

Champlain Dry Dock for Quebec Harbor.

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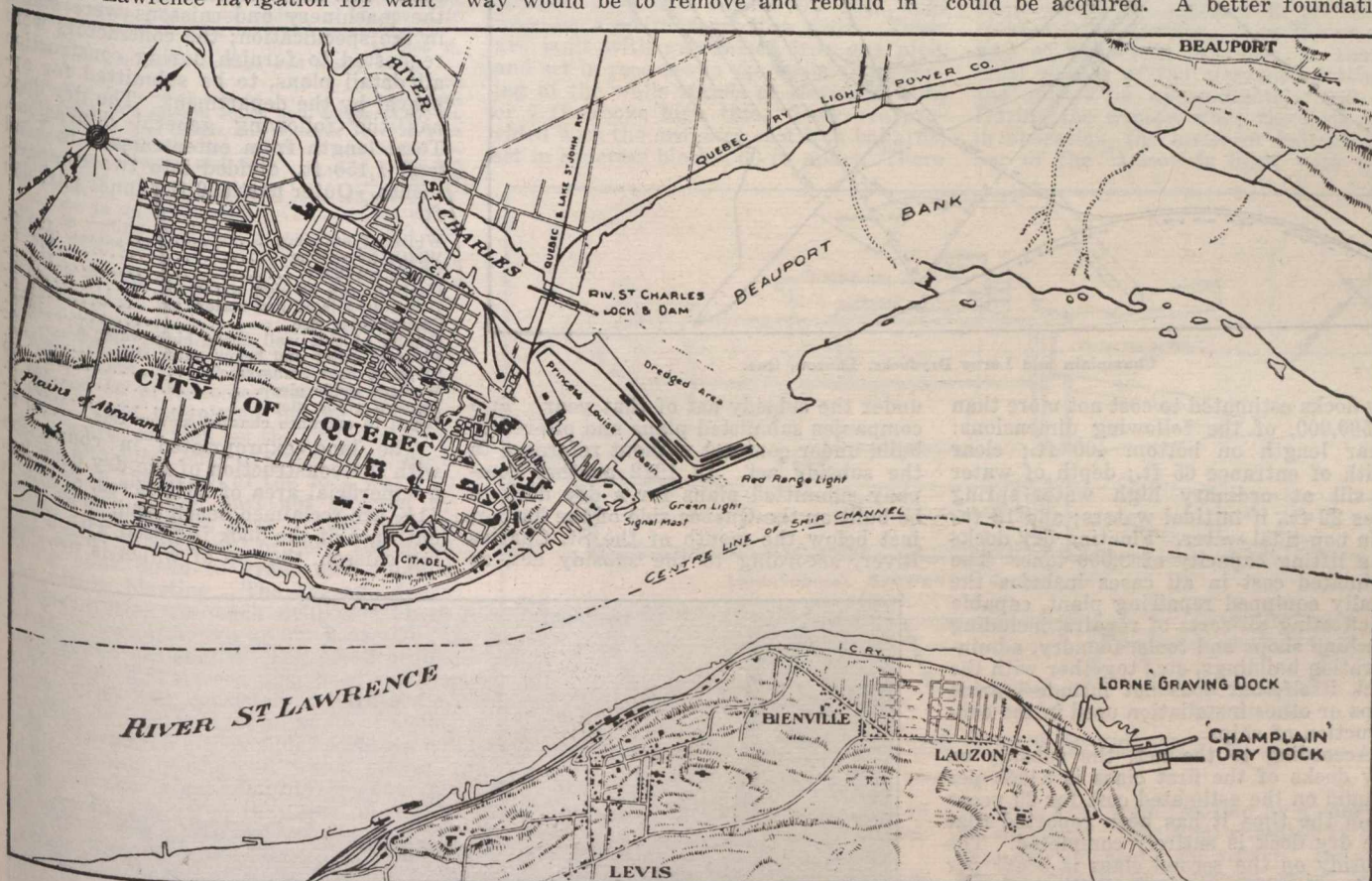
For a number of years the River St. Lawrence has been frequented by ocean steamers of such dimensions that they could not be accommodated in the Lorne dry dock, completed in 1886, at Lauzon, in Quebec harbor. In 1906 the Canadian Pacific Ry. brought out its steamships Empress of Britain and Empress of Ireland, of 65 ft. beam. The Allan Line steamships Virginian and Victorian of 60 ft. beam were also placed on the St. Lawrence route in that year. The Bavarian of somewhat narrower beam, 59 1/4 ft., came to Quebec in 1905; thereafter the number of large ships placed on the St. Lawrence traffic increased rapidly, until in 1912 there were 25 vessels that could not have been repaired in the long stretch of the St. Lawrence navigation for want

scrap. This is the worst case on record in the history of the St. Lawrence navigation. The vessel was only six years old and of a registered tonnage of 10,387 tons.

In the summer of 1898 the writer was instructed to prepare a report on the practicability of widening the entrance of the Lorne dry dock at Levis, which had been completed in 1886. A plan was submitted, showing the possibility of obtaining an entrance 70 ft. wide, by removing part of the timber slides at the outer end of the dock; increasing the length was also suggested. The first was reported to be inadvisable, as it would greatly disfigure the dock and do away with the convenience of the timber slides; the only feasible way would be to remove and rebuild in

cost of \$921,130. In 1888 the Canadian Government relieved the Quebec Harbor Commission of all obligations to refund the sum expended on the dry dock and in 1890 it was placed upon the control of the Department of Public Works; the writer was then placed in charge.

In 1906 the Quebec Harbor Commissioners urged upon the government the necessity for a large dry dock for Quebec harbor. In the autumn of that year the writer was instructed to make a survey of the locality surrounding the old dry dock and report on the best location. Two sites were examined, but the position to the east of the present dock was considered the most advantageous for three principal reasons. A larger area of land could be acquired. A better foundation



Quebec Harbor, showing locations of Champlain and Lorne Drydocks.

of sufficient dock accommodation, the width of entrance of the present dry dock being only 62 ft. Any of these vessels that required docking had to be repaired temporarily, as well as possible, while afloat, and taken either to Halifax or New York, which, in some cases, was a risky undertaking. The case of the s.s. Bavarian was an unfortunate experience in this respect. On Nov. 5, 1905, she ran aground with a full cargo from Montreal and Quebec, about 40 miles below Quebec, opposite Grosse Isle. Although late in the autumn, she could have been raised and brought to Quebec had there been dock accommodation for her. Her beam was 59 1/4 ft., but through the accident her sides had bulged out beyond the width of the dry dock entrance. She was raised in the following spring, although further damaged by ice during the winter, and brought on the beach a short distance below the dry dock, where she was sold as

another position the eastern side wall, thus depriving the harbor of all dock accommodation for probably two seasons. A new caisson would necessarily have to be provided; the cost would have been considerable. Further, it was considered that a new dry dock would be required in Quebec before many years. The suggestion of lengthening the dock was adopted; the length was increased from 484 to 600 ft.; this consisted merely in moving the circular head, stairways and timber slides 116 ft. further, after excavating the rock to proper width and depth. The work was performed under contract awarded in 1900, for \$100,000, and completed in 1901 without interfering with the use of the dock. This dry dock was built by the Quebec Harbor Commissioners under an act, 38 Vict. Cap. 56-1875, by which the issue of bonds was allowed to obtain the necessary amount. The work was started in 1878 and completed in 1886 at a total

could be obtained. The repairing plant of G. T. Davie & Sons could have better access to both the new and old docks. A plan and report were submitted in the early part of 1907; the dock then proposed was 1,000 ft. long with an entrance width of 100 ft. The proposition was not immediately acted upon; the question as to whether the government should build the dock or induce some shipbuilding firm to build it under a subsidy from the government, was unsettled. The result of the discussion was the passing at the session of 1910 of an Act to Encourage the Construction of Dry Docks.

Under this act dry docks were divided into three classes. The first class included dry docks estimated to cost not more than \$4,000,000, and capable of receiving and repairing the largest ships of the British Navy and of the following dimensions: Clear length on bottom 900 ft.; clear width of entrance 100 ft., with depth on