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## Canadian Northern Bridges Over the Carp, Mississippi and Ottawa Rivers and Stoney Creek.

On the Canadian Northern Ry.'s main transcontinental line, about 35 miles west of Ottawa, are four closely located bridges. The first bridge, over the Carp River, consists of two 75 ft. half through girder spans with a 200 ft. truss span between them. The next crossing, the Mississippi River, is of two 75 ft. half through and a

girder span was first erected, then the bottom chords and floor system of the truss span were placed in position as fast as the falsework was built. The trusses were erected by a locomotive crane after the floor system was completed. An air hammer was used for driving the piles, air being supplied by a steam compressor, which was also used

each, and were erected by using a gallows frame, in connection with the 50 ton locomotive crane.

Piles were driven at Stoney Creek, on which a temporary track was constructed, and the girders carried into place from a side track by the locomotive crane. These girders weighed about 25 tons each. This



Carn River Bridge

Chats Rapids Bridge, Ottawa River.

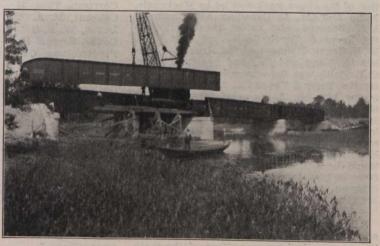
121½ ft. half through girder span, between the two 75 ft. spans. A mile farther down is the Stoney Creek bridge, which had three 85 ft. half through girder spans. The fourth is a long crossing over the Chats Rapids of the Ottawa River, and is made up of 10 deck girder spans, including 5 plate girder spans each 115 ft. long, 2 of 121½ ft.,

for driving rivets. This bridge was completed so that the construction trains crossed on July 16, 1914, and track laying was started to the Mississippi bridge and completed so as to allow erection of that bridge to start on Aug. 1, 1914.

A camp was established at this point and maintained until the erection work was bridge was completed on Sept. 5. 1914, but a serious delay occurred after this. About the time the track was laid to Chats Rapids, the grader's locomotive upset in a sink hote, and a very difficult job of rescuing it was accomplished by calling in the Terry & Tench Co.'s erecting plant. The compressor was set up, and the pile driver used to



Mississippi River Bridge.



Stoney Creek Bridge, Placing Last Girder.

one 200 ft. through rivetted truss and one 290 ft. through rivetted truss spans. The total weight of the bridges is about 2,800 tons.

The masonry foundations were all in at the time the superstructure contractor's men arrived on the job on June 20, 1914. The plant arrived a day later and at the Carp River, driving piles and building falsework started at once. The easterly

started at Chats Rapids, at which point a splendid camp for use through the winter was built, and the men were made as comfortable as they could be at home. The river bed at the Mississippi is rock, so that a temporary timber bent trestle was erected, which permitted running out the girders on the cars, from which they were unloaded into place. The centre girders of the Mississippi River Bridge weighed 52 tons

build a trestle across the sink hole. Then the big locomotive crane was used to pick up the locomotive and set it on the track. This caused a delay of three weeks, and threw the erection of the Chats Rapids Bridge long into the late autumn and winter.

Work was finally started at Chats Rapids on Sept. 16, 1914, and a 25 ton guy derrick, having an 88 ft. mast and a 75 ft. boom, was erected alongside the track, about 200