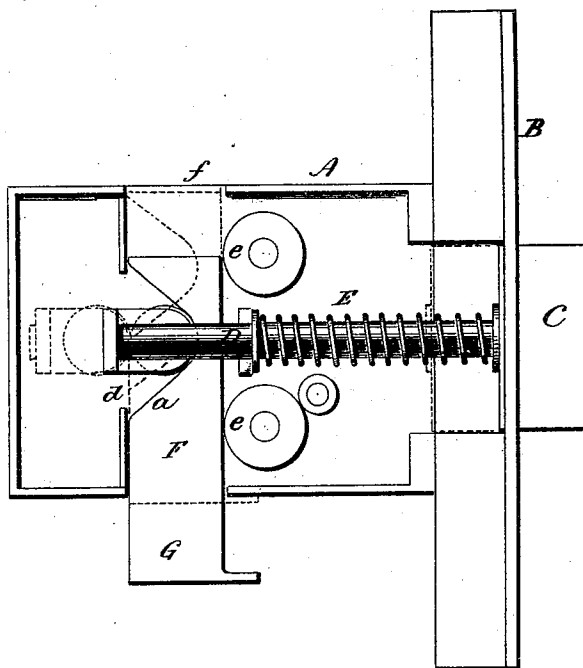


H. S. POMEROY.
REVERSIBLE-LATCH.

No. 170,393.

Patented Nov. 23, 1875.



Witnesses.

W. Sumner
Clara Broughton.

H. Sterling Pomerooy
By Atty. Inventor

By Atty. Inventor
J. E. Smith

UNITED STATES PATENT OFFICE.

H. STERLING POMEROY, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE
BLAKE BROTHERS HARDWARE COMPANY, OF SAME PLACE.

IMPROVEMENT IN REVERSIBLE LATCHES.

Specification forming part of Letters Patent No. **170,393**, dated November 23, 1875; application filed
October 6, 1875.

To all whom it may concern:

Be it known that I, H. STERLING POMEROY, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Reversible Latches; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent an interior view of the latch.

This invention relates to an improvement in that class of mortise-latches which are constructed to be actuated by a lifting or thumb lever; and the invention consists in combining with the tail of the bolt a vertical slide working through the case, so that, the thumb-lever acting upon and pressing up the said slide, the bolt will be drawn, and, when free, the spring of the bolt will return the slide, as more fully hereinafter described.

A is the case; B, the face-plate; C, the bolt, with the usual beveled nose, the tail D of the bolt extending into the case, and there supported by suitable guides, and provided with a spring, E, the tendency of which is to force the bolt outward. F is a vertical slide, working through the case in suitable guides, one end extending through the edge of the case, as at G. At the point where the said slide passes the tail of the bolt, an incline, *a*, is formed in the slide, and a corresponding shoulder, *d*, on the tail of the bolt bears against this incline; hence, when the slide is raised, as denoted in broken lines, the incline will force the bolt backward, as also denoted in broken lines, and when the slide is free the reaction of the spring bearing the shoulder *d* against the incline will force the bolt outward and return the slide downward.

In order to make the movement of the slide perfectly free, anti-friction rolls *e* are arranged in the case and a similar roll in the shoulder *d*.

The latch is mortised into the door in the usual manner, and the thumb-lever arranged to work beneath the lower end of the slide F,

so that the raising of the thumb-lever will correspondingly raise the slide and draw the bolt.

In order to make the latch reversible an opening, *f*, is made in the other edge of the case, corresponding to the one upon the opposite side in which the slide is represented as working. The slide F is withdrawn from the case and inserted through the opening *f* in the opposite side, and the case inverted for the opposite hand. This reversing of the slide in no way interferes with the mechanism of the latch, it only being required to press in the bolt with the finger while the change is being made.

To prevent the accidental removal of the slide, its end beyond the incline is made of hook shape to overhang the bolt, as shown, so that it cannot be removed without first pressing in the bolt.

I do not wish to be understood as broadly claiming the operation of a latch-bolt by means of a sliding cam, as such I am aware is not new.

I claim—

1. The combination, in a latch-case, of the bolt C, with its tail D, provided with a shoulder, *d*, the vertical slide F, working through the edge of the case, and constructed with an incline or cam shape, substantially as described, and so that the vertical movement of the slide imparts a horizontal movement to the latch-bolt.

2. The combination, in a latch-case, of a horizontal latch-bolt, a vertical slide working in connection with the said bolt, so that the vertical movement of the slide imparts a horizontal movement to the bolt, the said case constructed with an opening to receive the said slide from either edge, substantially as described, and for the purpose of adapting the latch to either a right or left hand door.

H. STERLING POMEROY.

Witnesses:

JOHN E. EARLE,
CLARA BROUGHTON.