## The Canadian Engineer

A weekly paper for engineers and engineering-contractors

## PROGRESS ON THE NEW QUEBEC BRIDGE

SUPERSTRUCTURE ERECTION REVIEWED TO DATE—PROGRAM OF ERECTION—OFFSETTING DIFFICULTIES IN PIN CONNECTIONS ARISING OUT OF ALLOWANCES FOR DEFORMATION OF MEMBERS UNDER FULL LOAD.

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ITH the close of the present season considerable progress is to be noted towards the erection of the new Quebec Bridge. During the summer of 1913 the approach spans on the north shore from the abutment to the anchor pier were fully erected. These

two double lines of tracks, spaced 54 ft. centre to centre. The two inner rails were carried on the top flanges of the outside bridge track girders, the outer rails being carried on special erection girders resting on the falsework and thoroughly braced to the track girders themselves. The

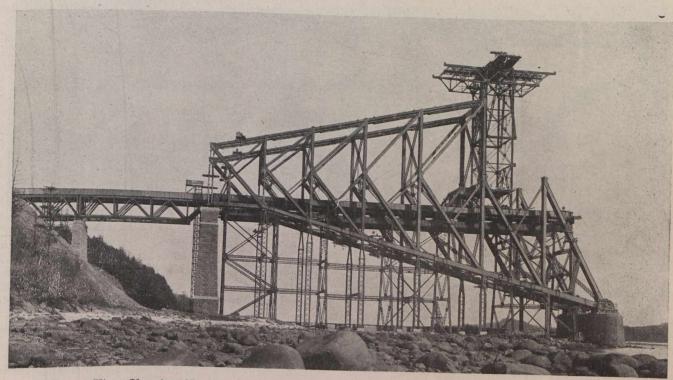


Fig. 1.—View Showing North Anchor Arm when Work Closed Down at the End of the Season.

spans were erected by derrick cars on heavy wooden and steel falsework. As these spans would have to carry the 1,000-ton erection traveler, and as the concentrated wheel loads from this traveler were considerably greater than the live loads for which the spans were designed, this falsework was made sufficiently strong to take care of these reactions.

During the winter of 1914 the traveler was erected on the shore, just north of the abutment and it was ready to move out early in May. This traveler was carried on traveler was moved out over the approach spans to the anchor pier on May 18th, and proceeded to erect the inside falsework carrying the floor of the anchor arm on which the traveler runs.

The main floor beams of this floor were supported on special erection girders supported by this falsework and were located in approximately their correct positions. The main track girders, sub-floor beams and stringers were then erected in place and special girders erected outside the track stringers for the erection traveler.