

No. 758,415.

PATENTED APR. 26, 1904.

A. C. CHRISTOPHER.
TELEPHONE INSTRUMENT.

APPLICATION FILED FEB. 3, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

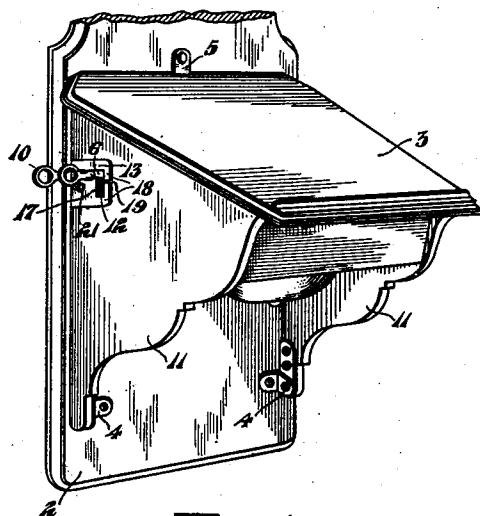


Fig. 1.

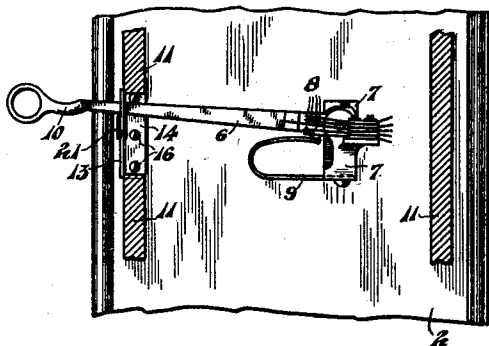


Fig. 2.

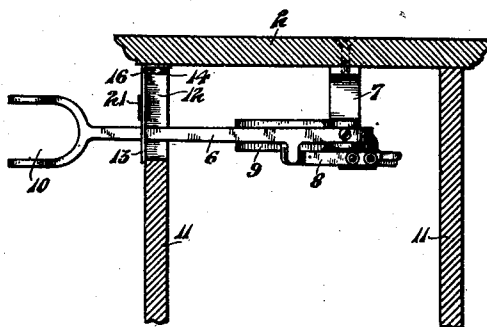


Fig. 3.

Witnesses.

P. H. Burfield
E. A. Harlock.

Inventor:

Albert C. Christopher
by *Robert Lewis Ames*,
Attorney.

No. 758,415.

PATENTED APR. 26, 1904.

A. C. CHRISTOPHER.
TELEPHONE INSTRUMENT.

APPLICATION FILED FEB. 3, 1904.

NO MODEL.

2 SHEETS—SHEET 2.

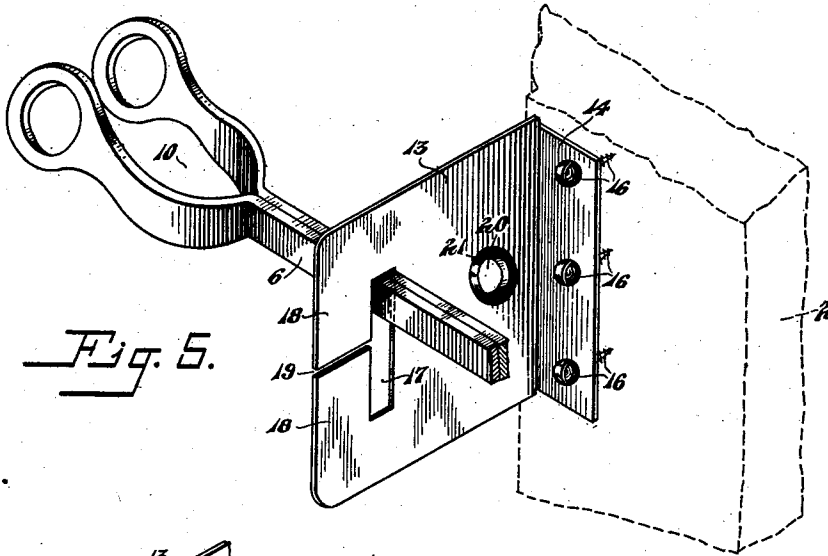


Fig. 5.

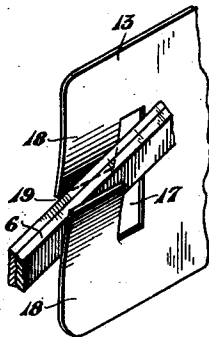


Fig. 6.

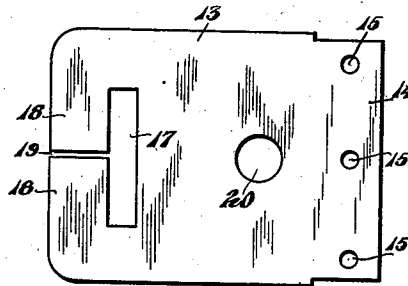


Fig. 7.

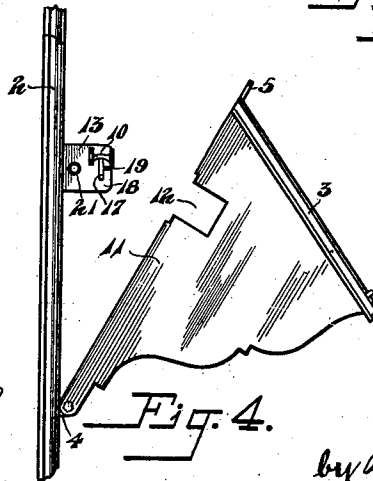


Fig. 4.

Witnesses.
R. H. Burfield
E. A. Harlock

Inventor:
Albert C. Christopher
by Robert Lewis Ames,
Attorney.

UNITED STATES PATENT OFFICE.

ALBERT C. CHRISTOPHER, OF CHICAGO, ILLINOIS, ASSIGNOR TO KELLOGG SWITCHBOARD & SUPPLY COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

TELEPHONE INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 758,415, dated April 26, 1904.

Application filed February 3, 1904. Serial No. 191,775. (No model.)

To all whom it may concern:

Be it known that I, ALBERT C. CHRISTOPHER, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Telephone Instruments, of which the following is a specification.

My invention relates to improvements in escutcheon-plates for telephone sets, my object being, in general, to provide an escutcheon-plate that is simple and inexpensive to manufacture, that is convenient to apply, and that is more efficient in operation than those heretofore employed.

In certain classes of telephone wall sets it is desired to mount the switch-hook upon the backboard of the set either directly or indirectly and to provide a suitable cover which is hinged at one edge and is adapted to close over the working parts of the said switch and other parts of the instrument, so as to fit closely against the backboard or part upon which the switch or escutcheon is mounted. Inasmuch as the telephone-receiver is adapted to be hung upon the exposed vibrating end of the said hook-switch lever, it thus becomes necessary or desirable to provide a notch in the edge of the side of the cover to permit the same to close over the hook-lever. It has been common heretofore to provide an escutcheon-plate in connection with such sets which when the cover is closed serves to conceal the said notch in the side of the cover and which also serves as a support and guide for one side of the hook-lever. A cooperating plate or member is secured to the cover at the inner edge of said notch and serves when the cover is closed to form the other side of the escutcheon and the guide for the other side of the hook-lever. This arrangement is objectionable not only on account of the cost of making the two separate parts, each of which has to be separately punched, formed, and finished, but also by reason of the fact that when the cover is open the outer side of the hook-lever is left unprotected and the lever is liable to be broken by an accidental

sidewise blow or thrust upon its end or, at least, knocked out of adjustment. In addition there is always trouble in assembling the two parts, since the part carried by the cover must suitably coöperate with the stationary part of the escutcheon-plate in order that the lever may work properly in the slot formed between them and in order that an unsightly appearance may not be presented by the two parts when the cover is closed. In my present invention I seek to avoid all these difficulties by making a single escutcheon-plate to take the place of the two of the prior art, whereby there is only the one piece to punch and stamp in the beginning, only one piece to be nickel-plated and polished, only one piece to be mounted upon the wall set, and the hook is at all times fully protected and cannot bind in the slot provided for it and in which the adjustment remains constant at all times and is not affected by the shrinking and swelling of the cover or backboard or other part, and a more efficient device throughout is obtained.

In carrying out my invention in its preferred form I stamp the escutcheon-plate from a single piece of sheet metal and suitably bend the inner end of the blank at right angles to the main portion of the plate to provide means to secure the same to the backboard or other part upon which it is to be mounted. A slot is also punched in the plate to receive the hook-lever, and in order to readily insert the said lever I preferably slit the portion surrounding the outer edge of the slot through which the lever may be sprung into its intended position within the slot, as hereinafter described.

My invention is illustrated in the accompanying drawings, in which the same reference characters designate like parts throughout the several views, and in which—

Figure 1 is a perspective view of the lower portion of a telephone subscriber's wall set, showing my improvements applied thereto. Fig. 2 is a front view of the same showing the cover in section. Fig. 3 is a plan view of the assembled parts, the cover being also in section. Fig. 4 is a side view of a wall set, show-

ing the escutcheon-plate applied thereto and the cover partly open. Fig. 5 is an enlarged perspective view of the escutcheon-plate with the hook-lever in position. Fig. 6 shows the manner of inserting the hook-switch into the slot of the escutcheon-plate, and Fig. 7 shows a view of the blank from which the escutcheon is made.

The wall set to which I have shown my improvement applied consists of the usual backboard 2, to which the cover 3 is hinged at the lower edge by hinges 4 4, a suitable clip 5 at the upper edge serving to secure the same in closed position. The usual hook-switch is provided, which in this instance is mounted directly upon the backboard through the medium of a suitable support 7, which in addition carries the switching contact-springs 8 and the lifting-spring 9, said switching-springs being adapted to be suitably connected in the electric circuit of the instrument. For the sake of clearness these circuit connections, the necessary binding-posts, and the other associated and related parts are not shown. The lever of the hook-switch is provided with the usual hook 10 at its outer end, upon which the telephone-receiver is adapted to be suspended when the set is not in use. The side wall 11 of the cover 3 on the side toward the hook is provided with a suitable notch 12, which fits over the lever 6 and permits the closing of said box and the vibration of the hook-lever when the box is closed.

The escutcheon-plate 13 consists of the blank, which is preferably punched in the form shown in Fig. 7, the end 14 thereof being later bent at an angle and in this instance at a right angle, as shown more clearly in Fig. 5. This end contains suitable apertures 15, through which screws 16 may be passed to secure the escutcheon-plate to the backboard 2 or other part of the instrument. At the opposite end of the blank a vertical slot 17 is formed, through which the lever 6 of the hook-switch extends when the box is assembled and in which said lever is adapted to vibrate to change the circuits from signaling condition to talking condition, and vice versa. In order to readily insert the hook-lever 6 into the slot 17, I slit the outer edge 18 of the escutcheon-plate, as at 19, through which the lever 6 of the hook-switch may be inserted by springing the adjacent edges of the slit apart, as shown in Fig. 6, and which are sufficiently resilient to spring back into line when the lever has passed therebetween, as shown in the other figures. An additional aperture 20 is provided in the escutcheon, through which the receiver-cords are adapted to extend from the receiver upon the outside of the box to the terminals therefor within the box and which are also inclosed by the cover 3. A suitable insulating-washer 21 is provided for the aperture 20, which serves not only to prevent wear upon the covering of the receiver-

cords, but in case the said covering becomes worn it does not short-circuit the conductors of said cords, as the metal edge of the aperture would do. In order to present a neat appearance, the outer face of this escutcheon-plate is preferably nickel-plated.

When the device is in position upon the wall set, the cover 3 may be opened without in any manner affecting the hook-switch or the adjustment of the same within the slot of the escutcheon-plate. The switch cannot at this time be moved outwardly from the backboard, since it is retained by the outer integral edge 18 of the said plate. Any slight variation in the dimensions of the cover or any inaccuracies in the construction thereof cannot change the width of the slot through which the switch-lever 6 passes, so that it does not bind therein; nor is any such trouble caused by the shrinking or swelling of the woodwork of the instrument. The plate itself is cheaply and conveniently made and practically at a single operation, thus avoiding the duplicate operations of the devices of the prior art. There are no separate mountings of two parts, as in former devices.

Although I have described one specific construction of my invention, I do not wish to be so limited in all respects, as it is obvious that various modifications may be made therein without departing from its scope and principle. Likewise I do not wish to be limited in all respects to the type of wall set to which the escutcheon-plate is applied nor to the particular method of mounting the same. It is also apparent that other methods of inserting the hook-switch lever may be utilized without departing from the scope of my invention.

Having thus described my invention and one practical manner of carrying the same into effect, what I claim, and desire to secure by Letters Patent, is—

1. In a subscriber's telephone set, the combination with a support, of a hook-switch having a vibrating lever upon the projecting end of which the receiver is adapted to be suspended, a cover for the set adapted to close over said switch and having a notch in one of its side edges to accommodate the said lever, and an escutcheon-plate for the said notch formed of a single member and having an opening to receive the vibrating end of said lever, substantially as described.

2. In a subscriber's telephone set, the combination with a support, of a hook-switch having a vibrating lever upon the projecting end of which the receiver is adapted to be suspended, a cover for the set adapted to close over said switch and having a notch in one of its side edges to accommodate the said lever, and an escutcheon-plate for the notch formed of a single member secured to the support and having an opening to receive the vibrating end of said lever, substantially as described.

3. In a subscriber's telephone set, the com-

5 combination with a support, of a hook-switch hav-
ing a vibrating lever upon the projecting end
of which the receiver is adapted to be sus-
pended, a cover for the set adapted to close
over said switch and having a notch in one of
its side edges to accommodate the said lever,
and an escutcheon-plate formed of a single in-
tegral member carried by the support and
having an opening to receive the vibrating
10 end of said lever, substantially as described.

4. In a subscriber's telephone set, the com-
bination with a support, of a hook-switch hav-
ing a vibrating lever upon the projecting end
of which the receiver is adapted to be sus-
pended, a cover for the set adapted to close
over said switch and having a notch in one of
its side edges to accommodate the said lever,
and an escutcheon-plate for said notch con-
sisting of a member secured to the support
20 and having a slot to receive the vibrating end
of said lever, whereby the said lever is sup-
ported and guided thereby upon both sides at
all times, substantially as described.

5. In a subscriber's telephone set, the com-
bination with a support, of a hook-switch car-
ried by the support and having a vibrating lever
upon the projecting end of which the tele-
phone-receiver is adapted to be suspended, a
box-like cover adapted to fit over the contacts
of said switch and other associated parts to
inclose the same, said cover having a notch
formed in one of its edges to permit the same
to be closed over the said lever and to permit
the vibration of the lever when the box is
35 closed, and a member independent of the cover
to close said notch when the cover is closed
and provided with an opening or slot through
which the said lever passes, substantially as
described.

6. In a subscriber's telephone set, the com-
bination with a support, of a hook-switch car-
ried by the support and having a vibrating lever
upon the projecting end of which the tele-
phone-receiver is adapted to be suspended, a
box-like cover hinged at one edge to the sup-
port and adapted to fit over the contacts of
said switch and other associated parts to in-
close the same, said cover having a notch
formed in one of its edges to permit the same
50 to be closed over the said lever and to permit
the vibration of the lever when the box is
closed, and a member mounted on the support
independently of the cover to close said notch
when the cover is closed and provided with a
55 slot through which the said lever passes, sub-
stantially as described.

7. In a subscriber's telephone set, the com-
bination with a support, of a hook-switch car-
ried by the support and having a vibrating lever
upon the projecting end of which the tele-
phone-receiver is adapted to be suspended, a
box-like cover hinged at one edge to the sup-
port and adapted to fit over the contacts of
said switch and other associated parts to in-
close the same, said cover having a notch

formed in one of its edges to permit the same
to be closed over the said lever and to permit
the vibration of the lever when the box is
closed, and a member mounted on the support
independently of the cover to close said notch
70 when the cover is closed and provided with a
slot through which the said lever passes, said
member having an aperture through which
the receiver-cord is adapted to pass from the
receiver of the set to its binding-posts in-
closed by the cover, substantially as described.

8. In a subscriber's telephone set, the com-
bination with a backboard, of a hook-switch
carried thereby and having a vibrating lever
upon the projecting end of which the tele-
80 phone-receiver of the set is adapted to be sus-
pended when not in use, a box-like cover
adapted to fit over the contacts of said switch
and other associated parts of the set to nor-
mally inclose the same, said cover having a
85 notch in one of its side edges to permit the
same to be closed over the said lever and to
permit the vibration of the lever when the
cover is closed, and an escutcheon-plate for
said notch consisting of a sheet-metal plate
90 having its inner edge bent at an angle by
which it is secured to the support and serving
to close the notch when the cover is closed,
said plate having a slot formed therein to re-
ceive said vibrating lever and to at all times
95 support and guide the same upon both sides,
substantially as described.

9. In a subscriber's telephone set, the com-
bination with a support, of a hook-switch hav-
ing a vibrating lever upon the projecting end
of which the receiver is adapted to be sus-
pended, a cover for the set adapted to close
over said switch and having a notch in one of
its side edges to accommodate the said lever,
and an escutcheon-plate for the said notch car-
ried by the support and having an opening to
105 receive the vibrating end of said lever, said
plate having a slit cut from the edge of the
plate to the said opening whereby the edges
adjacent the slit may be sprung apart to per-
mit the passage of the lever into the said open-
ing, substantially as described.

10. In a subscriber's telephone-box, the com-
bination with a support, of a box inclosing
working parts of the set, said box having a
115 notch or aperture through one side of the
same, a hook-switch within the box having a
vibrating lever projecting through said notch
or aperture, the receiver of the set being
adapted to be hung upon the outer end of said
120 lever when not in use, and an escutcheon-plate
for said notch or aperture having a slot
through which the said lever extends and in
which it vibrates, said plate having a slit cut
from the said slot to the outer edge of the plate
125 whereby the contiguous edges of the slit may
be sprung apart to permit the passage of the
hook-lever into the said slot, substantially as
described.

11. In a subscriber's telephone set, the com- 130

bination with a support, of a hook-switch carried thereby and having a vibrating lever upon the projecting end of which the telephone-receiver of the set is adapted to be suspended
 5 when not in use, a box-like cover adapted to fit over the contacts of said switch and their associated parts to normally inclose the same, said cover having a notch in one of its side
 10 edges to permit the same to be closed over the said lever as well as to permit the vibration of the lever when the cover is closed, and a sheet-metal escutcheon-plate for said notch secured to the support and serving to close the notch
 15 when the cover is closed, said plate having a slot formed therein to receive said vibrating lever whereby said lever is supported and guided upon both sides at all times, a transverse slit cut across the portion of said plate forming the outer side wall of said slot whereby
 20 the opposite edges at the slit may be sprung apart to permit the passage of the said vibrating lever into the slot, substantially as described.

12. In a subscriber's telephone set, the combination with a support, of a hook-switch carried thereby and having a horizontally-disposed vibrating lever upon the projecting end of which the telephone-receiver of the set is adapted to be suspended when not in use, a
 30 box-like cover adapted to fit over the contacts of the switch and the associated parts of the set to normally inclose the same, said cover having a notch in one of its vertical side edges to permit the same to be closed over the said
 35 lever, an escutcheon-plate for said notch consisting of a single sheet-metal plate having its inner end bent at right angles and serving as a means for securing the same to its support, the body portion of said plate extending out-
 40 wardly from the support and serving to close and conceal the notch in the cover when the latter is in normal position, said plate having a vertical slot formed therein near its outer edge to receive said vibrating lever, the inner
 45 and outer edges of said slot forming supports and guides for both sides of said lever, the surrounding wall of said slot being severed to permit the adjacent edges of the severed portion to be sprung apart to admit the said lever into the slot, substantially as described.
 50

13. In a subscriber's telephone set, the combination with a support, of a hook-switch car-

ried thereby and having a horizontally-disposed vibrating lever upon the projecting end of which the telephone-receiver of the set is
 55 adapted to be suspended when not in use, a box-like cover adapted to fit over the contacts of the switch and the associated parts of the set to normally inclose the same, said cover having a notch in one of its vertical side edges
 60 to permit the same to be closed over the said lever, and an escutcheon-plate for said notch consisting of a single sheet-metal plate having its inner end bent at right angles and serving as a means for securing the same to its sup-
 65 port, the body portion of said plate extending outwardly from the support and serving to close and conceal the notch in the cover when the latter is in normal position, said plate having a vertical slot formed therein near its
 70 outer edge to receive said vibrating lever, the inner and outer edges of said slot forming supports and guides for both sides of said lever, the surrounding wall of said slot being severed to permit the adjacent edges of the
 75 severed portion to be sprung apart to admit the said lever into the slot, said escutcheon-plate also having an aperture therein through which the receiver-cord is adapted to pass from the receiver of the set to its binding-
 80 posts within the cover, said aperture being provided with an insulating-bushing, substantially as described.

14. In a subscriber's telephone set, the combination with a support, of a hook-switch hav-
 85 ing a vibrating lever upon the projecting end of which the receiver is adapted to be suspended, a cover for the set adapted to close over said switch and having a notch in one of its side edges to accommodate the said lever, 90
 an escutcheon-plate for the said notch independent of the cover carried by the support and having a slot to receive the vibrating end of said lever, and means to permit opening the side walls of the plate surrounding the said
 95 slot to allow the passage of the hook-lever into the said slot, substantially as described.

Signed by me at Chicago, county of Cook, State of Illinois, this 30th day of January, 1904.

ALBERT C. CHRISTOPHER.

Witnesses:

GAZELLE BEDER,
 ROBERT LEWIS AMES.