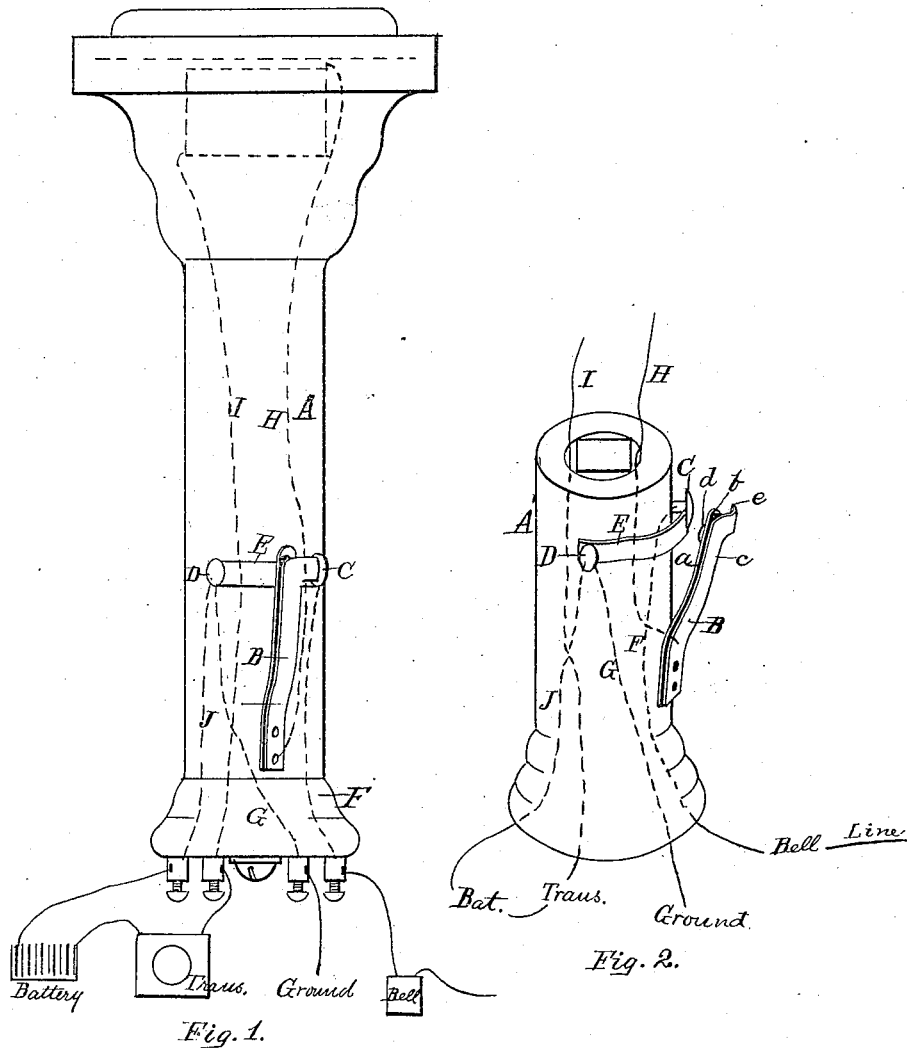


(Model.)

W. H. ECKERT, J. A. SEELY & E. A. ECKERT.
COMBINED TELEPHONIC RECEIVER AND AUTOMATIC CIRCUIT BREAKER.
No. 266,277. Patented Oct. 24, 1882.



Witnesses:

O. J. Bailey
C. H. Jones

Inventors:

W. H. Eckert
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Att'y

UNITED STATES PATENT OFFICE.

WILLIAM H. ECKERT, JOHN A. SEELY, AND EDWARD A. ECKERT, OF CINCINNATI, OHIO.

COMBINED TELEPHONIC RECEIVER AND AUTOMATIC CIRCUIT-BREAKER.

SPECIFICATION forming part of Letters Patent No. 266,277, dated October 24, 1882.

Application filed April 21, 1882. (Model.)

To all whom it may concern:

Be it known that we, WILLIAM H. ECKERT, JOHN A. SEELY, and EDWARD A. ECKERT, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Combined Telephonic Receiver and Automatic Circuit-Breaker, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a front view of a telephone equipped with the automatic circuit-breaker, and Fig. 2 is a perspective view of portion of telephone, showing the location and relative arrangement of switch.

It is the object in this invention to equip a telephonic receiver with switching mechanism for throwing the telephone, transmitter, and battery in or out of the circuit, so arranged that it will be operated by the hand as it grasps the instrument for use.

To this end it consists in providing the ordinary telephone, A, with a leaf-spring, B, the lower end of which is attached to the lower end of the telephone. This spring is preferably made of two flat pieces, laid together with a piece of insulating material, *a*, between them. The under spring, *b*, has at the upper end a button, *d*, and the outer spring has at the upper end a side projection, *e*. The body of the telephone beneath the end of this compound spring has a raised button, C, and removed a short distance from this button is another button or binding-post, D, which holds permanently to the telephone the end of a spring, E. The opposite end of the spring E projects over to the opposite button, C, and rests under the head of said button. The compound spring B is so located relatively to the button C and spring E that when the upper end of the spring is pressed down onto the telephone-body the side projection, *e*, of the leaf *c* will come in contact with the button C, and the button *d* on the inner leaf will at the same time come in contact with the free end of the spring E and move it toward the body of the telephone, thus

breaking its contact with button C. The line-wire F is connected with raised button C and the ground-wire G with button D. One end of the helix is connected with the outer plate, *c*, of the compound spring B by means of the wire H. Wire I connects the opposite end of the helix with the transmitter and battery, and the battery is connected with button D by means of wire J.

The operation is as follows: When the receiver is not in use the current passes from the line-wire F to button C, thence through spring E and wire G to the ground. When the operator grasps the telephone the hand presses the spring B against the button C and spring E, simultaneously breaking contact between button C and spring E and making contact between plate *c* and button C. The current will therefore pass from wire F to button C, thence through spring-plate *c* and wire H to the helix, from the helix, through wire I, to transmitter and battery, and from battery, through line J and wire G, to the ground.

What we claim is—

1. In a telephone provided with wires G, H, I, and J, the combination of the spring B, the button C, post D, and spring E, substantially as and for the purpose set forth.

2. In a telephone-circuit, the combination of a receiving-telephone having keys upon its body with a separate transmitter and battery, arranged as described, whereby when the receiving-telephone is grasped by the listener the keys can be operated to switch the receiving and transmitting telephones and battery into the line-circuit.

In testimony that we claim the foregoing we have hereunto set our hands this 18th day of April, 1882, in the presence of witnesses.

WILLIAM H. ECKERT.
JOHN A. SEELY.
EDWARD A. ECKERT.

Witnesses:

O. J. BAILEY,
J. S. ZERBE.