

The Department of Marine.

The report of the Department for the year ended June 30, 1900, has been issued. Following are extracts from the Deputy Minister's report:—

The amount expended on the various branches of the public service comprised in the Marine Branch of the department during the year was \$919,616.94; the expenditure for the previous year was \$1,020,259.93. The expenditure for civil government, including the Marine and Fisheries branches, amounted to \$54,368.71, and for civil government contingencies \$8,962.60.

The number of persons in the outside service of the Marine branch is 1,910.

The expenditure for maintenance of light-house and coast service was \$456,254.48; construction, \$60,239.92; total, \$516,494.40.

The number of light stations, light-ships, and fog alarm stations in the Dominion on June 30, 1900, was 693, and lights shown 869; the number of steam whistles and fog-horns, bells and guns 88; the number of light-keepers and engineers of fog alarms, with masters of light-ships, was 693.

Buoys and Beacons.—The extended coast line of Canada, and numerous bays, inlets, rivers, lakes, harbours, and other navigable waters require a large number of buoys, which are maintained at an average cost of \$55,000 a year. For the year ended June 30, 1900, the service cost \$66,980.48. The cost is increased in years when new contracts are given for steel signal and other coast buoys. The Department has been substituting steel coast buoys for wooden buoys with favourable results. The districts now buoyed in all parts of the Dominion number over 300, and the buoys number over 3,000. The contract system has been found to work most economically and efficiently; in the majority of instances the contracts are immediately under the supervision of departmental officers, whose duty it is to report to the Department any neglect of work on the part of the contractors. There are now existing about 275 contracts, some of which will shortly expire, but new contracts will be entered into in the spring. The contractors are paid semi-annually upon the certificate of the superintending officer. There are, however, some districts not under contract; the work is being attended to by the harbour masters. In these cases it has been found more advantageous to place the work immediately in the hands of these officers. A large number of whistling, bell and other iron buoys are maintained along the coasts of the several provinces by Dominion steamers, particularly the Nova Scotia, New Brunswick and British Columbia coasts. The cost of this maintenance by the steamers is not charged directly to the buoy service, but is included in the cost of maintenance of steamers which frequently perform the double duty of attending to lighthouses and the coast buoy service on the same trip.

The expenditure in connection with the buoy service for the year ended June 30, 1900, was:—

Province of Quebec, including port of Montreal	\$30,527 61
Above Montreal, including Ontario	7,489 58
Nova Scotia	11,067 28
New Brunswick	9,390 82
British Columbia	6,111 60
Prince Edward Island	2,393 59
Total	\$66,980 48

In addition to the buoys for marking dangers, there are 11 gas buoys below Quebec and one spare buoy, also gas works and supply tanks, etc. Two gas buoys are maintained in Pelee Passage, Lake Erie, and three in Parry Sound, Ont. All of these buoys assist vessels at night by their light.

The steam barge Shamrock, built in 1898, was engaged in the buoy service in the ship channel between Montreal and Quebec, and

was immediately under directions from the Department in carrying out the work of buoying the channel. The buoys were increased in number, and various changes and improvements were made, especially in the stretches of the dredged channel improved by the Public Works Department.

Tenders were invited and contracts entered into for the following steel buoys during the year, viz., 3 whistling buoys, 2 bell buoys, 4 conical buoys and 9 can buoys for the Nova Scotia agency; 18 conical buoys for the New Brunswick agency, and 2 conical buoys for the Quebec agency.

Steamer Minto.—The Minto is a new iron steamer 225 ft. long, breadth 32.6 ft., and depth 20.6, gross tonnage 1,089, net tonnage 371; indicated h.p., 2,900, and nominal h.p., 216. She is commanded by Capt. Allan Finlayson, and has a crew of 35 in all. She left Dundee, where she was constructed, on Sept. 14, 1899, and arrived in Charlottetown Sept. 25, having experienced a rough passage. She proceeded to Pictou for coal on Sept. 27, and from there made a trip to Sable Island, returning to Charlottetown on Oct. 11. She left for Pictou on Dec. 18 to coal up for the winter service and entered upon this work on Jan. 2, when she left Charlottetown for Pictou. One round trip was made on this route, but on returning from Pictou the second time the Captain deemed it unsafe to enter Hillsboro Bay on account of the condition of the ice, and went to Georgetown. She continued on the Pictou-Georgetown route until April 6, 1900, on which date she went to Charlottetown. The Charlottetown-Pictou route was resumed, and she continued until April 16, when she was withdrawn from the service. On May 30 she left for Pictou to go on the slip to have the bottom cleaned and painted; this was completed about the end of May, and she returned to Charlottetown, where she was laid up at the wharf. She was still there at the end of the fiscal year, overhauling gear, painting, etc. The gross earnings of the steamer amounted to \$11,654.56. She made 81 trips and carried 2,104 passengers and 89,626 packages of goods, besides doing mail service the whole winter; there was therefore no necessity for opening the mail service between Capes Traverse and Tormentine in the small ice boats as usual in former years.

The cost of maintaining the Dominion steamers, which was \$145,270.75 in 1898-9, rose to \$180,975.45 in 1899-1900. The latter figures, however, include the outfit and stores to the str. Minto in Scotland, also alterations of the str. Aberdeen.

Masters and Mates.—The Board of Examiners of Masters and Mates held examinations at Halifax 13 times, at St. John 6 times, at Yarmouth 3 times, but none at Quebec. There were also 5 examinations held at Victoria, B.C.; the papers and problems were forwarded to the Agent at that place and returned to Halifax, for inspection of the Chairman of the Board.

Wrecks and Casualties.—The total number of casualties to British and Canadian sea-going vessels reported to the Department, as having occurred in Canadian waters and to Canadian sea-going vessels in waters other than those of Canada, during the year, was 151, representing a tonnage of 59,066 tons register, and the amount of loss both partial and total, to vessels and cargoes as far as ascertained, was \$356,848. The number of casualties to inland vessels, so far as have been reported, were slight and unimportant. The number of lives reported lost in connection with the casualties was 74.

Sick and Distressed Mariners.—A duty of 2c. a ton register is levied on every vessel arriving in any port in the Provinces of Quebec, Nova Scotia, New Brunswick, Prince Edward Island and British Columbia, the money thus collected forming the Sick Mariners' Fund.

Vessels of the burden of 100 tons and less pay the duty once in each calendar year, and vessels of more than 100 tons, three times in each year. No vessel, which is not registered in Canada and which is employed exclusively in fishing or on a fishing voyage, is subject to this duty. The receipts for the year were \$59,954.50, and the expenditures were \$32,743.30. Since 1869 \$127,291.10 has accumulated to the credit of this fund. The Sick Mariners' Act does not apply to Ontario, and consequently no dues are collected from vessels in that Province, although a small expenditure is incurred on account of sick seamen. An appropriation is made by Parliament to cover the expenditure at Kingston and St. Catharines, where general hospitals have been established and sick seamen are attended. During year sick seamen were paid for at a per diem rate of 90c.

Steamboat Inspection.—The total number of steamboats reported in the several districts in the Dominion is 1,491, of which 106 are new vessels, the gross tonnage being 244,401. Fees were collected for inspection amounting to \$35,465.83; the fees from engineers for certificates amounted to \$809, and fees for inspection of tow barges to \$200, making the total receipts \$36,474.83, but out of this amount refunds were made to date which should have come out of former years' receipts. Owing to the increase of tonnage of steamers, mainly caused by the Yukon trade, and the additional work of inspecting steamers without certificates, not registered in the Dominion, the work of inspection has been increased in most of the divisions. The total expenditure in connection with inspection was \$27,965.92.

Signal Service.—Arrangements have been completed between the Government and the Society of Lloyd's, whereby the following signal stations, maintained by the Dominion, have been included in Lloyd's system of reporting stations. Orders forwarded to Lloyd's can be notified to vessels by means of these signal stations on the same terms and conditions as observed at Lloyd's signal stations, and vessels signalling to these Canadian signal stations will be reported to Lloyd's for insertion in the Lloyd's List and Shipping Gazette, and daily press, in the same manner as reports from Lloyd's signal stations:—Cape Ray, Newfoundland; St. Paul's Island and Cape St. Lawrence, Cape Breton; Heath Point, South Point, Southwest Point and West Point, Anticosti; Cape Rosier, Fame Point and Cape Magdalen, Gaspé Coast; Amherst Island, Magdalen Islands.

The government telegraph system was, during the past season, extended along the north coast of the Gulf of St. Lawrence to the Strait of Belle Isle, and it was intended to connect Belle Isle, last fall, with the shore telegraph system by a cable, but the loss of the str. Newfield has postponed the completion of this work.

Lloyd's have been in communication with this Department on the subject of establishing one of their reporting stations on Belle Isle, and have been offered the active assistance of this Department in doing so. They are also considering the feasibility of connecting Belle Isle with the mainland by a system of aerial telegraphy, so that communication would not be interrupted by a break in the cable.

Arrangements have been completed by the Department whereby all inward bound vessels showing their official numbers will be reported from marine signal stations in the river and gulf of St. Lawrence immediately, and all reports will be promptly posted on the bulletin board of the G.N.T. Co.'s office in Quebec, and on that of the Board of Trade in Montreal. Weather and ice reports will be forwarded twice a day, as formerly, and similarly posted. Arrangements have also been made for repeating all reports received to the