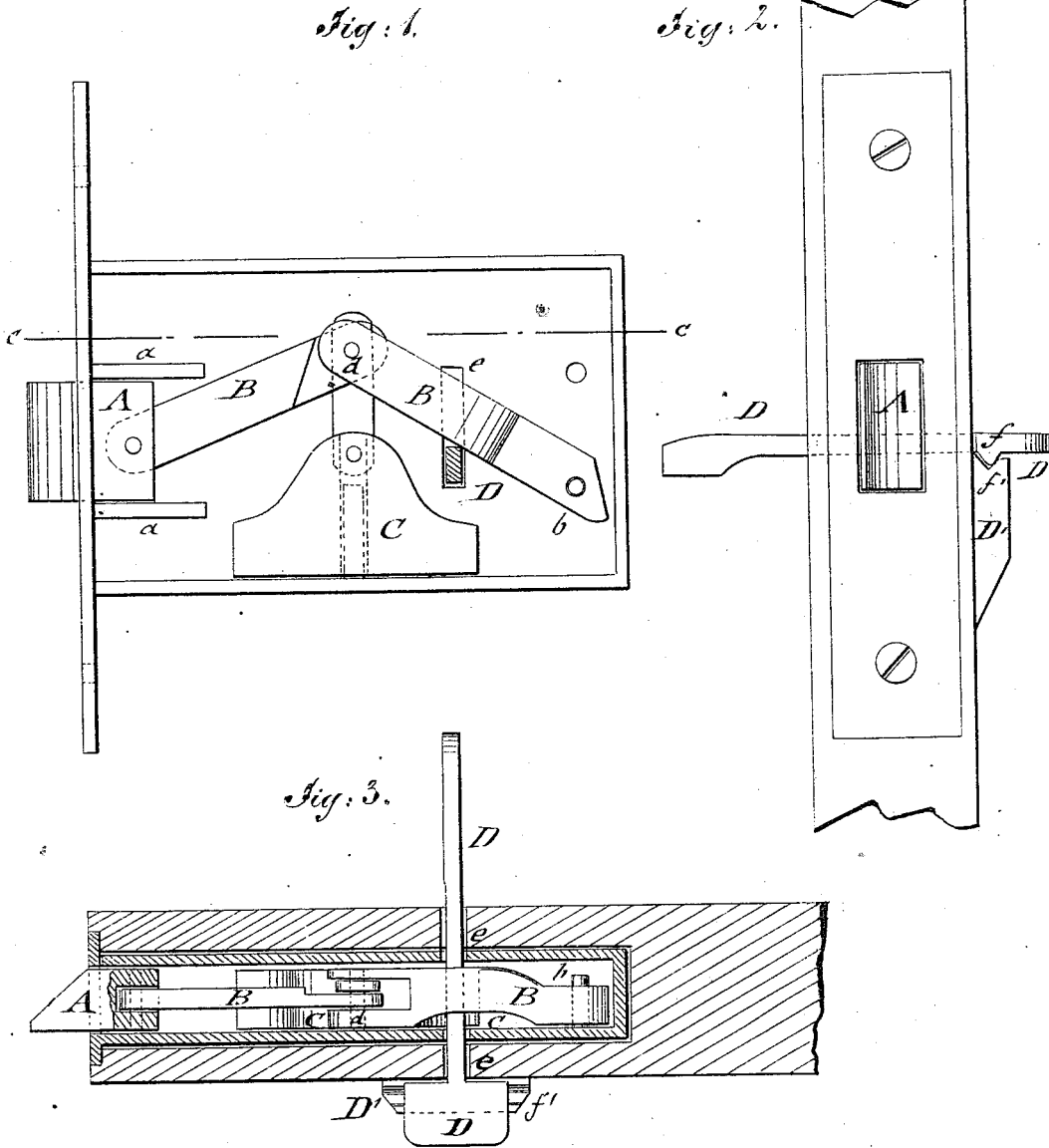


J. H. CRANE.  
Door-Latch.

No. 162,275.

Patented April 20, 1875.



WITNESSES:

*Cmas. Nida*  
*A. J. Terry*

INVENTOR:

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BY *Munnell*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JONAS H. CRANE, OF SCHENECTADY, NEW YORK.

## IMPROVEMENT IN DOOR-LATCHES.

Specification forming part of Letters Patent No. **162,275**, dated April 20, 1875; application filed March 20, 1875.

*To all whom it may concern:*

Be it known that I, JONAS H. CRANE, of Schenectady, in the county of Schenectady and State of New York, have invented a new and Improved Door-Lock, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved door-lock; Fig. 2, an end view; and Fig. 3, a horizontal section of the same on the line *c c*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to a simple and readily-operated door-lock, that is constructed without the use of springs and worked by a thumb-lever, so as to readily open and close the door.

The invention consists of a sliding bolt, which is operated by pivoted and horizontal toggle-levers, in connection with a thumb-lever acting thereon.

In the drawing, A represents the sliding bolt, that is guided in suitable strips *a* at inside of the casing, set into the usual recess of the door. The toggle-levers B are pivoted at one end to bolt A, and at the other end to a stationary pin, *b*, of the casing, a pendent weight, C, being hung to the pivot-pin *d* of the toggle-levers B, imparting continually a downward strain on the levers, and keeping the bolt thrown to the outside of the casing. A thumb-lever, D, passes laterally through slots *e* of the casing and the surrounding door below the rear lever B, and rests, by a projec-

tion or lug, *f*, at the under side, in a grooved seat, D', applied to the outer side of the door.

The seating of the thumb-lever secures the position of the bolt in forward direction, without being liable to be thrown back by mere pressure on the door. By raising the thumb-lever D the toggle-levers B are raised, and the bolt is thereby withdrawn, so that the door may be opened. The release of the thumb-lever carries the toggle-levers, by the action of the weight, instantly in downward direction, and shoots the bolt forward for locking, forming thus a quickly-operated, effective, and very durable lock, without the use of any springs, to wear out and require repairs.

The lock may be readily changed from right to left hand by pulling out the pivot-pin of the bolt and turning the same in the casing.

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

1. A door-lock composed of a sliding bolt with pivoted and weighted toggle-levers and lateral operating thumb-lever, when arranged and constructed substantially as and for the purpose set forth.

2. The combination of the lateral thumb-lever, swinging in guide-slots of the casing, and having the bottom projection, with the grooved outer seat part, substantially as specified.

JONAS H. CRANE.

Witnesses:

E. ROSA,  
D. A. ATWELL.