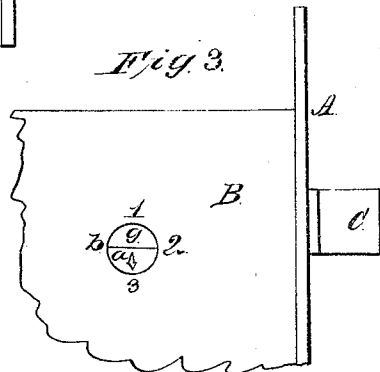
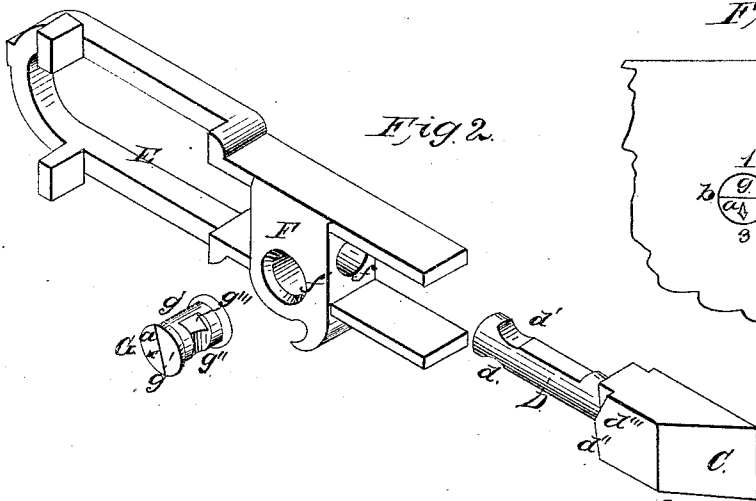
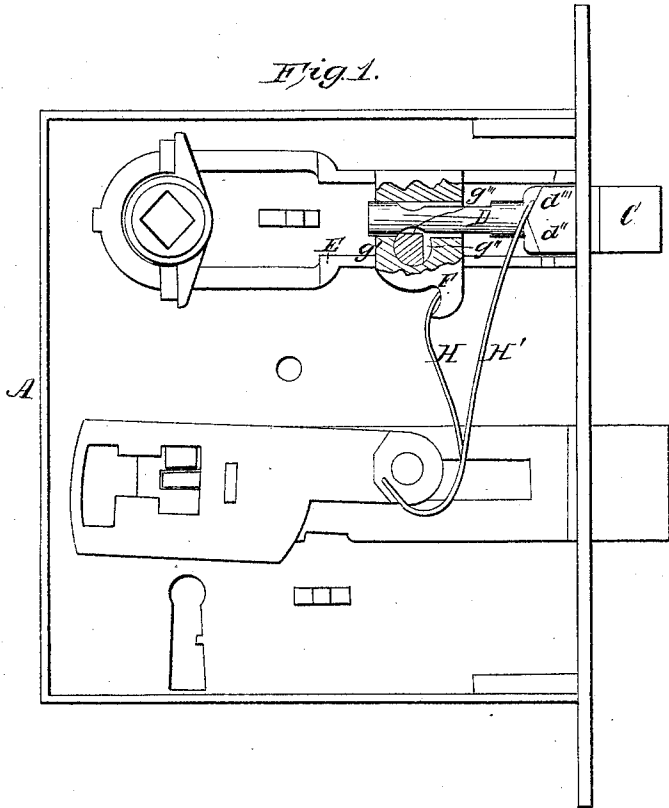


R. Lee,

Reversible Latch.

N<sup>o</sup> 57,930.

Patented Sep. 11, 1866.



Witnesses:

James H. Layman

Inventor:

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By Ruyhones  
Atty

# UNITED STATES PATENT OFFICE.

ROBERT LEE, OF CINCINNATI, OHIO.

## IMPROVEMENT IN KNOB-LATCHES.

Specification forming part of Letters Patent No. **57,930**, dated September 11, 1866; antedated September 2, 1866.

*To all whom it may concern:*

Be it known that I, ROBERT LEE, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Locks; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My improvement relates to the class of door-locks whose latch is made capable of being turned either to the right or to the left, according to the direction in which it is desired to close the door; and my invention consists in an arrangement whereby the object is accomplished by the simple rotation of a pin, which is accessible on the outside of the lock without removing the cap.

Figure 1 is a side elevation of a lock embodying my invention. Fig. 2 shows the slide and reversible latch detached. Fig. 3 is an external view of a portion of the lock.

The case A may be of any customary form. B is a portion of the cap, having a hole, *b*, to afford access to the reversing-pin, to be presently described.

C is my latch, provided with a round shank, D, distinct from the tail or slide E. The shank D is deeply nicked or coved, *d d'*, on opposite sides of it.

The slide E carries a block or socket-piece, F, pierced longitudinally by a cylindrical hole, *f*, to receive the shank D, and transversely, with another cylindrical hole, *f'*, to receive a pin, G, having a nicked head, *g*, or its equivalent, to enable its rotation, a hole, *b*, being provided in the cap to permit the insertion of a screw-driver or other turning instrument.

A mark or pointer, *a*, is provided on the end of the pin G, and the cap immediately around the hole *b* is marked with the numerals 1, 2, 3, for a purpose to be presently explained.

The pin G is, for a portion *g'*, of its circuit, cylindrical. This cylindrical portion *g'*, being presented upward, so as to bring the pointer *a* opposite the numeral 1, occupies one or other cove, *d* or *d'*, of the latch-shank, and serves the twofold purpose of retaining the latch to the right or to the left position, and of coupling the latch-head and slide in one rigid piece

or limb, so as to bring the entire latch under control of the customary spring H.

To adapt the lock to a right-hand door it is only necessary to turn the pin G with the deep nick or cove *g''* uppermost, so as to present the pointer opposite the numeral 2, withdraw, reverse, and re-insert the latch, and turn back the pin G.

The foregoing describes the main features of my invention, and is complete for the purpose intended.

It is, however, in some instances desirable that facility should exist to diminish the spring-tension brought into play in the act of self-closing the latch where the door is closed without manipulation of the handle. For such cases I provide a sensitive auxiliary spring, H', which bears against the latch only, and two shallow depressions, *d'' d'''*, on opposite sides of the latch-shank, and I provide on the pin G a shallow nick, *g'''*, which nick being turned uppermost, so as to bring the pointer opposite the numeral 3, as in Figs. 1 and 3, the latch, while being securely held against withdrawal from the lock, is susceptible of being pushed back into the lock, in the act of self-closing, with a comparatively gentle effort.

In cases where the door is liable to become unlatched, as where the jamb has sprung away from the door, or otherwise, it is preferable to bring both springs into play by presenting the pointer at the numeral 1.

I claim herein as new and of my invention—

1. The reversible latch CD *d d'*, detachable slide E F *f f'*, shiftable pin G *g g' g''*, and spring H, or their equivalents, arranged and operating as set forth.

2. Combining with the above elements the auxiliary spring H' and shallow depressions *g''' d'' d'''*, for the purpose stated.

3. In the described combination, the indexed and reversible pin G *a g g' g''*, and the cap B, having the hole *b* and numerals 1 2 3, or devices substantially equivalent.

In testimony of which invention I hereunto set my hand.

ROBERT LEE.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.