

the Miramichi River and Bay, and a minor light on Portage Island, and 2 on Fox Island, in Miramichi Bay, making altogether 15 principal lights, and 17 minor lights.

There are powerful steam fog-whistles at Partridge Island, at the entrance of St. John Harbor, at Point Lepreau, in the Bay of Fundy.

A new lighthouse has been erected on Cape Jourimain, in the Northumberland Straits, on the catoptric system, with 3 powerful circular burners, and 21-inch reflectors.

A gas light is also shown at Reed's Point, St. John, for the purpose of guiding vessels into the harbor, and a signal station is maintained at Partridge Island.

Four new minor lights have been placed on the Miramichi river, which have been found of great use. A new square lighthouse has also been erected at Portage Island, in Miramichi Bay, and the sites of two others changed. And two new minor lights have been erected at Prestons Beach, Miramichi Bay.

Six new beacon lights have been erected on the River St. John, between Fredericton and St. John.

A new lighthouse has been erected at Cox's Point, Grand Lake. New lights are also erected at Caraquet Island, Bay Chaleur, and Paspebiac Point.

In Nova Scotia there were 59 lighthouses in operation in 1869, and since that period a new lighthouse has been erected on Point Tupper, in the Straits of Canso. They are all on the catoptric system, with the exception of two lights on St. Pauls, which are dioptric lights with mirrors.

A fog-whistle of a powerful kind is proposed to be placed at Seal Island, on the north-west coast of Nova Scotia; and one has been erected at Cape Fourchu, at the entrance of Yarmouth Harbour. The fog trumpet at Cranberry Island, worked by caloric engine, has been replaced by steam. Several extensive works have been undertaken for the protection of lighthouses threatened by the action of the sea.

At Sable Island there is a Humane Establishment at a cost of upwards of \$5,000 per annum, of which the British Government pays £400 stg., as the island lies on the great highway between Europe and North America. There is a small breed of horses to the number of 300 or 400 living wild on the island; some of them are caught and sold in Halifax. The island is said to be an excellent grazing farm, and it is proposed to stock it with cattle.

It is proposed to place a French dioptric light on Seal Island; and to erect new lights on Ingonish Island, Cape Breton, on the west end of Scattered Island, at Pugwash Harbour, and at the mouth of the Sissiboo River.

The cost of these services within the financial year was \$55,053.66.

The total quantity of oil for the lighthouse service of the Dominion was 36,000 gallons. Coal oil is now principally used, it being obtained at a price under 24 cents per gallon. The sperm oil formerly used cost from \$2.20 to \$2.50 per gallon.

Observatories are maintained or aided by the Government of Canada at Toronto, Kingston, Montreal, Quebec and St. John.

The Government of the Dominion have decided to give rewards for saving life, and some have already been given.

The Minister made an elaborate report against admitting foreign vessels to the coasting trade of Canada which denied that privilege to British and Colonial vessels. An Act was passed on the subject last session, for a synopsis of which see "Legislation" in another part of the *Year-Book*.

#### THE FISHERIES.

The total expenses of the Fisheries branch for the year ended June 30th, 1869, were \$31,640.82. The collections for the same period were \$13,583.97.

Effective measures have been taken to remove the long standing abuses under which the fisheries of the Maritime Provinces suffered, and the fishery laws have been brought into active operation. The results have been successful and encouraging.

The experiments in pisciculture under the Department have been successful; and the experiments made by Mr. Wilmot, at Newcastle, have been very encouraging.

A very decided measure with respect to United States fishermen, recommended by the Minister, has been carried into effect. It is the withholding of licenses to fish on payment of a fee, and excluding American fishermen altogether, from Canadian fishing grounds. This vigorous measure has received the sanction of the Imperial Government, and the Government at Washington has felt itself constrained to assent to the policy. This last has issued circulars to American fishermen warning them that they could not have the protection of the U.S. Government if they encroached on Canadian fishing grounds.

The policy of exclusion determined upon has been enforced, and a number of seizures have been made.

The policy of granting licenses led to gross evasions and abuses, and even induced, the Minister contended, the belief that Canada was doubtful of its rights.

These fisheries are exhaustless and are of immense value; which will be increased to the Dominion by the building of the Intercolonial Railway. Mr. Mitchell states:—

"They should form the staple of an extensive and lucrative trade with foreign countries, and with the other British Colonies. They provide an important nursery for our seamen, and they afford an inexhaustible field for the skill and energy of your sea-board populations. They possess great specular value to Canada. Their exclusive use, therefore, affords these united Provinces such advantages as a young country cannot too highly estimate, and should on no account neglect or abandon."

He gives the following exposition of the "fishing question," and speaking of the exclusive Canadian rights, states:—

"These rights are based on public law, and are limited only by treaty stipulations. The extent to which they are so limited by the Convention of London, dated 20th October, 1818, between Great Britain and the United States, is still in controversy. Great Britain contends that the prescribed limits of three marine miles, as the line of exclusion, should be measured from headland to headland. The United States Government contends that it should be measured from the interior of the bays and sinuosities of the coast. In support of the British view, reference is made as well to the exact terms of the Convention as to the law and practice of nations regarding their sovereign rights and territorial jurisdiction. The legal authorities on these points are so clearly and decidedly in favour of our interpretation, that Canada may appeal to them with the utmost confidence. The American Govern-