the St. Lawrence for the supply of Albany, New York, or Boston, via Lake Champlain, so cheap as it can now be moved via Oswego, to the same points, for the reason that as the freight from Montreal to any of the points named, is as high as from Oswego, there will be a difference equal to the cost of transport from Oswego to Montreal.

These observations seem to me to shew that the railway cannot possibly bring produce to Montreal from the interior so cheap as it can be done by water.

Having said this much, on our ability to compete for carrying

Canadian or Western produce to the great consuming markets of New England, I shall now as briefly as possible advert to the causes which make the Atlantic Ports of the United States, particularly New York, so successful in attracting through the Erie Canal so large a proportion of this produce for exportation. I have shewn elsewhere that the exports by Sea rom Montreal of wheat and other grain, and flour reduced to grain for this Season, is 1,761,226 bushels. The export of wheat and other grain and flouras above, from New York alone, in 1857, was equal to 21,000,000 bushels.

Now, in my opinion, this superiority of New York over the St. Lawrence arises principally from the Erie Canal via Buffalo and Oswego, being the cheapest route for the transport of the great bulk of Western and Canadian products intended for consumption in the Eastern States. The Western merchant in starting his property on this route, puts it, as it were, into a groove, by which he has a chance of selling it so as to meet either the home or the export demand. If he sends it to Montreal, the home demand is small and easily supplied; he has no means of shipping it to the Eastern States, and must either ship to England on his own account or sell for shipping. If freight is too high, or if it is not desirable to ship, there exists no means of sending it to New York, Albany, or Boston, except at the loss of all the freight from Oswego or Lake Ontario to Montreal. The property must therefore be sold for shipment, and of course its value has to depend on the value in England, less freight and charges. Freight at Montreal to Liverpool up to 1854 has generally averaged 100 per cent. over the rates at New York, so that although the cost of freight from the interior to Montreal is less than to New York, yet the gain on ocean freights from New York brings the choice of routes for export nearly to an equality, both varying from time to time according to circumstances.

The position, then, in which I think Montreal can be placed, is exactly that which Oswego and Buffalo now hold in being the best outlets from the St. Lawrence route, on Lakes Erie and Ontario to New York and New England. I believe if a ship canal were opened from the St. Lawrence to Lake Champlain, so that the ves-

sel from the interior, whether from the Western States or from Canada West, could deliver her cargo on Lake Champlain without breaking bulk, a new route would be made available, by which a superiority in time and cost over the Oswego or Buffalo routes will be secured, and the great stream of trade in its passage from the West to the East removed 250 miles lower down than where its exit from the St. Lawrence is at present. This I have long held, and every one who has examined the subject thoroughly and in all its bearings coincides in the belief that such awork would inevitably result in securing, through Lower Canada, the quickest and cheapest means of transport to the Eastern United States.

Engineers who have examined the subject, and whose opinions I might quote at length, all agree, without dissent, that the building of a Ship Canal, to connect the St. Lawrence with Lake Champlain, would secure for Canada, through the Welland and St. Lawrence Canals, without the possibility of change, the quickest and cheapest water route, to any part of the Eastern States, for freight from the interior. Among these Engineers who thus concur, I may mention the names of J. B. Mills, Hon. H. H. Killaly, Messrs. Samuel and Thos. Keefer, Walter Shanley, Edward H. Tracev, John B. Jarvis, Colonel Swift, John Page, T. C. Clarke, J. W. Gamble, Captain John Childe, Jas. Kirkwood, and W. J. McAlpine. Every Chief Commissioner of Public Works, since the work was projected in 1846, has reported in favor of its construction. The Hon. W. B. Robinson, Merritt, Chabot and Lemieux, have written strongly in reference to the change which it would produce in the means of transit and on revenues from our Public Works. The Legislature of Canada, in 1852, by a vote of 37 to 6, passed the following Resolutions in its favor:

1st. Resolved,—"That from the proximity of Lake Champlain to the River Hudson and St. Lawrence, the trifling elevation of the summits which divide them, and the natural advantages the great chain of lakes and rivers leading into the interior possess, the construction of a canal to connect the St. Lawrence with the River Richelieu or Lake Champlain, of sufficient dimensions to admit the largest class of steamers from Lake Ontario to Whitehall, would materially cheapen the rates of

transportation between Lake Erie and New York, regain the trade or the West through its natural channel, and increase the revenue from tolls on all our leading Public Works."

2nd. Resolved,—"That an humble address be presented to his Excellency the Governor General, to communicate the preceding Resolution, aed to recommend the subject thereof to the attentive consideration of his Excellency."

But on a resolution being moved to place the work on the estimates, it was decided by a majority not to do so. This result was owing to the Ottawa members suddenly changing their previous vote by the promise of the Government to build the Chats Canal, and to the influence of the Grand Trunk Engineers, who were loud in their statements that Canals could not compete with Railways.

The greatest opposition to the work of connecting the St. Lawrence with Lake Champlain has proceeded from citizens of Montreal, to which locality, in my opinion, it would be of more benefit to than any other. This opposition has arisen from the decision of the Department of Public Works and of the Engineers, that the proper place for its location on the St. Lawrence is above the Lachine Rapids, at Caughnawaga, it being argued that if so located it would injure Montreal, by carrying the trade past it. I entirely differ from this view of the matter, and, for the interests of Montreal would prefer the outlet at Caughnawaga to an outlet opposite the city for reasons which I will briefly refer to. It must be borne in mind that the Canal referred to, is a public work, to be built by public money, not for any sectional advantage, but for the general public interests. In her rivalry with the State of New York for the Western trade, Canada cannot afford to depart in the slightest degree from any locality which may secure the cheapest transport. When public works are constructed on this principle, then it is left to each locality to make the most of the natural advantages it may possess. The public interest is deeply involved in this work. We have seen that the St. Lawrence and Welland Canals, after deducting the receipts for Tolls, have cost the Province an outlay, in 1857, of upwards of £217,000. The loss for 1857 is by no means exceptional, as it will be found that, since

1850, the annual loss has ranged from £190,000 to £230,000. It is estimated that the commerce between the UNITED STATES and Western Canada alone affords a revenue to the State of New York for Tolls, of upwards of £500,000 per annum. If not only this trade, but a share of the vast Western States' trade could be made to pass through the Welland and St. Lawrence Canals into Lake Champlain, and to the Eastern States, as the quickest and cheapest route, instead of, by Oswego and Buffalo, it is a matter too plain for argument that the public interest of Canada would thereby be vastly promoted. Having made this, as I think, clear, I shall now continue to show what effect such a work would have in diminishing the price of ocean freight at Montreal, or equalising the rates with those of New York. It will be conceded that the tonnage requisite to move the raw products of the Interior to the East, must always be greater, and has always been greater than the tonnage necessary to move the representive value of these raw products in merchandise of all kinds from the East to the West. This being granted, it follows that, to whatever point these raw products come to meet the merchandise from the East, at that point, there must always, in the nature of the things, be an excess of tonnage. For instance, I have shewn that Oswego and Buffalo are the Lake Ports in which the great bulk of the Western trade centres, but although the propellers and sailing vessels arrive there fully loaded with corn, wheat, pork, flour, &c., yet there is not enough of iron, steel, crockery, silks, cottons, &c., to load them all back to furnish them with return cargoes. Hence, some have to take in ballast, and others are only partially loaded. such a supply of tonnage, freights from Oswego and Buffalo to the West are reduced to the very lowest or ballast rates, and this element in the cost of freight from the ocean Westward, has a powerful influence in attracting to New York, freight destined for the Western States. If the route was changed, as I have suggested, so that the Western vessels could descend the St. Lawrence to Montreal, or go into Lake Champlain, then there would always be at Montreal, or within call of her Merchants, any amount of return vessels, by which freights could be obtained at the same comparative rates current at Oswego and Buffalo.

In the rivalry, therefore, to secure the cheapest point for exports and imports, the obtaining at Montreal that abundant and constant supply of cheap freights, now in possession of Oswego and Buffalo, would act powerfully in attracting to the St. Lawrence, freight and passengers which now centre so exclusively in New York, and just in proportion to the extentof our power of attracting vessels with freight and passengers, up the St. Lawrence to meet the cheap Western freight, can we succeed in reducing open freights. The Atlantic voyage consists of two trips—one out-bound, the other homeward; and if the vessel comes out in ballast, she cannot afford to carry freight home so cheaply as the vessel which brought cargo out.

This at present is the case on the St. Lawrence, the great bulk of the ships come in ballast, and the voyage home has to make it up. At New York the vessel arrives with cargo, and can afford to carry back at a low rate.

Mr. Trautwine does not take this view of the trade on the St. Lawrence, and attributes the difference of freight to other causes, for instance, he says:—

"Now this idea of making Montreal the great transfer point of Western produce from Lake craft to sea-going vessels; and the basing of the suggestion upon the firm broad ground of the almost uninterrupted natural water-course from the very head of our great lakes to Europe, are grand and comprehensive conceptions; and the plausible minor arguments by which they are sustained, are calculated to excite our admiration, and to enlist our sympathies strongly in the cause. At first sight the position appears to be impregnable; our judgment is taken by surprise, and we are disposed to acquiesce in the assumption without cavil.

But unfortunately there exist very cogent counter-arguments, which, if they do not entirely refute and invalidate the foregoing reasonings, at least tend materially to diminish their force, and to suggest doubts respecting the practical result of their realization.

"We will briefly allude to some of the more important of these antagonistic views.

"The most formidable perhaps is the opinion entertained by many gentlemen of high commercial experience and observation, that even in the event that Western produce should arrive in large quantities at Montreal, it would be impossible to induce sea-going vessels to ascend

the St. Lawrence to receive it. The exports of purely agricultural countries always greatly exceed their imports in bulk or tonnage; usually in the proportion of 3 or 4 to 1. Foreign vessels therefore going to Montreal for this supposed accumulation of Western produce, must go in ballast; thus losing, as it were, one half their voyage;—whereas if they go to New York for that same produce, they can carry into that port a cargo which will be pretty sure of meeting a ready sale.

"This consideration, therefore, must weigh more heavily with the Western producer, than that of a reduction of a few cents per barrel in the charges which he may have to pay to reach the more accessible seaport, and must prompt him to prefer the other.

"If this argument be correct (and it certainly appears to me to be entirely irrefutable), then the export tonnage of Montreal must in a great measure be limited by that of her imports, and cannot be expected to augment in any greater ratio than they do. But as the population of Canada is rapidly increasing, and the demand for imported articles becoming proportionally greater, all precedent sustains us in the assumption that the exports will at least keep pace with them, although a considerable time may elapse before they will warrant any heavy expenditure for docks."

Mr. Trautwine's objections are here fairly put, and seem to him "irrefutable." Let us examine them. He says that

"This idea of making Montreal the great transfer point of Western produce from lake craft to sea-going vessels, and the basing of the suggestion upon the firm broad ground of the almost uninterrupted natural water-course from the very head of our great lakes to Europe, are grand and comprehensive conceptions; and the plausible minor arguments by which they are sustained are calculated to excite our admiration, and to enlist our sympathies strongly in the cause. At first sight the position appears to be impregnable: our judgment is taken by surprise, and we are disposed to acquiesce in the assumption without cavil."

Now, what are "the plausible minor arguments" which are given in support of making Montreal the great transfer point of Western produce, and which Mr. T. acknowledges "stands upon the fair broad ground of the almost uninterrupted natural watercourse from the very head of our great lakes to Europe." I have shewn, that with the Welland Canal, adapted for vessels of only \$50 tons burthen, and with no outlets from Montreal or near it by which the Eastern consuming markets can be reached, so cheap-

ly as from Oswego or Buffalo, it is impossible for property in any quantity to go below Oswego; and, by actual trade returns, I have shewn that this is the fact as regards the trade not only of the Western States, but of Canada West. These statements go beyond plausibility, and are irrefutable. I again state, that if the Welland Canal was enlarged, so that the vessels of 750 and 800 tons which now trade to Buffalo could proceed down to Montreal and to Lake Champlain, a route not only to Montreal but to all ports on Lake Champlain would thereby be secured, quicker in point of time and cheaper in point of expense than any now existing, or than it is possible to make, through the State of New This is not mere assertion. The actual comparative cost of moving produce by canal, lake and rivers, has been thoroughly investigated and the results acknowledged by such men as Messrs. McAlpine, Keefer, Shanley, Kirkwood, Clark, Killalay, Childe, Swift and Gamble, names which Mr. Trautwine will acknowledge as giving weight to any statement on engineering. Messrs. Childer Kirkwood & McAlpine declare, that with these works constructed and the enlarged Eric Canal in full operation, a ton of Western produce can be carried to Montreal at \$2.78, and to New York through Lake Champlain \$3.76, while by Buffalo it would cost \$5.30, and by the way of Oswego \$4.46.

Mr. Trautwine does not, in his Report, attempt to refute any of these statements, which are endorsed by all the other names referred to, in which I entirely concur, and which cannot, I think, be placed among "the plausible minor arguments." They constitute the basis of all the hopes I have of concentrating a large part of the Western Trade at Montreal. If incorrect, the errors should have been pointed out by Mr. Trautwine. But he has failed to do so. He has left the facts untouched. Now, what are the "cogent counter-arguments" of his own which, "if they do not refute and invalidate," at least "tend materially to diminish their force"?

Mr. Trautwine's remark "that the exports of purely agricultural countries, always greatly exceeds their imports" is exemplified in my previous statements of the surplus receipts of agricultural products in Buffalo and Oswego from the United States and Ca-

nada, compared with the exports from these ports of merchandise. The Eastern United States are largely engaged in manufacturing; they import their food from the West, and it is the surplus of such receipts after supplying this home demand as previously stated, that is exported from New York and other Atlantic ports, in vessels which, on their out-voyage bring cargo. It is by having this out-cargo, as has been before stated, that the ship at New York is prepared to carry back at cheaper rates than from Montreal. This is all true, but it must be borne in mind that the vessels coming to New York are loaded with goods, destined not for New York State alone, but principally for the Western States, and that these goods are shipped through the Erie Canal, to Buffalo and Oswego, and by this route, are at present carried to the West cheaper than by the St. Lawrence route to the West. I say at present, because as we have seen, the downward or Western trade, does not extend below Oswego on Lake Ontario. (I mean to any considerable amount,) and the cheap freights and the facilities for handling cargo there and at Buffalo, and in the United States Atlantic Ports, that give the present superiority to the Erie Canal route over that of the St. Lawrence.

Let us for a moment place the Lower St. Lawrence, with its imaginary fogs and dangers out of the question, and suppose that the irrefuted opinions of the engineers I have named are correct, and that the cheapest and quickest route by water from the Upper Lakes to New York and the Eastern States, diverged from the St. Lawrence at Caughnawaga. Would not the vessels carrying Western produce into Lake Champlain and into the Hudson, returning with the manufactures of the Eastern States, and with the goods brought by the foreign ships to New York, for distribution in the West, as they now do from Oswego and Buffalo. Now, unless Mr. Trautwine is prepared to deny the statements made by all the engineers named, it follows, that with the Welland Canal enlarged and the Canal into Lake Champlain built, for vessels of 800 tons, a cheaper route to the Eastern States would be opened up, than any now existing by any other route, or will exist even when the Erie Canal is enlarged. It is therefore evident that a large share at least of the trade would pass by that channel. Now,

the Montreal merchant is seven miles from this great marine water-line at Caughnawaga, but in connection with it by a canal of equal size. With such a vast stream of trade within seven miles of him, let us enquire what grounds he has to expect any part of it.

The produce having descended the St. Lawrence as far as Caughnawaga, must as we have seen, be either consumed in the Eastern States, or shipped from Atlantic ports. This produce is partly wanted for immediate consumption, but the greatest part is stored in New York and elsewhere, and held by the merchant either for sale, for consumption or for shipment. I hold that all such produce, not immediately wanted for consumption, and intended to be held for a market, could be stored at Montreal in docks, cheaper than in New York, and would be at a point equally available to supply the Eastern demand for consumption and for shipment to Europe. Caughnawaga is distant from Liverpool via the St. Lawrence 2689 miles, and from Liverpool via New York 3375 miles, and 395 of this island navigation. According to the statements of Messrs Childe, Kirkwood and McAlpine, property from this port could be shipped by vessel at Montreal and landed in Liverpool at 17 cents less per barrel, (after a handsome allowance against the St. Lawrence route for towage) than by the way of New York. There being this saving on the voyage to Liverpool, does it not seem reasonable to conclude that there would be an equal saving on the freight of goods destined for the Western States. coming through the St. Lawrence. In distance to Chicago the saving from Liverpool would be 689 miles. The ship coming to Montreal could transfer her cargo, with the Lake vessel, making only one transhipment against two by the way of New York, with 103 miles of canal navigation, against 211 miles by the New York route through Lake Champlain. In time also, the advantage on both the up and down voyage is very much in favour of the St. Lawrence route. On the Erie Canal the voyage from Buffalo to the Hudson, occupies about thirteen days, while Montreal can be reached from the Welland by propeller in four, and by sailing vessel in six days. If the Champlain route was in opera-

tion, Montreal would then have a command of the low freight Westward for the cargo of the ocean vessel coming up the St. Lawrence. What then is to prevent the import of the whole supplies for Western Canada and for the Western States, through the St. Lawrence. Imports from abroad are admitted to entry for customs duty at the ports on the Western Lakes on the same terms as at NewYork, namely, direct import with American Consul's certificate, and I see no obstacle to prevent branch houses from Montreal and Quebec being established in Chicago, Milwaukie or elsewhere, and imports made through the St. Lawrence for their supply. At present, with Oswego, the largest port on the Lakes, from which the Eastern States can be supplied, it is impossible that this trade can be done. The Government of Canada too, have aided the American merchant to compete with the Canadian merchant by a system of specific duties, while the American Government adopt the ad valorem system. The system, of specific duties although false in principle, is still in force. It obliges importers to pay a highduty on common goods, and on the highest priced goods the lowest duty. Nor is this all. Specific duties are almost exclusively charged on articles of bulk and weight, and it is bulk and weight we so much want, to give cargo to the outward ship, and thus furnish return cargo to the interior vessel. It will be found that the weight of the goods on which specific duties have been charged, will average for the last three years 50,000 tons, more than equal to the whole of thet onnage of sailing vessels from sea to Montreal in 1858, of these goods paying specific duties in 1857, £1,087,826 came from the United States, and only £276,724, from Great Britain, the British Colonies and other Foreign Countries.

One of Mr. Trautwine's cogent counter-arguments against the St. Lawrence route, and of course against any Docks, is "the high rates of insurance incident to the navigation of the River and Gulph of the St. Lawrence." On this point I deemed it best to write a note to Mr. Hart who has acted as the agent in Canada, for the "Sun" and other Marine Insurance Offices in New York for several years, and the following is his reply:—

MONTREAL, 4th December, 1858.

"Your letter calling my attention to Mr. Trautwine's report, and remarks on the subject of Insurance by the St. Lawrence route, I have to acknowledge. This gentleman depends a good deal on hearsay, and the old bug-bear of the dangers of the St. Lawrence, seems to have been one of his strong points against the successful use of the St. Lawrence route.

Some 8 or 10 years ago the rates of premium on the St. Lawrence were about double the rates now paid, and the cause was very apparent. Then, any vessel that could float was employed, in the St. Lawrence timber trade, and if, by any representation, this class of ship could get insured, it most probably ended in a sale of the vessel to the Underwriters; therefore the frauds practised on the Underwriters were put down as losses from the dangers of the St. Lawrence Navigation. What are the facts? As you and others know, the rate at present between May and October, is the same premium as charged from New York and other Atlantic ports of the United States. In October and November the rates would average double those charged from Atlantic United States ports, but when you take into consideration that the improvements on the St. Lawrence of Light Houses, Tug Steamers, Harbours of Refuge, have all been brought to bear within the last 5 years, the losses now by the St. Lawrence are reduced perhaps to the lowest per centage, taking the number of ships from the port of Quebec as compared with New York or Boston.

Out of a fleet of about 1200 vessels that cleared from Quebec this year, we know of but eight losses, a new ship and two old ones in the Gulf of the St. Lawrence, the other five were abandoned at sea, (out of the Gulf of the St. Lawrence) no doubt old and poor craft. I am convinced that a reduction by the St. Lawrence routes, on the October and November rates of Insurance, will be made for the coming year, and from my experience, feel satisfied that the winter rates of premiums from the Atlantic Ports of Britain or the United States, will be as high, if not higher, than those to be charged from the St. Lawrence for October and November risques, within next three years.

The Underwriters are now finding out that the best passages and finest weather for leaving the St. Lawrence, are between the 15th of October and 15th of November, avoiding the gales generally prevalent between 15th September and 15th October on the Atlantic.

Yours Truly,

THEODORE HART.

The following is the evidence of Captain C. L. Armstrong, at present Superintendent of Lake St. Peter Works, lately Insurance

Agent for the New York offices at Quebec, and thoroughly acquainted with the whole of the Gulf of the St. Lawrence, as given to Messrs. Childe, McAlpine and Kirkwood, but not before published:—

Navigation below Quebec, opens about the twenty-second of April, that is for ships from Europe.

A small craft came up to this port as early as March.

I crossed in an open boat on the 26th of March, 1856, between St. Flavien and the Manicouagan Shoals (about one hundred and seventy miles below Quebec), a distance of fifty-five miles.

I have had a good deal of experience, as commander of ships below Quebec, and as to fogs in the Gulf of St. Lawrence, below Quebec, have to state that the river and gulf, to the north of Newfoundland and Gaspé, is much more free of fogs, than on the coast of Nova Scotia and New Brunswick, and there is no reason whatever why the whole route to sea from Quebec, should not be made as safe as the route to Europe from the Atlantic ports, provided that lights could be constructed on Bird Rock, Cape Augille, nine lights in the Straits of Belle Isle, Manicouagan Shoals, Onehetedan, Cape Chat and Metan, on the Brandy Pots, and one on Hare Island Reef, Kamouraska, Crane Island, two leading lights at Berthier, and one on Point St. Lawrence.

The Gulf, above the Straits to the Port, is generally clear of fogs, while the whole coast in the straits and above, abound in natural harbours, up to this time but little known.

The general time of a sailing ship from Quebec to Liverpool, is about twenty days; and the same ship, in my opinion, would take two or three days longer from Boston, and about five days longer from New York. I mean in the voyage from Quebec through the Straits of Belle Isle.

No more expense is incurred to navigate the route from the St. Lawrence than from New York or Boston, except Insurance, which is the same during the summer months, but after the middle of September the rate advances, and there is a difference between the latter part of November, against the St. Lawrence of about thirty to forty per cent.; but this difference ought not to exist, and will not in my opinion exist, when the St. Lawrence below Quebec is properly lighted; but this difference does not exist to the same extent as regards steamers.

The towage of a ship from Quebec to Montreal, of fifteen hundred tons, drawing eighteen and nineteen feet, will cost £62 10s., and one-third of this amount less, towed down.

Vessels often save towage by sailing down,—about one-third of the vessels sail down without towage.

It is cheaper to tow fifteen hundred tons in one vessel than in several:

the cost, in my opinion, would be fully one-third less, or nearly one-half.

The rates of towage would be lessened very much by an increase of the number of ships requiring to be towed.

Fifteen years since, the rates of towage were much higher than at present, in consequence of the want of competition and the small number of vessels to be towed.

An inducement for vessels to be towed down, is the fact that only half pilotage is charged for vessels in charge of a steamer.

That he was acquainted with the route through the Gulf of St. Lawrence, and Straits of Belle Isle; that it was clear of shoals, and was generally preferred by all the Captains to whom it was known.

Up to the present time this channel, by the Straits, is in its natural state.

It abounds with natural Harbours of Refuge. It is eighteen miles wide at the entrance, and nine miles at the narrowest place, and is about fifty miles long.

It is now proposed by the Government to light the whole Gulf throughout so that Navigation may at all times be within view of some of these lights.

Fogs are not at all prevalent on the North shore of the Straits, and along the coast of Labrador, although more or less so on the rest of Newfoundland.

Vessels can occasionally leave Quebec on the first of April; steam vessels could come up to the River du Loup by the first of April, and there discharge freight for Canada. The Railway is now completed forty miles below Quebec, and is proposed to be extended one hundred and ten miles.

The Spring tides at Quebec are twenty-two feet, and the neap tides fourteen or fifteen feet.

The Trinity Board of Quebec also gave the following evidence on the same subject:—

The voyage to and from Quebec and Liverpool has, unfortunately for the Canada trade, been too long considered both difficult and dangerous in comparison with that of the Atlantic ports in North America, but practically it is believed, the facts do not bear out that opinion.

The Gulf and River have been carefully and accurately surveyed, the chains are good, the soundings well noted, the lights (being greatly increased in number) the buoys, beacons and signal guns are all advantageously placed, and taking a fair average of the losses by way of the St. Lawrence, it may be found that they are not greater, but rather of less extent, with reference to the number of ships employed, than the losses on the coast and approaches to the Atlantic sea-ports.

Take one instance in point. A most extensive ship-owning house, who are their own underwriters, only lost two ships during eleven years, out of 406 owned by them, engaged in the Quebec trade.

The river risks are also greatly lessened upon such sailing ships as avail themselves of the powerful tug-steamers, now plying on the Lower St. Lawrence.

Harbours of Refuge are not required, the sea-room below the Island of Bic being ample, and the anchorage under the lee of that island offering sufficient security for vessels seeking shelter there in stormy weather.

Old Bic harbour might be improved by piers and a wharf, so as to enable the steamships and sailing vessels to discharge cargoes there in the month of April, so soon as the railway now in progress is completed to Rimouski; thereby enabling merchants in the west to get their goods and ship their produce a month earlier in the Spring, and nearly a month later in the Fall, than they now do.

From Quebec westward the internal improvement in aid to the vast expanse of lake and river navigation, are of such extent as to afford every facility for the employment of any number of propellers or sailing vessels, as the trade may require.

The advantages of the St. Lawrence route for goods and passengers, as compared with that by the Atlantic Ports, are obvious: the distance is shorter, one-third of the voyage is comparatively in smooth water, and it is less costly; it needs only a glance at a map to see that the 700 miles from Quebec to Belle Isle are through a land-locked channel, and admitting that the rates of passage by steamer whether from Liverpool to New York, or Boston, or Liverpool to Quebec, were about equal, the great gain to the emigrant would be from Quebec to the West, supposing his destination to be Chicago or Wisconsin, he would be transported with his family, either by rail at \$7 per adult, or by propeller at \$4 per adult; whereas from the Atlantic ports, he would have to proceed by rail to Buffalo, and thence by steamer at \$8½ per adult, or by rail to Chicago, at a cost of \$10 per adult.

Mr. Trautwine says :--

Another argument against the possibility of securing this monopoly, is the fact, that the harbors of New York and Portland are open and accessible during the entire year, while that of Montreal is annually closed by ice for five months. Constancy and regularity are rapidly becoming more essential features in the transaction of heavy commercial operations between distant countries, and neutralize to a great extent the advantages which attach to long water communications subject to so serious a drawback as an entire suspension of business for five months annually. The business connections which must necessarily concen-

trate upon New York and Portland the great bulk of Western commerce during nearly one-half of the year, cannot be suspended and renewed periodically in favor of Montreal during the other half.

I hold a contrary view to this, and state that the Port of New York, or any other Atlantic port, is as effectually closed to Western trade by the cold of winter as is Montreal or Quebec. On this point Messrs. Childe, M'Alpine, and Kirkwood wrote as follows:—

The more Northern portion of the St. Lawrence route may lead to the assumption that it remains closed by ice later than the New York routes. But such is not the fact. The great body of water passing down the St. Lawrence, and its derivation from the Upper Lakes, the waters of which never attain the low temperature of the streams within the same region of country, seems to more than compensate for the more Northern latitude of this route.

The Tables in the Appendix will shew the dates of the first arrivals of sailing vessels at the Port of Quebec (indication of the River being free of ice), and the dates of the opening of the Port of Buffalo, and of the navigation upon the Eric and the Canadian Canals. (i)

The first has been furnished by the Trinity Board at Quebec, and the others have been taken from the report of the Canal Commissioners of the State of New York, from the Reports of the Canadian Board of Works, and other official reports.

The following is the Table referred to above, and is the result of a careful compilation from official data:—

TABLE of the dates of the opening and closing of the Navigation on the Western Lakes, and on the New York and Canadian Canals, and St. Lawrence, from 1847 to 1857.

=====, ================================											
No.		184	18.	18	49.	18	350.	18	51.	18	352.
		Opened.	Closed.	Opened.	Closed.	Opened.	Closed.	Opened.	Closed.	Opened.	Closed.
1	Straits of Mackinaw	April 11	· • • • • • • • • • • • • • • • • • • •	April 10		April 2		April 2	Nov. 30	May 2	Dec. 8
2	Port of Hamilton	Febr. 28	Dec. 25	March 28	Dec. 26	do do	Dec. 29	Nov. 22	Dec. 24	April 22	do 31
3	do Buffalo	April 9		do 25		March 25		April 2		do 20	•••••
4	do Oswego							•••••			
Б	do Montreal	April 18	Dec. 22	April 17	Dec. 9	April 16	Dec. 11	April 13	Dec. 6	April 28	Dec. 21
6	do Quebec	May 2	Nov. 21	do 28	Nov. 22	do 28	Nov. 30	do 20	Nov. 25	do 15	Nov. 25
7	do Bic				Dec. 19	March 18	Dec. 19	March 15	Dec. 20		
8	Erie Canal	May 1	Dec. 9	May 1	do 5	April 22	do 5	April do	do 5	April 20	Dec. 15
9	Welland Canal					do 1	do 12	do do	do 12	do 13	
10	Cornwall Canal	April 11	do. 8	April 13	do 6	do 20	do 7	do 25	do 5	May 1	Dec. 16
11	Lachine Canal	do 24	do. 11	do 21	do 8	do 27	do 10	do 23	do 10	do do	do 10

TABLE of the dates of the opening and closing of the Navigation,—Continued.

No.		1853.				1854.				1855.				1856.			1857.					
			Open	ed.	Clos	ed.	Open	ed.	Clos	ed.	Open	ed.	Clos	ed.	Opene	ed.	Close	ed.	Opene	d.	Closed	ι.
1	Straits	of Mackinaw	April	11	Dec.	9	April	24	Dec.	9	April	26	Dec.	3	May	1	Dec.	8	May	1	Dec.	6
2	Port of	Hamilton	do	5	do	30	do	4	do	18	do	14	do	24	April	21	do	18	April	4	January	31
3	do	Buffalo	do	14	 	• • • •	do	11	d.	6	do	21	do	14	May	2	do	12	May	13	Dec.	22
4	do	Oswego	Feb.	27	 .		Feb.	28			Mar.	19			April	15		• • •	April	2		• • •
5	đo	Montreal	April	18	Dec.	18	April	26	Dec.	6	April	30	Dec.	12	d9	24	Dec.	13	do	18	Dec.	14
6	đo	Quebec	do	24	Nov.	26	do	20	Nov.	29	May	6	Nov.	22	May	29					 	
7		Bic																				18
8	Erie Ca	ınal	April	20	do	15	Мау	1	do	3	May	1	S Dec	. 5 . 10	Мау	12	Dec.	10	{ May do	13	Nov.	23
9	Wellan	d Canal		• • •		••••			 .		April	16	do	12	April	26	do	13		• • •	Dec.	15
10	Cornwi	ıll Canal	April	29	Dec.	4	April	30	Dec.	10	May	1	do	9	May	2	do	2	May]	Dec.	12
11	Lachine	Canal	do	30	do	15	May	1	do	5	do	do	Nov.	30	do	1	Nov.	29	do	4	Nov.	30

"The mean for the last ten years, as derived from these tables, is as follows:

G. I. a.s.	Open	s.	Closes.	
Straits of Mackinaw	April	14	December	6
Port of Hamilton	do	1	do	28
Do. Buffalo	do	14	do	14
Do. Oswego	March	20		
Do. Montreal	April	20	December	11
Do. Quebec		29	November	24
Do. Bic			December	19
Erie Canal	April	28	do	7
Welland Canal		8	do	12
Cornwall Canal	do	25	do	8
Lachine Canal	do	28	do	8
St. Lawrence River, between Lake				•
Ontario, Montreal, and Lachine .	do	26	do	7
Do. between Montreal and Quebec.	do	24	do	10

"Taking into account the difference in time between the voyages from Lake Ontario to Albany or Quebec, and the dates of the opening of navigation on the two routes, it appears that the navigation is open about five days earlier and is closed about one day later on the St. Lawrence route than it is on the Eric Canal."

It is thus evident that the Welland Canal has, on the average of the last ten years, been open to commerce twenty days earlier and five days later than the Erie Canal, and that the port of Montreal is also open eight days earlier and four days later on the average of these ten years than the Erie Canal, so that the only communication after the close of navigation which Portland, Boston, and New York can have with the West or Western Canada is by railroad; and Montreal is nearer, on an average, to all these cities by rail than either Oswego or Buffalo.

In these remarks on the capability of the St. Lawrence to compete with the routes through the State of New York, I have contended that the port of Montreal can be made the cheapest and best point for the transfer between the ocean and the interior vessel. Mr. Trautwine demurs to this view, as the following extracts will show:—

"Again, it is urged against docks, that there is no special reason why the Lake propellors should not pass through the outlet lock of the

Lachine Canal at Montreal, and continue their voyage down the St. Lawrence to Quebec, there to meet the sea-going vessels; instead of requiring the latter to ascend the river to Montreal to meet the former. It is true that neat calculations have been made, which seem to show a slight preponderance, on the score of economy, in favor of the large steam-vessel going up and down, over two of half her tonnage going down and up. But the difference would in itself be too trivial to constitute in itself much more than a theoretical argument in favor of docks at Montreal."

"Again, the completion of the Victoria Bridge, for carrying the Grand Trunk Railway across the River St. Lawrence at Montreal, will open to that railway an uninterrupted line from Canada West to the seaport of Portland in Maine, and to Quebec. The effect which this road has already produced upon the Lake craft, driving many of them out of the business of transporting Western produce to Montreal for foreign shipment, gives every reason to suspect that when the Victoria Bridge shall relieve the Company from the necessity under which it now labors, of placing their freight in barges, and towing it across the river, a much greater proportion of Western produce will be carried by it past Montreal to Portland and Quebec; perhaps so much more as to retain Montreal nearly in her present condition, or at least to prevent that rapid increase in her commerce which many predict. Such of it as is put upon the railway at points westward from Montreal, and destined for shipment to Europe by way of the St. Lawrence will certainly not stop in Montreal, when in a few hours it can be carried to Quebec, 180 miles further."

In the opinions thus expressed, Mr. Trautwine is supported by Mr. Blackwell, the representative in Canada of the Grand Trunk Company, who states in his Report of last September to the London directors:—

"The lower sections of the line, from Montreal to Point Levi, St. Thomas, and Portland, may be said to call for no special remarks, excepting their want of connection by means of the Victoria Bridge with the western section. This link is so essential, that no correct estimate of the through traffic can be formed until it is completed, and without t we shall never be able fully to take advantage of the great facilities which will be afforded to Quebec shipping on the completion of the Pointe Levi docks, to load and unload Western goods and products. These extensive works, together with the wharves of Messrs. Forsyth & Co., and the additional accommodation we are affording the ocean steamers at our wharves, will undoubtedly be the means of securing to

Western-bound traffic which at present finds it way up the St. Lawrence to Montreal, so soon as our freight trains can cross the river at Montreal without break of guage or bulk."

These are statements which affect not only local interests, but the interests of the Province; for if true, it would appear that our intercommunications need not be improved, that docks are unnecessary at Montreal, and that, when the Victoria Bridge is completed, the great bulk of the Western trade will be carried by railroad past Montreal to Quebec. I have in another place demonstrated by facts the utter impossibility, during the summer season, (when freights rule at from 11 to 16 cents per 60 lbs. of wheat from Chicago, or in the same proportion at other places,) for the railroad to compete in heavy freight with the sailing vessel to Montreal. Now let us examine how the facts bear out the views of Mr. Trautwine and Mr. Blackwell as regards the power of the Quebec and Portland railways to compete with the ocean and river vessel from Montreal in the transport of produce and merchandise.

I have before stated that it is a received opinion among railway engineers and managers that to make any profit whatever in the carrying of heavy freight by railway, it is imperative that at least 14 cent per ton per mile should be received. The correctness of this principle has been acknowledged by the Grand Trunk Company in their refusal to take a less rate for flour to Portland than 45 cents per bbl. from Longueuil. I have myself sent over the Portland railway upwards of 100,000 bbls. of flour, and in no instance could I get the rate reduced below 45 cents, the agents affirming that it was impossible to take it less. The distance to Portland is 292 miles, which at 11 cents per mile would be 44 cents per bbl. of 10 bbls. to the ton. The distance to Point Levi, opposite Quebec, is say 180 miles, so that for every barrel carried to Point Levi it would be requisite to receive 27 cents to save from loss; and for every ton of goods upwards the rate would require to be \$2.70. For wheat, at 33½ bushels to the ton, the rate would require to be 8 cents per bushel.

The following letter from Messrs. L. Renand & Frère, copied from the Appendix to Messrs. Childe & M'Alpine's Report, shews

that flour is carried by river craft from Montreal to Quebec at 6½ cts., and wheat and other grain at 2½ cts. per bushel. The rate of insurance between Quebec and Montreal does not at any time exceed one half per cent.

MONTREAL, 13th November, 1857.

"As to the freight from Montreal to Quebec on Flour and Wheat, we have to say that the same is lower this year than we have ever before known it in our experience.

The lowest freight for Flour to Quebec by barge (usually of 150 tons) this season, has been 6½ cents per barrel of Flour, and for Wheat and other grain 2½ cents per bushel. By steamers of 750 tons, such as navigate the Upper St. Lawrence, or by the Mail boats, the rate has been usually 12½ cents on Flour, but very little grain is sent by this mode of conveyance, but is carried generally at proportionate rates to Flour. We had three barges engaged in the Quebec trade; the lowest freight this season of Coal and heavy goods has been 5s. 6d. per chaldron, up, and the highest 7s. 6d., or about 6s. on an average, while occasionally we have had as much as 10s. for bringing Coal from Quebec, per chaldron.

(Signed) L. RENAUD & FRÈRE.

P.S.—The rate of Freight on Flour and Wheat, as above by barge, is exclusive of towage, which is about £12 10s. for a barge of 150 tons.

L. R. & F.

The following statement of the actual expenses between Montreal and Quebec, of a ship of 1013 tons burthen per register, was furnished by Andrew Shaw, Esquire:—

Ship "Pride of Canada," 2nd Voyage, 1856.

				£		
Lake dues downwards, 1 1013 Tons 9d.,				37	19	9
Pilotage down,	• • • •			5	7	6
Towage to Quebec,				35	0	0
Lighterage,	5.	1 0	6	•		
Do.,	. 1	5 0	0			
Do.,	3	5 0	0	•••		••
	-			101	0	6
Ten days' Wharfage, 1013 1s. 4d.,	•••	• • • •	• • •	10	11	0

On board leaving Montreal, Minots Corn,31950
Draft 15, 81 feet,
Lightered and taken on board at Quebec, 14116

46066

In all 46066 Minots Corn delivered in England 5942 Quarters.

Montreal, 13th November, 1857.

Lake dues upward,	£37	19	9
Pilotage up,			
Towage from Quebec,			
Wharfage,			
			—

£146 15 9

The cost of moving the 31950 bushels was as near as possible 2 2-5 cents per bush., and as the channel is now deepened, so that the whole 46066 bush. could be taken on board at Montreal, the cost would now be 1 3-5 cents per bush.; and on the up freight, supposing the 1013 ton ship to carry in dead weight only 1150 tons, the cost would be 56 cts. per ton, the freight by sailing vessels would stand thus:—

TO	PORT	CLAN	D.		го с	QUEB	EC.	
	heat bush.		_		heat bush	•		our brl.
	c.	c.			c.			c.
By railway,	13	44		 	8 .			27
By river craft,								
By ocean ship,								

Even if these rates by water were doubled, still the railway could not compete. The same difference exists as to up freights.

The cost of bringing ocean steamers up to Montreal is shewn by the following statements, furnished by the agents of the several vessels, and all go to shew the superiority in cheapness of these vessels coming to the port of Montreal, which, of course, will be still further increased if the Lake dues are abolished and the necessary facilities for loading and discharging created. *Steam Ship "Caledonia," total measurement 1000 tons Register. Tonnage 798 (deducting engine room), Quebec to Montreal and back.

hage 190 (deducting chains room), & decode to men-			
QUEBEC TO MONTREAL.	٠		
Pilotage upwards,	£16	0	0
Wharfage, 798 tons—3 days at ½d.,	8	6	3
Lake dues—798 tons upwards, at 9d.,	29	18	6
Coal consumed (supposed), 20 tons, at 20s.,	20	0	0
	£74	4	9
MONTREAL TO QUEBEC.			
Pilotage downwards,	10	15	0
Wharfage, 798 tons—5 days at ½d.,	8	6	3
Lake dues—798 tons downwards, at 9d.,	29	18	6
Coals consumed, 15 tons, at 20s.,	15	0	0
	£63	19	9
RECAPITULATION.			
Expenses upwards,	74	4	9
Do. downwards,	63	19	9
	£138	4	6
STATEMENT of eertain expenses incurred by bringing the belonging to Montreal Ocean Steam Ship Company about on an average of three voyages in 1856, when the wriver enabled them to come up, drawing 15 feet 3 inches	ve Q ater	ueb	ec,
Pilotage above Quebec, up and down	£ 27	0	0
Lake dues	87	10	0
Wharfage at Montreal	24	10	0
Small Steamer, assisting out of harbour	6	5	0
Lighterage up, £125; Lighterage down, £100	225	0	0
Coals consumed up and down	100	0	. 0
	470	5	0

Note.—One of these Steamers arriving at Quebec, with a full cargo, has on board about 1000 tons goods; of which, on an average, there may be 200 tons for Quebec, 400 tons for Montreal, and 400 tons for places west of Montreal. She then draws 17½ feet water, and after discharging the Quebec goods we have to lighten up 320 tons, at a cost of 7s. 6d. per ton, and downward the same, at about 6s. per ton.

(Signed,)

EDMONSTONE, ALLAN & Co.

Montreal, 23rd November, 1857.

^{*} Furnished by H. L. Routh & Co.

These are something more than "neat calculations," and, to my mind, are conclusive that, even when the Bridge is finished, produce (if we had it to send,) cannot be carried by rail, either to Portland or Quebec, for shipment by sea, so cheap as it can be done from Montreal; and from the relative freight above Montreal being higher than below Montreal, where the competition of the ocean ship begins, it is not probable that it will be found cheaper for the interior vessel to proceed to Quebec.

In proof of this position I give the following statement from the three largest and oldest forwarding houses in Canada, as furnished to Messrs. McAlpine, Childe & Kirkwood:—

The undersigned, who are largely engaged in the forwarding business between the Upper Lakes and Ports of Montreal and Quebec, do hereby certify, that the rate of freight from Quebec to Montreal by sailing vessels, for heavy goods, has varied this season from one dollar to eight shillings per ton, while the rate for grain, from Montreal to Quebec, has been from $2\frac{1}{2}$ to 3 cents per bushel, and for flour five and a half to ten cents per barrel.

The rates for some years back have not varied much from the above.

Although we occasionally are compelled to send our steamers with freight to Quebec, we do so with reluctance, finding, as we do, these rates of freight unremunerative. Out of many strong grounds of objection to that port, we merely state a few, viz:—The detention caused by the limited accommodation for loading and discharging at suitable wharves; the great detention from the tidal hours, and the serious risk of grounding at low water.

We find that our freight steamers occupy nearly as much time in a trip from Montreal and Quebec, and back to this place, as hence to Toronto and back; while the earnings of the steamer during that time, will not exceed one-third the amount gained by her on the latter trip.

The freight from Quebec consists chiefly of salt, coals, railway iron and fish, articles which require nice calculation to avoid loss to the importer and forwarder, leaving but a very marrow margin for profits. The freight to the interior being necessarily low, prevents the loading of steamers with such freight except in part; and hence it is that they cannot visit profitably a port where only freight of that description can be had. Sailing craft, which are run at less expense, are consequently employed between Quebec and this place; and such is the uncertainty of the traffic, that in part of the months of May, June, September and October, the simultaneous arrival of a few ships laden with freight of the above description, caused the advance of freight by river craft from

Quebec to Montreal of from fifty to seventy-five per cent. As no foresight on the part of the importer or forwarder, who contracts for the freight through, can guard against such occurrences, they lose heavily by the advance of freight beyond its average range.

In confining ourselves to the foregoing remarks, we trust we have said enough to shew that steam-vessels, or others adapted to the trade of the interior, cannot go below Montreal for freight at unremunerative rates.

(Signed,)

" HOOKER JACQUES & Co.,

" JONES, BLACK & Co.,

" HENDERSON & HOLCOMB.

MONTREAL, 19th November, 1857.

I have no doubt Mr. Blackwell will change his opinions in reference to the cost of transport between Montreal and Quebec after a longer residence in Canada; but it is much to be regretted that it should be gravely asserted in an official document, by a gentleman at the head of such a line of railway as that of the Grand Trunk Railway of Canada, that its success depended on the completion of the Point Levi docks, Messrs. Forsyth & Co.'s wharves, and the Victoria Bridge. I predict that when all are finished, in the absence of other works, this railroad will be as powerless as it is at present, in attracting any considerable portion of that great stream of traffic, which flows past Lower Canada, into the United States, over the Suspension Bridge, and through the State of New York.

If the whole exports from Montreal in 1858 of wheat, pease, oats, corn, barley, flour, oatmeal, beef, pork, lard and butter, were carried by railway to Quebec, even at the rate of 1½ cents per ton per mile, the whole amount of gross receipts would only be £41,941; a sum wholly insufficient, even including other receipts, to pay interest on capital invested in the 180 miles to Quebec, and supposing the road to cost only £5000 per mile. The success of our Canadian railways is dependant, in my opinion, on a totally different line of policy; and, strange as it may seem, on the success and superiority of our water-lines of transport over those of the State of New York. I have shewn that the great flow of trade from the Western States and Canada West is through the Eric Canal, from Buffalo and Oswego. The railways running parallel with this line of navigation are the

most successful on this continent; and although they carry but little of the heavy freight, yet they are fully employed, carrying light and valuable freight-hogs, cattle, and sheep-which can afford and pay a much higher rate of freight than flour, wheat, &c., that are moved by sailing and steam vessels. Passengers follow the stream of trade; and, while the railway lines from Buffalo and the Great Western Railway passing over the Suspension Bridge are crowded with passengers, the Canadian or Grand Trunk line below Hamilton is comparatively deserted. The same foresight which expects such wonders to result from the Point Levi docks, Mr. Forsyth's wharves, and the completion of the Bridge at Montreal, also anticipates enormous results from connecting the Grand Trunk Railroad with Michigan Roads opposite These may pay from being in the American line of business, but they will prove merely feeders to the great New York lines, and fail in any way to attract freight or passengers below Hamilton. And this state of things must, in my opinion, continue until, by the enlargement of the Welland Canal, the improvement of the Rapids of the St. Lawrence, and the construction of a canal into Lake Champlain, Montreal is made a depot, where Western produce can be stored and held, for shipment to New York, Boston, Portland, the Lower Ports, Britain, or elsewhere. I have attempted to shew, and have supported my views with the testimony of eminent Enginers, (always excepting Mr. Trautwine), that with these works completed, property from the West could be laid down at Montreal at less cost than at any other point, for export by sea, or for distribution to the Eastern States, and that imports could be sent to the West via Montreal cheaper than is possible by any other route. In the proportion, therefore, as we succeed in making the great water-lines through Canada to Montreal and Lake Champlain superior to those of New York, just to the same extent will be the success of our railway system; and, while the sailing-vessel and propellor might be employed in carrying the heavy and bulky freight, the railways in Canada would be employed, as they are through New York, in the transport of freight which can afford to pay higher rates than by

water, and passengers from Canada West and the Western States would come to Montreal as a centre of trade, instead of going as they now do almost exclusively to New York and Boston. My strong conviction is, that the strength and influence of the Grand Trunk Company, instead of being wasted and worse than wasted on the construction of docks and wharves which can have no perceptible effect in increasing the revenues of the Company, should be concentrated in urging upon Government the absolute necessity of at once proceeding to enlarge the Welland Canal, and to connect the waters of the St. Lawrence with those of Lake Champlain, and of giving every aid they can for constructing docks at Montreal. Until this is done, disappointment will follow disappointment, notwithstanding the great facilities which will be afforded by the completion of the Victoria Bridge.

If these views are, as I believe them to be, sound and based on ascertained facts, then an amount of trade, with these works completed, would be attracted to Lower Canada, for which the accommodation in the harbours of Quebec and Montreal is totally inadequate. In 1852 the total number of vessels which arrived in Montreal was 192, and the gross tonnage 46,079, or an average of 240 tons each. In this year the arrivals are 191, of a gross tonnage of 70,183, or an average of 368 tons. This increasing size of vessels coming to the port requires more space, which will render additions necessary even for the present limited commerce. There are no facilities in the harbour, similar to those existing at Oswego and Buffalo, for handling grain, flour, &c. At these two points there are no less than 22 elevators, capable of storing 4,180,000 bushels of grain, with a capacity to receive, per day, 750,000 bushels. In the harbour of Montreal we have no elevators, and cannot have any. In the Lachine Canal we have only two, of a united storage capacity of 125,000 bushels.

In view, therefore, of our present wants, and under the belief that the Government of Canada will not fail to construct works so essential to the progress of the country, as I have pointed out, as well as from a conviction that docks at Point St. Charles can be constructed without adding any increase to present harbour dues, I shall proceed to examine the opinions offered by Mr. Trautwine on this subject, and correct what seem to me his erroneous conclusions.

The Harbour Commissioners of Montreal, conceiving that further harbour accommodation would in a few years be required, of a character different from what it was possible to obtain in the present port, and in magnitude corresponding with their improved channel from Montreal to Quebec, deemed it their duty as early as 1852 to cause surveys to be made of all the various localities, first by Messrs. Gzowski & Keefer, next by Mr. Forsyth, then by Messrs. Childe, McAlpine & Kirkwood. The whole of these gentlemen reported strongly in favour of making the improvements at Point St. Charles. In this opinion the Harbour Commissioners concurred; and in this opinion also the Montreal Board of Trade, at a special general meeting called to consider this subject, concurred.

The following is an extract from a letter addressed to the Harbour Commissioners from Commander Orlebar, R.N., and Admiralty Surveyor, when sounding the river and harbour this season:

"The very great improvements that the Harbour Commissioners have originated and completed;—the deepening of the channel to more than eighteen feet; the increased number of lights and buoys—all make it the more important to have Bayfield's survey of the river revised and speedily published, so that the public may know more generally the character of this noble river above Quebec, and its capabilities for the safe navigation of vessels of large draught. I think it is also required in connection with the vast improvements yet contemplated in the Harbour accommodation of Montreal; and when published will, I hope, convince the most sceptical that the proper terminus of the ocean trade is the city and harbour of Montreal; and that sound policy as well as a regard to their essential interests should urge the people of that city to the early extension of accommodation for the greatly increased amount of tonnage that will eventually frequent their Harbour.

"With the plan of the Montreal Harbour before me, and the Victoria Bridge in sight, I cannot hesitate in saying, the situation marked out for docks is the shoal flat extending from near the mouth of the Lachine Canal to the Victoria Bridge; and I cannot believe that much time will elapse before the harbour of Montreal shall possess that great desideratum of an enterprising mercantile community—a dock of sufficient extent to receive their shipping."

A very considerable number of citizens, however, principally residents at the east end of the city, were opposed to the construction of docks at Point St. Charles, and being seemingly in favour of a dock carried through the property of the Ladies of the Grey Nunnery, across McGill Street, and through the College property, the Harbour Commissioners invited a number of these gentlemen to meet them, which resulted in Mr. Trautwine of Philadelphia being called to survey and report upon the matter. seems, however, that this plan through the Nunnery and McGill Street has been abandoned, as it is not even referred to, and a totally new scheme projected, the idea of which belongs exclusively to Mr. Trautwine. There was first a project of what may be called "The Hochelaga Docks." In reference to this, Mr. Trautwine concurs with the other Engineers who had previously examined it, and condemns it as too costly and too distant from the business part of the city.

The next scheme was that called the "Viger-Square Docks," and Mr. Trautwine also concurs with the parties who had, under directions of the Harbour Commissioners, examined it, remarking as follows:—

"So thoroughly convinced am I of the entire inadvisability of investing money in any of the proposed dock projects, and so incontrovertible do the calculations of revenue into which I have already entered appear to me, that I should consider it a mere waste of time to prolong the discussion of this point.

"The intrinsic merits of the Viger-Square scheme had strongly prepossessed me in its favour; but a close investigation of all the points involved, compels me unwillingly to class it along with the others, as being nothing more than a capacious abyss, into which much money may be recklessly thrown away."

Another scheme is one which had previously been spoken of, but not surveyed or reported on, called by Mr. Trautwine, in his Report, the "Central Project," of which he remarks that—

"The most serious objection to this scheme, is the inconvenience which would result from the interruption of the Lachine Canal, for perhaps two years, by the proposed deepening, and by the construction of the locks, and of new face-wharves in Basins No. 1 and No. 2.

"Perhaps of no less weight is the objection that the canal-basins are already crowded; and the necessity for passing large sea-going vessels through them after the completion of the docks, would greatly increase the inconvenience now experienced."

I entirely concur in the objections here named, and think that apart from many other less serious objections, it would be impossible to shut up the Lachine Canal for two years—during the period of construction.

There then remain two projects, that of the docks at Point St. Charles, and the other with an entrance from the Harbour near the Lachine Canal Locks. The latter project Mr. Trautwine thinks the best, and it was suggested by himself. Let us examine the principal features.

The space on which Mr. Trautwine locates his plan of Docks occupies about 120 acres. A large part of this land is requisite for the construction of basins for canal purposes, and was purchased by me for this object, on account of the Province, in 1852. The enlargement of the Welland Canal will double the size of the vessels now trading to Lake Erie and the Upper Lakes, so that the present water-space in the canal would be totally insufficient to accommodate two-thirds of the present number of vessels of double capacity, and therefore all the land around the canal basins belonging to Government, and a great deal more, will be requisite, in my opinion, for canal purposes. It is this land which Mr. Trautwine proposes to take on which to construct his dock for ocean vessels.

Here, then, there is a very serious objection to this scheme if carried out. The utility of the canal must be sacrificed for the improvement of the harbonr, and sea going vessels accommodated at the expense of the river and canal craft. I have no space left to develope this idea, and to show how blind and fatal a policy it would be to cramp and fetter our interior trade, by appropriating the land required for its accommodation.

Water to supply this dock is to be taken from the Lachine Canal, on what is called the St. Gabriel level. The water in the dock would thus be five feet higher than McGill Street, or any of the streets in Griffintown; and as the dock wharves would be

five feet higher than the water, it follows, that no part of wharves could be reached from Wellington or McGill Streets except by an ascent of ten feet, and the first story of the buildings near the canal, and not included in its line, would be nearly overtopped by the canal. The docks would cross fourteen great thoroughfares between the harbour and the road to the Grand Trunk works. Instead of these fourteen streets, Mr. Trautwine proposes to accommodate the public by four draw-bridges, one on Commissioners Street, next to the harbour, one on Grey Nuns' Street, one on King Street, and one on Colborne Street, one slight objection to thie portion of his plan would be that the residents on Prince, Queen, George, Nazareth, Dalhousie, McGill, King, Ann, St. Charles, St. Etienne Streets, &c., would thus be prevented direct access to the present canal, or the numerous manufactories on the river, and would have to go round to some of the drawbridges referred to. Drawbridges in such a thoroughfare could not fail to prove of great inconvenience. Of course November is not so busy a month as the summer months, but on the 11th, 12th and 13th November 1858, from daylight to dark, say in 36 hours, there passed at Commissioners Street—

Cabs and carriages	1263
Carts and trucks	
Double-waggons	201
Double-carriages and omnibuses	120
Foot-passengers	

Now a lockage would occupy at least half an hour. There would in that time accumulate, at Common Street, 90 vehicles of all kinds, and 101 foot passengers. At the first bridge of the Lachine Canal, at Wellington Street, and the other streets where bridges are proposed, I find the passage to and fro to be nearly the same. Vessels would require to come out of the docks stern first, the breadth not being sufficient for them to turn round—extensive mill sites, and elevators, are laid out on the plan, but for which there is no water, all the water is leased out already, which the present capacity of the canal affords, and there is no provision in Mr. Trautwine's estimate for enlarging the Canal. I do not

pretend to critisice on Mr. Trautwine's views on points of engineer. ing, but I think I shall be strictly correct in stating that there must either be an independent feeder, for the use of the proposed docks, and for affording the necessary water power to drive the mills and elevators, which on all hands are admitted to be an essential part of the scheme, or the Lachine Canal must be enlarged to afford that supply of water. To do this the water would have to be drawn off the canal in winter, during the period of enlargement, and for such withdrawal of the water, every factory on the canal, holding a Lease from the Government, would have a claim for damages during the period when their factories were closed. But again, according to Mr. Mr. Trautwine's scheme I find that a gross error has been committed in estimating the value of the land proposed to be taken for this dock project. I have asked Messrs. Spier and Son for the details of their estimate of \$485,000, cited by Trautwine as the cost of land and demolition of the buildings. Their reply was, "That the price we have allowed in our estimate for land required for the dock, ranges from 5 shillings to one and three pence per superficial foot of English measure. The number of feet required is about 743,900 feet; this is from Grey Nun to Colborne Street, including a point of Mr. Logan's. The above does not include streets." Now here is a scheme for docks, embracing a surface of about 120 acres, and on which there are numerous buildings, all at present rented, and for this land Messrs. Spier & Son have heen requested to give the value to Colborne Street only-or for about 18 acres. What was the reason that, in comparing this scheme as to its cost with that of Point St. Charles, the value of the whole of the land required for its construction has not been estimated? It is not sufficient to say that the greater part of the land not estimated for, belongs to the Grand Trunk Company, or to the Province. The land is worth its value whoever it belongs to, and that value is one of the elements of Mr. Trautwfne's scheme of docks, in comparison with that of Point St. Charles. Although I purchased the whole of this land, and know its great value, yet I thought it best to request the well known contractors, Messrs. Brown & Watson, to estimate the value of the land and buildings which it would be necessary to purchase if Mr. Traut-

wine's scheme of docks was carried	out according	to	his	plans.
In reply I have the following:				

MONTREAL, 7th Dec., 1858.

Sir,—
In accordance with the request contained in your letter of the
30th ult., we have examined the ground required for the proposed Docks,
as well as the buildings thereon, and we submit the following as an
estimate of the cost, viz:—
Ground from the Port to the Flour Sheds on Canal, 824,100

We consider that the value of the building lots on the Point St. Charles plan, when the plan is finished would be one thousand dollars each.

We remain,

Your obedient servant servants,

BROWN & WATSON.

To Hon. John Young, Montreal.

P. S.—We wish it to be understood that the above estimate, for value of land and buildings is based on what we think is the present value, and not the prospective value arising out of the adoption of Mr. Trautwine's plan of docks.

B. & W.

The figures will therefore stand thus, taking Mr. Trautwine's estimates as correct:—

The total cost will be,\$	1,073,976
_	

We have thus a cost of,......\$2,488,938

not including damages to proprietors for streets closed up, nor damages to lease-holders of water-power on the canals for closing their mills and factories during the enlargement of the canal.

Let us now examine Mr. Trautwine's estimate for the docks at Point St. Charles. According to his figures the cost will be \$3,087,878.

Mr. T. adds 25 per cent for contingencies, of hazardous construction,	3 087 878
I have reason to believe there is no necessity for adding more than Mr. Forsyth does, say 10 per cent, and enquiry	0,001,010
on this subject brings me to the same conclusion,	308,787
\$	3,396,665
Mr. T.'s dock on his own plan has a lift of 25 feet,	•
cost for this,\$469,876 Yet he makes the cost of a lock on Point St. Charles	
Scheme of 20 feet lift, 583,441	
Upon enquiry from good authority, deduct difference,	113,567
Mr. T. estimates for the whole of the 11 piers; 4 only necess- sary at present, according to Mr. Forsyth's plans, deduct	
estimate for 7,	158,802
Lock K, connecting Lachine Canal with dock, is a Government work, and is on the Lachine Canal lands, and will	,
no doubt be constructed by the Canadian Government	133,267
Filling up lots not at all necessary at present, as parties pur- chasing will prefer building on the rock and geting	
cellar room thereby,	209,953
	\$615,587
There is left by the arrangement of this scheme of docks 121 lots 50×90, which, in such a position, are surely worth	•
£250, but I estimate them at only £150 each,	\$121,000
Cost of the docks at Point St. Charles, according to Mr. Trautwine's estimate,\$2	2,660,078
Against \$2,448,938 for the project through Griffintown.	

I have examined Mr. Forsyth's detailed estimates carefully. The prices for the various kinds of work differ from the prices named for the same work in Mr. Trautwine's estimate. On fixing his rates however, I am aware he spared no trouble to get correct

information; and I had also the testimony of the late Captain Childe, a man of great practical experience in his profession, that after a careful examintion of Mr.Forsyth's estimates, he found them amply sufficient to cover the whole expense of the Tail-Race and docks, not including the 7 piers, nor the lock to connect with the Lachine Canal, nor the earth filling at 0 in Mr. Trautwine's plan, and I have the most perfect confidence that Mr. Forsyth's estimate for the whole work of \$2,040,000 is correct and reliable, in which opinion Mr. Forsyth is also supported by Messrs Brown & Warson, who understand the nature of such a work as well as any contractors in the country.

As Mr. Trautwine says, "it appears to me utterly impossible to hesitate between the two plans."

By the one there is no water power, and can be none without a very considerable enlargement of the Lachine Canal. In the other, the finest water power on this continent is made available for public purposes. Messrs. Childe, McAlpine, and Kirkwood, on this subject, remark:

The value of a water-power thus located will be appreciated, when it is considered that throughout the whole grain-growing region of the West, there is almost none, certainly no amount of water-power at all adequate to the manufacture of the immense quantity of the cereals which must be exported from that region.

The value of such a power is enhanced by being located in close contiquity to the dense population along the Atlantic, where the Offal has the greatest value, and it is also increased, because it can be directly reached by Lake-craft without transhipment or drayage.

The whole available power at Blackrock, Lockport, Rochester, and Oswego has already been occupied.

These places are at a great distance from the sea-board.

. At Black Rock and Oswego, the Lake Vessels can discharge grain into the flouring mills, and the manufacturad flour can be loaded directly from the mills into canal boats. At the other places named, grain to be floured must be subjected to an extra transhipment, the cost of canal transport, and, in many cases, to an expensive drayage.

The plan of the contemplated Harbour of Montreal, provides for a large water-power, with the means of increasing it almost without limit, and is so located, that Lake vessels may discharge their cargoes of Grain designed for manufacture, lying alongside the flouring mills, and the grain so manufactured can be delivered on board of the ocean ships or steamers, as well as on cars for direct transportation to the East, without drayage.

The rapid growth of the trade at Oswego will best serve to illustrate the advantages which would be enjoyed at Montreal, by the construction of the proposed works. The present condition of the trade at Oswego is not alone due to the cheapness of the greater length of untaxed Lake navigation which it enjoys, combined with the advantage of receiving and manufacturing Grain, without the expense of transhipment or cartage.

At the Port of New York there is no water-power, and Western Grain designed for export from that Port, is subjected to the expenses of transhipment at the place where it is manufactured, or to the extra cost of the transport of the raw material on the Ocean. These expenses will be obviated by the consignment of Grain to Montreal, and it will there have another advantage in the better condition in which flour will be shipped, as the barrels will not be liable to any damage or loss in the exposure of the weather. This cannot be assumed at less than twenty-five cents per barrel, or five per cent on the cost of the article.

Mr. Trautwine admits that this plan of Dock is better adapted than any af the others to an economical application of its surplus water to milling purposes, inasmuch as the tail-water would discharge *directly* into the river, thus avoiding the expense of a long tail-race.

But Mr. Trautwine differs with Messrs. Childe and McAlpine as to the advantages for milling flour at Montreal, and as to the amount of damage by the exposure of that article in its transit from the interior. I have had some experience in such matters, and fully confirm all that is said on this point by Messrs. Childe and McAlpine. It is not so much the loss of small portions of the flour by carting, or by the barrels getting soiled, as the loss by being obliged to grind wheat in the interior during winter, and by the exposure to the heat during summer. This causes flour to sour on the voyage; and the loss thereby caused to shippers here and in New York, where it is longer exposed in canal boats, is, in my opinion, nearly equal to 25 cents per barrel on the whole quantity of flour milled in the interior. With the mills as proposed at the Point St. Charles Docks, any quantity could be manufactured, and the cities of New York and Boston, and the New

England States generally, could procure fresh flour at all times, and cheaper, as I have shown, than it could be obtained at Oswego, Rochester, or other milling points in the State of New York. Mr. Trautwine again says:

"Let us assume therefore that the enlargement of the Welland Canali locks will be effected ;-and that by this means Western flour and loose, grain may (as shown by Messrs. Childe, Kirkwood, and McAlpine) bebrought to Montreal at 17 cents per barrel of bulk, less than it can to New York by way of Oswego. Also, that of the entire quantity of these articles, now exported to foreign countries from our North-Eastern ports, namely, about one-third of all that is sent eastward to them or to-Montreal, (or say a bulk equal to four millions of barrels annually,) Montreal shall secure to herself the shipping of two-tdirds, or a bulk equal to 2,666,666 barrels. This is, at least, 2,000,000 more than she now sends down the St. Lawrence. She cannot expect to receive muchof the non-exported eight millions of barrels, because they are required chiefly for local consumption along their line of transportation; and in districts more accessible from New York than from Montreal. And even in case the entire 4,000,000 of barrels exported should pass through the latter city, I think we may assign the excess over 2,666,666 barrels to the Grand Trunk ;-so that the docks could not, under any circumstances, be expected to receive a greater proportion than what I have assigned to them; -especially if the Caughnawaga Canal project ever be carried into effect."

Messrs. Childe, Kirkwood, and McAlpine not only say that flour can be delivered in Montreal 17 cents less than it can be delivered in New York, but they also state, and Mr. Trautwine does not attempt a contradiction, that flour can be delivered in New York 8 cents less via the route of the St. Lawrence and Lake Champlain than by any other route, which is confirmatory of an opinion expressed by the Harbour Commissioners, "That the "St. Lawrence route, as a means of transport between Europe, the "Eastern States, Western Canada, and the Western States, has "not yet been fully developed; that if the Welland Canal were "enlarged, so as to admit the passage of vessels of 800 tons, and a "canal constructed to connect the St. Lawrence with Lake Champlain, and suitable facilities created in this port, so as to shorten "the stay of the Western and the Ocean vessel, and thus reduce "the cost of insurance, storage, and price of handling property, to

"the lowest possible rates, a vast increase of trade would thereby be attracted to the St. Lawrence, to the great advantage, not only of this port, but to the general public interests."

Mr. Trautwine thinks that docks could not under any circumstances be expected to receive a larger amount of bulk than 2,666,666 barrels, and more especially if the Caughnawaga project ever be carried into effect. It will be seen from my previous remarks, that it is through and by this Caughnawaga project alone that I expect the trade of Montreal to increase. It is by that project alone, that Messrs. Childe, Kirkwood, and McAlpine were enabled to place the route of the St. Lawrence as superior to any other in its cheapness of transit both to Montreal and New York, even to the route through New York, when the Erie Canal is enlarged and doubled in its capacity for trade. Without that project, neither Messrs. Childe, Kirkwood, nor McAlpine, could not, nor could any one else, advise the construction of the contemplated docks, because it would be impossible to show that, with our present means of transport, the produce of the interior could be carried with advantage lower than Oswego. When that project is completed, a channel is opened by which the merchant of the Western States or Western Canada can ship direct to New York, Boston, or the Eastern States, if he chooses, or he can store his property at Montreal, where I hold it can be done cheaper than is possible elsewhere, and have it at a point equally convenient to be shipped to Europe, to the Lower Ports, to Portland, to Boston, or to New York. In what a grand position would this place the merchant at Montreal! He has a channel for navigation open to him on the one side for vessels from sea of not less than 20 feet at the lowest water, with an inland navigation on the other side, extending to the head of Lake Superior, and by and by to the head-waters of the Saskatchewan, with railways to the West and the South in all directions, with a net-work of railways to the East, connecting the Lower Provinces and the Eastern Atlantic States, by a bridge across the St. Lawrence, and also with a line in contemplation to connect the St. Lawrence with the Pacific. By these works, he would be enabled to lay down products at Montreal at a less cost than they can be delivered at any other ocean-port in the continent, and at a point also where they are on the highway to be distributed, either for shipment to Europe, or to the Eastern States by water or by railway transport; besides being at a point to which imports from the world's markets can be brought and distributed for the supply of the vast interior, either by railroad or water, at the lowest possible cost of transport and with only one transhipment, between the ocean vessel which brings them to Montreal and the vessel which must carry them to the head of Lake Superior.

Mr. Trautwine states that under any circumstances the largest amount of property that might be attracted to the proposed docks would be equal to 2,666,666 bbls. This is an important statement, coming from such a source; but is it correct? On my authority, Mr. Trautwine states the receipts at Lake ports in the United States of loose grain and flour as equal in 1856 to 12,000,000 bbls.; and states, that about one third of this amount is exported from the Eastern Atlantic ports, say 4,000,000 bbls.; and that Montreal could not expect to get more than two thirds of this four millions, or say 2,666,666 bbls. It is true that the estimate of the receipts of grain and flour at the Lake ports in 1856 was 12,000,000 bbls, but I never stated that grain and flour were the only articles received at Lake ports, nor did I state that the 12,000,000 bbls. were received at tide-water in that year. I knew that a vast amount was distributed along the line of the canal before it reached tide-water. I give the following table showing the receipts at tide-water in 1856 :--

Statement of all the Property which came to the Hudson River on the Canals in 1856.

	QUANTIT	Y.
ARTICLES—DESCRIPTION.	Erie.	Erie.
THE FOREST.		
Fur and peltry, lbs.,	90,000	45
Boards and scantling, feet,	206,431,200	344,053
Shingles, M.,	61,784	7,72
Timber, cubic feet,	2,967,600	59,35
Staves, lbs.,	162,856,000	81,42
Wood, cords,	874	2,44
Ashes, pot and pearl, barrels,	52,207	14,35
Total of the forest,		509,40
AGRICULTURE.		
Product of animals.	79,662	12,74
Pork, barrels,	44,143;	7,06
Beef, barrels,	6,866,000	3,43
Bacon, lbs.,	5,676,000	2,83
Cheese, lbs.,	3,278,000	1,63
Butter, lbs.,	6,468,000	3,23
Wool, lbs.,	2,212,000	1,10
Hides, lbs.,	588,000	294
Total product of animals,		32,35
Vegetable food.		
Flour, brls	1,098,000	118,58
Wheat, bushels,	11,741,366	352,24
Rve. bushels	1,054,428	29,52
Corn. bushels	9,547,143	267,32
Corn meal, barrels,	6,157	65
Barley, bushels,	1,818,082	43,63
Oats, bushels,	5,4 73,875 39,6 20,000	87,58 19,61
Bran and ship stuffs, lbs.,	361,433	10,84
Peas and beans, bushels,	338,400	10,15
Potatoes, bushels,	738,000	36
Total vegetable food,		940,51
All other agricultural products.	704.000	
Cotton, lbs.,	184,000	9 57
Unmanufactured tobacco, lbs.,	1,156,000	3
Hemp, lbs.,	74,000 540,000	27
Clover and grass seed, lbs.,	3, 720,000	1,86
Domestic salt, lbs.,	210,000	1,86
Total manufactures,	 	20,20
TOTAL Manufactures,	, • • • • • • • • • • • • • • • •	,

	QUANTI	T¥.
ARTICLES—DESCRIFTION.	Erie.	Erie.
MERCHANDIZE.		
Sugar, lbs.,	12,000	-6
Molasses, lbs.,	12,000	6
Coffee, lbs.,	2,000	1
Nails, spikes and horse shoes, lbs.,	512,000	256
Iron and steel, lbs	858,000	429
Flint enamel, crockery and glassware, 1bs.,	346,000	173
All other merchandise, lbs.,	11,820,000	5,910
Railroad iron, lbs.,	1,176,000	588
Total merchandise,		7,369
Other articles.		
Live cattle, hogs and sheep, lbs.,	316,000	158
Stone, lime and clay, lbs.,	55,314,000	27,657
Gypsum, lbs.,	1,322,000	661
Mineral coal, lbs.,	41,646,000	20,823
Copper ore, lbs.,	9,816,000	4,908
Sundries, lbs.,	43,262,000	21,631
Total other articles,		75,838
Total,	 	1,587,130

If the manufactures and products of the State of New York' amounting to 374,850 tons is deducted from 1,587,130 tons, we have a receipt at tide water from Western Canada and the Western States, of 1,212,550 tons. Besides this, there arrived at tide water from Lake Champlain, by way of Ogdensburgh, &c., 536,-339 tons. If from this amount we deduct 349,366 tons, the products of the forest, (much of which is from Lower Canada,) we have 186,973 tons, which added to the above 1,212,555 tons makes 1,399,523, or an equivalent to say 14,000,000 barrels, and it is for the share or proportion of this amount arriving at tide water in the United States, that I hold Montreal can be made a competitor and not for the share of 4,000,000 barrels, supposed by Mr. Trautwine to be the amount exported. This is a mistake. however, for the exports from New York alone of Breadstuffs and Provisions in 1857, exceeded 5,000,000 barrels. I claim that the receipts now arriving at the tide water on the Hudson, could pass down the St. Lawrence, to the same point at tide water, quicker and cheaper than they are now taken there, or even when the Erie Canal is enlarged, can be taken there, I claim also that whether for export abroad, or for distribution throughout the Eastern States, Montreal is a better point than Albany, and that the amount likely to be received at Montreal when the Docks would be completed, is not two-thirds of 4,000,000, but at least one-third of the total receipts at Lake Ports, or say five million of barrels.

To compare with these large receipts at tide water in the State of New York, we have only the following paltry receipts to the 4th instant at this port:—

RECEIPTS OF PRODUCE FOR 1858.

Ashes	28430	barrels.
Flour	669,964	"
Wheat	1,774,464	bushels.
Indian Corn	105,087	
Pork	11,640	barrels.
Butter	17,568	kegs.
Barley	23,881	bushels.
Peas	177,908	4,6
Lard	2,416	kegs.
Beef	729	barrels.
Oatmeal	1,854	"
Oats	113,566	bushels.
Copper Ore	0	tons.

or 140,021 tons, equivalent to a bulk of 1,400,021 barrels, or about one-tenth of the same produce received at tide water in the State of New York. The charges now incurred on flour, wheat, &c., by cartage to store, cartage from store to ship, extra cooperage, extra insurance, extra labour and extra storage, cannot be calculated less, exclusive of all wharfages, than six cents per barrel over and above what the charges might be if facilities were created in Docks, by machinery and otherwise, for receiving and delivering property. On our present trade, which is equal to 1,400,021 barrels, this extra charge would at 6 cents amount to \$84,001. If, therefore, I am correct in assuming the rate to be 6 cents, (the rate named by Mr. Trautwine), it follows that Montreal, as a receiving and shipping port, is 6 cents per barrel inferior to Oswego or Buffalo, than it can be made, and that par-

ties sending property to Montreal for sale are subjected to a charge of six cents per barrel, from the want of those facilities which exist elsewhere. This charge of 6 cents, let it be remembered, has nothing to do with the charge of 1d for wharfage on exports of flour, but is a charge, as I have stated, owing to the want of those facilities which exists in every United States Lake Port for receiving and shipping the produce of the interior.

Let us enquire with Mr. Trautwine—will docks pay, and how could they be constructed without increasing the duty of the port?

The gross revenue of the Harbour of Montreal, in ordinary years, is about £24,000—this year it is not more than £20,000, but I shall suppose £24,000 to be the probable receipts under present arrangements. This amount is distributed as follows:—

Lake Debt	Interest,				. £	11,000
Harbour	do.,					7,000
Manageme	nt and ord	inary (exper	ıses,		1,750
Keeping w	harves in r	epair,				1,000
Dredging	in the Harb	our,				1,000
Carried to	"Rest" A	count	, .	•		2,250
					-	
						24.000

Supposing, however, that we obtained the 2,666,666 barrels, which Mr. Trautwine doubts our being able to get over and above our present receipts, the result would stand thus:

2,666,666 barrels, at 3 cents	\$79,998 39,873 53,000
Interest on cost of dealer according to Mr. Barrell	172,871
Interest on cost of docks, according to Mr. Forsyth's estimate \$2,040,000	
Surplus	\$50.471

The assumption therefore by Government of the Lake St. Pcter debt and the payment of the interest, would set at liberty a sum of £12,617, which could be applied to the construction of docks. If docks were constructed, so that wheat, corn, &c. could be elevated from the vessel at a cost of half a cent per bushel, instead of 3 cents as at present, and if flour could be

taken up by machinery, held at a low insurance, and delivered into vessel without cartage, &c. at a cost of 3 instead of 6 cents, it is evident that the docks would be used for the great bulk of the receipts, as shipments could also be made with equal facility by railway.

Now, irrespective of any increase over the trade of this year, which is much less than usual, let us see how docks could be constructed, based on this year's trade alone:

1,400,021 bbls, at 3 cents dock dues, would be Surplus from harbour revenue	\$39,87 3 53,000
Interest on docks on Mr. Forsyth's estimate of \$2,040,000, at 6 per cent	\$92,873
	122,400
Shewing a deficiency of	\$29,527

This deficiency is made without taking into consideration the loss of some \$84,000, for want of proper facilities, and without claiming any increase to our trade, which, from the reasons already given, and from the fact of its steady increase since 1850, when the total receipts were only equal to 743,000 bbls, affords good grounds for supposing that the same progress will continue, and more especially if increased facilities are created and the charges in the port lessened. I find also that in 1858 the tonnage inwards is 70,183, against 42,157 in 1848, and 36,631 in 1843.

Now the Grand Trunk Company are perhaps more interested in a scheme for docks than any other interest in Canada. The rates which they can charge for freight are influenced by the facilities afforded the ship at the point of shipment and by the cheapness with which cars can be loaded and unloaded. It is impossible to imagine anything more complete than the arrangements which could be obtained in the dock scheme at Point St. Charles, with water-power to use all kinds of machinery. It has therefore always been a part of my plan for building docks, that the Grand Trunk Company should assist in doing so. If that Company should see it their interest to aid in the construction of docks, and would contribute as a loan say £200,000, to be paid back by the Harbour Commissioners, with interest, so soon as

the business of the port warranted their doing so, a part of the dock could be fitted up for the business of the Grand Trunk Company, and an arrangement could be made binding on the Commissioners of the Harbour not to charge harbour dues on the business of the Grank Trunk Company so long as their advance and interest remained unpaid. If this were done, even supposing the docks to cost \$2,400,000, there would remain to be provided for by the Harbour Commissioners only £300,000, for which they would have in hand annually from harbour receipts (supposing Government to remit the Lake St. Peter debt) ample funds to defray interest, without calculating upon attracting any part of that vast trade, of which I think we could obtain the largest part if the improvements advised by me were carried into effect. The figures would then stand thus:

Cost of Docks, at Point St. Charles, say	
	\$1,600,000
Interest at 6 per cent.,)
Dock and Harbour dues on 1,329,110 bbls, at 3 cts. 39,873	\$ \$92,87 3

In this calculation I do not include any increase beyond present receipts.

I cannot therefore see any difficulty in carrying out this important work, which would effect a saving of at least 3 cents per bbl. on our whole trade, without that loss and damage to packages which are the result of the handling and carting necessary under present arrangements.

I have placed the financial view of this matter in its most unfavorable light. I would not be and have never been an advocate for increasing harbour dues, unless to obtain an object which would far outweigh the cost. In the construction of new docks it is not necessary to increase harbour dues to any extent, while the saving which would be effected would be very great. I think it of the greatest importance that every means should be taken to make the charges on shipping coming to the port as light as

possible; and it is only by providing conveniencies for receiving goods, that we can expect to do so. At present the receipts for harbour dues are principally from imports and vessels; the produce received from the interior pays almost nothing. For instance, in this year the whole receipts for wharfage on produce shipped for sea at the Port of Montreal were:—

Flour	£804
Wheat	419
Ashes	410
Corn	9
Pork	1
Butter	20
Pease	247
Lard	1
Beef	6
Oatmeal	5
Oats	20
	1943

If we adopt Mr. Trautwine's policy and wait till trade increases, without attempting to make our position more attractive for trade than it is, I fear we shall have to wait a long time; and we may give an impulse to other places, by our apathy, which it may take

years to recover from.

I have not made allusion to the increase which may be expected in the trade between the Atlantic and the West; but, considering the small area yet settled of the great territory to the West, no doubt its trade must increase rapidly and assume more importance year by year. Its extent in future it is impossible to predict, and the only safe calculations respecting it must be reduced from its past progress. Let me take an example of the increase in receipts of the articles, Wheat and Flour, shipped from Buffalo and Oswego in 1837, 1847 and 1855:—

	BUFFALO.		Oswego.		TOTAL.	
1837 1847 1855	Barrels. 126,855 1,903,357	Bushels. 450,350 5,816,362	Barrels. 66,002 610,494	Bushels.	1,474,356 19,099,118	

Montreal, in my opinion, possesses great natural advantages as a place of exchange and distribution between the ocean and interior vessel, and can be made the most convenient point on this continent for storing and holding property of all kinds for shipment in any direction, whether by rail or water, so that instead of 2,666,666 barrels, being attracted to Montreal out of the 14,000,000 barrels which arrive at tide-water, we have the power, in my opinion, of commanding the greater part of it. Of course this is a subject upon which there will be various opinions. I am supported in mine by men the most capable of judging in the Western States, and also by engineers of the highest eminence. If I am correct, look at the vast interests dependant on the paltry outlay to secure so great a result. We have the Grand Trunk and other railways costing £10,000,000, in which the people of Canada are interested to the extent of £4,500,000. On a large part of this grand undertaking there is comparatively no commerce, and what is now being done is done at a loss, to the ruin of other legitimate and necessary branches of transit. If Montreal possesses these vast advantages which I claim for it, as a depôt for imports and exports, whether to the East or to the Ocean, passengers by rail would follow the great stream of trade, as they now do, by railways running parallel to those water-lines which now transport the great bulk of imports and exports between the Atlantic and the interior. The rail would also perform its legitimate work, not in carrying heavy and bulky freight, where cheapness of transport is important, but in carrying articles of great value, and of perishable character, where cheapness of conveyance is not an object. I do not mean to say that railways will not carry heavy freight, for I know that the lateness of the season, the demand for or value of the article in market, or the necessity of the owner, frequently changes the movement from a slower to a more speedy conveyance. Then again, there is that vast trade in animals, for consumption and slaughtering, at the East, amounting last season to upwards of 670,000 in hogs, cattle and sheep, of which our railways will command a share as there is not a better point for this business than Montreal. These considerations lead me to look with perfect confidence to the future success of our Canadian railways, and to the belief that a double track of rails would be necessary to do the business which would flow on to them, if the policy I suggest was carried out, in the development of the route of the St. Lawrence and the great natural position of Montreal.

It is time to draw this letter to a close; and in doing so I cannot but express regret, at being forced to differ so widely from the views of Mr. Trautwine, in respect to Docks, and as to the capabilities of Montreal, as a point for concentrating a large portion of the Western Trade. I have no doubt, that in expressing his views, as he has done, he acted from a high sense of duty, but with the documents placed before him, I think he should have hesitated before dessenting so widely from all the eminent engineers, whose opinions have been given on the points in dispute, after long and intimate acquaintance with the trade of the West. More especially should Mr. Trautwine have so hesitated inasmuch as his line of professional duty had not previously directed his attention to that trade, or of the merits of the various routes in competition for the vast and increasing products of that region of country. Mr. Trautwine has not, as I understand, ever visited Buffalo, Chicago or the Western States, and it was most difficult after a visit of only a few weeks at Montreal, to understand, as well as most dangerous to speak authoritatively on matters which formed the especial study for years of engineers of equal eminence, whose views directly conflicting with those set forth by Mr. Trautwine, were endorsed by the members of the Board of Trade, after much consideration and long active mercantile experience. I cannot however, regret the discussion which has already arisen, and will yet arise on the merits of the projects of our Harbour improvements, and I trust that some of the "gentlemen of large commercial experience, and habits of close observation," who agree with Mr. Trautwine's views will be induced to support these views before the public, and point out the errors in the opinions expressed in relation to Docks at Point St. Charles, and as to the trade of this port, and in the many facts and arguments by which these opinions have been supported.

My own views on these points have long been before the public; they are the result of much reflection and considerable experience. It is well known that on various occasions, as well in Parliament as out of it, I have expressed my views on the unsatisfactory state of our trade with the west, and of the means by which that trade might be increased. Questions of greater importance, not merely to our local trade, but to the trade of the Province, cannot be agitated. Let it be remembered that the loss to the Province in 1857 from the Welland and St. Lawrence Canals was £217,000, and it will be seen that the interest on these unproductive works actually paid for the last three years, and which must be paid for the next three years, would be more than sufficient to enlarge the Welland Canal, to build the Caughnawaya Canal, and to improve the Rapids of the St. Lawrence.

Entertaining these views, it is not to be wondered at if I have persisted in keeping them before the public, although they should be stamped as visionary, and as "vague dreams of the imagination." It should also be remembered that other projects advocated by me, which at first were considered as unfavourably as the Dock at Point St. Charles, have been carried out. to the deepening of Lake St. Peter in the old channel, which was recommended by me in a report to the Board of Trade in 1846. and was at first covered with ridicule, but which was finally adopted, and the Government works abandoned after an expenditure of about £75,000. In the same year, I suggested to the Directors of the St. Lawrence and Atlantic Railroad Company the necessity of bridging the St. Lawrence, and recommended as the best site a point a little below the Nun's Island. I certainly never dreamed of so noble a work as that now being erected. My idea went no further than a bridge of wood and stone. The conception of the bridge in its present form is due to Alexander M. Ross, Esquire, who examined the locality and first mentioned the present mode of construction to me when on a boat on the spot I was trying to point out its advantages. I brought the project before the public at various times from 1846 to 1852, when, at my suggeston, its construction was made the means of a compromise between the Montreal and Kingston Railway and the Grand Trunk Company.

As Chief Commissioner of Public Works I was the first to suggest the establishment of a line of steamers from the St. Lawrence by means of a subsidy to be paid by Canada alone, and the views then held will be seen from the following extract from the Public Works' Report of 1851:—

"From extensive inquiry, we believe that a safe route exists for steamers and sailing vessels through the Straits of Belle Isle. The distance from Liverpool to Quebec, coming through these Straits, is 400 miles less than from Liverpool to New York, which, in conjunction with smooth water from the Straits to Quebec, will enable a saving to be made of fully two and a half days in the voyage, and as the English mails usually arrive in Quebec some 36 to 48 hours after their arrival in Boston, there is no good reason why the proposed line of steamers should not be able to deliver their mails in Quebec and Montreal, in less time than they are now delivered coming through American Territory, and with vessels of the same speed as those now plying to Boston and New York, why the mails from England, with railroads from Quebec to Detroit, should not only be delivered throughout Canada, in less time than at present, but that this would also be the best route for mails destined for the Eastern and Western States. To make the route, however through the Straits of Belle Isle effective, more light-houses are required. At present there is only one light from Quebec along the whole North Shore to the entrance of the Straits of Belle Isle, a distance of some 800 miles. It is therefore recommended that a light be placed on Belle Isle, one at Cape Normand, one at Forteau Bay, one on the West point of Anticosti, one on the north shore of Anticosti, and another on the Main North Shore nearly opposite.

"Authority for the erection of some of these lights would have to be obtained from the Government of Newfoundland. These, with the other lights, for which appropriations have already been made, will do much to improve the navigation of the Lower St. Lawrence, and lessen the cost of insurance on both ships and cargoes, in all of which improvements none are so much interested as the Agriculturalists of Canada."

It is unnecessary to say how fully the fine line of steamers, now in successful operation, has verified the views then entertained, and how they have advanced not merely the trade, but the honor and reputation of the Province. I was one of the promoters of the exhibition of Canadian Industry in the London Exhibition of 1851, and moved the first resolution to that effect, and suggested and actively aided Canada taking a part in the

Paris Exhibition,—the good results of which projects need not be insisted upon.

If I allude to these matters here, it is not from mere feeling of vanity, but rather from a pardonable, and, I think, laudable pride in being associated with such undertakings, and with a view also of suggesting to those who are disposed to blame what they call my pertinacity in advocating the great projects referred to in the this letter, that these projects deserve careful consideration, and are based upon facts and arguments which, I believe, will recommend themselves sooner or later to the judgment of all who will take the trouble to examine them with attention, and which have already received the support of many of the most intelligent merchants in this city. It may turn out years hence, that the justice and prudence of the course which I have urged, and shall continue to press upon the Government and the public, in respect of the necessity of at once enlarging our Harbour accommodation and the Welland Canal, and of constructing the Caughnawaga Canal, will be as plain and palpable, as in the cases above referred to. If the views entertained by me as to the position and capabilities of Montreal referred to are incorrect and those mentioned by Mr. Trautwine and Mr. Blackwell are well-founded, I freely admit that it would be the extreme of folly to engage in any expensive Dock Improvements, and it is equally clear that the expenditure in Lake St. Peter has been made to very little purpose, and that the merchants in Montreal must be content to receive the merest fraction of the great trade of the West, and to see the stream of commerce constantly diverted from the natural Water Channel connecting the Lake with the ocean.

Before acquiescing in such a result, it appears to me that far more convincing arguments, and better considered figures and facts are required than those I have been commenting upon, and that the citizens of Montreal should examine with the greatest possible attention, the views advanced on the great projects now under consideration, and decide upon their real merits.

JOHN YOUNG.

MONTREAL, 10th Dec., 1858.