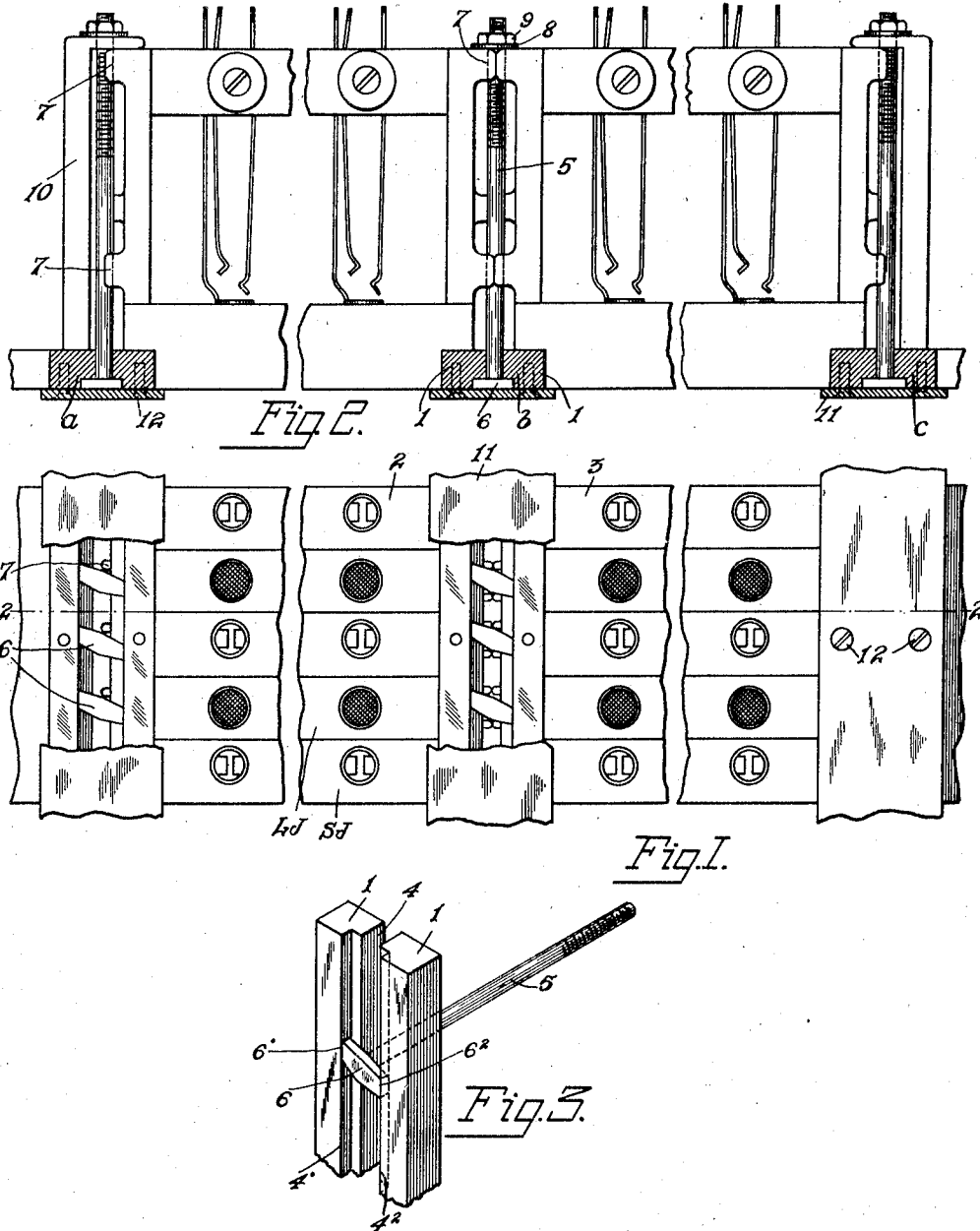


G. D. WOLF.
SWITCHBOARD APPARATUS.
APPLICATION FILED FEB. 5, 1917.

1,330,565.

Patented Feb. 10, 1920.



Witnesses:
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UNITED STATES PATENT OFFICE.

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SWITCHBOARD APPARATUS.

1,330,565.

Specification of Letters Patent.

Patented Feb. 10, 1920.

Original application filed October 6, 1915, Serial No. 54,303. Divided and this application filed February 5, 1917. Serial No. 146,665.

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 Switchboard Apparatus, of which the following is a specification.

My invention relates to switchboard apparatus associated with telephone switchboards of the type in which central office operators are used to establish connections between subscribers' lines, and has to do more particularly with the mounting means as employed for mounting the lamp jack and spring jack strips in the face of a switchboard. This application is a division of my application Serial No. 54,303, filed October 6, 1915, for telephone switchboard.

I so construct the front of the switchboard that a strip of line or trunk drops may appear next to a strip of lamp and jack springs, or they may be mounted in the reverse order without necessitating differently formed stile strips. The method commonly employed for mounting strips of drops, spring and lamp jacks, is to provide a stile strip having pins staked and spaced upon given centers, but due to the varying widths of the drop, spring and lamp strips, the stiles must be constructed with the pins spaced on different centers to take care of the different widths of strips. This method of mounting is also objectionable for the reason that no matter how much care is used in the manufacture of this equipment, it does not readily fit snugly together, without a considerable amount of labor and time in so making it fit. To overcome this difficulty, I provide stile strips which are of drawn stock and are provided with bolt members adapted to be slidably and adjustably mounted between each pair of stile strips, thus providing a most flexible means of mounting the carrying strips. With this method of mounting, only one standard stile strip is necessary, the slidable bolts providing the means for mounting the varying widths of strips.

With a mounting construction as above

described, I have obviated the above-mentioned objections and embodied desirable features and advantages all in a simple, efficient and economical manner; and to the accomplishment of the above objects and such others 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 drawing in which like reference characters denote like parts and in which—

Figure 1 is a face view of a portion of a switchboard showing several assembled lamp jack and jack spring strips with parts broken away to show the mounting means of the said strips;

Fig. 2 is a sectional view along the line 2—2 of Fig. 1 showing the method of mounting the jack strips;

Fig. 3 is a perspective view of the stile strips and clamping bolt:

Referring now more in detail to my invention as illustrated in the accompanying drawing, I provide supporting strips commonly known as stile strips for suitably supporting the spring and lamp jack strips SJ and LJ in the face of the switchboard. The stile strips 1 are L-shaped, and for the purpose of illustrating my invention, I show two banks of spring jacks and lamp jacks respectively mounted in the face of the switchboard. The strip of spring jacks SJ and lamp jacks LJ are alternately mounted in each bank. The L-shaped stile strips 1 are mounted in juxtaposition and parallel to each other and when thus mounted the two stile strips form a T-shaped slot 4 into which bolts 5 may be inserted. The bolts 5 are provided with hexagonally shaped heads 6 which when inserted in the T-shaped slot 4, as shown in Fig. 3, permit vertical movement of the bolts 5 so that the said bolts, which are used for clamping the spring and lamp jack strips to the stile strip, may be adjusted according to the widths of the said jack and lamp strips.

For the purpose of mounting the two

banks of jack strips 2 and 3, I show three pair of stile strips *a*, *b* and *c*, respectively, each made up of two L-shaped stile strips 1. The stile strips *b* are used as mounting means for the inside ends of the two adjacent jack strips while the stile strips *a* and *c* are used as mounting strips for the outside ends of the two adjacent jack strips. To insert the bolt 5 into the T-shaped slot 4, the long axis of the hexagonally shaped head 6 is placed approximately parallel to the stile strip and inserted into the slot 4, the bolt is then given a quarter turn bringing the sides 6¹ and 6² of the head into engagement with the sides 4¹ and 4² of the slot thus permitting vertical movement of the bolt but not rotary movement thereof. To mount two adjacent jack strips in position upon the stile strips, they are placed in the position shown in Fig. 2 and the bolts 5 are then inserted into the T-shaped slot 4 in the manner above described. A washer 8 is then placed over the bolt 5 and a nut 9 is then added to securely hold the jack strips in place. The bolts 5 which are inserted into the T-shaped slot 4 formed by the stiles *b* clamp the two inside ends of the adjacent jack strips, while the bolts 5, inserted in slots 4 of the stiles *a* and *c*, clamp the outside ends of the two adjacent jack strips. The outside ends of the jack strips are also clamped by means of bolts 5 and nuts 9 through the medium of an angularly shaped lug 10 which is used to exert equal pressure upon the stile strips, when the jack strip ends are clamped to the stile strips *a* and *c* respectively. The sides 6¹ and 6² of the hexagonal heads 6 engage the sides 4¹ and 4² of the stile strips 1, when the nut 9 is turned to securely clamp the jack strip, thus preventing the bolt from turning. By the use of the stile strips 1 and bolts 5, any width of jack strip may be mounted, due to the vertical movement of the bolt in the T-shaped slot 4.

If at any time a spring jack or lamp jack is in need of repairs, or another is to be inserted, all that is necessary is to loosen the nuts 9 which clamp them in place, give the bolt a slight turn to the right, then withdraw the bolt from the slot 4 thereby permitting the withdrawal of the jack strip from its mounting place. A finishing stile 11 is fastened to the stile strips 1 in any suitable manner as by the screws 12.

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. In a telephone switchboard, the combination with a jack frame, a bank of jack strips, a plurality of vertically disposed L-shaped jack stile strips suitably mounted in pairs to form T-shaped openings, and slidably mounted bolts supported in said T-shaped openings for adjustably supporting said jack strips in said jack frame.

2. In a telephone switchboard, the combination with a jack frame, a bank of jack strips, a plurality of vertically disposed L-shaped stile strips suitably mounted in pairs to form T-shaped openings, slidably mounted bolts supported in said T-shaped openings, for adjustably supporting said jack strips in said jack frame, and finishing stiles secured to said stile strips.

3. The combination with a telephone switchboard, of a mounting shelf having an opening therein, stile strips mounted in pairs in said opening, strips of apparatus, locking means cooperating with said stile strips for adjustably securing said strips of apparatus in said mounting shaft, and finishing stiles secured to said stile strips.

4. In a telephone switchboard, the combination of a mounting frame, pairs of L-shaped supporting strips mounted within said opening, jack strips carried by said supporting strips, locking means for each pair of mounting strips cooperating with said jack strips for adjustably securing them to said mounting frame, and a finishing stile for each pair of supporting strips.

5. In a telephone switchboard, the combination with a jack frame, a bank of jack strips, a plurality of vertically disposed L-shaped jack stiles suitably mounted in pairs to form T-shaped openings, bolts associated with each pair of stiles suitably supported in said T-shaped openings for adjustably supporting said jack strips.

6. A device of the character described including adjacently mounted pairs of stile strips, strips of apparatus adapted to be secured between adjacent pairs of stile strips, a longitudinal recess formed by each pair of stile strips, and means adapted to fit into said recess for adjustably securing said strips of apparatus in position.

7. A device of the character described including a jack frame, pairs of vertically disposed stile strips, vertical recesses formed by each pair of stile strips, jack strips adapted to be mounted in banks between said stile strips, and slidably mounted bolts supported in said vertical recesses for adjustably supporting said jack strips.

8. A device of the character described including a jack frame, three pairs of adjacently mounted vertically disposed stile

strips, a vertical recess formed by each pair
of stile strips, jack strips adapted to be
mounted between adjacent pairs of stile
strips, and locking means for each pair of
5 stile strips slidably mounted in said verti-
cal recess for adjustably securing said jack
strips in position, the locking means carried
by the middle pair of stile strips being
adapted to hold the ends of oppositely
10 mounted jack strips, while the locking means

carried by the outside pairs of stile strips
is adapted to hold only one end of the jack
strips.

Signed by me at Chicago, in the county
of Cook and State of Illinois, in the pres- 15
ence of two witnesses.

GEORGE D. WOLF.

Witnesses:

G. A. YANOSCHOWSKI,
MARY R. ROCHFORD.

It is hereby certified that in Letters Patent No. 1,330,565, granted February 10, 1920, upon the application of George D. Wolf, of Chicago, Illinois, for an improvement in "Switchboard Apparatus," an error appears in the printed specification requiring correction as follows: Page 2, line 89, claim 3, for the word "shaft" read *shelf*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 18th day of May, A. D., 1920.

[SEAL.]

M. H. COULSTON,

Acting Commissioner of Patents.

Cl. 179—91.