

gate length of these canals is $70\frac{3}{4}$ miles, with a total lockage of $536\frac{1}{2}$ feet, through 54 locks.

THE LACHINE CANAL.

In the year 1903 the Lachine Canal was opened to navigation 246 days. During this time 7,365 vessels of all description passed through it, carrying over two million of tons of freight and 35,000 passengers.

432,000 tons of wheat, 218,000 tons of corn, 22,000 tons of flour, 327,000 tons of lumber, 370,000 tons of coal and half a million of tons of general cargo passed through its locks.

A few words as to the history of the construction of the Lachine Canal will not be out of place, especially as a complete history is yet to be published.

Immediately above Montreal are found the rapids of Sault St. Louis, or Lachine Rapids, which are the first obstruction to westward navigation in the St. Lawrence River. To continue the water route, as far back as 1700 the Sulpician Fathers opened up a boat canal, merely a trench, via River St. Pierre in the marshes where the Lachine Canal at present lies. The depth of water was but two and a half feet, and served for boats to carry thirty barrels of flour. The locks were six feet wide and one hundred feet long.

This was enlarged and deepened in 1821 to allow for navigation by barges drawing four feet. The locks were lengthened to one hundred and fifty feet and broadened to twenty feet.

In 1843 a ship canal was begun at a cost of two million of dollars. Five locks were built, each 2,000 feet long and nine feet of water on the sills.

The length of the Lachine Canal is eight and three quarter miles. From Lachine to Côte St. Paul, a distance of five and three-quarter miles, there are no locks, the Lachine locks being, in fact, only guard locks, the lockage is but a foot.

From Côte St. Paul to Montreal harbor, a distance of three miles, the total lockage is forty-five feet.

The Canal is spanned by six swing bridges built on piers of cut stone. These bridges are the Lachine bridges, Côte St. Paul bridge, Brewster's bridge, the Grand Trunk, Curran and Black's bridges. The last three are very heavy.

Use of the Electric Power—

In 1902 the Department of Railways and Canals decided to take advantage of the available water power on the Lachine Canal to generate electric current for the following purposes:—

- 1st. To light the canal, the locks and approaches of the bridges.
- 2nd. To electrically heat the power house and lock cabins.