

(No Model.)

J. A. GIESE.
KEYHOLE GUARD.

No. 528,667.

Patented Nov. 6, 1894.

Fig. 1.

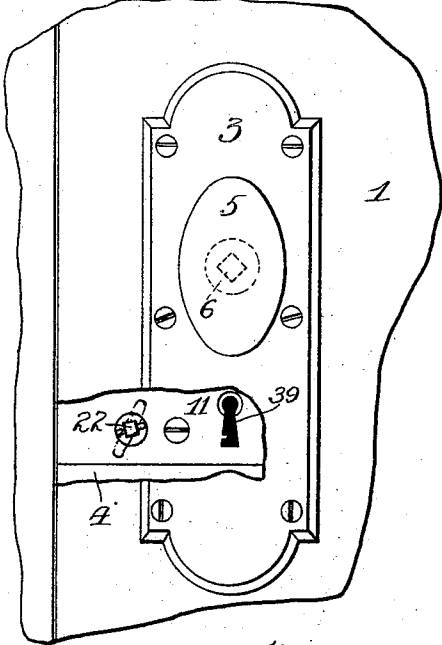


Fig. 2.

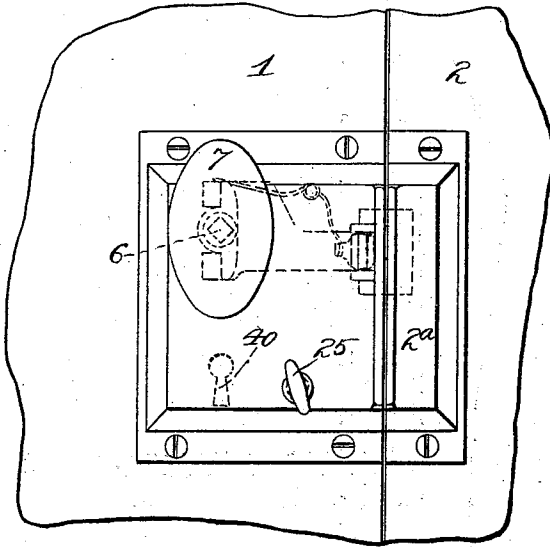


Fig. 3.

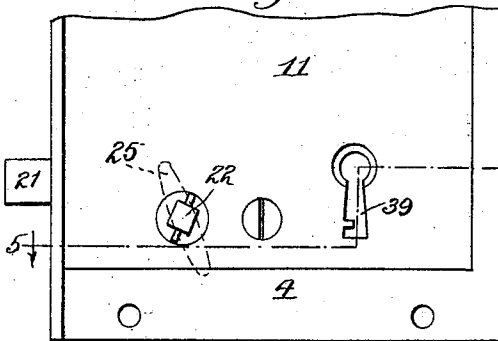


Fig. 4.

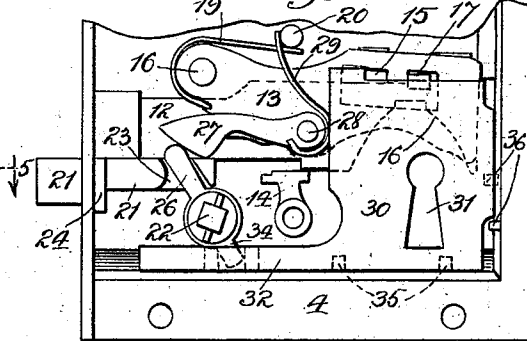


Fig. 5.

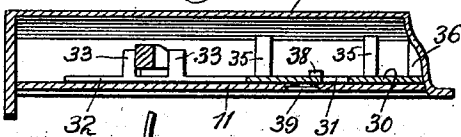


Fig. 6.

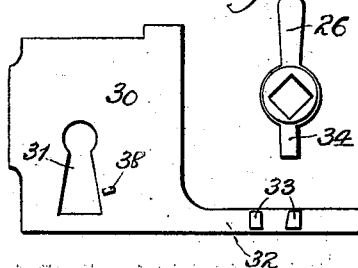


Fig. 8.



Fig. 7.

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UNITED STATES PATENT OFFICE.

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KEYHOLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 528,667, dated November 6, 1894.

Application filed February 16, 1894. Serial No. 500,372. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. GIESE, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Safety Attachments for Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to safety attachments for locks, such as are designed for use upon the cabin or state-room doors of vessels, the doors of hotel and boarding-house apartments, and for the doors of various other classes of rooms and apartments.

Among the primary objects of my invention is included that of producing a safety attachment for locks which shall, under certain circumstances, effectually prevent the unlocking of the door by any other key than that actually in possession of the occupant of the room or apartment: furthermore, to produce attachments, for the purpose above stated, which shall be capable of application to a great variety of locks; which shall not prevent (under certain conditions) the usual working of the main locking-bolt by the proper key; which shall be simple, strong and durable in construction, and direct, positive and reliable in its operation.

The above-mentioned objects, and also such others as may appear from the ensuing description, are attained by the devices illustrated in the accompanying drawings, in which—

Figure 1 is an outer side elevation of part of a door and one of its jambs, having a lock applied thereto which is provided with attachments embodying my invention. Fig. 2 is an inner side elevation of the structure shown in Fig. 1. Fig. 3 is an enlarged outer side elevation of the lower part of the lock-casing; the cap-plate being in position. Fig. 4 is an enlarged outer side elevation of the lower part of the lock; the cap-plate being removed to expose the interior parts. Fig. 5 is a horizontal section of the lock, taken on the line 5—5 of Fig. 3; the direction of view being downward, as indicated by the arrows applied to the section-line. Fig. 6 is a de-

tached view, in end elevation, of the thumb-button spindle, showing its followers. Figs. 7 and 8 are detached views, in inner and outer side elevation respectively, of the guard-slide and of the tumbler for the thumb-spindle followers.

Before describing in detail the devices shown in the drawings as embodying my invention, I desire to state that while I have shown the safety-attachments as applied to a lock which is particularly adapted for use upon the cabin or state-room doors of passenger-carrying vessels, I do not desire to confine myself at all to this precise use of the attachments.

Attachments embodying my invention are equally applicable to the doors of other rooms and apartments, and to various types of locks, as will be readily perceived from the ensuing description.

In Figs. 1 and 2 of the drawings, 1 designates part of a cabin or state-room door, and 2 part of the jamb which carries the keeper 2^a. A suitable face-plate 3 is shown as secured to the outer side of the door 1, and the casing 4 of a lock is shown as secured upon the inner side of the door in proper proximity to the keeper 2^a. A knob 5 is shown as secured upon the outer end of a knob-spindle 6 which passes through the upper part of the face-plate 3 and also through the lock-casing, and which carries at its inner end a companion-knob 7. The knob-spindle is provided with the usual followers 8 engaging studs 9 on a latch-slide 10, so that when the knob-spindle is turned in either direction the latch will be retracted. Inasmuch as the knob-spindle and the latch, and also the latch-slide and its immediate accessories, have no direct relation to my invention, I have contented myself with simply showing these parts dotted in Figs. 1 and 2.

The lock-casing 4 is shown as shallow, and of approximately rectangular form and also as provided with a removable rectangular cap-plate 11 which intervenes between the inner surface of the door and the body of the lock-casing; but it will be clearly apparent, from the ensuing description, that the casing 4 and its cap-plate 11 may be of any desirable form without departing from the essential spirit of my invention.

12 designates the main locking-bolt and 13 the tumbler therefor, this main locking-bolt being shown as located horizontally beneath the main latch-slide 10 and as movable between lower and upper guiding-lugs 14 and 15 formed upon the inner surface of the back of the casing 4. A recess 16 is shown as formed in the under side of the inner end of the locking-bolt 12 into which engages the fin of the locking-key.

The main locking-bolt tumbler 13 is shown as pivoted at its outer portion (that is, the portion which is presented toward the keeper 2^a) upon a stud 16^a protruding outwardly (that is, now, toward the outside of the door) from an adjacent part of the lock-casing back. An outwardly extending stud 17 formed upon the inner end of the slide 12 protrudes into a slot in the inner end of the tumbler and acts in conjunction with a lug 18 protruding downwardly from the upper margin of the slot. A spring 19, attached at one end to the outer end of the tumbler, engages at its free end with a stud 20 on the back-plate of the lock-casing and depresses the inner end of the tumbler so as to maintain the upper margin of the tumbler-slot in engagement with the stud 18. As the key is turned, in one direction or the other, it first raises the inner end of the tumbler (by engaging the lower edge thereof) and then moves the slide and tumbler longitudinally, so as to bring the lug 18 at the opposite side of the lug 17 compared to its starting-position.

The parts above described are shown principally for purposes of illustration, so as to render clear the position and operation of my attachments in a lock; and, as before stated, wide variations of form and arrangement of the principal parts of the lock itself may exist.

21 designates the auxiliary or safety locking-bolt and 22 the post or spindle for said bolt. This safety locking-bolt 21 is shown as located adjacent to the lower outer corner of the lock-casing, and as having on its inner side a transverse recess or groove 23; a shoulder 24 on the outer end of the bolt serving to limit the outward movement thereof. The spindle 22 of the safety bolt 21 extends only through the inner or back wall of the casing 4 (not through the cap-plate 11 thereof) and at its inner end said spindle carries a thumb-button 25 which protrudes into the room or apartment to the door of which the lock is applied. At one side, within the lock-casing, the spindle 22 carries a radial follower-arm 26 which constantly engages within the recess 23 of the bolt 21, so that when the spindle and arm are turned in one or the opposite direction, the bolt 21 is protracted out of or retracted into the casing 4.

27 designates the safety-bolt tumbler which is pivoted at its inner end upon a stud 28 carried by the main locking-bolt tumbler 13. A spring 29 which is secured at one end to the inner end of the tumbler 27, engages at

its free end the stud 20, and thus forces the outer or free end of the tumbler downward. As the spindle 22 and its follower 26 move in one or the opposite direction, the enlarged free end of the tumbler 27 engages one or the opposite side of the follower 26 and thus retains said follower and the bolt 21 at one or the other limit of their movement:

30 designates a guard-slide, the body portion of which is shown as of approximately rectangular marginal contour, but which may be of any desirable marginal contour. The body-portion of this guard is formed with a key-hole opening 31 and said slide is shown as located in the inner lower corner of the lock-casing. Said guard-slide 30 is shown as provided with an extension-arm 32 which protrudes outwardly from the lower outer corner of the guard and toward the keeper 2^a of the lock, and on its outer side (that is, the side toward the outer surface of the door) said arm 32 is provided with two lugs 33.

In accordance with my invention, I provide the spindle 22 with an additional follower-arm 34 which extends radially and opposite the arm 26 and which engages constantly between the lugs 33. The guard-slide 30 rests and moves upon two lugs 35 located in the inner part of the lower wall of the casing, and also, when in its innermost position, said slide bears upon two lugs 36 at the lower part of the inner wall of the casing. The upper part of the guard-slide rests and moves always upon a sunken portion of the inner end of the lug 17, so that no upward displacement of the slide can occur. Inasmuch as the guard-slide 30 works directly against the inner surface of the cap-plate 11, no key-ward is formed on said plate, but a key-ward 38 is located on the inner surface of the guard-plate at a point adjacent to the key-hole 31 thereof.

A key-hole 39 is formed through the cap-plate 11 of the lock-casing and let it be assumed that the door is locked by the main locking-bolt 12, and also that the safety locking-bolt 21 is retracted; the occupant of the room being out of the same. With the safety locking-bolt retracted, the guard-slide 30 is at the outer limit of its movement, and the guard-slide key-hole 31 is in register with the key-hole 39. Consequently the occupant of the room is able to insert his key through the key-holes 31 and 39 and to retract the main locking-bolt so as to gain entrance to the room. Once in the room, the occupant thereof should shut the door and, having of course previously withdrawn his key from the lock, should turn the button 25 so as to throw the safety locking-bolt 21 outward into position to lock the door. By so turning the button, the occupant moves the guard-slide 30 inward so as to carry the key-hole 31 of said slide out of register with the key-hole 39 of the lock-casing. The guard-slide 30 now closes the key-hole and no person can insert a key into the lock.

When the occupant leaves the room, he un-

locks the safety-bolt 21 and so moves the guard key-hole into register with the casing key-hole 39 and can then insert his key from the outside and lock the door. After this an attendant provided with a pass-key can unlock and lock the door.

Were the occupant of the room to inadvertently fail to lock the door after entering the room, a stranger in wrongful possession of the key could of course enter, and perhaps steal from the room, and finally lock the door from the outside, so as to imprison the rightful occupant; provided no key-hole was provided for the inside of the lock. This can, of course, be readily prevented by an inner key-hole (shown in dotted lines) formed through the back-plate of the lock-casing in register with the outer key-hole 39.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A safety-locking attachment comprising a safety locking-bolt independent of the main locking-bolt, a sliding-guard arranged to cover and uncover the key-hole for the main locking-bolt, a turning-spindle carrying followers engaging the safety-bolt and guard and actuating the same, substantially as set forth.

2. A safety lock-attachment, comprising a safety locking-bolt independent of the main locking-bolt, a sliding-guard for covering and uncovering the key-hole for the main locking-bolt, a turning-spindle having followers engaging the safety-bolt and guard to actuate the same, and a spring-pressed catch or tumbler engaging one of said spindle-followers so as to hold the same at one and the other limit of its movement, substantially as set forth.

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Witnesses:

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