

**Napanee, Ont.**—Water company proposition.  
**Smith's Falls, Ont.**—New Collegiate Institute, \$46,500; water power for pumping stations \$1,600.  
**Ottawa, Ont.**—Incinerator; establishment of publicity department; improvements to city hall.  
**Owen Sound, Ont.**—Public library.  
**Kingsville, Ont.**—Tax exemption to Mettawas Hotel Company, who will build a \$50,000 summer hotel.  
**Hamilton, Ont.**—Good roads, \$200,000; police stations \$50,000; registry office \$75,000.

### PERSONAL NOTES.

MR. A. S. HERBERT, Canadian manager for Siemens Bros., Dynamo Works, Stafford, England, sailed yesterday for the Old Country. Mr. Herbert will be away about two months.

### OBITUARY.

SIR EDWARD LEADER WILLIAMS consulting engineer, died on Monday in London, England. He was born in 1828, and came of an engineering family, his father having in his lifetime been engineer to the Severn Navigation Commissioners. He was first engaged as an engineer in 1846, and was engaged on such works as the Great Northern Railway, Shoreham and Dover harbors, River Weaver and Bridgewater Canal navigations. He was chief engineer of the Manchester Ship Canal during construction, and has since been its consulting engineer.

### SOCIETY NOTES.

**Engineers' Club of Toronto.**—The programme of the above society for January appears elsewhere in this issue.

**The Royal Architectural Institute of Canada.**—A meeting of the council of the above society will be held at 5 Beaver Hall Square, Montreal, on Tuesday, 18th January, at 2.30 p.m. to consider the nomination of an assistant secretary, the opening of a ballot for the election of members, applications for membership and the transaction of any other business that may arise.

#### Toronto Branch, Canadian Society of Civil Engineers.

On January 30th, Mr. C. N. Monsarrat, M.C.S. C.E., chief engineer of bridges for the Canadian Pacific Railway, gave an address on the construction of the Lethbridge viaduct, before members of the above society. Mr. Monsarrat gave reasons for the type of bridge selected, the method of constructing the footings and erecting the steel work. A large number of slides were used to make plain to the audience the methods referred to.

The site of the bridge, said Mr. Monsarrat, is the best for a high-level crossing in the immediate vicinity of Lethbridge. On the east side the surface slopes are fairly uniform for a distance of 1,000 ft. from the prairie level, when they drop more abruptly for 800 ft. to the flat at the bottom of the valley, which is flooded in extreme high water. The valley is approximately level for a distance of 1,800 ft., to the edge of the river, which at the crossing is about 300 ft. wide. On the west side of the river the ground rises to the prairie level in a distance of about 1,300 ft. On the east bank the soil is clay and gravel for about 6 ft. below the surface, then 50 ft. of hard clay, followed by 12 to 20 feet of coarse gravel, and, below this, shale and coal. For about 20 feet below the bed of the river there is gravel, then 20 ft. of coal shale, below that 2 ft. of blue clay, then a hard shale for a distance of 16 to 18 ft., below which is hardpan and sandstone. The west side is of somewhat similar formation, but the bank has been eroded, causing it to cave in at several points. On this account it was necessary to do extensive work in order to secure proper foundations for the piers.

Mr. J. G. G. Kerry, C. E., presided at the meeting, and some fifty members were present.

There were 422 industrial accidents in Canada during November. Of these 143 were fatal and 279 serious. Trade disputes numbered eight, a decrease of three as compared with the previous month.

## ORDERS OF THE RAILWAY COMMISSIONERS OF CANADA.

Copies of these orders may be secured from the Canadian Engineer for a small fee.

8903—December 15—Amending Order No. 3245 dated July 4th, 1907, by striking out clause "b" and substituting therefore the following:—"Over-flow pipes from lifting injectors or water pipes from injector delivery pipe or boiler to be put into the front and back part of the ash pans and used during the months of April, May, June, July, August, September and October, for wetting ash pans."

8904—December 2—Authorizing the C.N.O. Railway to place its lines or tracks across the tracks of the G.T.R. near Port Hope, Ont.

8905—December 7—Authorizing the C.P.R. to construct spur for the Spietz Furniture Company and the Hanover Portland Cement Company, Hanover, Ont.

8906—December 9—Authorizing the C.P.R. to install half-interlocking with derails, on Richmond Street, London, Ont.

8907—December 13—Directing the C.P.R. to carry highway between Townships Springer and Caldwell, over its tracks, Nipissing County, Ont.

8908—December 15—Authorizing the G.T.R. to construct proposed sidewalk to be used for pedestrian traffic only, where the same crosses Maitland River, Wingham, Ont.

8909—December 8—Authorizing the G.T.R. to construct branch line north of Ontario Street, Port Hope, Ontario.

8910—December 12—Refusing application of William Knetchel & Sons, for spur line to grist mill at Hanover, Ontario.

8911—December 2—Authorizing the G.T.R. to reconstruct highway bridge over its tracks at Margaret Street, Berlin, Ont.

8912—December 15—Authorizing the Peck Rolling Mills, Montreal, P.Q., to operate an overhead carrier in connection with its business at Mill Street over tracks of Montreal and South Counties Railway.

8913—December 15—Authorizing the Peck Rolling Mills, Montreal, P.Q., to operate rail line in connection with its business across track of Montreal and Southern Counties Railway on Mill Street.

8914—December 15—Approving highway crossing and road diversion between Secs. 15 and 22, Tp. 33, R. 28, west 2nd Meridian of the G.T.P. Railway, District, Saskatoon, Sask.

8915—December 15—Authorizing the G.T.P. Railway to construct its railway across the diverted highway through S.E. ¼ Sec. 20 Tp., 42 R., 25, west 3rd Mer., Sask.

8916—December 15—Approving and sanctioning location of the C.N.O. Railway line in Pickering Township, Ontario County.

8917—December 15—Approving standard plan of C.N.R. overhead highway crossing.

8918—December 15—Authorizing the corporation Winnipeg, Man., to place its transmission lines across the track of the C.P.R. in S.E. ¼ Sec. 7, Tp. 13, R. 7, East 1st principal Meridian, Man.

8919—December 15—Authorizing the Bell Telephone Company to place its wires across the G.T.R. near Courtland Station, Ontario.

8920—December 15—Authorizing the Coldstream Telephone System to place its wires across the G.T.R. between Komoka & Strathroy, Ont.

8921—December 15—Authorizing A. McMichael, Jr., Melfort, Sask., to place wires across the C.N.R. at Government Road, west of Melfort, Sask.

8922—December 15—Authorizing the C.P.R. to construct spur to the end of its wharf on Kootenay Lake, Nelson, B.C.

8923—December 15—Authorizing the G.T.R. to construct spur into the premises of the Goderich Lumber Company, Limited, Front Street, Southampton, Ont.

8924—December 15—Directing the G.T.P. Railway to place at least two more wires along fences on both sides of its right-of-way in Sec. 2, Tp. 12, R. 11, west 1st Meridian, Man.

8925—December 16—Approving and sanctioning location of the C.N.R. through Tp. 24, Ranges 17-15, west principal Meridian, Manitoba, mile 0 to 14.02.

8926—December 10—Approving location of the Toronto, Niagara & Western Railway Company, Toronto, Ont., from Davenport Station to Jane Street.

8927—December 4—Directing the G.T.R. to remove not later than 1st July, 1910, its additional track where it crosses King Street, Sherbrooke, P.Q.

8928—December 15—Authorizing the Board of Light and Heat Commissioners of Guelph, Ont., to place its wires across the track of the C.P.R. at Norwich St.

8929—December 16—Authorizing the Bell Telephone Company to place its wires across the track of the M.C.R.R. south of station, Wellington Street, Windsor, Ont.

8930 to 8932 Inc.—December 16—Authorizing the People's Telephone Company to place its wires across the track of the G.T.R. near Jericho, and at two points near Forest, Ontario.

8933—December 16—Authorizing the town of Waterloo, Ont., to lay water main under the track of the G.T.R. at John Street.

8934—December 7—Dismissing application of the G.T.P. Railway for Order for connection between its tracks and Canada Iron & Foundry Company's tracks at Mountain Avenue, Fort William, Ont.

8935—December 7—Directing the C.P.R. to fill in with plank space between rails on its railway along John Street and Water Street, Eganville, Ont.

8936—December 7—Directing the C.P.R. to construct station at Eganville, Ontario, with good and sufficient accommodation facilities for traffic.

8937—December 7—Authorizing the Georgian Bay and Seaboard Railway Company to cross with its tracks the tracks of the G.T.R. in Lot 16, Con. 3, Tp. of Eldon, mileage 50.5 at Victoria Harbor, Ont.

8938—December 2—Authorizing the C.P.R. to construct spur near Sutton Station, P.Q.

8939—December 16—Authorizing the C.P.R. to construct and operate spur near Smelter Junction, B.C.

8940—December 16—Approving and sanctioning location of C.N.O. Railway line through Frontenac County, mileage 61 to 96, west from Ottawa.

8941—December 7—Directing the Montreal Park & Island Railway to stop its cars for the purpose of allowing passengers to get off and on at six points in Mount Royal Ward, Montreal, P.Q.