March 1, 1949. P. F. MUNGAN 2,463,195

LOCKING DEVICE

Filed July 11, 1946

Fig. 1.

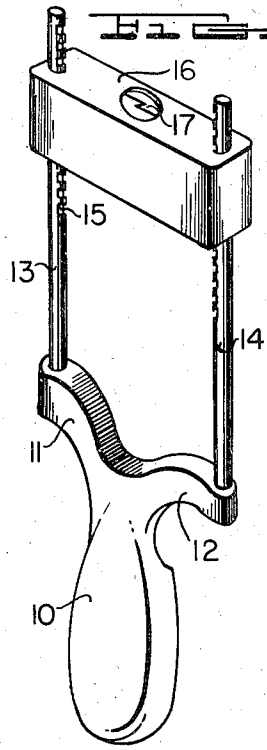
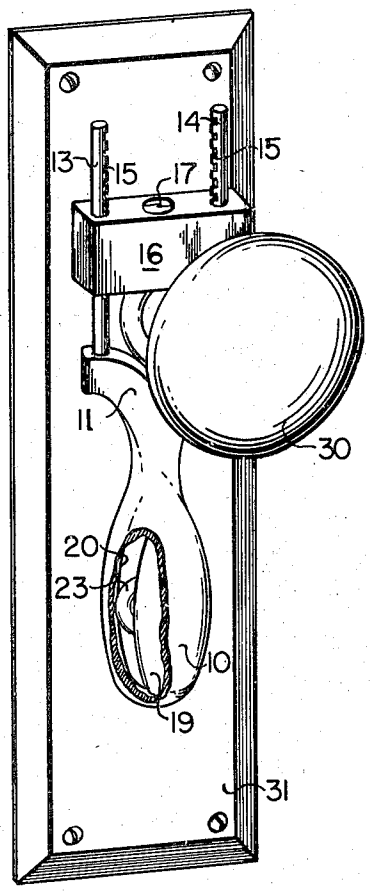


Fig. 2.



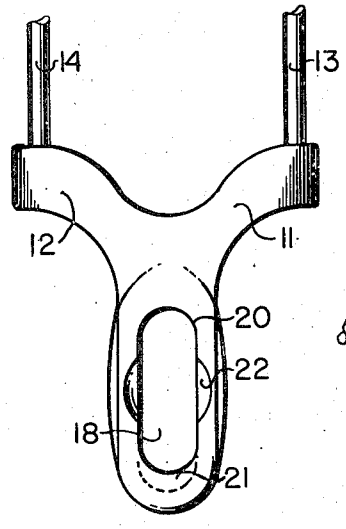
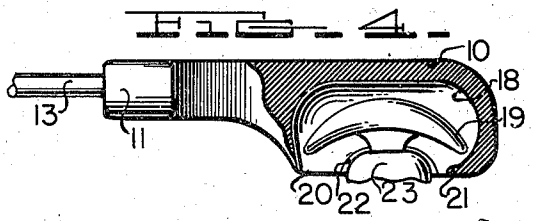


Fig. 3.

Fig. 4.



Inventor
Paul F. Mungan

By Donald E. Lane
Attorney

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LOCKING DEVICE

Paul F. Mungan, Philadelphia, Pa.

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4 Claims. (Cl. 70—416)

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This invention relates to locking devices and more particularly to a portable device for attachment to a manually operated lock bolt to prevent the same from being operated by unauthorized persons.

Doors provided with a bolt type lock manually operated by a knob or permanent key on the inside of the door are sometimes unlocked from the outside by unauthorized persons who break or remove a panel from the door and reach through the opening to operate the knob or permanent key which draws the locking bolt. This method of unlocking bolt locks may be relatively easy where the door is provided with a panel or panels of glass, or panels of thin wood or thin metal. Such bolt type locks manually operable from only the inside of the door are often provided as night locks on the doors of residences, stores, offices, and the like.

It is an object of this invention to provide a simple lock attachment which readily fits over the manual operator of a bolt lock to prevent its operation by unauthorized persons.

It is another object of this invention to provide a tamper-proof shield or cover to enclose and to prevent the operation of the operator of a conventional night lock.

It is another object of this invention to provide a tamper-proof cover for lock bolt operators which may be rigidly secured in proper position by being locked to the shank of the usual door knob.

It is a still further object of this invention to provide a tamper proof cover or shield for lock bolt operators which may be easily and economically manufactured for application to the lock-bolt operators of door locks already in use.

Other objects and advantages of this invention will be readily apparent from the following description of a preferred embodiment of my invention, illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of a locking device embodying my invention before the device is applied to a door lock.

Figure 2 is a perspective view of the locking device of Figure 1 applied to a conventional door lock.

Figure 3 is an elevation view of the underside of a portion of the locking device shown in Figures 1 and 2.

Figure 4 is a side elevation view partly cut away of the locking device of Figure 3, illustrating its application to a conventional lock bolt operator.

Referring to Figure 1, the locking device illustrated includes a shield member 10 provided with projecting arms 11 and 12, the latter having parallel bars 13 and 14 projecting therefrom. The bars 13 and 14 may be provided with notches 15 or the like therealong to adjustably secure a locking member 16 thereto. The bars 13 and 14 and the locking member 16 may be similar to the conventional bicycle lock devices in which notched bars extending between the spokes of a bicycle wheel are engaged by a removable locking member.

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The shield member 10 and its arms 11 and 12 may be fabricated from sheet metal or may be of cast metal or plastic or of hard wood or other materials, as will be readily apparent to those skilled in the art. The bars 13 and 14 are securely fastened to the arms 11 and 12 or may be integral therewith. The locking member 16 may be of metal or the like of any suitable construction and may be provided with an opening 17 to receive a key, or may be provided with a combination locking mechanism.

The main body of the shield member 10 is hollowed or recessed on its under side to provide a chamber 18 to receive a bolt operator or permanent key 19, the latter being illustrated best in Figure 4. The chamber 18 is provided with an elongated opening 20, as shown in Figure 3, which opening is somewhat smaller than the size of the chamber. The body of the shield member 10 has a lip portion 21 adapted to extend under a portion of the operator 19 when the shield 10 is fitted over the operator 19 with the latter within the chamber 18. The opening 20 may be somewhat enlarged as shown at 22 in Figures 3 and 4 to fit around the bushing or hub 23 of the operator 19.

The method of operation of the locking device described above will now be explained. Referring to Figure 2, a conventional door latch and lock device having a door knob 30 to operate a door latch mechanism (not shown) is supported by a plate 31 attached to a door. The lock bolt operator or permanent key 19 is located below the knob 30 and is also supported by the plate 31. The operator 19 is in the vertical position shown when the lock bolt (not shown) is extended to the door-locking position. The shield member 10 is then positioned over the operator 19 with the latter in the chamber 18 of the member 10 and with the lip 21 of member 10 extending under the lower end of operator 19. In this position, the bars 13 and 14 extend from the member 10 upwardly, one on either side of the shank of the door knob 30, and the locking member 16 is positioned

on the bars 13 and 14 from the free ends thereof. The member 16 is urged downwardly along the bars 13 and 14 until it engages the shank of the door knob 30 and extends partially under the upper portion of the knob 30. The member 16 is locked in the position shown in Figure 2 with its locking mechanism engaging the notches 15, thereby preventing its removal from the bars 13 and 14. As shown, the member 10 encloses the bolt operator 19 and prevents actuation of the operator by unauthorized persons. The locking device cannot be removed from the operator 19 until the locking member 16 is unlocked by a key or the like and removed from the bars 13 and 14.

The locking member 10 illustrated is intended for use with lock bolt operators of the shape shown, and it will be readily apparent that the shape of the chamber 18 may be modified to fit operators of other shapes or to fit operators which extend in a horizontal direction rather than a vertical direction when the locking bolt is in the door locking position. Some lock bolt operators turn through an angle of ninety degrees to operate the lock bolt and others turn through one hundred and eighty degrees to operate the lock bolt. If the lock bolt operator 19 is not in the vertical position illustrated when the lock bolt is in the door locking position, in many cases it may be adjusted on its shank to be in said vertical position for use with the shield member 10 illustrated, or else the shield member 10 may be shaped so that its recess 18 receives the operator 19 in whatever position it may be desired to lock it in. Where the operator 19 turns through an angle of one hundred and eighty degrees between the locked and the unlocked positions, it will be apparent that the locking device shown may be used to securely lock the door bolt in either the door-locked or door-unlocked position.

The use of the locking device described on door locks of the type shown prevents a locked door from being unlocked by an unauthorized person who might gain access to the lock operator by removal or breakage of a panel in the door. Likewise, the locking device is effective to prevent use of a locked door by unauthorized persons who may be on the same side of the door as the shielded lock operator. Numerous modifications and changes in minor details, proportions, and design of the structure illustrated will be readily apparent to those skilled in the art and may still be within the scope of the invention as defined in the following claims.

I claim:

1. A locking device for a manually-operated lock bolt comprising in combination, a shield member having an elongated recess in the underside thereof to receive and closely enclose an elongated bolt operator, means including a notched bar secured to and projecting from said shield member, and a locking member engageable with said notched bar to secure said shield member in position over said bolt operator.

2. A locking device for a manually-operated lock bolt comprising in combination, a shield member having an elongated recess in the underside thereof to receive and closely enclose an elongated bolt operator and having a lip portion to extend under a portion of said operator, and a locking member engageable with a portion of said shield member to secure said shield member upon and enclosing said bolt operator.

3. A locking device for a manually-operated lock bolt comprising in combination, a shield member having an elongated recess in the underside thereof to receive and enclose an elongated bolt operator, the lower portion of said shield member having a lip portion to extend under the lower portion of said bolt operator, a bar extending upwards from the upper part of said shield member, and a locking member engageable with said bar to lock said shield member over said bolt operator.

4. A locking device for a manually-operated door lock bolt operator positioned adjacent a door knob comprising in combination, a shield member having a recess therein to receive and enclose said bolt operator, a pair of bars connected to said shield member and projecting therefrom, said bars being adapted to extend past the shank of said door knob, and a locking member detachably secured to said bars on the side of said door knob remote from said shield member for engagement with the underside of said door knob to lock said shield member over said bolt operator.

PAUL F. MUNGAN.

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