

No. 639,830.

Patented Dec. 26, 1899.

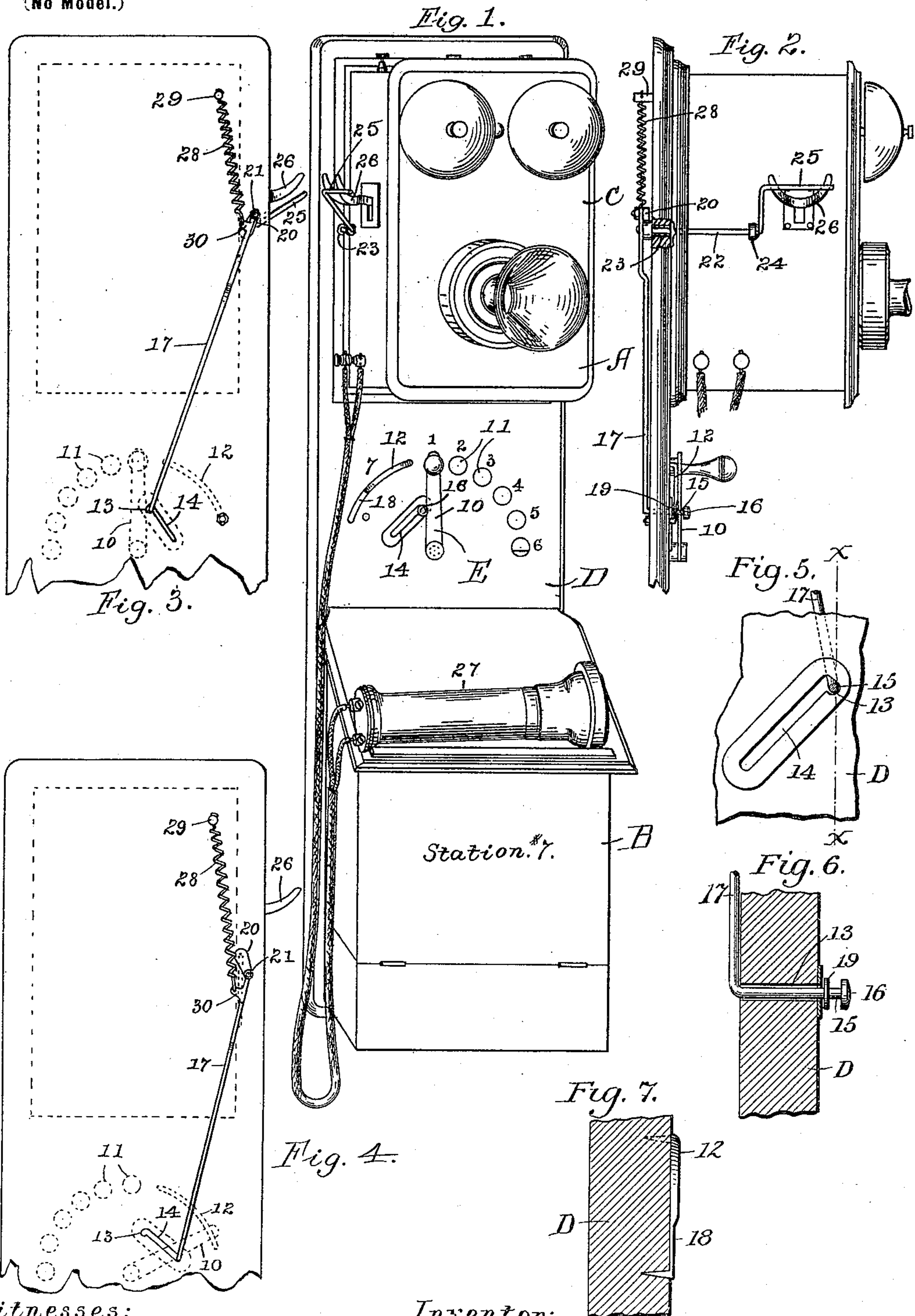
J. J. SCHOENLEBER, Dec'd.

J. ESPY, Administrator.

TELEPHONE INSTRUMENT.

(Application filed Apr. 26, 1897.)

(No Model.)



Witnesses:

W. H. Millan
J. J. Schoenleber

Inventor:

John J. Schoenleber.

per: H. G. Bradbury,
Attorney.

UNITED STATES PATENT OFFICE.

JOHN J. SCHOENLEBER, OF ST. PAUL, MINNESOTA; JOHN ESPY ADMINISTRATOR OF SAID SCHOENLEBER, DECEASED.

TELEPHONE INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 639,830, dated December 26, 1899.

Application filed April 26, 1897. Serial No. 634,051. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. SCHOENLEBER, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Telephone Instruments, of which the following is a specification.

My invention relates to improvements in telephone instruments, the object being to provide a telephone instrument for use in intercommunicative telephone systems to automatically prevent the circuit selector-switch being left out of normal position for the proper maintenance of the system.

To this end my invention consists of a telephone instrument of ordinary type constructed with a receiver-hook-blocking device which is operated by a selector-switch, so as to prevent the hanging of the receiver upon its hook when said switch is not in normal position.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of the telephone instrument with my improved device mounted thereon. Fig. 2 is a partial side elevation of the same. Fig. 3 is a partial rear elevation of Fig. 1. Fig. 4 is a similar elevation to Fig. 3, showing the parts of my device in home position and ready for placing the receiver upon its hook. Fig. 5 is a detail view of the guide-slot, showing the notch for retaining the end of the pitman-rod. Fig. 6 is a cross-section of Fig. 5, taken on the line X X; and Fig. 7 is a detail view of the home electrical contact, showing the notch for engaging the switch-arm when in normal position.

In the drawings let A represent the telephone instrument, which is of ordinary type, having the battery-box B and magneto call-bell C mounted on the backboard D. The backboard has mounted thereon in suitable position the circuit selector-switch E, consisting of the spring switch-arm 10 and contacts 11, which lead to and connect with the line-circuits, (indicated by the numerals 1, 2, 3, 4, 5, 6, and 7.)

In connection with the telephone-switch is mounted my improved receiver-hook-blocking device, which consists of the following: Cut in the backboard E, transverse to the switch-arm 10, between the pivoted end there-

of and the contact-catch 12, is the slot 14, through which the bend 15 of the connecting-rod 17 projects. This bend is engaged by arm 10 in its travel and is guided by means of its collar 19, which is soldered or otherwise fastened. The bend is also provided with the cap-nut 16. The upper end of rod 17 is journaled by means of bolt 21 to the crank 20, which operates the block-arm 25. The block-arm is raised into the position as shown in Figs. 1, 2, and 3 by means of spring 28 and is there retained by means of notch 13. The block-arm is provided with the shaft 22, which is journaled upon bearings 23 and 24. These bearings are mounted upon the magneto bell-box and backboard, through which the shaft projects. The projecting portion of the shaft carries the crank 20, to which the connecting-rod is journaled. The block-arm is positioned so as to raise and lower when the switch is operated and respectively block and open the entrance of the receiver-hook 26.

The spring 28 is fastened to the lug 30 at an oblique angle to the connecting-rod 17 and to the post 29, which is mounted upon the backboard D. The spring tends to draw the connecting-rod 17 in an oblique direction, thus causing the block-arm 25 to automatically rise to the superior position and block the entrance of the receiver-hook when the switch-arm is thrown to contacts 11 of the selector-switch, ranging from 1 to 6, when the receiver is removed from its support. Formed in the upper end of the groove 14 is the notch 13, which is adapted to receive the bend 15 of the connecting-rod when the block-arm 25 is raised to the superior position. The oblique tension-spring causes the bend to move into this recess or catch, where it is retained. When the switch-arm 10 is thrown to its normal or home position, the end 15 of the connecting-rod is shifted out of the recess and by groove 14, so as to engage its contact-catch 12, which is provided with the notch 18. This catch engages the switch-arm, and thereby holds the block-arm 25 lowered.

In the operation of my improved telephone the switch-arm 10 is shifted from its normal position to the contact corresponding to the circuit over which it is desired to converse.

By so doing the block-arm 25 is released, which assumes the position as shown in Fig. 1 by means of spring 28. The bend 15 of the connecting-rod is thereby drawn into the notch 13, which prevents the block-lever lowering, except by returning the switch-arm 10 to its normal position, and thereby making home contact. When the switch-arm is first shifted, as above mentioned, and the receiver removed from the support, the block-lever assumes the superior position, thus blocking the entrance of the receiver-hook. The receiver cannot then be hung upon the support until the switch is returned to its normal position and the instrument thereby eliminated from electrical disconnection with its home circuit.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a telephone instrument the combination of a receiver-support; a blocking device consisting of a block-lever positioned and journaled upon the instrument so as to raise and lower, thereby blocking and opening the entrance of said support; a spring-controlled pitman-rod connected to said block-lever and the circuit-switch having a switch-arm journaled to a suitable support for electrically contacting with the various circuits, adapted in its travel to engage said pitman-rod and thereby cause the block-lever to raise and lower.

2. In a telephone instrument the combination of a receiver-support; a blocking device for blocking the entrance of said support, consisting of a block-lever journaled upon a suitable support and having a spring-controlled pitman-rod journaled thereto, and the circuit-switch consisting of a switch-arm journaled and the circuit contact-points mounted, upon the telephone instrument, said switch-arm being adapted to contact with said pitman-rod in its travel, thereby operating said pit-

man-rod and raising and lowering the block-lever so as to block and open the entrance of the receiver-support.

3. In a telephone instrument a backboard D, a hook 26 for supporting the receiver; a block-lever 25 for blocking the entrance of said hook, journaled upon a suitable support; a circuit-switch E consisting of electrical contact-points 11 and switch-arm 10 which is journaled to the backboard D; pitman-rod 17 connected to said block-lever having spring 28 fastened to the same, said pitman-rod being formed with end 15; slot 14 formed in the backboard for guiding said end and the notch 13 formed at the upper end of said slot to engage said end; said switch-arm 10 being adapted in its travel to contact with the contact-points 11 and to operate said block-lever by engaging said end 15 and to release the same from normal position, and the contact-point 12 formed with notch 18 which is adapted to retain the switch-arm and block-lever in normal position, said notch 13 being adapted to retain the block-lever in raised position, substantially as described.

4. In a telephone instrument, a receiver-support, a movable block-arm for blocking and opening the entrance of said support, a switch for connecting the telephone with the various circuits and operating said receiver block-arm, and the means for connecting said block-arm with said switch; adapting the block-arm to assume the superior position when the switch is thrown from normal position, and to assume the lowered position when the switch is returned to normal position, for the purposes specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN J. SCHOENLEBER.

Witnesses:

F. G. BRADBURY,
J. H. WHITAKER.