

with 7 feet of water on the sills, joins Chambly and St. Johns. Construction of this canal was commenced in 1831 and completed in 1858.

Ottawa Canals.

The navigation of the Ottawa river between the port of Montreal and the city of Ottawa is effected by means of the Lachine canal, the Ste. Anne lock and the Carillon and Grenville canals. The Ste. Anne lock surmounts the Ste. Anne rapids at the junction of the Ottawa river with lake St. Louis. Between the years 1840 and 1843 the first lock was constructed, its dimensions being 190 feet by 45 feet, with 6 feet of water, and an additional lock, 10 feet longer and 3 feet deeper, was constructed between the years 1880 and 1883. Both locks are now in operation. Between Carillon and Grenville there were originally three canals, constructed by the Imperial Government between the years 1825 and 1833. The second of the three, the Chute à Blondeau, was abandoned after the completion of the Carillon dam in 1881. At this time also, the Carillon and Grenville canals were reconstructed, the work being fully completed in 1884. The locks on these canals are of the same dimensions as the newer of the two locks at Ste. Anne.

Rideau Canal.

This canal, constructed by the British Government between the years 1826 and 1832 and providing a continuous waterway between the cities of Ottawa and Kingston, owed its inception to purely military considerations incident to the war of 1812. It consists of a series of natural water courses connected by short cuttings and locks, starting with the Rideau river at Ottawa, rising to a summit at the Upper Rideau lake and finally entering lake Ontario by the Cataragui river. This canal, with a total length of 126½ miles, was transferred to the Provincial Government in 1857 and after Confederation was taken over by the Dominion authorities. It has 47 locks, 134 feet by 33 feet, with 5 feet of water on sills. From the northerly end of the Lower Rideau lake a branch, 7 miles in length, extends to the town of Perth.

Trent Canal.

In the Trent canal is comprised a system of navigation which extends from Trenton, on the bay of Quinte, to the Georgian bay. The route of this canal follows the river Trent to Rice lake, thence by the Otonabee river to Peterborough, from which point, by a series of rivers, lakes and artificial channels, it reaches lake Simcoe, passing next into lake Couchiching and Sparrow lake, whence it follows the line of the Severn river to Honey harbour on Georgian bay. Up to the present the canal has been opened to navigation as far west as Sparrow lake and, by the use of marine railways at Swift rapids and Big Chute, motor vessels of five tons may complete the passage to Georgian bay via Port Severn. While the canal is of no economic importance as a waterway, its power facilities are of considerable value. It is also noted for the hydraulic lift-lock at Peterborough, capable of lifting an 800-ton vessel a vertical distance of 65 feet.

Murray Canal.—An open waterway across the isthmus of the Prince Edward County peninsula may in a sense be considered as forming part of the Trent Canal system. Vessels leaving the Trent canal at Trenton can by this route pass directly into lake Ontario. The first proposal to construct this canal appears to have been made in 1796, and the project was discussed frequently thereafter in the Provincial Legislature. Construction, however, was not begun until 1882 and was completed in 1889.