

1,321,870.

G. D. WOLF.
TELEPHONE SWITCHBOARD.
APPLICATION FILED OCT. 6, 1915.

Patented Nov. 18, 1919.
2 SHEETS—SHEET 1.

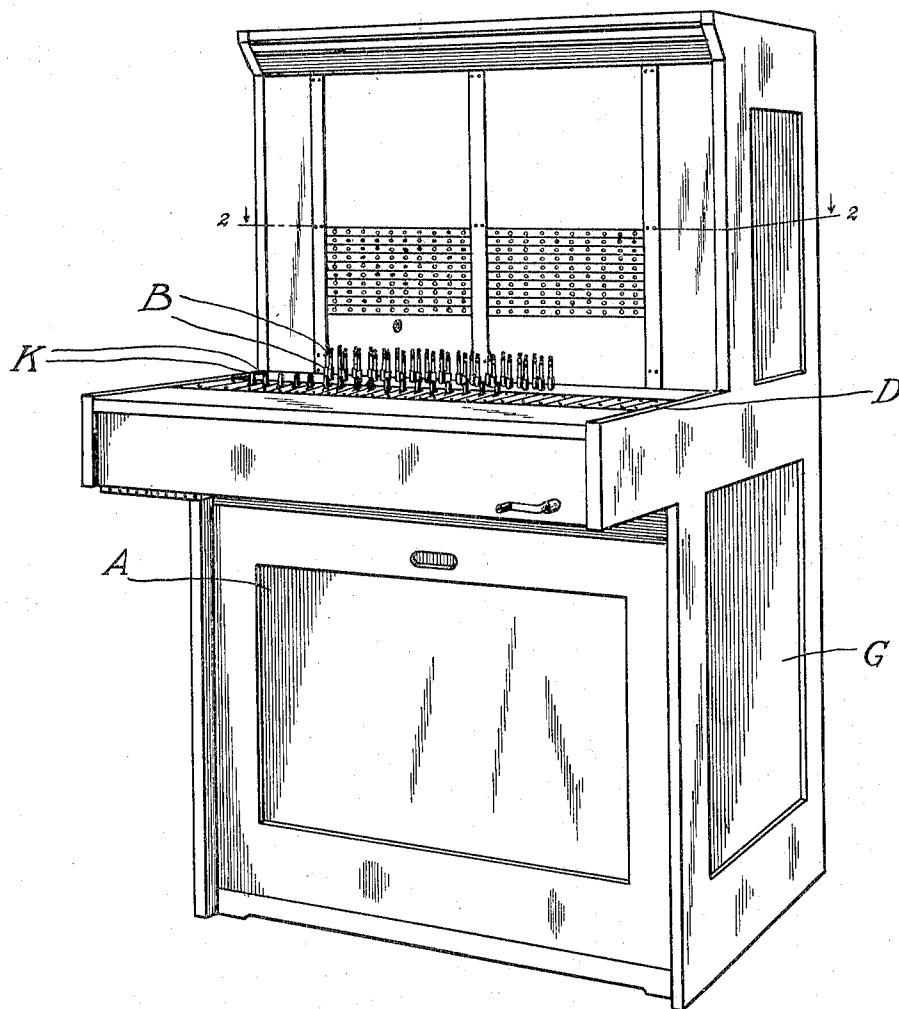


Fig. 1.

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Inventor:
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By Curtis Blamp.
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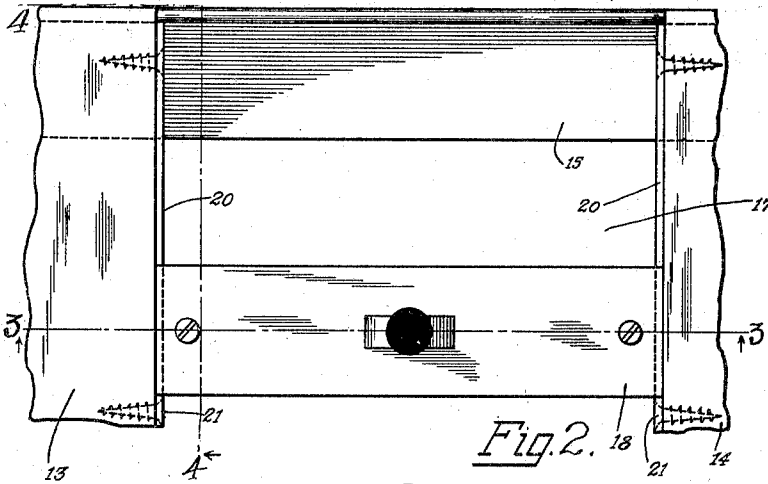


Fig. 2.

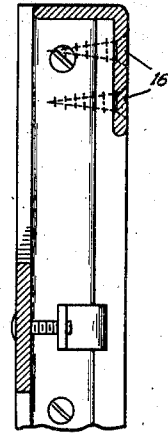


Fig. 4.

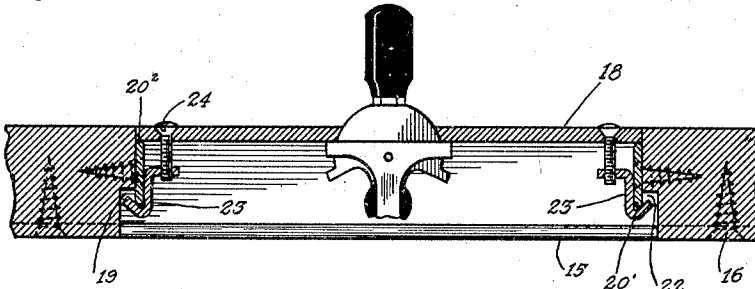


Fig. 3.

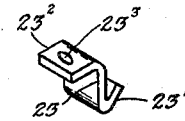


Fig. 5.

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UNITED STATES PATENT OFFICE.

GEORGE D. WOLF, OF CHICAGO, ILLINOIS, ASSIGNOR TO KELLOGG SWITCHBOARD AND SUPPLY COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

TELEPHONE-SWITCHBOARD.

1,321,870.

Specification of Letters Patent.

Patented Nov. 18, 1919.

Application filed October 6, 1915. Serial No. 54,303.

To all whom it may concern:

Be it known that I, GEORGE D. WOLF, a citizen of the United States of America, residing in Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Telephone-Switchboards, of which the following is a specification.

My invention relates to telephone switchboards of the type in which central office operators are used to establish connections between subscribers' lines. The object of my invention is to construct the different parts, that form a switchboard of this character, in such a manner that the parts may be interchangeably mounted and at any time any additional equipment may be readily added.

A feature of my invention is the construction of the key shelf and the method of mounting the keys upon the key shelf of the switchboard so as to permit longitudinal movement of the keys as well as providing novel means for clamping the keys in position, thus providing means for readily mounting variable widths of keys.

With a switchboard construction as above described I have obviated undesirable features and embodied desirable features and advantages all in a simple, efficient and economical manner; and to the accomplishment of the above objects and such other as may hereinafter appear, my invention consists in the novel details of construction, parts, and combination of parts hereinafter described and particularly pointed out in the appended claims.

For a better understanding of my invention reference may be had to the accompanying drawings in which like reference characters denote like parts and in which—

Figure 1 is a perspective view of a telephone switchboard embodying the features of my invention;

Fig. 2 is an enlarged fragmentary plan view of the key shelf;

Fig. 3 is a sectional view along line 3—3 of Fig. 2;

Fig. 4 is a sectional view on line 4—4 of Fig. 2; showing the method of mounting the keys in the key shelf, and

Fig. 5 is a perspective view of the clamping member for the key.

Referring now more in detail to my invention as illustrated, and referring more par-

ticularly to Fig. 1, the cabinet A and the plugs B are of any suitable or approved construction. The key shelf D of the switchboard is provided with suitable ringing and listening keys K which are adapted for different functions in the circuits of the switchboard.

Referring now to Figs. 2 to 5 inclusive, I illustrate a method of constructing the key shelf and also a method of mounting the keys in the said key shelf. I preferably construct the key shelf in two sections 13 and 14 respectively, the said sections being joined in any suitable manner as by means of the angle pieces 15, which are fastened to the sections 13 and 14 by means of the screws 16. The key shelf thus formed provides a longitudinal opening 17 extending the length of the said key shelf, which can be made of varying widths for mounting different lengths of key escutcheons. The key shelf D comprises two members, 13 and 14, which have the bottom edges of their inner faces cut away so as to form recesses 19 which extend the length of the opening 17. Each inner opposite face of the key shelf opening 17 has a metal bar or strip 20 fastened to it in any suitable manner as by means of the screws 21. The bars 20 are so positioned upon the inner faces, in fixed relation to the recesses 19, as to form a channel or groove 22. The key escutcheons 18, carrying the usual listening and ringing keys, are mounted across the opening 17 in the key shelf D. The escutcheons when in position in the opening 17 are adapted to be longitudinally adjusted by means of a pair of clamps 23. Each clamp 23 has a hook-shaped portion 23¹ which engages the bottom edge 20¹ of the bar 20. The hole 23² in the angular shaped portion 23² of clamp 23 is drilled and provided with screw threads to receive a clamping screw 24. The said screw is inserted through a suitable opening in the escutcheon or key base 18 and has screw threaded engagement with the opening 23³ of the clamp 23, thereby causing the clamps 23 to securely engage the bar 20, thus providing fastening means for said escutcheons 18.

To mount a key in the opening 17 of the key shelf D, the said key base or escutcheon is placed in position resting upon the top edges 20², of the bars 20. A clamp 23 is then positioned so that the hook portion of

the clamp engages the bottom edge of the bar 20, the ends of the hook portion 23¹ extending into the groove 22. With the clamps in this position the screws 24 are threaded into the tapped openings 23³, permitting longitudinal adjustment in relation to the opening 17, and when in the desired position the screws are tightened, forcing the hook portion of the clamp into engagement with the lower edge 20¹ of the bars 20, thus locking the key in position. By constructing the key shelf in the above described manner, I eliminate all the difficult cutting-out of the key-shelf for the frame, the large amount of exact drilling to bring about the matching of the parts, and at the same time I make the keys accessible so that they may be easily removed for repairs or adjusting.

While I have shown my invention adapted to one particular form, I do not wish to limit myself to the exact construction and uses to which it has been put, but aim to cover all such changes and modifications as come within the spirit and scope of the appended claims.

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

1. A switchboard of the class described including a key shelf having an opening therein, longitudinal slots or recesses cut in said key shelf, key supporting strips mounted in said opening longitudinally of said key shelf and extending downward partially covering said longitudinal slots, a key escutcheon mounted within said opening and supported by said strips, catch members for said key escutcheon provided with upturned portions that fit over said strips into said slots, and screws passing through said escutcheon into integrally formed flanged portions of said catch members to securely hold said key escutcheon in position.

2. A switchboard having a key shelf provided with an opening therein, slots cut in the bottom edges of the inner faces of the periphery of the members that form the key shelf, key supporting strips mounted in said opening, secured to said key shelf members and extending downward partially covering the slots cut in said key shelf members, a key base supported by said strips within said opening and adapted to be adjusted longitudinally of said opening, catch members having their main body portions lying against said supporting strips and provided with upturned portions extending over protruding portions of said mounting strips

into said longitudinal slots, fastening members extending through said key base and having screw-threaded engagement with integrally formed flanged portions of said catch members to securely hold the key base in its adjusted position.

3. The combination with a telephone switchboard of a key shelf having an opening therein, supporting rails mounted in said opening, a key escutcheon mounted within said opening, supported by said rails and adapted to be moved longitudinally, catch members for said key escutcheon having flat portions mounted parallel to and lying against said mounting rails and provided with hook portions extending over said mounting rails, and screw members extending through orifices in said key escutcheon into tapped orifices in integrally formed flanged portions of said catch members, which flanged portions extend perpendicular to said mounting rails, to securely hold said key escutcheon in its adjusted position.

4. In a switchboard of the class described, a key shelf having an opening therein, a pair of supporting strips mounted in said opening longitudinally of said key shelf opening, a key base adjustably held by said supporting strips, catch members for said key base provided with upturned portions adapted to fit over said supporting strips, and screw members passing through openings in said key base and into threaded portions in said catch members for securely locking said key base to said supporting strips.

5. A switchboard of the class described provided with a key shelf having an opening therein, key supporting strips mounted in said opening longitudinally of said key shelf, a key plate supported on said key shelf by said supporting strips, a catch member provided with an upturned portion adapted to fit over one of said supporting strips and having a longitudinally extended portion provided with threads, and a screw member adapted to fit into an orifice in said key plate and provided with threads for engaging the threaded portion of said catch member to securely hold one end of said key plate in longitudinal adjustment with the key shelf.

Signed by me at Chicago in the county of Cook and State of Illinois, in the presence of two witnesses.

GEORGE D. WOLF.

Witnesses:

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