

But even, should the cost be raised from £45,197, (the estimate for the Durham-boat improvement,) to £80,000, or £100,000, the difference will be far more than counterbalanced by the superior advantages. This change will enable forwarding to be done by steam-boats adapted to conveying passengers, and each boat towing two covered barges containing freight equal to 4000 barrels of flour, at the low prices for the latter of 8d. per bbl. from Prescott, or 10d. from Kingston, to Montreal, and up of 11d. from Montreal to Prescott, or 1s. to Kingston.

But to proceed to the comparison. The chief objects to be attained are *safety, expedition, cheapness, and certainty*. In considering the comparative merits of the two routes the committee begin with *safety*.

1. All those who are conversant with the mode of navigating the St. Lawrence between Montreal and Prescott are aware that the losses and injuries to freight have chiefly arisen from one of three causes. 1. Leakage of boats. 2. Removal of goods from the boats at the portages and exposure to wet while undergoing cartage. 3. The dangers of the navigation. To the first cause of damage leakage, the boats on both routes will be equally liable and it can only be avoided by care and precaution. The second and third causes of loss will be done away by the proposed improvements of the river. To the two last forwarding by the Rideau route will continue to be liable, at least until the works on the Ottawa river are completed. At present it is found cheaper and more advantageous to send produce from the neighborhood of Perth, round by Kingston and down the St. Lawrence to Montreal, than by the Rideau Canal and Ottawa river. But supposing the improvements contemplated on both routes are accomplished. And will not the St. Lawrence be equally safe for forwarding as the Rideau Canal and Ottawa river? Will not produce and merchandize in covered Barges towed by Steam Boats on the St. Lawrence, be as secure from wet or damage as if in Erie Steam Boats and Barges on the Rideau route? It would be strange if they would not. But further, would they not be less liable to loss on the St. Lawrence? With the exception of some short cuts by canals to avoid the rapids, the broad expanse of water in the St. Lawrence and its Lakes would enable almost any number of Steam Boats to pass and repass each other with perfect ease and safety. Could this be the case along the line of the Rideau Canal? Far otherwise. Pent up in a narrow, and generally shallow channel, Steam Boats with Barges in tow would pass with some difficulty. There would be constant danger of grounding, or coming in contact and causing leakage and exposure of the loading to wet and loss. So liable, indeed, would the Boats of the Rideau Canal be to such accidents that it is extremely doubtful if it could be navigated at all by them during the least darkness in the night. In point of safety, therefore, it is evident, that for forwarding, the St. Lawrence improved, would not only be fully equal, but somewhat superior to the Rideau route.

2. Next, as to *expedition*. A Steamboat leaving Kingston with two Barges in tow for Montreal, by the Rideau Canal, must ascend 165 feet of Lockage to attain the summit level, then descend about 290 feet more to arrive at the Ottawa river. In the Ottawa there must be a farther descent by Lockage and another in the Lachine Canal. Assuming the two last descents to be 45 feet, (they are probably more,) and there would be on the whole line 500 feet of Lockage, on which there are about 60 Locks. In going and returning between Montreal and Kingston, by this route, Boats must pass 500 feet of Lockage and 60 Locks twice, making equal to 1000 feet of Lockage and 120 Locks. Now, considering these Locks to be scattered along the whole line of the route, the time required to unfasten and fasten the Barges in tow, letting off and getting up steam and other delays, and that each Boat and Barge must pass every Lock separately, it must be admitted that 10 minutes to each Boat and Barge in passing a Lock is a very small allowance: making to a Steamboat and its two Barges 30 minutes. At this rate a Steamboat with its Barges would occupy each trip from Kingston to Montreal and back again two days and a half in passing the Locks only!

Again, supposing produce and merchandize are to be transmitted between the country above Kingston and Montreal. A large Steam Boat laden arrives at Kingston from above, and her loading is transferred to the Rideau Canal Steamboats and Barges. From Kingston to Montreal, via the Rideau Canal, the distance is estimated at 234 miles. Going and returning, 508 miles. Allowing each Steamboat with its two Barges in tow, to progress at the rate of 120 miles per day, (which is certainly a great speed for a small Steamboat, towing 2 Barges with a freight equal to 4000 barrels of flour, subject to be delayed by passing other Boats with Barges in tow and dark nights in a narrow channel and by waiting for other Boats to pass the Locks,) and it will require something more than 4 days and 5 1-2 hours to go and return. Add, say 6 1-2 hours for hindrance from currents, in ascending from Montreal, and the account for one trip stands thus:

Kingston to Montreal and back again,.....	4 days, 5 1-2 hours,
Hindrance from currents, in ascending,	“ 6 1-2 “
Passing Locks, 2 1-2 days, or	2 “ 12 “

Total,

7 days.