L. M. Ham,

Lock.

No. 89,830. Patented May 4, 1869.

Fig. 2.

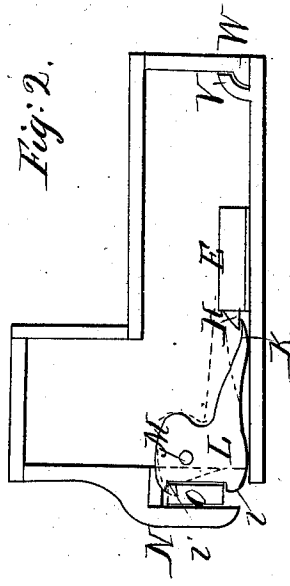


Fig. 3.

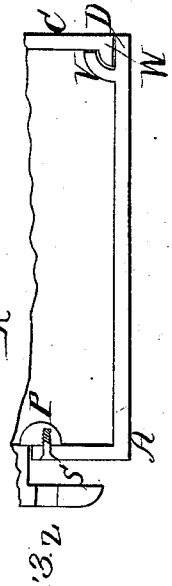
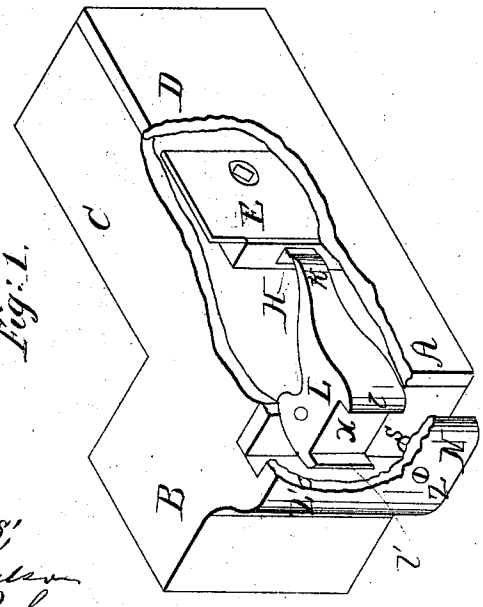


Fig. 1.



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UNITED STATES PATENT OFFICE.

L. M. HAM, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LOCKS FOR PRISON-DOORS.

Specification forming part of Letters Patent No. **89,830**, dated May 4, 1869.

To all whom it may concern:

Be it known that I, L. M. HAM, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Locks for Cell-Doors; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

To enable others skilled in the art to make and use my invention, I will proceed to describe its nature, construction, and use.

The nature of my invention consists, first, in combining with a lock-casing for prison-doors a latch-lock and a peculiarly-formed catch, arranged so as to work together as a spring-lock of great security; second, in combining with the casing a strong guard, which extends over the face of the catch and immediately behind the bar of the door, so that said bar cannot be raised out of jaw of the catch.

Drawings.

Figure 1 is an isometric perspective view of the casing, broken into to show the interior. Fig. 2 is a horizontal section through the same, showing the lock E and catch L. Fig. 3 is a horizontal section, showing the method of attaching the front piece, A D, of the casing.

A D B C represent the casing. It is built into the masonry of the cell-door jamb. L, Figs. 1 and 2, is a catch, swinging on M as a pivot, the front of the catch being provided with a recess or a vertical channel, X, Fig. 1, between the two lips *l l'*, Figs. 1 and 2. This catch has a projecting arm, K, which serves to hold it in a position represented by full lines, Figs. 1 and 2, when locked. E, Figs. 1 and 2, is a latch-lock, the latch H of which serves to hold the arm, and consequently the catch L, as above stated.

If the latch be withdrawn it will be seen that the catch L will be free to assume the position represented by dotted lines, Fig. 2.

O, Fig. 2, represents the iron bar which forms the edge of the door, and when the door is closed is held in the recess of the catch between the lips *l l'*, as represented in Fig. 2.

To unlock the door I have to simply withdraw the latch H, which action will allow the catch to swing around, as represented by the dotted lines, and to leave the bar O free.

The contacting faces of H and K are rounded or beveled, as shown in the drawings, so that when the catch L is unlocked the closing of the cell-door will, by the action of the bar O against the lip *l'*, cause the catch to swing back into the position represented by full lines, Fig. 2—that is, the arm K coming in contact with the latch H will push it back, and, having passed beyond it, will allow it to snap out again, and thus to hold it until it is again released by the withdrawal of the latch H.

N is a guard, formed as represented in the drawings, which, being a part of the lock-casing, serves to prevent the bar O of the door from being pried away from the lips *l l'* of the catch.

The face-plate A D is attached to the lock-casing by means of a bracket, V, which hooks onto the bead W, Figs. 2 and 3, and also by the screws S S, Figs. 1 and 3. These screws are inserted through holes Z Z' made in the guard N. (Shown in Figs. 1 and 3.) When the door is closed the bar O covers the heads of these screws S S, so that they are inaccessible.

What I claim as my invention is—

1. Combining with an ordinary latch or lock, E, the catch L, made and arranged substantially as described, and for the purpose set forth.

2. The guard N of the lock-casing B C, in combination with the bar O and catch L, constructed and arranged substantially as described, and for the purpose set forth.

L. M. HAM.

Witnesses:

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