

INTERCOLONIAL
RAILWAY
CAR FERRY
“SCOTIA”

Marine Department

Intercolonial Railway's Car Ferry Steamship, Scotia 2.

A very complete advance description of this vessel was published in Canadian Railway and Marine World for Nov. 1913. The route which she is to serve is the trying one which traverses the Strait of Canso, between the mainland of Nova Scotia and Cape Breton Island. There is considerable ice-flow along this route in winter and, therefore, the Scotia 2 has been constructed to break up the ice, in order to keep the passage open for railway service. The vessel, which has several interesting features, left the Tyne Aug. 31 last, under the command of Capt. Manning, and, in spite of heavy weather on the voyage, arrived at Port Mul-

duced in order to break up the ice in front arrangement aft is for a single screw propeller with the ordinary rudder. The hull is specially strengthened at the water line, fore and aft, and water ballast tanks are arranged at the forward and after ends. These can quickly be filled in order to increase where necessary the downward thrust for the breaking up of the ice.

To facilitate navigation, a superstructure has been built. This gives a clear headway for the railway cars traversing the track on the deck, and affords a good outlook for navigation purposes. The pilot house on the navigation bridge contains the steam steer-

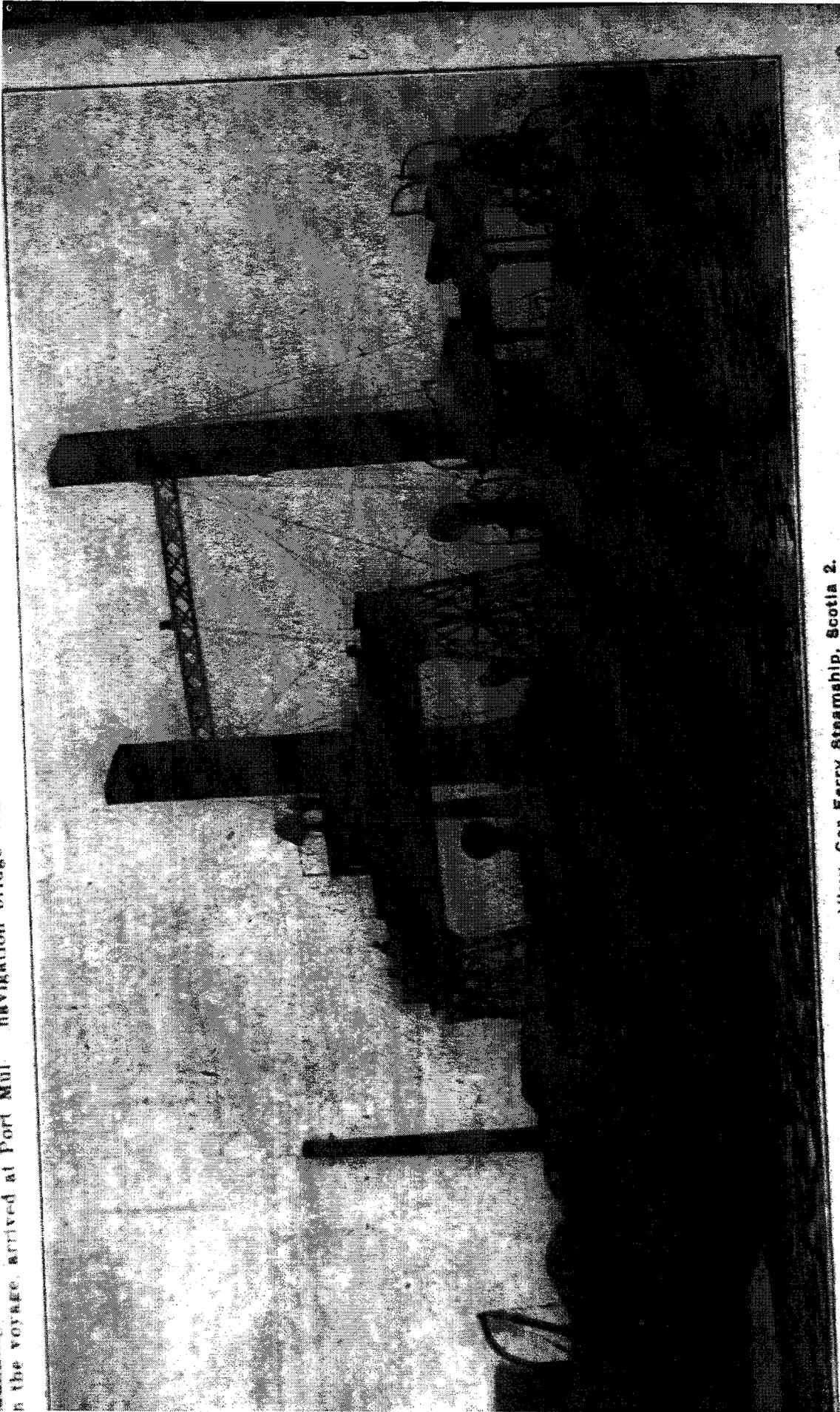
of one large mess room, four rooms for the officers and engineers, one for the steward, two separate rooms for the day and night captains, and two for the chief engineers. The crew's quarters include a mess room, one room for 6 seamen, and one for 2 firemen. A complete installation of electric light is fitted throughout the vessel. The generating machinery consists of two direct coupled plants, each capable of giving an output of 25 kw. at 80 volts, when running at a speed of 350 revolutions a minute. A searchlight of 20 in. diameter and 16,000 candle power, is fitted on top of the pilot house, with the necessary controlling

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NAVIGATION OFFICE

ARRIVED AT PORT MUL

THE VOYAGE



Bow View, Car Ferry Steamship, Scotia 2. The structural of the forward propeller. The structural ing gear control standard and the steering compass, with speaking tubes and tele-

gear and connections therein. There are 6 electric fans fitted in the stokehold and engine room ventilators. An air compressing plant, consisting of two Westinghouse

N.S. Sept. 15, proving the structural of the hull and the fact that ves-

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grave, N.S., Sept. 15, proving the structural strength of the hull and the fact that vessels of this character can safely cross the Atlantic. The principal dimensions are:—

Length over all	300 ft. 0 ins.
Length between perpendiculars	286 ft. 6 ins.
Breadth, extreme, over fenders	50 ft. 0 ins.
Depth, moulded	20 ft. 0 ins.
Draught of water	14 ft. 2 ins.
Displacement at 14 ft. 2 in. draught	3665 tons

The vessel is of the single deck type; and increased strength has been introduced in the framing of the deck in order to support the weight of heavy locomotives on the centre track. The vessel conforms to the conditions of Lloyd's highest classification and also with British Board of Trade requirements. The main deck has three lines of track laid to standard 4 ft. 8½ in. gauge, and the cars will be shipped and discharged over the forward end only. The four bunkers with which the vessel is fitted are so arranged that they can be loaded from cars on the railway track on deck. The fore part of the vessel is of the ram form, intro-

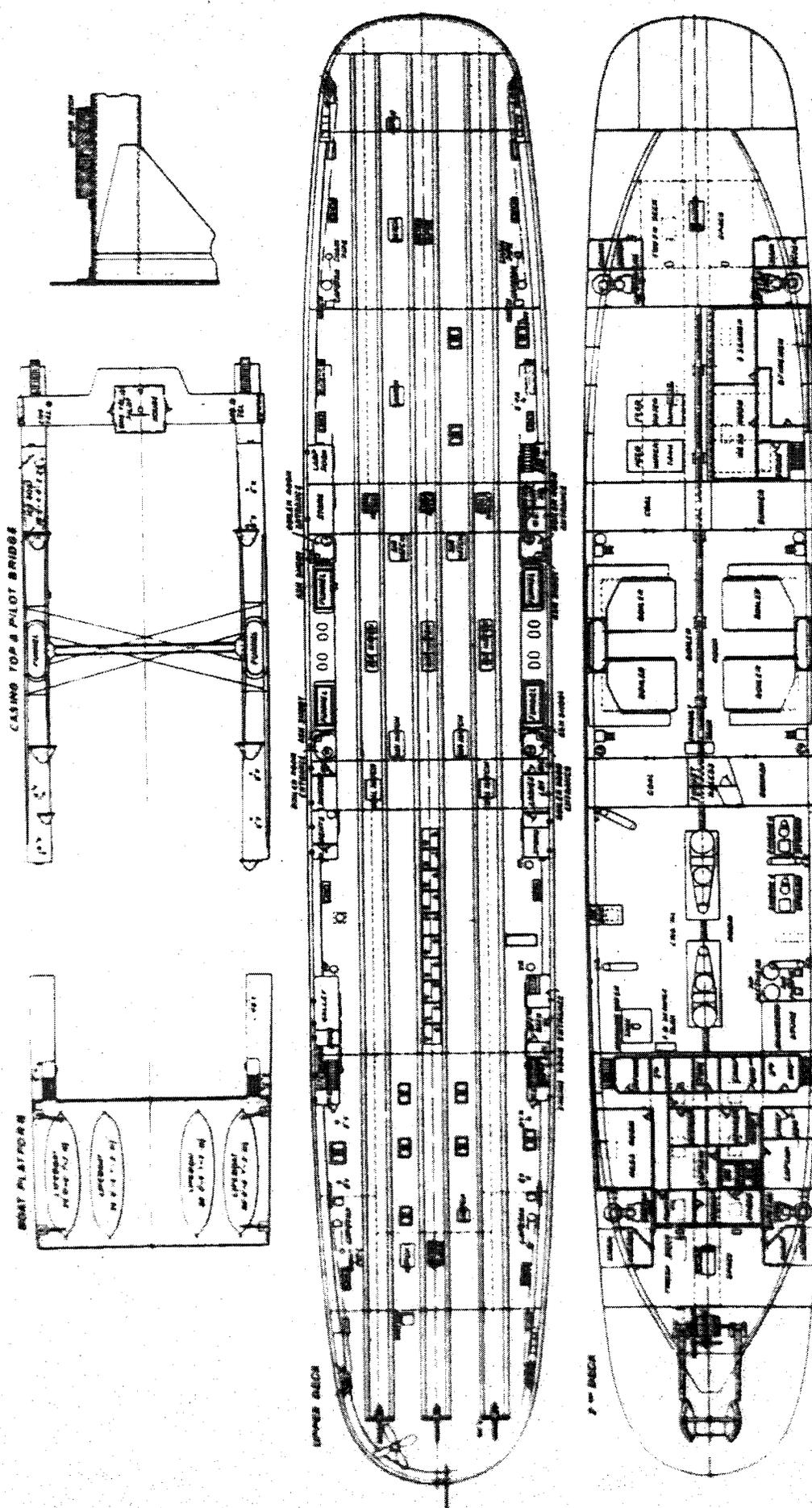
Bow View, Car Ferry Steamship, Scotia 2.

of the forward propeller. The structural ing gear control standard and the steering compass, with speaking tubes and telegraphs from the house to the engine room and its steering gear, which is fitted immediately forward of the rudder. The gear is of the combined hand and steam type. In addition there are warping steam capstans placed at each end of the vessel for working anchors, cables, and mooring ropes. The capstan heads are placed on deck, with the engines below the deck. There are also four pairs of mooring bits with the necessary pipes. Aft there is a superstructure corresponding to that for the pilot house, but utilized for carrying four lifeboats. On each side of the upper deck are the funnel casings and also the deck houses, providing the necessary sanitary accommodation, etc., for the officers, crew, and passengers. The mess room and living accommodation for the officers and engineers is under the deck aft, and for the crew below the deck forward. The former accommodation consists

gear and connections therein. There are electric fans fitted in the stokehold engine room ventilators. An air compressing plant, consisting of two Westinghouse air pumps, with receivers, is placed in engine room. Connections are led to each end of the vessel for providing power pneumatic tools used for effecting repairs to the hull or machinery.

The propelling machinery is fitted on ships and consists of two sets of engines, the fore and aft line, the forward engine being arranged to work the bow propeller and the after engines the stern propeller. A suitable coupling was fitted so that two engines may work either together independently. The engine room ventilators are placed in the wings, in order to afford the maximum of deck space for accommodation of the railway trains. Boilers are also arranged in the wings of ship, enabling the uptake to be easily suitably connected to funnels at the aft of the ship. There are 4 single ended bo-

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Longitudinal Section and Deck Plans, Car Ferry Steamship, Scotia 2.

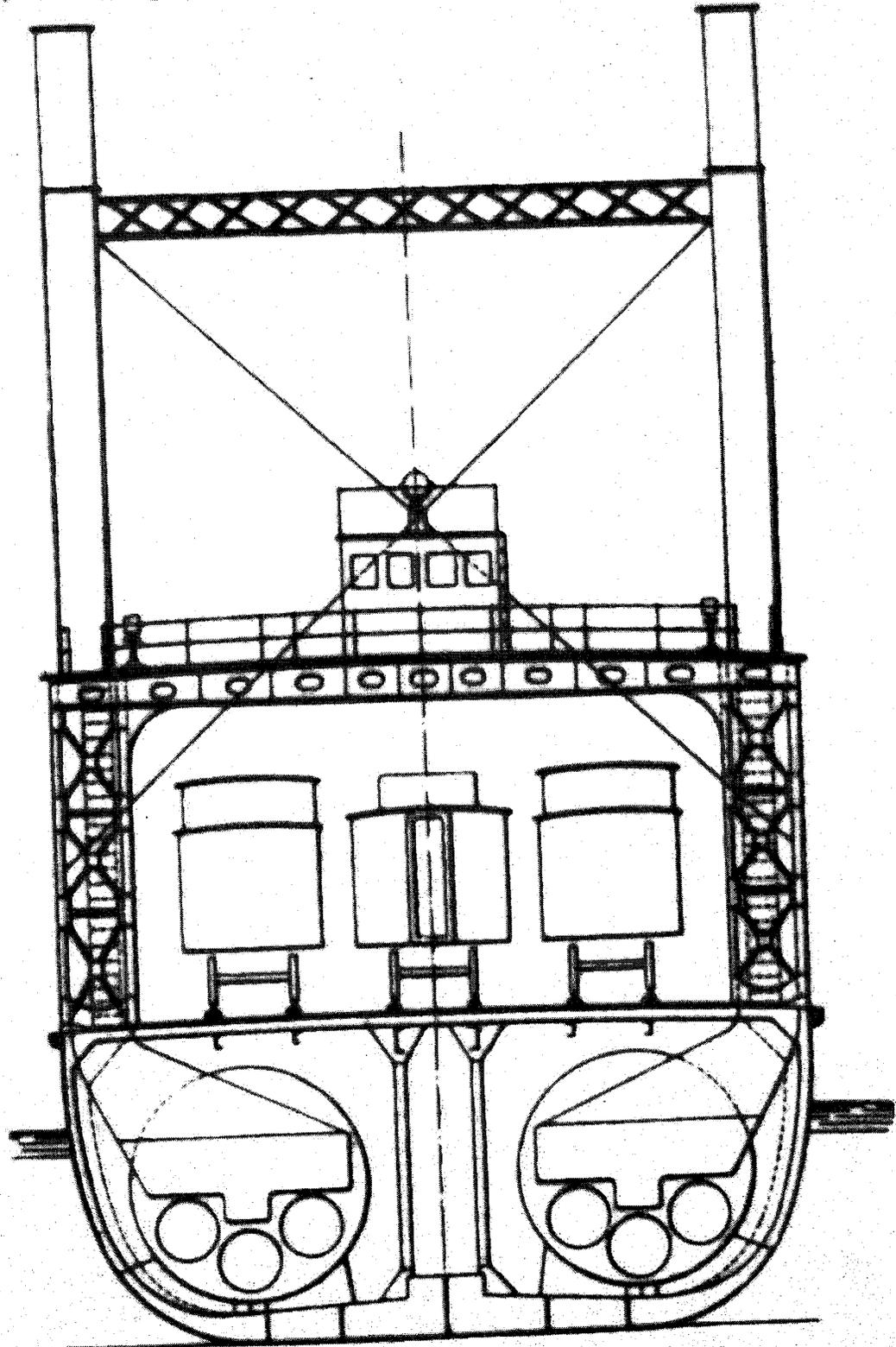
is made of nickel steel, extra thick, for working amongst ice. There is one condenser common to the two engines. It is placed on the port side centrally, being carried on the columns of the two high pressure cylinders. The method of support simplifies

has been built by Sir W. G. Armstrong, Whitworth & Co., Walker Shipyard, Newcastle-upon-Tyne, Eng.

A view of the cross section of this vessel is given on the next page.

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LOSS OF THE S.S. SCOTIA
 in the Gulf of Georgia, Oct. 2, 1915, was
 held at Vancouver, B.C., recently, by Capt.
 J. D. Macpherson, Wreck Commissioner for



Cross Section, Car Ferry Steamship, Scotia 2.

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