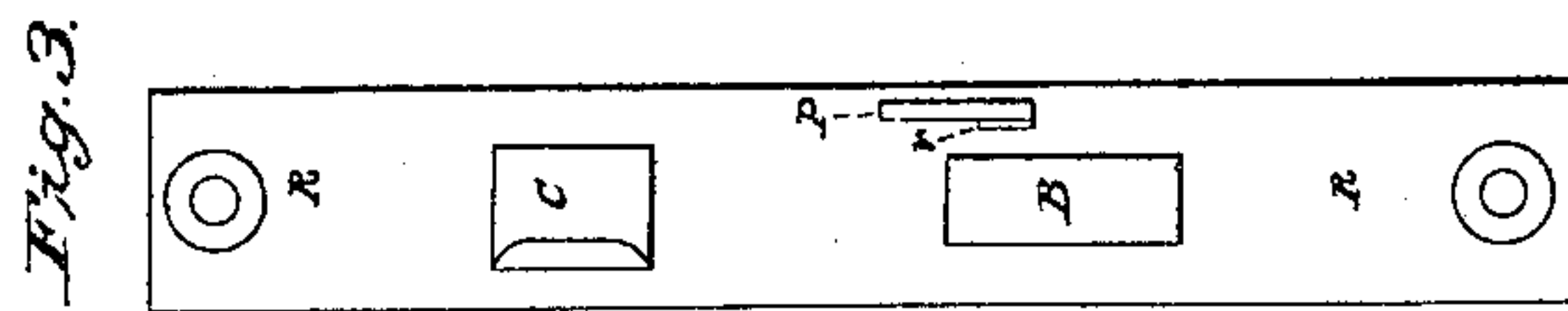
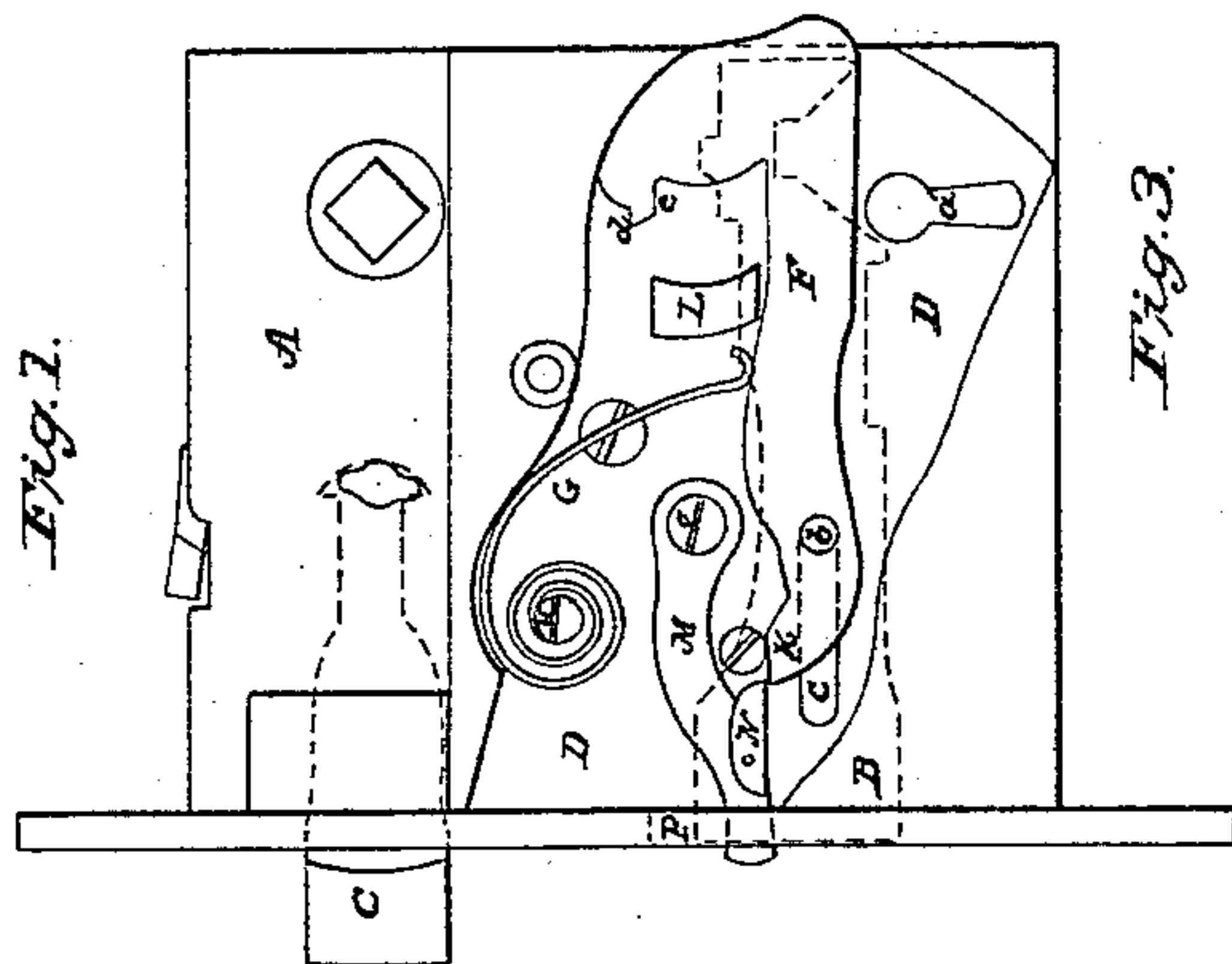
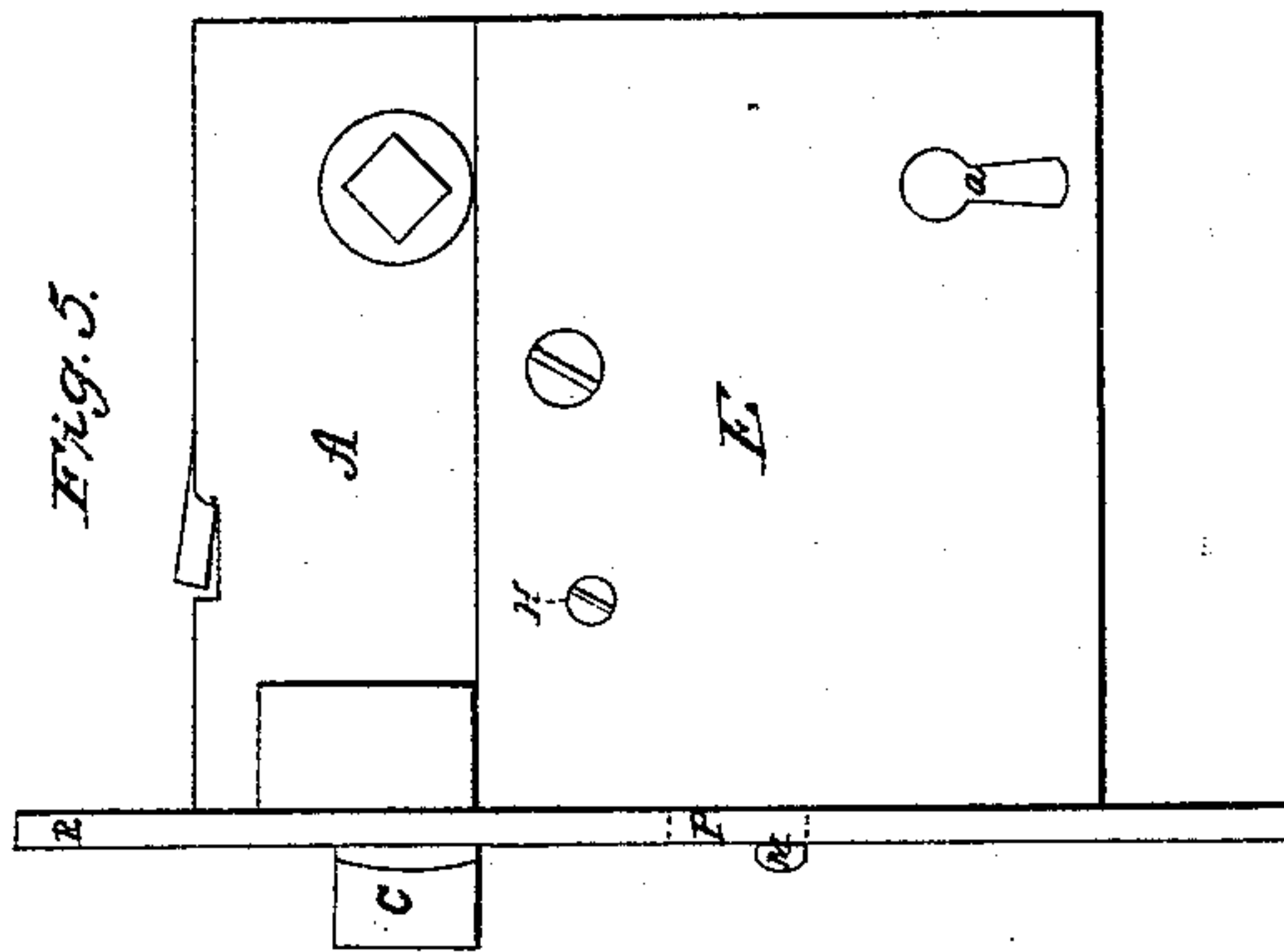
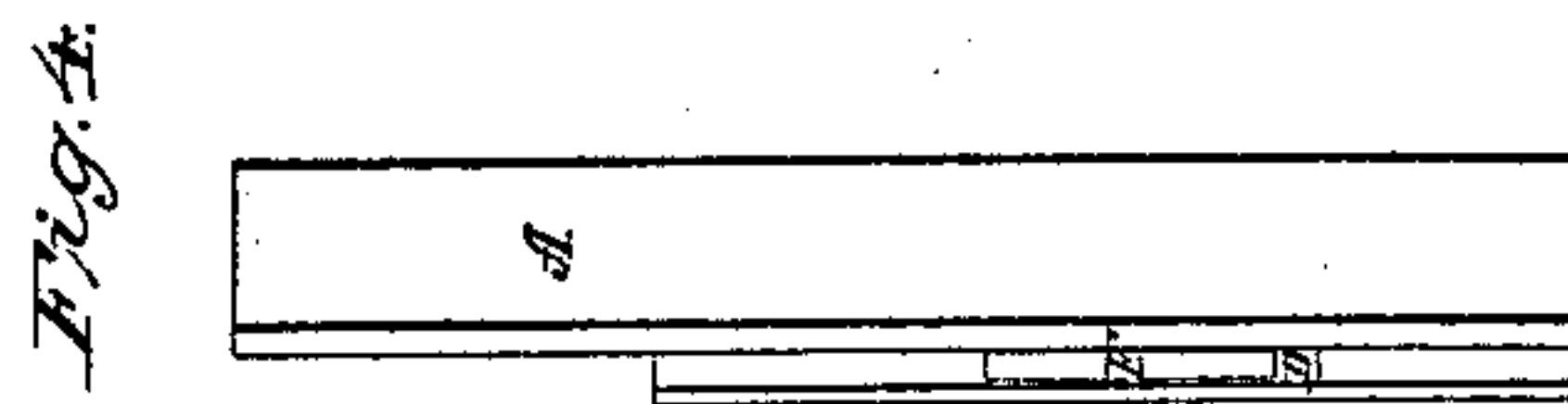
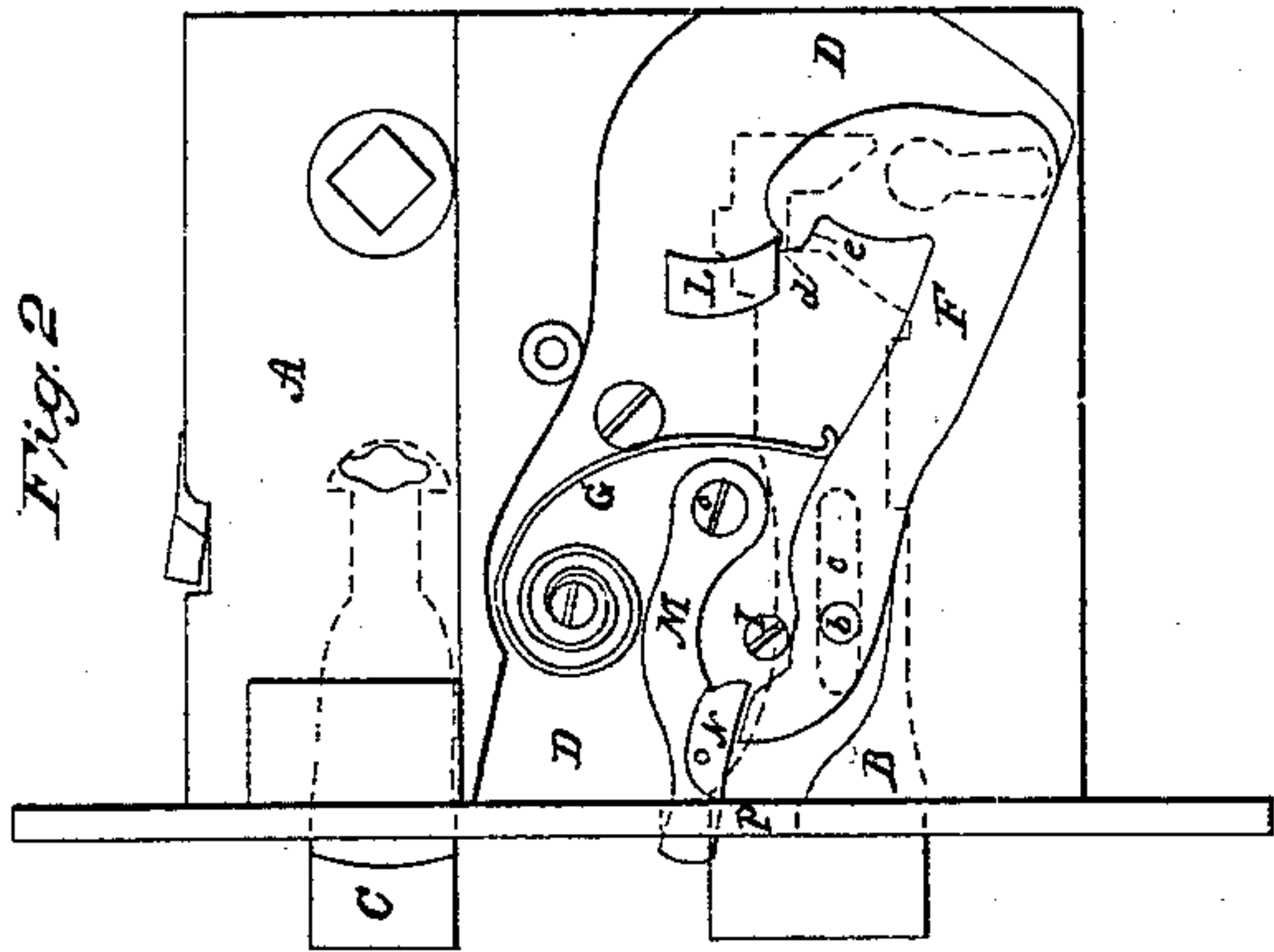


W. Johnson,
Key-Hole Guard.
N^o 64,426. Patented May 7, 1867.



Witnesses:

J. P. Hale Jr.
Samuel N. Piper.

Inventor:

William Johnson
by his attorney
R. W. Ledy

United States Patent Office.

WILLIAM JOHNSON, 2d, OF HAVERHILL, MASSACHUSETTS.

Letters Patent No. 64,426, dated May 7, 1867.

IMPROVEMENT IN KEY-HOLE GUARD FOR DOOR-LOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, WILLIAM JOHNSON, 2d, of Haverhill, in the county of Essex, and State of Massachusetts, have invented a new and useful Improvement in Locks for Doors; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side view of a lock with my invention applied to it, the covering plate of such addition being supposed to be removed from the lock, and the main bolt of the case to be exhibited in red lines. This figure shows the key-hole guard elevated into a position above and so as to uncover such key-hole.

Figure 2 is a similar side view of the lock and its addition, but with the key-hole covering plate or guard down, so as to cover the said key-hole.

Figures 3 and 4 are opposite edge views of the lock.

The parts within the case of the lock are to be such as are common to most locks whose bolts are operated by a key introduced into a key-hole made in their cases, the object of my invention being to so cover the key-hole when the bolt is locked or shot forward, as to prevent a person from the outside of the door having the lock applied to it from introducing a key or other implement into the lock for the purpose of picking it or throwing back the bolt thereof. My invention prevents a person from revolving the key by forceps applied to the end of its shank, and when the key is in the lock, and thus my invention enables the key to be left in the lock after the bolt may have been thrown forward by the key.

In the drawings, A denotes the case, B the main bolt, and C the spring or latch bolt of a common mortise lock, they being made and applied in the ordinary manner. Against the external surface of the outer plate of the said case A, a shallow chamber, D, is formed, which with its contents is to be covered by a cap plate, E, (see fig. 5,) duly fixed in place by one or more screws, such cap plate being provided with a key-hole, *a*, which is to be in prolongation of the lock-case key-hole *a'*. From the main bolt B a pin, *b*, projects through a slot, *c*, (made in one side of the lock-case,) and into a lever, F, formed as represented in figs. 1 and 2. This lever is the key-hole guard. When the bolt B is retracted or is "back," the guard F takes the position shown in fig. 1; but when the bolt is advanced or entirely thrown forward the guard is made to assume the position exhibited in fig. 2, that is, so as to cover the key-hole, the key under such circumstances being supposed to be introduced from that side of the lock which is opposite to the one on which the lever F is situated. A spring, G, fixed to a stationary pin, H, and having its free end bearing on the upper edge of the longer arm of the lever F serves to depress such arm, or to turn the lever on its fulcrum whilst the bolt B is in the act of being advanced by the key. When the lever F is in its highest position a stud, I, projecting from the lock-case, and arranged as represented, serves to there support the lever by reason of the shorter arm of such lever resting against the pin. A cam or inclined surface, K, (formed on the shorter arm of the lever,) by its action against the stud I while the bolt is being thrown back serves to raise the lever into a position above the key-hole. L is a stationary stud or projection extended from the case of the lock, and being for the purpose of holding the lever or guard F down when covering the key-hole. The lever in descending carries a projection, *d*, from it directly underneath and against the stop L, in manner as shown in fig. 2. Thus the stop serves to prevent the guard from being raised above the key-hole by an instrument other than the key passed into the key-hole *a*, and against the guard. In case the key, after having been introduced into the lock from the outside of the door and been turned therein so as to advance the bolt, should be withdrawn from the key-hole, the guard F would be likely to be thrown down so as to cover the key-hole. Should such happen, it would be impossible to introduce the key into the key-hole. This would prevent the key from being again inserted in the lock for the purpose of unlocking the door. Now, in order to prevent the guard from falling or being depressed while the key introduced from the outside of the door is in the act of throwing the bolt, I provide the lever or guard F with a notch or catch, *e*, arranged in or upon it as represented. This will cause the lever, while the bolt is being advanced, to catch on the top of the stud L, which, when the bolt is advanced, will hold the lever up even after withdrawal of the key from the lock. Again, should it be desired to prevent the key-hole guard from being thrown down under any circumstances so as to cover the key-hole, that is, so as to enable the key to be inserted in the lock from either side of the door, and the door to be either locked or unlocked by the key, under either of such arrangements of it I provide the lock and the key-hole guard with a mechanism for holding the said guard upward while the bolt is being

advanced or retracted by the key inserted from either side of the lock, and also when the key is out of the lock. This mechanism consists of a spring-latch, M, provided with a projection, N, fixed to one side of it, they being formed and arranged as represented. The latch turns on a centre-pin, O, screwed into the lock-case. The fore end of the latch extends through and a little beyond a slot, P, made in the fastening plate R of the lock-case, and formed with a catch recess, *r*, as shown in fig. 3. When the latch M is depressed and in the recess *r*, the projection N will serve as a stop to prevent the depression of the guard, but it will allow the guard to be moved back and forth with and by the main bolt.

Having thus described my invention, what I claim is as follows:

1. I claim the combination as well as the arrangement of the key-hole guard F, and its operative mechanism, viz, the spring G, the stud I, and the cam K, with the bolt and the lock-case provided with a key-hole as set forth, such guard being for the purpose as specified.

2. I also claim the combination as well as the arrangement of the stud L and the projection *d* with the lever guard F, applied to the bolt B, and to operate therewith, and with respect to the key-hole of the lock, substantially in manner as hereinbefore described.

3. I also claim the combination as well as the arrangement of the stud L and the catch *e* with the lever guard F, applied to the bolt B, and to operate therewith and with respect to the key-hole of the lock, substantially in manner as hereinbefore explained.

4. I also claim the combination as well as the arrangement of the spring-latch M, its catch slot, and the projection N, or their mechanical equivalent, with the lock-case and with the lever guard F, applied to the said case and the main bolt, substantially in manner and so as to operate with respect to the key-hole essentially as and for the purpose hereinbefore set forth.

WM. JOHNSON, 2d.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.