

E. MOAT.
Key-Hole Guards.

No. 154,410.

Patented Aug. 25, 1874.

Fig: 2.

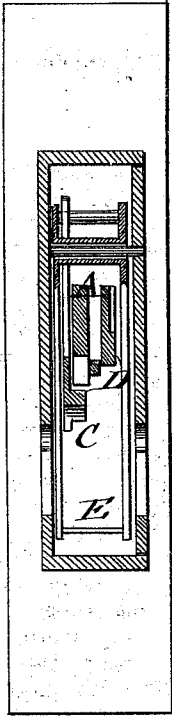


Fig: 1.

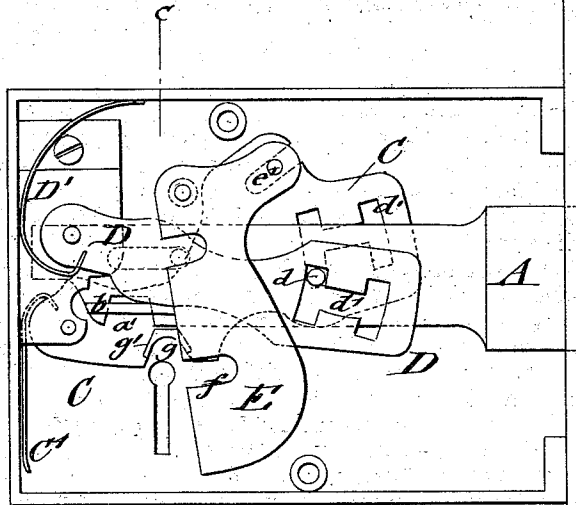


Fig: 4.

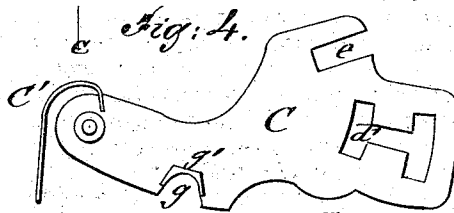


Fig: 3.

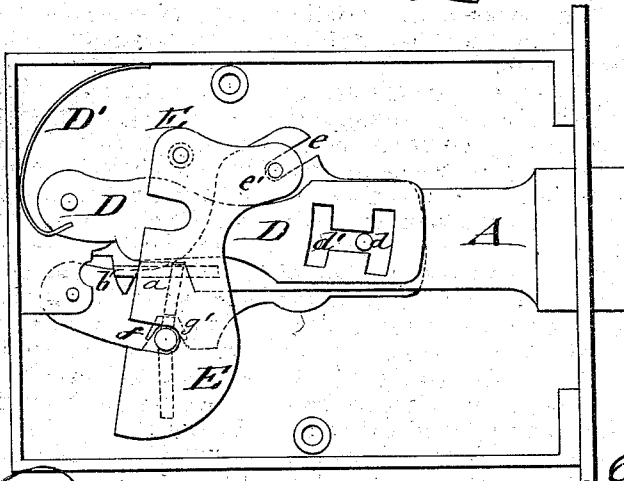
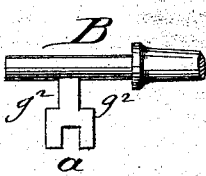


Fig: 5.



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UNITED STATES PATENT OFFICE.

ELIJAH MOAT, OF WATERTOWN, MASSACHUSETTS.

IMPROVEMENT IN KEY-HOLE GUARDS.

Specification forming part of Letters Patent No. **154,410**, dated August 25, 1874; application filed June 27, 1874.

To all whom it may concern:

Be it known that I, ELIJAH MOAT, of Watertown, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Lock, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a side elevation of my improved lock; Fig. 2, a vertical transverse section of the same on the line *c c*, Fig. 1; Fig. 3, a side view of the lock, with guard-plates thrown over the key-hole around the key; Fig. 4, a detail view of the main tumbler for working guard-plate and bolt, and Fig. 5, a detail side view of the key for working the lock.

Similar letters of reference indicate corresponding parts.

The object of my invention is to construct a lock for doors and other purposes, which is provided with guard or ward plates, in such a manner that the action of the key carries the guard-plates over the key-hole not occupied by the stem, previous to the throwing of the bolt, so as to prevent effectually the opening of the lock with any other key, and to exclude the introduction of implements for assisting the movement of the bolt, and of an additionally protecting latch-tumbler.

My invention consists of a pivoted spring-tumbler, connected with double-pivoted guard-plates, the bolt and latch-tumbler in such a manner that the throwing of the bolt is rendered impossible without a key fitting the parts moving the guard-plate, bolt, and additional guard-tumbler.

In the drawings, A represents the bolt of my improved safety-lock, which is guided in the usual manner and thrown by a key, B, with slotted bit *a*, engaging in a recess, *a'*, at the rear part of the same. The bolt A is connected by pins or lugs *d*, projecting at both sides, with the pivoted main tumbler C swinging at one side, and the additional pivoted latch-tumbler D at the opposite side of bolt A. The pins *d* engage in double T-shaped slots *d'* of the tumblers C and D, both tumblers being acted upon by band-springs C' and D', which serve to throw the tumblers in opposite directions and lock over the stop-pins *d* of the bolt. The main tumbler C is provided above its slot *d'* with a slotted recess, *e*, which em-

braces a pin, *e'*, of double guard-plates or wards E, which are pivoted above the bolt and swing at both sides of the same, immediately under the outer side plates of the lock-case. The guard-plates E are securely braced by lateral bars, and provided with slots *f* at the points at which they pass over the stem of the key B, when the same is placed into the key-hole. The main tumbler C is also recessed to fit over the stem of the key and provided around this recess *g* with a raised and inclined cam, *g'*, for the purpose of being acted upon by the spurs or projections *g''*, formed by recessing the bit of the key back of its slotted portion. The turning of the key causes, first, the catching of the spurs over the cam *g'*, thereby the carrying down of the main tumbler so as to release the stop-pin *d* from its slot, and throw the guard-plates E around the key-stem, closing the key-holes completely thereby. The bit engages next the bolt-recess, and raises also the latch-tumbler D from the opposite stop-pin *d*, so that the bolt is free to be thrown completely for closing or opening the lock. The spring action on the main and latch tumbler carries them instantly, on the completion of the bolt-movement, back over the stop-pins, and throws the guard-plates sidewise from the key-holes, producing thereby the rigid and secure position of the bolt and the opening of the key-holes for the key. No key which is not constructed to correspond exactly with the threefold functions it has to perform—viz., the throwing of the main tumbler and guard plates, bolt, and latch-tumbler—can, therefore, succeed in forcing the lock, especially as the closing of the key-holes by the guard-plates, previous to the motions of the other parts, prevents the introduction of any implements or devices for throwing the bolt and releasing the tumblers. The action of the key on the parts of the lock, in either direction, is the same, so that no intermeddling, feeling, or tampering with the open lock is possible.

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

1. The combination of pivoted main tumbler C, having slots *d'* and *e*, with main bolt A, and pivoted double guard-plates E for

swinging guard-plates over key-hole on action of key on raised cam, and releasing stop-pin for throwing the bolt, substantially as and for the purpose set forth.

2. The combination of pivoted main tumbler C, having spring C', swinging guard-plates E, bolt A, and pivoted latch-tumbler D, with spring D' for throwing bolt after closing of

key-hole, and return of the guard-plate on completion of key action, substantially as specified.

ELIJAH MOAT.

Witnesses:

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ABIEL ABBOTT.