

Marine and Fisheries—Marine Branch.

the channel are four black spar buoys. The platform buoy indicates a point where vessels upwards bound can leave the dredged channel and make a course for Algoma Park light, and where vessels bound down require to take Canadian dredged channel.

Lights.—It is intended to mark the dredged channel approaching the canal from the eastward by two electric arc lights shaded by red globes, placed in a prolongation of the axis of the dredged cut. These two lights in line will lead vessels from the American channel up the middle of the dredged approach to the east end of the canal. Further details of these lights will be given when established.

The canal itself is marked by white electric arc lights established at regular intervals along both sides of the canal bank and cribwork approaches.

A group of incandescent electric or white lights is to be placed on top of the beacon at the turn in the western approach to the canal, and an incandescent bright light on a pole is to be established on the eastern extremity of Davignon Point. These two lights in one, N.E. $\frac{1}{2}$ E., will guide from the turn at the beacon through the middle of the dredged channel, past Vidal shoal, to the American channel. Further particulars of these lights will be given when established.

Sailing Directions.—Vessels bound upwards should keep the usual course in making for the American canal until they bring the Canadian range lights below the canal in one bearing N.W. $\frac{1}{2}$ N. They should then follow the alignment of these lights, between the red and black buoys, until they reach the axis of the canal, due west. They moor to the cribwork at the north side of the entrance while waiting to go through the lock; after passing through the lock and the upper end of the canal, their course will be W. $\frac{3}{4}$ S., passing 125 feet south of the beacon. On reaching the beacon they haul S.W. $\frac{1}{2}$ W. and rounding the westernmost of the two black buoys and keeping the range lights in one astern, pass up through the middle of the channel between the red and black buoys. After passing the red pyramidal buoy off the west extremity of Vidal shoal there is good water up to Algoma Park light and vessels can make for that light.

Hay Lake Channel.—In connection with the opening of the canal, it may be mentioned that the American government greatly improved the approach to it from the eastward by opening Hay Lake channel last year. It is cut, principally in American waters, south of Sugar Island, through Sugar Island rapids and Middle Neebish. It leaves the present channel of River St. Mary about $2\frac{1}{2}$ miles below the canal, rejoining it at the foot of Sugar Island and shortens the distance to Lake Huron by several miles. This channel is now properly buoyed, and on the 5th of October last was further marked by a system of 27 lights established by the United States Government.

Pie Island lighthouse.

A new light was put in operation on the 15th September last, on the west extremity of Pie Island, at the western entrance to Thunder Bay, Lake Superior, District of Algoma.

The light is a fixed white light, elevated 29 feet above the level of the lake, and should be visible 10 miles from all points of approach by water. The illuminating apparatus is dioptric of the seventh order.