

on No 1, commences. There it turns off in the direction of the River, until it reaches the Bank, near the head of the Long Sault, thence along the margin of the River to the new Store-house, thence a towing path along the river to Dr. Archibald's Point.

This route will cost £17,308 15 0 being £8,935 18 4 less than No. 1, and as it will be less liable to contingencies when completed, we think it decidedly the best route.

From Archibald's Point to Point Avoyon, and thence to Rapid Plat, we make only one entire cut for a distance of 30 chains at Pine-tree Point, the average depth 4 feet; this is necessary in order to avoid a difficult sand shoal.

For the remainder of the distance the expense consists in forming a towing path, deepening shoals and in erecting bridges.

Expense for this distance (16 miles 34 chains) £4,825 9 0

At Rapid Plat we recommend a broad and substantial towing path along the water's edge. The current near the shore is not very strong, being checked by counter currents or eddies. average rate, 5 miles per hour.

The resistance to be overcome in a current of 5 miles per hour, when compared with a Canal or River of 60 feet surface is as 3 1-2 to 7 hence the objection to towing against a current in a canal of limited dimensions, does not apply with the same force, where there is a broad expanse of water as along the Saint Lawrence. This fact is exemplified on the Welland Canal in which there is a succession of broad reservoirs.

Mr. Clowes proposes making an entire Canal round this rapid, the cost of which he estimates at £28 178 0 0, an expense in my opinion, the difficulties do not warrant. The proposed plan will answer every purpose, and only cost £1,259 10 8

The ordinary expense of a towing path deepening shoals and erecting bridges for the convenience of towing is incurred from the head of this Rapid to Shaver's Island, a distance of 8 1-4 miles, which we estimate at £3,116 7 6

In order to pass Presque Isle, we leave the River at Station No. 530, and make a Canal 72 chains, place a lock of 3 ft. lift, and erect a small dam at the foot of the Island,

The cost of which will be £1,626 2 6

From the head of Presque Isle to Point Cardinal, the distance is 2 miles, and 62 chains, and will require an expenditure of

£648 1 0

At Point Cardinal, £877 5 0

From Point Cardinal to the foot of Rapid Au Galloup, the distance is 1 mile and 58 chains.

Estimated cost, £742 11 0