

S. W. Drowne,
Lock.

Nº 75,879.

Patented Mar. 24. 1868.

Fig. 1.

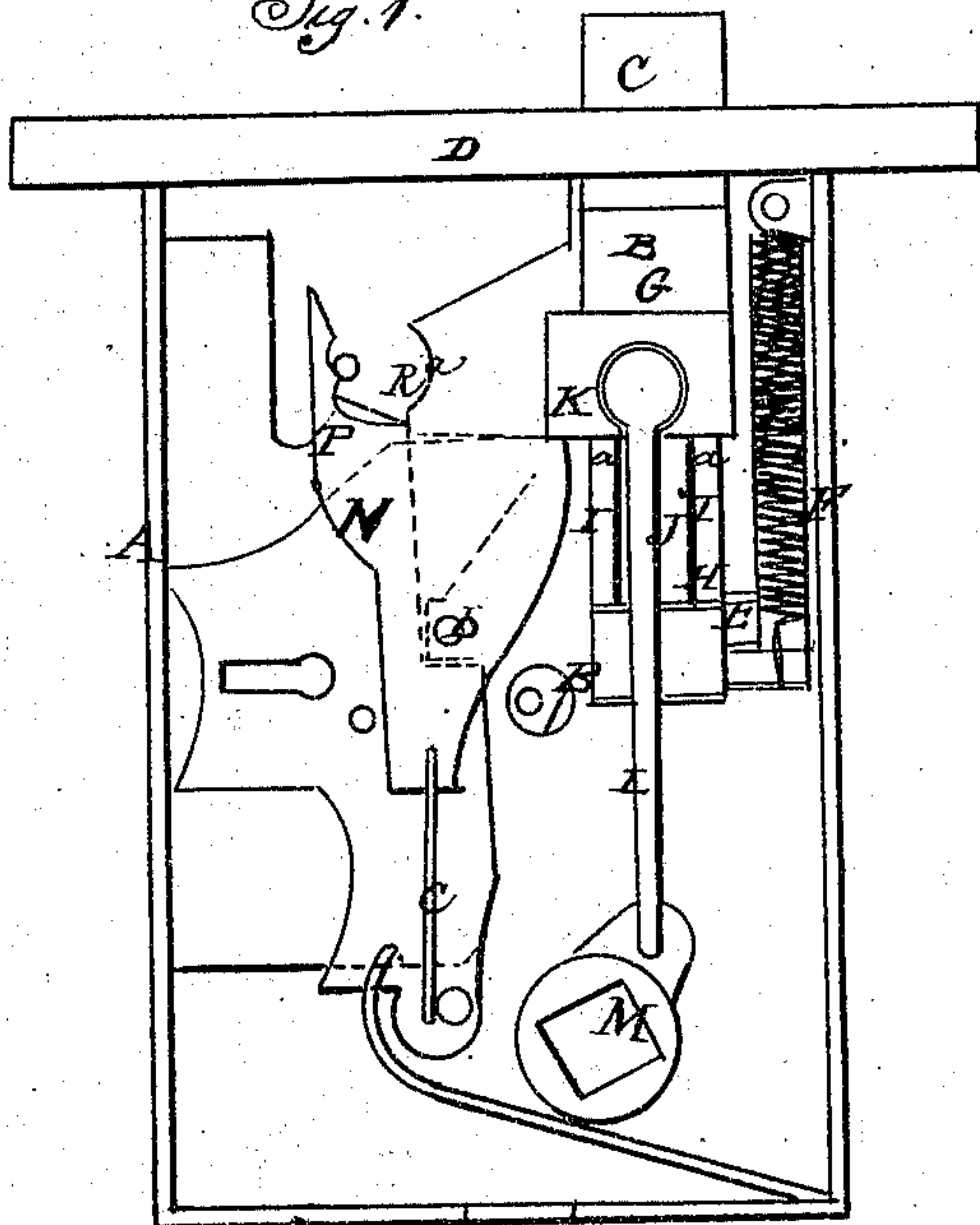
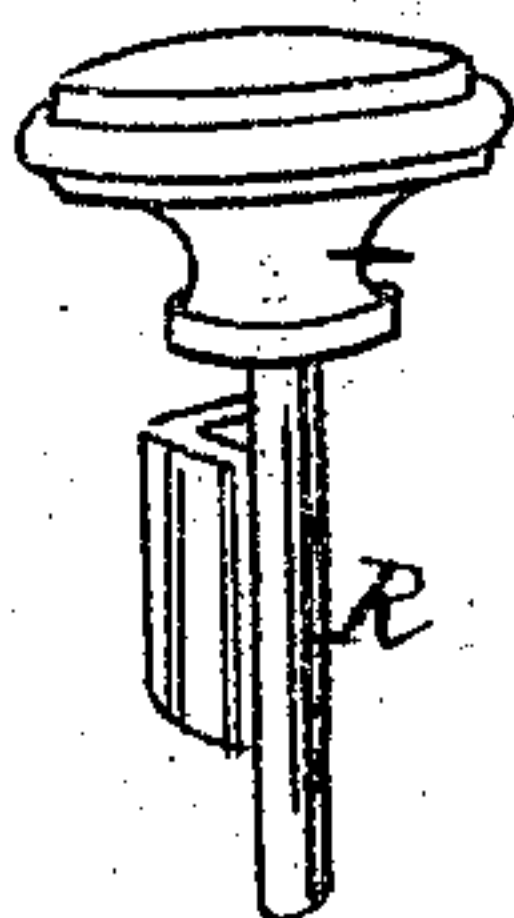


Fig. 2.



Witnesses:
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SIMEON W. DROWNE, OF NORWICH, CONNECTICUT.

Letters Patent No. 75,879, dated March 24, 1868.

IMPROVEMENT IN LOCKING-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, SIMEON W. DROWNE, of Norwich, in the county of New London, and State of Connecticut, have invented new and useful Improvements in Locks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

The present invention relates to latch-locks more particularly, and consists principally in a novel arrangement of the latch-bolt and locking-mechanism, whereby the latch-bolt can be so locked that it cannot be operated by the handle or knob-spindle, but yet it is free to play when the door is closed. In the accompanying plate of drawings my improvements in locks are illustrated—

Figure 1 being an inside view of the case or box to the lock, showing the locking-mechanism, and

Figure 2 a perspective view in detail of one of its parts, to be hereinafter referred to.

Similar letters of reference indicate corresponding parts.

A, in the drawings, represents the box or case to the lock. In this box the latch-bolt B is arranged to slide, projecting by its angular end C, through the front plate D, to the case. This bolt B slides between two posts, E, and has a coiled spring, F, connected with it, to throw it out after being drawn in by the turning of the knob or handle, as will be hereinafter described. This bolt, on one face, G, has a groove, H, formed by two parallel raised ribs, I, and between these ribs extends the projecting arm J, to a sleeve, K, that is arranged upon the bolt B to abut against the ends *a* to the ribs I. To the sleeve K is hung one end of a rod, L, that, at its other end, is hung to the arm of the hub M to the knob-spindle, by the turning of which in the proper direction the latch-bolt will be drawn in, as is obvious, the spring F throwing it out upon the removal of the hand from the handle. N, a series of tumblers, hung at one end upon a common pin, *b*, of the lock-casing, so as to thereon turn, the several tumblers being laid upon one another, and in form and shape adapted for the peculiar shape given to the bit of the key that is provided therefor. These tumblers N are each provided with a similar bent spring, *c*, for throwing them to their original place after the key-bit has ceased to act upon them, which is against one side of the sleeve, on the latch-bolt, by which the latch-bolt is prevented from moving by turning the knob-spindle, while at the same time its play or movement through the said sleeve is not in the least degree obstructed. The several tumblers are provided with an extension-arm, P, by means of which, with the bit to a knob-key, R, arranged to turn in the lock-casing, such tumblers can be held out of contact or engagement with the bolt-sleeve, if so desired, and thus the latch-bolt left free to be moved by the turning of the knob-spindle. The knob-key R is shown in perspective view, fig. 2, and is intended to be located upon the inside of the door to which the lock is applied.

From the above description of the lock it is obvious that the latch-bolt can be locked, so that while it cannot be operated by the turning of the knob or handle, it can play as the door is closed, and that, furthermore, the locking-mechanism can be held out of contact with the sliding sleeve to the latch-bolt, and thus left free for operation upon the bolt by the turning of the knob-spindle or handle. By means of the knob-key R, when placed within the notch to the arm R² of the latch-bolt, such bolt can be held fast, as it were.

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

The combination of the latch-bolt B, spring F, sleeve K, ribs I, connecting-bar L, tumblers N, with projections P and R², and knob-key R, all constructed and operating as described for the purpose specified.

The above specification of my invention signed by me, this day of July, 1867.

SIMEON W. DROWNE.

Witnesses:

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