

packet or boracic wool; 8 oz. bottle each of carbolic acid, salvolatile, carron oil, arnica and olive oil; bottle of smelling salts; box of carbolic salve; box of boracic ointment; card of safety pins; tourniquet; scissors; tweezers; adhesive plaster; boracic lint; needles; eye shade, and small towel. With each kit, there is a stretcher and a full set of 14 splints. In the car department, additional provision is made by having a local store of stretchers, splints, etc., in the office of the general foreman, which is centrally located to all the buildings.

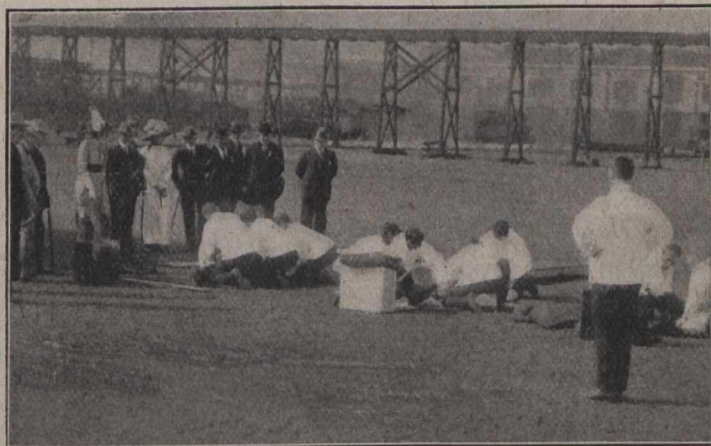
loving cup, presented by D. B. Hanna, Third Vice President, to be competed for annually, and five gold medals extra for the members of the winning team, the donation of M. H. MacLeod, General Manager. These are to be competed for by teams from all over the system, and as the sections at various points expand, some keen competition is to be expected.

The Fort Rouge section is highly elated over the successes of last fall. On the C.P.R., the St. John's Ambulance Association holds sway. The winners of the competi-

tion followed by a train load of 4,750 lbs. per lin. ft.; or, in other words, the structure could safely be loaded from end to end with locomotives, each weighing in working order 180 tons.

The ties used are 10 by 12 ins. by 14 ft., with every fourth tie 18 ft. long, on which is carried on one side of track a foot walk, with substantial hand railing.

The concrete substructure was started May 3, 1912, and finished July 30, 1912. The first span of the superstructure was placed Aug. 20, 1912, and the last span, or most



Inspection of C.N.R. St. Andrew's Ambulance Association First Aid Work by the Duke of Connaught.

Demonstration of First Aid Work Before the Duke of Connaught by C.N.R. St. Andrew's Ambulance Association.

At convenient points in each building there are steam connected hot water heaters attached to the columns of the buildings, marked on the outside with a red cross. These hot water connections must only be used for first aid purposes, use for other causes being prohibited.

In each shop, alongside the first aid kit, there is a small blackboard, on which are entered the names of the members of the team who are to use that particular kit. An air whistle alongside is the signal in the case of an accident for those men to instantly drop their work and prepare to render first aid to the injured.

The officers of the Fort Rouge shop section are: President, A. M. McCowan, General Car Foreman; Commandant, D. Mowat, Assistant Foreman Freight Repair Yard; Assistant Commandant S. Angus; and Sec-Treas. J. Candline, Assistant Foreman Freight Repair Track. Considerable activity is being demonstrated in this section, as in the short time of its existence about 40 members have qualified.

The local committee for the Canadian Northern Ry. has the following officers: Honorary President, Sir Wm. Mackenzie; Honorary Vice President, Sir Donald Mann; President, A. E. Cox, General Storekeeper; Vice President, A. H. Eager, Supt. of Shops; Secretary, E. J. Gillingwater, Chief Clerk to General Storekeeper; Treasurer, J. E. M. Firby, Foreman of Mill; Committee, T. J. Lowe, Chief Clerk to General Manager, O. C. Bishop, Asst. Supt. of Dining Cars, J. Hough, Foreman Machine Shop, G. Lyons, Foreman Upholsterer, W. Clegg, Foreman Air Brake Dept., F. McDowell, Asst. Storekeeper, D. Galloway, General Foreman Locomotive Dept., W. Watt, General Foreman Freight Sheds, and T. A. Musgrave, Foreman Freight Car Repair Tracks. On this committee devolves the work of organizing sections all over the system, several of which are already in contemplation.

The heads of the Canadian Northern are doing their best to encourage the work, many valuable prizes being offered individually and to the teams competing in the general competitions held annually. Among the team prizes may be mentioned a large silver

tions of the Western and Eastern Lines met last fall, the team from the Western Lines being declared the winners. The C.N.R. Fort Rouge section challenged this winning team, and in the demonstration which followed, proved capable of defeating the champions of the C.P.R. system.

### Blende River Viaduct, Canadian Northern Ontario Railway.

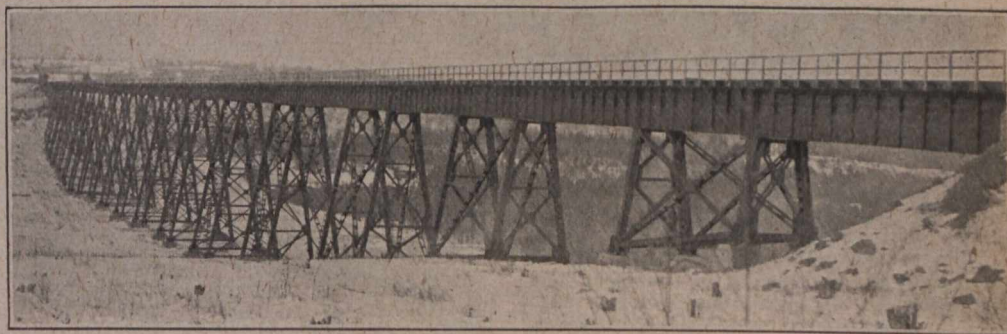
The Blende River viaduct, at mileage 24 east of Port Arthur, on the C.N.O.R., recently completed, is the largest of the many steel structures on that line. Although the stream crossed is but a rivulet, the wide and deep valley necessitated a structure of

easterly, in position Dec. 28, 1912.

The concrete substructure was built by J. A. Whalen, subcontractors Kennedy Construction Co., the total yardage being about 3,600 cu. yds. About 2,000 piles were used in the foundations. The steel superstructure was built by the Canadian Bridge Co., Walkerville. The weight of steel is about 5,000,000 lbs. The total cost was nearly \$350,000.

The viaduct was designed under the supervision of W. P. Chapman, Bridge Engineer, Mackenzie, Mann and Co., Ltd.

Telephone Train Dispatching on the Intercolonial Ry.—F. P. Gutelius, General Manager, Canadian Government Railways, is reported to have stated recently, that a



Blende River Viaduct, Canadian Northern Ontario Railway.

some magnitude to conform to the location and grade adopted, the alternative being a more circuitous route, which would have increased the length of line several miles.

The structure is 2,300 ft. long, the maximum height above water level being 130 ft. It comprises 14 spans of 75 ft., 15 towers of 45 ft., with six 60 ft. spans and four 40 ft. towers at the ends. The foundations of the two abutments and end pedestals are on rock; the remaining pedestals are built upon pile foundations.

The structure is designed to Dominion Government Specification, 1908, Class heavy loading—that is, a capacity to safely carry two 180 ton locomotives, coupled together,

telephone dispatching system will be installed almost immediately on the St. John-Moncton section of the Intercolonial Ry., and that tenders have been asked for the necessary equipment. It is said that at the same time the automatic block signalling system will be installed.

Railway Lands Patented.—Letters patent were issued, during August, in respect of railway lands in Manitoba, Saskatchewan, Alberta and British Columbia, as follows:—

	Acres.
Canadian Northern Ry. ....	5.14
Grand Trunk Pacific Ry. ....	141.26
Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co. ....	2,332.00
Total .....	2,378.40