

Statistics of Canadian Shipping.

The total number of vessels on the Canadian register for the year ended Dec. 31, 1911, was 8,088, measuring 70,446 tons, being an increase of 184 vessels and 19,517 tons over 1910. There were 3,444 steamers, with a gross tonnage of 588,741, included in the list, which, at an assumed average value of \$30 a ton for the net registered tonnage, represents \$23,113,380. The number of new vessels built and registered in Canada was 339, representing 27,736 tons net register, which, estimated at \$45 a ton, gives \$1,148,120 for new vessels. During the year 279 vessels were removed from the register, lists of which, together with details of new registrations, were given in Canadian Railway and Marine World, throughout the year. It is estimated that 41,447 men and boys, inclusive of the masters of the vessels, were employed on Canadian registered vessels during 1911. The number and tonnage of vessels, according to provinces, are as follows:

	Sailing ships and steamships	Steamships	Gross tonnage of steamships	Net tonnage of sailing ships and steamships
Ontario	2,014	1,472	255,628	236,877
Quebec	1,511	490	128,523	193,682
Nova Scotia	2,105	236	35,916	142,631
British Columbia	1,227	873	112,511	122,264
New Brunswick	965	200	39,890	55,872
P. E. Island	149	20	4,407	9,683
Manitoba	96	86	8,348	6,373
Yukon district	15	3	3,132	2,708
Saskatchewan	5	4	381	356
Totals	8,088	3,444	58,8741	770,44

In a list showing the net registered tonnage of the shipping of the various maritime nations of the world, Canada appears as the ninth.

Of the vessels which were removed from the Canadian register during 1911, 21 were sold to foreigners, 37 were wrecked, 15 stranded, 12 lost, 78 broken up, 10 abandoned at sea, 3 sunk in collision, 12 foundered, 31 were burnt, 2 condemned, 31 reported out of existence, 2 dismantled, 17 were transferred to Newfoundland, and 8 to Barbadoes.

Ports of registry are distributed as follows:—Ontario, 38; Nova Scotia, 21; New Brunswick, 7; Quebec, 6; British Columbia, 4; Prince Edward Island, Manitoba, Saskatchewan and Yukon territory, one each.

The ports having a net tonnage of 10,000 and over, are as follows:—

	Vessels.	Net tonnage.
Sailing.	Steam.	
Montreal	803	297
Victoria, B.C.	325	203
Toronto	352	285
Vancouver, B.C.	686	531
Quebec, Que.	618	158
St. John, N.B.	330	105
Ottawa	390	253
Windsor, N.S.	72	15
Lunenburg, N.S.	332	30
Kingston, Ont.	208	139
Halifax, N.S.	433	100
Midland, Ont.	30	24
Parrsboro, N.S.	87	7
Hamilton, Ont.	40	37
Collingwood, Ont.	78	73
Yarmouth, N.S.	310	38
Port Arthur, Ont.	80	55
S. S. Marie, Ont.	69	59

The vessels built and added to the register during 1911, according to provinces, were as follows:—

	Vessels.	Tonnage.
Ontario	42	10,086
British Columbia	98	7,781
Nova Scotia	136	5,340
Quebec	30	2,726
Manitoba	3	902
New Brunswick	25	774
Saskatchewan	1	66
Prince Edward Island	4	61
Totals	339	27,736
Totals, 1910	294	22,283

Canadian Notices to Mariners.

The Department of Marine has issued the following:—

65. Aug. 23. 180. Ontario, Detroit river, off southern end of Fighting island, spar buoy replaced by gas buoy. 181. Ontario, Lake Superior, east end, Whitefish bay, Ile Parisienne, light and fog alarm established. 182. Ontario, Lake Superior, Thunder bay, Port Arthur, Bare point, breakwater under construction, lights.

66. Aug. 24. 183. New Brunswick, Bay of Fundy, Grand Manan island, Ross island, Grand harbor, Fish Fluke point, character of light. 184. Nova Scotia, Avon river, Windsor bridges, arrangement of lights changed, new bridge being built. 185. Nova Scotia, south coast, Cross island, change in character of light. 186. Quebec, River St. Lawrence, Portneuf-en-bas lighthouse, slats placed in skeleton frame. 187. Newfoundland, south coast, St. Lawrence harbors, Middle head, fog alarm established.

67. Aug. 24. 188. British Columbia, Chatham sound, entrance to Prince Rupert, Holland island, lighthouse under construction; temporary light.

68. Aug. 26. 189. Quebec, River St. Lawrence, Beauport bank, conical buoy replaced by gas buoy. 190. Quebec, River St. Lawrence, Montreal harbor, Ile Ronde range, Ile Ste. Helene, lighthouse established.

69. Aug. 27. 191. Ontario, Lake Superior, eastern end, outer Pancake shoal, bell buoy replaced by gas and bell buoy. 192. United States of America, Lake Erie, Buffalo harbor approach, lightship established.

70. Aug. 27. 193. British Columbia, Thompson river, Kamloops lake to Little Shuswap lake, buoys and day beacons established.

71. Aug. 29. 194. British Columbia, Vancouver island, west coast, Clayoquot sound, Templar channel, telephone connection between Lennard island light-station and Tofino. 195. British Columbia, Vancouver island, east coast, Cordova bay, uncharted rock. 196. British Columbia, Strait of Georgia, Porlier pass, are of visibility of front range light on Race point increased. 197. British Columbia, Chatham sound, Dundas islands, Hudson Bay pass, uncharted rock. 198. United States of America, Washington, Juan de Fuca strait, Neah bay, whistling buoy replaced by gas and whistling buoy, light discontinued.

72. Aug. 31. 199. Quebec, River St. Lawrence, St. Thomas channel, dredging, rearrangement of buoys, gas buoys established.

73. Sept. 5. 200. New Brunswick, south coast, Bay of Fundy, Musquash harbor, buoys established. 201. New Brunswick, south coast, Bay of Fundy, Cape Spencer, reported irregularity of light contradicted. 202. New Brunswick, east coast, Northumberland strait, Kouchibouguac bay, St. Louis gully, Kouchibouguac river, change in position of range lights. 203. New Brunswick, east coast, Kouchibouguac bay, Kouchibouguac river, change in position of range lights. 204. Prince Edward Island, south coast, Hillsborough bay, Charlottetown harbor, buoy re-established. 205. Newfoundland, Labrador, Belle isle, south end, position of main light, erratum in list of lights. 206. England, west coast, Trevose head light, alteration in character. 207. England, south coast, Lizard head, submarine fog signal established off.

74. Sept. 6. 208. British Columbia, Lama passage, Campbell island, Napiér point, day beacon erected. 209. British Columbia, Queen Charlotte islands, entrance to Houston Stewart channel, beacon to be moved from Koya point to Danger rocks.

75. Sept. 7. 210. Quebec, Gulf of St. Lawrence, Magdalen islands, Grindstone

island, Etang du Nord lightstation, new lighthouse, change in character of light.

76. Sept. 11. 211. British Columbia, Queen Charlotte islands, Skidegate inlet, hydrographic information.

77. Sept. 12. 212. Ontario, Lake Erie, Port Burwell, change in position of back range light of inner range. 213. Ontario, Lake Erie, shoal off entrance to Port Stanley, caution. 214. United States of America, St. Lawrence river, Ogdensburg harbor, Ogdensburg light, red sector to be installed.

78. Sept. 13. 215. Ontario-Michigan, Detroit river, Livingston channel, aids to navigation to be established.

The White Star Steamship Britannic.

The Atlantic liner, which is being built at Belfast, Ireland, for the White Star Line, and which will be named the Britannic, will in general features be similar to the Olympic, but of somewhat larger tonnage. There will also be various improvements introduced into the new vessel, resulting from the experience gained from the Olympic, and profiting by the lesson of the Titanic disaster. The Olympic will also be altered at an early date with a view to making her what her owners believe will be the safest ship in the world. The general structural changes will be very few, the strength of the Olympic under all weather conditions having proved entirely satisfactory. In two important respects, however, both vessels are to bear evidence of the recent change in expert and public opinion as regards protection against the effects of collision, both by the introduction of a complete inner skin extending to a considerable height above the load line throughout the most vulnerable portions of the vessels, and also by the increased height and number of watertight bulkheads, so as to render both ships as nearly unsinkable as possible.

The inner skin will consist of heavy plating, well stiffened, extending for more than half the length of the vessel, from the watertight bulkhead in front of the forward boiler room to the after end of the turbine engine room, the inner skin being strongly connected to the outer shell by longitudinal plates and angles and specially strong connections at bulkheads and watertight divisions. The space between the outer and inner shells will be the width of the web frames at present in the ship, and this reinforced structure will run from the tank top, i.e., from the top of the double bottom, to a point well above the load water line. In addition, an extra watertight bulkhead will be introduced, and several of the existing bulkheads carried up to the bridge deck.

The additional strength and safety afforded by these methods will be easily appreciated. Hitherto it was considered sufficient if a vessel could float with any two compartments pierced; but the Olympic and Britannic, besides having this extra protection against serious damage, will, it is claimed, be able to float with any six compartments flooded; and with these special provisions it is not considered within the possibility of chance that so many compartments could be in this condition.

The Chief Engineer states, that every effort is being made to complete the excavation and the work on the locks of the Panama canal by June 30, 1913. He expects to see the level of Gatun Lake at 85 ft. some time in Sept., 1913. If this be accomplished and the first boat be successfully put through the canal, announcement will be made that it is in condition to pass shipping. This, he says, will allow of a year's try-out before the formal opening.