

## SOCIETY NOTES.

**Toronto Branch A.I. and E.E.**

A special meeting of the Toronto Section of the American Institute of Electrical Engineers was held on the evening of Monday, March 30th, at the rooms of the Engineers' Club, thirty-one members of this section and eight visitors being present, twenty-one of whom were present at the luncheon held prior to the meeting.

The chair was occupied by the Chairman of the Section, Mr. K. L. Aitken, and the address of the evening was made by Mr. David B. Rushmore, of the Schenectady Section, who discussed "Some Factors in High Tension Power Transmission." Mr. Rushmore's address was illustrated by the use of a considerable number of lantern slides. Among other things, he drew attention to the gradual removal of the limitations in the matter of transmission voltage, illustrating his fact, by the recent remarkable improvements, (1st) in line insulators, and (2nd) in lightning arresters; the results of improvements in which have permitted the installation and operation of at least four lines in America at voltages higher than 60,000, one of which is designed for from one hundred to one hundred and twenty thousand volts. He referred to the fact that the limit which had been removed, and whose removal permitted the use of the new common sixty thousand volt lines had been the result of considerable improvement in the insulation of transformers and of the development of the multi-gap lightning arrester.

The first view shown was of a stroke of lightning, in discussion of which the speaker drew attention to the fact that recent studies had shown that the damages sustained by such electrical disturbances are unimportant when compared with those resulting from high resistance grounds on well-insulated lines in either overhead or underground systems. Other subjects illustrated were the aluminum arrester whose characteristics and principles were developed; recent designs of very high tension oil switches and air brake switches. Several different types of station design and arrangement were discussed.

In concluding his remarks, Mr. Rushmore complimented the Section upon taking the initiative toward the establishment of a new grade of membership in the Institute. He then outlined his ideas of the probable development of the Institute, if it were to attain its proper functions in American progress. His chief proposition was to the effect that the developed Institute would become more truly a federation of active scattered local sections rather than a small central body with more or less independent and therefore merely weak scattered groups of members.

A rather full discussion was taken part in by Prof. T. R. Rosebrugh, of the University of Toronto; Messrs. Converse and Ryerson, of Niagara Falls; Glassco and Darrall, of Hamilton; and Kynoch, Lambe, Black, Bucke, Price, Watts and Mitchell, of Toronto. The greater part of the discussion centred around the subjects of "lightning arresters" and "location of the centre of control in power stations;" Messrs. Converse and Ryerson declaring satisfaction with the control in the hands of chief operators absolutely isolated from the machinery of the power-house, and in presence only of the indicating apparatus, while Mr. Black declared a distinct preference that the operators should be able to see the machinery which they are controlling. Mr. Glassco set forth briefly some of the chief experiences of the Cataract Power Company, of Hamilton, with which he is connected, one of the most interesting items of which experience related to the voltage stresses resulting from the use of an open delta on the three-phase lines.

A vote of thanks, on motion of Messrs. Black and Ryerson, was tendered to Mr. Rushmore, for his courtesy in coming to Toronto and addressing our section.

The next meeting will be held at the University of Toronto, on the evening of Friday, the 17th April, and will be addressed by Mr. H. W. Price, on "The Oscillograph." The lecture will be illustrated by use of the instrument and by means of slides.

**American Waterworks Association.**

Preparations are being made for the 28th annual convention of the American Waterworks Association, to be held in Washington, D.C., May 11th, 16th, 1908. The programme of papers to be read and of the various excursions to be taken to points of interest near Washington is being distributed, and is unusually interesting. The secretary is Mr. J. M. Diven, 14 George Street, Charleston, S.C.

**ORDERS OF THE RAILWAY COMMISSIONERS OF CANADA.**

(Continued from Page 258.)

4536—March 31—Authorizing the township of Rochester to erect its telephone wires across the tracks of the Michigan Central Railroad at the Malden Road, about three-quarters of a mile east of Woodslee Station, Ont.

4537—March 31—Authorizing the township of Rochester to erect its telephone wires across the tracks of the Michigan Central Railroad at the sideroad between Lots 10 and 11, Middle Road, North Concession, Boscomb Station, Ont.

4538—March 31—Authorizing the township of Rochester to erect its telephone wires across the Michigan Central Railroad at the town line between Maidstone and Rochester, about three hundred feet west of Woodslee, Ont.

4539—March 31—Authorizing the township of Rochester to erect its wires across the track of the Michigan Central Railroad at the Sixth Concession Road, township of Rochester, about one and a quarter miles east of Ruscom Station, Ont.

4540—March 31—Authorizing the township of Rochester to erect its telephone wires across the track of the Michigan Central Railroad between Lots 4 and 5, Middle Road, South Concession, about one and a half miles east of Woodslee Station, Ont.

4541—March 31—Authorizing the township of Rochester to erect its telephone wires across the tracks of the Michigan Central Railroad at the Middle Road, Lot 9, about three-quarters of a mile west of Ruscom Station, Ont.

4542—March 31—Authorizing the township of Rochester to erect its telephone wires across the tracks of the C.P.R. at the Belle River Road, about one-tenth of a mile west of Belle River Station, Ont.

4543—March 27—Authorizing C.P.R. to construct a spur to the premises of the Monarch Lumber Company at Savonas, B.C.

4544—March 27—Authorizing the G.T.P. Railway Company to construct a spur from a point on its Lake Superior branch, being mile 87.76, north-west of Fort William, Thunder Bay District, for a distance of 1.94 miles.

4545—March 31—Authorizing Bell Telephone Company to erect its aerial wires across the G.T.R. siding to the St. Clair Foundry Company, Toronto Junction, and rescinding Order No. 4182, dated December 26th, 1907.

4546—March 27—Approving plans of C.P.R. standard pile and timber trestles.

4547—March 27—Authorizing C.P.R. to construct spur to the premises of Robert Carroll, on Lots 8 and 9, Concession 4, west, in the township of Caledon, Ont.

4548—March 27—Authorizing C.P.R. to construct spur to the premises of the Bury Pulpwood and Lumber Company, near Gould, P.Q.

4549—March 27—Authorizing the Glengarry Telephone Co-operative Association, Limited, to erect its telephone wires across the G.T.R. at the public highway, about two miles south of Dalkeith Station, Ont.

4550—March 31—Authorizing the Bell Telephone Company to erect its aerial wires across the G.T.R. at public crossing about one mile east of Forest Station, Ont.

4551—March 31—Approving by-law of the Temiscouata Railway Company authorizing F. X. Belinger, general freight agent to prepare and issue tariff of tolls to be charged for all freight traffic.