April 4, 1950 J. GUERRA 2,503,044

ESCUTCHEON PLATE FOR LOCKS

Filed March 10, 1947

Fig. 1.

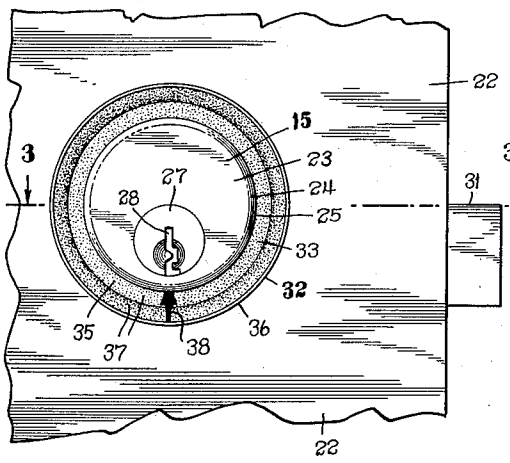


Fig. 3.

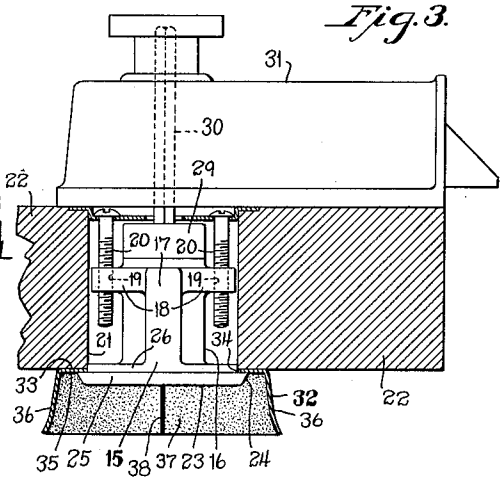


Fig. 2.

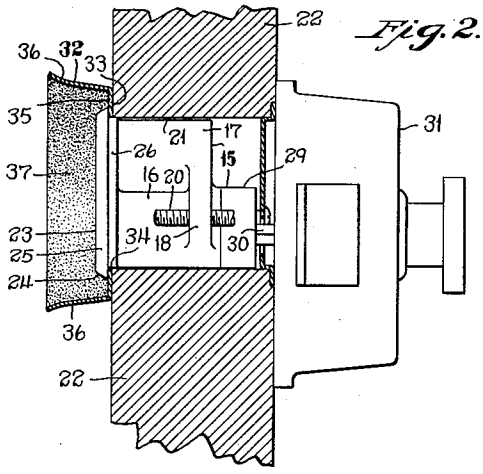


Fig. 4.

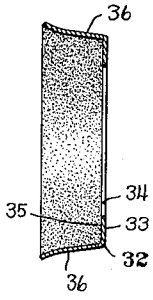


Fig. 5.

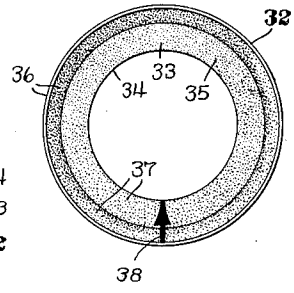


Fig. 6.

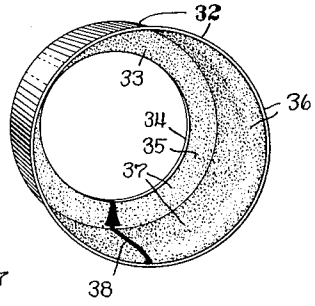


Fig. 7.

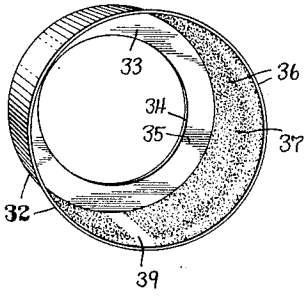
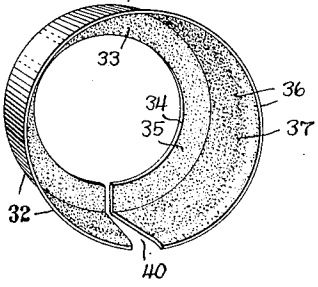


Fig. 8.



Inventor
John Guerra
By
Seymour, Earle & Nichols
Attorneys

Patented Apr. 4, 1950 2,503,044

UNITED STATES PATENT OFFICE

2,503,044

ESCUTCHEON PLATE FOR LOCKS

John Guerra, New Haven, Conn.

Application March 10, 1947, Serial No. 733,626

2 Claims. (Cl. 250—77)

1

The present invention relates in general to locks and more especially to an improved escutcheon plate for cylindrical locks.

An object of the invention is to provide a superior lock for doors and the like wherein the escutcheon plate is designed and constructed to facilitate locating the keyhole of the lock in the dark.

A further object of the invention is to provide an improved escutcheon plate for locks embodying an annular shield which projects forwardly from the face of the lock and is provided on its inside wall with luminescent indicium to establish the location of the keyhole of the lock in the dark.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features in the said disclosure which are novel over the prior art.

In the accompanying drawings, in which certain modes of carrying out the present invention are shown for illustrative purposes:

Fig. 1 is a front elevation of a cylinder lock embodying the improved escutcheon plate of this invention, the lock and escutcheon plate being shown mounted in a fragmentary part of a door;

Fig. 2 is a side elevation in section of the lock, escutcheon plate, and door assembly shown in Fig. 1;

Fig. 3 is a plan view of the lock, escutcheon plate, and door on section line 3—3 of Fig. 2;

Fig. 4 is a side elevation in section of the improved escutcheon plate of this invention;

Fig. 5 is a front elevation of the escutcheon plate shown in Fig. 4;

Fig. 6 is a perspective view of the escutcheon plate showing one form of indicium thereon;

Fig. 7 is a perspective view of the escutcheon plate showing a second form of indicium thereon; and

Fig. 8 is a perspective view of the escutcheon plate showing a third form of indicium thereon.

For the purpose of illustrating an embodiment of the invention, the latter is shown as used in conjunction with a cylinder-type lock but it will be appreciated that the invention is not limited to this application but is applicable to other types of locks.

The cylinder lock shown in the drawings is essentially of conventional construction and comprises a body indicated generally at 15 consisting of a cylindrical barrel-portion 16 provided with a solid upstanding lug-portion 17 formed integrally on its topside. In the present embodiment, the

2

lug 17 is substantially rectangular in cross section as shown in Fig. 3, its length being substantially equal to the length of the cylindrical barrel-portion 16 of the lock-body and its width being substantially one-third the diameter of the latter. Formed integrally with and extending laterally from opposite sides respectively of the back end of the lock-body 15 are suitable ears 18, each of which is provided with a screw-threaded aperture 19 in which suitable fastening-means such as a screw 20, is adapted to engage to secure the body of the lock in a suitable aperture 21 in the front of the door 22.

Formed integrally on the forward end of the lock-body 15 is a face-plate 23 which is substantially disk-shaped, its periphery being provided with a forwardly-sloping annular bevel 24, the mean diameter of the face-plate being somewhat greater than the over-all height of the body of the lock as shown in Fig. 2, so that the peripheral edge of the back face of the face-plate 23 constitutes, in effect, an annular flange 25. The latter may be, and is preferably, provided with an annular recessed shoulder 26 for supporting the improved escutcheon plate of this invention, as hereinafter described. The barrel-portion 16 of the lock-body is provided with an axial bore adapted to receive the revolvable plug 27 which characterizes this type of lock and which projects forwardly through an aperture in the lower part of the face-plate 23. The forward end of the revolvable plug 27 has a keyhole 28. The rear end of the revolvable plug extends beyond the rear end of the barrel-portion 16 of the lock-body and is adapted to support a collar 29 which is fixedly secured thereto so as to prevent unintentional removal of the plug from the lock. The usual type of bolt-operating link 30 extends rearwardly from the rear end of the revolvable plug and is adapted to operatively engage the bolt of a night latch 31 secured on the inside of the door.

In mounting locks in doors, it is customary to provide a suitable escutcheon plate. The present invention features the discovery of an improved escutcheon plate which is so constructed that it functions as an escutcheon plate and also as means to facilitate establishing the location of the keyhole in the dark. Referring to Figs. 4 and 5, the escutcheon plate for the cylinder-lock is essentially a cup-shaped member indicated generally at 32 having a substantially-flat bottom 33 provided with a concentric aperture 34, the diameter of which corresponds substantially to the diameter of the recessed shoulder 26 on the back of the face-plate. Thus, when the body of

the lock is inserted into the aperture in the bottom of the escutcheon plate in the manner shown in Figs. 2 and 3, the annular recessed shoulder **26** on the back of the face-plate may engage the peripheral edge of the aperture **34** so as to support the escutcheon plate in substantially concentric relation with respect to the face-plate of the lock. Moreover, the lock-body is adapted to be assembled in the escutcheon plate so that the back of the annular flange **25** of the face-plate engages against the inner annular surface **35** of the cup-bottom **33**, as a consequence of which the walls **36** of the cup-shaped escutcheon plate project forwardly from the plane of the face-plate. In the preferred construction, the walls **36** are substantially planar in cross section and flare outwardly slightly in the form of an annular shield. Although outwardly-flared walls are especially suitable for the purposes of the present invention, it will be understood that the walls may be arranged at substantially right angles to the bottom of the cup-shaped escutcheon plate, and that the walls may be other than of substantially planar cross section. Thus, the outer surface of the walls may be, in effect, built up to provide a relatively-thick ornamental annulus circumscribing the face-plate of the lock.

The walls **36** of the cup-shaped escutcheon plate are adapted to be provided with suitable luminescent-means and indicium associated therewith to facilitate locating the keyhole of the face-plate in the dark. Referring especially to Figs. 5 and 6, the inside surfaces of the cup-shaped escutcheon plate and in particular the walls **36** thereof, are shown provided with an application of a luminescent material, indicated generally at **37**. This material may be a fluorescent material, a phosphorescent material or a radioactive substance, and in one form is applied as a paint or similar coating of substantially uniform thickness and continuity around substantially the entire inside surface of the walls **36** of the escutcheon plate. In addition to the luminescent coating **37** on the inside surface of the walls **36**, an arrow **38** or equivalent indicium may be painted or otherwise superposed over the corresponding portion of the luminescent coating or field of the escutcheon plate, as shown in Figs. 5 and 6, the arrow extending in a radial direction across the luminescent field with the head of the arrow directed inwardly. Thus, when viewed in the dark, the luminescent walls **37** of the escutcheon plate constitute, in effect, a bright annular ring circumscribing the face-plate of the lock, whereas the arrow appears as a relatively black arrow in the luminescent field of the escutcheon plate. When assembling the escutcheon plate and lock in the door, the escutcheon plate is adapted to be oriented with respect to the face-plate, whereby the arrow is located substantially opposite the keyhole, so as to point directly at the latter.

Fig. 7 shows a modification of the indicia of Figs. 5 and 6, wherein another form of marking is provided in the luminescent field of the escutcheon plate by leaving a relatively-narrow uncoated space **39** extending radially across the luminescent field of the escutcheon-plate wall, this space appearing as a black line when seen in the dark.

A still further modification of the cup-shaped escutcheon plate is shown in Fig. 8. In this instance, a radial relatively-narrow slot **40** is formed in the luminescent walls of the escutcheon plate directly beneath the keyhole of the face-plate. The opposite sides of the slot **40** may be arranged to converge inwardly toward the center of the escutcheon plate so that as seen in the dark, the slot or indicium **40** appears as a dark arrowhead pointing directly at the keyhole of the lock.

It should be pointed out that since the walls of the escutcheon plate extend forwardly of and flare outwardly slightly from the face of the lock, the coated area of the walls presents a relatively-wide annular luminescent band circumscribing the face-plate of the lock when viewed from the front in the dark, the illumination provided by the luminescent material being in part reflected back onto the burnished face-plate of the lock so as to illuminate the latter, whereby the keyhole may be located with facility and dispatch in the dark. Moreover, since the luminescent field of the escutcheon plate is formed on the inside surfaces of the forwardly-projecting walls of the escutcheon plate, the luminescent field is protected both from the weather and from scratching or marring by the key.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

I claim:

1. In a lock, the combination with a lock-body having a face-plate provided with a keyhole; an escutcheon plate circumscribing said face-plate, said escutcheon plate comprising a relatively deep substantially cup-shaped member projecting forwardly of said lock to protect the face-plate thereof, said cup-shaped member being coated on its inner wall with a luminescent material for illuminating the face-plate and keyhole of said lock.

2. In a lock, the combination with a lock-body having a face-plate provided with a keyhole; an escutcheon plate circumscribing said face-plate, said escutcheon plate comprising a relatively deep substantially cup-shaped member projecting forwardly of said lock to protect the face-plate thereof, said cup-shaped member being coated on its inner wall and bottom with a luminescent material for illuminating the face-plate and keyhole of said lock.

JOHN GUERRA.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,522,169	Young	Jan. 6, 1925
1,527,527	Segal	Feb. 24, 1925
2,188,264	Fordyce	Jan. 23, 1940