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SWITCHBOARD AND THE LIKE.

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1,350,328. Patented Aug. 24, 1920.

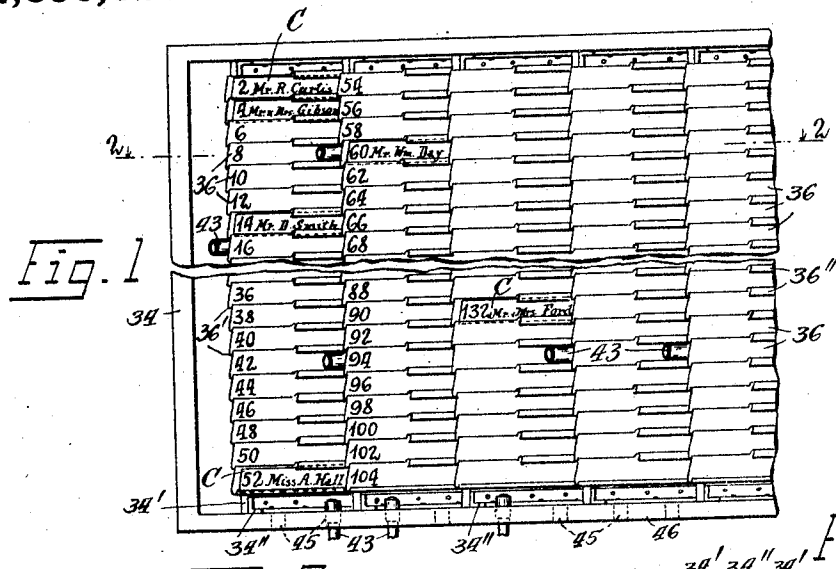


Fig. 1.

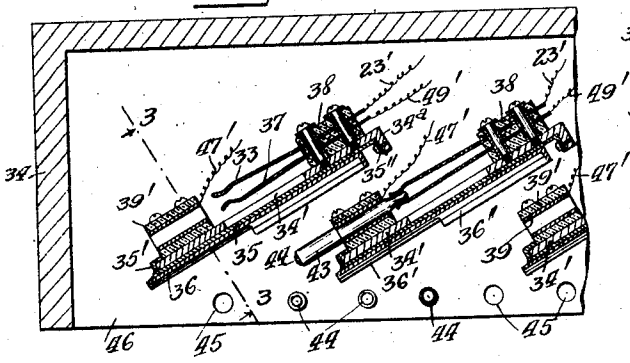


Fig. 2.

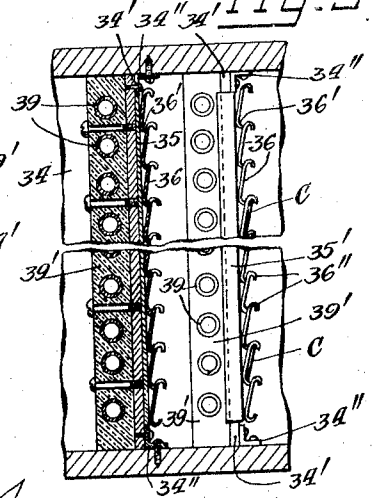


Fig. 3.

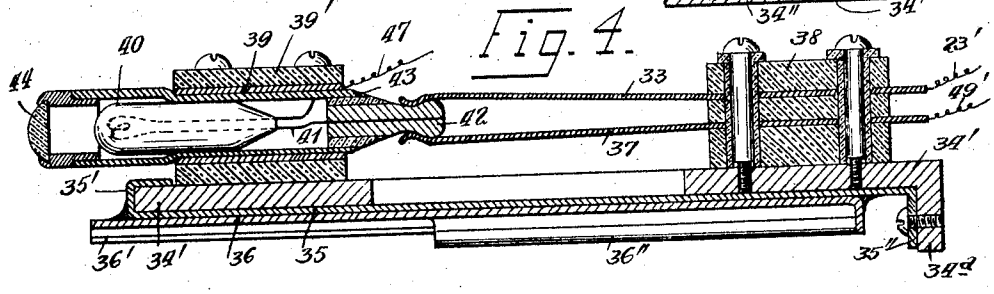


Fig. 4.

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SWITCHBOARD AND THE LIKE.

1,350,328. Specification of Letters Patent. Patented Aug. 24, 1920.

Original application filed January 12, 1918, Serial No. 211,502. Divided and this application filed August 17, 1918. Serial No. 250,289.

To all whom it may concern:

Be it known that we, FREDERICK A. MUSCHENHEIM and FREDERIC W. BLASDALE, both citizens of the United States, and both residents of New York city, in the county and State of New York, have invented certain new and useful Improvements in Switchboards and the like, of which the following is a specification.

Our invention relates to switchboards and in the particular embodiment illustrated by the accompanying drawings is constructed as a hotel room rack to be placed at the clerk's desk, with provision for giving and receiving certain signals at said desk, whereby the clerk may operate apparatus located at a distance from his desk, and may also receive indications at his desk of certain conditions obtaining at a distance therefrom.

This improved switchboard is particularly designed for use in connection with the novel signaling system set forth in our application for Letters Patent filed in the United States Patent Office on January 12, 1918, Serial No. 211,502, Patent No. 1,327,837, issued January 13, 1920, of which the present application is a division; but our switchboard may be employed in other connections also.

An example of our invention is shown in the accompanying drawings, in which

Figure 1 is a front elevation of a hotel room rack embodying our improved switchboard;

Fig. 2 is a fragmentary horizontal section on line 2—2 of Fig. 1 showing a portion of the rack on an enlarged scale;

Fig. 3 is a vertical section on line 3—3 of Fig. 2, and

Fig. 4 is a horizontal section showing on a still larger scale, one of the switchboard or indicator sections of Fig. 2.

The switchboard or indicating apparatus shown in the drawings is located at the clerk's desk, and is preferably constructed as a unit with the hotel room rack having numbered compartments or holders for receiving cards, such as C, bearing the names of the guests occupying the respective rooms. While racks of this type are well known, we have somewhat modified their construction so as to provide spaces for the placing of the indicating lights which according to our present invention, are used in connection with such racks.

The rack comprises a frame 34, with uprights 34′ extending obliquely with respect to the front of the frame, between the top and bottom members of the frame. The connection of each upright with the said frame members may be made by means of horizontal angle irons 34″. Against the front face of each upright, between the corresponding angle irons 34″ is secured a piece of sheet metal 35, the forward edge 35′ of which may be bent to fit the corresponding edge of the upright, while its rear edge 35″ is bent at right angles so that it may be readily fastened (say by screws) to the corresponding rear portion 34ª of the upright 34′. To the metal sheet 35 we secure, as by soldering, a series of superposed horizontal holders 36 for the cards C, the cards being adapted to have written thereon the guest's name, room number, and other data. Each holder 36 has its back inclined forwardly and upwardly as shown in Fig. 3, and preferably projects slightly beyond the sheet 35 at its forward edge. Each holder has a horizontal channel 36′ along its entire lower edge, and a horizontal channel 36″ along the rear half or portion of its upper edge, the edges of the cards C sliding in said channels as the cards are inserted or removed. The back of each card holder rests at its upper end against the bottom channel 36′ of the next holder above. At the front end of each holder the room number is painted. The holders of adjacent sets or columns are preferably overlapping, but a sufficient space is left between adjoining holders belonging to different sets to interpose the signaling or indicating apparatus mentioned above as located at the clerk's desk. This apparatus comprises forwardly extending contacts or terminals 33, 37, the rear ends of which are secured to a suitable stationary carrier 38 (fastened to the upright 34′) in such a manner, that one terminal will be insulated from the other. At the forward portion of each card holder is secured a conducting socket 39. The sockets of the same column, may be, for instance, carried by a vertical bar 39′ of insulating material, secured by screws or otherwise to the respective upright 34′. Each socket 39 extends horizontally lengthwise of the holder, and is adapted to receive one of the clerk's signal lights. This light comprises a suitable bulb 40 with a filament 41 one end of which is secured to a metallic plug 42 adapted to be fitted between the ter-

minals 33, 37 the plug preferably having a groove to receive the curved outer ends of said terminals, which latter are made of spring metal. The bulb is fitted into a tubular casing 43, of a conducting material to which the other end of the filament 41 is secured. Said casing is adapted to slide in or out in the conducting socket 39, and is provided at its forward portion with an opening in which is set a lens 44, to direct the clerk's attention to the card or card holder corresponding to the room that is signaling. It will be understood that the parts 40, 41, 42, 43, 44 are connected with each other rigidly and move as a unit when being inserted into, or removed from the socket 39. When not in their sockets 39, these signal units may be kept in any manner convenient for the clerk's use, and we prefer to set them, when not in use, in vertical sockets 45 (say of wood) located in a board 46 at the bottom of the room rack and slightly in advance thereof, so as to be within the clerk's reach.

Each of the terminals 33, 37 is connected by a wire 23′, 49′ respectively with suitable apparatus adapted to be operated under certain conditions when one of the clerk's signal lights is inserted in said socket 39, the latter being connected with certain circuits by a wire 47′ one for each socket. With the particular arrangement of circuits set forth in our parent application above referred to, the clerk, by putting a signal light 40 in the socket 39 corresponding to a particular room, may cause a signal to be given near such room, to inform a maid or other attendant that her services are required in such room, and by certain operations likewise described in said parent case, the maid can cause the corresponding signal or light 40 to flash at the clerk's desk, thus informing him that she has answered the call and is working in that room, and she is also able to cause the desk light 40 to flash in a different manner when she wishes to let the clerk know that her work in that room has been completed. We have not deemed it necessary to show these circuit arrangements in the present application, particularly since the switchboard or indicator illustrated herein might be used in connection with signaling or other apparatus of different types.

We have described and shown in the present case certian features in the mechanical construction of the room rack irrespective of its electrical or signaling features. These features of mechanical construction are not claimed herein, but in a separate application filed by us simultaneously herewith.

We claim:

1. In an electric switchboard, a rack having a series of card holders, two electric contacts adjacent to each holder, a conducting socket for each holder, said contacts and sockets being adapted for connection with a signaling circuit and a signal lamp having a terminal adapted for engagement with said socket, a filament one end of which is connected with said terminal, and a plug connected with the other end of said filament and adapted for engagement with said contacts to bridge the gap between them.

2. In an electric switchboard, a rack having a series of card holders arranged in columns ranging obliquely with reference to the front of the rack, and overlapping, two electric contacts adjacent to each holder, a conducting socket for each holder, said contacts and sockets being adapted for connection with a signaling circuit, and a signal lamp having a terminal adapted for engagement with said socket, a filament one end of which is connected with said terminal, and a plug connected with the other end of said filament and adapted for engagement with said contacts to bridge the gap between them.

3. In an electric switchboard, a rack having card holders, spaced spring contacts adjacent to each holder, a conducting socket adjacent to said contacts, said contacts and sockets having means for connection to a signaling circuit, and a signal lamp having a filament one terminal of which engages said socket when the lamp is inserted therein, the lamp having at one end, a plug connected with the other end of said filament and adapted to electrically bridge the gap between the springs, the lamp being provided at the other end with a lens to intensify the light of the lamp.

4. In an electric switchboard, two adjacent electric contacts, a conducting socket associated with said contacts, said contacts and socket being adapted for connection with a signaling circuit, and a signal lamp having a terminal adapted for engagement with said socket, a filament one end of which is connected with said terminal and a plug connected with the other end of said filament and adapted for engagement with said contacts to electrically bridge the gap between them.

5. In an electric switchboard, two adjacent electric contacts, a conducting socket associated with said contacts, said contacts and socket being adapted for connection with a signaling circuit, and a signal lamp having a terminal adapted for engagement with said socket, a filament one end of which is connected with said terminal, and a plug connected with the other end of said filament and adapted for engagement with said contacts to electrically bridge the gap between them, the lamp being provided at the other end with a lens to intensify the light of the lamp.

6. In an electric switchboard, two adjacent electric contacts, a conducting socket associated with said contacts, said contacts and sockets being adapted for connection with a signaling circuit, and a signal lamp having a conducting sleeve adapted to slip into said socket, a filament one end of which is connected with said sleeve, and a plug connected with the other end of said filament and adapted to engage said contacts and electrically bridge the gap between them.

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