C. SEYMOUR.

Locking-Latch.

No. 162,423. Patented April 20, 1875.

Fig. 1.

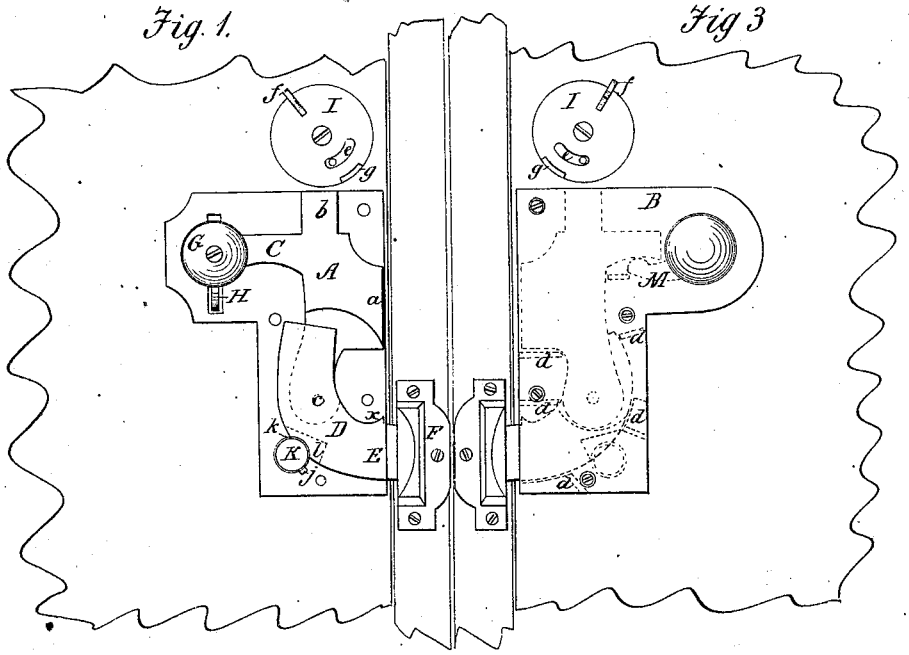


Fig. 3

Fig. 2.

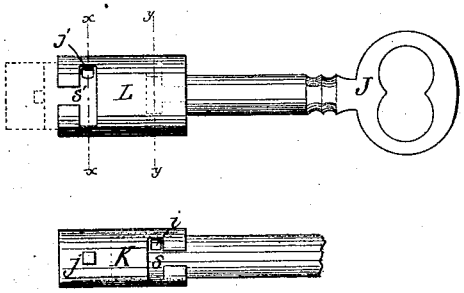


Fig. 6.

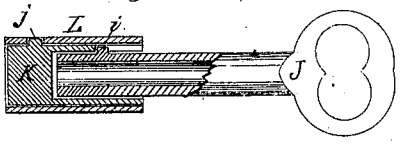


Fig. 4

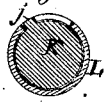
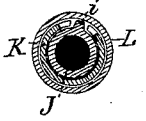


Fig. 5



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UNITED STATES PATENT OFFICE.

CHARLES SEYMOUR, OF CHARLOTTESVILLE, VIRGINIA.

IMPROVEMENT IN LOCKING-LATCHES.

Specification forming part of Letters Patent No. **162,423**, dated April 20, 1875; application filed March 9, 1875.

To all whom it may concern:

Be it known that I, CHARLES SEYMOUR, of Charlottesville, in the county of Albemarle and State of Virginia, have invented a new and Improved Latch and Knob Lock; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation of left-hand lock with the cover B removed; Fig. 3, a side elevation of right-hand lock, with modification of devices for opening; Figs. 2, 4, 5, and 6, details of locking devices.

The object of this invention is to provide a simple and effective lock for doors of all kinds, and other analogous uses, without the use of springs; and it consists in such a construction and arrangement of parts as will first be fully described, and then pointed out in the claim.

In the drawing, A represents the vertically-sliding bar, which moves inside a casing or frame, B, being guided in vertical direction by the face *a* and the vertical extension *b*, which passes through the top of the frame B. C is a horizontal arm attached to bar A, by means of which the said bar is elevated. D is the curved bolt, pivoted near the middle, at *c*, to the lower end of the bar A. Said bolt moves in the arc of a circle between the guide-lugs *d*, and its horizontal end E engages with the keeper F upon the door-frame, the projection *x* preventing the bolt from going too far. G is a knob attached to the arm C of the vertically-moving bar, by means of which the door is unlocked. Just beneath the said knob appears the end of a lever, H, by means of which the door is opened from the opposite side. I is a fastening, consisting of a circular plate pivoted to the door, and provided with a guide-slot, *e*, and lugs *f* and *g*, the first of which serves to turn the fastening I, and the second, *g*, engages with the vertical extension of the bar A, and prevents the same from being elevated. In addition to the said fastening I use another and more effective means for rigidly locking the bolt, in which J represents a key having a lug, *i*; K, a tumbler, having a T-shaped slot, *s*, in which the lug *i* of the key moves. L is a stationary detachable barrel fixed in the door, and provided with a T-shaped slot, *s'*, in which moves a second lug, *j*, attached to the tumbler. In the curved outer surface of the bolt D is a circular notch, *k*, corresponding to the outer surface of the tumbler K, and also an angular depression, *l*. Now, when the key is introduced into the tumbler K the lug *i* forces the tumbler into the notch *k* in the bolt, and a turn of the key turns the lug *j* of the tumbler in the depression *l* of the curved bolt, the tumbler locking thereby the bolt, and the lug of the tumbler preventing the withdrawal of the tumber until turned back again. As soon as the lug of the tumbler is turned out of the depression *l*, and it is in alignment with the entrance to the T-shaped slot *s'* of the barrel, the tumbler can be withdrawn from the notch *k* of the bolt, and the latter left free to move. A turn now to the right or left locks the lug of the tumbler in the T-shaped slot *s'* of the barrel, and also the lug of the key in the T-shaped slot *s* of the tumbler.

In operating my improved lock, I do not confine myself to any particular form of device, as I may employ a lever, as in Fig. 1, or I may use a rotary-moving knob having an extension, M, which lifts the horizontal arm of the vertically-sliding bar, as shown in Fig. 3.

Having thus described my invention, what I claim as new is—

The key having lug *i*, the tumbler K, having lug *j* and T-shaped slot *s*, the barrel L, having T-shaped slot *s'*, and the curved bolt D, having notch *k* and depression *l*, all combined and arranged substantially as and for the purpose described.

The above specification of my invention signed by me this 5th day of March, 1875.

CHAS. SEYMOUR.

Witnesses:

EDWD. W. BYRN,

CHAS. A. PETTIT.