

rivers emptying into Lake Ontario. Half a million of eggs were gathered and laid down last fall, and there is likely to be on them only a minute percentage of loss. Other establishments have been started at Tadousac, Gaspé, Miramichi, and Restigouche. A private establishment on the Moisie River, north shore of the St. Lawrence, has been very successful, and the yield from the fishing been much increased. It is intended to breed extensively for Canadian water-shad, alewives and bass, and to establish an extensive hatching house for white fish on the Detroit River. The systematic enforcement of the Fishery Laws have had a most beneficial effect on both the inland and coast fisheries, both as to their condition and yield. The renting of angling streams on the St. Lawrence produces increased protection on the rivers besides contributing to the revenue.

Very much valuable information regarding the fauna of the Gulf and Lower St. Lawrence has been given by Mr. Whittier of the Natural History Society of Montreal, especially with regard to the oyster fisheries. Neglect, waste and excessive cupidity have almost destroyed the oyster beds of the eastern part of the Dominion. It is recommended that new beds should be planted in suitable places, leaving portions of the coast to individuals or companies who are desirous of practising oyster culture. The excessive fishing on existing beds should be prohibited and a certain proportion of the beds set aside for rest and growth. Refuse of mills, &c., should be prohibited; very successful results have

been obtained where oyster culture has been attempted in the Gulf.

Special efforts are being made to restore the fisheries on the American shore of the great lake, and it is a necessity to assimilate as nearly as possible the local fishery regulations. The lobster fishery is assuming commercial importance, especially in Nova Scotia and New Brunswick. In Nova Scotia there are 40, and in New Brunswick 24 factories engaged in canning lobsters, employing a considerable amount of labour and capital. Last year 21,000 tons of canned lobsters were exported to the United States markets, besides what was consigned to other markets; about \$120,000 worth were disposed of fresh. Great care is necessary to economise and perpetuate the supply for this fishery. A regulation on this subject was adopted in July, 1873, which has led to remonstrances from various quarters, but the result of all inquiry is that restrictions are indispensable to prevent the exhaustion of the fishery.

Four fishways on milldams were constructed in Nova Scotia during 1873, 3 in New Brunswick, and 4 in Quebec. Various obstructions were removed and extensive breeding grounds opened to fish.

The demand for fresh fish has very much increased, and additional fishery officers have been necessary to enforce the fishery law in inland waters. Further protection is necessary to preserve the fish during the spawning season. On the completion of the Intercolonial Railway, an extensive market for fresh fish will likely be opened up by the Maritime Provinces.

Dominion Marine.

MARINE.

Lighthouses.—In the Ontario division there were in 1872-3, 90 lighthouses in operation, 4 light vessels maintained by the Government and one partly so maintained. 80 keepers were paid by the Government. The lighthouse on Middle Island, Lake Erie, was exhibited first on the 17th Sept. 1872. It is a powerful red catoptric light. A powerful fixed white catoptric light on Corbay Point, Batchewana Bay, near the entrance of Lake Superior, was lighted first on the 1st of Oct. 1872. Another similar one at Point Porphyry, Lake Superior, was lighted 1st July, 1873. Two lighthouses were erected on Michipicoten Island, Lake Superior, and were lighted on 28th August and 23rd September, 1872. A new lighthouse at Point aux Pins, on St. Mary's river, a few miles above Sault Ste. Marie, was lighted on 1st September, 1873. On the 12th August 1873, a light was exhibited on the S.W. end of the Great Manitoulin Island, Lake Huron. It is a fixed white catoptric light, visible 15 miles. One of the same kind, visible 12 miles, at MacKenzie's Wharf, Owen Sound, Georgian Bay was first lighted on the 11th July, 1873. The stone tower at Windmill Point, near Pres-

cott, has been purchased and fitted up as a lighthouse. The tower is 63 feet high, and the light, a fixed white catoptric, can be seen 15 miles. It was first exhibited on the 15th June, 1873. On the 3rd September another light of the same kind was first exhibited at Hamilton's Island, 8 miles below Cornwall. A few miles above this, at Stonehouse Point, another new lighthouse has been erected, and was first exhibited on July 20th. Three minor lighthouses were erected in the summer of 1873 on the Upper Ottawa, one on Morris Island, one on Campbell's Island and one at the mouth of Deep River. On the 20th day of August was first put in operation the new lighthouse at Point aux Anglais, Ottawa River. A powerful fog bell was erected near Nine Mile Point, S. W. of Kingston, and another at Michipicoten Island, Lake Superior. 21 buoys were placed on Lake Simcoe and 11 in St. Joseph's Channel, Lake Superior. The total cost for lighthouses, &c., in this division, for the fiscal year 1872-73, was: for maintenance \$61,033.47; for construction \$18,999.38. Total Ontario Division \$80,035.85.

Trinity House, Montreal.—After the 1st July, 1873 the management of the lights in the River St. Lawrence, formerly held by