ment was continued, and by the close of navigation of that year the whole pier had been finished, except a small part at the lower end, which has still to be slightly raised and levelled off. The total expenditure to that date on the Mackay pier was \$355,500, exclusive of the cost of the railway tracks now being laid upon the pier, of which the city has paid \$80,598.

On July 12, 1898, the sanction of the Minister of Public Works was given to the carrying out of the plan known as 12A 2, which provided for the demolition of the old wharves between the entrance to the Lachine canal and the Victoria pier, and the construction in their place of three high level piers of 300 ft. in width by 825 ft. to 1,014 ft. in length, with shore wharves of 210 ft. to 240 ft. in breadth. The plan also provided for the widening of Common and Commissioners streets to widths of from 80 ft. to 100 ft., and the placing of a wall between the street and the wharves for the protection of the city from floods, and for making the new wharves of such height as to join the streets directly without ramps.

The work of constructing the Jacques Cartier pier was commenced in 1898, and at the end of August, 1899, one ship's berth had been finished and put into use, and by the close of navigation the whole pier had been finished and put into regular service. In 1900 the shore wharf between Victoria pier and Jacques Cartier pier was built up to high water mark, and was finished and put into use early in the summer of 1901. In September, 1899, the construction of the Alexandra pier and the shore wharf between the pier and the canal was begun, and in October, 1900, a ship's berth of the new pier was ready for use. By the close of navigation in the same year the remainder of the pier had been completed, with the exception of levelling off part of the earthwork, which was done in the spring of 1901, and the whole pier was made ready for use by July 6.

The building of the King Edward pier and the shore wharf between that pier and the Alexandra pier, was commenced at the opening of navigation in 1901, and by its close more than half a mile of cribwork had been sunk. In the spring of 1902 work was resumed, and by May 15 500 ft. of one side of the pier was ready for use, and before the close of navigation all the pier, excepting about 500 ft, of the down-stream side had been put into use. Part of the concrete wall between the King Edward and Alexandra piers was built upon the cribwork in 1902, and the earth fillings behind the walls is now nearly completed. During 1902 cribs were also sunk and a concrete front wall built thereon above water for forming the shore wharf between the Jacques Cartier and King Edward piers, and a considerable quantity of earth filling was made behind the wall by derricks. Work was resumed upon this and the unfinished 500 feet of the King Edward pier early in the spring of the present year, and on June 15 the whole was ready to berth ships,

In 1902 an embankment of about 40 feet top width was made up to high level alongside the flood protection wall, and the two main railway tracks were taken from the low level and laid upon it. The widening of the railway bank and the general filling of the shore wharf was resumed in the spring of the present year, and practically the whole has now been raised to high level grade. The works under these plans are expected to be completed, except in some minor details, this year.

The Dominion Parliament has passed, at the current session, an act respecting the safety of ships, by which the deck loading in Winter is prohibited. The act does not make any change in the law, but by certain alterations brings the Canadian act into textual agreement with the British act concerning deck loading.

Notices to Mariners.

The Department of Marine has issued the following notices to mariners:

No. 63. July 18.—Prince Edward Island— 159. South coast, Crapaud road, buoyage.

No. 64. July 28.—Nova Scotia—160. South coast, Halifax harbor and approach, particulars of buoyage. 161. South coast, Sambro channel, particulars of buoyage.

No. 65. July 28.—British Columbia—166. Georgia strait, unchartered rocks off Sisters lighthouse. 167. Fisher channel, depth on Walbran rock.

No. 66. July 29.—Ontario—168. Lake Huron, Jennie Graham shoal, bell buoy established. 169. Lake Huron, Great Duck island, wharf on east side. 170. Lake Huron, north channel, Cockburn island, Tolsmaville, light established.

No. 67. July 30.—Nova Scotia—173. South coast, Halifax harbor, Mauger beach, change in characteristic of fog signal. New Brunswick—174. Gulf of St. Lawrence, Miscou island, fog alarm again in operation,

No. 68. July 31.—Quebec—Gulf of St. Lawrence, Seven islands, Carousel island, light station, fog alarm established.

No. 69. Aug. 6—Ontario.—176. Lake Ontario, Toronto harbor approval, buoyage, general information. 177. Lake Ontario, Toronto harbor approach, off Lighthouse points, bellbuoy discontinued.

The following notices have been issued by the U.S. hydrographic office:

No. 31. Aug. 1.—St. Mary's river—1578. Middle Neebish cut clear of obstructions. Lake Ontario—1580. Olcott depths in channel and on bar.

No. 33. Aug. 15.—Lake Ontario—1680. New York, Oswego harbor, depth in outer harbor. St. Lawrence river—1681. Ogdensburg harbor, dredged channel.

The act respecting the encouragement of dry docks in Canada, by which the Government bonus has been increased to 3% for 20 years, to an amount not exceeding \$30,000 in any one year, has been passed by the Dominion Parliament.

Maritime Provinces and Newfoundland

Capt. P. McKay, for many years trading between Maritime province ports and the West Indian islands, died at Sussex, N.B., recently.

The Springfield Steamship Co. has been authorized, under the New Brunswick Companies' Act, to increase its capital from \$12,000 to \$45,000.

The contract for the building of the ware-houses on no. 4 wharf at Sand Point, has been let by the St. John, N.B., city council to G. S. Mayes, who is erecting the sheds on no. 3 wharf.

The Charlottetown, P.E.I., Board of Trade is negotiating with the Dominion Government with a view of securing a steamship service which will give two trips a day between Prince Edward Island and the mainland.

The str. Eldorado has reached Quebec from England, to take the place of the Norwegian str. Stord, which went ashore at Pointe des Montes, Que. The Eldorado will be used as a trading ship along the Labrador coast.

It is reported that Mackenzie, Mann & Co., of Toronto, will establish a steamship service on the Bay of Fundy and adjacent waters, on the completion of the Middleton and Victoria Beach Ry., which they have recently acquired.

The Dominion Government expedition to Hudson's Bay consists of 40 persons, including a scientific party of twelve under A. P. Low, of the Geological department. The

steamer Neptune sailed from Halifax, N.S., with the party, Aug. 15.

A company is being organized at Sydney, N.S., with a capital of \$1,250,000, with a view of constructing a graving dock there. The Boston Engineering Works is interested in the project, and proposes to establish a ship yard in connection with the dock.

The str. Queen, which was purchased at Montreal in 1902 and taken to St. John, N.B., this spring for the river trade, was burned at her wharf, Indiantown, N.B., July 28. She was valued at \$15,000, and was insured for \$4,500. The steamer will not be rebuilt.

Recent launches at Nova Scotia ship yards include a 200 ton schooner at Parrsboro, of which Rhodes, Curry & Co. (Ltd.), of Amherst, N.S., are part owners; a 270 ton schooner at Port Grenville, N.S., for Capt. Wasson, of Parrsboro; and a 536 ton barge, for the Cumberland Ry. and Coal Co.

The Department of Marine is considering tenders for the purchase of the str. Acadia. The Acadia was built in Pennsylvania, U.S., 1880, and has the following dimensions: length, 182.5 ft.; breadth, 23.6 ft.; depth, 18.7 ft.; tonnage: gross, 520 tons register, 354 tons. She was engaged in the lighthouse supply service.

D. McNicoll, Vice-President C.P.R., denies the press reports that the company is going to run a line of steamers between Halifax, N.S., and Great Britain. C. E. E. Ussher, General Passenger Agent, and W. R. McInnes, Freight Traffic Manager, of the company, recently visited Halifax, and were making some investigations there.

The Hudson's Bay Company's str. Inenew, built at the Polson Ironworks, Toronto, in 1892, has met with several accidents since she left Toronto. Two occurred last year, repairs being at two points, and the Inenew wintered in St. John's, Nfld. This year a new captain and crew took charge, but the steamer met with another accident and is now back at St. John's.

The J. F. Bridges Tug Boat Co. (Ltd.) has been incorporated under the New Brunswick Companies' Act, with a capital of \$20,000, to carry on a towing and general navigation business upon the St. John river. The officers are to be at Gagetown, N.B., and the first directors are: J. F. Bridges, A. W. Ebbett, J. Chapman, J. F. McAllister, B. M. Dykeman, and H. B. Bridges.

It is expected that the str. Senlac will be launched at St. John, N.B., early in September. Her dimensions are: length, 187 ft., over all; breadth, 32 ft. 6 in.; depth of hold, 16 ft. 6 in.; and she will be fitted with fore and aft surface condensing engines, cylinders 20 in. and 40 in. diameter, by 30 in. stroke, to which steam will be supplied by two Scotch boilers, 10 ft. 6 in. diameter, by 12 ft. 6 in. long. The Senlac will trade from St. John to Yarmouth, N.S., and south shore ports.

Province of Quebec Shipping.

The Manchester Trader ran ashore on the southern shore of Anticosti island, but is reported uninjured.

The Quebec Harbor Commission is seeking Dominion aid in connection with the project for harbor development there.

The C.P.R. Atlantic steamship Manitoba went aground near Longueuil, Aug. 3, and was got off apparently undamaged.

The traffic passing through the Soulanges canal during May and June amounted to 83,-927 tons, against 90,090 for the same period of 1902.

The Governor-in-Council has approved of the by-law of the Quebec Harbor Commission