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H. G. VOIGHT.
KEYHOLE SHUTTER FOR LOCKS.

APPLICATION FILED OCT. 8, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

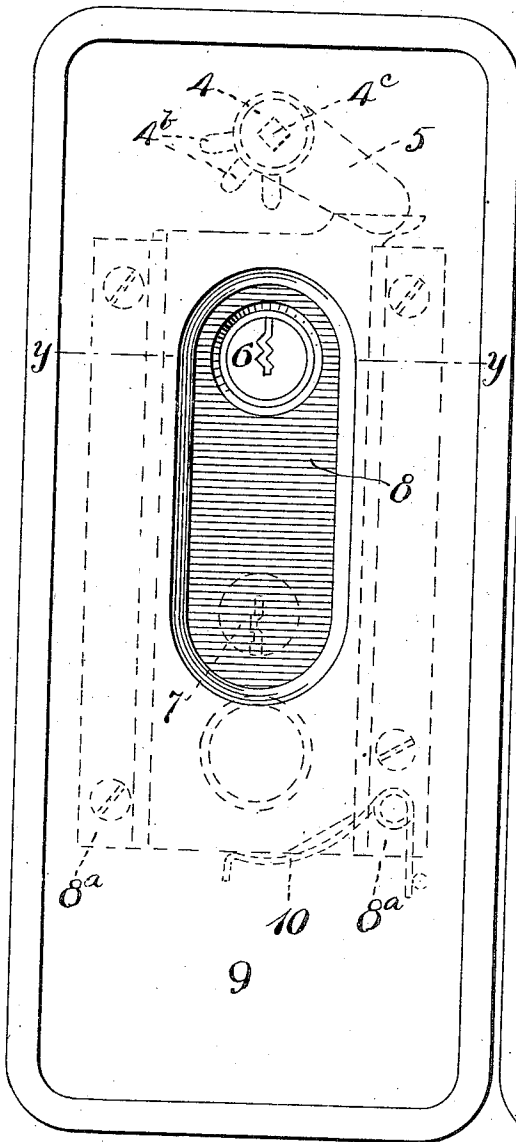
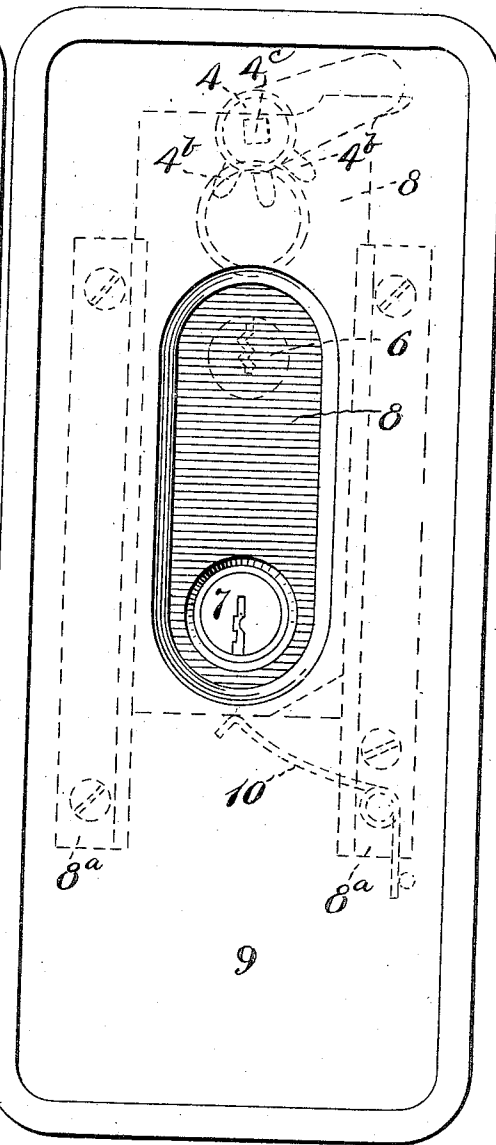


Fig. 2.



Witnesses
Chas. A. [Signature]
W. H. [Signature]

Inventor
HENRY G. VOIGHT
By his Attorneys
Daniel D. [Signature]

UNITED STATES PATENT OFFICE.

HENRY G. VOIGHT, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO RUSSELL & ERWIN MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

KEYHOLE-SHUTTER FOR LOCKS.

No. 845,019.

Specification of Letters Patent.

Patented Feb. 19, 1907.

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To all whom it may concern:

Be it known that I, HENRY G. VOIGHT, a citizen of the United States, residing at New Britain, county of Hartford, Connecticut, have invented certain new and useful Improvements in Keyhole-Shutters for Locks, of which the following is a full, clear, and exact description.

My invention relates to improvements in locks, and consists in providing in that type of lock which includes two keyways a shutter by which only one of said keyways is exposed or accessible at a time.

This invention is of particular utility in that type of lock having two keyways arranged to receive two different keys, one of which, for example, may be employed to release a dead-locking device. In such an instance it is desirable that only this one keyway be exposed when the dead-lock is on. When the dead-lock is off, this the last-mentioned keyway is covered and the other exposed.

In the accompanying drawings, Figure 1 is a front elevation of an escutcheon-plate, showing improved shutter attachment in one position. Fig. 2 is a similar view showing the shutter in another position. Fig. 3 is a view of the interior of a lock-case, showing the dead-locking appliance. Fig. 4 is a section on the line X X, Fig. 3, and showing a portion of the door. Fig. 5 is another section taken on line Y Y in Fig. 1.

1 represents lock-case; 2, a latch-bolt, which may have any suitable means for retracting the same. (Not shown.) 3 is a dogging-slide arranged to coöperate with said latch-bolt to prevent its retraction when said slide is in the position shown in Fig. 3. This is done by means of a tumbler 3^b, pressed by spring 3^c, and which has a projection 3^d arranged to engage behind a fixed stop 1^a on case 1 when the slide is in said dead-locking position. The dogging-slide may be actuated from the outside by means of a cam mounted on key-hub 6, arranged to engage tumbler 3^b and free the shoulder 3^d from stop 1^a, so that said slide may readily be moved in either direction by the use of a suitable key. From the inside the slide would be moved by an arm (not shown) mounted on a hub opposite to hub 6 and ro-

tatable by the usual thumb-turn. (Not shown, but well known in the art.)

5 is a lever-arm connected to hub 4 by a spindle 4^c. On the outside of the door are represented two locks 6 and 7. (See Figs. 1 and 2.) Each of these locks is provided with a keyway, and they are intended to separately and independently perform certain functions.

8 is a shutter in suitable guideways 8^a 8^a on the back of the escutcheon-plate 9. This shutter 8 is provided with two windows or openings spaced apart differently from the spacing between the keyways in locks 6 and 7. Hence when one of said locks is exposed the other one will be covered. The escutcheon-plate itself has a window or opening which would expose both of said keyways at a time were it not for the shutter. The shutter itself stands between the back of the escutcheon-plate 9 and the front of the locks 6 and 7.

10 is a spring acting to move the shutter in one direction. The arm 5 makes suitable pressing engagement with the shutter—as, for example, illustrated in dotted lines in Figs. 1 and 2—so that when the dead-locking slide is moved into the dead-locking position by rotating the thumb-turn it will shift the shutter from the position shown in Fig. 2 to the position shown in Fig. 1, thus exposing only the keyhole in lock 6. At such times only such a key as is adapted to the lock 6 can be inserted. By means of such a key the dead-locking device may now be retracted. This retracting of the dead-lock device will restore the arm 5 to the position shown in Fig. 2, so that as soon as the key is withdrawn from lock 6 the shutter will be moved by spring 10 from the position shown in Fig. 1 to the position shown in Fig. 2, covering keyhole 6 and exposing keyhole 7. At such times only such a key as is adapted to the lock 7 can be employed.

As will be seen, the main purpose of this invention is to prevent confusion in the use of keys. Were two keyholes exposed, it is obvious that the user of a key might be confused and endeavor to insert the key in the wrong lock. By this shutter arrangement, however, such a mistake will be avoided. The only key adapted to lock 6 is the grand

master-key, and inasmuch as such key is rarely used and never used excepting the door is dead-locked from the inside there is little or no danger of confusion, because the holder of the grand master-key is always one entirely familiar with the lock. The function of the lock 7, however, is to receive the change-key or the ordinary master-key. With the lock in use in a hotel, for example, keyhole 7 would be exposed when the room is vacant. A guest of the hotel upon being given a key would upon approaching his room observe only one keyhole, and that in lock 7. As that lock is adapted for operation by the guest-key, all danger of confusion would be eliminated, whereas if lock 6 were also exposed confusion might result. The shutter also acts as a warning to the floor attendant, who is provided with a master-key, for when the dead-lock is applied the shutter is moved to the position indicated in Fig. 1, and the attendant, being familiar with the lock and observing that only the upper lock is exposed, would be clearly advised thereby that the room was occupied. The shutter therefore performs several valuable functions.

What I claim is—

1. In a lock of the character described, a plurality of keyholes arranged to be accessible from outside of the door, a shutter having a plurality of key-passages, said passages being spaced apart differently from the spacing between the keyholes, a means for shifting said shutter from the inside of the door to expose only one keyhole at a time.

2. In a lock of the character described, a plurality of keyholes arranged to be accessible from outside of the door, a shutter having a plurality of key-passages, said passages being spaced apart differently from the spacing between the keyholes, a means for shifting said shutter from the inside of the

door to expose only one keyhole at a time, in combination with the dead-locking device coöperating with said shutter to move the same when the dead-locking device is operated.

3. In a lock of the character described, two keyholes arranged to be accessible from the outside of the door to which the lock is applied, a shutter having two key-passages, said key-passages being spaced apart differently from the spacing between the two keyholes, a means for shifting said shutter, said means comprising a manually-controlled lever-arm for moving said shutter in one direction and a spring-arm for moving it in the other direction.

4. In a lock of the character described, a latch-bolt and dead-locking device therefor, means for operating the dead-locking device from the inner side of the door to which the lock is applied, two key-actuated devices accessible from the outer side of the door and including two independent and separate keyholes, a shutter having two key-passages spaced apart differently from the spacing of said keyholes, means for moving the shutter in one direction when the dead-locking device is applied, and spring-controlled means for yieldingly pressing the shutter in an opposite direction when the dead-locking device is retracted.

5. In a lock of the character described, a plurality of keyholes arranged to be accessible from the outer side of a door to which the lock is applied, a shutter for said keyholes, and means for shifting said shutter from the inside of the door to expose only one keyhole at a time.

HENRY G. VOIGHT.

Witnesses:

M. S. WIARD,
W. R. STONE.