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1,719,993

SUBSTATION EQUIPMENT

Filed Oct. 15, 1925

Fig. 1

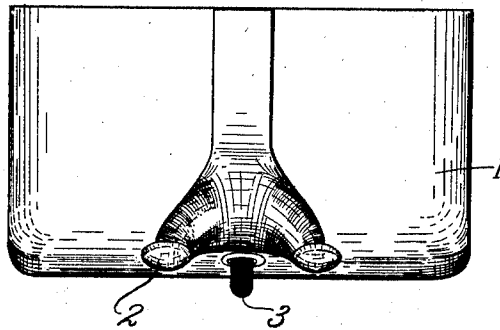
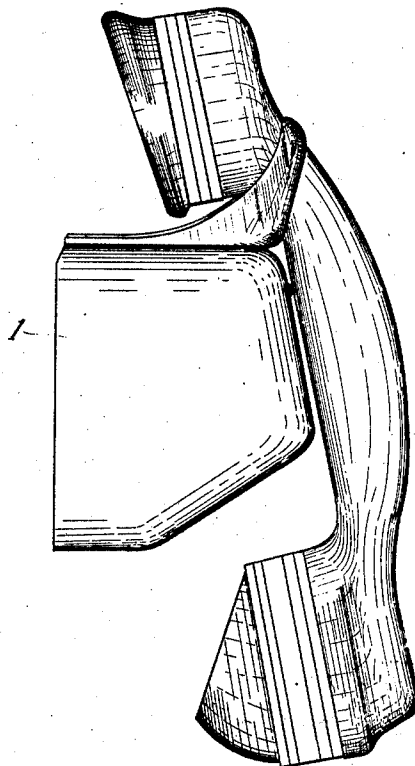


Fig. 2



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## UNITED STATES PATENT OFFICE.

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## SUBSTATION EQUIPMENT.

Application filed October 15, 1925. Serial No. 62,546.

The present invention relates in general to substation equipment for telephone systems, but is particularly concerned with the provision of a new type combined switch-box and  
5 hand telephone support.

An object of the invention is to provide a switch-box having a fixed or stationary support for a hand telephone.

Another object is to provide a support on the switch-box which has a contour which conforms well with the receiver end of a hand telephone so that when a hand telephone is suspended upon it it will have a strong tendency to assume a definite desired  
15 position.

A further object is to provide a switch control button on the switch-box at a point near the support which will be depressed by the handle of the hand telephone when the same is in place.  
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A still further object is to provide a switch-box of the foregoing character which is compact, and neat appearing, and which has many uses, some of which are pointed  
25 out further on in the description of the invention.

A switch-box of this character has utility in a great variety of ways. It may conveniently be secured to the end of a desk and there support a hand telephone used as an extension for answering calls only, if the system is automatic. It may be used as a bed-side telephone where patients in a hospital may use it to call for service, the  
35 switch-box in most such instances being conveniently secured to the patient's bed. It may also be used in conjunction with a hand telephone of the type equipped with a calling device in which case automatic outgoing calls can be made. There are unquestionably many other uses to which applicant's invention may be applied which clearly fall within the scope of this invention.  
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The drawings comprising Figs. 1 and 2, are believed sufficient, when taken in connection with the description which follows, to make the invention clear.  
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Figure 1 discloses a plan view of the switch-box; and Fig. 2 discloses a side view of the switch-box with a hand telephone in place. In this figure, it will be observed that the receiver end of the handle of the hand telephone is in the support. However, it should also be noted that the correspond-  
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ing part of the handle at the transmitter end is of substantially the same contour and therefore, it may also be suspended from this end to obtain the same result. 55

The button, 3, protruding from the wall of box 1, is a switch control button for controlling switching springs in the manner disclosed in the copending Obergfell application, Serial No. 28,758, filed May 8, 1925. 60

The contour of the support 2 for the hand telephone is formed to substantially conform to the contour of the receiver end of the hand telephone to be used in conjunction with it so that irrespective of the angle at which the hand telephone is placed on the support it will finally assume the position shown in Fig. 2 and will accordingly operate the switching springs by means of the button 3 even in cases where the hand telephone when in place, is pushed to one side of the button. In order to make the operation of the button more positive, that side of the switch-box provided with the button 3 is made slightly slanting so that when the hand telephone is placed on the hook the weight of the hand telephone will cause it to operate as a lever on the button 3. This method of operating the button is more positive than it would be if the handle of the hand telephone were permitted to hang exactly in a plane perpendicular to the top of the box as would be the case if the right wall of the box were parallel to the left wall. 85

The switch-box is small and compact and is intended to receive such equipment as is necessary, such as condensers and an induction coil which are usually located in the bell box and, as previously stated, is built with the idea of its being secured to hospital beds, walls, or desks as proves most convenient for the party using it. 90

What is claimed is:

1. In combination with a hand telephone comprising receiver and transmitter units connected by a handle, a switch-box carrying a support for receiving either the receiver or transmitter end of the hand telephone, and a switch control button operated by the handle of said hand telephone when the same is placed upon said support. 100

2. In combination with a hand telephone, a switch-box having a support for said hand telephone and a switch control button, said support having a contour closely following 105

the contour of the receiver end of the hand telephone to allow the hand telephone to always assume a position of rest in operative relation with said button irrespective of the 5 angle or manner in which the hand telephone is placed on the support.

3. In combination with a hand telephone, a switch-box, a hook on said box in fixed relation thereto upon which the hand tele- 10 phone may be hung, and a button on the box encountered and operated by the handle of the hand telephone when the same is in position irrespective of the manner in which the telephone has been placed on the hook.

15 4. In combination with a hand telephone, a switch-box, a support for the hand telephone, and a button protruding from said box operated by the hand telephone irrespective of how the same is suspended from said 20 support.

5. In combination with a hand telephone, a switch-box, a support for the hand telephone located on the top side of said box, a side of said box slightly slanting toward 25 said support, a switch control button protruding from the slanting side of the box, and a handle for the hand telephone positioned substantially parallel to the slanting side of said box and directly over said but- 30 ton when not in use.

6. In combination with a hand telephone

of the type having a handle connecting receiver and transmitter units, respectively, a housing having a member fixed thereto for supporting said hand telephone with the 35 handle thereof lying in a plane within fifteen degrees of vertical, and switching means within said housing movable at right angles to and by the handle of the hand telephone when the same is in place. 40

7. In combination with a hand telephone, a wall box, a support extending upward from said box for receiving said hand telephone at the receiver end thereof, said box having a cutaway portion which permits the 45 transmitter end to hang suspended below the box at a point near its center of gravity, and a switch control button on the box encountered and operated by the handle of the telephone as it tends to assume said position. 50

8. In combination with a hand telephone comprising receiver and transmitter units connected by a handle, a switch box carrying a support, and a switch control button 55 encountered and actuated by the handle of the said hand telephone only after said hand telephone has been suspended on said support.

In witness whereof, I hereunto subscribe my name this 13th day of October, A. D., 60 1925.

HERBERT F. OBERGFELL.