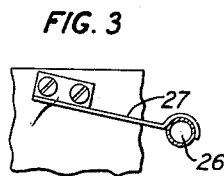
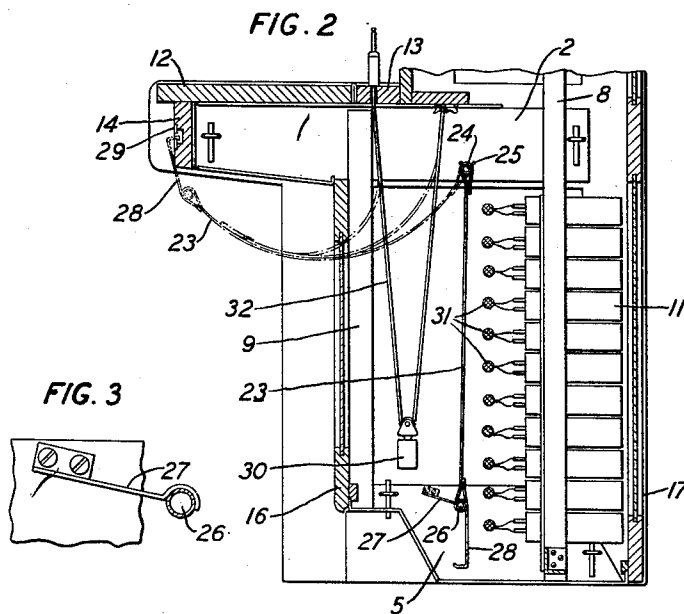
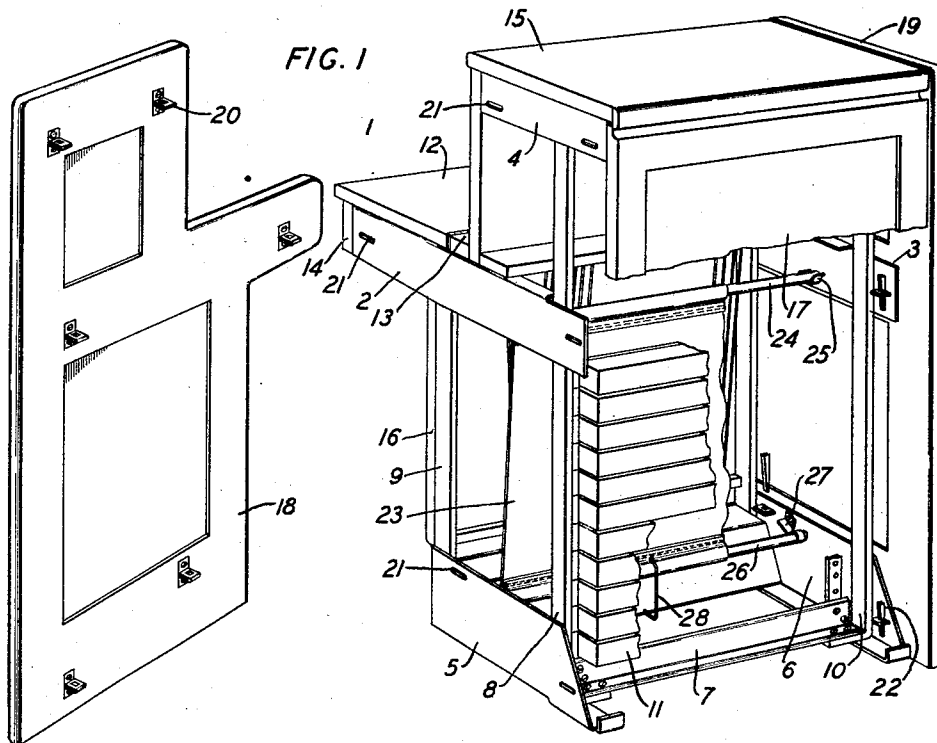


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C. BORGMANN
TELEPHONE SWITCHBOARD

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TELEPHONE SWITCHBOARD

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This invention relates to switchboards and more particularly to switchboards equipped with cords.

An object of this invention is to permit easy and quick removal of the rear, side and lower front panels thereof and the substitution therefor of other panels of any desired material, color or finish, thus reducing the number of switchboards required to be carried in stock to supply customers' requirements.

Another object is to prevent injury to apparatus and wiring, mounted in the lower part of the switchboard, from the swaying of cords and their suspended cord weights.

A feature of the invention, therefore, resides in the provision of a switchboard having a steel frame or carcass on which is mounted a keyshelf, a roof, an upper front panel and all the required apparatus and wiring, and so arranged that rear, side and lower front panels of any desired material, color or finish can be attached and detached quickly and with little effort.

Another feature resides in the provision of a flexible barrier, which in practice may be a canvas curtain, interposed between the cord weights and apparatus or wiring mounted in the lower part of the switchboard. The bottom of this curtain is adapted to be pulled forward and upward and held in a raised position by means of a hook adapted to engage the keyhole of the keyshelf lock whereby the cords and their associated cord weights are held out of the way to give free access, from the front of the board, to apparatus or wiring mounted in the lower part.

The invention will be better understood from the following description when read in connection with the accompanying drawings;

Fig. 1 of which shows the removable side panels and the method of fastening them to the framework; and

Figs. 2 and 3 show the canvas curtain and the method of fastening it in either the vertical stretched or raised position.

Referring to the drawings, the switchboard 1 consists of a metal framework formed of horizontal bars 2, 3, 4, 5, 6, 7, etc. and vertical bars 8, 9, 10, etc. fastened together in such a

way as to provide mounting space for the switchboard apparatus 11, the keyshelf 12, cord shelf 13, etc. The lock rail 14 and top 15 are fastened to the framework by screws or otherwise firmly attached. The lower front panel 16 is removable by raising it vertically about $\frac{1}{8}$ " and swinging it forward from the bottom, whereupon it may be disengaged at the top by lowering it a short distance. This general arrangement for removable front and rear panels for switchboards is old and has been in use for some time and therefore forms no part of the present invention. Likewise the rear panel 17, only a portion of which is shown, is arranged to be removed in the same manner.

One of the features of the invention, as previously referred to, resides in the removable side panels 18 and 19 which are adapted to be held in position by the members 20 which pass through slots 21 in the horizontal bars 4, 2, 5, etc. and are tightly locked in place by means of the tapered keys 22. In order to remove the side panels for the purpose of greater accessibility or for the purpose of replacing the side panels for ones of a different material, color or finish, it is only necessary to remove the six keys 22 on each side and lift the panels away.

In addition to the removable side panels the other feature previously referred to is that of the canvas curtain 23 which is supported at the top by the rod 24 which rests in brackets 25 attached to the inner side of the horizontal bars 2 and 3. The lower end of the curtain is terminated in a second rod 26 which is caught under the spring tensioned brackets 27 attached to the inner side of the lower horizontal bars 5 and 6. Attached to the middle of the lower rod 26 is a hook shaped member 28 which is adapted to be hooked into the key hole 29 in the lock rail 14.

When the curtain 23 is held in a vertical position between the brackets 25 and 27 the cord weights 30 are prevented from injuring the wiring 31 or apparatus 11 in the rear of the switchboard in case the cord weights are caused to sway by movement of the cords 32 from which they are suspended.

In case it is desired to obtain access to the

lower part of the switchboard from the front, the front panel 16 is removed in the manner previously described and the rod 26 is disengaged from the spring brackets 27. The curtain 23 may be then pulled forward and upward and fastened in a raised position as shown by the dotted lines in Fig. 2 by hooking the member 28 into the key hole 29. This operation raises the cords and cord weights out of the way thus giving free access to the wiring 31 and apparatus 11.

What is claimed is:

1. In a switchboard, the combination with a framework, of removable front and rear panels, removable side panels and locking means for quickly attaching and freeing said side panels.

2. In a telephone switchboard, the combination with a cord shelf of connecting cords depending therefrom into the lower part of the switchboard, a cord weight suspended from the bottom of each cord, apparatus mounted in the lower part of said switchboard behind and adjacent said cord weights and within striking distance thereof and a curtain of flexible material normally separating the space occupied by said cord weights from said apparatus to prevent contact therebetween, the bottom of said curtain being arranged to be fastened in a raised position to move said cords and cord weights to give free access to said apparatus from the front of the switchboard.

3. In a switchboard, a plurality of dangling switching cords, each held taut by a cord weight, a panel of electrical apparatus within striking distance of said cord weights, and a flexible barrier normally interposed between said apparatus and said weights, said flexible barrier serving as a means to move said cords and weights collectively to give access to said panel.

4. In a switchboard, in combination, a plurality of switching cords depending therefrom into the lower portion thereof, each cord being held taut by a suspended cord weight, a panel of electrical apparatus mounted within striking distance of said cord weights, a curtain of yielding material normally interposed between said cord weights and said apparatus, the bottom of said curtain being adapted to be drawn forward and raised to move said cords and weights to give free access from the front of the board to said apparatus, and means for holding the curtain in said raised position.

In witness whereof, I hereunto subscribe my name this 20th day of October, 1930.

CHARLES BORGMANN.