

The 10,500-Ton Steel Cargo Steamships for Canadian Government Merchant Marine, Ltd.

As announced in Canadian Railway and Marine World at the time, the Marine Department gave contracts to Halifax Shipyards, Ltd., Halifax, N.S., on Dec. 10, 1918, for 2 steel cargo steamships of approximately 10,500 d.w. tons each, to be operated by Canadian Government Merchant Marine Ltd. The keels for them were laid as follows:—S.s. Canadian Mariner; Marine Department contract 21; builder's yard no. 1; Feb. 24, 1919, and s.s. Canadian Explorer; Marine Department contract 22; builder's yard no. 2; Mar. 15, 1919. It is expected that the first ship will be delivered before the end of this year. Their principal dimensions, etc., are as follows:—

Length between perpendiculars.....	430 ft.
Breadth moulded	56 ft.
Depth moulded	30 ft., 38 ft.
Sheer forward	7 ft.
Sheer aft	3 ft.
Lowest point of sheer	Amidships
Draft mean	28 ft. 11½ in.
Deadweight, in long tons, about.....	10,500
Speed loaded on 6 hours trial.....	11 knots
Complement, officers and men, about.....	63

These ships are of the shelter 2 deck type, having shelter, main and lower decks of steel, the shelter deck being surmounted by a forecastle deck forward, 45 ft. long, and a poop deck aft, 45 ft. long. They are being built to Lloyd's 100 A1 class and will have 8 w.t. transverse bulkheads, and a double bottom extending from peak bulkhead forward to peak bulkhead aft, dividing the ship into 24 w.t. compartments. A deep tank is provided abaft of the engine room. The frames and beams are of heavy bulb angle section, and the various decks are strongly supported by tubular pillars.

The cargo working arrangements are very complete. There are 4 hatchways, each about 30 x 18 ft. and 2 hatchways, each about 15 x 18 ft. commanded in all by 20 five ton derricks. The derricks will be operated by twenty 7 x 12 in. winches, of the Clarke Chapman type. In addition no. 2 hold is provided with a 30 ton derrick for heavy weights, such as machinery. The usual steam windlass forward is provided.

The steering engine is of the Wilson Pirrie type, 10 in. diameter by 10 in. stroke, direct connected to the rudder head. The ship will be electrically lighted throughout, being provided with duplicate sets of generating machinery, running in parallel 110 voltage. Two masts are provided, one forward and one aft, carrying the wireless aerials, the wireless set being of 1½ k.w. capacity.

Each ship will be provided with the following life saving equipment: 2 lifeboats, 28 x 8½ x 3½ ft.; 2 lifeboats 22 ft. x 6¾ ft. x 2 ft. 10 in.; 2 working boats, 18 x 5½ x 2½ ft. All other parts of the livesaving equipment will be in accordance with the British Board of Trade and Canadian Steamship Inspection requirements. The anchor and cable equipment will be in accordance with Lloyd's as follows: 2 bowers, stockless, 72½ cwt.; 1 spare, stockless, 72½ cwt.; 1 stream, ex-stock, 20½ cwt.; 1 kedg, ex-stock, 9 cwt., and 300 fathoms 2 6-16 stud link cable, with the usual steel wire and malleable hawsers, warps and towlines.

The accommodation for the officers and crew will be very complete. The engineers' cabins are placed in an island deckhouse on the shelter deck, about

amidships, containing cabins, dining saloon, lavatories, pantry, etc. The navigating officers will be in a deckhouse over on the lower bridge, and the captain's quarters comprising day cabin, sleeping cabin, office and lavatories, will be placed on the upper bridge, which will be surmounted by the chart room and wheel house on the flying bridge. The crew will be located aft, under the poop and shelter deck. A total complement of 63 officers and men is provided for. Forward under the forecastle deck will be the hospital, carpenter shop, paint store, oil room and boatswain's store. Steam heating at 20 lb. pressure will be supplied to all living quarters.

Cold chambers for the preservation of the ships' provisions will be abreast of the engine casing, on the main deck, and will have a total capacity of about 1,000 cu. ft. The refrigerating engine will be on the Clothel principle, capable of maintaining a temperature of 28° in tropical climates.

The propelling machinery will consist of one set of inverted vertical direct acting surface condensing engines of the following leading particulars:—
29½ x 50 x 80 in.

54 in.

Steam will be generated in 4 single ended boilers working under Howden's system of forced draft and having a working pressure of 180 lb. per sq. in. The heating surface will be about 10,500 sq. ft. and the grate area 270 sq. ft.

The air and bilge pumps will be direct connected to the main engine. One pair of Weir's feed pumps will be provided, each capable of supporting the boilers at full power. The other auxiliaries will comprise general service pump, ballast pump, sanitary pump, evaporator, distiller, feed filter, feed heater, auxiliary condenser, ash hoist and turning engine.

There will be one funnel of double section, and the usual ventilation to the engine and boiler rooms.

These ships, which have been designed by the Naval Constructor of the Marine Department, for bulk, general and refrigerated cargoes, will be capable of a speed of 12 knots under load conditions.

Winter Moorings of Canadian Steamships.

Following are Canadian steamships and the ports at which they have been berthed for the winter, in addition to those given in Canadian Railway and Marine World for January:—

Canada Steamship Lines Ltd., Montreal—Steamships, Lucia, S. H. Dunn, Port Colborne, Ont.; Ionic, Kingston, Ont.; Sarnor, Sorel, Que.

Keystone Transportation Co., Montreal—Steamships Keybell, Keynor, Keyport, Keywest, Grand Trunk dock, Kingston, Ont.

St. John Steamship Co., St. John, N.B.—Steamship Glenholm, Annapolis, N.S.

A record for speed was achieved by the British torpedo boat destroyer Tyrian on her recent deep water trials, when she attained 45 miles an hour on a 4 hour trip.

Sorel Government Shipyards Superintendency.

Canadian Railway & Marine World for Dec., 1919, gave particulars of notice issued by the Civil Service Commission inviting applications to be sent in by Nov. 24, 1919, by residents of the Province of Quebec only, for the position of Shipyard Superintendent, for the government shipyard at Sorel, Que., at an initial salary of \$3,000 a year. Apparently no satisfactory applications were received, as on Dec. 24, another notice was issued inviting applications for the position and stating that the competition was open to all residents of Canada, as follows:—A shipyard superintendent for the Government shipyard at Sorel, Que., Marine Department, at an initial salary of \$3,000 a year, which will be increased on recommendation for efficient service at the rate of \$180 a year until a maximum of \$3,540 has been reached. Candidates must have education equivalent to graduation in engineering from a school of applied science of recognized standing; at least five years of experience in ship design and construction, two years of which shall have been in responsible charge of such work; thorough knowledge of various types of ships and ship machinery and the construction and repair thereof; firmness, tact, good judgment, and ability to manage men; preferably a knowledge of both French and English. No special age limit is fixed for this position, but the appointee must be of such an age as to ensure a reasonable period of satisfactory service after appointment. The successful candidate will be required to perform the following duties: under direction to have charge of the Sorel shipyard; to be responsible for the design, estimate, construction and repair of ships; to supervise the buying and safekeeping of stores and stock and the work of all employees; and to perform other related work as required. An examination will be held in education and experience along the lines indicated above. An oral examination of the best qualified candidates will be held, if necessary in the commission's opinion. This position was advertised Nov. 6, 1919, and is now readvertised.

As stated in Canadian Railway & Marine World for Dec., 1919, the vacancy was caused by the resignation of W. S. Jackson, who was appointed Superintendent, May 12, 1919. F. A. Willsher, Assistant Naval Constructor, Marine Department, Ottawa, has been acting as Superintendent since Mr. Jackson's resignation.

Shipbuilding and Naval Architecture Instruction—Brigadier General C. H. Mitchell, C.B., C.M.G., D.S.O., Dean of Applied Science and Engineering Faculty, Toronto University, in his recent inaugural address, said, among other things:—"The subject of shipbuilding and naval architecture, which appear to be now in some demand, especially with the revival of Canadian shipping on the Great Lakes, and the development of the harbor works at Toronto and elsewhere, are being kept in view."

The Canadian Brotherhood of Light-house Keepers' Association, New Brunswick branch, was organized at St. John, N.B., Jan. 18. The officers are: J. E. Collins, Cape Spencer, President; K. McClellan, Port Esquimalt, Vice President; F. Fauley, Port Lepreaux, Secretary.