C. C. DICKERMAN.

DOOR-LOCK.

No. 173,450. Patented Feb. 15, 1876.

Fig. 8.

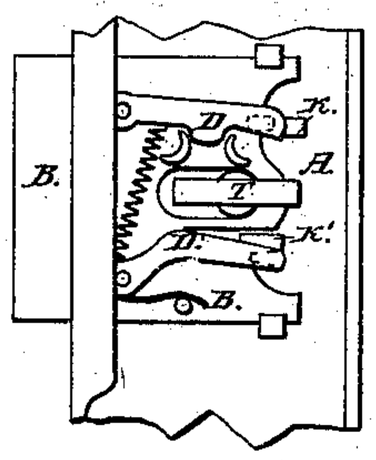


Fig. 9.

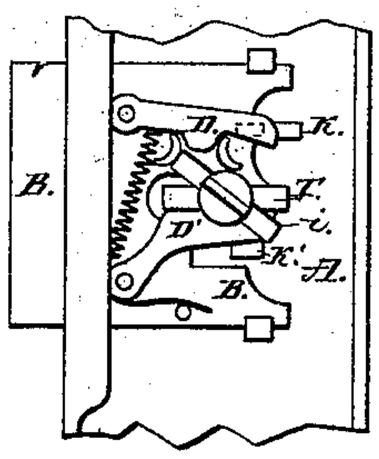


Fig. 1.

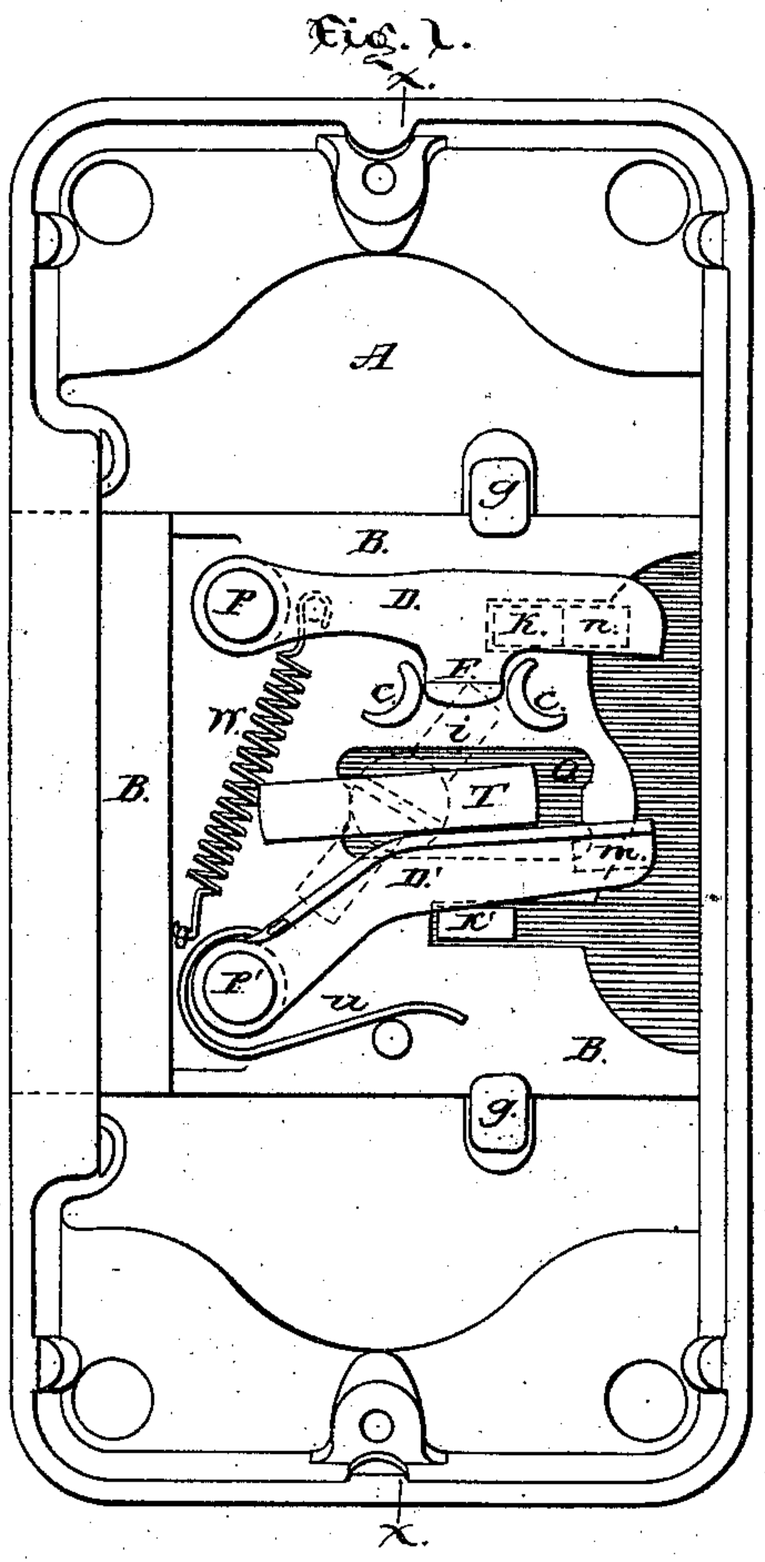


Fig. 2.

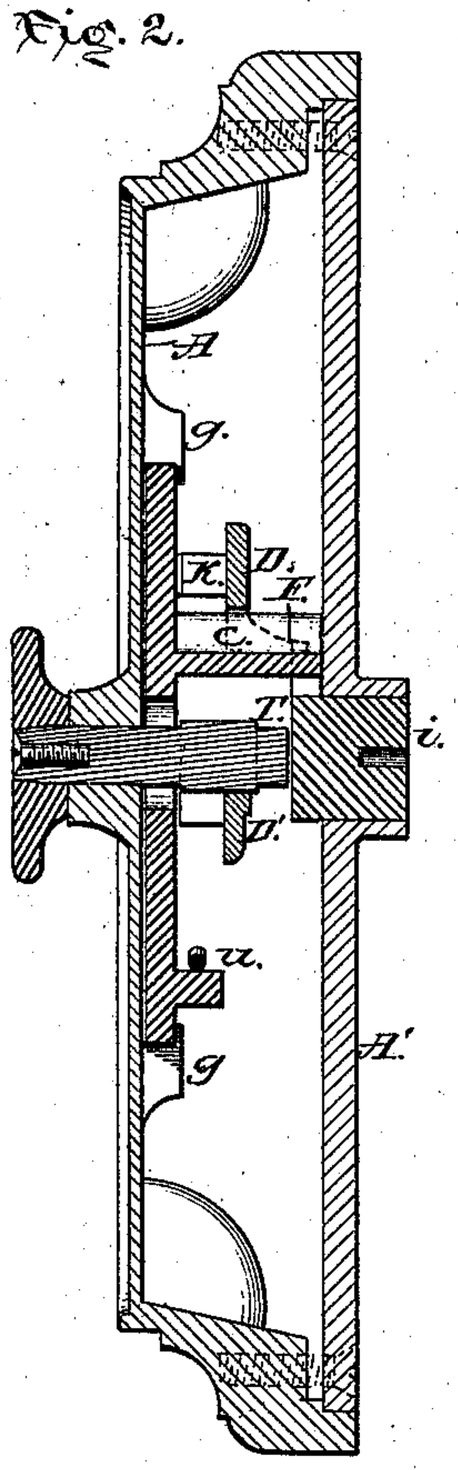


Fig. 4.

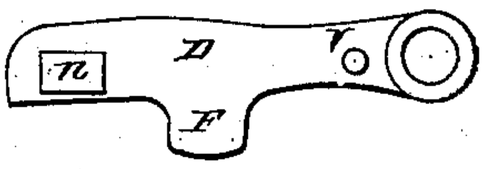


Fig. 5.

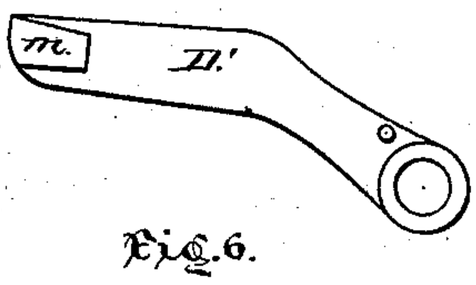


Fig. 6.

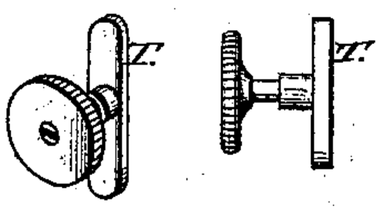


Fig. 7.

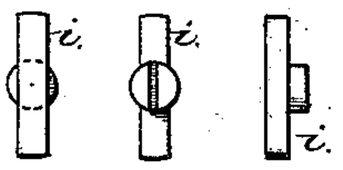
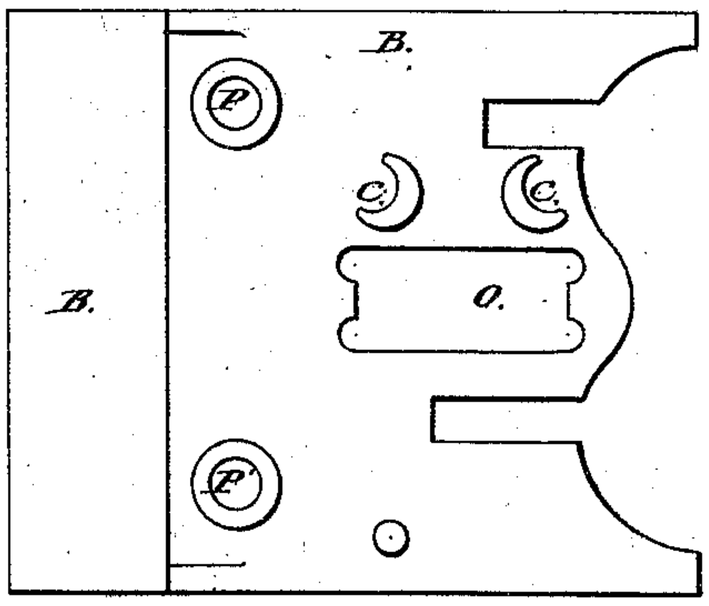


Fig. 3.



Attest:

Will H. Moxon
D. G. Weems.

Inventor:

Chas. C. Dickerman

UNITED STATES PATENT OFFICE.

CHARLES C. DICKERMAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN DOOR-LOCKS.

Specification forming part of Letters Patent No. **173,450**, dated February 15, 1876; application filed December 13, 1875.

To all whom it may concern:

Be it known that I, CHARLES C. DICKERMAN, of the city of Boston, county of Suffolk and Commonwealth of Massachusetts, have invented a new and useful Improvement in Locks, which improvement is intended to be fully set forth in the following specification, reference being had to the accompanying drawings.

The purpose of my invention is to produce a lock capable of being operated from one side with a key, through a key-hole, and from the other or opposite side with a knob, or its equivalent, yet so peculiarly constructed that, although it may be locked and unlocked by the knob on the one side and by the key from the opposite side when locked by the knob, but cannot, if locked by the key from one side, be thereafter unlocked by the knob from the opposite side.

The construction of a lock which may be operated from one side with a key only and from the opposite side by a knob is in no sense new, but is well known and in very general use, and greatly admired for the convenience it affords in locking and unlocking from the inside without the use of the key.

Notwithstanding the desirability of constructing locks so as to be operated with a knob upon the inside of the building or place secured by them, there has heretofore been much objection made to such by a multitude of persons who would otherwise adopt and use them, which objections, as raised, are, that in case any evil-disposed persons should, while the premises provided with such locks are open, and free to the entrance of said persons, enter and secrete themselves on the premises, they may, after the departure of the persons in charge of said premises, and after the place has been locked from the outside, help themselves to whatever they choose, and quietly turn the knob from the inside and depart; also, that where glass is used in doors, the same may be easily broken, the hand passed through the aperture, and the lock easily opened.

My invention, it will be seen, obviates all possibility to any like occurrence; and, in fact, when a lock is constructed with my improvement, it affords far greater security than when made with a key-hole in each side, for the reason that if the lock is locked with the key from the outside it cannot possibly be unlocked or picked from the inside.

Figure 1 represents an interior view of the lock, with bolt and other parts necessary for the proper operation thereof, constructed with my improvement. Fig. 2 represents a section on line *x x* of Fig. 1. Fig. 3 shows the bolt of the lock with its proper projections and slots, hereafter more fully described. Fig. 4 represents the main dog or stop-lever with its necessary appliances. Fig. 5 represents the auxiliary or safety dog-lever and appliances. Fig. 6 shows two views of the inner or knob trunnion and its knob. Fig. 7 shows three views of the outside trunnion *i*, with key-slot therein.

In describing my invention it is deemed unnecessary to enter into a general description of the construction of the lock, only so much thereof as relates directly to the subject of my claims, and I therefore omit all foreign matter.

Fig. 8 shows the bolt B as thrown out by the action of the knob-trunnion T, and secured in this position by the combined action of the lug N of the dog D against the projection K on the shell A and the spring W, when the safety-dog D′ is brought in position with the inside of its lug M bearing directly against the outer side of the projection K, in which position it is free to be operated by the action of the inside knob-trunnion T.

Fig. 9 shows the bolt B thrown out by means of the outside or key trunnion *i*, one of the arms of which, it will be seen, passes directly over the face of the safety-dog D′, thus leaving the latter in the position held by its spring U, which allows its lug M to always pass above the projection K, by which operation and action the safety-dog D′ is held firmly in position against the side of the knob-trunnion T, thus preventing the possibility of turning the knob-trunnion T until released from its confinement by the operation of the key-trunnion *i* upon the lug F of the dog D, and the throwing back of the bolt B, by which action the safety-dog D′ is again left free to be operated by the knob-trunnion T.

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

1. The combination of the safety-dog D′ with the bolt B and projection K, or its equivalent.

2. The combination of the dogs D and D′, the bolt B, shell A, and springs with the trunnions T and *i*, or their equivalent, substantially as and for the purpose described.

CHAS. C. DICKERMAN.

Witnesses:
GEORGE PENNIMAN,
A. G. BURTON.