

No. 772,487.

PATENTED OCT. 18, 1904.

G. W. WINCKFIELD.
LOCK.

APPLICATION FILED DEC. 23, 1903.

NO MODEL.

Fig. 1.

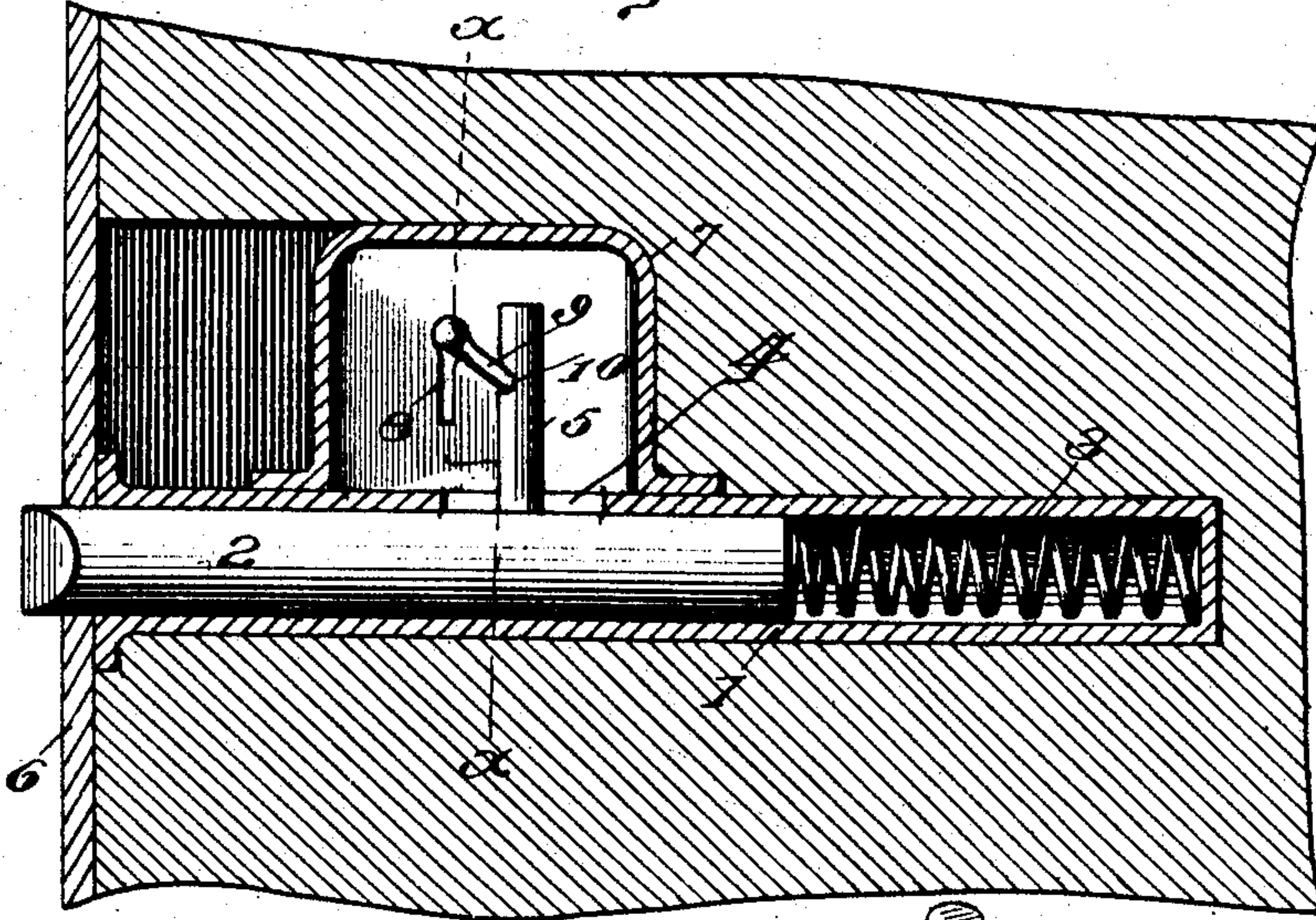


Fig. 2.

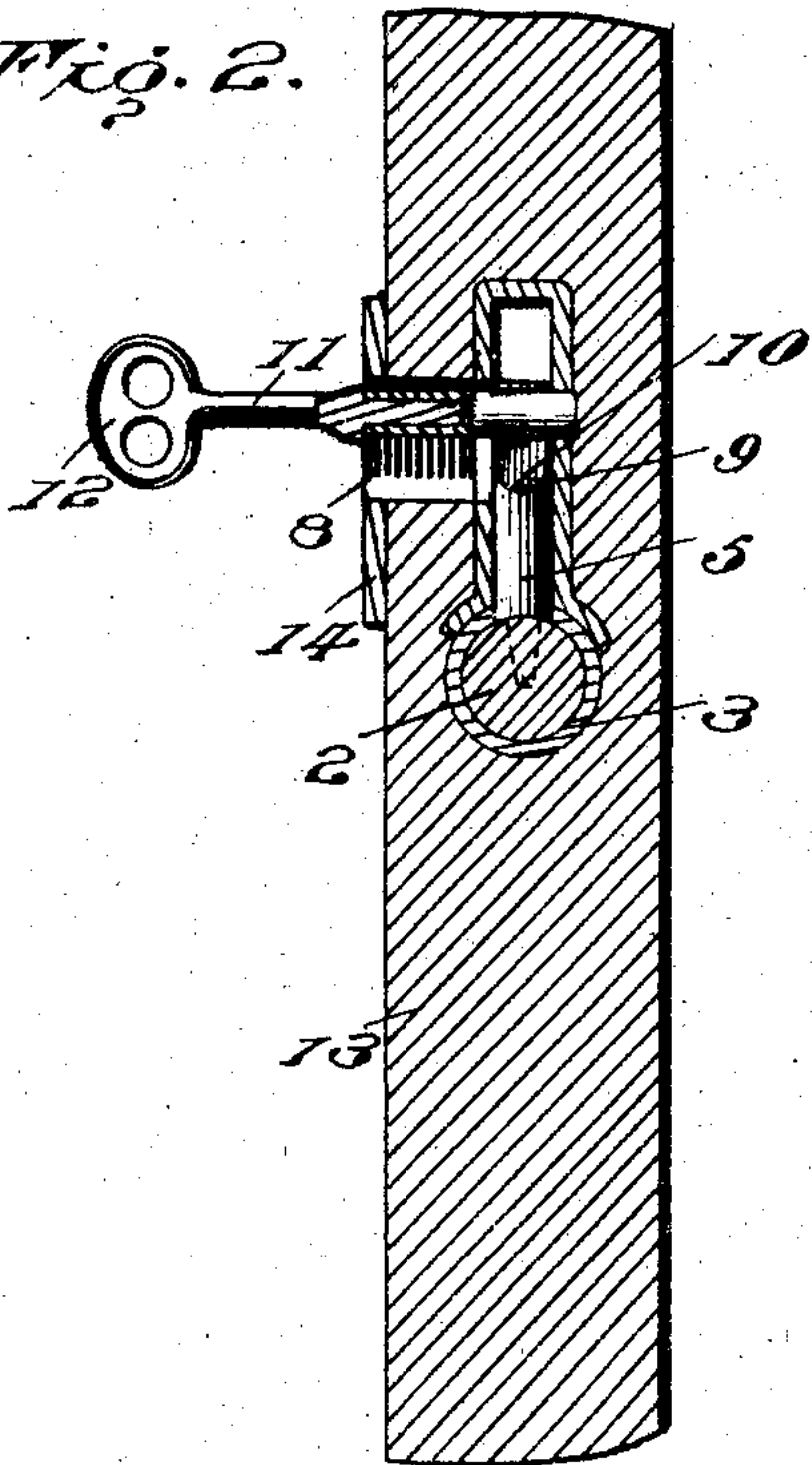


Fig. 3.

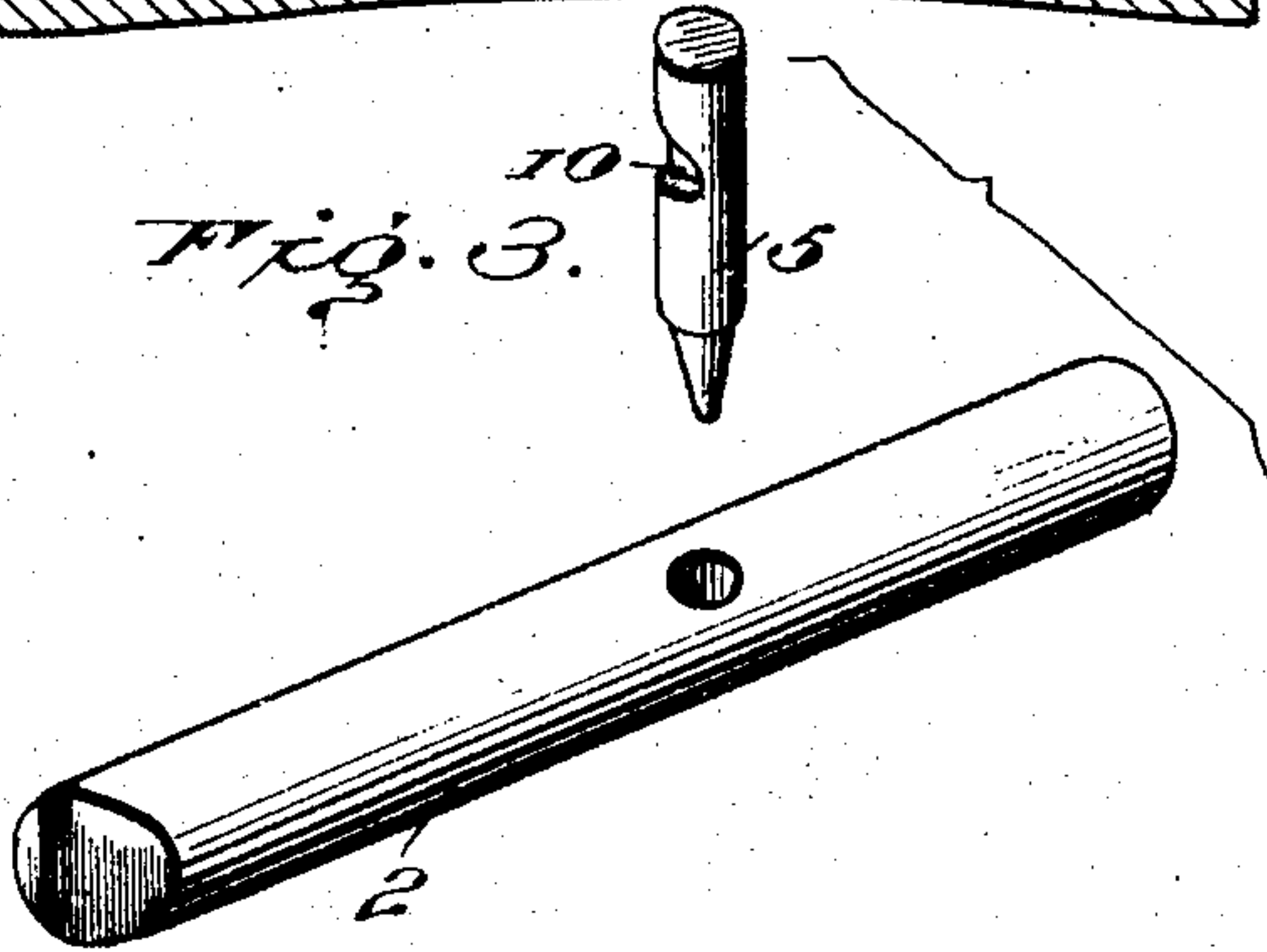
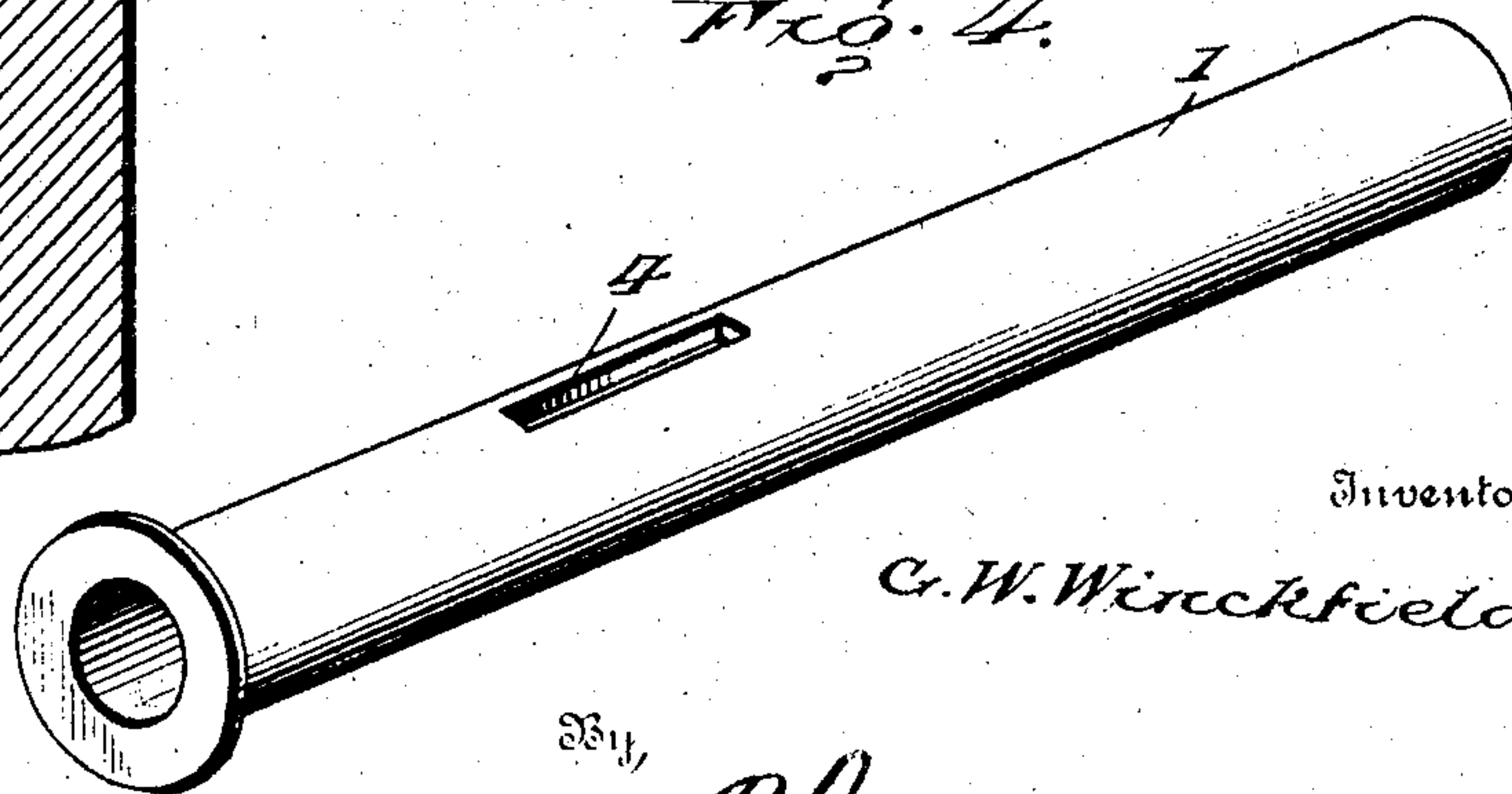


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE W. WINCKFIELD, OF OAKLAND, CALIFORNIA.

LOCK.

SPECIFICATION forming part of Letters Patent No. 772,487, dated October 18, 1904.

Application filed December 23, 1903. Serial No. 186,401. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WINCKFIELD, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention provides a lock of the mortise type designed for windows, doors, and interior work generally, although it may be used to advantage wherever a lock of the mortise species is desired.

An essential feature of the invention is simplicity of construction and the provision of a lock which may be readily placed in position and is effective for the purpose intended and not liable to get out of repair.

Other objects and advantages are contemplated and will suggest themselves to the skilled artisan as the details of the invention are comprehended, and to this end reference is to be had to the following description and the drawings hereto attached, in which—

Figure 1 is a central longitudinal section of a lock embodying the invention, showing the same in operative position. Fig. 2 is a section on the line X X of Fig. 1. Fig. 3 is a detail perspective view of the lock-bolt and operating-pin, the parts being separated. Fig. 4 is a detail perspective view of the casing or tube for the lock-bolt and its actuating-spring.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The lock comprises the tube, barrel, or casing 1, in which is slidably mounted the lock-bolt 2 and the actuating-spring 3 therefor. A longitudinal slot 4 is provided in a side of the barrel 1 and admits of the pin 5, connected to the lock-bolt and projected laterally therefrom, operating therein. This pin 5 is secured to the lock-bolt in any determinate way and, as shown, is fitted into an opening formed in a side thereof. The pin 5 limits the outward movement of the lock-bolt by coming in contact with the outer closed end of the slot 4 and also receives the force applied for moving the lock-bolt inward against

the tension of the spring 3 when it is desired to open the door, window, or other part to which the lock is applied. The face-plate 6 is secured to the outer end of the barrel 1 in any manner and closes the opening into which the barrel and box 7 are fitted.

The box 7 is secured to the side of the barrel 1 having the slot 4 in any desired way and forms a housing for the pin 5 and is provided with the keyhole 18 for reception of the key employed for operating the lock. The nib 9 of the key is adapted to enter the notch 10, formed in a side of the pin 5, so as to hold the key in a determinate position and prevent displacement thereof. Further, the nib 9 in its cooperation with the notched portion 10 of the pin 5 establishes an interlocking connection with the said pin, so as to lock the bolt 2 within the tubular barrel 1, as shown in Fig. 1 of the drawings. The notch 9 is undercut sharply at one end and inclined upwardly toward the other end, so that the interlocking connection between the nib 9 of the key and the lock 5 may be obtained. The spring 3 cooperates to effect the interlocking connection by affording a spring action at the time the nib 9 engages the undercut portion of the notch 10, so as to hold the pin firmly in engagement. To release the lock-bolt 2, a rotary movement of the key causes the nib 9 to ride out of the notch in a manner readily apparent.

The key is of sectional formation and comprises the stem 10, carrying the nib 9, and the shank 11, provided at its outer end with the thumb-piece 12. The shank and stem of the key are connected by a slip-joint and are made angular in cross-section to insure turning of the parts as a unit when using the key for opening the lock. The stem 10 remains within the box 7, as indicated most clearly in Figs. 1 and 2, whereas the shank 11 is detachable to be carried in the pocket. The keyhole of the door 13 or like part is provided with the usual escutcheon 14 to give a finished appearance and sustain the wear.

A lock constructed in accordance with this invention may be easily and quickly applied to a door, window, or like closure or part by boring the same to receive the barrel 1 and providing a shallow mortise to receive the box

7, which operation may be conveniently and expeditiously performed. After the lock has been slipped into place it is fastened by screws applied to the face-plate 6 in the well-known manner.

5 Having thus described the invention, what is claimed as new is—

1. In a lock, the combination of a tubular casing, a lock-bolt slidably mounted within the casing, a spring bearing against the lock-bolt to normally project the same from the casing, a pin projected laterally from the lock-bolt and provided with a notched portion, and a key for actuation of the lock-bolt and having a nib extended therefrom, said nib being adapted to make interlocking connection with the notched portion of the pin aforesaid, whereby said lock-bolt may be locked within the casing.

20 2. In a lock, the combination of a tubular

barrel or casing having a longitudinal slot in a side, a spring-actuated lock-bolt mounted in the barrel or casing, a pin projected laterally from the lock-bolt through the slot of the barrel, a box projected from the side of the barrel or casing and constituting a housing for the projecting portion of the pin, a key insertible within the box aforesaid and provided with a nib extended therefrom, the lock-pin being provided with a notch undercut at one end and inclined at the other, the nib of the key being adapted to make interlocking connection with the notched portion of the pin by having its end portion engaged therein.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. WINCKFIELD. [L. S.]

Witnesses:

C. J. RALEIGH,
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