

UNITED STATES PATENT OFFICE.

WALLACE T. MUNGER, OF BRANFORD, CONNECTICUT, ASSIGNOR TO HIMSELF AND J. A. LEGGAT, OF SAME PLACE.

IMPROVEMENT IN KNOB-LATCHES.

Specification forming part of Letters Patent No. 53,745, dated April 2, 1866.

To all whom it may concern:

Be it known that I, WALLACE T. MUNGER, of Branford, in the county of New Haven and State of Connecticut, have invented a new and useful 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, in—

Figure 1, a face view; Fig. 2, a top edge view with the latch-bolt set as for a left-hand door; Fig. 3, a like view with the latch-bolt reversed—that is, set for a right-hand door; Fig. 4, an interior view of the lock; and in Figs. 5 and 6, sectional views of detached parts.

My invention relates to an improvement in locks or latches whereby the latch-bolt may be reversed so as to set for a right or left hand door; and it consists, first, in the mechanism whereby the latch-bolt be made reversible; second, in the peculiar arrangement whereby the spring is made to operate both for the latch-bolt and lock-bolt.

To enable others skilled in the art to construct and use my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is the case of the lock and latch; B, the plate which covers one of its sides; C, the latch-bolt; D, the lock-bolt; E, the follower; F, the horseshoe.

That portion of the latch-bolt C which extends beyond the face of the latch is of the usual form, and the hole through the face-plate through which the latch-bolt passes is of the same form; but that part of the latch-bolt *d* back of the projecting portion is made round, as seen in Fig. 4. To this bolt is attached a spindle, G, which extends back, and is attached to a yoke, H, so as to be revolved in the said yoke—that is, to be turned from right to left hand, as in Figs. 2 and 3, or vice versa. The said yoke passes around the neck

of the follower E, as seen in Fig. 4, one side of the follower being open, as seen in Figs. 5 and 6, to permit the cross-bar *a* of the yoke to lie within the follower E, as seen in Figs. 4 and 5. A spring (denoted in blue) between the latch-bolt head and the horseshoe F tends to force the latch-bolt forward, as seen in Figs. 4 and 5, in which position the latch-bolt may be reversed. When the spindle is inserted through the follower it will strike the cross-bar *a* of the yoke H and draw the latch-bolt into the case, as denoted in Fig. 6, so that when in that position the bolt cannot be turned. Thus, when the spindle is out, the latch-bolt is always in a position to be removed without the removal or change of any part of the latch simply by turning the bolt to the required position. This completes the first part of my invention.

For the second part I extend the horseshoe F, and joint it to a link, I. The said link is pivoted to the plate at *b*, as seen in Fig. 4. L is the catch, which holds the lock-bolt back or forward, as the case may be, by dropping to either side of a projection, *c*, on the lock-bolt in the usual manner for similar locks. Between the link I and the catch L, and near the fulcrum of both, I fix a spring, M, so as to operate upon both, by which arrangement the spring is made very short and the movement of the two bolts made much lighter and equally certain than as heretofore constructed, which completes the second part of my invention.

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

1. The combination of the latch-bolt C, the yoke H, and follower E, substantially in the manner and for the purpose specified.

2. The combination of the horseshoe F, link I, spring M, and the lock-bolt D, substantially in the manner and for the purpose set forth.

WALLACE T. MUNGER.

Witnesses:

JOHN E. EARLE,

JOHN H. SHUMWAY.