

of McGill University, shall for the present conduct the meteorological observations at Montreal.

OBSERVATORIES.

There are two observatories and time ball stations maintained under the supervision of the Department. The expense of the one at Quebec was \$2,400. The time is given regularly to the shipping during the season of navigation at 1 o'clock, p. m. A signal drum has been erected on the top of Laval College for storm signals. A new observatory and dwelling house has been erected for the Director, at a cost of \$5,000. The other observatory and time ball is at St. John, N. B. It has been placed on the roof of the Custom House, and the time is also given at 1 p. m. every day, except Sunday. The expenditure was \$638 61.

Improvement of Harbours.—Under the Act 32 and 33 Vic., Cap. 40, the Governor in Council was empowered to impose a duty of 10 cts. per ton on all vessels arriving in Harbours proclaimed to be under the operation of the Act, to reimburse the Government for contemplated improvements. Bathurst, Richibucto, N. B.; House Harbour and Amherst Harbour in the Magdalen Islands, and Cape Chatte, in Quebec, are the only ports yet proclaimed. The amount collected, during the fiscal year, was, \$2,976.70; and the amount expended, \$7,909 34. The largest expenditure was at Amherst Harbour, Magdalen Island, where there are sometimes 2 or 300 fishing vessels taking refuge. \$2,000 was spent for a steam tug at Richibucto, and the same amount at Miramichi, N. B. During the last 4 years nearly \$20,000 has been expended on these harbours, and nearly \$12,000 received from them.

HARBOUR AND RIVER POLICE.

A water police force is maintained at Quebec and Montreal during the season of navigation, for the purpose of preserving order about the shipping and wharves. A tax of 3 cts. a ton is imposed on all vessels visiting these ports. Under 100 tons, it is only payable once a year; over 100 tons, twice. There are two steam yachts and four boats at Quebec and constant employment for the force. The total number of the force employed at Quebec during the season of 1872 was 34, but in 1873 it was thought advisable to increase it to 49. The total expenditure during the fiscal year at the Port of Quebec, was \$18,200, and the receipts, \$ 0,542 96. At Montreal the force numbered 25 men. The expenditure, \$14,453.87, and the receipts, \$6,075.54.

Total Expenditure.....\$32,653 87
 " Receipts..... 26,613 50
 During the 5 years ending 30th June, 1873, the total receipts were.....\$121,018 87
 And the total expenditure..... 111,223 34
 Showing a balance of..... 9,795 53
 receipts over expenditure in the 5 years.

SICK AND DISTRESSED MARINERS.

Mariners who are found sick or disabled at any of the sea-going ports in Canada, who belonged to Canada and Canadian ships, those who have been shipwrecked and become distressed on the shores of Canada or abroad, and who require assistance and clothing to reach their homes in Ca-

nada, are taken care of by the Government of Canada. A tax of 2 cents per ton is imposed on all vessels entering any port of Quebec, New Brunswick, Nova Scotia, P.E. Island, or B. Columbia, from any port or place not in the same province, except vessels from Ontario coming to ports of Quebec. 100 tons or less pay once a year; over 100 twice. There are Marine Hospitals at Quebec, St. John, St. Andrews, Miramichi, Richibucto and Bathurst, and it is intended to establish others at Sydney, Pictou, Yarmouth, Sackville and Da'houseie. At Montreal and Halifax arrangements are made for sick mariners at the General Hospitals, and at small ports where there is no hospital the Collector of Customs is required to provide for sick mariners. A hospital has also been established since July, 1874 at Charlottetown, Prince Edward's Island, and another is being built at Victoria, B. C. The total amount collected during the fiscal year was \$37,135.08 and the expenditure was, \$ 4,016 43, divided as follows:—

	Receipts.	Expendit.
Quebec.....	\$ 8,305 57	\$17,744 50
New Brunswick.....	8,922 76	7,610 76
Nova Scotia.....	10,305 37	11,719 53
Ont.....		500 00

The expenditure in Nova Scotia was still further largely increased by the expenses of shipwrecked and distressed seamen from N. S. abroad, which were reimbursed to the Imperial Board of Trade. On the amounts of the last five years there is a balance to the credit of the fund of over \$1500; but the demands are constantly increasing and very heavy, and the fund will hardly be self supporting in future.

Masters' and Mates' Certificates.—The examination for these certificates is by a Board of Examiners at Halifax, St. John and Quebec, of which Capt. Scott, R. N., is Chairman. The greater part of the examinations are at St. John, some at Halifax and a very few at Quebec. From 16th Sept., 1871, to 31st Dec., 1873, 369 candidates had passed successfully; 117 at Halifax, 245 at St. John, and 27 at Quebec; 70 mates passed and received certificates in the same time. The expenditure up to 31st Dec., 1873, was \$14,402 92, and the receipts for certificates, \$7,673.

STEAMBOAT INSPECTION.

All steamboats registered in Canada, if running and navigating in our waters, must be annually inspected by the Government Inspector, whose duty it is to see that they are safe. In the Dominion there are 7 Inspectors, who are engineers, and are paid salaries for this duty. In British Columbia the agent of the Department performs the service. The receipts from this branch during the fiscal year, were \$15,412.75, and the expenditure, \$11,205 54. The fees are; for a steamer not exceeding 100 tons, \$5, over 100, \$8; and a charge of 10 cts. a ton, irrespective of size. During the calendar year 1873, there were inspected in the W. Ont. Division, 177; E. Ont. 83; Montreal 83; Three Rivers, 48; Quebec, 75; New Brunswick and Nova Scotia, 88; total, in 1873, 554, with a gross tonnage of 92,298 tons. 272 were paddle steamers, 282 screw; 223 were passenger boats, 72 freight, and 259 tug boats. 85 new steamboats were added to the list in 1873, which, at the very moderate estimate of \$20,000 each, gives the sum of