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COMBINATION SWITCH AND LOCK LIGHT

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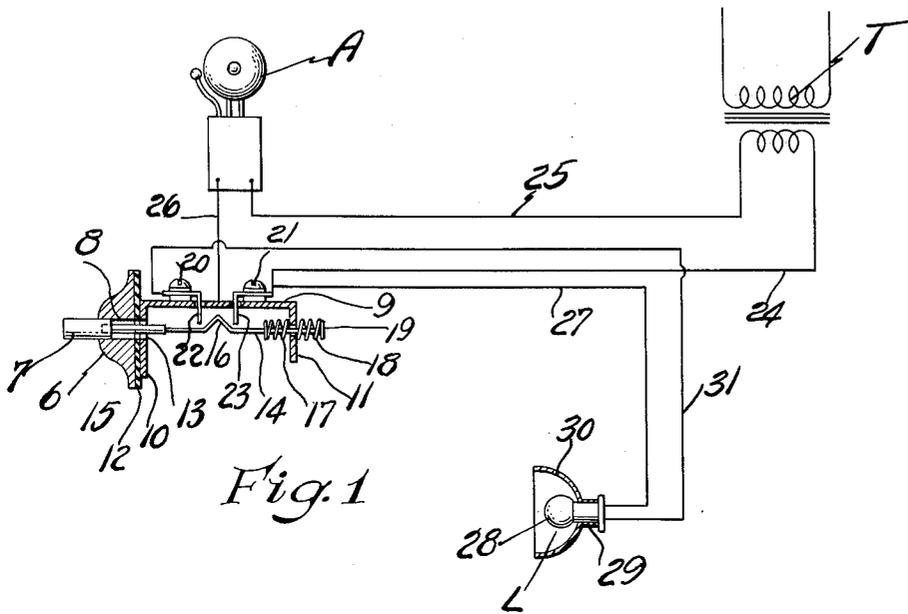


Fig. 1

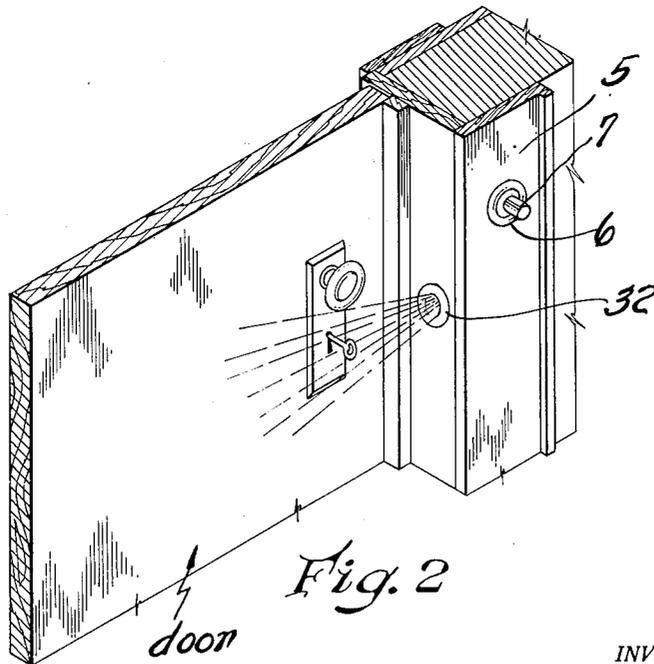


Fig. 2

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COMBINATION SWITCH AND LOCK LIGHT

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2 Claims. (Cl. 340--310)

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This invention relates to a combination switch and lock light, and more particularly to a combination by means of which the conventional pushbutton can be actuated to selectively operate either the door bell or the lock light.

One of the prime objects of the invention is to design a simple, practical and relatively inexpensive switch and light arrangement incorporated with the conventional door bell wiring system, and so designed that when the push button is pushed inwardly in the conventional manner, the door bell will be energized, and when the button is pulled in the opposite direction, the lock light will be energized.

A further object is to design a combination door bell and lock light switch which can be easily manufactured and assembled, and which readily lends itself to quantity production with the resultant saving in cost.

Still a further object is to provide a combination switch and door light, operable by means of a push button for selectively energizing the door bell or the lock light.

With the above and other objects in view, the present invention consists in the combination and arrangement of parts, hereinafter more fully described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims, it being understood that changes may be made in the form, size, proportion, and minor details of construction, without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawing:

Fig. 1 is a sectional, elevational view of the switch included in the wiring diagram, the switch being shown in neutral position.

Fig. 2 is a fragmentary, isometric view of a door and door frame showing the push button and light rays directed across the face of the keyhole.

Referring now more particularly to the accompanying drawing, the numeral 5 indicates the door frame within which the device is mounted. A housing 6 is mounted on the door frame as shown and a cylindrical luminous plastic button 7 is mounted in a centrally disposed passage 8 provided in said housing.

A bracket 9 is mounted in a recess (not shown) provided in the casing 5 and is formed with depending legs 10 and 11, the leg 10 being secured to the casing 5 in any approved manner, and an insulating strip 12 is interposed therebetween, said strip and legs being provided with aligned openings 13, and a contact rod 14 is secured to

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the inner end of the push button and projects through said openings.

An insulated sleeve 15 is mounted on the outer end of the rod 14, said rod being pressed to form a V-shaped section 16 at a point intermediate its length, and spring 17 and 18 are provided on the rod 14 on opposite sides of the leg 11, pins 19 being provided in the rod and the springs bear against said pins and the leg for returning the rod to neutral position when released.

Spaced-apart terminals 20 and 21 are mounted on the bracket 9, the depending legs 22 and 23 projecting into the path of travel of the V-shaped section of the rod as it is actuated, the springs 17 and 18 serving to return the rod to neutral position.

The door bell circuit is conventional, the line 24 leading to a transformer T; thence the line 25 leads to the alarm A, and thence the line 26 leads to the bracket 9.

The lock light circuit comprises line 27 connected to terminal 21, thence leading to the light L which comprises a high-resistance light bulb 28 mounted in a socket 29 and having a reflector 30 as usual; thence the line 31 leads from the socket 29 back to terminal 20 and is in series with the bell circuit above described when the button 7 is pulled to the out position, said light being in alignment with an opening 32 provided in the side of the door frame so that the light rays will be projected across the face of the keyhole.

In normal practice, the device operates as follows:

When it is desirous to ring the door bell, the push button 7 is pressed inwardly; the contact rod 14 moves inwardly, causing the V-shaped section 16 to engage contact 23, energizing the door bell circuit to sound the alarm. The spring 17 which has been compressed, returns the device to a neutral position when the pressure on push button 7 is released.

The purpose of the transformer T is, of course, to cut down the higher voltage of the house circuit to the lower voltage required by the device.

When it is desirous to direct the light rays across the face of the keyhole, the button 7 is pulled outwardly, causing the contact rod 14 to move outwardly and engage contact 22; this energizes the light circuit through circuits 27 and 31, and spring 18 returns the device to a neutral position when the button 7 is released.

It is to be noted here that the light bulb is in series with the alarm circuit when the push button is in the out position, but the higher resist-

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ance bulb takes very little current, so that while the bulb lights, the bell will not ring.

It will thus be seen that I have perfected a simple, practical, and economical switch mechanism for the purpose described, which does not require the use of an additional outside power source, and which draws power only during its intermittent operation. The system is very easily adapted to homes where the door bell system is already installed, no extra wiring, other than the circuit 27 and 31 being required.

It is understood that my invention is not limited to the specific embodiment shown, and that variations may be made therefrom without departing from the spirit and scope of the appended claims.

What I claim is:

1. A combination switch and lock light comprising a housing, a bracket associated therewith, spaced-apart terminals on said bracket and formed with depending leg alarm and light contacts, a push-pull button mounted in said housing, a rod connected thereto and spanning said leg contacts, said rod being shaped to selectively engage a selected leg contact when the button is actuated, an alarm, an alarm circuit connected at the alarm contact, said alarm circuit including a transformer, said rod closing said circuit to energize said alarm when the rod is moved into

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engagement with the alarm contact, a light of high resistance with relation to said alarm, and a light circuit leading from the light contact to said light and thence connected in series with said alarm circuit, said light only being energized when the button is moved in the opposite direction to bring said rod into engagement with said light contact.

2. The construction as defined in claim 1 in which resilient means is provided on said contact rod and in engagement with said bracket for automatically forcing the rod to neutral position when the button is released.

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