

There were two tandem locks of masonry, each 350 feet by 70 feet by 11 1-2 feet on the miter sills, with a lift of about 9 feet each, and the entire cost was \$999,802.46.

Water was first let into the canal on April 19, 1855, and on June 18 following, the first boat passed through the canal, and thus was inaugurated intercommunication between Lake Superior and the others of the Great Lakes. Upon the completion of the canal it passed into control of the State of Michigan, the Governor, Auditor-General and State Treasurer constituting a Board of Control, John Burt being appointed the first superintendent of the canal. The canal remained under State control until 1872; and the old locks, which were built of Ohio limestone, remained in use until 1888, when they were destroyed by the excavating for the Poe lock in 1888.

Upon the transfer of the canal to the Federal government, Gen. O. M. Poe, then in charge of that district, assumed control of the waterway, being relieved by Gen. Godfrey C. Weitzel on May 1, 1873. Under Gen. Weitzel's supervision was built the lock which bears his name. This lock is 515 feet long, 80 feet wide in chamber, narrowing to 60 feet at the gates, with 17 feet of water over the miter-sills, and it was built between the years 1873 and 1881 at a cost of approximately \$3,000,000, including the deepening and widening of the canal. Plans now being formulated by the Federal authorities will increase the Weitzel lock so that it will have a length of 1,600 feet, a width of 100 feet and a depth over miter-sills of 30 feet, these improvements to cost nearly \$25,000,000.

The Poe lock, which was originally surveyed by Gen. O. M. Poe, is 800 feet long, 100 feet wide, and 22 feet over miter-sills. It was built between 1887 and 1896 at a cost of a little over \$4,000,000. The canal has been deepened to 25 feet, and the entrance piers extended so that its total present length is 8,448 feet. The channel through the St. Mary's River is now 20 feet deep at the mean stage of water and 300 feet wide, and the whole improvements on the American side up to date aggregate something over \$15,000,000.

While electricity is used for operating the Canadian lock, both the Poe and Weitzel locks use hydraulic power, a pressure of 400 pounds per square inch being used for the former lock and 115 pounds for the latter. The Poe lock can be filled and emptied in about 7 minutes, and an up-lockage of a boat 350 feet long can be made in 11 minutes, the gates being opened or closed in 2 1-4 minutes.

Canal work on the Canadian side began some time between the years 1796 and 1798, when the Hudson Bay Fur Company built a lock 38 feet long, 8 feet 9 inches wide, with a lift of 9 feet. A towpath was made along the shore for oxen to pull the bateaux and canoes through the upper part of the rapids. This old lock was demolished in 1814 by United States troops from Mackinaw Island under command of Major Holmes. The present Canadian canal is 5,920 feet long, 150 feet wide and 22 feet deep, with a lock 900 feet long, 60 feet wide and 22 feet of water on the miter-sills. It was built between the years 1888 and 1895, the work being in charge of W. G. McNeil; Thompson,