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NEW BRIDGE AT TRAIL, B.C.

There was recently completed for the Province of British Columbia, at Trail, B.C., a four-span through riveted truss type bridge, which contains much of interest, both in design

feet and a removal of sixty-five hundred yards of material to make the approaches. The base of the north abutment, on account of the nature of the bottom, is forty-two feet below the floor level. The ground near the north shore slopes from zero at low water to a depth of thirty feet between piers 1 and 2, which is the channel proper.

Construction was commenced in November, 1911, and was completed on May 24th, 1912. Fourteen thousand lineal feet of piles were used in the falsework, and a hundred and thirty thousand feet of timber. The cement used in the construction of piers and abutments totalled about 7,500 sacks. The earth work necessitated for the approaches ran about 1,500 cubic yards. As has been noted, the bridge superstructure is made up of four spans. Each of these spans is 171 feet 6 inches in length, with seven panels to the span. The total length of the bridge is 691 feet 9 inches. The foundation of the deepest pier

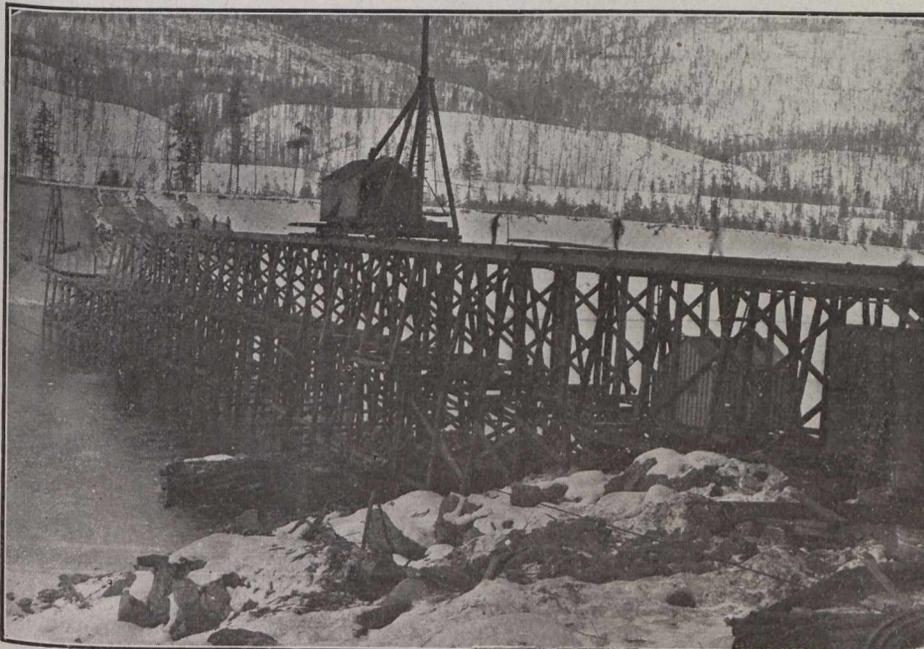


Fig. 1.—View Showing Falsework of the Bridge.

and construction. The bridge was erected by Armstrong, Morrison & Co., Limited, of Vancouver, and was opened for traffic on May 24th, 1912. It is designed for ordinary highway traffic with paved roadway, eighteen feet in the clear. The bridge is of the truss type supported on tubular steel piers filled with concrete. Each pair of piers is joined together by sheet steel reinforced bracing, which forms a wall with two feet thickness of concrete. There are three piers; piers Nos. 2 and 3 were sunk by the pneumatic process, while pier No. 1 was built in a cofferdam. The site of the bridge is at the east end of the city of Trail. The bank on the south or city side, is of a rocky formation. The first pier and abutment have, therefore, solid rock foundation. The north bank of the river is of a sand and gravel formation, and the general level is about fourteen feet above the bridge floor elevation. This necessitated a cut of about fourteen

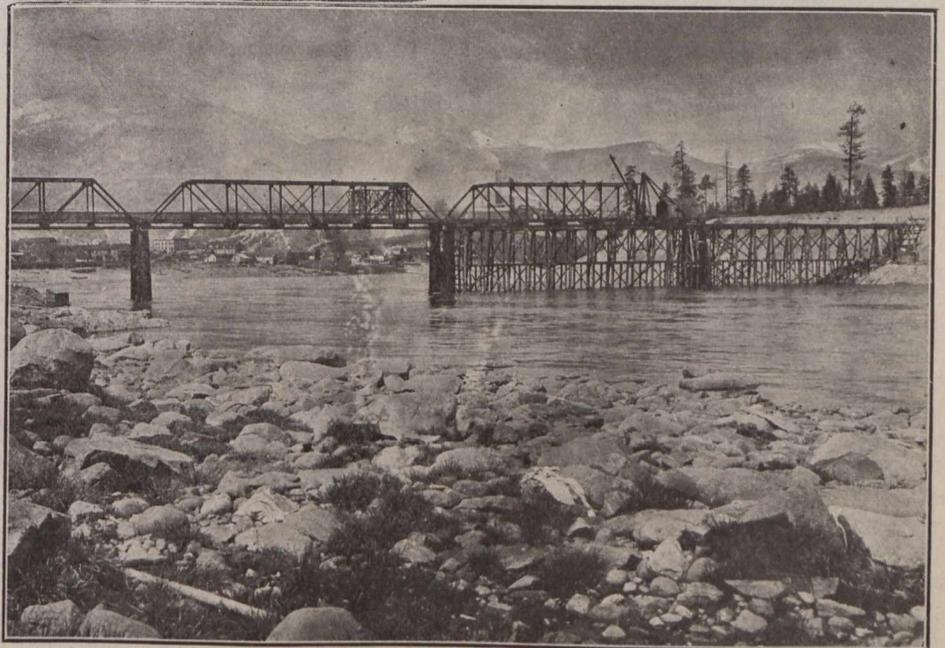


Fig. 2.—View Showing Falsework for Placing the Final Span.

below low water necessitated by the nature of the ground, is 44 feet. The height of the pier over all is 86 feet. The height of the bridge from the floor to the top chord is