## The Canadian Engineer

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## KAMINISTIQUIA RIVER BRIDGE, FORT WILLIAM

NEW ELECTRICALLY OPERATED STRAUSS TRUNNION BASCULE BRIDGE FOR THE CANADIAN PACIFIC RAILWAY—CLAIMED TO BE THE LARGEST DOUBLE DECK, DOUBLE TRACK BRIDGE IN USE

THE Canadian Pacific Railway Company are building extensive terminal yards and loading docks on Island No. 1 at Fort William, Ontario. In order to reach this island, it was necessary to build bridges across the Kaministiquia and McKellar Rivers, and, inasmuch as these are both navigable rivers, movable bridges were required, while on account of the rivers being so narrow, it became necessary to use bridges of a bascule type. The Kaministiquia River, at the point where the railway crosses, has a clear width of channel of 125 feet, but as the railway crosses the river at an angle, a clear span of 180 feet is required. This leaves the channel perfectly clear when the lift is raised into the open position.

The bridge is a single-leaf, double-deck, Strauss trunnion bascule bridge, with the main trunnions at the



Fig. 1.-The Kaministiquia River Bridge, Fort William, Ont.

The Kaministiquia River bridge is of the Strauss trunnion type, while that across the McKellar River is of the Scherzer rolling lift type. The bridge department of the Canada Foundry Company, Limited, have the contract for the fabrication and erection of both of these bridges, and the bridge across the Kaministiquia River is about completed. point of intersection of the bottom chord and the end post of the truss (heel trunnion type), and embraces a 186-foot movable span, giving the required clear channel of 180 feet in the river, and a 40-foot stationary span or tower. The lower deck carries a double track railway and the upper deck two street car tracks in addition to a roadway and sidewalks on each side.