BRIDGE OVER NORTH THOMPSON RIVER, BRITISH COLUMBIA.

FEW months ago a deck girder bridge 1,209 ft. in length with a girder lift span 93 ft. long and a height of lift equal to 53 ft. was completed for the Canadian Northern Railway Company over the North Thompson River at Kamloops, B.C. Approaches of timber trestle construction at both ends of the bridge have a total length of 1,123 ft. The fixed spans, 12 in number, correspond in length to the lift span, below the deck and between the girders in the centre of the span.

Centering castings provide for keeping the span in proper alignment when being seated. These castings also look after the longitudinal braking thrust. The track is equipped with the necessary special castings at the ends of the span to give continuity to the rails and with locks at each end of the bridge. Limit switches, coming into operation as the span is approaching its bearing, or its elevated position, control the igniter circuit of the engine which, under ordinary operating conditions, is capable of



Fig. 1.-General View of the Thompson River Bridge.

giving the whole structure a very well proportioned and balanced appearance. The lift span is second from the centre span of the structure, as shown in Fig. 1.

The lift span weighs 118 tons and is operated by the assistance of counter weights attached to cables engaged in sheaves at the top of the towers, as shown in Fig. 2. The ends of the span ascend in guides so designed as to make due allowance for elongation due to changes of



Fig. 2.—View of Lift Span, Showing Elevating Mechanism.

temperature and for changes in live loan. Cables, $1\frac{1}{4}$ in. in diameter, at each corner of the span pass over drums and are actuated through a system of gears by a gasoline engine, which, together with all the equipment, is located raising the span 53 ft. in 100 seconds, thus providing a clearance of 55 ft. above high water.

The bridge was designed by Messrs. Waddell and Harrington, consulting engineers, Kansas City, Mo. Mr. H. L. Johnston, divisional engineer for the C.N.R., represented the railway in its construction.

The approximate cost of the bridge was \$250,000.

CANADIAN ELECTRICAL ASSOCIATION.

The twenty-fourth annual convention of the Canadian Electrical Association will be held in Montreal June 24, 25, 26 and 27, with headquarters at the Ritz Carlton Hotel. Local committees have been appointed and consist of the following:

General Committee—Major Hutcheson and Mr. J. S. Norris, joint chairmen; Messrs. L. D. McFarlane, E. F. Sise, G. H. Olney, R. S. Kelsch, R. J. Jones, J. M. Robertson and Dr. L. Herdt.

Ways and Means Committee-Mr. Julian C. Smith, chairman; Messrs. K. B. Thornton, J. A. Shaw, R. H. Balfour, W. F. Graves and R. F. Morkill.

Entertainment Committee-Mr. Lawford Grant, chairman; Alderman Boyd, Messrs. Paul Sise, R. G. Harris, W. C. Lancaster, W. H. Winter, H. C. Post, P. Roper, Powell and R. M. Wilson.

Publicity Committee—Mr. S. W. Smith, chairman; Messrs. W. J. Doherty and L. J. Belnap. Finance Committee—Mr. J. W. Pilcher, chairman;

Finance Committee—Mr. J. W. Pilcher, chairman; C. F. Medbury, F. W. Smith, R. M. Wilson and L. B. Belnap.

P. T. Davies, honorary secretary.

A special programme has been prepared by the Entertainment Committee which is sure to appeal to all visitors. Special souvenirs have been provided for the ladies.