Oct. 21, 1930. C. BORGMANN ET AL 1,779,058

TELEPHONE SWITCHBOARD

Filed April 22, 1929 2 Sheets-Sheet 1

FIG. 1.

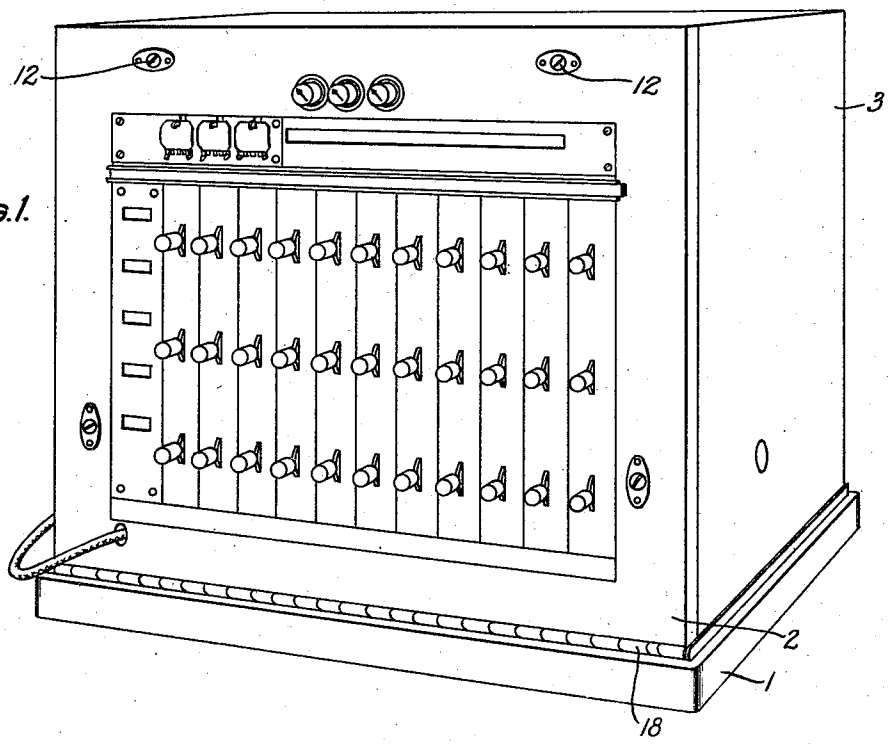
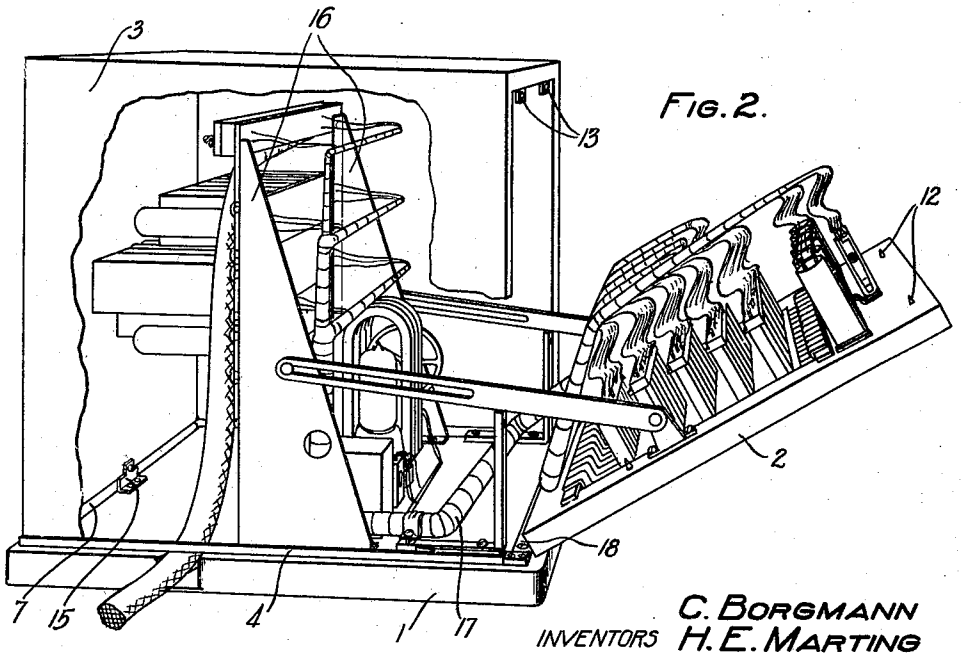


FIG. 2.



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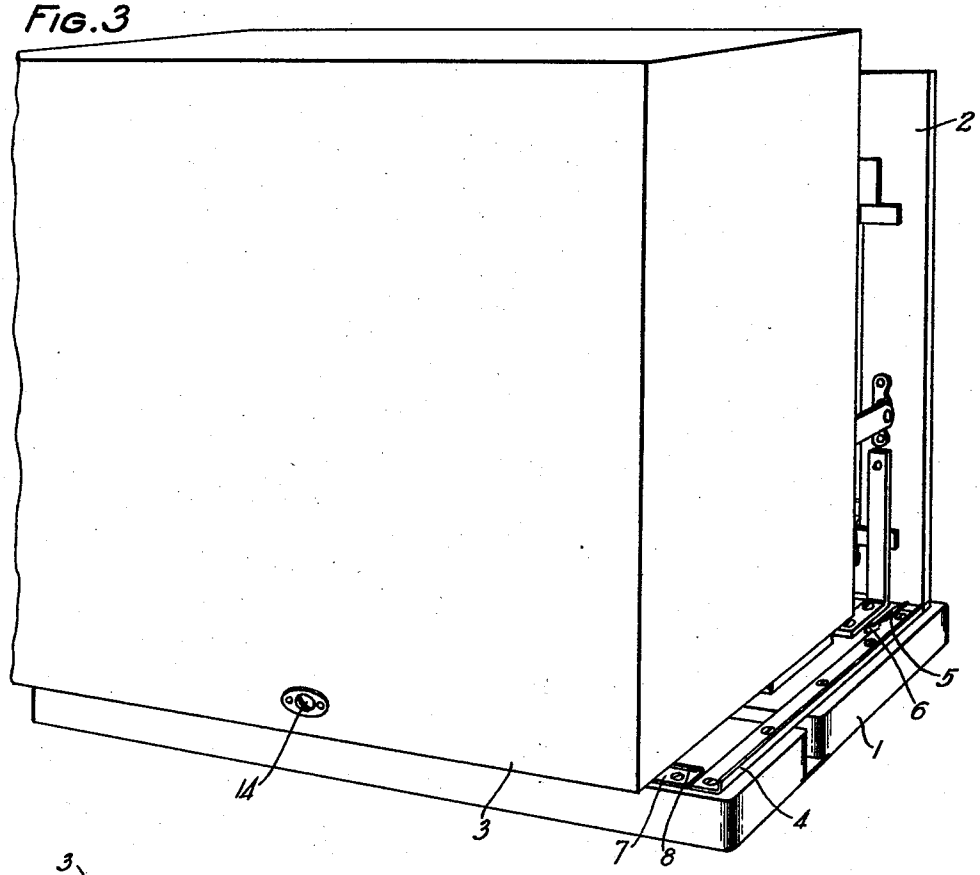
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FIG. 3



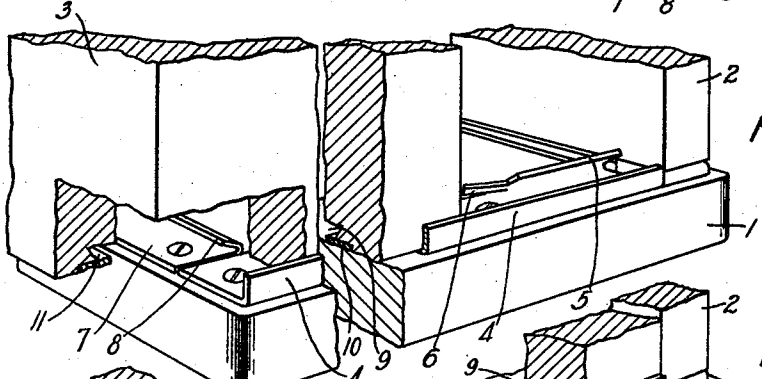


FIG. 4.

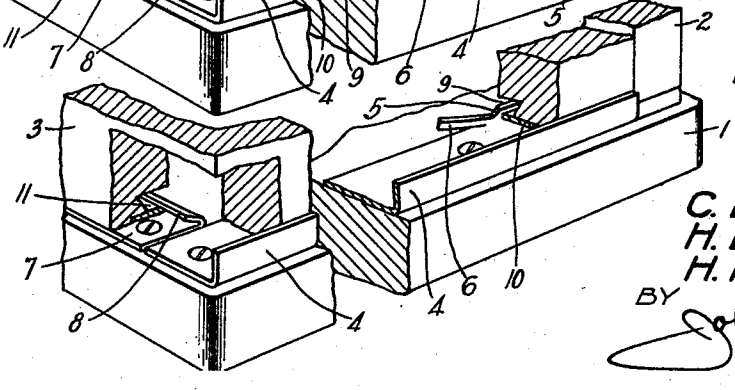


FIG. 5.

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UNITED STATES PATENT OFFICE

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TELEPHONE SWITCHBOARD

Application filed April 22, 1929. Serial No. 356,994.

This invention relates to telephone switchboards and more particularly to improvements in switchboards adapted to rest on the top of a desk, table or like support and hereinafter referred to as desk type switchboards.

The object of the invention is to make the wiring and apparatus of switchboards of this character more accessible.

In attaining this object a feature of the invention resides in providing a base member, on which is centrally mounted a combined relay rack and distributing frame and to the front edge of which is hinged a panel carrying the necessary signals, switching keys, etc. This panel is adapted to swing forward and downward to a position substantially 60 degrees from its vertical or closed position.

A unitary removable cover consisting of three sides and a top is also provided which is adapted, in conjunction with the base and front panel, to completely enclose the apparatus and wiring. This cover is held in position on the base by means of a system of guides and flanges.

The following description, when read in connection with the accompanying drawing, will give a more complete understanding of the invention.

In the drawing:

Fig. 1 is a front view of a switchboard according to the present invention showing the cover in place;

Fig. 2 shows the front panel in its open position and a portion of the cover broken away to show the interior including the distributing frame and relay rack;

Fig. 3 shows the rear of the switchboard with the cover pushed back and raised a short distance;

Fig. 4 shows a broken away view of a portion of the cover resting on the base but pushed back away from the front panel into its unlocked position; and

Fig. 5 shows a similar broken away view of the cover in its locked position.

Referring to the drawing the switchboard structure consists essentially of a base 1, a front panel 2 fastened to the base by a piano hinge 18 and a cover 3 having a top and three sides adapted to completely enclose the apparatus and wiring shown in Fig. 2.

Fastened to both sides of the base, in any suitable manner, and running from the back to the front are angular guides 4 on which the cover 3 is adapted to rest and slide, the vertical portions of the guides serving to prevent the cover from moving in a sidewise direction.

The forward end of each of the guides 4, i. e., the end toward the front panel has a short bent-up portion 5 comprising a rearwardly extending flared portion 6. Fastened to the rear of the base is a strip 7 having a turned or rolled edge 8.

A groove 9 a little longer than the bent-up portion of the guide 4 is cut in the inner lower edge of the two sides of the cover 3, which grooves cooperate with the bent-up portion 5 when the cover is in position on the guides 4 and pushed forward into its closed position. A similar groove 11 is cut in the inner bottom edge of the rear of the cover and is adapted to cooperate with the rolled-over portion of the strip 7 when the cover is in its closed position. Cooperation of the grooves 9 and 11 with the bent-up portions 5 and 8 serves to lock the cover in position.

Screws 12 at the top of the front panel are adapted to engage threaded portions or nuts 13 fastened to the top of the cover when it is in position and the front panel closed. Similarly, a screw 14 at the bottom of the rear wall of the cover is adapted to engage a nut member 15 attached to the base when the cover is in position.

By this arrangement ready access to the interior of the switchboard is made possible merely by loosening three screws and pushing the cover backwards a short distance, of the order of one or two inches, whereupon it may be lifted away from the base or pushed all the way back as desired.

By referring to Fig. 2 the general arrangement of the switchboard apparatus will be understood. Two upright angular bracket members 16 support the necessary wiring and apparatus, such as relays, condensers, re-

tardation coils, etc. from which a cable 17 runs to the keys, signals, etc. mounted on the front panel 2.

What is claimed is:

1. In a desk type telephone switchboard, in combination, a horizontal base member, a vertical distributing frame and relay rack mounted on brackets supported from the base member, a vertical key shelf and signal apparatus member hinged to said base member at its front edge and adapted to be tipped forward and downward to facilitate access to said apparatus and distributing frame, suitable wiring interconnecting said key shelf member and said distributing frame and relay rack, a removable cover enclosing three sides and the top of said switchboard and a system of guides and interlocking flanges arranged to hold said cover in position on said base member.

2. In a desk type telephone switchboard in combination, a horizontal base member, a vertical distributing frame and relay rack mounted on brackets supported from the base member, a vertical key shelf and signal apparatus member hinged to said base member at its front edge and adapted to be tipped forward and downward to facilitate access to said apparatus and distributing frame, suitable wiring interconnecting said key shelf member and said distributing frame and relay rack, a removable cover enclosing three sides and the top of said switchboard, means for attaching said cover to said base including a system of guides and flanges on said base member and flanges on said cover adapted to cooperate with the flanges on said base member, and automatic means to lock said cover in position when placed on said base member and moved into position a short distance in a forward horizontal direction.

3. In a desk type telephone switchboard, in combination, a horizontal base member, a vertical key shelf member, hinged to said base member at its front edge and adapted to mount switching and signal apparatus and to be tipped forward and downward to facilitate inspection and adjustment of the apparatus, vertical members attached to said base member and adapted to support apparatus mounting plates, and a removable cover enclosing three sides and the top of said switchboard and a system of metal guides and interlocking flanges adapted to hold said cover in position on said base member.

In witness whereof, I hereunto subscribe my name this 19th day of April, 1929.

CHARLES BORGMANN.

In witness whereof, I hereunto subscribe my name this 20th day of April, 1929.

HEBER E. MARTING.

In witness whereof, I hereunto subscribe my name this 19th day of April, 1929.

HARVEY M. HAGLAND.