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G. T. P. DRY DOCK AT PRINCE RUPERT, B. C.

SPLENDID TERMINAL FOR PACIFIC COAST SHIPPING COMPLETED BY THE GRAND TRUNK PACIFIC RAILWAY, AFTER MORE THAN THREE YEARS' WORK, AT COST OF APPROXIMATELY \$2,500,000.

THE largest dry dock on the Pacific Coast, either in the United States or Canada, and one of the largest of its kind anywhere in Canada, is the Grand Trunk Pacific dock at Prince Rupert, B.C. The land and wharf area is about seventeen acres. Preparation of the site included 96,000 cubic yards of dredging; 82,000 cubic yards of gravel fill; 268,000 lineal feet of piling for tight bulkhead, 12 inches thick, runs below the keel blocks of each section, and partial bulkheads on each side are used to strengthen the structure. The pontoons are connected together by steel side walls, or wings, which are 38 ft. high, 15 ft. wide at the bottom and 10 ft. at top, and which contain altogether 2,400 tons of steel, and required 13,000 gallons of paint. The two end sections



Middle Section (only) of Dock Submerged. Wrecked Vessel "Delhi" Being Lightered onto Submerged Section. One End Section, Not Submerged, in Background.

the wharf, and 5,000 cubic yards of concrete work for foundations, this being exclusive of any work in connection with the power house.

The Floating Dock.—The dock itself is built in three separate but interchangeable sections, the total length when joined together being 600 ft. When used separately, the two end sections are 165 ft. long, and the middle section 270 ft. long. The lifting capacity with the three sections joined is approximately 20,000 tons. The end sections have each a lifting capacity of 5,000 tons, and the middle section of 10,000 tons. The clear width between walls is 100 ft.; the over-all width, 130 ft.

The complete dock consists of twelve pontoons, each 44 ft. wide x 135 ft. long x 15 ft. deep, with a crown of 3 inches at the centre, and having 15 trusses spaced on 3-foot centres. Each pontoon weighs 490 tons, and has a lifting capacity of approximately 1,700 tons. A waterhave three pontoons each; the middle section six pontoons. The pontoons are built of Douglas fir, protected against marine insects, first by a coating of tar and gravel, poisoned with arsenic, then by two layers of hair felt similarly treated, and covered with galvanized iron and an outside layer of $1\frac{1}{2}$ -inch creosoted lumber, secured with galvanized nails. The pontoons were caulked with 800,000 white pine wedges and contained 4,000,000 ft. of lumber and 400 tons of galvanized iron fastenings.

The dock, as a whole, is secured to the pier by the engagement of clamps on the dock with a vertical truss secured to the pile platform in such a way that it is free to rise and fall with the tide (which in the spring is often 25 ft.), and when being raised or lowered with a vessel aboard.

When it is desired to use the dock in separate sections, the forward three pontoons can be detached and