closing bank will be made water tight by a vertical puddle wall, and covered on the outside slope by the rock excavated from the inside and bottom. At the centre of the north side a ship-lock, 75 by 400 feet chamber, will connect the enclosed space with the present harbour and river channel. Thus by a lock-lift of 20 feet, and the shelter afforded by the railway, you will acquire for first-class sea-going vessels as much useful area as is now furnished by the unprotected river harbour for river and coastwise transports. We believe that a dock-harbour thus situated, will be perfectly safe from water and ice floods, and meet fully and substantially all of the requirements before stated:—1st. As a depository for grain, flour, and prepared lumber from the west and north, and for cargoes of foreign merchandise; 2nd. As a safe place for storage, for ship-building, repairs, and for milling or manufacturing purposes; 3rd. As most convenient for communication with both the River, Harbour and Lachine Canal; 4th. As near as practicable to the city (the centre being ¾ths of a mile from the Merchants' Exchange), and of more convenient access by carts and cars than any erections could be, for enclosing the present harbour; and 6th. As peculiarly well adapted by absence of currents for bringing the lake and sea-going vessels side by side for the cheapest transhipment of rolling freights and lumber, or to the same warehouse for grain. All these objects and uses unite to make Point St. Charles the most suitable place for your harbour improvement; while the 7th and last consideration, for bringing here a large quantity of water for dock and milling purposes, cannot be applied to any of other locations without costing more than it is worth.

"Three modes of supplying water for dock purposes at this point are suggested. First, from the Lachine Canal, by increasing the section of said canal every where to its full width, which would afford enough surplus water to supply the dock, and with less current probably to obstruct navigation than is now experienced in the narrow rocky reaches above.

"Second, from the tail-race of the Water-Works, which would give an ample supply as long as the pumps shall be worked by water-power, the bottom of the wheels being four feet above the surface of water in the proposed dock; and the distance being 1¾ miles, gives fall sufficient to prevent back water upon the wheels.

"But neither of these sources will be as constantly reliable as is desired. At best, both are but secondary to other and prior uses; while the regular working of the harbour locks is of the utmost importance, and should not be subject to adverse control or accidents, which might at times cut off the supply. An independent source therefore will be greatly preferable, and this is happily at hand, forming the third mode of supply, which is to take water from the head of the Lower Lachine Rapids above Knox's mill by an open canal 5½ miles long with a mean width of 20 feet and depth of 7 feet, and a fall of 13¼ feet, which will deliver at Point St. Charles three times as much water as the dock will require, for the estimated cost of £80,125, including right of way for a canal three times wider and ten feet deep, which may be made to bring down a very large amount of water for manufacturing purposes, beyond what will be needed for the dock.

"In fact there is a legitimate relation between the manufacture of flour and the very extensive traffic in wheat and flour which the new dock is designed to accommodate; and when joined to the cheap freights of seven to nine hundred ton vessels west from Montreal, and with one thousand to twenty-five hundred tons sea-going vessels east from the same port, and with Railways from the dock *via* Victoria Bridge to all parts of the Eastern States, it is very clear that the milling power so easily brought from the rapids to the proposed dock and its vicinity will serve to render Montreal one of the largest wheat and flour markets in North America; and secondarily, for general manufacturing purposes, the Harbour Commissioners, statesmen and capitalists can confer no greater benefit upon the Province of Canada and industrial population of Montreal than by developing this water power, and leasing it to enterprising individuals who will thereby create a diversity of labor and furnish employment to thousands who would otherwise be idle.

"Water for the dock for milling and other manufactures, can all be passed through the same canal by carrying it over the St. Pierre River and the Water-Works tail-race at one and the same point, and under the Grand Trunk Railway by a very shallow syphon.

Montreal will then enjoy the advantage not possessed by any other sea-port within our knowledge, of delivering wheat from the lake vessels to the mills on one side, and of rolling the flour from the other side into sea-going vessels for export, or into cars for consumption in New-England. The surplus water will pay interest upon three times its cost.

"From all these considerations, and from the vast amount of Western trade likely to take the St. Lawrence route, we are united in opinion that a dock harbour of one hundred and ten, to one hundred and thirty acres, is the best form for a permanent increase of accommodation, and that Point St. Charles is very much the best site therefore.

"The cost of construction, including the £80,125 for an independant supply of water, as before explained, is estimated by the engineer, Mr. Forsyth at £510,000.

"It is not necessary that the whole work should be executed at once and before any part could be brought into use. The enclosing banks faced with stone upon the top and river side, puddle walls, lock and two or three piers will be the extent of the first constructions. Afterwards, as the commerce of the port increases, the work of excavation, inner facing with cribwork and masonry, and other piers, may be carried on from time to time without interfering with the use of all parts previously completed."

"It is unnecessary for us in this report to enter upon the details of construction. We simply advise that the largest area, sheltered by the railway works from drifting ice, be enclosed; that one lock 400 feet by 75 in the clear, with an intermediate pair of gates 150 feet from the head gates be adopted; also that solid crib work be used for inside walls from the bottom of the dock to within three feet of water surface, and surmounted by 8 or 9 feet of well-crossed stone work."

The preceding considerations bring us to the conclusion that the Harbour commissioners are right in their views respecting the need of an early extension of the Harbour of Montreal. In its present condition it is at best only a summer harbour devoted to the domestic, coastwise and river trade, and affording in all respects very inadequate facilities for the few sea-going vessels of large class which now reach Montreal, by the improved channel of 17 feet water; and where this channel shall be carried to the depth of 20 feet as may so readily be done within the next two