CHAPTER VII.

Other canals on the St. Lawrence system. 588. In addition to this, the canals on the St. Lawrence system are the Welland, from Port Colborne, on Lake Erie, to Port Dalhousie, on Lake Ontario, $26\frac{3}{4}$ miles in length by the enlarged or new line, with 26 locks, and a total rise of $326\frac{3}{4}$ feet; and, along the St. Lawrence; the Galops, $7\frac{5}{8}$ miles in length, with three locks and a rise of $15\frac{3}{4}$ feet; the Rapide Plat, 4 miles in length, with two locks and a rise of $11\frac{1}{4}$ feet; Farran's Point, $\frac{3}{4}$ of a mile long, with one lock and a rise of 48feet; the Cornwall, $11\frac{1}{2}$ miles in length, with six locks and a rise of 48feet; the Beauharnois, $11\frac{1}{4}$ miles in length, with nine locks and a rise of $82\frac{1}{2}$ feet (the Soulanges Canal is being built on the north side of the river on the enlarged scale, to take the place of this canal, and will be 14 miles in length, with five locks); and the Lachine Canal, $8\frac{1}{2}$ miles in length, with five locks and a rise of 45 feet.

589. The difference in level between Lake Superior and tidewater is Depth of canals. The total number of locks on this system is 53. about 600 feet. The aggregate length of the canals is 70¹/₂ miles, and the total height directly overcome by locks is $533\frac{1}{4}$ feet. The greatest navigable depth is 14 feet, but that at present is only to be found in the Welland Canal, which was open for the first time for 14 feet navigation during the season of 1888. The greatest available depth in the other canals is at present limited to 9 feet, which makes that depth the limit for communication between Lake Ontario and the sea, but improvements are now being made with a view to having a uniform depth of 14 feet throughout the system, with locks 270 feet between the gates and 45 feet in width, and it is hoped that this general enlargement scheme will be completed in the course of the next three or four years.

St. Lawrence ship canal. 590. By the completion of the ship canal through Lake St. Peter, vessels drawing $27\frac{1}{2}$ feet of water can ascend the St. Lawrence as far as Montreal, by which means that port is now accessible to the largest merchant vessels afloat.

Ottawa 591. The other canal systems of the country are as follow :--The Ottawa, which connects Montreal and the city of Ottawa, and the Rideau, which, in conjunction with the Ottawa system, affords communication between Montreal and Kingston, a total distance of 246 miles. The lockage on this system (not including that of the Lachine Canal) is 509 feet, 345 rise and 164 fall, and the number of locks is 55 The Rideau Canal was originally built by the Imperial Government for military purposes. It was begun in 1826, finished in 1834, at a cost of \$3,911,701, and transferred to Canadian authorities in January, 1857.

Chambly Canal. 592. The Richelieu and Lake Champlain system, or Chambly Canal, extends from the junction of the rivers St. Lawrence and Richelieu, 46 miles below Montreal, into Lake Champlain, a distance of 81 miles.