Feb. 2, 1943. C. F. GARVERT ET AL 2,309,840

ILLUMINATED DOOR LOCK

Filed March 22, 1941 2 Sheets-Sheet 1

Fig. 1.

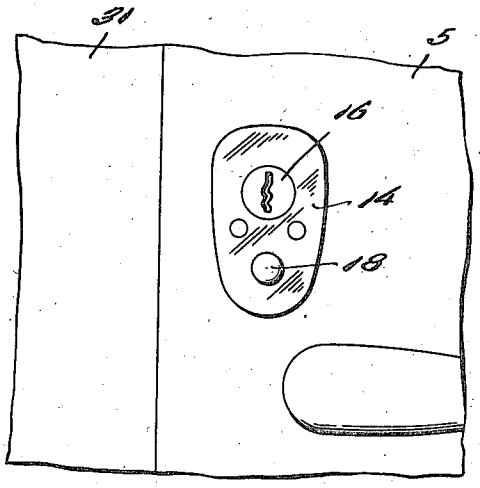


Fig. 5.

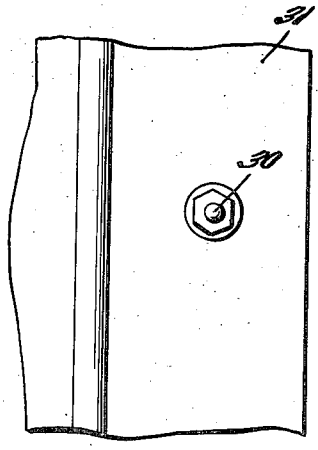


Fig. 6.

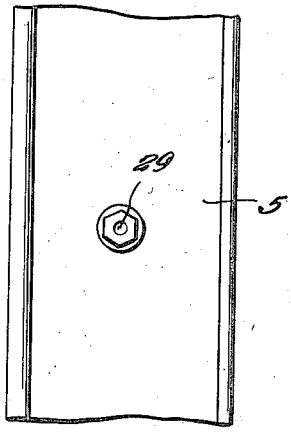
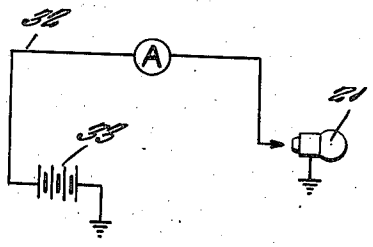


Fig. 8.



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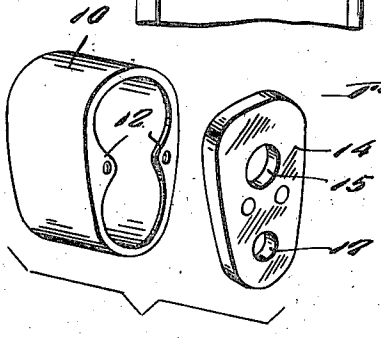

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ILLUMINATED DOOR LOCK

Filed March 22, 1941 2 Sheets-Sheet 2

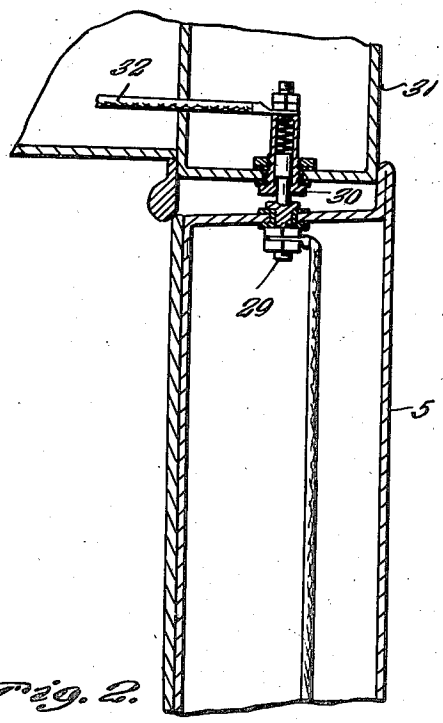
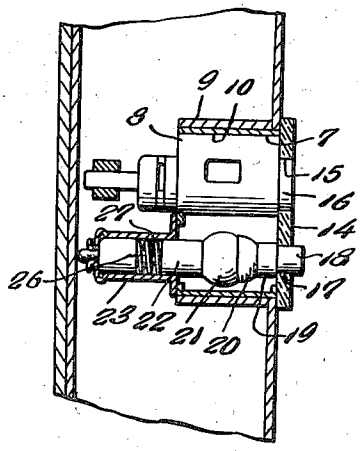


Fig. 2.

Fig. 3.



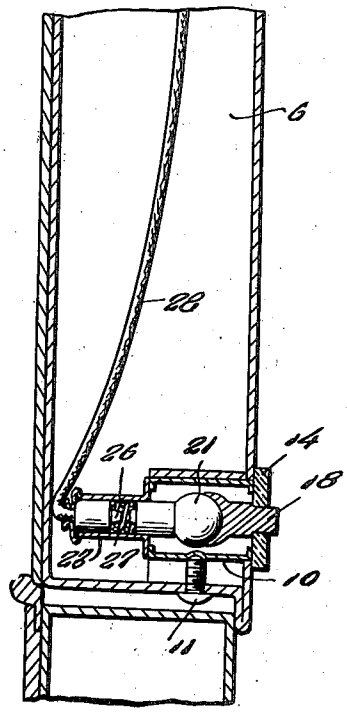
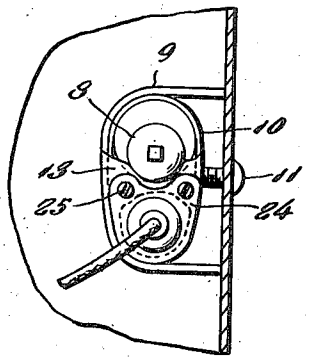


Fig. 4.



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UNITED STATES PATENT OFFICE

2,309,840

ILLUMINATED DOOR LOCK

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Topeka, Kans.

Application April 22, 1941, Serial No. 389,804

4 Claims. (Cl. 240—2.13)

The present invention relates to new and useful improvements in locks for automobile and similar vehicle doors, and has for its primary object to provide a translucent escutcheon plate for the keyhole of the lock and in which a push button is mounted leading to a lamp positioned behind the escutcheon plate whereby to provide sufficient illumination for the keyhole to facilitate insertion of the key therein.

A further object of the present invention is to provide a novel push button construction and otherwise to provide an attachment of simple and practical construction, which is neat and attractive in appearance, relatively inexpensive to manufacture and install in operative position on the automobile door and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout, and in which

Figure 1 is a fragmentary front elevational view of an automobile door showing the transparent illuminated plate surrounding the keyhole of the lock,

Figure 2 is a horizontal sectional view through the vehicle door showing the circuit wire extending therethrough to the frame of the car,

Figure 3 is a fragmentary vertical sectional view through the bracket for supporting the door lock and the lamp for illuminating the lock,

Figure 4 is a rear elevational view of the bracket assembly with the door shown in section,

Figure 5 is a fragmentary detail of one of the contacts for the hinged edge of the door,

Figure 6 is a similar view of the other of said contacts,

Figure 7 is a perspective view of the translucent escutcheon plate, and lamp shield, and

Figure 8 is a wiring diagram showing the connection for the lamp with the light circuit of the car.

Referring now to the drawings in detail, wherein for the purpose of illustration we have disclosed a preferred embodiment of the invention, the numeral 5 designates an automobile door having spaced walls to provide the compartment 6 therein. The outer surface of the door is provided with the usual opening 7 within which the door lock casing 8 of conventional construction is mounted, the casing being supported in a bracket 9 secured to the inner surface of the front panel of the door adjacent the opening.

Positioned in the bracket 9 is a substantially tubular housing 10 anchored in position by a set screw 11, the lock casing 8 being mounted in the upper portion of said shield, the front and rear portions of the housing having inwardly projecting flanges 12 and 13, respectively.

Secured to the front flange 12 is a transparent or translucent escutcheon plate 14 having an opening 15 in its upper portion in which the keyhole guide 16 for the lock is positioned, the escutcheon plate also having an opening 17 therein within which is slidably mounted a push button 18. The push button 18 is formed with a flange 19 adapted to abut the inner side of the escutcheon plate to prevent outward movement of the push button, the inner end of the push button being formed with a socket 20 adapted for engaging an electric lamp 21 having its base 22 slidably mounted in a socket 23 which is secured to the inner flange 13 of the shield by a plate member 24 through which the fastening screws 25 are inserted.

In the base of the socket 23 is a contact 26 and between the contact and the base 22 of the lamp is an expansible coil spring 27 yieldably urging the lamp outwardly, the contacts of the lamp being engageable with the contact 26 upon an inward depressing movement of the push button 18.

A circuit wire 28 leads from the contact 26 to a terminal 29 secured to the door 5 adjacent its hinged edge, the contact 29 being engageable by a spring projected contact 30 mounted in the door jamb 31 and having the circuit wire 32 extending therefrom to the battery 33 of the car.

From the foregoing it will be apparent that when the door is closed the contact 30 will engage the terminal 29 to close the circuit leading to the contact 26 and thus when the push button 18 is depressed, the lamp 21 will be energized and the keyhole illuminated through the plate 14.

It is believed the details of construction and manner of use of the device will be readily understood from the foregoing without further detailed explanation.

What we claim is:

1. A keyhole illuminating attachment for vehicle door locks comprising a transparent escutcheon plate for the keyhole, a push button mounted in said plate and a lamp having its bulbous end disposed in the path of the push button and engaged by the inner end of said push button for movement thereby into contacting position with an electric circuit for energizing the lamp.

2. A keyhole illuminating attachment for vehicle door locks comprising a transparent escutcheon plate for the keyhole, a push button mounted in said plate, a recessed head on the inner end of the push button, an electric lamp having its bulb end bearing against the head for slidably actuating the lamp, an electric socket slidably receiving the lamp for engaging a contact in the base of the socket upon inward movement of the push button and spring means urging the lamp out of contacting engagement.

3. A keyhole illuminating attachment for vehicle door locks comprising a housing secured in position in the door, and adapted to support the lock casing, a transparent cover plate for the housing and having an opening for receiving the keyhole guide of the lock, a push button slidably mounted in the cover plate, a recessed head on the inner end of the push button, a lamp socket secured to the inner end of the housing and a lamp in the socket and bearing against the bulb end of said head for movement into energizing position in the socket by the push button.

4. A keyhole illuminating attachment for vehicle door locks comprising a tubular housing, flanges projecting laterally inwardly from opposite sides at the ends of the housing and adapted to support the opposite ends of a lock casing positioned in the housing, a transparent cover plate secured to the flanges at the front end of the housing, said cover plate having openings therein, one of said openings providing access to the key hole of the lock, a push button positioned in the other of said openings, a lamp socket secured to the flanges at the rear of the housing and supporting a lamp in position for actuation by the push button, and means for securing the housing in the door of a vehicle.

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