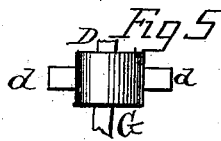
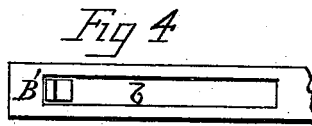
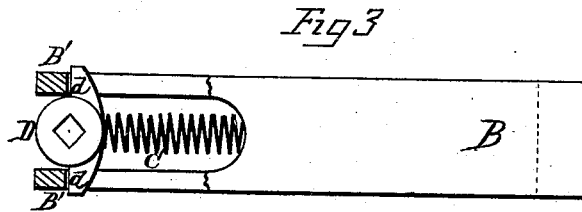
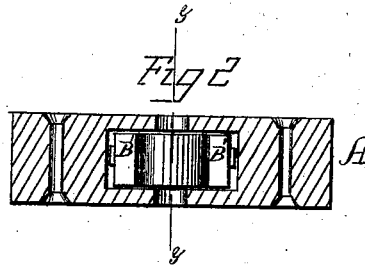
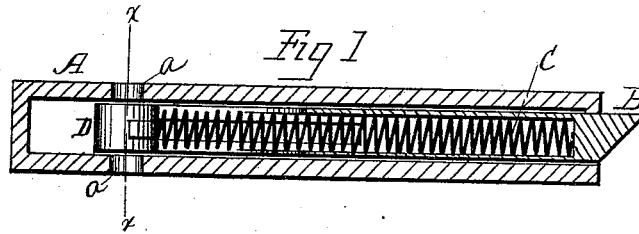


H. ESSEX.

REVERSIBLE KNOB-LATCH.

No. 188,346.

Patented March 13, 1877.



Witnesses  
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C. L. Evert.

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# UNITED STATES PATENT OFFICE.

HENRY ESSEX, OF MEADVILLE, PENNSYLVANIA.

## IMPROVEMENT IN REVERSIBLE KNOB-LATCHES.

Specification forming part of Letters Patent No. **188,346**, dated March 13, 1877; application filed February 5, 1877.

*To all whom it may concern :*

Be it known that I, HENRY ESSEX, of Meadville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Locks ; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in a reversible latch in which the reversal is permitted by removing the hub, along with the latch-bolt, through the latch-bolt hole in the edge of the lock-case, and in making the spindle to revolve directly in holes in the sides of the lock-case, instead of revolving the hub in said holes ; and, also, in the construction and combination of parts, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a section through the line *y y*, Fig. 2. Fig. 2 is a section through the line *x x*, Fig. 1. Fig. 3 is a side view of the latch-bolt. Fig. 4 is a detail thereof, and Fig. 5 shows the hub through which the spindle passes.

A represents the lock-case, made in one or more pieces, in any of the known and usual ways. B represents the latch-bolt, beveled at its outer end, in the usual manner, and formed with a longitudinal chamber for the reception of the spiral spring C, and the inner end of the latch-bolt forms two arms or prongs, B' B', in each of which is a longitudinal slot, *b*, as shown. D represents the hub, which does not revolve in holes made in the sides of the lock-case, but is made short enough to fit in between the arms B' of the latch-bolt, and thus permit of its removal through the latch-

bolt hole in the edge of the lock-case. The hub D is provided with ears *d d*, which work in the slots *b b* in the arms of the latch-bolt.

By first putting the spiral spring into its chamber in the latch-bolt, and then crowding the hub against the spring and forcing the ears *d* into the slots *b*, these three parts—latch-bolt, spring, and hub—become connected together, so that they can be removed and inserted at one time all together. G is the knob-spindle, which revolves directly in holes *a*, made in the sides of the lock-case, and passes through the square hole in the hub D.

To reverse the latch the spindle is taken out, when the latch-bolt, spring, and hub can be drawn together out of the lock-case, and put back the other way, and the spindle then put back through the holes in the sides of the lock-case, and through the square hole in the hub.

This reversible latch may be combined in the same case with any kind of lock.

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

1. In a reversible latch, the hub or follower D, constructed short, as described, and removable, along with the latch-bolt, through the latch-bolt hole in the edge of the lock-case, substantially as herein set forth.

2. The combination of the chambered and slotted latch-bolt B, the spiral spring C, and the hub D, with ears *d d*, all constructed and arranged as described, to be removable together bodily through the latch-bolt hole in the edge of the lock-case, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY ESSEX.

Witnesses :

LORENZ HEPLER,  
E. ELLSWORTH.