

A. WORSTER.
Locking-Latch.

No. 166,834.

Patented Aug. 17, 1875.

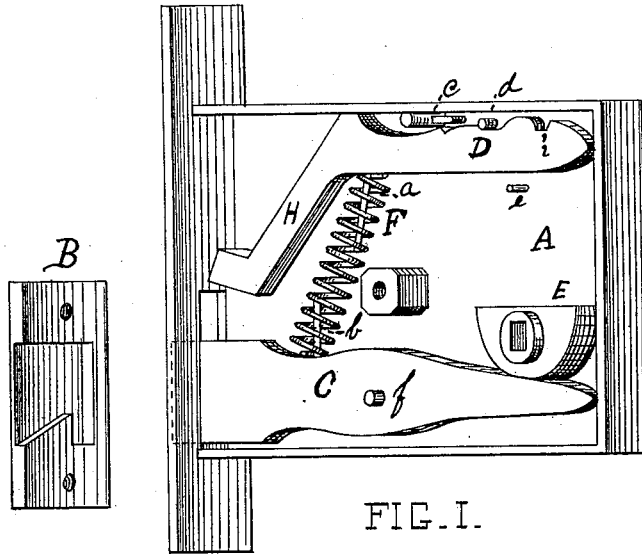


FIG. 1.

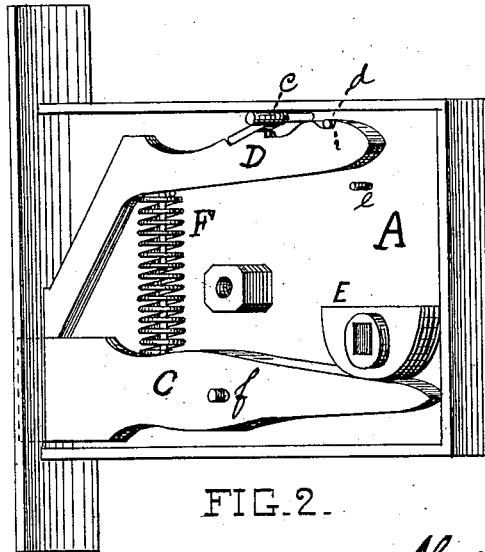


FIG. 2.

WITNESSES:
Bert H. Wood.
G. A. C. Smith.

Alexander Worster.
INVENTOR.
J. Mc. Perkins
ATTORNEY.

UNITED STATES PATENT OFFICE.

ALEXANDER WORSTER, OF GROVETON, NEW HAMPSHIRE.

IMPROVEMENT IN LOCKING-LATCHES.

Specification forming part of Letters Patent No. **166,834**, dated August 17, 1875; application filed April 23, 1875.

To all whom it may concern:

Be it known that I, ALEXANDER WORSTER, of Groveton, in the county of Coos and State of New Hampshire, have invented certain new and useful Improvements in Mortise Drop-Latches and Locking-Bolts; and I do declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The same letters and figures of reference are used to indicate corresponding parts.

After describing the invention, its nature and extent will be shown in the claim.

Figure 1 represents an interior view of my invention when the latch is not locked by the locking-bolt. Fig. 2 is the same view with the latch locked.

A is the lock-case; D, the locking-bolt; C, the drop-latch, and B the keeper. E is a crescent-shaped cam, placed just above the rear end of the locking-latch. Through this cam the knob-shaft operates to lift the latch out of the keeper B. The latch is pivoted to the case at *f*, which is an elongated slot, so that pivoting the latch at one or the other end of this slot serves to lengthen or shorten that portion of the latch which projects from the case and engages with the keeper.

In lieu of the slot *f* the latch C may be lengthened or shortened by a screw-joint connecting the divided parts.

In Fig. 1, *c* is the key, inserted and ready to

turn the locking-bolt D. As the key is turned around it presses the bolt D against the spring F, and forces it forward as well as downward, until it occupies the slot above the latch C, and is flush with the outside facing of the lock. The latch is now locked, as shown in Fig. 2.

The function and position of the spring F and the pins *a b* fully appear in the drawings without further explanation.

The extreme simplicity, cheapness, and freedom from getting out of order are among the chief advantages of my invention.

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

In a locking-latch, the combination of a locking-bolt provided with two arms, D and H, forming an obtuse angle on the under or lower side, as shown in the drawings, and provided with a pin, *a*, and notch *i*, the fixed pin *d*, the spring F, and the latch C, provided with the pin *b*, and operating on the pivot *f* near its center, together with the semicircular cam E, operating by means of the usual knob and shaft on the upper rear extremity of the latch C, as hereinbefore described, and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 12th day of February, 1875.

ALEXANDER WORSTER. [L. S.]

In presence of—

JOSIAH MORSE,
WM. E. MORSE.