

same from Quebec to Montreal, even at the low rates of freight of last season, would be fully £185; while, on the other hand, the tonnage duty on the same vessel, passing through the improved channel with her whole cargo on board, will be only at the present rate of tonnage duty £12 10s, showing a saving on the trip of £152 10s; a saving which seems to be conclusive as respects the question under discussion.

But it may be answered by objectors that the regular trader makes two voyages in the year, pays tonnage duty both voyages, and yet requires to use the improved channel only in the fall of the year. Granting this as true, it still follows that the vessel will be a gainer in the fall of the year, after deducting the dues for both trips, of £130, as shown in detail by the statement already referred to. And in the same manner it might be shown, that the vessel would profit on her outward trips, from the deepening of the Channel; but it is considered unnecessary to multiply proofs where the case is so plain.

It is not, however, to the limited point of view thus far presented, that the Commissioners would wish to confine their examination of this important question. On the contrary, in contemplating the benefits likely to result from deepening the channel, they consider themselves warranted in expecting that vessels of much larger tonnage than those hitherto used in the trade with Montreal, will be employed therein, after the improvements are completed; and it is from this point of view that they draw the most favorable conclusions as to the benefits to be realized, for it seems to them clear that, if vessels of 800 to 1000 tons burthen can be enabled to reach Montreal throughout the season of navigation, without the necessity of employing lighters as auxiliaries, and thus connecting with the large craft now employed in the inland trade with the West, that then the chief desideratum will be attained for enabling Montreal to compete with the most favored seaports elsewhere for the carrying trade, and the commerce of that immense region; and that little else will be required to give permanence to her prosperity, except the allowing the vessels of all nations to resort freely to her wharves in the pursuits of commerce.

With such views, and looking forward confidently to an increase of trade from the causes above referred to, the Commissioners, I am instructed to say, have also thought it their duty to anticipate the actual necessity for increased harbor accommodation; and, accordingly, some months ago, directed their Engineer, C. S. Gzowski, Esq., assisted by T. C. Keefer, Esq., to make a complete survey of the harbor, for the purpose of ascertaining to what extent accommodation could be provided for the water-borne traffic of the city. That survey has been completed, and the Commissioners hope in a short time to receive the report and plans of the Engineers, which they will do themselves the honor of submitting on receipt, for His Excellency's consideration. In the meantime, however, I am directed to remark that the survey has demonstrated that it is practicable to provide accommodation within the harbor for any probable increase of trade, at a cost which may be considered not excessive, when compared with the importance of the interests at stake, and the benefits to result from the expenditure.

I have the honor to be, Sir,

Your most obedient servant,  
JNO. GLASS,  
Secretary.

Hon. A. N. Morin, M. P.,  
Provincial Secretary,  
Quebec.

#### APPENDIX A.

A vessel of 500 tons burthen, loaded with a full cargo for Montreal, will draw on her inward trip generally about 16 feet 9 inches, and will carry, on an average, about 600 tons of dead weight, or 1000 tons composed of weight and measurement goods together.

The same vessel, drawing only 11 feet of water (low water on the flats of Lake St. Peter), would be little more than able to stand upright, and would have very little cargo on board.

The same vessel, drawing 12 feet of water, might have on board, as cargo, 250 tons of dead weight, or 350 to 400 tons of weight and measurement goods together.

These facts have been ascertained from merchants well acquainted with the subject, and form what may be considered the general ruler of the case.

Reasoning, then, from the foregoing data, it follows that, supposing the channel in Lake St. Peter were not improved, the generality of 500 ton vessels, loaded in full for Montreal, would have to lighter up in the fall of the year, with even 12 feet of water in the Lake (a foot more than often prevails), fully 600 tons of cargo, composed of weight and measurement goods together; and the cost of doing so—ascertained from merchants and others engaged in the business—would be from 5s to 6s per ton all round, independent of the towage of the vessel.

Assuming, then, the cost of freight at the average rate of 5s 6d per ton, all round, the charge for lightering 600 tons of cargo would be £165; while, on the other hand, the tonnage duty upon the same vessel, passing through the improved Channel in the Lake, with a full cargo on board, would be at the present rate of duty only £12 10s—showing a net gain to the vessel from deepening the Channel of £152 10s on the inward fall trip. But further; supposing the vessel to be a regular trader, making two voyages in the year, and deducting from the said gain the tonnage duty paid upon the spring inward trip also, the vessel would still be a gainer on the two trips of £130, from the substitution of tonnage duty for lighterage.

The above, however, is not the only saving to the vessel; for to it must be added, a reasonable allowance for damage done to cargo in the operation of transhipping—also the cost of transhipping—and the expence arising from the vessel's being delayed by it; all which would involve, in the case supposed, a very considerable expenditure.

The saving effected by a vessel on her outward trips might also be shown in detail; but it is considered unnecessary to enlarge upon so self-evident a point.

(Reports referred to in Mr. Glass's letter.)

REPORT OF C. S. GZOWSKI, ESQUIRE, RESPECTING WORKS CARRIED ON IN LAKE ST. PETER, THE CHANNEL OF THE RIVER ST. LAWRENCE, AND THE HARBOUR OF MONTREAL, FOR THE SEASON 1852.

MONTREAL, 18th December, 1852.

Sir,—On the withdrawal of the vessels engaged in the work of improving the channel through Lake St. Peter and their removal to winter quarters, I have the pleasure of submitting, for the information of the Harbour Commissioners, a brief report of the operations during the last season, and of the results attained.

The operations on the Lake were commenced in the latter part of May, and prosecuted with