(No Model.)

M. M. HENRY.

CATCH FOR LATCH BOLTS.

No. 265,924. Patented Oct. 10, 1882.

Fig. 1.

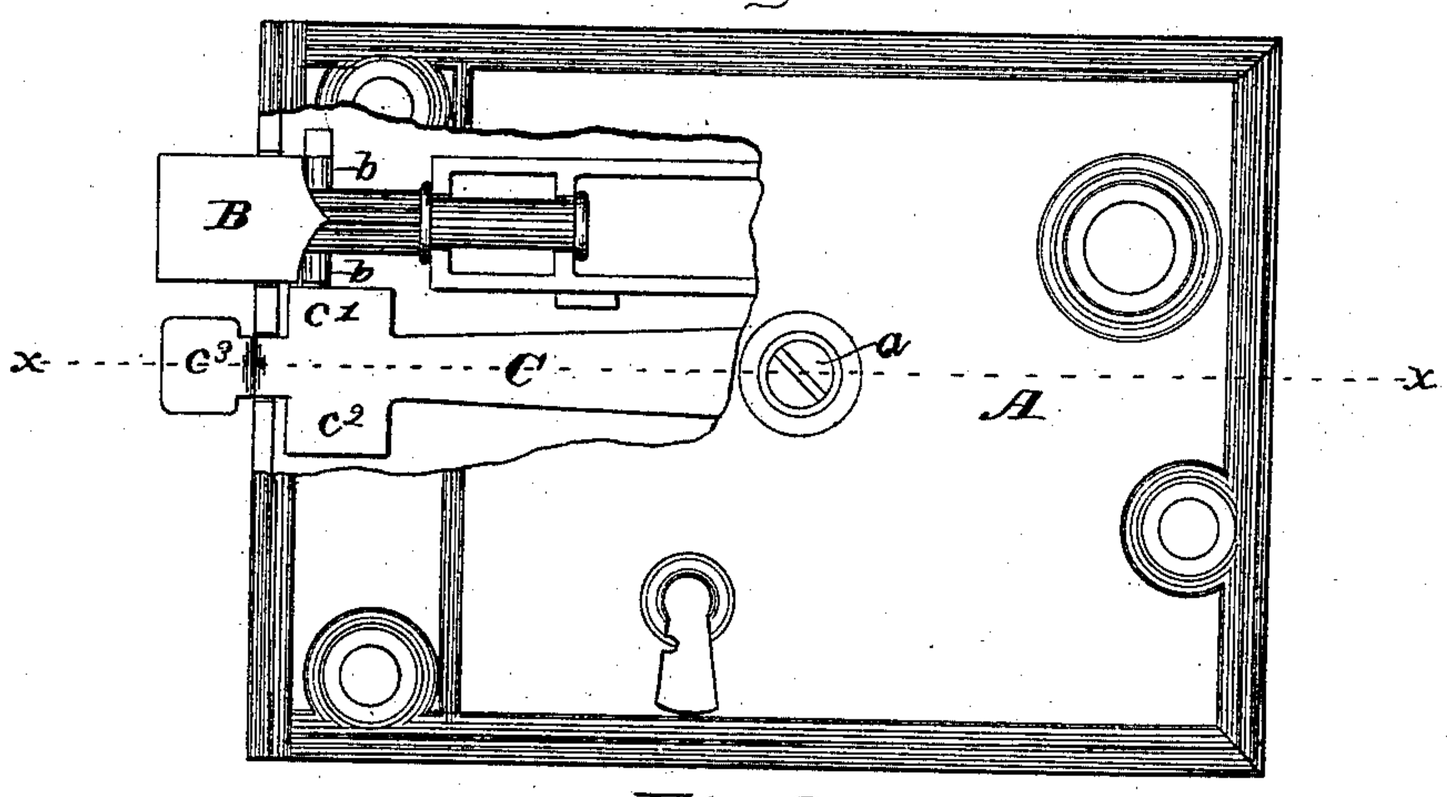


Fig. 2.

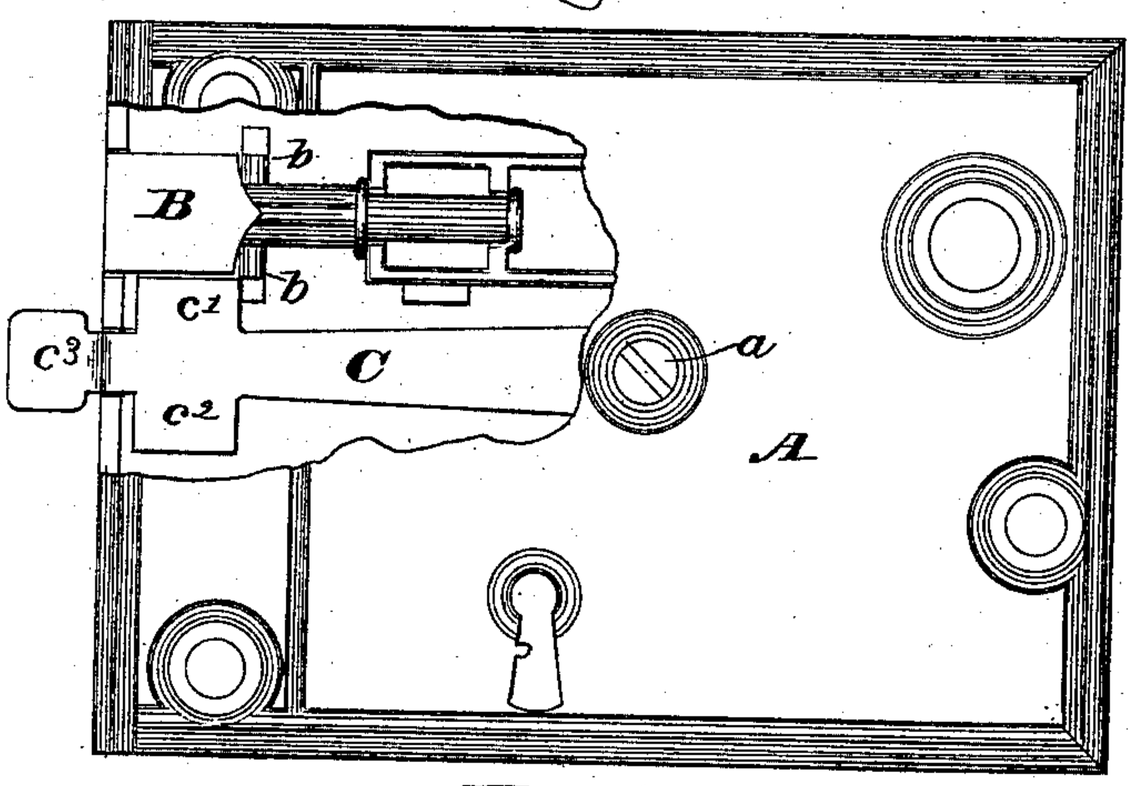


Fig. 3.

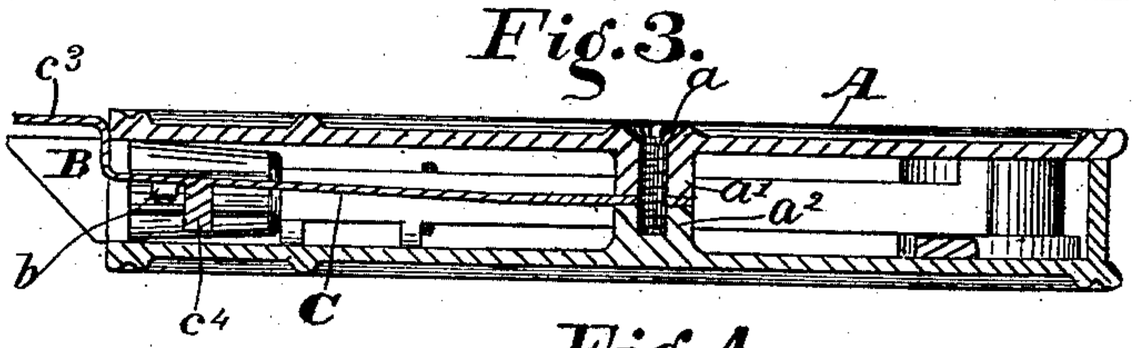
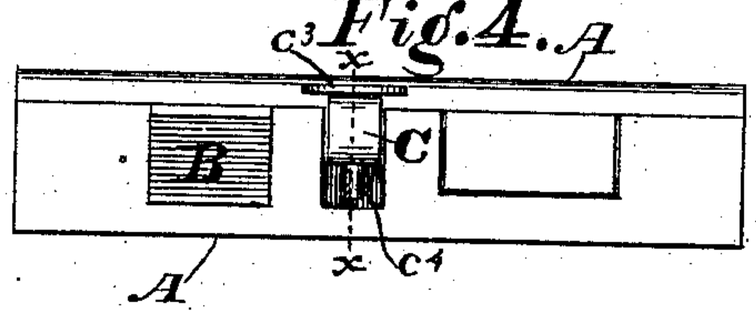


Fig. 4.



WITNESSES.

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MARTIN M. HENRY, OF LADOGA, INDIANA.

CATCH FOR LATCH-BOLTS.

SPECIFICATION forming part of Letters Patent No. 265,924, dated October 10, 1882.

Application filed July 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, MARTIN M. HENRY, of the town of Ladoga, county of Montgomery, and State of Indiana, have invented certain new and useful Improvements in Catches for Latch-Bolts, of which the following is a specification.

My said invention consists in certain improvements in the construction and arrangement of parts of that class of latches the bolts of which are retained within the casing by a spring-catch until the door is shut, when said catch is disengaged by the contact of a projection thereon with the lock-strike or door-casing, which permits the latch-bolt to fly forward and latch the door.

I am aware that the above-specified general result has been before accomplished in a variety of ways, and I therefore do not desire to be understood as claiming any device or combination, except such as are hereinafter particularly described and claimed as new.

The results which particularly distinguish my device from those which have preceded it are as follows: It is reversible, and is thereby adapted to be used with any kind of lock, and can be reversed when the latch-bolt is reversed. It has a certain and well-defined movement, which is limited by a stop that is so adjusted as to perform its proper function when the lock is in either position.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a plan view of a lock the latch-bolt and catch of which are constructed in accordance with my invention, the top plate of the lock being partially broken away to show said parts. Fig. 2 is a similar view when the latch-bolt is held back by the catch. Fig. 3 is a longitudinal sectional view on the dotted line *x x*, and Fig. 4 is a front end elevation of the lock.

In said drawings, the portions marked A represent the lock-casing, B the latch-bolt, and C the spring-catch.

The casing A is or may be of any usual or approved form. It has two bosses, a' a^2, between which the spring-catch C is secured by means of a screw, *a*, which is also the means whereby the two sides of the lock are held together. The latch-bolt B also is or may be of a common form, but is provided with a cross-bar which forms projections *b* thereon, with which the catch-spring engages. This cross-bar is preferably a short piece of steel wire passing through the shank of the latch-bolt, and having its ends squared to engage with the catch portions of the spring.

The catch-spring C is secured to the boss a' on the lock-case by the screw *a*. It is provided with catch-ears c' c^2, a turned-up end, c^3, which will come in contact with the lock-strike or door-casing when the door is shut, and a stud, c^4, which acts as a stop and prevents said spring from passing to the wrong side of the bar *b*. This catch-spring may be secured to a separate boss by a separate screw, if desired, instead of in the manner shown.

The operation of my said invention is as follows: When the bolt B is drawn into the lock, as by turning the door-knob in opening the door, the spring-catch C springs down until its wing c' or c^2 catches behind the bar *b*, which holds said bolt back, as shown in Fig. 2, until the door is shut, when the end c^3 comes in contact with the lock-strike or door-casing, lifting it until the bar *b* will pass under it, thus permitting the bolt to fly out and engage with the catch or strike on the door-casing. As will be seen, the stud c^4 prevents the spring from passing below and getting beneath the bar *b*. The ears c' c^2 are as long as the stroke of the latch-bolt, so that the cross-bar *b* shall not be caught by the front thereof, and thus prevent the bolt from being forced back when it is desired to unlatch the door.

When it is desired to reverse the lock the latch-bolt is taken out and turned over in the ordinary manner. The screw *a* is also removed, the spring C turned over, and the said screw replaced. As the cross-bar *b* extends equally on both sides, and the spring C is provided with a second ear, c^2, which will engage therewith, the device works as well when reversed as when in its normal position. The stud c^4 also performs its office as well on one side as on the other.

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

1. The combination, in a lock, of the latch-

bolt B, provided with the cross-bar *b*, and the catch-spring C, provided with the catch-ears c' c^2 and the stud c^4, substantially as shown and described, and for the purposes specified.

2. The combination, with the latch-bolt of a lock and the catch-spring therefor, said bolt and spring being provided with suitable engaging devices, of a means for securing said spring to the lock-casing, consisting of the two bosses a' a^2 and the screw *a*, substantially as shown and specified.

In witness whereof I have hereunto set my hand and seal, at Ladoga, Indiana, this 21st day of July, A. D. 1882.

MARTIN M. HENRY. [L. S.]

Witnesses:

B. F. WILLIAMS,

J. T. MCGINNIS.