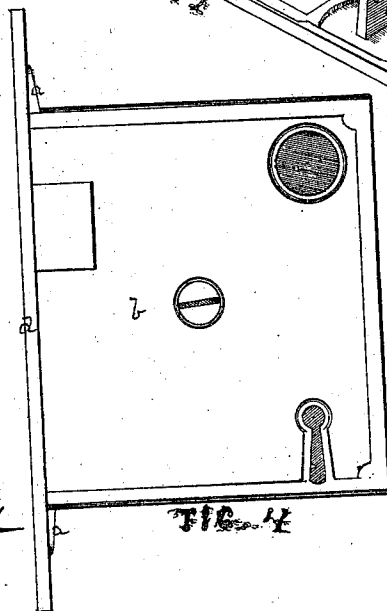
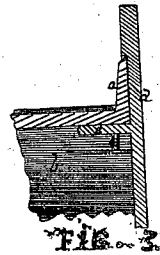
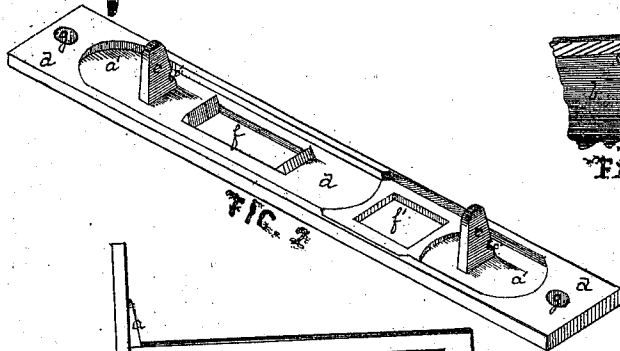
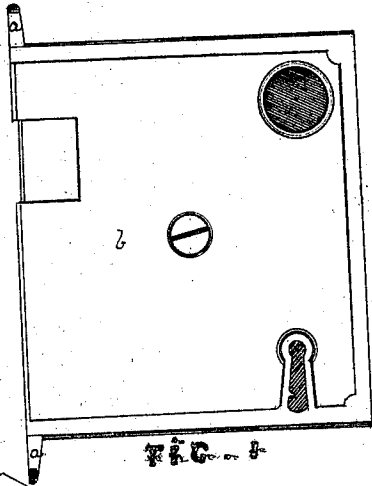


J. Whittingham,

Reversible Latch.

No. 100,830.

Patented Mar. 15, 1870.



Witnesses:

*Thos. B. Kerr
R. W. Smith*

Inventor:

*Joseph Whittingham,
by Bakewell, Lemish,
his Attys.*

United States Patent Office.

JOSEPH WHITTINGHAM, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 100,830, dated March 15, 1870.

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, JOSEPH WHITTINGHAM, of Pittsburg, in the county of Allegheny, and State of Pennsylvania, have invented a new and useful Improvement in Locks; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side view of a lock-case partially illustrative of my improvements;

Figure 2 is a perspective view of the inner side of my improved face-plate to be used therewith;

Figure 3, by a sectional view of the end of the face-plate and the corner of the lock-case, illustrates the manner of their fastening; and

Figure 4 is a side view of the lock when ready for use.

Like letters of reference indicate like parts in each.

My invention relates to that class of mortise door-locks known as reversible locks, that is, locks having reversible latch-bolts, so as to be readily made applicable to a right or left-hand door; and

The nature of it consists in combining lugs on the outside of the lock-case with recesses in the inside of the removable face-plate.

Also, in making a lock having a removable face-plate.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and manner of use.

The lock-case *b* being a mortise-lock, has short lugs *a*, projecting, one up and one down, as shown, at the corners which come against the face-plate *d*.

The inner side of the removable plate *d* has recesses *a'*, sufficiently deep to receive the lugs wholly or in part.

At suitable points on the inner side of the face-plate, so that they may enter the open end of the case at or near the opposite corners, are lugs *c*, about as broad as the aperture of the case, but each one having on one side a small notch, *c'*, which, when the face-plate is in place, catches on a bead, *e*, on the inside of the lock-case, whereby such lugs *c* are made to perform the function of hooks.

The parts are so proportioned that they fit snugly together, so that each part will keep in place with considerable firmness.

In the face-plate are holes *f f'*, for the lock and latch-bolts.

It is important in door-locks that the face-plate should be firmly attached to the lock-case, as with a mortise-lock there is no way of fastening the lock in the mortise, except by screws passing through the holes *g* in the face-plate. If, as has been done, the

face-plate be hinged to one corner of the lock-case, the lock-case will be liable to fall back or become loosened from the face-plate after being inserted in the door.

In the case of the devices herein described, the lugs *a* project out far enough to rest against the edge of the door in a groove or recess cut for the purpose, one above and one below the mortise. The hooks *c* also catching on the beads *e* aid in holding the lock-case to its place. Also the lugs *a* entering the recesses *a'* in the face-plate *d*, and the hooks *c* fitting snugly into the open end of the case, hold the case so firmly in place that when the face-plate is screwed to the door, the lock-case cannot move laterally. Hence the connection is practically as secure as if, as was formerly the case, the face-plate were irremovably fastened to the lock-case; and, at the same time, the connection is such that before the lock is attached to the door, the face-plate can easily be removed, the latch-bolt be reversed, and the plate replaced without trouble. The expense of hinging is saved, and a better lock produced.

It will be observed that the face-plate described is so made that it may be entirely removed from the lock-case, and this feature, with or without the lugs and hooks, I claim as an important part of my invention.

In fitting the lock-case into the door, when the case and face-plate are fixedly attached together by riveting, hinging, or otherwise, it requires considerable skill to fit and set the case properly in its mortise, since the workman can judge as to the accuracy of his work only by the accuracy of the setting of the face-plate. But by my invention, I make the face-plate removable, so that the workman can fit his lock-case into its mortise so carefully and tightly that it will, in most cases, retain its position without being in any way attached to the face-plate, though the devices described for that purpose may be used as an additional protection against displacement and injury.

I am aware that face-plates have been attached to lock-cases by screws inserted through lugs on the rear of the face-plate and into the lock-case, so that the face-plates were removable therefrom by taking out the screws, but in such locks this could not be done while the lock-case was in the door, nor would it be possible in such a lock to reverse the latch-bolt without removing the screws, except by the use of other improvements.

My improvement, as above described, greatly simplifies the construction of the lock, facilitates the accurate setting of the case, and the reversal of the bolt, without losing anything in the security of the attachments, and in such features of construction consists its novelty and utility. Hence,

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with a mortise-lock case, a face-plate, *d*, with connections, such that it may be attached and entirely detached without the necessary removal of any separate fastening devices, substantially as described.

2. The devices of preceding claim, in combination with lugs *a a* on the lock-case, substantially as described.

3. One or more hooks, *c*, projecting from the inside of the face-plate, entering the open end of the lock-case and engaging catches *e*, substantially as described.

In testimony whereof, I, the said JOSEPH WHITTINGHAM, have hereunto set my hand.

JOSEPH WHITTINGHAM.

Witnesses:

THOS. B. KERR,

A. S. NICHOLSON.