



Rock Loading Plant at Point Du Chene.

The landing pier and breakwater are both of rock-bound type, faced with large stones.

The contract for the work at Carleton Point was awarded by the Department of Railways and Canals to

while in position on the cars, and taken to Point Du Chene where two stiff-leg derricks picked them up and dumped their contents into the scow pockets, the capacity of the scow being about 850 tons. The scows were then towed across to the site by the company's tug, "J. O. Gravel," a vessel 100 ft. in length, drawing $12\frac{1}{2}$ ft. of water, built in England and brought across under its own steam. Night operations at the site of dumping were accomplished by the use of a searchlight, at first erected on the shore and later removed to the landing pier, when the cable tower had been constructed there.

After both landing pier and breakwater were brought up in this manner to low-water level the construction of the former was continued by the use of a cable. Two wooden cribs were sunk about 1,500 ft. from shore, each 100 ft. long by 30 ft. in width. They were built up to about 8 ft. above high tide. The side farthest from shore was protected by a bank of stone about 80 ft. in width, the outer side of which was faced up with large pieces of rock. This afforded ample protection from the sea and from the ice during winter. A 95-ft. wooden tower was



Rock Used in Facing Pier and Breakwater.

Roger Miller & Company, Toronto, in August, 1913, and the season of 1914 witnessed a great deal of preparatory and under-water work. The former included the construction of a floating drydock, scows, cable-way towers and piers, railway sidings, quarry stripping and working, etc. Besides, both the 1,500-ft. rock-fill and the 500-ft. breakwater were constructed up to the level of low water, while a length of approximately 500 ft. of the former was built up to the level of high tide.

An abundant supply of excellent rock was located about $1\frac{1}{2}$ miles from Shediac, N.B., which is about $2\frac{1}{2}$ miles from Point Du Chene, where the stone is loaded. The rock for the core of the breakwater and fill was conveyed from the quarry to Point Du Chene by railway, the line being about 5 miles in length. A siding, connecting with the Intercolonial, ran about 1,000 ft. into the quarry. Transportation from the quarry was effected by 40 standard steel-frame cars, each capable of carrying four steel skips, each of which held about 6 cubic yards. The skips were loaded by steam shovel

then erected, partly on the cribs and partly on the rock-fill back of them.

These cribs were built at Point Du Chene, in a specially constructed floating dry dock. The first crib was not



Dry Dock and Steel Deck Scow Under Construction at Point Du Chene.