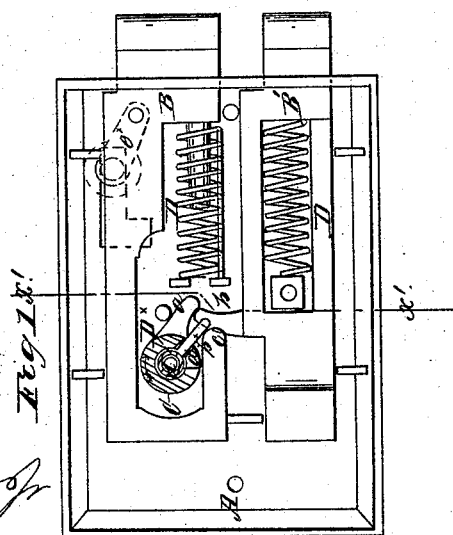
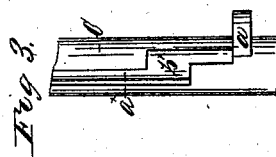
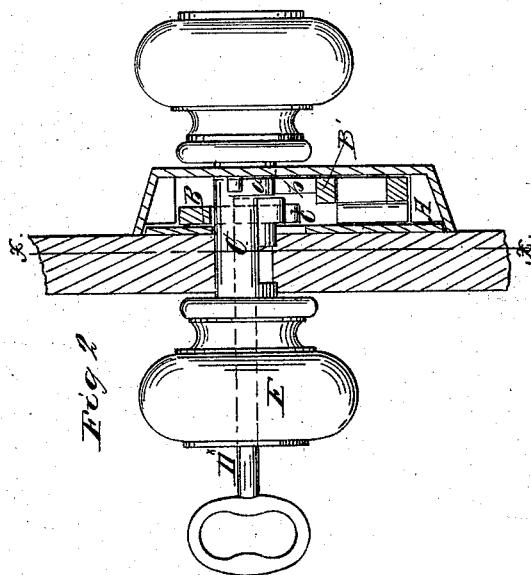


A. Williams,
Latch,
No. 48,123, *Patented June 6, 1865.*



Witnesses
Malvern
Geo. Fusch

Inventor,
A. Williams
Byllum & Co.
Attys.

UNITED STATES PATENT OFFICE.

ALBERT WILLIAMS, OF NORWICH, CONNECTICUT.

KNOB-LATCH.

Specification forming part of Letters Patent No. **48,123**, dated June 6, 1865.

To all whom it may concern:

Be it known that I, ALBERT WILLIAMS, of Norwich, in the county of New London and State of Connecticut, have invented a new and Improved Lock; 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 a part of this specification, in which—

Figure 1 is an external view of my invention, the knob-arbor being in section, as indicated by the line *x x*, Fig. 2; Fig. 2, a transverse section of the same, taken in the line *x' x'*, Fig. 1; Fig. 3, a detached view of the knob-arbor pertaining to the same.

Similar letters of reference indicate like parts.

This invention consists in combining in a novel way a dead-latch and an ordinary slide-latch in such a manner that the slide-latch may be operated by the turning of the knob-arbor, as usual, and the dead-latch operated by a key, the hole for which passes through one of the knobs and the knob-arbor, as hereinafter fully shown and described, whereby a very simple, economical, and efficient lock is obtained, and one that cannot be readily picked or opened illegitimately.

A represents the case of the lock, which may be of rectangular or other form, and provided with the latches B B', one, B, being the dead-latch, which is operated by a key, and the other, B', a slide-latch, which is operated by the knob-arbor C. These latches are each provided with a spiral spring, D, which have a tendency to keep the ends of the latches forced out from the case, as will be understood by referring to Fig. 1. The knob-arbor C is provided with a bit, *a*, which acts against a projection, *b*, on the slide-latch, pressing against it and forcing it back when the arbor is turned in the direction indicated by arrow 1. This turning of the arbor C, however, does

not affect the dead-latch B. The dead-latch is operated or thrown back by means of a key, D^x, the hole of which passes through a knob, E, on the arbor C, and the arbor is slotted to admit of the key passing through it into the lock, the slot *a^x* in said arbor having a right-angular turn, *b^x*, in it near its inner end, to cause the key to be turned in position in order that its bit *b* may be brought in a proper relative position with a projection, *c*, on the dead-latch. (See Figs. 1 and 3.) The arbor C, at its inner end, is provided with a pin, *d*, which passes into the tubular end of the key when the latter is inserted in the tube. The dead-latch is provided with a hook or catch, *e^x*. (Shown by dotted lines in Fig. 1.) This hook or catch is to hold in the dead-latch when the slide-latch is only required to be used, and is accessible at the inner side of the door. When the dead-latch is not held back by this hook or catch, it serves as a lock-bolt, and the key D^x is required in order to open the doors from the outer side, the knob E being at the outer side of the door.

The lock may be made as a rim or mortise lock, and used for any purpose where a lock is required. It cannot be readily picked on account of the difficulty of inserting a pick or wire through the knob E and arbor C; a wire would be so thin as not to have sufficient strength to force back the dead-latch.

I claim as new and desire to secure by Letters Patent—

The arrangement of the slotted arbor with the dead and slide latches and knob, substantially as shown, so that the dead-latch may be operated or thrown back by the insertion of a key through the knob and arbor, while the latter is used for operating the slide-latch, as described.

ALBERT WILLIAMS.

Witnesses:

M. M. LIVINGSTON,
C. L. TOPLIFF.