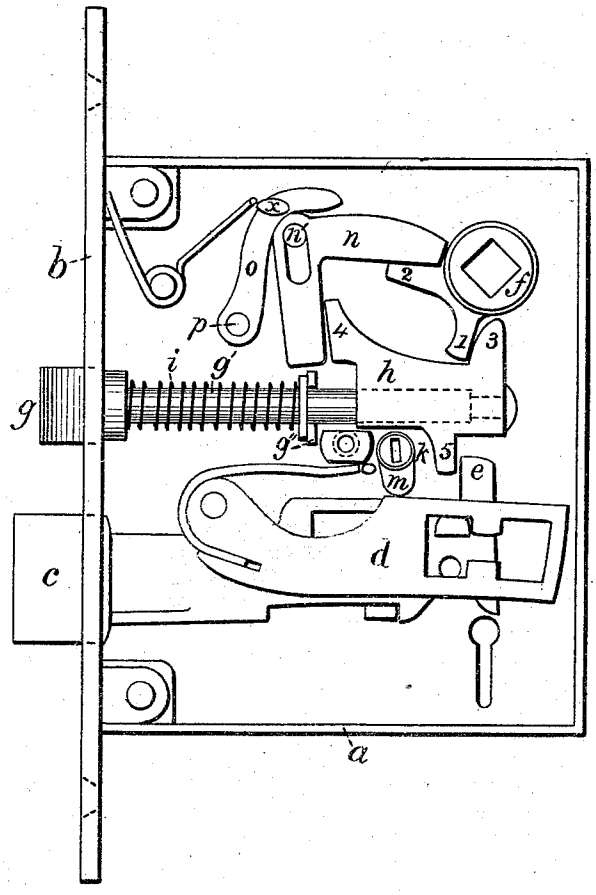
J. ARBEITER.

Reversible Knob-Latches.

No. 147,467. Patented Feb. 17, 1874.



Witnesses

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JOSEPH ARBEITER, OF NEWINGTON, CONNECTICUT.

IMPROVEMENT IN REVERSIBLE KNOB-LATCHES.

Specification forming part of Letters Patent No. **147,467**, dated February 17, 1874; application filed December 30, 1873.

To all whom it may concern:

Be it known that I, JOSEPH ARBEITER, of Newington, county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Reversible Knob-Latches; and to enable others skilled in the art to make and use the same, I will proceed to describe its construction, referring to the drawing.

In the accompanying drawing is shown a lock or latch case, having its cap removed to show the construction and arrangement of its operating mechanism.

a is the case; *b*, the face-plate. *c* is a lock-bolt. *d* is a tumbler. These parts thus far noticed are made in the common way, except that a projection, *e*, is formed on the upper edge, and at the back end of the bolt *c*. *f* is a spindle-hub, fitted into the case in the common way, and is provided with actuating-arms 1 2. The lines of their outer edges are made nearly at right angles and in a line nearly to the center of the spindle-hub orifice. *g* is a reversible latch-bolt, the front end of which is beveled on one side and flat on three sides back as far as the inside of the face-plate, and round a short distance inside of said face-plate, to steady the latch while pushed forward to be reversed, and is provided with a stem, *g'*, which extends back through the opening in boss *g''*. The end of this stem is fitted closely in the orifice (shown by dotted lines) in the tail-block *h*, and is secured thereto so as to allow the stem to turn freely therein. This tail-block *h* is provided with projection 3, to be acted upon by the arm 1 of the spindle-hub to operate the latch-bolt. *i* is a spiral spring, arranged upon the stem *g'*, one end of which bears against the shoulder of the latch-head, and the other end against a washer, which rests against the boss *g''*, which serves to press the latch forward when not otherwise prevented. *m* is a cam attached to hub *k*, which hub is fitted into orifices in the case-plates flush with the outside. This hub has an oblong orifice through its length for the reception of a key, and is held in the desired position (when not in use) by a spiral spring upon its upper end, one end of which spring bears against the shoulder of the hub, and the other against the cap-plate. By turning the cam *m* down, as shown in the drawing, it will bear upon the top edge of the tumbler, and will effectually prevent any movement of said tumbler, even by the lock-key. *n* is an intermediate angle-lever for actuating the latch by means of the arm 2 of the spindle-hub and the projection 4 on the tail-block. This lever *n* is provided with an elongated bearing orifice, which receives and works upon the stud *n'*, and is held in position for actuating the latch by the curved spring-lever *o*, which vibrates upon the stud *p*, and is provided with a projection, *x*, which extends through an opening in the cap-plate, and by means of which projection the upper end of this lever may be drawn forward, when the mechanism will be freed, so as to allow the end of the latch *g* to extend forward out of the face-plate, so as to be reversed from right to left, or vice versa; then, by pressing back the latch, it will assume its former position, so that it may be operated freely and easily by the knob-spindle, in the common way.

When desirable to provide additional security, after the bolt is locked turn the cam *m* down against the tumbler, and the projection 5 of the tail-block will bear against the projection *e* on the back end of the bolt. The bolt-key will then be prevented from raising the tumbler or unlocking the bolt, and the knob-spindle from operating the latch until said cam is turned back.

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

The latch *g*, tail-block *h*, spindle-hub *f*, angle-lever *n*, and curved spring-lever *o*, in combination, substantially as and for the purpose set forth.

JOSEPH ARBEITER. [L. S.]

Witnesses:
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