

broad are erected, the bottoms of which are placed twenty-two feet above Montreal harbor, in order to escape the back water caused by the winter rise of the St. Lawrence. The water is admitted and discharged from the wheel house through submerged archways, under covered frost proof passages, extending above and below the building. About a hundred feet from the Wheel House the pumping main branches into two lines, each twenty-four inches diameter, which are continued under the Grand Trunk Railway, the River St. Pierre, and the Lachine Canal, (which latter is passed by a culvert, at a level of twenty feet below the surface,) and shortly after ascends within six feet of the natural surface, where the two mains are connected again, and a single one only is continued to the Reservoir, at the base of the mountain. They are excavated out of the solid rock, and have a water surface of about ninety thousand square feet, two hundred and five feet above Montreal harbor, with a depth of 25 feet, containing about fifteen millions of gallons. They can be filled by the two wheels in seventy-five hours pumping, the wheels also providing the consumption of the city during that period. These works were commenced in June, 1853, the first water was pumped into the Reservoirs September 11th, 1856. Cost of the Works, including land purchases, machinery, reservoirs, interest, discount, &c, \$1,500,000.

THE LACHINE CANAL is among the public works particularly worthy of note, and of which the city may well feel proud. The head of water on this canal has been rendered available for the creation of water power which has been applied most successfully to the movement of very extensive machinery over a large extent of ground. Among the works here, are foundries, engine and boiler works, a ship yard and marine works, saw mills, sash, blind and door factories, stave and barrel works, a flour mill, an oatmeal and corn mill, cotton mills, an edged tool factory, India rubber factory, a factory of wollens, a large rope and cordage factory, with other smaller establishments. These works, with those on the lower basin, are using a power daily equal to that of 3500 horses. They furnish employment to more than 2000 men, affording subsistence to 10,000 persons. Further on, at Cote St. Paul, there are several other large factories of various kinds, which are well worth while visiting.