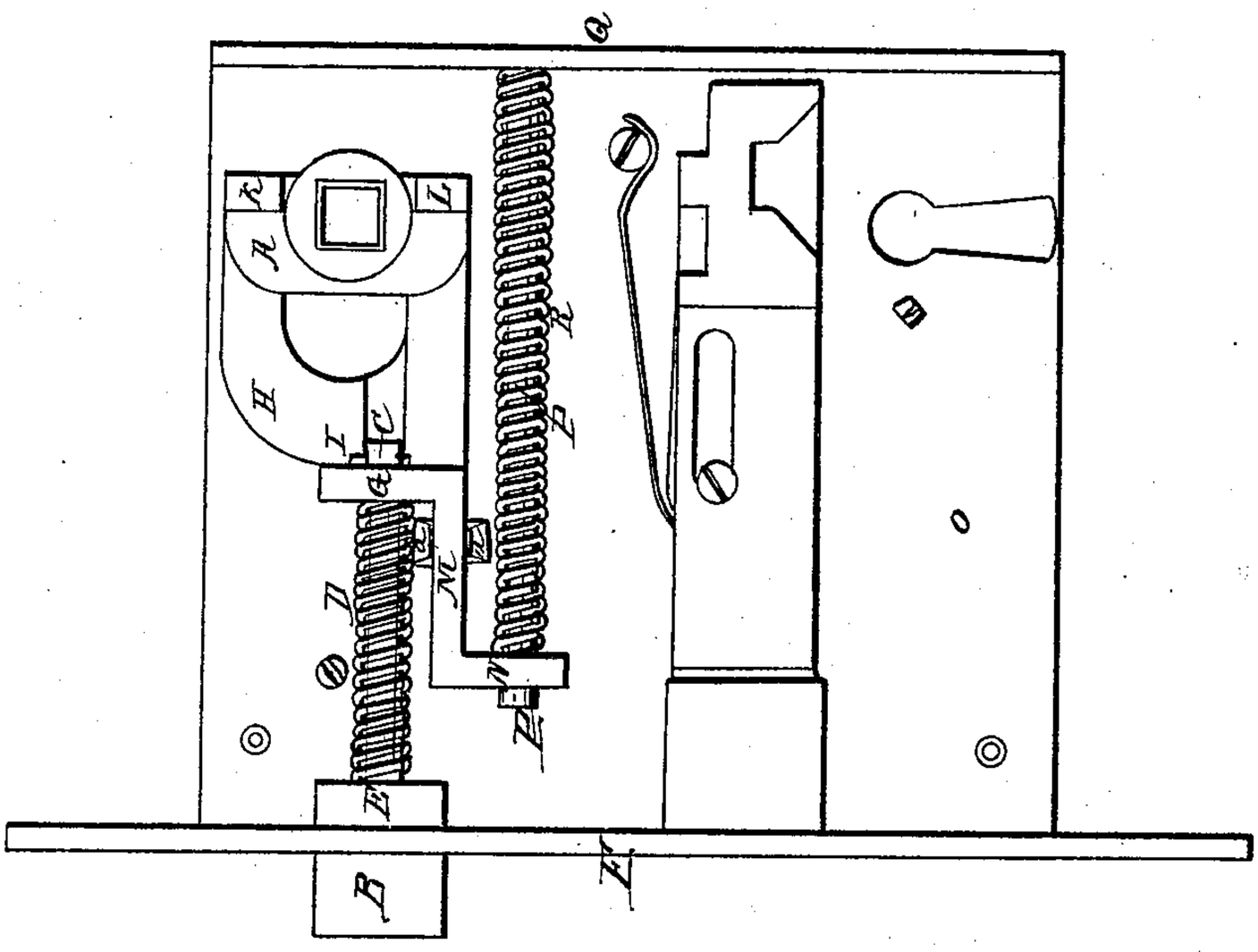
# Robinson & Hall,

## Latch.

No. 1,995. Patented Mar. 3, 1841.



# UNITED STATES PATENT OFFICE.

ENOCH ROBINSON AND WM. HALL, OF BOSTON, MASSACHUSETTS.

## LATCH OF DOOR AND OTHER LOCKS.

Specification of Letters Patent No. 1,995, dated March 3, 1841.

*To all whom it may concern:*

Be it known that we, ENOCH ROBINSON and WILLIAM HALL, both of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Locks for Doors, and that the following is a full and exact description of the same.

The said description, taken in connection with the accompanying drawing, hereinafter referred to forms our specification, setting forth and exhibiting the principles of construction of our improvement, (by which it may be distinguished from other inventions of a like character), and such parts or combinations as we claim to be our invention, and for which we solicit Letters Patent.

The drawing, herewith presented, represents the internal parts of a lock of our construction. Our improvements are confined to the arrangement of the springs, which operate the latch and knob.

A exhibits the tumbler, through which the square shank of the knob is inserted in the usual manner. That part of the bolt or spring latch B, which projects out of the side of the lock, is formed like those of most other locks, but that within the lock has a small shank C projecting back from the same, around which a helical spring D is wound as represented in the figure. One end of the spring D abuts against the rear part E of that part of the latch, which slides through the side plate F of the lock, while the other end of the spring rests against a shoulder piece G, raised perpendicular upon the fork H. The shank C passes and plays loosely through a cylindrical hole, formed through the shoulder piece G, and has a pin I inserted therein on the opposite side of the said shoulder piece. Thus it will be seen that when the bolt B recedes, the shank C moves back with the same and the spring D contracts, but on removal of the force, causing the same, the expansion of the spring, throws out the latch, until the pin I comes in contact with the side of the shoulder piece G. In order to draw back the latch at any time, to open the door, the tumbler A, when operated by the hand applied to the knob, acts on one or the other of the two studs K, L raised on the ends of the fork H. The shoulder G is bent at right angles as represented at M, N, the part M of the same being supported during its back and forth motions, by a projection *a*, on each side thereof (as seen in the drawing), cast or otherwise applied to the plate O of the lock. A rod or piece of stout wire P, has one end inserted and riveted, or otherwise properly affixed, in the side Q of the lock, and the said rod P projects therefrom and passes through a cylindrical hole, bored through the bent part N of the shoulder piece, so as to admit the part N to freely slide thereon, when drawn back by the action of the tumbler. A strong helical spring R is placed on the rod P, one end of the same abutting against the side of the piece N, and the other, resting against the side Q of the lock case as shown in the drawing. The particular object of this spring is to act upon the tumbler, and thus throw back the knob, after it has been turned around by the hand. The force exerted by the spring D should be much weaker than that of the spring R, so that whenever the door is closed, the latch will slip back, independent of or without any action on the knob, tumbler, or the spring R.

We claim as our invention,—

Arranging the latch-bolt with an additional spring, which shall operate the same in closing the door to which the lock is applied, independently of the spring which acts on the knob, the whole being constructed substantially as hereinabove set forth.

In testimony that the above is a true description of our said invention and improvement we have hereto set our signatures this eleventh day of February, in the year eighteen hundred and forty one.

ENOCH ROBINSON.
WM. HALL.

Witnesses:
R. H. EDDY,
CALEB EDDY.