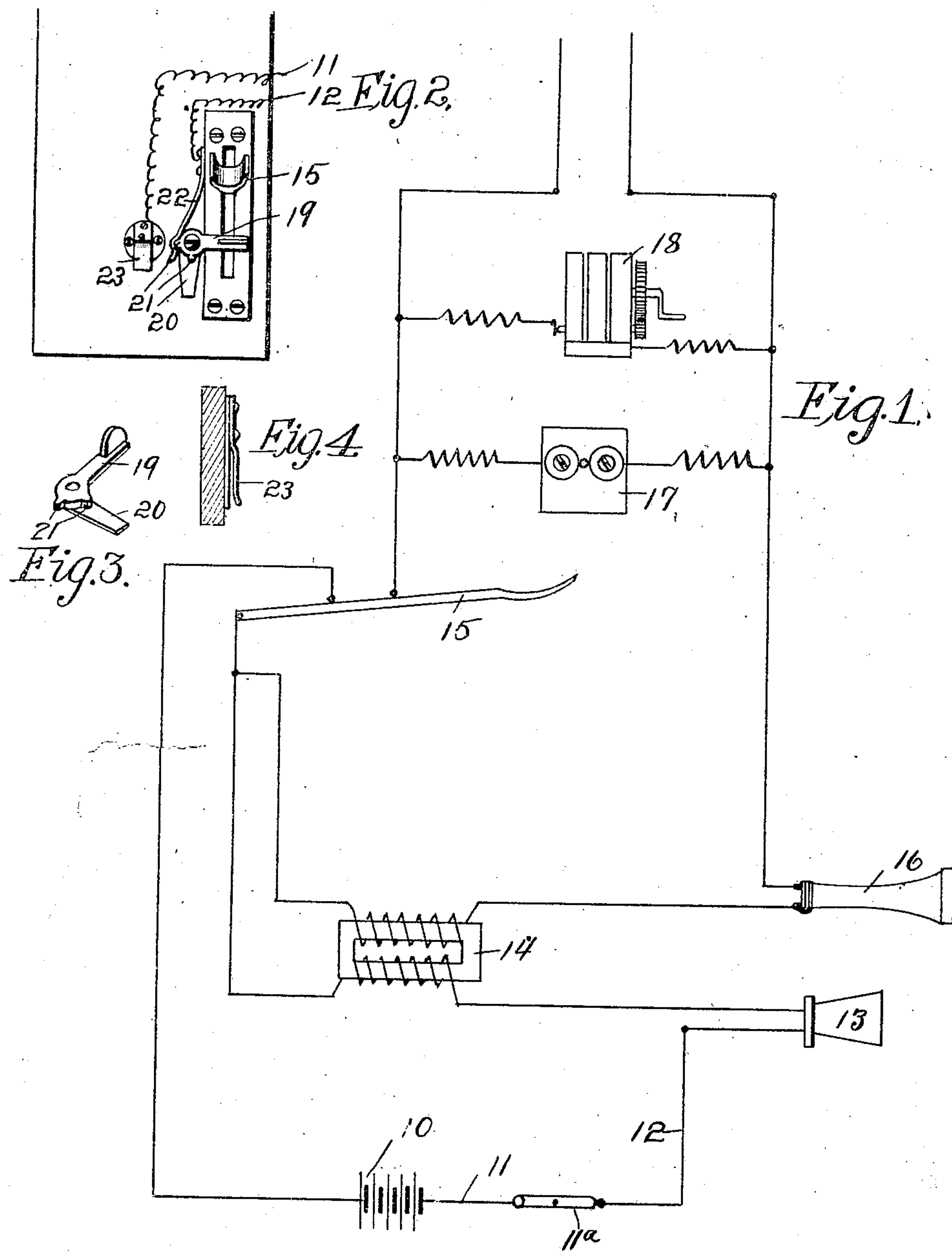


No. 841,491.

PATENTED JAN. 15, 1907.

F. EDWARDS.
TELEPHONE.

APPLICATION FILED MAY 9, 1905.



sses:
Cague:
oody.

Inventor: Fred Edwards
by Curig & Lane Attys

UNITED STATES PATENT OFFICE.

FRED EDWARDS, OF JEFFERSON, IOWA.

TELEPHONE.

No. 841,491.

Specification of Letters Patent.

Patented Jan. 15, 1907.

Application filed May 9, 1905. Serial No. 259,645.

To all whom it may concern:

Be it known that I, FRED EDWARDS, a citizen of the United States, residing at Jefferson, in the county of Greene and State of Iowa, have invented a certain new and useful Telephone, of which the following is a specification.

The object of my invention is to provide means of simple, durable, and inexpensive construction that may be quickly and easily applied to an ordinary telephone of the type known as the "bridging or party-line type," which means may be manipulated by the operator in such manner that the telephone-receiver will remain operative while the transmitter-circuit will be disconnected to thereby avoid deterioration of the battery of the transmitting-circuit during such times as the operator desires only to use the receiver, and, further, to provide means whereby the transmitting-circuit is automatically connected when the telephone-receiver is suspended from the receiver-hook.

My invention consists in the construction of the switch mechanism and in its arrangement and combination with a telephone, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 illustrates diagrammatically a telephone-circuit, showing the position of my improved switch in the transmitting-circuit. Fig. 2 shows a detail elevation of a portion of a telephone with my improved switch device adjacent to the receiver-arm. Fig. 3 shows a detail perspective view of my improved switch-lever, and Fig. 4 shows a detail sectional view of a part of the telephone to illustrate the contact-plates for receiving the switch-arm.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate the battery of the transmitting-circuit of the telephone. 11 indicates a conductor leading from the battery to my improved switch, (designated in Fig. 1 by the reference-numeral 11^a,) which is described more particularly hereinafter, and 12 indicates the conductor extending from my improved switch to the transmitter 13.

The numeral 14 indicates the ordinary induction-coil; 15, the supporting-lever for the receiver; 16, the receiver; 17, the bell, and 18 the generator, all of which are of the ordinary

kind in common use on the type of telephones known as the "bridging or party-line type."

Adjacent to the receiver-lever 15 is a pivoted switch-arm 19, having a right-angled extension 20 and also provided with two lugs 21. The numeral 22 indicates a spring-actuated arm notched to receive said lugs 21. This arm is connected with conductor-wire 12.

Adjacent to the switch-arm 19 is a contact-plate 23, designed to receive the extension 20 when the switch-lever is in one position, and this contact-plate is connected with the conductor 11. The said parts are so arranged and disposed relative to each other that when the receiver-lever 15 is in its normal position—that is to say, held at its lower limit of movement by the weight of the receiver—then the switch-arm 19 is held in position with its extension 20 in engagement with contact-plate 23 and a circuit is established through the transmitter-circuit, the said switch-arm 19 being yieldingly held in this position by the spring-arm 22. If the receiver is removed from its lever 15 and said lever is in its elevated position, as shown in Fig. 2, then the operator may grasp the switch-lever 19 and move it to the position shown in Fig. 2, whereupon the circuit through the transmitting-circuit is broken, and the transmitter-battery is held inoperative to thereby avoid its deterioration. However, when the switch-lever 19 is in the position shown in Fig. 2 the circuit of the receiver is not in any way interrupted and the operator at the receiver may receive messages in the ordinary way, and then when the receiver is again placed on the receiver-lever the circuit through the transmitting-circuit is reestablished and will remain so until the switch-lever 19 is manually operated.

In practical use it frequently happens that a person must wait at a telephone for a long time to receive a message, and without my improved automatic switch the transmitting-circuit would be in use and the transmitting-battery subjected to deterioration during all this time. However, by opening the switch 19 the operator may wait at a telephone to receive a message for an indefinite time and receive said message at any time during this period without using the current of the transmitting-circuit.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. In a telephone having an independent transmitting-circuit, the combination of a switch in said circuit automatically cut in when the receiver-lever is at its lower limit of movement and capable of being manually cut out when the receiver-lever is in its elevated position.

2. The combination with a telephone of the type known as the "bridging or party-line type" and including an independent transmitting-circuit and a pivoted lever for a receiver of a switch-lever pivotally supported adjacent to the receiver-lever and provided with an extension and with two lugs, a notched spring to successively engage

said lugs, said notched spring electrically connected with the transmitter, a contact-plate electrically connected with the transmitter-battery and arranged in position to be engaged by the extension of the switch-lever when said switch-lever is in one position, said switch position arranged relative to the receiver-lever, so that it will be moved to position in engagement with its contact-plate when said receiver-lever is at its lower limit of movement.

Des Moines, Iowa, March 23, 1905.

FRED EDWARDS.

Witnesses:

H. I. JENISON,
J. A. HENDERSON.