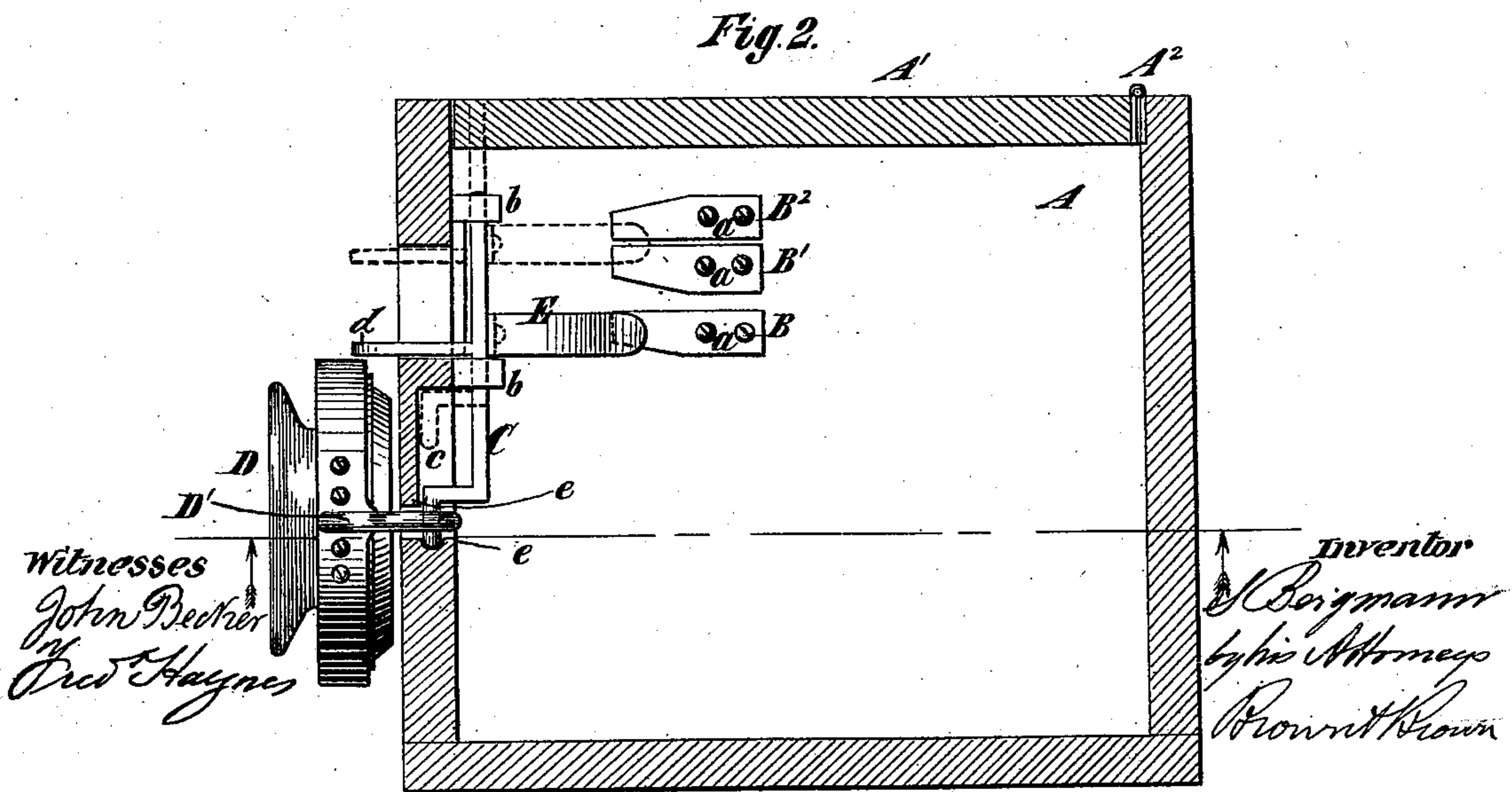
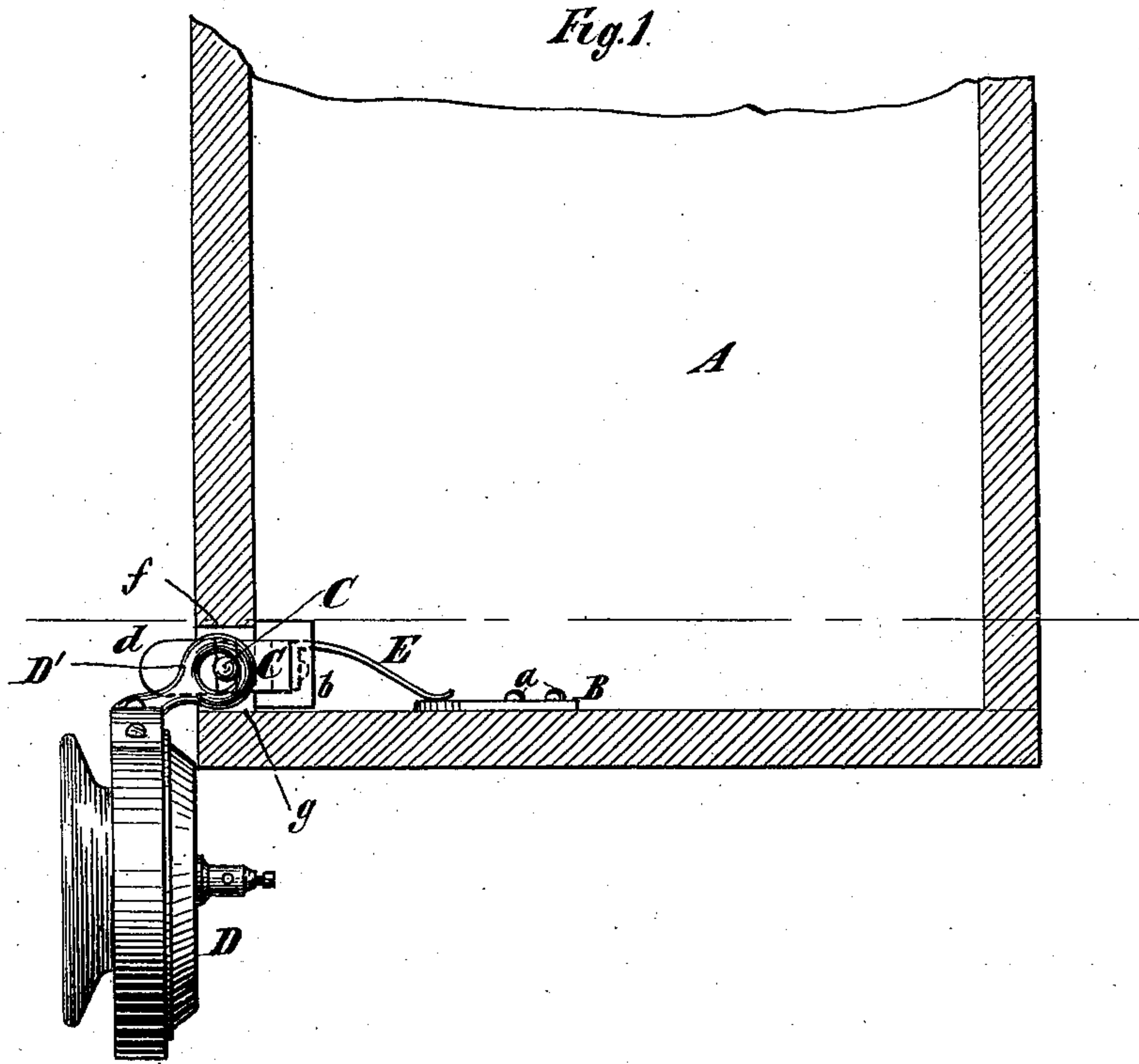


(No Model.)

S. BERGMANN.
Telephone Support and Switch.

No. 235,988.

Patented Dec. 28, 1880.



Witnesses
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UNITED STATES PATENT OFFICE.

SIGMUND BERGMANN, OF NEW YORK, N. Y.

TELEPHONE SUPPORT AND SWITCH.

SPECIFICATION forming part of Letters Patent No. 235,988, dated December 28, 1880.

Application filed October 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, SIGMUND BERGMANN, of the city of New York, in the county and State of New York, have invented a new and useful Combined Telephone Support and Switch, of which the following is a specification.

I am aware that a telephone support and switch have been combined, so that on the placing of a telephone-instrument on its support the weight has operated the switch to disconnect the instrument from the electric circuit or line with which the instrument has to be used, and that on the removal of the instrument from its support the switch has been actuated by a spring to connect the instrument with said circuit or line.

The object of my invention is to produce a combined telephone support and switch wherein a more positive and hence more reliable operation of the switch may be attained, and yet one wherein the act of placing the telephone on its support necessitates the operation of the switch, so that the latter cannot be neglected.

To this end my invention consists in the combination of a telephone-instrument, a support for said instrument when it is not in use, and which preferably consists of a bolt, means which preclude the placing of the instrument on the support or its removal from the support without a movement of the support by the hand, and a switch which is operated simultaneously with the movement of the support to connect the instrument with or disconnect it from the electric circuit or line with which it is used.

It also consists, in the combination, with a bolt upon which a telephone-instrument may be hung to support it, and a switch whereby it is connected with and disconnected from an electric circuit or line with which it is used, of a pair of jaws or devices extending transversely to said bolt, so that the telephone-instrument cannot be placed upon the bolt except upon the withdrawal of the bolt past one of the jaws or devices to permit the insertion between the two jaws or devices of the eye or hook, whereby the telephone-instrument is suspended upon the subsequent shifting of the bolt to engage with said eye or hook and support the

telephone-instrument, so that the telephone-instrument cannot be removed from the bolt until the bolt is withdrawn past one of said jaws or devices, whereby the bolt is caused to be operated in such manner as to effect the shifting of the switch to connect the telephone with or disconnect it from the electric circuit or line, and prevents the shifting of the switch being neglected. The pairs of jaws or devices relatively to which the bolt has to be adjusted, in order to place or support the telephone-instrument thereon or detach it therefrom, may consist of the sides or walls of a recess in a box or case wherein are contained the switch and the terminals or contact-points of the electric circuit or line with which it operates. If the telephone-instrument is provided with a hook in lieu of an eye for connecting it with the bolt, there ought to be a cross bar or bars in addition to the said pairs of jaws or devices to prevent the hook from being slipped over the bolt crosswise without operating the bolt, and such bar or bars may consist of the top or top and bottom of the recess in the said box or case.

In the accompanying drawings, Figure 1 is a vertical section of a box or case embodying my invention, with a telephone-instrument suspended therefrom; and Fig. 2 is a horizontal section of the box, taken just above the telephone-instrument.

Similar letters of reference designate corresponding parts in both figures.

A designates a box or case, shown as of rectangular form, having a door or cover, A', connected to it at one side by hinges A², and capable of being opened or closed at pleasure.

B B' B² designate terminals or contact-points of an electric circuit or line and branches thereof. They consist of metallic plates fastened by screws *a* or otherwise to the bottom of the box or case A.

C designates a bolt capable of being moved longitudinally in bearings *b* attached to one side of the box or case A, and constituting a support for a telephone-instrument. As shown, it is inside the box or case, and at one end is offset, so as to be in close proximity to the exterior of the said box or case, its offset portion working in a recess, *c*, provided in the inner

side of the said box or case. It may be made in any suitable manner, so as to be capable of being operated from outside the box or case A. For instance, it may, with this end in view, be furnished with a lip or thumb-piece, *d*, which protrudes through a slot in the side of the said box or case. It is very desirable that, no matter how it may be constructed, its protruding portion shall be shaped so as to render it impossible, or at least very inconvenient, to hang a telephone-instrument on it.

Adjacent to the offset end of the bolt C are provided jaws or similar devices, which, though they can be made in various ways, may consist of the opposite sides or walls *ee* of a recess or opening in the side of the box or case A. These jaws or devices constitute means which preclude the eye or hook or hanger of a telephone-instrument from being placed on the bolt without necessitating the longitudinal movement of the bolt. To still further preclude this, I preferably arrange cross-bars above and below the bolt, and such bars may consist of the top *f* and bottom *g* of the recess or opening in the box or case. Thus an inclosure barely large enough for the accommodation of the eye, hook, or hanger of a telephone-instrument is produced, wherefore the said eye, hook, or hanger cannot be inserted in such inclosure until the end of the bolt C is withdrawn past the inclosure, and it can only be placed on the bolt by moving the bolt through it after its insertion in the inclosure. Of course, it is equally impossible to detach the eye, hook, or hanger of the telephone-instrument from the bolt until the bolt is moved beyond it and past the inclosure. It will be seen, therefore, that the telephone-instrument can neither be attached to the bolt, to be supported thereby, nor be detached therefrom for use, without necessitating the movement of the bolt.

The telephone-instrument D, which I have shown suspended from the bolt C, may be of any approved style, provided with an eye or hanger, D'. Of course, where it is attached to the bolt by an eye it is not so necessary to combine with the bolt the jaws and cross-bars or inclosure above described, because the eye can only be slipped over the bolt endwise.

One end of the line or electric circuit is in electrical communication with the bolt C, for instance, by connection with one of the bearings, whereby the bolt is supported; and said bolt, as here shown, carries a switch consisting of an arm or strip of metal, E, which when the bolt is moved is adjusted or shifted into different relation to the contact-points B B'. When the bolt C is moved into position to support the telephone-instrument the switch E is shifted onto the contact-point B, which has connected with it a branch circuit leading through a signal-bell, and thence to a return-wire or the ground; and hence the switch, owing to its connection with the bolt C, establishes communication between this

branch circuit and the main circuit or line, so that the bell may be rung from a distant point. When, however, the bolt C is moved into position to release the telephone-instrument, the switch E is shifted onto the contact-points B' B², and, owing to the connections of these contact-points, establishes communication between a battery, the transmitting-instrument, its induction-coil, the receiving-instrument, and the line or main electric circuit. The transmitting-instrument is intended to be arranged in or on the box or case A, and the receiving-instrument is designed to be supported when not in use by the bolt C. The connections for these instruments may all be of any approved form.

It will be seen that by my invention I provide for making as firm and reliable a contact of a switch with the contact-points as is possible, and yet preclude even inexperienced persons from neglecting to operate the switch, as is necessary, by compelling them to operate it in the act of placing the telephone-instrument on or removing it from its support.

The invention may be found advantageous for telegraphic instruments other than telephones.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a telephone-instrument, a support for said instrument when it is not in use, means which preclude the placing of the instrument on the support or its removal from the support without a movement of the support by the hand, and a switch which is operated simultaneously with the movement of said support to connect the instrument with or disconnect it from the electric circuit or line with which it is used, substantially as specified.

2. The combination of a telephone-instrument, a bolt adapted to be operated by hand and serving to support the instrument when it is not in use, means which preclude the placing of the instrument on or the removal of the instrument from the bolt without a movement of said bolt, and a switch operated by the movement of the bolt to connect the instrument with or disconnect it from the electric line or circuit with which it is used, substantially as specified.

3. The combination, with a bolt upon which a telephone-instrument may be hung and a switch operated by the movement of the bolt, and serving to connect the instrument with and disconnect it from an electric circuit or line with which it is used, of a pair of jaws or devices extending transversely to the bolt, substantially as and for the purpose specified.

4. The combination, with a bolt upon which a telephone-instrument may be hung and a switch operated by the movement of the bolt, and serving to connect the instrument with and disconnect it from an electric circuit or line with which it is used, of a pair of jaws or devices extending transversely to the bolt,

and a cross bar or bars extending between said jaws or devices, substantially as and for the purpose specified.

5 5. The combination, with a bolt and a switch operated by the movement of the bolt to connect a telephone - instrument with or disconnect it from an electric circuit or line with which it is used, of an eye on the telephone-

instrument, whereby it may be attached to and supported on the bolt by slipping the bolt through said eye, substantially as and for the purpose specified.

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