

Mr. M. P. Fennell, Jr., of the design, construction, equipment and commerce of the ports and docks of London, Havre, Marseilles, Genoa, Hamburg, Rotterdam, Antwerp, Bristol, Liverpool, Manchester, Glasgow, Edinburgh, Rosyth, Hull, and Southampton. This occupied three months and a very interesting part of the report of the Commissioners for 1914 is that relating to the distinctive features of these European ports.

The expenditures on capital account in 1914 amounted to \$1,758,368.83 and alluded to the following principal works of improvement: Harbor dredging, \$229,808.22; real estate, \$39,469.10; wharves, piers and basins, \$745,062.04; plant, \$83,663.42; shops and buildings, \$24,573; railways, \$115,236.44; permanent sheds, \$345,-246.56; electric hoists, etc., \$31,878.10; grain elevators, \$143,431.95.

The programme which entailed the above expenditure was very largely of an engineering nature, the engineering department having charge of harbor construction, maintenance and operation. The construction work is almost entirely carried on departmentally and the commissioners' plant of dredges, tugs, derrick, repair shops, etc., is consequently elaborate, adequate and up-to-date.

The 1914 operations involved the following work-Improvement and extension of harbor railway tracks; continuation of construction of new Victoria pier and market basin; continuation of construction of bulkhead high level wharves on the river front, eastwards from Victoria pier; general dredging for widening and deepening of basins and berths; dredging of channels for the amelioration of St. Mary's Current; paving and laying railway tracks on the wharves; continuation, almost to completion, of improvements resulting in the floating dock basin and site for ship building and repair yard; construction and improvement of harbor facilities, such as hoists, flood gates, bridges, subways and freight yards; additions and improvements to Harbor Commissioners' construction plant; construction of an industrial wharf at Pointe-aux-Trembles; construction of addition to Grain Elevator No. 1; construction of a new subway to the harbor at Aylwin Street; construction of two transit sheds, Nos. 24 and 25; maintenance of berths and channels, of wharves, sheds, buildings, roadways, water service, cleaning of wharves and general repairs. The operating of floating crane, electric hoists and the construction and maintenance of industrial connections with the harbor, were all carried on as usual during the season.

The extensions of the harbor railway tracks, on which considerable work was done, are to facilitate the best possible terminal connection between the railway systems and the North Atlantic steamships. They involve the practical conversion of the shore area of the harbor into a convenient railway terminal, the tracks being operated directly by the Commissioners. The Grand Trunk and Intercolonial lines connect with the harbor at its westerly end; the Canadian Pacific and Canadian Northern reach it toward the eastern end.

An important feature is the construction of the new Victoria pier. Up to 1913 the old level Victoria pier had been used, although the new work of construction had almost surrounded it. Early in 1914 the old structure was removed, and the new pier was built to the extent of 300 ft. of high level wall and 1,200 ft. completed to low level.

A bulkhead wharf below Victoria pier, completed last year, gives a bulkhead width of 250 ft. Two new transit sheds were constructed with provision for the installation of a grain conveyer system on the river side of each.