

The methods of water ballasting on the lake type boats, according to the Marine Record, is "simply to partly fill the hold with water, which is prevented from running through to the engine room by a bulkhead, generally constructed of a few planks, with a filling of cement to make it watertight." The reason the ballast is so placed is to submerge the propeller when the vessel is light, and since it has come in vogue there has been a minimum of broken shafts and lost propeller blades through racing.

The Brockville Navigation Co.'s directors for the current year are: President, R. Bowie; Managing Director, W. S. Buell; other directors, N. Cossitt, sen., J. Grant, O. K. Fraser and J. A. McKenzie. The Co. is a close corporation, organized by residents of Brockville and neighboring summer resorts for the purpose of supplying a satisfactory ferry service, which is given by the str. Brockville. The Co. has done a satisfactory business and paid last year the usual dividend of 5%, besides carrying forward a substantial amount.

The Lake Carriers' Association Committee on Aids to Navigation recommends among a large number of other works the following: range lights on Point Edward, near the mouth of the St. Clair river, recommended on account of several strandings having occurred after the lightship was removed because of the ice, thus leaving the dangerous channel unmarked; a number of additional gas buoys along St. Clair river both on the American channel, and the middle ground; a gas buoy to mark the channel of the Soo river near the Dark Hole.

In addition to the figures respecting the traffic through the Canadian and the U.S. canals at Sault Ste. Marie in our last issue the following additional facts from the U.S. reports will be of interest. The 4,204 vessels passing through the Canadian canal included 3,438 steamers, 336 sailing vessels, and 430 unregistered vessels. The total number of passengers carried was 59,663, of which 29,962 were carried through the Canadian canal. The outward traffic totalled 23,087,742 tons, its destination being as follows: to Lake Michigan ports, 2,211,476 tons; to Lake Huron ports, 917,919 tons; Lake Erie ports, 19,716,464 tons; and Lake Ontario ports, 241,882 tons; while the inward traffic amounted to 5,315,323 tons.

The Algoma Central & Hudson's Bay Ry. Co. has purchased a side-wheel steamer for the route between Toledo, Ohio, and Sault Ste. Marie, Ont., via Kincardine and other Lake Huron ports in Canada and the Manitoulin channel. This steamer, with the Osifrage, will give a bi-weekly service between these ports. The steamer which has been bought is the iron side-wheeler Montauk, owned by the Montauk Steamboat Co., which has been plying between New York and Sag Harbor, and which is the smallest steamboat running on Long Island Sound that has state-rooms. She was built at Wilmington, Del., in 1891. Her dimensions are: length 175 ft., beam 31 ft., width over guards 45 ft., depth 9½ ft., tonnage gross 570, net 449. She has 1 cylinder, vertical beam 38 x 108, 2 boilers, water pressure 60 lbs. She has accommodation for about 100 passengers.

#### Manitoba and the Northwest Territories.

Work on the construction of the locks at St. Andrew's rapids on the Red River below Winnipeg, has been recommenced by the contractors, Kelly Bros.

The Saskatchewan river is navigable from Lake Winnipeg along the north branch to Edmonton, Alta., for large vessels, and for smaller steamers for 150 miles further to Rocky Mountain house.

P. McArthur, A. D. McArthur, G. Barr, of Westbourne, G. O. Bellamy, of Winnipegosis, and J. G. Harvey of Dauphin, are making application for incorporation under the Dominion Companies' Act as the Standard Lumber Co. of Manitoba, with power, among other things, to acquire vessels and carry on a general navigation business, with office at Winnipegosis, Man.

The Roman Catholic mission on Lesser Slave lake has had built two steamers, one for the Peace river to be operated between Hudson's Hope and Fort Vermilion, about 600 miles; and the other for the Lesser Slave lake. The Peace river steamer is 60 ft. long and 11 ft. wide, and is fitted with powerful engines; while the second boat is a 29 ft. steam launch. Both are being taken overland from Edmonton to Athabasca Landing, the larger one in sections.

#### B.C. and Pacific Coast Shipping.

The C.P.R., it is said, will not take any steps in the direction of inaugurating a line of steamships from Vancouver, B.C., to Vladivostock, for some months.

Press reports state that a steamer is to be put on the Columbia river, to trade from Death rapids to the mouth of Canoe river, and up that river as far as it is navigable.

The Canadian Pacific Navigation Co. is about to build, at the Pacific coast, a wooden screw steamer for general service there. Her dimensions will be: length, 200 ft.; breadth, 36 ft.; depth, 16 ft.

The British Yukon Navigation Co. proposes to use crude petroleum as fuel on its steamers plying on the Yukon river between Whitehorse and Dawson. The experiments will be commenced in May.

The Pacific Coast Steamship Co. has purchased the str. Valencia to operate on its Alaska route; and will place the new str. Spokane on the run between Victoria, B.C., and San Francisco, Cal.

The Canadian Pacific Navigation Co.'s str. Charmer, plying between Vancouver and Victoria, B.C., has been equipped with a telephone, and when lying at the wharf at either port is connected with the city system.

The steamer service between Victoria and Crofton, B.C., in connection with the Victoria Terminal and Ferry Co.'s railway lines, was commenced on Feb. 3 by the str. Iroquois, the str. Mystery taking the place of the Iroquois.

It is reported that J. J. Hill and W. Oakes between them control most of the steamship lines operating from U.S. points on Puget Sound to southeastern Alaska, and that W. Oakes has in all his purchases been acting for J. J. Hill.

It is reported that one steamship company operating on the northern runs will hereafter employ wooden instead of steel vessels. It is claimed that they are less liable to damage, and should they run ashore, they can be got off at less cost than can steel vessels.

Goodall, Perkins & Co., San Francisco, who have been agents for the Pacific Coast Steamship Co. for some years, have given notice of cancellation of their contract, to take effect, it is stated, on June 30. The P.C.S. Co. will manage its business direct, and it is understood that Mr. Goodall, jun., will enter the Co's service.

Press reports state that the steamers of the Canadian-Australian line will resume calling at Fiji during the summer, and that it will receive mail contracts from the Imperial and Australian governments on the expiry of existing contracts with the U.S. lines. The Co. is having one new steamer built and will purchase another.

The Canadian Pacific Navigation Co., has placed an order with Swan & Hunter, Newcastle-on-Tyne, Eng., for a twin screw steel steamer, to run between Vancouver and Victoria, B.C. Her dimensions will be: length, 300 ft.; breadth, 40 ft. 6 in.; depth, 17 ft. 6 in. She is to be engined to give a speed of 18 knots an hour.

The Hudson's Bay Co. is having built at Victoria a stern wheel steamer for the Skeena and Stikine river trade. The dimensions will be: length, 130 ft.; breadth, 28 ft., with a very light draught; and the boiler is to be tested to 200 lbs. a square inch. The boat is being built under the superintendence of Capt. Johnson and Chief Engineer Hickey, of the H.B. Co.'s Skeena river service.

Press reports state that the promoters of the Trans-Alaska Ry. have secured three steamers, each capable of carrying 300 passengers and 2,400 tons of freight, and having a speed of 10 knots an hour, to run between Seattle, Wash., and Iliamna bay, Alaska, the proposed Alaskan terminal of the line. Two of the vessels are said to have been secured on the Great lakes and the third on the Atlantic coast.

Some surprise was recently created on the coast by the announcement that the collector of customs at Sitka, Alaska, had issued instructions to his deputy for Unalaska and Dutch Harbor, directing him to refuse the privileges of the port to British vessels engaging in sealing operations, such vessels being said to be engaged in "illegal poaching." The attention of the authorities at Washington was called to the Collector's action, with the result that he has been relieved of his position and the instructions cancelled.

U.S. shipping papers continue to state that the Canadian Pacific Navigation Co. is having built on the Clyde four 21-knot steamers, each to be 600 ft. long, 12,600 tons displacement and having accommodation for 800 cabin and 1,200 steerage passengers, that these steamers are for the Oriental trade, and that the three Empress liners are to be put on the Vancouver-Australia route. The C.P.N. Co. does not operate either of the two lines in question, but does operate on the Pacific coast in connection with the C.P.R. The C.P.N. Co. has just placed an order for an 18-knot steamer with an English firm, and a wooden screw steamer is to be built on the Pacific coast, for general service there. The C.P.R. operates the Oriental line and is considering plans for an additional steamer for it. The line to Australia is operated in connection with the C.P.R. by the Canadian-Australian S.S. Co., for which Co., it is reported, a new steamer is being built on the Clyde, and enquiries are being made for the purchase or charter of another.

The Elder-Dempster line has decided to withdraw its steamers from the route from Portland, Me., to Bristol, Eng., as the business has never been satisfactory.

By reason of an agreement between a number of transatlantic steamship companies, freight and passenger rates between Canada and British ports have been raised, and U.S. ports have agreed to quote Montreal rates in Canada for all classes of goods, hay alone excepted. The minimum saloon rate, winter months, is to be \$50 in future. The Elder-Dempster Co. state that they will not enter into any combination that will affect the immigration rates, consequently the third-class rates are not to be altered this season.

J. J. Riley, Jr., read a paper on marine insurance before the Montreal Insurance Institute recently. He stated that he was unable to trace the introduction of insurance into Canada, but the oldest policy