

Canada-West Indies Steamship Service.

The existing contract for a steamship service between Canada and the British West Indies and British Guiana, expires July 1, 1913, and in consequence of the recent report of the commission appointed to enquire into the general service with the West Indies with a view to improvements and extensions, the Dominion Department of Trade and Commerce is inviting tenders for a mail, cargo and passenger service between Canada, the British West Indies and British Guiana, and between Canada and Jamaica. The service for the West Indies and Guiana is intended to be every 10 or 12 days from Canada, to Georgetown, calling each way at St. Kitts, Antigua, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados and Trinidad, with Halifax or St. John, or both, as the Canadian ports. The tenderers are also asked to send proposals for a monthly service from Montreal, during the St. Lawrence navigation season, calling at Quebec each way, and the West Indies ports previously enumerated. Permission will be given for the vessels to call at any British port in the West Indies, and the contractor shall have the option of calling at any of the foreign islands for the sole purpose of discharging any Canadian cargo.

The Jamaica service is intended for vessels of from 1,600 to 3,000 net tons, having a speed of from 10 to 15 knots, sailing from either Halifax or St. John, or both, every 7, 10 or 12 days, calling each way at Bermuda.

In tendering, the following information must be given:—registered gross and net tonnage and passenger accommodation of vessels to be employed, average speed, period of round voyages, the annual subsidy required therefor, and the date on which the contractor will be in a position to supply the service.

Preference will be given, other conditions being equal, to the tenderer providing the most satisfactory conditions as to general accommodation, and also as to cool air chambers, insulation for the protection of fruit, etc.

The vessels to be employed must be of class A1, and be of British register, capable of maintaining a minimum speed of 12 knots when loaded at sea under normal weather conditions. The Minister of Trade and Commerce has power to prescribe the maximum freight and passenger rates, and to provide that no discrimination shall be made against Canadian importers and exporters.

The Largest Vessel Yet Constructed.

The s.s. Imperator, which is being built at Hamburg, Germany, for the Hamburg American Line, and which was launched recently, will exceed the ill-fated Titanic by some 5,000 tons. She is 900 ft. long, beam 96 ft. and molded depth 62 ft. From the keel to the boat deck will be 100 ft., and from the keel to the trucks of the masts will be 246 ft. The three funnels will be oval in section, measuring 18 ft. on the smaller and 29 ft. on the greater axis. The rudder will weigh 90 tons and the diameter of the rudder stock will be 2½ ft.

She will be driven by turbines of 70,000 h.p., which will be developed on four shafts. Her estimated speed is 22½ knots. She will have water tube boilers and will be fitted with U-shaped anti-rolling tanks. This device consists of tanks of large capacity, built on opposite sides of the vessel and connected by an inclosed waterway, through which the water can flow from side to side of the ship as she rolls, its flow being subject to control by valves.

The sub-division of the Imperator below the water line has been carried out under the supervision of the Germanic Lloyd's and the immigration authorities. It consists of a series of intersecting transverse and longitudinal bulkheads. Transversely, the ship is subdivided by 12 bulkheads, which are carried two decks above the water line, with the exception of the collision bulkhead forward, which extends four decks above the same level. These bulkheads are intersected by longitudinal bulkheads, which subdivide the boiler and engine rooms, the under water portion of the ship being divided altogether into 24 separate watertight compartments. There are four boiler-rooms, containing the water-tube boilers. The coal bunkers are placed above the boiler rooms, and along the sides of the ship, in the latter case being known as wing bunkers. The longitudinal bulkheads are placed about 19 or 20 ft. in from the side of the ship, and they extend from bulkhead no. 4, aft to bulkhead no. 8. Astern of the aftermost boiler room is the forward turbine engine room, which is protected against flooding by two wing bulkheads, between which and the sides of the ship are placed the auxiliaries. The after turbine engine room is divided by a central longitudinal bulkhead.

Because of its great size, special interest attaches to the turbine installation. The rotor, or rotating part, contains 50,000 blades, and is capable of developing

over 22,000 h.p. The casing is 18 ft. in diameter and 25 ft. long. The shafting of all four propellers is 1½ ft. in diameter. The turbadium bronze propellers are 16 ft. 8 ins. in diameter. Although the engines are spoken of as being of 70,000 h.p. it is probable that on test they will develop from 80,000 to 85,000 h.p.

The Imperator will probably make her maiden trip to New York in the early summer of 1913.

Canadian Notices to Mariners.

The Department of Marine has issued the following:—

45. June 20. 117. Nova Scotia, Cape Breton Island, east coast, Sydney harbor, south east bar, gas buoy withdrawn, north west bar, conical buoy replaced by gas buoy.

46. June 26. 118. Ontario, Ottawa river, Lake Deschenes, Baskins wharf, change in front range light. 119. Ontario, St. Clair river, Sarnia, wreck of steamer Joliet, wrecking barges withdrawn, light-ship replaced. 120. Ontario, Georgian bay, Meaford, extension to east breakwater, temporary lights, caution. 121. Ontario, Georgian bay, south side, Lock-erie rock, change in position of gas buoy.

47. June 27. 122. British Columbia, Prevost passage, Joan rock, buoy established. 123. Alaska, Yakutat bay entrance, Ocean cape, light established. 124. Alaska, Prince William sound, Hinchinbrook entrance, Zaikoff point, light established.

48. July 2. 126 Maritime Provinces and Quebec, Canadian list of lights and fog signals, new edition. 127. New Brunswick, Bay of Fundy, Machias Seal island, easterly light permanently discontinued, erratum. 128. Prince Edward Island, south coast, Bedeque bay, change in position of Miscouche fairway gas buoy. 129. Newfoundland, south coast, Placentia bay, Little Burin island, fog alarm established.

49. July 8. 130. Bay of Fundy, Brier island, north west ledge, change in position of gas and whistling buoy. 131. Quebec, Gulf of St. Lawrence, Anticosti island, Bagot bluff, new lighthouse. 132. Ireland, north coast, Rathlin island light, alteration in character.

50. July 11. 133. New Brunswick, Bay of Fundy, east of Deer island, Tinker ledge, spindle erected. 134. New Brunswick, each coast, Northumberland strait, Richibucto harbor entrance, change in position of lights on the south beach and north beach.

51. July 13. 133. British Columbia, Vancouver island, Alberni canal, Somass river, beacons. 136. British Columbia, Seaforth channel, uncharted rock north of Dall patch, change in position of gas and whistling buoy. 137. British Columbia, Observatory inlet, beacon established, buoys established.

52. July 16. 138. Nova Scotia, Bay of Fundy, Lurcher shoal, light ship to be removed from her station temporarily for repairs. 139. Nova Scotia, Cape Breton island, east coast, Scatari island, telephone line.

53. July 17. 140. Quebec, St. Lawrence River, survey steamer at work eastward of Father Point, caution.

54. July 18. 141. New Brunswick, Bay of Fundy, Chignecto channel, buoys in the vicinity of Grindstone island. 142. New Brunswick, Bay of Fundy, Calhoun flats, location and description of buoy.

55. July 18. 143. Ontario, Canadian list of lights and fog signals, new edition. 144. Ontario, Georgian bay, Meaford, extension to east pier, eastern entrance to harbor to be closed, light to be moved to the west end of breakwater.

The name of the steamboat Schwalbe, registered at Lunenburg, N.S., has been changed by order in council, to Northern Messenger.

Sault Ste. Marie Canals Traffic.

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

ARTICLES	CANADIAN CANAL	U. S. CANAL	TOTAL
Copper Eastbound..... Short tons	864	10,040	10,904
Grain " Bushels	4,133,652	1,536,926	5,670,578
Building stone " Short tons			
Flour " Barrels	309,562	660,590	970,152
Iron ore " Short tons	4,836,092	2,542,737	7,378,829
Pig iron " " "			
Lumber " M. ft. b.m.	4,331	108,787	110,168
Silver ore " Short tons			
Wheat " Bushels	6,850,880	5,332,797	12,183,177
General merchandise..... " Short tons	2,584	43,529	46,113
Passengers..... " Number	2,482	1,850	4,332
Coal, hard Westbound..... Short tons	25,300	181,760	207,060
Coal, soft " " "	409,606	1,652,769	2,062,375
Flour " Barrels			
Grain " Bushels			
Manufactured iron..... " Short tons	31,139	52,865	84,004
Iron ore " " "		2,688	2,688
Salt " Barrels	21,385	55,280	76,665
General merchandise..... " Short tons	101,218	77,234	178,452
Passengers..... " Number	3,817	1,410	5,227
Summary.			
Vessel passages..... Number	1,127	2,277	3,404
Registered tonnage..... Net	3,829,513	4,594,108	8,423,621
Freight—Eastbound Short tons	5,173,605	3,027,628	8,201,233
" —Westbound " "	570,318	1,975,608	2,545,926
Total freight " "	5,743,923	5,003,236	10,747,159