

Abstract of Telephone Patents—(Continued).

different combinations, the individual line lamps being controlled in similar combinations by the relays in pairs. Patent assigned to Kellogg Switchboard and Supply Co. — 902,930.

Telephone Transmitter. — **Kaisling.** — An improvement over the Dean improvement over the White solid back transmitter. The diaphragm passes under the back electrode whose stem is secured in the bridge, and the front electrode is carried on a cup riveted on the front of the diaphragm. The effect is very similar to that in the Dean transmitter. Patent assigned to Milo G. Kellogg of Chicago, Ill.—903,197.

Telephone System. — **Dean.** — Two-wire multiple common battery with twin supervisory relays in a common shell or a series or pairs in a common shell, one of each pair closing and the other opening the lamp circuit. Patent assigned to Kellogg Switchboard & Supply Co. — 903,547.

Telephone System. — **J. A. & S. H. Geller.** — Step by step party line lockout, the rotary part carrying a combination of contacts. Patent unassigned. — 903,561.

Telephone Bracket. — **Lampert.** — Desk set clamped on the end of a lazy tongs with a foot pedal for working the tongs. Patent unassigned. — 903,733.

Relay for Reinforcing Sound. — **Christensen.** — Telephonic relay having an unbalanced weighted lever carrying a carbon contact. Patent unassigned. — 903,811.

Electrical Protective Apparatus. — **Cook.** — Heat coils and lightning arresters on a strip. Details of construction are claimed. Patent unassigned. — 903,812.

Contactless Thermal Protector. — **Cook.** — Heat coil without loose contacts. Both metallic heads of the coil are soldered to the spring. Patent unassigned. — 903,813.

Automatic Indicator for Telephones. — **Sedgwick.** — Automatic indicator for automatic dial senders, having discs displaying the number of the party called. Patent unassigned. — 903,898.

Telephone Exchange System and Apparatus. — **Wick, jr.** — Two-wire multiple common battery system having a split coil control-relay with its windings opposed and in series when one plug is inserted, but becoming active when the other plug is inserted. Patent assigned to The North Electric Co. — 904,105.

Protective Apparatus for Switchboards and the Like. — **Kaisling.** — Heat coil and lightning arrester on a strip. The invention really lies in a reversible heat coil or sneak current arrester having a pin longer than its body and sliding through the same when the solder melts. To reset, the coil is taken out, cooled and reversed. Patent assigned to Frank B. Cook of Chicago, Ill. — 904,486.

TABER, ALTA. The Government Telephone system is nearly completed. The long distance 'phone is in operation and the residents are now able to call up all the chief centres in Alberta.

The Leeds Rural Telephone Company, is extending its line to Pittsburg.

The telephone bill at Melfort, Sask., was passed almost unanimously and a system will be put in at once.

PORT ARTHUR, ONT. The municipal service is so popular that there are no less than 1,200 instruments in the city, one for every ten persons.

SNOWFLAKE, MAN. The farmers telephone line is meeting with many subscribers in the surrounding country.

FORT WILLIAM and PORT ARTHUR, ONT. The rates of the municipal telephones are to be increased now that the improved service is in operation. But the rates will be only \$1.25 and \$2.50 per month.

ENDERBY, B. C. The by-law granting a 25-year franchise to the Okanagan Telephone Co. passed without opposition. The contract fixes the rates at not more than \$2.00 for houses and \$3.00 for business places., per month; the company must supply phones to anyone within the city limits; but is not compelled to connect isolated houses where the revenue would be less than 10 per cent. of the outlay; the hours of service are only between 8 a. m. to 6.30 p. m. (This will be quickly be found a useless arrangement.—Ed.).

At a joint meeting, the City Councils of Fort William and Port Arthur, Ont., agreed to accept the offer of the Bell Telephone Co. and buy it out, but decided they would eliminate the clauses by which the Company controlled the long distance connections.

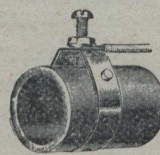
MANITOBA. The Commission is laying plans for considerable extension of long distance lines in the spring. The work of constructing the long distance line between Baldur and Miami has been completed. The lines between Minnedosa and Binscarth, and between Brandon and Rounthwaite are very nearly finished.

The Bethesda and Stouffville Telephone Company, Limited, have declared a dividend for the current year at the rate of 6 per cent., upon the paid up stock of the Company. From the commencement of the operation of the lines of this Company until the end of 1907, the profits of the Company were used in making improvements and extensions, and last February a Stock dividend of 25 per cent. was declared. As the Company commenced business in August 1904, the shareholders have received on their investment an average annual return of 6.79 per cent. The Officers of the Company are Messrs. A. D. Bruce, President and General Manager; D. W. Heise, Secretary; and J. H. Ratchiffe, Treasurer.

Telephone in Switzerland

In the little country of Switzerland, there are 10,548 miles of public telephone and telegraph lines, the government even manufacturing a good deal of the apparatus. A flat rate of \$12.45 is made for each instrument, and one cent for each call in the local exchange, long distance calls ranging from two to fourteen cents. That these rates pay is shown by the Government making a profit of \$864,000 a year.

The Blackburn Ground Clamp



Patented

can be attached in one minute to any size of lead or iron pipe at a cost of about five cents each. Adopted by the leading telephone companies as the most effective and economical ground connector made.

Blackburn Specialty Co.
Cleveland, Ohio.

THE Full report of the Brandon Convention will appear in our next issue.