

were taken by the province of Canada to enlarge the Welland (the wooden locks of which were falling into decay) and the Lachine, and to complete the remainder of the St. Lawrence canals, only one of which—the Cornwall—had been commenced by Upper Canada before the Union. The 40 wooden locks on the Welland were, by increasing the lifts, replaced by 27 stone ones, each 150 feet long by $26\frac{1}{2}$ feet wide in chambers, with 9 feet of water on the mitre sill, and the canal was completed upon this scale in 1846. The first enlargement of the Welland was contemporaneous with the completion of the St. Lawrence system, which had been commenced at Cornwall in 1834. The Lachine Canal was a barge canal, used in connection with the military canals of the Ottawa and Rideau route, and the Welland a ship canal connecting Lakes Erie and Ontario. Between these there existed on the St. Lawrence no advance in heavy freight transportation over that of the bateau or Durham boat of 1804. Great improvement in passenger transportation had been made by the introduction of steamers on Lake St. Louis and Lake St. Francis (reaches of the St. Lawrence) and on the river above the Long Sault; and by their connection by portage roads on which stages were established; but all the heavy freight was sent by the Ottawa and Rideau route to Kingston.

UNITED CANADA.

The St. Lawrence Canals.—The Cornwall Canal was commenced by Upper Canada in 1834, suspended by the Rebellion of 1837, and not resumed until after the reunion, when it was completed in 1843. Its lock dimensions were a great advance upon the old Lachine or upon the new Welland, being 200 feet long by 55 feet wide in the chambers, and the depth of water 9 feet. These dimensions appear to have been adopted to pass the short side-wheel steamers required for quick turning in running the rapids. There was no enlargement of this canal previous to the confederation of the British North American provinces in 1867, because no greater dimensions were established by the province of Canada in 1841 for the remainder