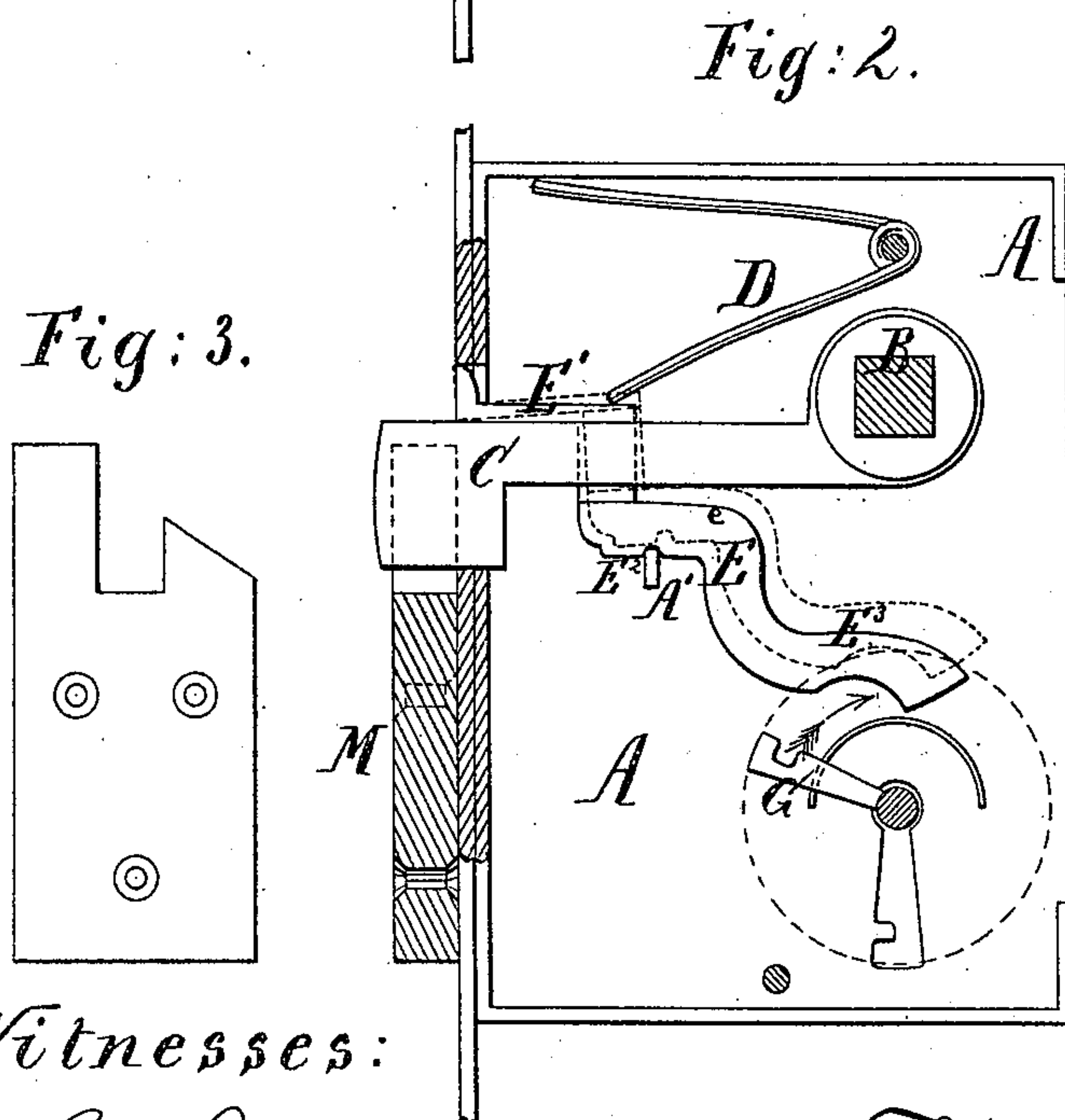
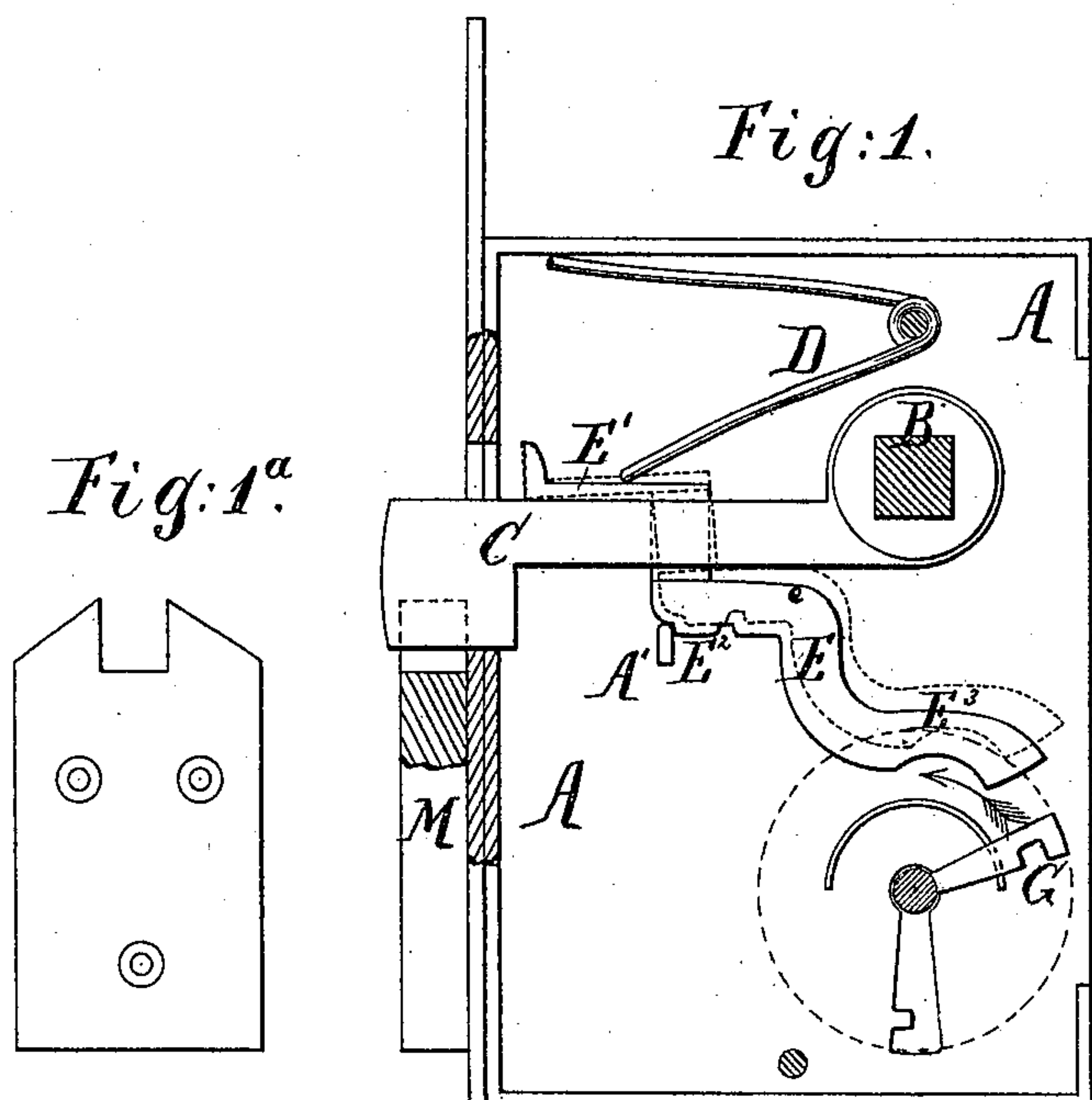


F. KLEMM.
LOCKING-LATCH.

No. 174,685.

Patented March 14. 1876.



Witnesses:

Albany Gentner
C. C. Stetson

Inventor:

Ferdinand Klemm
by his atty,
C. C. Stetson

UNITED STATES PATENT OFFICE.

FERDINAND KLEMM, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN LOCKING-LATCHES.

Specification forming part of Letters Patent No. 174,685, dated March 14, 1876; application filed January 28, 1876.

To all whom it may concern:

Be it known that I, FERDINAND KLEMM, of Brooklyn, Kings county, in the State of New York, have invented certain new and useful Improvements relating to Locks for Doors, of which the following is a specification:

The invention applies to all that class of locks in which the bolt or catch swings on a pivot with a motion like the ordinary latch. I provide for holding the catch firmly in the engaged position by means of a single piece operated by a key.

My improved lock operates with a single spring, which serves also to depress the latch when it is used as an ordinary latch, and the additional piece, which serves both as a locking-piece and as a saddle for receiving the spring on being thrown in one direction or the other by the key, serves to confine and liberate the latch at will very efficiently.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 is a view of the parts in the unlocked condition. Fig. 1^a is a view of one form of the striking-plate turned quarter around. Fig. 2 is a view of the parts in the locked condition. Fig. 3 represents another form of the striking-plate turned as in Fig. 1^a.

Similar letters of reference indicate similar parts in all the figures, except as above explained in regard to the two kinds of striking-plates which may be used.

A is the fixed casing of the lock. B is the shaft, furnished with a knob at each end, as will be understood. C is a latch or catch, adapted to be turned to a small extent, or raised out of engagement with the striking-plate M, by the operating of the shaft B, whenever the parts are in the unlocked condition shown in Fig. 1. D is a spring, urging the latch C downward. E E¹, &c., is my peculiar locking-piece. It extends across the back of the latch C, is widened above the latter to form a saddle or bearing piece, E¹, for the spring D, and is deepened at its outer end, to nearly or quite fill all the space provided in

the edge of the casing A, in which the latch C may ever rise. Below the latch C it is formed with two shoulders, one on each side of the locking projection or swell E², which engage alternately with stud or stop A', according as the lock is put in the locked or unlocked position. The extension E³ is adapted to be lifted and thrown by the action of the key G, inserted and turned, as is obvious. When the end E³ has been raised to a certain extent, the bend or stop e strikes the under face of the latch C, and, being thereby prevented from rising farther, is certain to be thrown in or out, as the case may be, by the further turning of the key G. Turning the key raises the inner end of the piece E E¹ E² E³ out of engagement with the stop A', and into contact with the catch C, after which it throws the said piece and lowers it again.

The piece may, if desired, be extended farther outward, and made to engage boltwise with a suitable cavity in a striking-plate properly extended upward for the purpose; but I do not esteem such generally necessary or desirable.

The form of striking-plate shown in Fig. 1^a allows of being applied with either left-hand or right-hand doors. The form shown in Fig. 3 also allows the same, but the latter has to be turned with its opposite face to the door in one condition. Both faces have the screw-holes countersunk to allow for such turning.

I claim as my invention—

In combination with the latch C and turning means B, a bolt or locking-piece formed in a single piece, having an arm, E³, adapted to be operated by the key G, a stop, e, to strike the latch and restrain the vertical motion, and a part, E¹, adapted both to receive the spring D and to form a removable stop to prevent the rising of the latch at will, all substantially as herein specified.

In testimony whereof I have hereunto set my hand this 26th day of January, 1876, in the presence of two subscribing witnesses.

FERD. KLEMM.

Witnesses:

A. HENRY GENTNER,
JAS. A. DANIELS.