

W. T. Munger,

Reversible Latch.

No. 113909.

Patented Apr. 18. 1871.

Fig. 1.

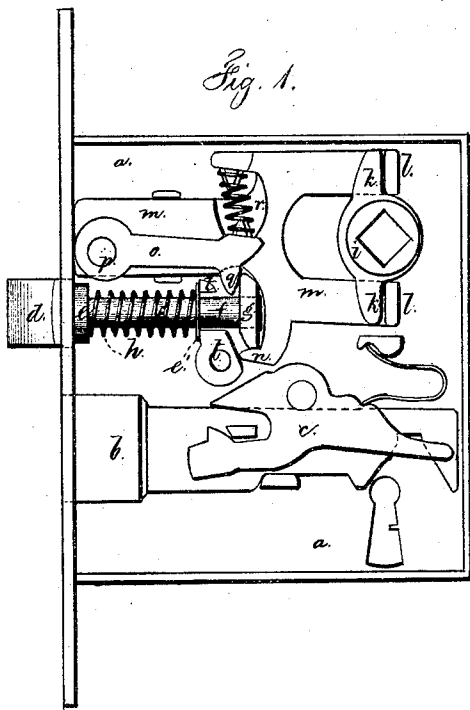


Fig. 3.

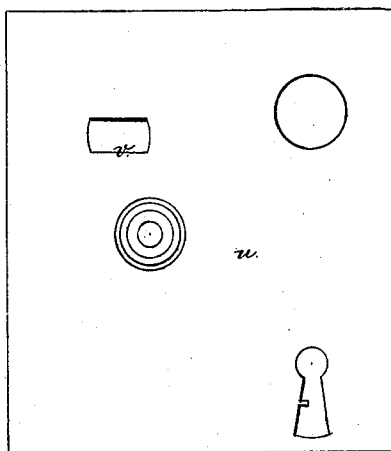
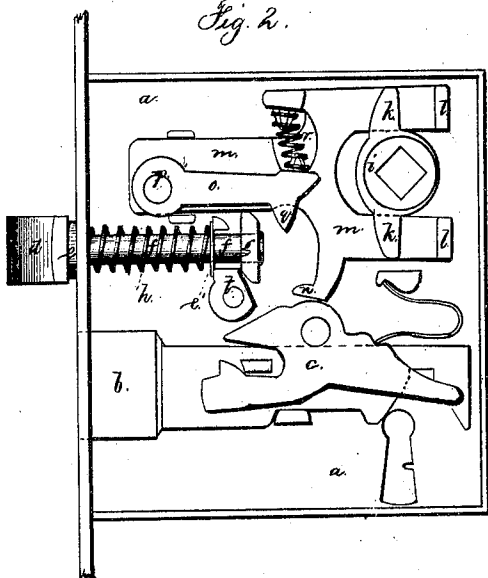


Fig. 2.



Wallace J. Munger.

Lemuel W. Serrell atty.

Witnesses.

Chas. A. Smith

Geo. A. Newker

United States Patent Office.

WALLACE T. MUNGER, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
P. & F. CORBIN, OF SAME PLACE.

Letters Patent No. 113,909, dated April 18, 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, WALLACE T. MUNGER, of New Britain, in the county of Hartford and State of Connecticut, have invented and made a certain new and useful Improvement in Locks; and the following is hereby declared to be a full and correct description thereof.

My invention relates to that class of locks or latches in which the latch is operated by the knob, and is capable of being reversed to change it to a right or left-hand lock.

I make use of a swinging arm moving upon a pin or stud on the saddle-plate of the lock or latch, and provided with a projection upon its outer end to take against the head upon the inner end of the latch-shank, and thereby keep said latch in its proper position relatively to the saddle-plate so that the two will move together when the knob is turned, or, when said arm is raised so that the projection is clear of the latch-head, allow the latch to move forward sufficiently out of the lock-case so that it can be reversed to change the inclination of the head of the latch and make it a right or left-hand lock or latch.

I provide a spring to keep the swinging arm in its correct position, and so support the latch-bolt that it will always be kept in its correct horizontal position.

In the drawing—

Figure 1 is an elevation of a lock with my improvement applied thereto, the cap-plate being removed and the parts in their normal position;

Figure 2 is a similar view, with the parts in position to allow of the latch being reversed; and

Figure 3 is an elevation of the cap-plate of the lock *a* represents the case of the lock;

b, the bolt; and

c, the tumbler, to be operated by a key of any desired character.

The latch-bolt is also of usual character, and is formed with the beveled head *d*, cylindrical part *e*, shank *f*, and head *g*, and is provided with the spring *h* by which it is projected, said spring acting between the cylindrical part *e* and the plate *e*.

i is the hub for the knob-spindle, and said hub is formed with the cams *k k* to act against the studs *l l*

upon the saddle-plate *m*, and move said saddle-plate and latch when the knob and spindle are turned.

o is the swinging arm, pivoted at *p* upon the saddle-plate *m*, and formed with the projecting stop *q* to take against the head *g* of the latch-bolt and keep said head *g* within its recess in the saddle-plate *m*, so that said plate *m* and latch-bolt, when in the position shown in fig. 1, will move together.

r is a spring to keep the arm *o* in its proper position; and at *n* I provide a projecting toe upon the saddle-plate *m* for the head *g* to rest upon, so that the spring *r* and arm *o* cannot move the latch-bolt from its correct horizontal position, and thus prevent friction of the shank *f* in sliding through the plate *e* or against the stops *t*.

In the cap-plate *u* I provide an opening, *v*, to allow for the arm *o* being raised to disconnect the stop *q* from the head *g*, so that the latch-bolt can be projected by its spring *h* to the position shown in fig. 2 to change or reverse the latch-bolt and make it a right or left-hand latch; and I make the stop *q* as a double incline, and also form the upper part of the head *g* as an incline, so that the simple act of forcing in the latch-bolt, after being changed or set as desired, raises the arm *o* and allows the parts to resume the position shown in fig. 1.

The head *g* and stops *t* prevent the latch being taken out of the lock when the same is being reversed, and become a guide for directing the head *g* back into place between the arm *o* and projection *n*.

I claim as my invention—

The reversible latch with the shank *f* passing between the stops *t* and carrying the swivel-head *g*, in combination with the arm *o* and projection *n* on the plate *m*, the parts being constructed and arranged substantially as specified.

Signed by me this 18th day of February, A. D. 1871.

W. T. MUNGER.

Witnesses:

CHARLES PECK,
EDWD. L. PRIOR.