

Department of Public Works.

During the fiscal year 1892-93, the work at this place which had become damaged was repaired at a cost of \$200, the repairs consisting in sheathing the west side of the wharf on a length of about 60 feet, in replacing about 150 lineal feet of face timbers, in putting in new floor stringers and flooring in the outer 60 feet of the wharf and a small quantity of ballast.

CHURCH POINT.

Church Point, Digby County, is situated on the south side of St. Mary's Bay, 9 miles south-west from Weymouth and directly opposite Petit Passage, Digby Neck.

During the past few years the gravel has been working around the outer end of the pier and forming a bar across the entrance to the loading berths of vessels.

During the first part of this fiscal year the sum of \$45.25 was expended in removing this bar of gravel, the work being done by hand with scrapers during low water.

COW BAY.

Cow Bay, Cape Breton County, is on the eastern coast of Cape Breton Island, about 18 miles north-east of Sydney Harbour. Owing to extensive coal mines in its vicinity it is a place of considerable importance.

The bay is two and a half miles wide at its mouth, and being open to the Atlantic from the east affords no safe anchorage during gales from that quarter.

A breakwater was built on the north side of the bay, some 20 or 25 years ago, by Messrs. Archibald & Co., proprietors of the Gowrie mines, with some aid from the Government of Nova Scotia. It is 1,386 feet in length and was originally about 44 feet in width, and had a depth, at the outer end at low water, of 20 feet. The area of the basin inclosed between it and the loading pier of the Gowrie mines is about 17 acres, 10 acres of which had originally a depth of from 9 to 20 feet at low water. Spring tides rise 5 feet.

In 1873, while repairs were in progress by the department, the breakwater was seriously damaged by the great gale of the 24th August.

After the gale, operations were resumed, the balance of the amount appropriated being largely supplemented by Messrs. Archibald & Co.

In 1874, Messrs. Archibald & Co.'s interest in the breakwater was acquired by the Dominion Government, and a contract entered into in May, 1876, for repairing and strengthening the structure was completed in July, 1877.

Extensive repairs have been made nearly every year since 1877, and the work has been strengthened by the addition of counterforts or outer face works, and by close piling.

The breakwater now consists of an inner work, extending from within 220 feet of the shore end to the outer end, with counterforts, and connecting works on the seaward side from within 580 feet of the shore end to the outer end. The outer and inner works are from 20 to 25 feet apart. They are connected at intervals by tie walls, and the spaces are filled with ballast.

During the fiscal year 1892-93, the sum of \$3,499.90 was expended in reconstructing and close piling a portion of the inner work and in general repairs to the outer works.

The repairs to the inner work included cutting down and reconstructing the inner face for a distance of 180 feet from the shore end, the new face work being 3 feet in average width and 10 feet in average height; close piling (with piles procured the preceding year) the inner face from 180 to 560 feet from the shore end, and in renewing the covering and cap timbers from 180 to 530 feet from the shore end.

The repairs to the outer works included, replacing about 260 tons of ballast, sheathing horizontally with hardwood over 60 lineal feet of close piling to a height of 5 feet above low water at the angle made at the second counterfort with the face