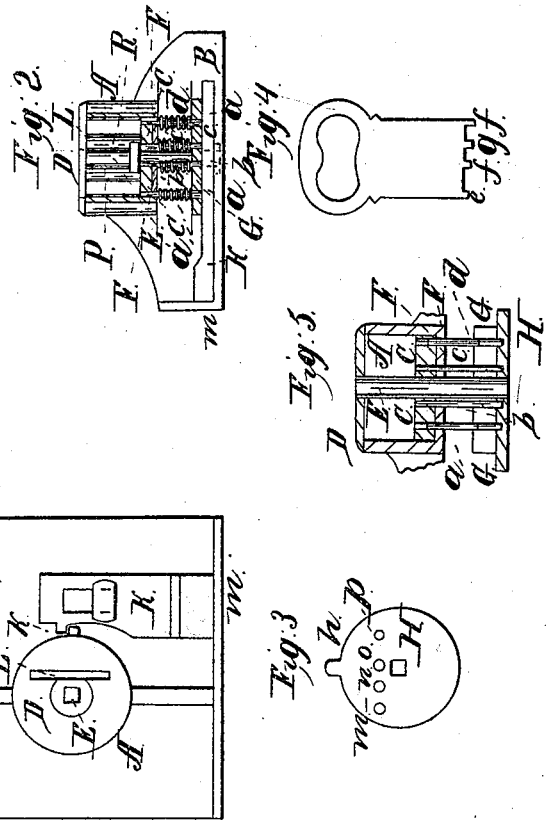
L. H. Mayott,

Lock.

No. 51,467. Patented Dec. 12, 1865.



Witnesses
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UNITED STATES PATENT OFFICE.

L. H. MAGOTT, OF SPRINGFIELD, MASSACHUSETTS.

LOCK.

Specification forming part of Letters Patent No. **51,167**, dated December 12, 1865.

To all whom it may concern:

Be it known that I, L. H. MAGOTT, of Springfield, Hampden county, Commonwealth of Massachusetts, have invented an Improved Lock; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to letters of reference marked thereon.

In the drawings, Figure 1 is a view showing the side of the lock which enters the door. Fig. 2 is a side view and partial section. Fig. 3 is a plan view of the piece which throws in and out the bolt. Fig. 4 is the key. Fig. 5 shows an enlarged view of the working parts of the lock with the springs *a' b' c' d'* removed.

The object of my invention is to obtain a lock which shall be as nearly as possible burglar-proof, while at the same time it shall be so simple and compact as to be as cheap and applicable to ordinary places as common locks. To accomplish this it is necessary, first, that it shall be impossible to pick it with any other instrument than the key; second, that it may be blown up with powder without affecting the mechanism of the lock or unlocking it; third, that the parts shall be arranged in so simple and compact a way as to be no more expensive than common locks. All this I have accomplished, as I will now show.

I will first describe its construction, and then its operation.

The operating parts of the lock are contained within the cylinder A, attached to the ordinary plate, B, which is attached to the door or lid which it is desired to lock. Within this cylinder A are the pins *a b c d*, which, when the lock is open or closed, are forced up by the spiral springs surrounding them into the part C, thus preventing the lock from being turned. The cover D of the lock is fastened to the upright shaft E passing through it. This shaft E passes through D, C, F, and G and enters H, which it turns, and the projection *h* on H, striking against the projection *k* on the bolt K, forces it (the bolt) in either direction.

The key, Fig. 4, is formed with the projections *e f g l*, for the purpose hereinafter described.

I will now describe its operation.

The key, Fig. 4, being inserted in the slot L, it is first pressed down. The projections *e f g l* on the key press in the pins *a b c d* until they are flush with the upper surface of F, thus leaving C free to turn, taking H around with it, and thus moving the bolt, as before mentioned. The same operation in and turning it in a contrary direction unlocks it.

Now, from the foregoing description it will be seen that I depend for the unlocking of this lock upon the length of the projections *e f g l* of the key; and it will also be seen that if these projections, or one of them, are too long, so as to force the pins down into H, it is just as impossible to turn the lock as it is if they are not forced down enough; and, again, the holes in C are in reality the key-holes, and, being filled up with the pins, no powder can be got in to do any damage, and if the cavity P is filled up with powder through the slot L, the only result will be the blowing off of the cap D without affecting the lock. Thus it will be seen that it is powder-proof; and it can be readily seen without further explanation that it cannot be picked, as to do it the four pins must be held in exactly the right position, and all of them different.

Great variety in the manufacture can be given by simply changing the relative lengths and positions of the projections on the key, so that no two may be made alike.

As far as simplicity and compactness are concerned, this invention is far ahead of even common cheap locks, so that, taking into account its security, as well as this, it makes the most desirable lock now made. It will also be seen that, the piece H being fastened by the pins *a b c d* springing up into C when the lock is completely locked, it is impossible to force back the bolt by pressing on it at *m*, as is the case with some locks.

Now, having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a suitable case, A B F G, the parts D E H and pins *a b c d*, when arranged and operating substantially in the manner and for the purpose described.

2. Providing the plate H with one or more holes, *m n o p*, for the purpose of fastening the lock when the pins are pushed too far down, as herein set forth.

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Witnesses:

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