(No Model.)

H. E. WAITE.

TELEPHONE SWITCH.

No. 305,552. Patented Sept. 23, 1884.

Fig. 1.

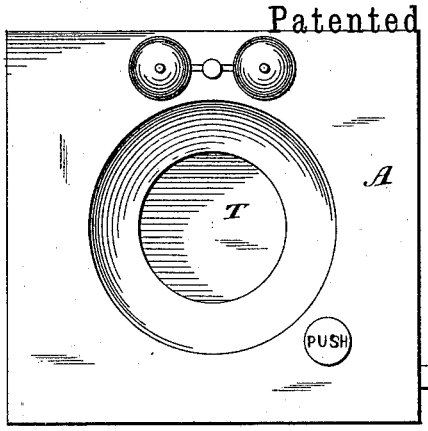


Fig. 2.

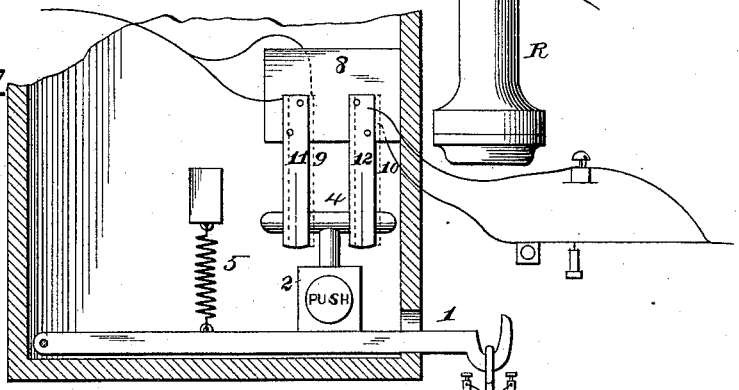
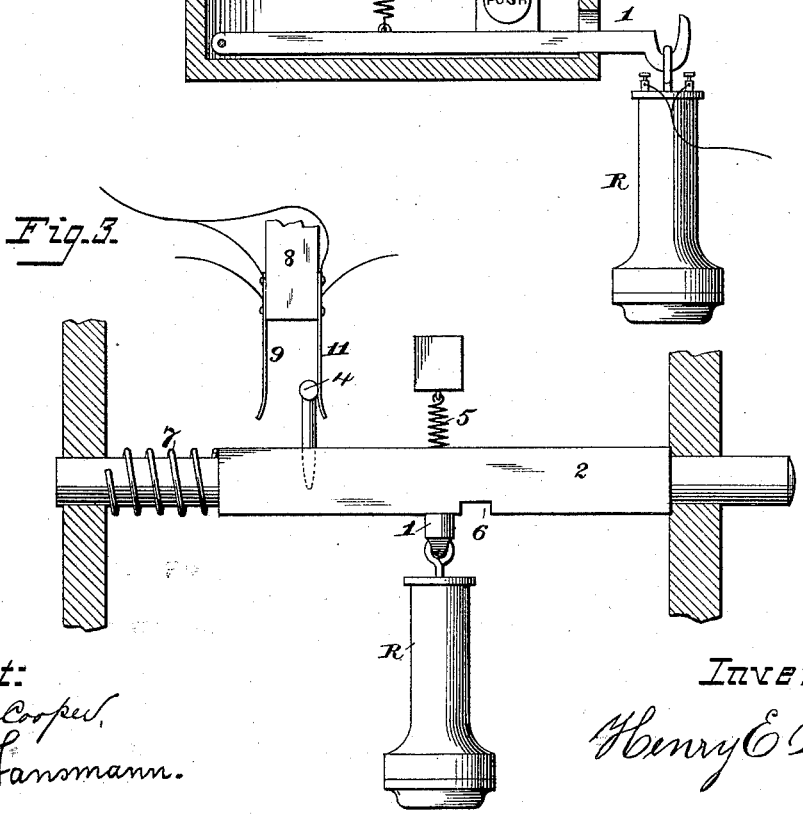


Fig. 3.



Attest:
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UNITED STATES PATENT OFFICE.

HENRY E. WAITE, OF NEW YORK, N. Y.

TELEPHONE-SWITCH.

SPECIFICATION forming part of Letters Patent No. 305,552, dated September 23, 1884.

Application filed May 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. WAITE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Telephone-Switches, of which the following is a specification.

My invention relates to telephone-switches for use in telephone systems; and it consists in the means for connecting the telephone-circuit at the subscriber's station so as to normally include the signaling or calling apparatus, and when the telephone-instruments at the station are in use to include the latter in the circuit, to the exclusion of the signaling devices.

Referring to the accompanying drawings, forming part of this specification, Figure 1 shows an ordinary telephone-box with my improvements added thereto. Fig. 2 is a plan, and Fig. 3 a side, view of the operating parts of my invention.

The transmitter-telephone T may be arranged as usual in the box A, containing the switching devices, or in a separate box, and receiving-telephone R is normally hung upon the projecting arm of the lever 1. This lever is pivoted at its inner end to the box or case, and is provided with a suitable hook or finger to receive the receiver R at its outer end. When the telephone R is on the hook, the lever is in its lowermost position, (shown in Fig. 2;) but when the receiver is removed the lever is raised by some suitable means—as a spring, 5—so as to be held in its highest position. Located in and extending through the case, preferably on the front, is a push button or bar, 2, arranged to slide in any suitable supports and to be pressed forward or held in its normal position by some suitable spring, as 7. The under side of this bar is provided with a notch or recess, 6, and upon the upper side is located a standard having a cross-bar, 4, of conducting material. From the side of the box projects a block or standard, 8, of insulating material, and upon opposite sides of this block are placed the conducting-strips 9 10 11 12, connected to the line and branch circuits, including the signaling and telephone instruments, in an obvious and well-known manner, one form of such connections being shown in the drawings.

Such being the construction of the various parts, I will now proceed to describe their operation. It is understood that in the normal condition of the station, when not in use, the hand telephone or receiver hangs upon the hook of lever 1, the push button or lever 2 projects through the case, as seen in Fig. 3, and the conducting-bar 4 is in contact with the spring-connections 11 12, so that the line-circuit is normally through the signaling instrument or bell. When it is desired to use the instruments, the receiver is removed from the hook of lever 1, when the spring 5 causes it to bear upon the under side of the push bar or button 2, which is then pushed in, so as to cause the conducting-bar 4 to break contact with the strips 11 and 12, and to make contact with the strips 9 and 10, and the bar 1 engages with and enters the notch 6 on the under side of the push-bar, and securely holds it in position. When the operator is through using the instruments, he hangs the receiver upon the hook of the lever 1 and pulls the hook down, drawing the lever out of the notch 6 of the push-lever, and the spring 7 forces the latter out to its normal position, and causes the conducting-bar 4 to break contact with springs 9 and 10 and make contact with 11 and 12, thereby switching the telephone-instruments out of circut and the signaling-instruments into circuit again.

I do not wish to be understood as limiting myself to the precise mechanism shown and described, as many modifications may be made in the details of the device without departing from the spirit of the invention.

What I claim is—

1. The combination, in a telephone-switch, with contact-plates, of a push-bar supporting a conducting-strip adapted to make contact with the said plates, and a telephone-supporting bar adapted to lock the push-bar in position, as set forth.

2. The combination, in a telephone-switch, with contact-plates, of a spring-pressed push-bar carrying a conducting-strip adapted to engage with either set of contacts, and a pivoted telephone-supporting bar adapted to engage with said push-bar and hold it in position while the telephone is removed from said bar, as set forth.

3. The combination, in a telephone-switch apparatus, with a contact-plate having main-line terminals and signaling and telephone apparatus terminals, of a spring-actuated push-bar carrying a conducting-strip adapted normally to complete the connection between the main-line and the signaling apparatus, and a spring-actuated telephone-supporting bar adapted to hold the push-bar so as to complete the connection between the main-line and telephone instruments when said instruments are in use, and to automatically restore the signaling apparatus to the main line, when the telephone is hung up, by pulling down on the hook, substantially as set forth.

4. The combination, in a telephone-switch, of the contact-plate having terminals 9 10 11 12, a sliding spring-actuated push-bar, 2, having connecting-bar 4, supported thereon and provided with a notch, 6, in its under side, a pivoted telephone-supporting bar, 1, and spring 5 for actuating the same, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY E. WAITE.

Witnesses:
WM. H. WOODHULL,
C. SPARMAN.