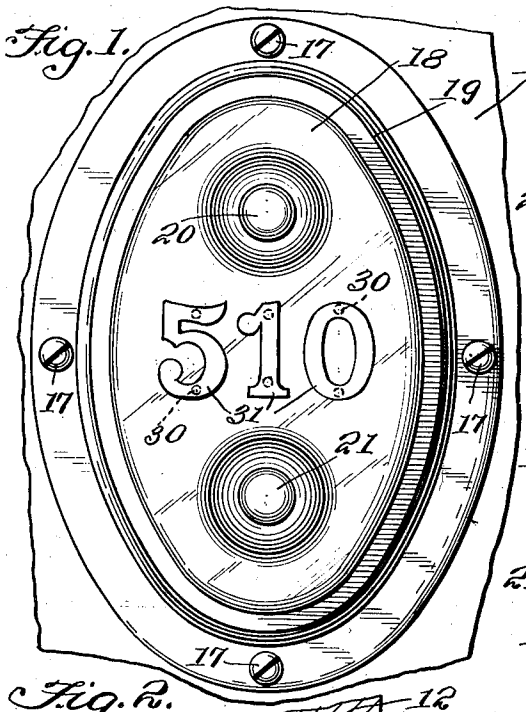
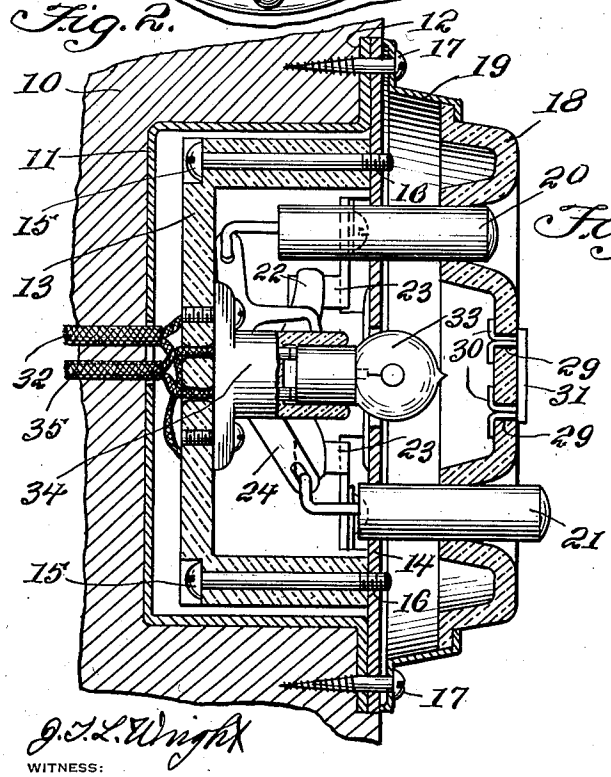
Aug. 10, 1926. 1,595,831

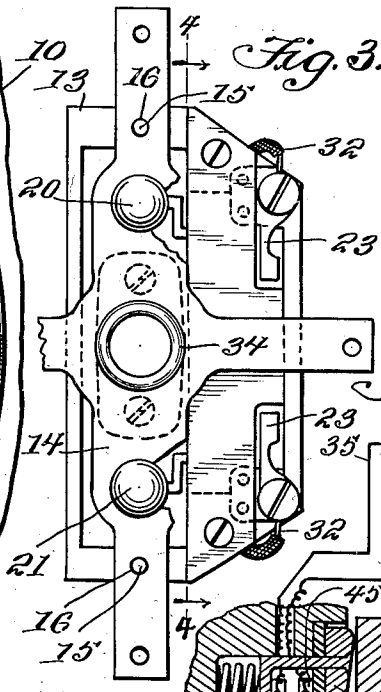
M. I. GANS

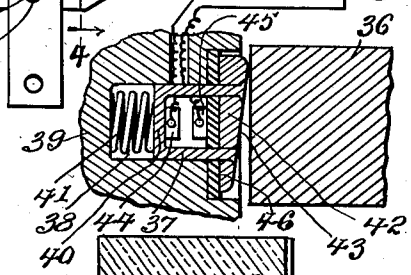
ILLUMINATED SWITCH

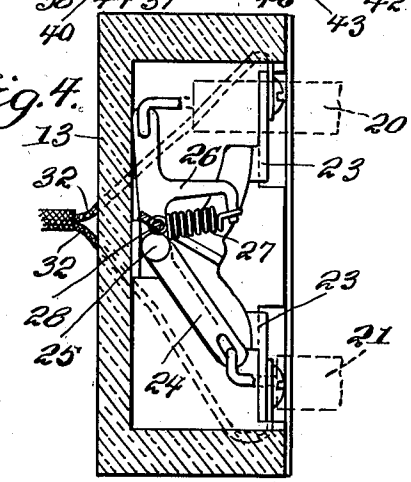
Filed Jan. 2, 1924











Morris I. Gans

INVENTOR

BY Victor J. Evans

ATTORNEY

J. L. Wright

WITNESS:

Patented Aug. 10, 1926. 1,595,831

UNITED STATES PATENT OFFICE.

MORRIS I. GANS, OF LYNCHBURG, VIRGINIA.

ILLUMINATED SWITCH.

Application filed January 2, 1924. Serial No. 684,026.

This invention relates to wall switches of the ordinary well known push button type, and contemplates the provision of an indicator in the nature of an electric light bulb adapted to be automatically lighted to illuminate the switch incident to the opening of the door of a room or dwelling as the case may be, so that the person entering the room or building can readily locate the switch.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawing, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawing forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:—

Figure 1 is a front elevation of the switch box mounted upon the wall.

Figure 2 is a vertical sectional view taken through the switch box and at a right angle to Figure 1.

Figure 3 is a view partly in section of the porcelain switch box.

Figure 4 is a sectional view taken on the line 4—4 of Figure 3, looking in the direction of the arrows.

Figure 5 is a sectional view through the door and door jamb showing the switch and circuit controlling the illumination of the switch box as described.

Referring to the drawing in detail, 10 indicates the wall of a building, which is recessed to receive a wall switch clearly illustrated in Figure 2. This switch embodies an outer metallic casing 11 formed with an attaching flange 12 which bears against the wall as shown. Arranged within this casing is a porcelain switch box 13 across the front of which extends a strip 14 utilized to support the porcelain box upon the metallic casing 11. Passed through the end walls of the porcelain box are fastening bolts 15 which are threaded into openings 16 in the strip 14, and as clearly shown in Figures 2 and 3, this strip extends beyond the ends of the porcelain box and is provided with openings to receive the fastening elements 17, which elements secure the strip 14 to the receptacle 11, and also secure the latter to the wall 10. This switch box is closed by a glass cover 18 which may be either translucent or opaque, and which cover is held in position by the rim 19 which bears against the marginal edge of the cover 18 and is secured to the strip 14 by means of the fastening elements 17. This construction is clearly shown in Figure 2. The porcelain box contains a switch mechanism of the ordinary well known push button type, making use of two buttons 20 and 21 respectively which control the circuit to the lights in the room or hall of the building depending of course upon the location of the switch itself. When one of the buttons is pushed inwardly, the switch closes the circuit to the lights, and when the other button is pushed inwardly, the circuit is broken. The blade of the switch is indicated at 22 and cooperates with the contacts 23, while the push buttons are terminally connected with the lever 24 which is fulcrumed within the porcelain box as at 25. This lever is formed with an offset arm 26 which is connected to one end of a coil spring 27, the opposed end being secured to the switch blade as at 28, so that the switch can be snapped off or snapped on and held in its given position. This construction is well known and does not enter into the subject matter of the present invention. A cover 18 is of course provided with spaced openings of the proper dimensions to receive the push buttons 20 and 21, while the central portion of the cover is provided with smaller openings 29 to receive the split pins 30 carried by the numeral 31. The combination of the numerals of course designates the number of the room or house as the occasion may be and after the split pins are passed through the openings 29 of the cover, the ends of the pins are split to hold the numerals positioned on the cover. 32 represents the wires leading from the switch to the light in the room or building.

As hereinabove pointed out, the chief characteristic of the invention resides in providing what may be termed an indicator for a wall switch, so that the location of the switch either in a hall or room of a building may be readily determined when the door is opened. In accordance with the present embodiment of the invention, this indicator consists of an electric light bulb 33 which is supported by a socket 34 attached to the rear wall of the porcelain switch box 13 in any suitable manner, such as shown in Figure 2. It will also be noted from this figure that the electric light bulb is arranged centrally of the switch box, be-

ing located between the switch buttons 20 and 21 respectively and directly behind the numerals 31. This electric light bulb 33 is included in a circuit 35 with a switch which is automatically operated incident to the opening and closing of the door 36, so that when the door is opened, the circuit 35 will be closed to the electric light bulb 33, thereby illuminating the interior of the switch box, so that the party entering the building or room can readily locate the push buttons for the purpose of closing the circuit to the electric light in the room or building and at the same time readily see the number on the cover plate 18. While the switch included in the circuit 35 may be of different construction for the purpose intended, I preferably make use of a U-shaped member 37 which is arranged to slide in the recess 38 formed in the door jamb 39, and positioned between the end wall 40 of the U-shaped member and the bottom of the recess 38 is a coil spring 41 which normally tends to project the U-shaped member an appreciable distance beyond the door jamb. This U-shaped member supports at its outer end a plate 42 having a cam shaped surface 43 disposed in the path of movement of the door 36, so that when the door is swung to a closed position, the U-shaped member is forced inwardly against the tension of the spring 41 to occupy the position shown in Figure 5. In this position, the contact 44 carried by the U-shaped member is moved away from and held in spaced relation to the contact 45 which is carried by a plate 46 stationarily attached to the door jamb, but which plate has openings to receive the limbs of the U-shaped member 37. As shown in Figure 5, the wires included in the circuit 35 are terminally connected with the respective contacts 44 and 45 of the switch just described.

In practice, assuming that the door 36 is in its closed position, it is manifest, that the contact 44 is spaced from the contact 45 of the door jamb switch, and consequently the circuit to the electric light bulb 33 is broken. However, when a person enters the building, or the room in which the wall switch is arranged, this circuit will be closed by simply opening the door 36. When the door 36 is opened, the spring 41 is allowed to expand, moving the U-shaped member 37 outwardly, and bringing the contact 44 into engagement with the contact 45 thereby closing the circuit 35 to the electric light bulb 33, with the result that the switch box is illuminated, the light projecting through the cover 18, making it possible for the person to readily locate the position of the switch box within the hall or room as the occasion may be. The invention is very simple in construction, and particularly useful for the purpose intended.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

Having thus described the invention, I claim:—

In combination, a wall switch, including an outer casing, formed with an attaching flange, a switch box arranged within the casing and spaced upon the walls thereof, an elongated strip arranged across the front of said casing and secured to said attaching flanges, means for supporting the switch box on said strip, a transparent cover for said box, a metallic rim surrounding said cover and utilized to support the latter from said strip, means for securing the rim to the strip, an electric light bulb arranged centrally of said box and projecting thru an opening in said strip, and a door controlled switch included in circuit for said bulb for the purpose specified.

In testimony whereof I affix my signature.

MORRIS I. GANS.