

New Freighter for Ottawa Forwarding Company.

The steamboat which is under construction at Kingston, Ont., for the Ottawa Forwarding Co., has the keel plate of steel, with keelson 18 by 6 ins., 70 lbs., of I beam type, with steel stem forging from keel turn, rivetted to keelson, and extending above the forward deckhouse to form support for the railing. The stern post is a steel casting with bulb for stern tube and shoe, all in one casting. The frames are 2½ by 3 by 5-16 in. angles, and the floor plates are 10 by 5-16 in. The frames throughout are spaced 18 ins. centres, and the deck beams 5 by 3 ins. steel angles are spaced 18 ins. centres and bent to 6 ins. in 25 ft. Deck stringers are 48 by 5-16 in., and side sheeting is formed up with a 48 by ¾ in. sheer strake and a 41 by 9-16 in. sheeting bolted below, from the bilge to the shear line. The sides are protected by 2½ by 3 ins. angles, fitted with heavy oak wales, and the bottom is planked with 3 ins. oak planking securely bolted to the frames.

The deck house forward is of steel 24 ft. long, and provides quarters for the captain, first and second officers and quarters below deck for the crew in the fore peak of the hull. A collision bulkhead separates this section from the main hold of the vessel. On the top of the deck house is the wheel house, equipped with steam steerer and fresh water tanks. The after deck house is also of steel, 40 ft. long, forming enclosures for machinery and quarters for the engineers and cook. The galley and mess rooms are arranged aft of the engine room. The vessel's dimensions are, length over all, 113 ft.; beam, 25 ft.; depth, 9 ft. The machinery consists of a compound engine with cylinders 11, 22, 22 ins. diam. by 16 ins. stroke, open front type with link motion, supplied with steam by a boiler for a working pressure of 137 lbs. The equipment includes high duty duplex boiler feed pump, independent air pump and jet condenser, arranged to pump from the bilge in case of accident, two hand capstans and one double drum steam winch with mast and boom for handling cargo.

She is intended for the general river trade in lumber, coal, grain and package freight.

Improvements for Vancouver Harbor.

E. D. Lafleur, of the Public Works Department, has advised that in order to work out a comprehensive scheme of improvements for Vancouver harbor, to meet the future requirements of the port, a complete survey of the harbor be made, including Burrard Inlet, up to, and beyond the Second Narrows, False Creek and the North Arm of the Fraser River. He recommends that a pier or dock should be built at some point on Burrard Inlet most suitable for shipping, about 800 ft. long by 250 ft. wide, with at least 30 ft. of water at low tide at the shore end, with warehouses, tracks and full equipment for handling merchandise; a similar pier or dock at North Vancouver; the maintenance of a channel with a minimum of 15 ft. depth at low water from New Westminster through the sandheads to the Gulf of Georgia; improvement of False Creek, by locks or dam at the outlet, or both combined; the relocation of the C.P.R. bridge, and the continued dredging of the First Narrows until the widening is completed and the Parthia shoal removed, and the Capilano River diverted to the west to prevent sand being washed into the dredged channel. The Minister of Public Works has approved the outlines of the scheme and instructions have been given for the prosecution of the work.

Canadian Notices to Mariners.

The Department of Marine has issued the following:—

37. May 29. 95. British Columbia, Prevost passage, uncharted rock, buoy established. 96. British Columbia, Queen Charlotte islands, Hecate strait, Skidegate inlet, eastward of Deadtrees point, buoy established.

38. May 30. 97. Nova Scotia, south coast, Peggy point, hand fog horn at light station. 98. Quebec, Restigouche river, changes in buoyage. 99. Quebec, River St. Lawrence, St. Pierre les Becquets, light discontinued.

39. June 8. 100. Prince Edward Island, north coast, Tracadie, change in position of front range lighthouse. 101. Quebec, Chaleur bay, Newport point, light improved. 102. Quebec, St. Lawrence river, Saguenay river entrance, Tadousac, new wharf. 103. Quebec, River St. Lawrence, Montreal harbor, Ile Ronde range, light on Guard pier discontinued, temporary back range light shown on new pier at Ile Ste. Helene.

40. June 10. 104. Ontario, Lake Ontario, Welland canal entrance, Port Dalhousie, change in front range light. 105. Ontario, Lake Huron, north channel, off Gibbons point, uncharted rock. 106. Ontario, Lake Superior, hand fog horn at light station on island west of Shaganash island.

41. June 11. 107. British Columbia, Vancouver Island, southeast coast, Victoria harbor, Brothie ledge beacon, change in characteristic of light. 108. United States of America, Washington, Destruction island light station, fog signal to be changed.

42. June 14. 109. Nova Scotia, southwest coast, Barrington bay, Congress shoal, buoy established. 110. Nova Scotia, south coast, submarine bell buoy to be moored near Sambro gas and whistling buoy for experimental purposes. 11. Nova Scotia, south coast, New harbor, whistling buoy moved to eastward.

43. June 18. 112. Nova Scotia, south coast, Coddle harbor, buoys established. 113. Prince Edward Island, north coast, Cascumpeque harbor, Alberton, change in position of range lights. 114. Quebec, Gulf of St. Lawrence, Gaspé coast, Great Fox river, change in position of front range light.

44. June 19. 115. Caution when approaching Canadian ports (Halifax, Quebec, Esquimalt), closing of ports, examination service. 116. Canada, signals

to be made by vessels approaching defended ports when inconvenienced by search lights.

New Steamship for C.P.R. British Columbia Coast Service.

The vessel which is under construction at Esquimalt, B.C., for the C.P.R. service on the west coast of Vancouver Island, as noted in previous issues, has the following dimensions:—Length between perpendiculars 232 ft., beam moulded 38 ft., depth moulded 17 ft.

She will be built of steel, in accordance with Lloyd's rules for a 100 A1 awning deck class of vessel, and will have double bottom throughout, and special tanks for oil fuel. The accommodation for both passengers and freight will be of the most modern type, specially suited for the trade in which she will be engaged.

The machinery will consist of triple expansion engines, with cylinders 20, 34 and 53 ins. diam. by 36 ins. stroke, supplied with steam by two boilers 13½ ft. diam. by 12 ft. long, and she will be capable of a speed of 12 knots an hour in the open sea.

International Inspection of Steamboats.

A United States steamboat inspection official at Oswego, N.Y., recently ruled that all boats plying between Canada and the U.S. must be inspected at U.S. ports. Francis King, counsel, Dominion Marine Association, took the matter up with the Secretary of Labor and Commerce at Washington, D.C., and received a letter from the acting Secretary, who said:—"It has long been the practice for inspectors of this country stationed at ports on the Great Lakes to inspect Canadian vessels at their home ports when requested by the owners, and this practice has been quite satisfactory to all interests. The local inspector at Oswego has been instructed by the Supervising Inspector-General, Steamboat Inspection Service, this department, to continue to inspect Canadian vessels at their home ports when requested."

F. E. Stearns, A.M. Can. Soc. C.E., has been appointed Assistant Engineer for the construction of the new Welland canal. He is a graduate of McGill University and has been engaged since 1907 on lock gate design on the Panama canal.

Sault Ste. Marie Canals Traffic.

The following commerce passed through the Sault Ste. Marie Canals during May, 1912:

ARTICLES	CANADIAN CANAL	U. S. CANAL	TOTAL
Copper	1,136	16,909	18,045
Grain	7,553,918	4,283,583	11,837,501
Building stone		2,250	2,250
Flour	281,720	655,360	937,080
Iron ore	3,923,545	1,589,854	5,513,399
Pig iron			
Lumber	784	67,516	68,250
Silver ore			
Wheat	27,122,703	7,450,808	34,573,511
General merchandise	1,120	24,585	25,705
Passengers	933	689	1,622
Coal, hard	9,646	8,202	17,848
Coal, soft	255,396	1,350,847	1,606,243
Flour			
Grain			
Manufactured iron	25,659	75,409	101,068
Iron ore		500	500
Salt	23,594	105,428	219,022
General merchandise	65,743	81,549	147,292
Passengers	1,501	436	1,937
Summary.			
Vessel passages	1,164	2,083	3,247
Registered tonnage	3,686,019	4,086,344	7,772,363
Freight—Eastbound	4,908,670	2,122,888	7,031,558
—Westbound	359,814	1,545,821	1,905,635
Total freight	5,268,484	3,668,709	8,937,193