

No. 646,094.

Patented Mar. 27, 1900.

L. H. MULLIKIN.

COMBINED LOCK AND LATCH.

(Application filed Feb. 3, 1900.)

(No Model.)

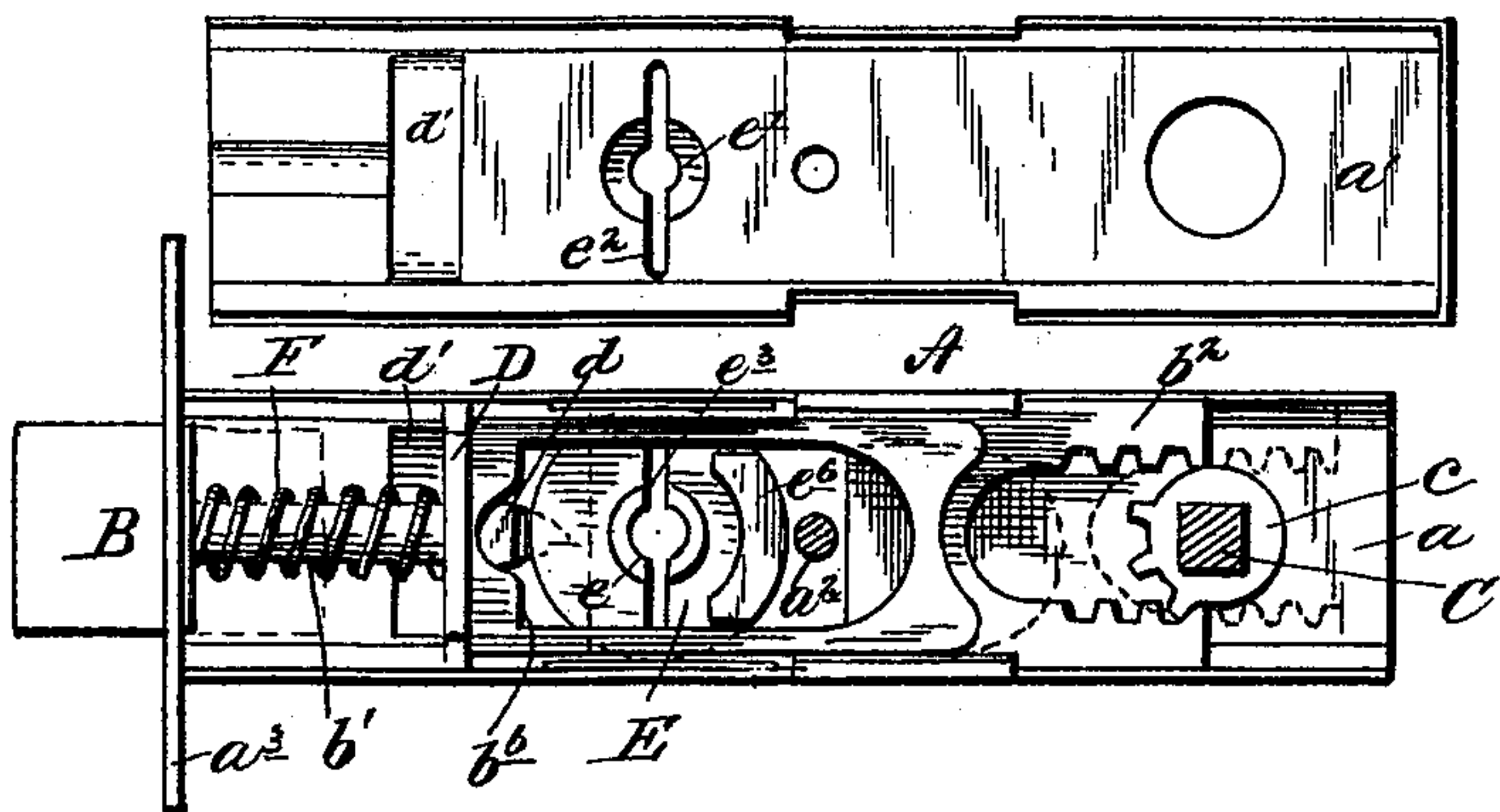


Fig. 1.

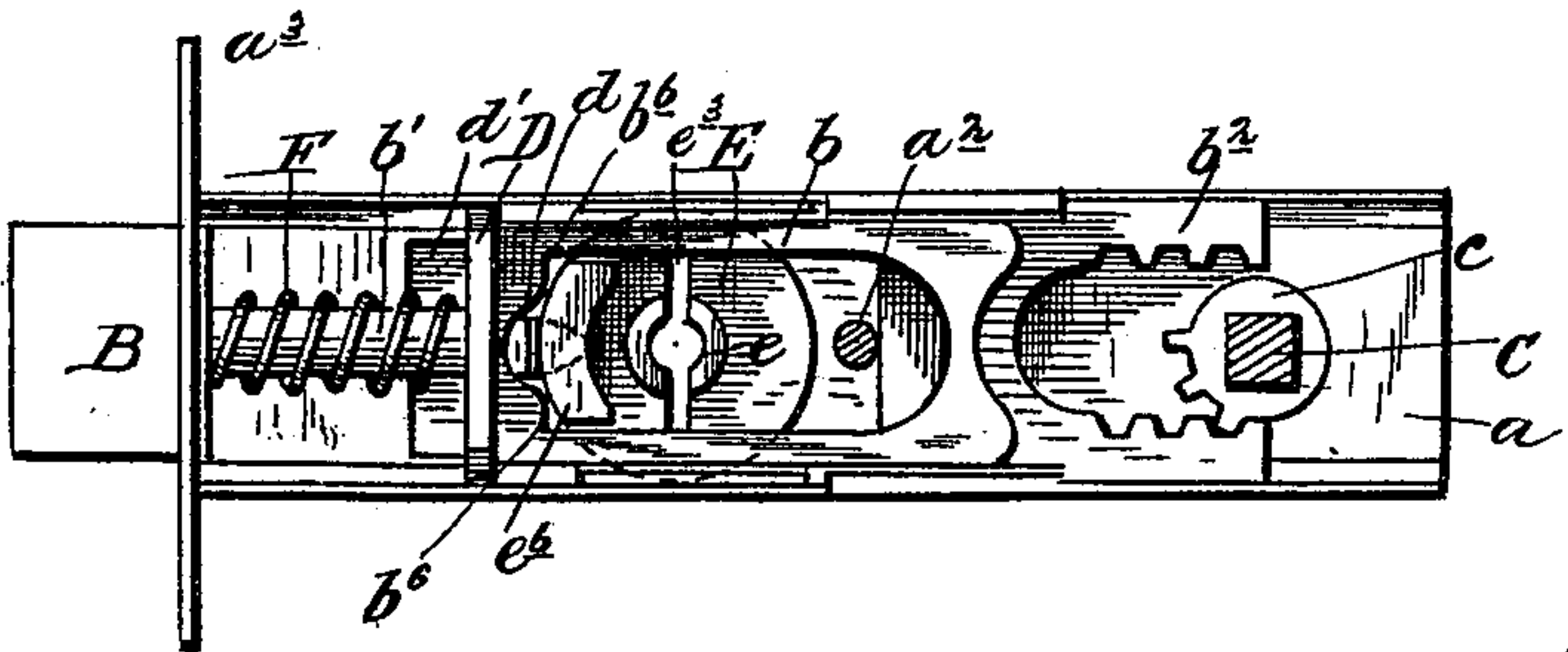


Fig. 2.

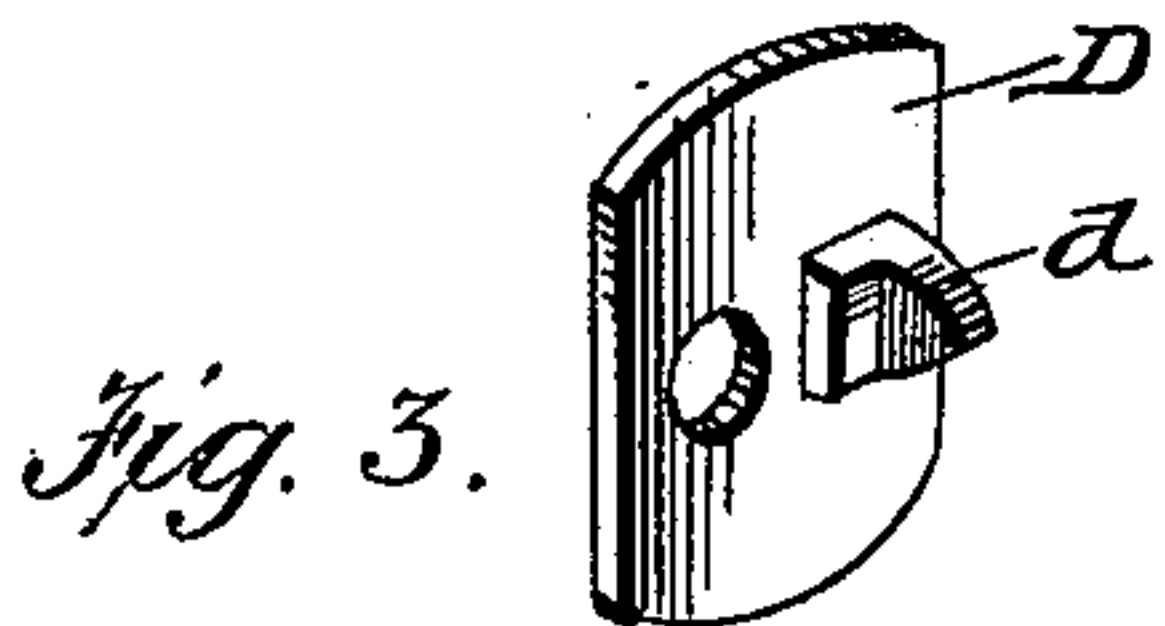


Fig. 3.

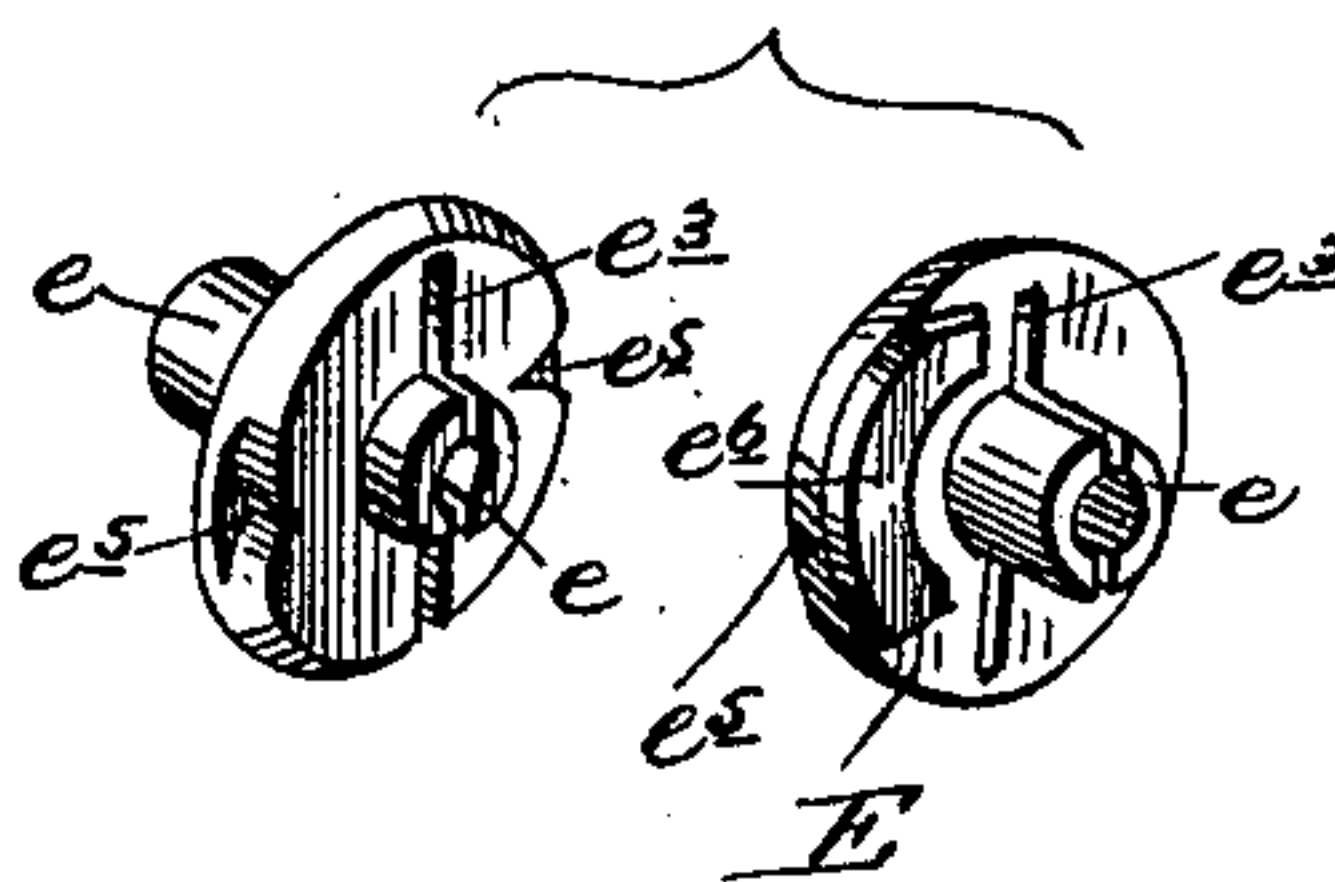


Fig. 4.

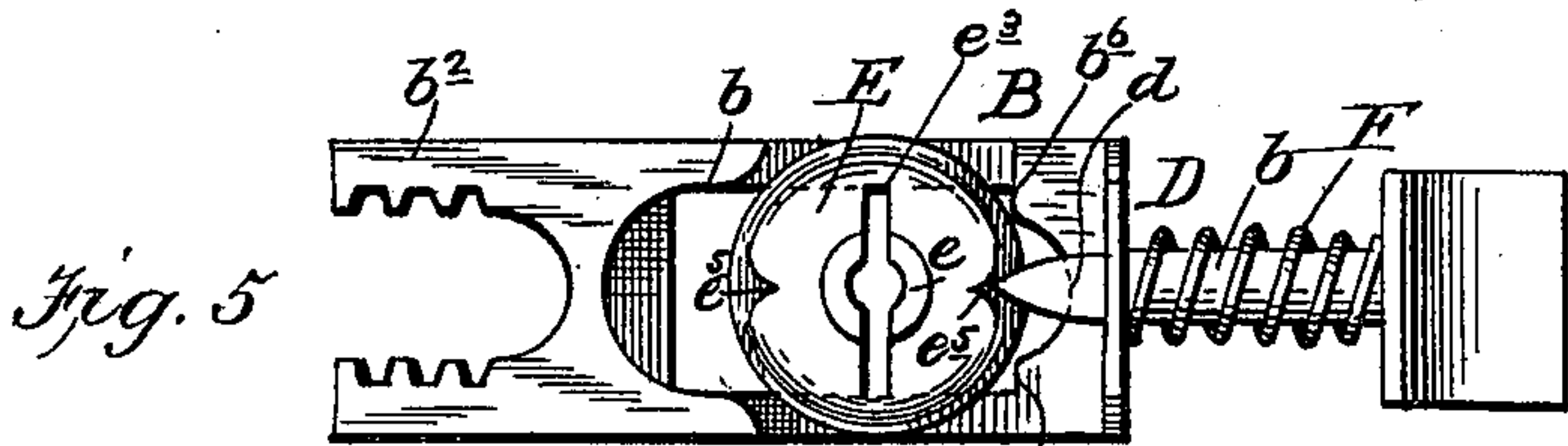


Fig. 5

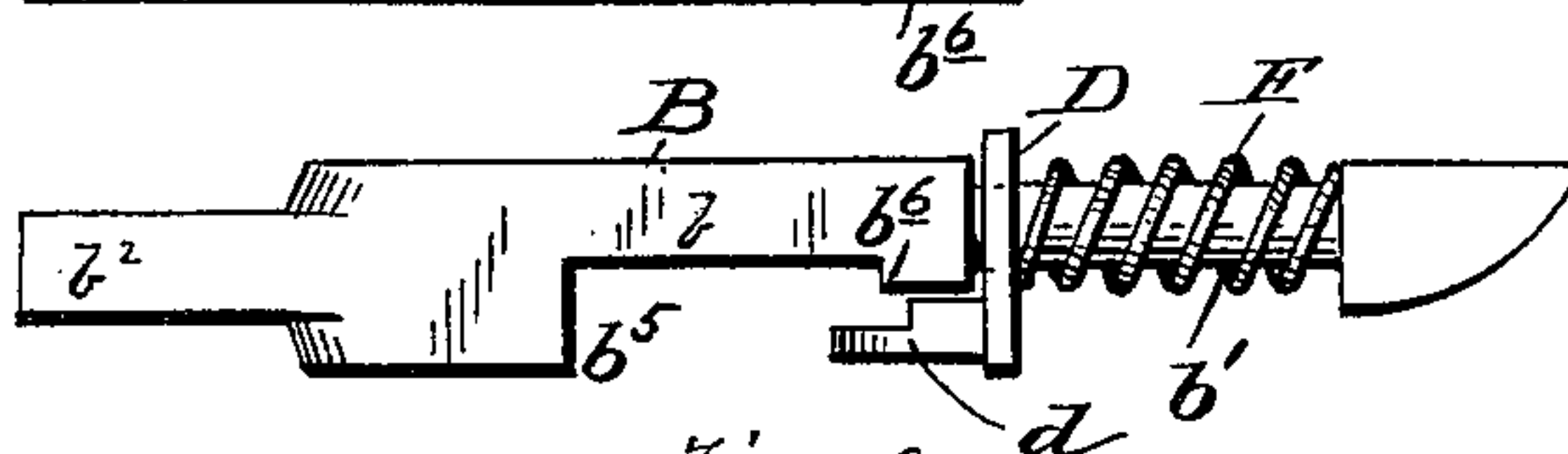
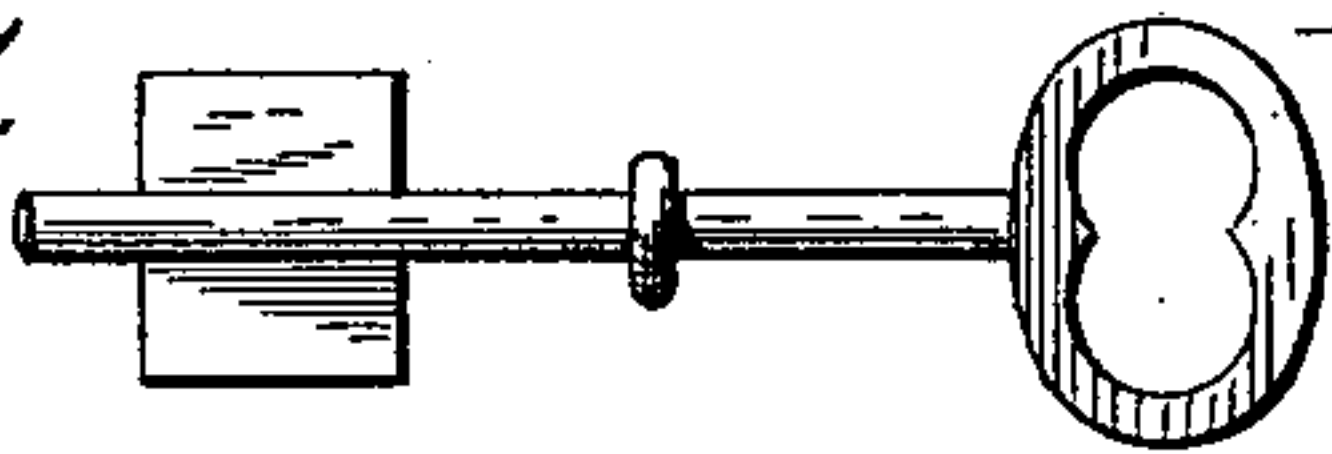


Fig. 6.

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LEVIN H. MULLIKIN, OF TRAPPE, MARYLAND.

COMBINED LOCK AND LATCH.

SPECIFICATION forming part of Letters Patent No. 646,094, dated March 27, 1900.

Application filed February 3, 1900. Serial No. 3,893. (No model.)

To all whom it may concern:

Be it known that I, LEVIN H. MULLIKIN, a citizen of the United States, residing at Trappe, Talbot county, Maryland, have invented certain new and useful Improvements in a Combined Lock and Latch, of which the following is a specification.

My invention relates to that class of locks and latches in which a knob-operated latch is held in its thrown position against retraction by means of a rotary tumbler or disk which can only be operated by a suitable key.

The objects of the invention are to provide such a combined lock and latch which shall be simple in its construction, effective in its action, and in which the locking-tumbler will be locked against accidental displacement by a spring-pressed dog which engages notches in its periphery, so as to always hold its key-opening in alinement with the keyholes in the lock-casing. These objects I attain by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan of the lock with one of its casing-sections or cover removed and the tumbler turned so as to allow the retraction of the latch, as shown in dotted lines. Fig. 2 is a similar view with the tumbler or locking-disk turned so as to lock the latch against retraction. Fig. 3 shows the dog for locking or retaining the tumbler or disk in position. Fig. 4 is a detail perspective of the said tumbler or disk. Fig. 5 is a plan of the latch, the locking-tumbler, and the tumbler-retaining dog from the side opposite to that shown in Fig. 1. Fig. 6 is an edge view of the latch and the tumbler-retaining dog. Fig. 7 is a side elevation of the key.

A represents a tubular lock-case formed in two longitudinal sections a a' , secured together by a screw a^2 , the section a being provided at its front end with a face or attaching plate a^3 .

B is the latch, having the usual beveled nose at its forward end, an open middle portion b , connected to the nose by a reduced member or shank b' , and having a toothed yoke b^2 at its rear end engaged by the toothed sleeve c of the knob-spindle C for retraction thereby in the usual manner.

Upon the inner end of the latch-shank b'

is loosely placed the apertured bearing-plate D, having a lug d projecting rearwardly from one edge, the said plate and its lug constituting the retaining-dog for the locking tumbler or disk E. The plate D is held in its proper position by means of opposed recesses d' , formed in the inner walls of the lock-case.

F is the latch-projecting spring, mounted on the shank b' and bearing at one end on the rear end of the nose of the latch and at its rear end bearing against the plate D.

The tumbler or disk E is formed with two hubs or trunnions e e , seated in recesses e' in the inner faces of the lock-case, and these recesses are intersected by the two keyholes e^2 in the lock-case. The tumbler or disk E has a keyhole or slit e^3 extending through it and its hubs, and in order that these keyholes e^2 e^3 may always register for the removal and insertion of a key E', I provide the tumbler or disk with two notches or recesses e^5 e^5 , into which the lug or toe d of the locking-dog snaps when the disk or tumbler is in its locking and inoperative positions.

The latch B is cut away at the opposite sides of its open middle portion, as at b^5 , so as to overlie the tumbler or disk E and slide rearwardly over it when it is in the position shown in Fig. 1, and the said tumbler or disk is provided with a raised rib or projection e^6 , adapted to rest behind shoulders b^6 b^6 , formed by the forward ends of the cut-away portions b^5 , and so prevent the retraction of the latch, as best shown in Fig. 2.

When the parts are in the position shown in Fig. 1, the latch operates in the usual manner upon turning the knob-spindle; but when it is desired to lock the latch against retraction the key is inserted from either side of a door into the tumbler or disk and then turned to rotate said tumbler and bring its rib or projection e^6 against the shoulder b^6 . In thus rotating the tumbler or disk the V shape of its notches e^5 will cause the toe or lug d of the retaining-dog to be forced away against the action of spring F, as shown in dotted lines, Fig. 1, until the opposite notch or recess reaches the toe or lug, whereupon the said toe will snap therein and hold the disk or tumbler with its keyhole in register with the casing-keyhole.

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

1. A combined lock and latch, comprising
5 a latch having an open middle portion, a shank in front thereof, and a knob-spindle yoke at its rear end, a projecting spring on said shank, a rotary key-operated locking-
10 disk underlying the middle open portion of the latch and provided with a raised rib or projection adapted upon the rotation of said disk to rest against the forward end of said open portion of the latch and prevent its re-
15 traction, and said disk having notches at opposite points in its periphery, a retaining-dog comprising an apertured plate on the latch-shank, engaged by the rear end of said spring and provided with a toe or lug to snap into
20 and be forced out of said peripheral notches upon the rotation of the locking-disk; substantially as set forth.

2. A combined lock and latch, consisting in the divided casing having recesses in its inner walls near its forward end, keyholes in
25 rear thereof, bearings at the inner sides of the casing intersected by said keyholes and

bearings at its rear end, a latch mounted in said casing and having a middle open portion, a forward shank and a yoke at its rear end, a knob-spindle sleeve mounted in the rear bearings to retract the latch, a spring on the shank to project the latch, a locking-disk having hubs turning in the middle bearings, a keyhole extending through the disk and its hubs to register with the casing-key-
35 holes, and peripheral notches in its periphery and on a line at right angles to its keyhole, and a retaining-dog for the disk, comprising an apertured plate mounted on the shank in rear of the spring with its side edges in the forward recesses of the casing and provided
40 with a toe or lug to snap into and be moved out of the peripheral disk-notches upon the rotation of the disk; substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

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Witnesses:

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