W. H. Andrews,

Reversible Latch.

No. 111,028. Patented Jan. 17, 1871.

fig. 1

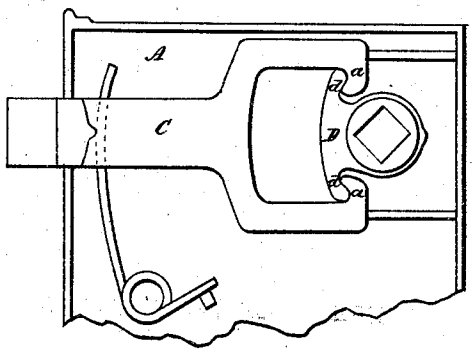


fig. 2.

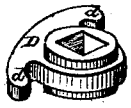
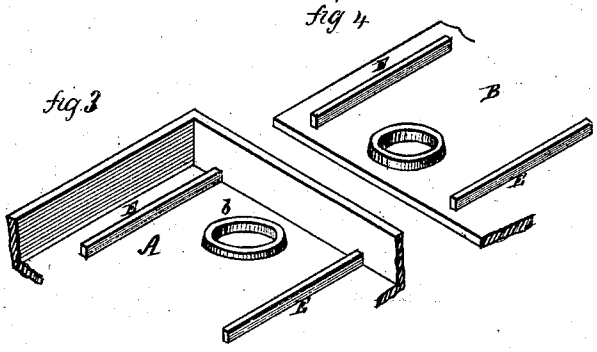


fig 4

fig 3



Witnesses

John A. Shumway

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fig 5

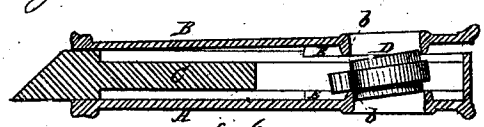
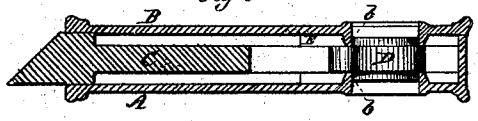


fig 6



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Letters Patent No. 111,028, dated January 17, 1871.

IMPROVEMENT IN REVERSIBLE KNOB-LATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM H. ANDREWS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Knob-Latches; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents in—

Figure 1, a view of the latch-case with the plate removed;

Figure 2, a perspective view of the follower;

Figure 3, a perspective view of the case, the plate removed;

Figure 4, a perspective view of the inside of the plate;

Figure 5, a section through the latch-bolt and follower as in the act of closing the case; and in

Figure 6, a sectional view on the same line, the case closed.

This invention relates to an improvement in knob-latches, the object being to make the latch reversible for right or left-hand doors, as also to construct the follower so that it will leave its own core in casting, so as to facilitate the closing of the case when opened for reversing the latch-bolt, and consists in constructing the case and plate each with a flange upon the inside around the follower, opening and extending inward to form a seat for the follower, and combined with the latch-bolt and ribs upon the case and plate for the support of the latch-bolt, whereby I am enabled to shorten the follower, and also to facilitate the closing of the case.

A is the case.

B, the removable plate.

C, the latch-bolt, constructed with a yoke, *a a*, extending around the arms *d* of the follower D.

In the construction of this class of locks the follower has heretofore been made of sufficient length to extend through to the outside of the case and plate, and form its bearing in the said plate and case. This makes the barrel and follower so long that it is difficult, if not impossible, to mold it so as to leave its own core.

To shorten the follower to little more than half its usual thickness, I form upon the inside of the case A and plate B an inward-projecting flange, *b*, around the follower-opening, and this flange I make to extend down onto the follower when placed in position, as seen in fig. 6. By this construction I am able to shorten the follower to about half its usual thickness, and this enables me to mold the follower so as to leave its own core.

This construction also affords another great advantage in putting the lock together, for when the plate is raised the spring will always draw the latch-bolt forward, and with it the follower, so as to tip the follower from its position, as denoted in fig. 5; and in the common construction the plate cannot be replaced except by guiding the follower and holding it in its seat until the plate is set onto it; but by this construction the plate B set onto the case and then simply pressed down, the flange *b* of itself forces the follower into position without the intervention of any other device or assistance of any person closing the case.

These advantages enable me to make an extremely cheap reversible latch.

The latch-bolt is constructed with the yoke central, as seen in figs. 1, 5, and 6, so that, either side up, it is in the same relative position to the follower.

The case and plate are provided with ribs E, which form a bearing for the yoke and support the bolt in its proper position.

To reverse the latch, simply remove the plate and turn the latch the reverse side up; then the plate, set back upon the case, as in fig. 5, and pressed down, throws the follower into its position, and the plate is secured.

I do not wish to be understood as claiming a latch-bolt constructed so as to be made reversible by taking it from the case and turning it the reverse side up, as such I am aware is very old; but

I claim as my invention—

In knob-latches, the case A and plate B, each provided with the flange *b* around the follower-opening and ribs E, combined with the follower D and bolt C, constructed as described, and arranged to operate substantially in the manner set forth.

WM. H. ANDREWS.

Witnesses:

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A. J. TIBBITS.