

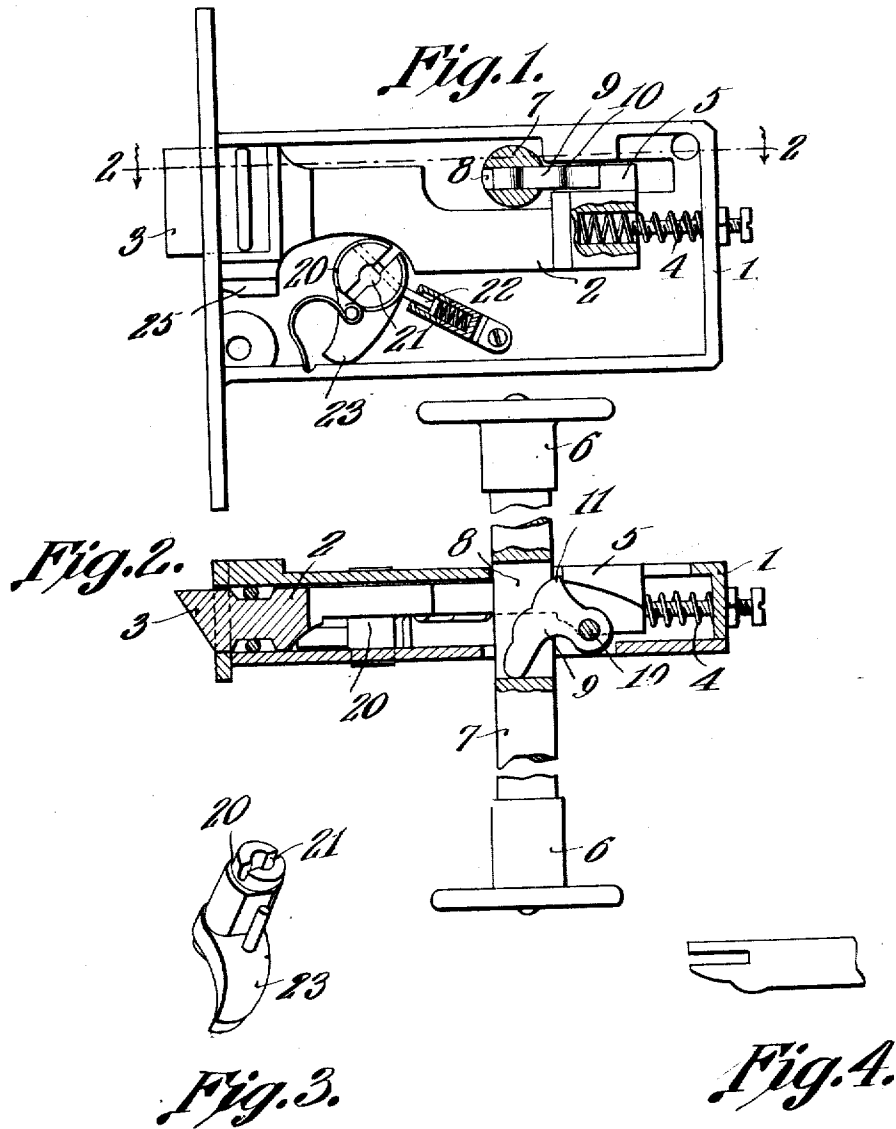
R. F. COOK.

LATCH.

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Patented Apr. 16, 1912

1,023,624.



Witnesses

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UNITED STATES PATENT OFFICE.

ROSWELL F. COOK, OF NEW YORK, N. Y.

LATCH.

1,023,624.

Specification of Letters Patent.

Patented Apr. 16, 1912.

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To all whom it may concern:

Be it known that I, ROSWELL F. COOK, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Latch, of which the following is a specification.

This invention relates to locks and latches, and more especially to that type wherein the latch is ordinarily used as such but has means for locking it at times; and the object of the same is to produce an extremely simple device of this character wherein the knobs and knob spindles slide through the casing rather than turn therein. This object is accomplished by the construction herein-after more fully described and claimed, and as shown in the drawings wherein—

Figure 1 is a side elevation of this lock with its nearest face plate removed and parts shown in section. Fig. 2 is a horizontal section on the line 2—2 of Fig. 1. Fig. 3 is a perspective detail of the lock proper of this device. Fig. 4 is a detail of the active end of the key used with this lock.

Referring to the drawings the numeral 1 designates the casing wherein slides the bolt 2 having a beveled front end 3 and borne forward by means of a spring 4, the body of this bolt having a lug 5 as seen in Fig. 2.

6—6 are the knobs on the spindle 7 which is mounted to move transversely through the casing in a line at right angles to the plane of the latter, and in its length it has a slot 8 which engages with the head of a T-shaped lever 9 whose shank is pivoted at 10 in any convenient manner to the casing. When the lowermost knob shown in Fig. 2 is pushed inward (upward in this view) the lowermost end of the slot 8 raises the head of the T-shaped lever 9 so that what might be called its heel 11 strikes the lug 5 on the bolt 2, and the latter is depressed against the tension of the spring 4 so as to withdraw its tip 3 from the keeper which is not shown. When pressure on the knob is removed, the parts return to their normal positions under the impulse of said spring. The same action of course takes place if the uppermost knob of Fig. 2 were raised upward instead of the lowermost knob being pushed upward.

The respective spindle openings in the sides of the casing 1 are designated by the numerals 17 and 17', which openings have

the respective rearwardly extending slots 15 and 16. The lug 5 projects into the slot 15 to be guided in the said slot and thereby also supporting the inner end of the latch bolt 2. The T-shaped lever 9 is pivoted in the slot 16 and when swung is adapted to enter the slot 15. This provides for a compact mechanism for actuating the latch bolt by the reciprocation of the knob spindle, which is essential when the latch is used as a mortise lock on doors and the like.

When it is desired to convert this spring latch into a lock, it can be done by applying means for preventing backward movement of the bolt 2, such as the lock proper illustrated alone in Fig. 3, and which is rotated by the key shown in Fig. 4. This lock in the present instance consists of a tubular barrel 20 having a slotted key opening 21 for the reception of the key from either side of a door, a spring actuated retainer 22 for holding this barrel frictionally in any position to which it may be turned by the key, and a nose 23 carried by the barrel and adapted by the latter to be turned downward out of active position as seen in Fig. 1, or to be turned upward as indicated in dotted lines so that it will engage behind an ear 25 on the bolt 2 when the latter is in its forward position, and prevent it positively from being moved to the rear. Thus it will be seen that by inserting the key from either side of the door into the key opening 21 and rotating the barrel 20 so as to raise the nose into engagement with the ear, the latch becomes a lock because it cannot be moved by the knobs until the nose is again restored to the full line position shown in Fig. 1. At other times the latch will be operated to retract it by pushing on one knob or pulling on the other, and obviously the door will be so hinged that this pull from one side or push from the other will open it.

The parts are of the desired sizes, shapes, materials, and proportions; and considerable change can be made without departing from the spirit of my invention.

Having described the invention what I claim as new is:—

In a device of the character described, a casing having spindle openings in the sides thereof with rearwardly extending slots, a spring pressed bolt slidably mounted in the casing and having a lug projecting there-

from and guided in one of the said slots, a knob spindle slidable through the spindle openings and having a longitudinal slot therein, and a T-shaped lever pivoted in the
5 other slot and fitting within the slot of the spindle with the heel thereof engaging the said lug.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ROSWELL F. COOK.

Witnesses:

ADELBERT A. BENEDICT.

WM. W. COOK.