

are being overhauled in their winter quarters at Owen Sound.

W. J. Stewart, hydrographic surveyor of the Department of Marine, Ottawa, is preparing a new edition of the Georgian Bay and North Channel Pilot.

The Algoma Navigation Co. is negotiating for the building of a steamer 190 ft. long and 34 ft. beam, with a carrying capacity of 700 tons, for its Georgian Bay trade.

The lighthouse supply str. Scout has been placed in the dry dock at Kingston, Ont., where she will be lengthened 25 ft., and a number of other improvements made.

The Central Canada Coal Co., of Brockville, has purchased the steam barge Samuel B. Marshall, of Buffalo, N.Y. She is classed A $\frac{1}{2}$  and has a gross tonnage of 1,350 tons.

There were on order on Dec. 31, 1902, at Toronto, 1 cargo steamer, 2,300 tons, two tow-boats and two light ships, and at Collingwood two cargo steamers of 4,000 tons each.

The Grand Trunk Car Ferry Co. is having a steel ferry boat 315 ft. long and 54 ft. in breadth, built at Toledo, Ohio. We are advised that the G.T.R. is not interested in this ferry.

Press reports have been revived to the effect that a joint stock company is in course of formation in Hamilton to establish another line of steamers between Hamilton and Toronto.

The Montreal Transportation Co. expects to have one of its additional steamers delivered at Kingston on the opening of navigation, and the second one in July. One of these is to replace the lost Bannockburn.

The Hamilton and Fort William Navigation Co. has declared a dividend of 8% for the year, and has elected directors for 1903: President, W. Southam; A. B. Mackay, A. E. Carpenter, J. Milne, C. Doolittle, G. Hope and G. S. Lynch Staunton, K.C.

The Montreal Transportation Co. has purchased the schooner Augustus from the Calvin Co., of Kingston, Ont. She was built at Garden Island, Ont., in 1893, her dimensions being: length, 177.5 ft.; breadth, 39.6 ft.; depth, 15 ft.; register tonnage, 802 tons.

It has been reported that two-thirds of the Canadian vessels passing through the canals at Sault Ste. Marie use the U.S. in preference to the Canadian canal, on the ground that the channel to the upper entrance of the Canadian lock is not so advantageous as that to the U.S. one.

The str. A. J. Tyron, of Toronto, was ordered to be sold by the Admiralty Court to satisfy claims for wages preferred by Capt. McSherry and the crew. G. Gooderham has a mortgage on the steamer, of which Capt. McSherry is part owner. The sale was announced for Jan. 28.

Capt. Donnelly, Superintendent of the Canadian Lake and Ocean Navigation Co., says as the result of his experience with the turret type of vessel last season he is satisfied that it is the very best that could be built for the trade. The captains and crews of the four steamers returned to England for the winter.

The Hamilton Steamboat Co. elected the following officers at its annual meeting: President, W. Leggat; Vice-President, G. T. Tuckett; other directors, S. Jones, J. W. Lamoreaux, F. W. Fearman, H. B. Witton and T. Ramsay; General Manager, T. H. Bishop; Secretary-Treasurer, Miss A. Abrahams.

Thirty-four vessels were lost on the Great Lakes during 1902, with 140 lives, and representing a loss of \$703,000 on hulls and \$269,000 on cargoes to the underwriters. With the exception of the Bannockburn all the vessels lost were getting old, and some of them were doubtless not well equipped to meet very heavy weather.

Two U.S. vessels collided in Sandusky harbor, Ohio, and an action was entered and the Whitney, one of the vessels, was seized in Canadian waters and held until bail was given. Judge McDougall in the Admiralty Court at Toronto has decided that the plaintiff must deposit \$800 as security for the costs of the owners of the Whitney.

The Victoria Lumber Co. is having built at Toronto a 2,300-ton steel barge, her general dimensions being: length, over all, 260 ft.; breadth, 43 ft.; depth, 25 ft. She will be fitted with triple expansion engines, 17, 28 and 46 in. cylinders, by 32 in. stroke, to which steam will be supplied, at 176 lbs. pressure, by two Scotch boilers 11 ft. 6 in. by 12 ft.

Major T. W. Symons, U.S. engineer at Buffalo, N.Y., has received instructions from the Secretary of War to make a survey for a deep ship canal from the headquarters of the Niagara river to the lower river a distance of 5 miles. If this work is carried out the lake boats will be able to get into the lower river, which they cannot now do on account of the shallows and rapids.

Arguments have been heard and judgment reserved in the action brought by R. D. Perry against the Algoma Central Ry. Co., in reference to the operation of a ferry between the Ontario and Michigan sides of the St. Mary river at Sault Ste. Marie. Mr. Perry operates his ferry under a lease from the Dominion Government granted in 1897, and the Algoma Central Ry. operates its ferry under the authority of a Provincial Act of Parliament.

The Toronto Globe of Dec. 25, 1852, had the following item relative to navigation on Lake Ontario: "We are glad to notice that the Chief Justice will make her trips backwards and forwards every day during the winter. This will be a very great convenience to our community. The City of Hamilton has been laid up, but the Queen of the West still retains her place between this city and Hamilton. The weather is mild and moist, and the ice has disappeared from the bay."

The Dominion Government proposes to construct a dam between Adams and Galops islands in the St. Lawrence, with a view of completing the channel between Prescott and the Galops rapids. As the U.S. boundary runs through the channel between the islands C. Schriber, Deputy Minister of Railways and Canals, has been to Washington and explained the project to the authorities there. A U.S. engineer will make a report, and if this is favorable the work will be commenced this year.

The str. Norseman has been purchased by N. and A. Dymont from F. D. Gilchrist, Alpena, Mich., and will be added to the lumber carrying fleet on Georgian bay. The Norseman was built in 1864 at Port Huron, Mich., and was originally known as the Enterprise, and has the following dimensions: length, 172 ft.; breadth, 32 ft.; tonnage, gross, 660 tons; net 501 tons. She is fitted with simple compound engines, 20 and 50 in. cylinders by 30 in. stroke, to which steam is supplied by two Scotch boilers 12 by 9.

Two steamers which are being built at Collingwood are expected to be completed by June. One is for J. Playfair, of Midland, Ont., and the other for the St. Lawrence and Chicago Transportation Co. Their dimensions are: length, over all, 375 ft.; breadth, 48 ft.; depth, 28 ft.; cargo capacity 4,900 tons, on an 18 ft. draught; fitted with triple expansion engines, 20, 33, and 55 in. cylinders by 40 in. stroke, to which steam is supplied by two Scotch boilers 14 ft. by 12 ft., at a pressure of 180 lbs. to the square inch.

The Upper Ottawa Improvement Co. is having built at Toronto two tow-steamers

which will be taken in sections to the upper reaches of the river and put together there. They have the following dimensions: (1) length over all, 146 ft.; keel, 139 ft.; breadth, 26 ft.; depth, 8½ ft.; fitted with inclined compound engines 24 and 48 in. cylinders, by 60 in. stroke, and two locomotive boilers 5 ft. 4 in. by 23 ft. 4 in.; (2) length over all, 140 ft.; keel, 133 ft.; breadth, 24 ft., depth, 8 ft.; fitted with inclined compound engines 20 and 38 in. cylinders, by 54 in. stroke, and two locomotive boilers 4 ft. 10 in. by 21 ft.

Recent press reports credited a Toronto shipbuilding and engineering company with the intention of establishing a big yard at Sandwich, Ont., at which the C.P.R. was to have built a large fleet of modern lake carriers, and where repairs for Canadian vessels could be made. A member of the Toronto firm in question declined to make any statement on the subject, but Sir Thos. Shaughnessy, President of the C.P.R., said it was a very large story built on a flimsy foundation, and an officer of the Co., connected with its shipping branch, said no order for new vessels of the kind indicated had been given.

F. H. Clergue has recently been making enquiries as to the use of acetylene gas in buoys for marine purposes, and Captain Folger, Superintendent of the New York lighthouse district, reports that so far buoys so equipped become defective after a few days or weeks of service. The Safety Car Heating and Lighting Co. says: "We recognize the value of the acetylene flame for use in reflectors or lenses, and have carried on a considerable number of experiments ourselves, and now have buoy lanterns burning at our laboratory in an effort to arrive at a suitable arrangement. The consumption of gas cannot be any less than with Pintsch light, although we believe that the light will be three or four times as effective if reliable."

The U.S. canal at Sault Ste. Marie was closed for the season Dec. 15, and the Canadian canal a week later. The traffic passing through the Canadian and the U.S. canals at Sault Ste. Marie, from the opening to the close of navigation, was 35,961,146 tons, against 28,403,065 tons in 1901. The following are the figures for the Canadian canal:

	1902.	1901.	Increase or Decrease.
April 5 to May 31.....	532,188	151,679	380,509+
June.....	1,118,564	1,235,055	116,491-
July.....	523,936	276,624	247,312+
Aug.....	639,858	295,175	344,683+
Sept.....	560,031	201,229	358,802+
Oct.....	604,713	354,383	250,330+
Nov.....	635,314	277,144	358,170+
Dec.....	113,747	29,738	84,009+
	4,728,351	2,821,027	1,907,324+

### Manitoba and Northwest Territories.

The Manitoba Exploration Co. has been incorporated under the Manitoba Companies' Act to own steam and other ships, and carry on a general navigation business in addition to a number of other purposes. E. F. Hutchings, G. A. Glines, A. McLaren, W. G. Scott, J. Robertson, J. G. Cleghorn and J. H. Leech of Winnipeg, are the provisional directors.

Kelly Bros. are hauling large quantities of material to St. Andrew's rapids, near Winnipeg, for the construction of the lock. They expect to have 2,000 cubic yards of stone and about 6,000 cubic yards of sand on the ground ready to start building in the spring. The work has been considerably delayed during the past year or two by the large quantity of water in the river.

The Canadian Northern Ry. proposes establishing a harbor on Lake Manitoba, at Oak Point, Man., the terminal point of its branch known as the Hudson's Bay line. Large quan-