in 1897, her dimensions being: length, 121.2 ft.; breadth, 22.4 ft.; depth, 7 ft.; tonnage—gross, 332 tons; register, 192 tons.

J. Oborne, General Superintendent C.P.R. at St. John, N.B., has outlined a plan for the improvement of the harbor there. He suggests the construction of a dyke from the Carleton shore near Fort Dufferin to Part-ridge island, and a second from Red Head bank, connecting with the first at Partridge island. These dykes would be carried to a height of about 10 ft. above high water mark, and would be provided with locks to admit the passage of vessels. The effect of the construction of these dykes would be to minimize the rise and fall of the tide to about 6ft. instead of from 22 to 28 ft. at present, to do away with the necessity of dredging, and to provide accommodation for increased numbers of steamers. The railway companies could run their tracks on the top of the dykes, and warehouses could also be erected. plan in effect is to turn the harbor into a gigantic floating dock.

Province of Quebec Shipping.

The Richelieu and Ontario Navigation Co. has purchased the Mullin wharf at Sorel.

The Richelieu and Ontario Navigation Co. has declared a half-yearly dividend of 3%.

A contract for the repairs to locks one and two on the Lachine canal, Montreal, has been let to Quinlan & Robertson.

The Richelieu and Ontario Navigation Co.'s str. Quebec ran ashore in a snowstorm near Varennes, Nov. 12, but was towed off without damage.

The Great Lakes and St. Lawrence river Transportation Co. has purchased from King Bros. the Lake Metapedia seigniory, with a view of entering the lumber business.

The Richelieu and Ontario Navigation Co.'s new str. Montreal is being completed at Sorel. The decoration and furnishing of the steamer is well advanced, and everything will be completed prior to the opening of navigation in 1903.

The lake-built steamers Minnetonka and Minnewaska, which were taken in sections through the St. Lawrence canals and put together at Quebec, are carrying grain from Quebec to Great Britain in connection with the Great Lakes and St. Lawrence River Transportation Co.'s fleet.

A company is in course of formation at Hedleyville to construct an extensive system of wharves, sheds, elevators, stockyards, etc., on the north side of the mouth of St. Charles river, facing the Louise embankment, Quebec. The Hedleyville council has given the promotors 15 years' exemption from taxation for the project.

Reports presented to the Montreal Harbor Commission, show that up to Oct. 31 the revenue amounted to \$240,534, against \$196,446 for same period in 1901. The number of seagoing vessels using the port was 685, having a tonnage of 1,385,315 tons, an increase of 9 vessels and 64,104 tons over 1901; while the inland vessels using the port numbered 8,281, having a tonnage of 1,664,096; an increase of 755 vessels and 157,421 tons over 1901.

T. J. Darling of Montreal, has been working on the suggestion of Hon. J. I. Tarte that the navigation of the St. Lawrence would be improved by the construction of a dam at Cap Charles, 112 miles below Quebec. Mr. Darling proposes the construction of dams at a number of points on the river, the effect of which, he says, would be to provide a 33 ft. channel up to St. Mary's current, between Montreal and Hochelaga. He has submitted a plan to the Montreal Harbor

Commission, which has referred it to the engineer.

The experiments with acetylene gas, as an illuminant for gas buoys and lighthouses on the St. Lawrence, are giving satisfaction to the officers of the Department of Marine as well as to the shipmasters. Lieut.-Col. Anderson, Chief Engineer of the Department, referring to the tests at the Father Point lighthouse, says acetylene gas gave a light visible at a distance of 28 miles. It is understood that the change in the illuminant of the gas buoys will be made gradually. Lieut.-Col. Anderson is perfecting a plan for an apparatus to be used for the equipment of the small lighthouses for acetylene gas.

Ontario and the Great Lakes.

The Ottawa Forwarding Co.'s freight str. Harry Bate is to be rebuilt at Ottawa during the winter at a cost of about \$15,000.

The Turret Crown has been aground at Harbor Beach, Mich., and the Turret Court at Port Arthur, Ont. Neither sustained any material damage.

The coal-handling plant at Rondeau, Ont., for the Lake Erie and Detroit River Ry., has been completed, and the port will be made a regular coal port.

The Lake Michigan steamship lines, controlling 37 steamers and two tugs, have combined, the capital of the combination being put at \$5,000,000.

The marine railway at Kingston is being put in order and will be utilized during the winter by the Kingston and Montreal Forwarding Co.'s steamers.

The hydrographic survey str. Bayfield has completed its work for the season, having been engaged on Lake Superior between Sault Ste. Marie and Michipicoten.

New boilers are about to be placed in the G.T.R. ferry, Lansdowne, at Windsor. The Great Western, as well as the Lansdowne, are to be fitted with electric light.

The C.P.R. str. Alberta struck a rock during a severe storm on Lake Huron during a recent trip, but no damage beyond the loss of a blade of her propeller was done.

It is proposed to lay up the four turret steamers at Owen Sound for the winter. For the future the steamers will be taken to the coast and put in the coasting trade for the winter.

The Department of Marine has authorized the maintenance of the lighthouses on the upper waters of Lake Superior to Dec. 12, so as to prolong the season of navigation as much as possible.

A press report states that the str. Cambria, after a lengthened career of mishaps, culminating in her sinking in Martindale's pond, on the Welland canal, is to be raised and taken to Buffalo.

The report that it is the intention of the Northern Navigation Co. to rebuild its str. United Empire, operated on the North West Transportation Co.'s service, is denied by President J. J. Long.

The Montreal Transportation Co.'s barge Hamilton has landed a 71,000 bush. cargo of wheat at Montreal from Fort William, this being the largest cargo ever brought through the inland waterways.

R. O. McKay and W. Magee have returned to Hamilton fro n Great Britain, and report that orders have been placed for the construction of two steamers for the New Ontario Steamship Co. The new steamers will be placed in service early next year.

The Booth line is building a steamer to be placed on the Lake Superior service next season, to have a speed of 16 miles an hour. It

is proposed to put in operation a round-lake service by extending the route from Houghton to Sault Ste. Marie and Port Arthur.

The steam barge Owen, built at Chatham, Ont., in 1884, and owned by W. Simmons, Kingston, Ont., went ashore on Gull shoal, Point Petre, recently and became a total wreck. She had on board 5,000 bush. of wheat, which with the vessel was uninsured.

Excavations are to be commenced during the winter at Sault Ste. Marie, Mich., on the preparatory work for the widening of the U.S. canal at that point. The U.S. engineer in charge of the canal is agitating for a new lock capable of passing vessels drawing 21 ft.

The steam barge Alberta, belonging to Capt. Smith, Kingston, and built at Cape Vincent, U.S.A., in 1886, was burned recently near Trenton, Ont. The Alberta, which was of 88 tons register, was engaged in the grain-carrying trade between Bay of Quinte points and Kingston.

The St. Lawrence and Chicago Navigation Co. proposes issuing 1,500 shares of stock in the proportion of two shares of new stock to five of old at par to shareholders of record of Dec. 15. The proceeds of the sale of new shares will go towards the building of a steamer at Collingwood.

The lease of the ferry between Prescott, Ont., and Ogdensburg, N.Y., now held by the C.P.R. Passengers and Transfer Co., is about to expire, and the Thousand Island Steamboat Co. is negotiating for a lease. The ferry is controlled by the C.P.R. and the New York Central Rd.

The traffic on Lake Timiskaming is controlled by the Lumsden line, which operates one passenger steamer, the Meteor, and a number of barges and scows. The lake is so shallow at the different landing-places that freight and passengers have to be taken ashore in lumbermen's "pointers."

Four dredges have been working during the season at Fort William and Port Arthur, deepening the channels, so as to permit vessels drawing 22 ft. to get alongside the docks. A basin has been dredged at the junction of the Kaministiqua and Mission rivers to permit 500 ft. steamers to turn in the river.

The Dominion Department of Public Works is building a spoon dredge, with a capacity of 800 cubic yards a day, on Lake Timiskaming, for the purpose of dredging at Haileybury, and New Liskeard, Ont., and Baie des Peres, Que. The dredge is 70 ft. long, 25 ft. beam, and with the tug-boat and tenders will cost \$80,000.

The Lake Erie Coal Co. (Ltd.) has been incorporated under the Ontario Companies' Act, with E. C. Walker, W. Woollatt, A. Leslie, of Walkerville, Ont; F. H. Walker and J. H. Walker, of Detroit, Mich., as provisional directors, to mine and deal in coal, and in connection with such business to own steam and other vessels. The capital is fixed at \$100,000.

The Canadian Shipbuilding Co. (Ltd.) has been incorporated under the Ontario Companies' Act, with a capital of \$1,000,000, to carry on a shipbuilding, general navigation, elevator and terminal business, or to acquire shares in such companies, or similar companies. The provisional directors are F. Nicholls, W. Mackenzie, Hou. G. A. Cox, W. R. Brock, M.P., and W. D. Matthews, of Toronto.

The U.S. engineering department has asked for bids for the construction of three dredging plants for the purpose of dredging the shoal in the middle ground of the mouth of Black river, in St. Clair river. The channel will be dredged to a width of 1,500 ft., and rext year it is proposed to dredge other shallow places in the channel to a width of 900 ft. and a depth of 21 ft. The Canadian channel is at