

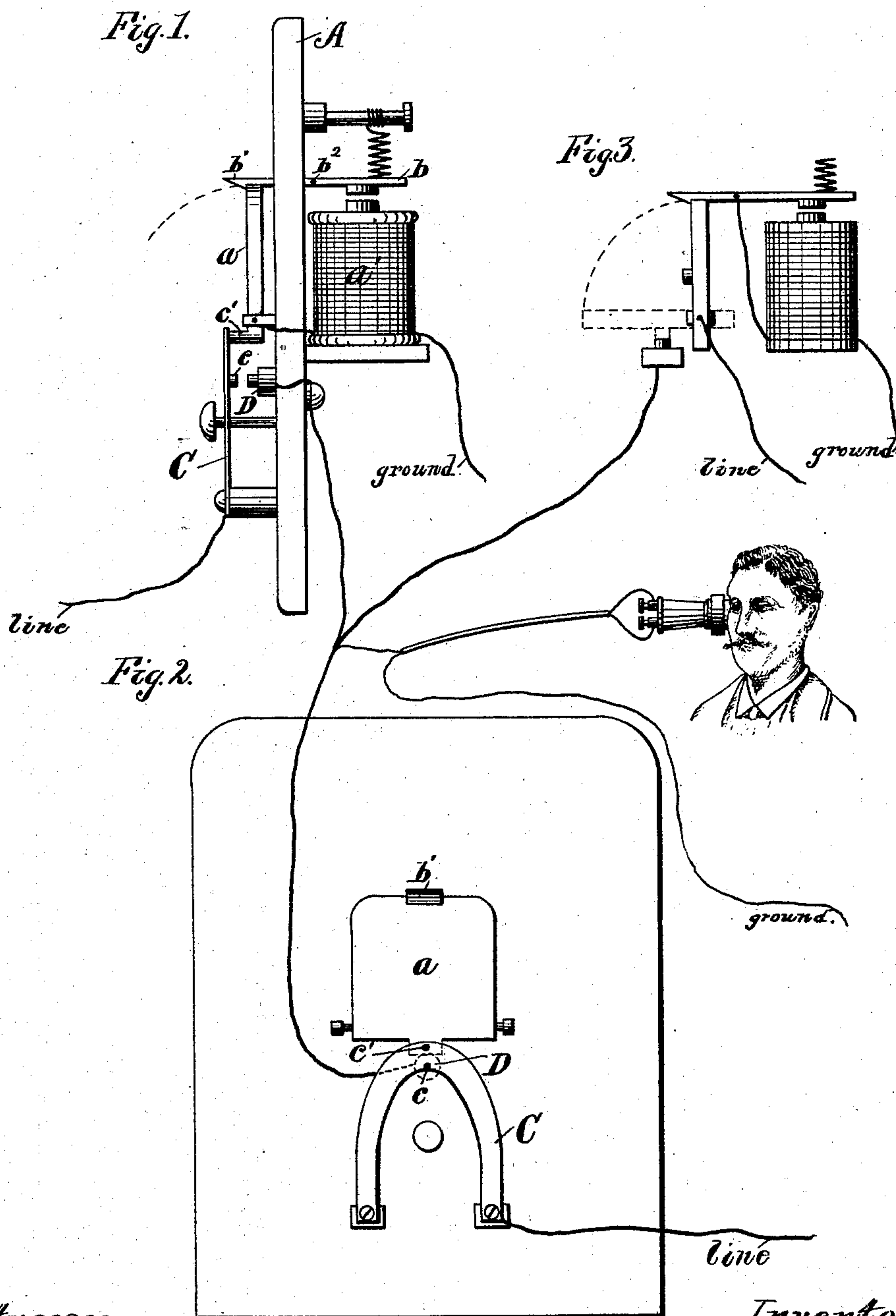
(Model.)

C. E. SCRIBNER.

CIRCUIT FOR TELEPHONE EXCHANGES.

No. 278,367.

Patented May 29, 1883.



Witnesses.  
Henry Hunt  
James L. Baird.

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# UNITED STATES PATENT OFFICE.

CHARLES E. SCRIBNER, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE WESTERN ELECTRIC COMPANY, OF SAME PLACE.

## CIRCUIT FOR TELEPHONE-EXCHANGES.

SPECIFICATION forming part of Letters Patent No. 278,367, dated May 29, 1883.

Application filed November 6, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. SCRIBNER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have discovered certain new and useful Improvements in Circuits for Telephone-Exchanges, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to a telephone-exchange system.

In the drawings, Figure 1 represents a side elevation, and Fig. 2 a front elevation, of an annunciator at the central office. Fig. 3 represents a modification of the annunciator. Each subscriber is provided with an annunciator.

Similar parts are represented by like letters of reference.

A is the base, *a* the drop, and *a'* the magnet. *b* is the armature-lever, which is provided with a catch, *b'*, and pivoted at *b*<sup>2</sup>. C is a metallic spring provided with contact-points *c* and *c'*, the latter normally resting against the shutter. Contact-point *c* is placed opposite to point D. Points D of all annunciators of the system, or as many as it may be convenient to group together, are connected with a common line, which passes through an operator's telephone and to ground, as shown.

The subscriber signals by sending a current along his line from a battery or magneto-generator. This current finds circuit by the line to spring C, thence by contact *c'* to the shutter and to the magnet *a'*, and thence to ground. Thus the armature-lever *b* is moved, and the shutter *a*, being released, falls. This breaks the circuit at *c'*, thus disconnecting the line from magnet and ground, while a new contact is made at *c* with D, thus bringing the subscriber's line into connection with the common line, and thence through listener's telephone to ground.

In the modification, Fig. 3, the spring C is not used, and the shutter itself becomes the switch. The subscriber thus is enabled to inform the listening attendant what connection he wishes.

I claim—

An indicating-annunciator drop and an electro-magnet and its armature for actuating the same, in combination with a switch automatically actuated by the movement of said drop, which acts to divert the circuit extending from the signaling-station from the said electro-magnet to a normally-open earth-circuit containing a receiving-instrument.

CHARLES E. SCRIBNER.

Witnesses:

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