

It also appears in Photos No. 2 and No. 3 of the issue of April 18. It was desirable to use the same traveller for the truss spans and the viaduct. It therefore had to be made low enough to go under the sway bracing of the truss spans. As the bridge was double track, the traveller was made as wide as the through trusses would permit, and carried a mast and boom on each side capable of being operated independently. Since the viaduct has quite an appreciable

truss at a point over the back truck, by two $1\frac{3}{8}$ -in. square steel tie rods. The booms were of 12 x 12 timber 35 ft. 0 in. long, and were capable of lifting 10 tons each. Across the tops of the wooden trusses were laid 6 x 12 cross ties 19 feet long, and to these was spiked the floor of the traveller. The engines rested on this platform, being placed over the back trucks in an enclosed cabin. Thus, under the centre of the traveller there was a clear head room of about eight feet under the cross ties or the height of the trucks plus the height of the truss. There was also a clear width underneath of about 12 feet between the trucks. In this space a third track of standard gauge was run along the centre of the bridge and on this track the material was brought on hand trucks from the delivery tracks at the east end of the bridge forward to the front side of the traveller within range of the derricks. This traveller erected all the truss spans

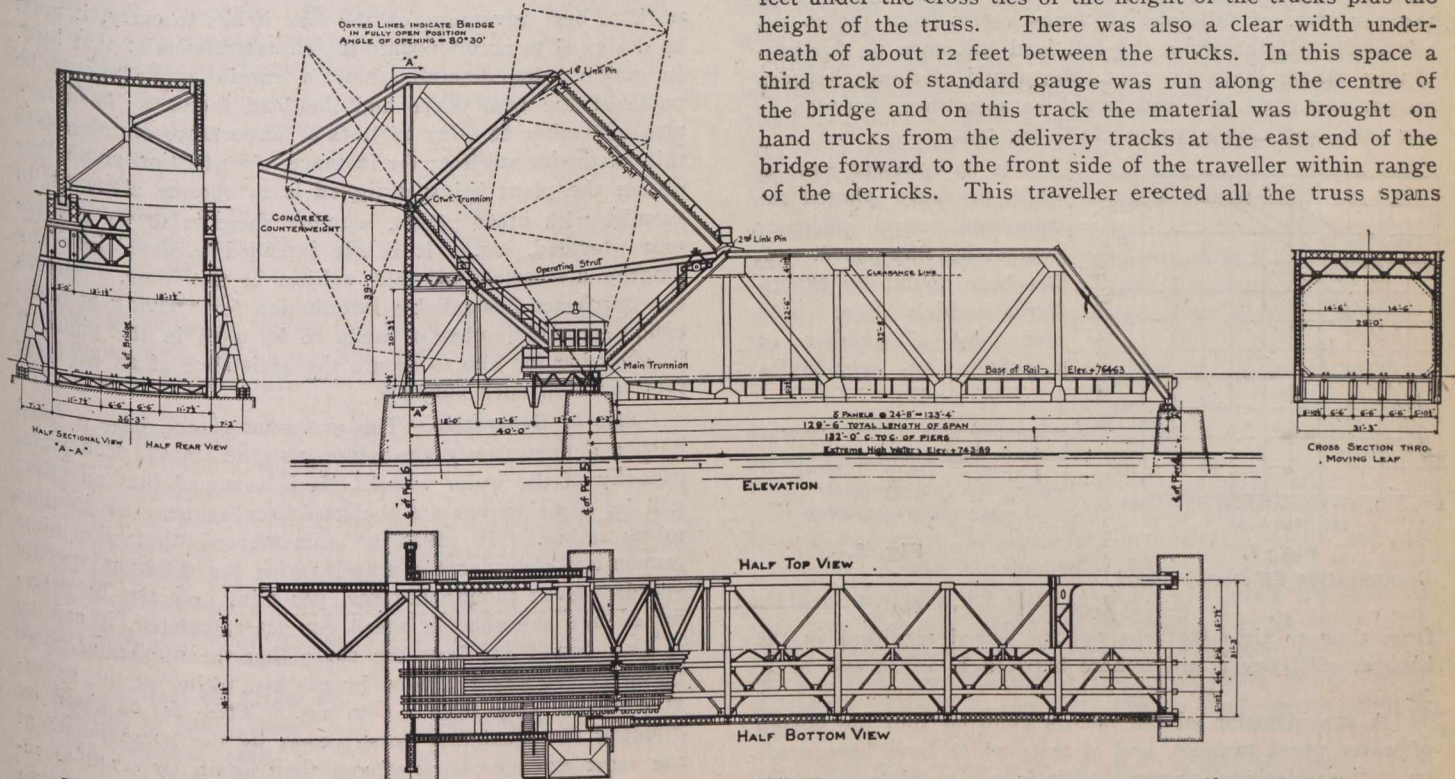


Plate 3.—The Strauss Trunnion Bascule Span of the Red River Bridge for the National Transcontinental Railway. Built by Dominion Bridge Company, Limited.

curve the wheels of the traveller were specially arranged to take the curve easily. This was accomplished by placing an ordinary car truck of four wheels at each corner of the traveller. The centres of the four trucks formed a base of 27 ft. 6 in. longitudinally by 18 ft. 0 in. transversely, the traveller running on two tracks of standard gauge with a width of 18 ft. 0 in. centre to centre of tracks. The frame of the traveller was made entirely of wood. The two trucks on each side are 27 ft. 6 in. apart, supported longitudinal wooden trusses 6 ft. 0 in. deep. These each had a vertical mast in front 18 ft. 6 in. high of 12 x 12 timber, the top of each mast being stayed to the bottom chord of the wooden

and approach girders, except the more elevated members of the tower and counterweight which were put up with a gallows frame. The forms for the concrete of the counterweight were supported on heavy woodwork resting on the most easterly girder span of the long viaduct.

In conclusion the writer wishes to most heartily thank Mr. Uniacke, the bridge engineer of the Transcontinental Railway, and Mr. Jeppesen, the designing engineer of the Strauss Bascule Bridge Co., for photographs and other information in connection with the bridge; without the co-operation of these gentlemen and also of the Dominion Bridge Co., this paper would not have been possible.

FAREWELL BANQUET IN HONOR OF CITY ENGINEER RUST AT ENGINEERS' CLUB, TORONTO.

Last Friday evening about ninety members of the Engineers' Club of Toronto, representing all phases of the engineering profession, sat down to a complimentary dinner in honor of Mr. C. H. Rust, City Engineer of Toronto, who left this week to assume his new duties as City Engineer of Victoria, B.C.

Mr. Willis Chipman occupied the chair, on the right of whom sat the guest of the evening, Mr. C. H. Rust, and on his left Mayor Geary. Other representatives of the city's life who were present and joined in this testimony to Mr. Rust's worth, character and ability were R. T. Coady, city treasurer; F. S. Spence, vice-chairman of the Harbor Commission; H. L. Drayton, corporation counsel; Alex. C. Lewis, secretary of Toronto Harbor Commission.

Mr. J. G. Sing, resident engineer for Department of Public Works, proposed the toast to the guest of the even-

ing. Mr. Sing referred to the loss not only the engineering profession would suffer by Mr. Rust's removal to the coast, but also the loss to the public life generally. He also spoke of the high character of Mr. Rust's work in Toronto during the past years.

Responding to the toast, Mr. F. S. Spence supplemented Mr. Sing's remarks and paid special tribute to the integrity and uprightness that Mr. Rust had always displayed in his municipal life. Following this Mayor Geary made a few remarks along the same lines to which Mr. Rust responded, and with some feeling referred to the breaking of connections with a city with which he had been so long identified.

At the conclusion of the proceedings Mr. Rust was presented with a bound souvenir menu containing the autographs of all the guests.