

ABSTRACT OF TELEPHONE PATENTS

Granted in the United States during last month, prepared for *The Canadian Municipal Journal* by Edward E. Clement, Telephone Patent Expert, Washington, D.C.

Telephone System. — Clausen. — Busy test circuit through operator's tertiary winding and the supervisory relay. Assigned to American Electric Telephone Co., Chicago, Ill. — 937,050.

Telephone Repeating System. — Shreeve. — Prevents losses in secondary line circuit due to phase differences between original and repeated energy waves, by confining original energy to the original circuit only, using repeating coils both sides of relay. Assigned to American Telephone and Telegraph Co., New York. — 937,189.

Four Party Telephone Line. — Weman. — Two stations have ringers to ground from opposite sides of line and the others howler receivers similarly connected. Uses an alternating generator at central for the ringers and an induction coil with primary high-frequency vibrator for the howlers. Unassigned. — 937,399.

Telephone Exchange System and Apparatus. — Manson. — Unbalanced differential line relays pull up part way on line current to close lamp circuit and all the way on cord battery when plug is inserted, to cut off lamp battery. Assigned to The Dean Electric Co., Elyria, Ohio. — 937,832.

Transformer. — Slough. — Smooths out irregularities in signalling current from vibrator transformers by arranging coils for magnetic leakage. Assigned to The Dean Electric Company, Elyria, Ohio. — 937,877.

Telephone Repeater Apparatus. — Warth. — Vertically arranged repeater magnets act directly on iron facing to resistance button. Unassigned. — 937,901.

Method of Wiring Telephone Switchboards. — Winston. — Apparatus on rack is wired to group of terminals so that by shifting jumper wires on the terminals the cord and other circuits can be modified for different classes of service. Assigned to Kellogg Switchboard & Supply Co., Chicago, Ill. — 937,909.

Locking and Signaling System for Telephone Registers. — Spiegel. — Line and cord meters are inoperative a second time during same connection. Provides meter signals for operator. Assigned to American Telephone & Telegraph Co., New York. — 938,026.

Apparatus and System for Measuring Telephone Service. — Browne. — Semi-automatic system with a meter for each line switch. Assigned to American Telephone & Telegraph Co., New York. — 938,039.

Appliance for Use with Telephone Transmitters. — Kintner. — Felt or buckskin lined funnel surrounds the transmitter to receive the speaker's mouth and deaden the sound for bystanders. Assigned to Miniature Telephone Booth Co., New York. — 938,060.

Telephone System. — Leich. — Line cut into sections for repeating coils, and phantoms on the sections for local working. Assigned to Cracraft-Leich Electric Co., Genoa, Ill. — 938,154.

Signaling System. — Leich. — Line sub-divided by repeating coils to make local phantoms, and selective signals for these and the metallic stations. Assigned to Cracraft-Leich Electric Co., Genoa, Ill. — 938,155.

Electrical Signaling System. — Slough. — Split battery discharging in alternate divisions through the primary of the ringing transformer in a harmonic system. Assigned to The Dean Electric Company, Elyria, Ohio. — 938,345.

Telephone Exchange System. — Zahm. — Automatic circuits arranged so subscribers can call direct to manual toll, information, etc., or to other subscribers, toll connections being through second selector. Assigned one-fourth to Edward E. Clement, Washington, D. C. — 938,541.

Telephone Exchange. — Anderson & Hagstrom. — Step by step selector with non-interference means for signaling and switching mechanism. Assigned two-thirds to The Anderson Electric and Manufacturing Co., McPherson, Kan., and one-third to Hagstrom Brothers Mfg. Co., Lindsborg, Kan. — 938,943.

Calling Device for Telephone Exchanges. — Anderson & Hagstrom. — Contacts on a dial are swept by a rotary wiper arm to send impulses to line as determined by setting device. Assigned to The Anderson Electric and Mfg. Co., McPherson, Kan., and Hagstrom Brothers Mfg. Co., Lindsborg, Kan. — 938,944.

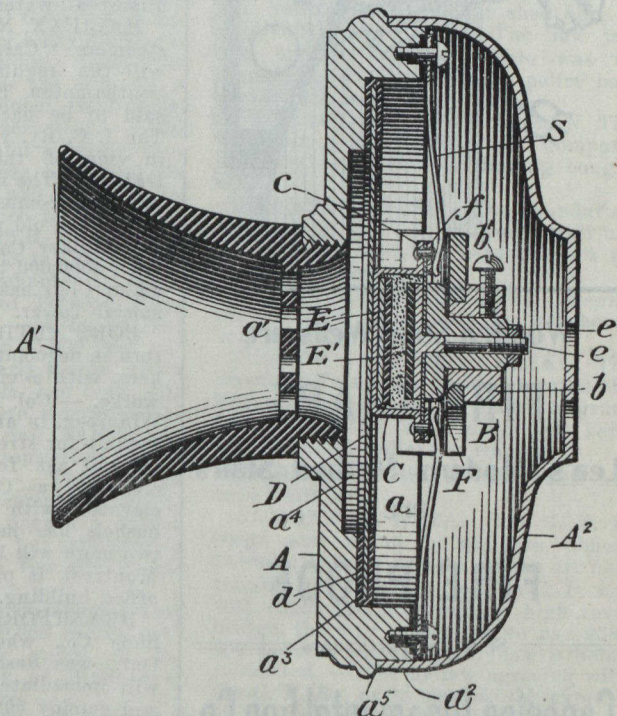
Telephone Line Testing System. — Chenoweth. — Testing drum and commutator at an intermediate station is controlled from the terminals. Unassigned. — 938,974.

Telephone Transmitter. — Egner & Holmstrom. — Strong current transmitter having its diaphragm uniformly strained by pressure from center to circumference. Unassigned. — 938,992.

Method of Selection in Systems of Communication. — Clement. — Method of selection of any one of a large number of circuits by controlling decimally arranged relays less in number. Assigned to The North Electric Co., Cleveland, Ohio. — 939,187.

Selective Apparatus for Systems of Communication. — Clement. — Apparatus for practicing the previous method. Assigned to The North Electric Co., Cleveland, Ohio. — 939,186.

Method of Selection in Systems of Communication. — Clement. — Selective connection by means of decimally arranged relays working in combinations of pairs and controlled by step by step switches. Assigned to The North Electric Co., Cleveland, Ohio. — 939,188.



Telephone Transmitter. — Dean. — Reissue of original patent No. 823,768 for a granular transmitter in which the resistance cup rests against the diaphragm and is vibrated by pressure alone, with a clamping screw. In the figure the cup C rests against the diaphragm D and carries within it the front electrode E. The back electrode is carried by stem E, clamped in bridge B. Assigned to The Dean Electric Company, Elyria, Ohio. — Reissue 13,035.

Telephone Attachment. — Palmer. — Pivoted receiver carrying lever forces down switch hook when back out of use. Unassigned. — 939,439.

Apparatus for Strengthening Weak Electrical Currents. — Pollak. — Repeater having two coreless coils, hung at opposite ends of a single field magnet, one being to line and controlling a microphone, and the other connected in circuit with the microphone of the first. Unassigned. — 939,625.

Telephone System. — Summers. — Party line built up in sections — two receivers at each station for opposite connection, and lockout means. Unassigned. — 939,756.

Attachment for Telephones. — Nilsson. — To detect eavesdroppers each phone on party line has pneumatic attachment which rings bells to sound its code number or the like when it cuts in. Unassigned. — 940,047.