(No Model.)

O. STODDARD.

KEYHOLE GUARD.

No. 478,768. Patented July 12, 1892.

Fig. 1.

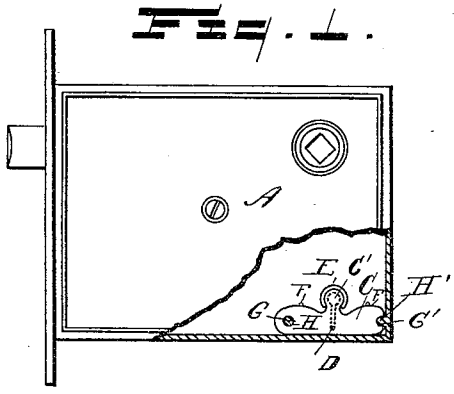


Fig. 2.

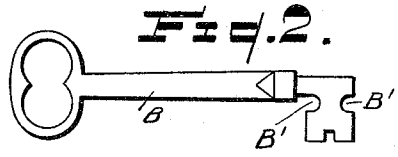


Fig. 4.

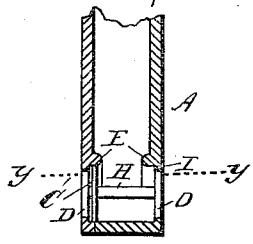


Fig. 3.

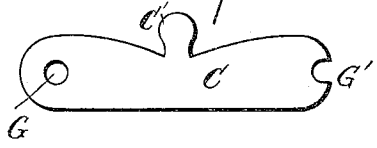


Fig. 9.

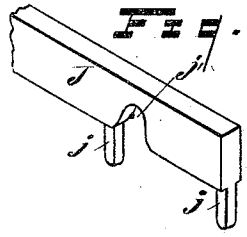


Fig. 8.

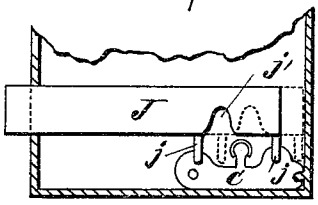


Fig. 5.

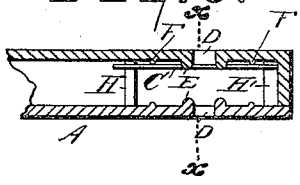


Fig. 6.

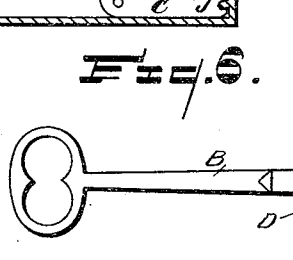
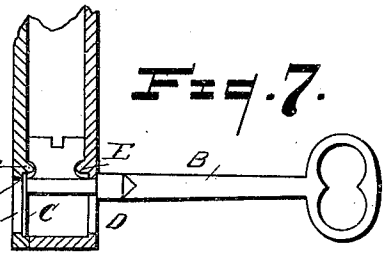


Fig. 7.



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OSCAR STODDARD, OF DETROIT, MICHIGAN.

KEYHOLE-GUARD.

SPECIFICATION forming part of Letters Patent No. 478,768, dated July 12, 1892.

Application filed March 3, 1892. Serial No. 423,635. (No model.)

To all whom it may concern:

Be it known that I, OSCAR STODDARD, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Door-Locks, of which the following is a specification.

My invention relates to improvements in locks of that class in which a movable plate is employed to close the keyhole opposite that in which the key may be inserted, and more particularly to that variety in which the said guard-plate is moved bodily across the lock-case by the entering key.

The objects I have in view are, first, to so construct the said guard-plate and the lock-case as to permit of the use of a cheap solid key without barrel or stub-hole; secondly, to so construct the case as to prevent access to the edges of said guard-plate by any lock-picking device; thirdly, to cause said plate to exert a frictional pressure on the key-bit, whereby the key may be retained in whatever position it may be left in the lock; fourthly, to render it impossible for the guard-plate to be pushed aside and the door unlocked from the outside, even though the key be removed from the inner side of the door. I attain these objects in the manner illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the plate side of my improved mortise-lock with a corner of the plate broken away, the exposed part of the ring being shown in section and the bolt omitted. Fig. 2 is a side elevation of the key, showing the recesses in its bit. Fig. 3 is an enlarged elevation of my keyhole guard-plate. Fig. 4 is a transverse vertical section at *x x*. Fig. 5 is a horizontal section at *y y*. Figs. 6 and 7 are sectional elevations similar to Fig. 4, but showing the key inserted from either side of the lock and the resultant position of the guard-plate. Fig. 8 is a longitudinal vertical section of the lower part of the lock-case, showing the locking-bolt in elevation thrown forward, with its pendent lugs behind the raised portions of the guard-plate, whereby the latter is prevented from being pushed back by means of a key or a tool entering the outer keyhole. The dotted outlines show the position of the bolt and its lugs when the bolt is thrown back. Fig. 9 is a perspective of the bolt and its pendent lugs.

Like letters refer to like parts in the several figures.

In the drawings, A represents the lock-case and its plate, and B is a solid key having a semicircular groove B′ in each end of its bit.

C is a thin plate of elastic sheet-steel struck or stamped to the outline seen in Fig. 3. It has a central elevated head-piece C′, which covers the upper portion of the keyhole D. A hole G at one end and a recess G′ at the other end adapt it to slide on a stub H and a rib H′, respectively, these being cast with the case in the positions shown and which support and guide said plate when pushed back and forth across the case by the entering key.

E is a sector-flange cast around the head of each keyhole on the inner side of the case. The recesses B′ of the key straddle these flanges, and thus support the key in its horizontal plane as soon as turned out of the line of the keyhole. Otherwise it would be necessary to provide a pivot-stub on each side of the plate and to drill the end of the key to accomplish the same end—a considerable expense, which I thereby avoid. Each sector-flange has a rabbeted seat I, Figs. 6 and 7, into which the plate C is pushed by the entering key, so leaving it that its edges are not to be reached by any sharp-pointed or hooked instrument with the intention of displacing it.

It not being desirable in the manufacture of so-called "common locks" to attempt closer fits than the "assembling" of good smooth castings will afford, it is possible that much shaking or jarring of the door might cause the key to work around in and drop out of the lock. To guard against this, I secure a constant pressure on the key by setting back the elastic guard-plate C against it. This I accomplish by casting two small vertical ribs F on the insides of the lock-case and plate, respectively, and against which the plate C rests, thus insuring the holding of the key in any position out of the plane of the keyhole, and to further guard against the plate C being pushed aside from any carelessness of the person locking the door in turning the key too far around into the plane of the keyhole, so that the guard-plate could be pushed back

from the outside, I cast two lugs *j j*, pendent from the lower edge of the locking-bolt J, at such points that when said locking-bolt is thrown to lock the door the lugs *j j* will be behind the raised parts of the guard-plate C, which then covers the outer keyhole, and from which it cannot be pushed back until the bolt is thrown, as will readily be seen in Fig. 8.

This lock cannot be picked from the outside when the door is locked, whether the key be left in or removed from the lock.

What I claim as my invention, and wish to secure by Letters Patent, is—

In a door-lock, the combination of the casing having the sector-flanges, the key having the guiding-recesses, the guard-plate having the raised ends, and the locking-bolt having the depending lugs or stops.

OSCAR STODDARD.

Witnesses:
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