

closing years of the last and the opening ones of this century.

The first lock between Lake Huron and Lake Superior was made by a Canadian company in the closing years of the last century. One of the North west Fur Trading Companies of Montreal cut a roadway 45 feet wide across the portage on the north or Canadian side of the Sault Ste. Marie and opened "a canal upwards of 300 feet in length, with a lock which raised the water 9 feet." This lock, 38 feet long and eight feet and three-quarters wide, was built like a flume, the posts of which at the lower end were high enough to permit boats to pass under their caps. A windlass raised the lower gates, but the upper ones were "folding," with sluices therein to fill the lock. A planked flume the width of the lock, 300 feet long and 6 feet high, conducted the boats into this lock. A round log cribbing extended the whole length of the canal, 12 feet in width, forming a tow-path for the oxen used in dragging the boats up stream. As the whole fall at the Sault is 18 feet, and the lock only dealt with half of this, the canal or channel above must have had a surface inclination of three feet in a thousand. It was completed in 1798. In July, 1814, this post was pillaged and burned by Major Holmes at the head of 150 Americans, when it is supposed that this lock (with the wooden banks of its canal) was "burned to the water's edge."

In the first year of the eighteenth century, Catalogne, military engineer to the King of France (who was probably the first engineer sent to Canada), commenced a channel from the St. Lawrence at Lachine to a marshy lake on a direct route to Montreal, from which lake it was connected with and followed the "Little River" to its outlet in front of the city. This, like the boat canal of 1798 at Sault Ste. Marie, was intended for a combined canal and mill-race, but without any lock. This work was undertaken by Dollier de Casson, Superior of the Seminary of Saint Sulpice,—but his death in 1701 arrested it. In 1717 it was resumed, but after an expenditure of 20,000 francs it was abandoned on account of the cost of the necessary rock cut at Lachine. This was, in all probability, the first rock excavation for canal purposes upon the St. Lawrence. For the rock exca-