

No. 778,469.

PATENTED DEC. 27, 1904.

F. UHRL.
LOCK.

APPLICATION FILED JUNE 21, 1904.

Fig. 1.

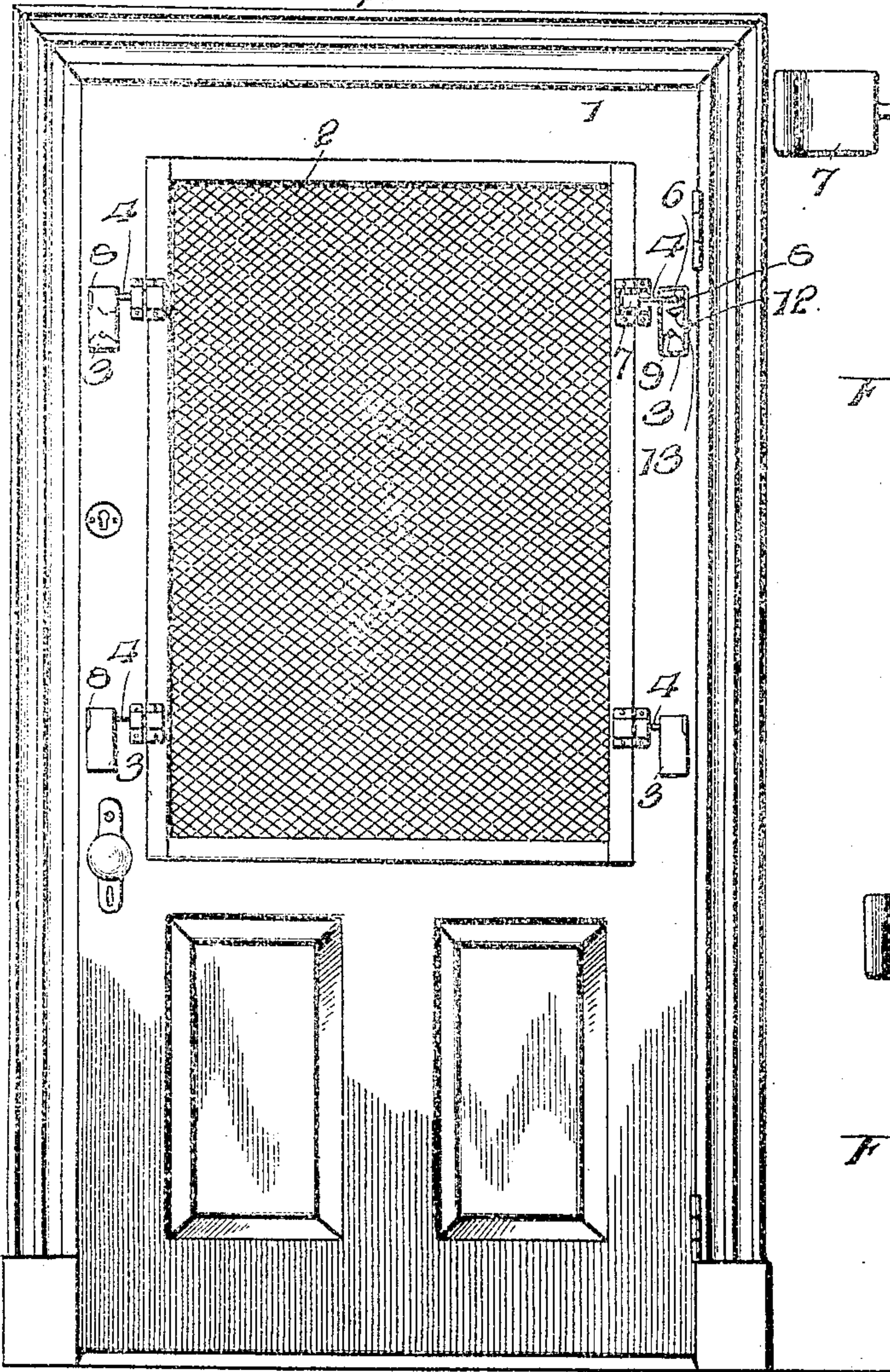


Fig. 2.

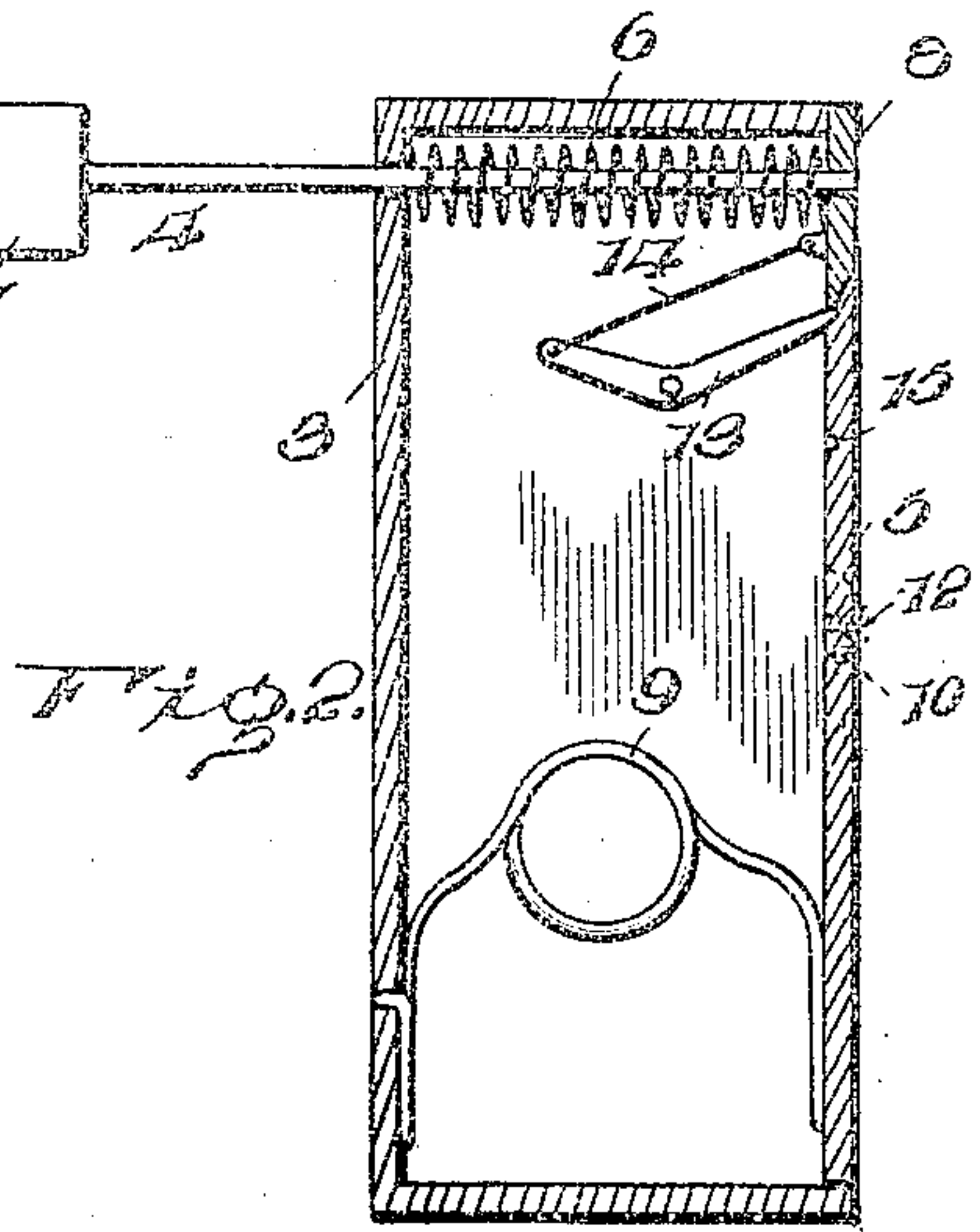


Fig. 3.

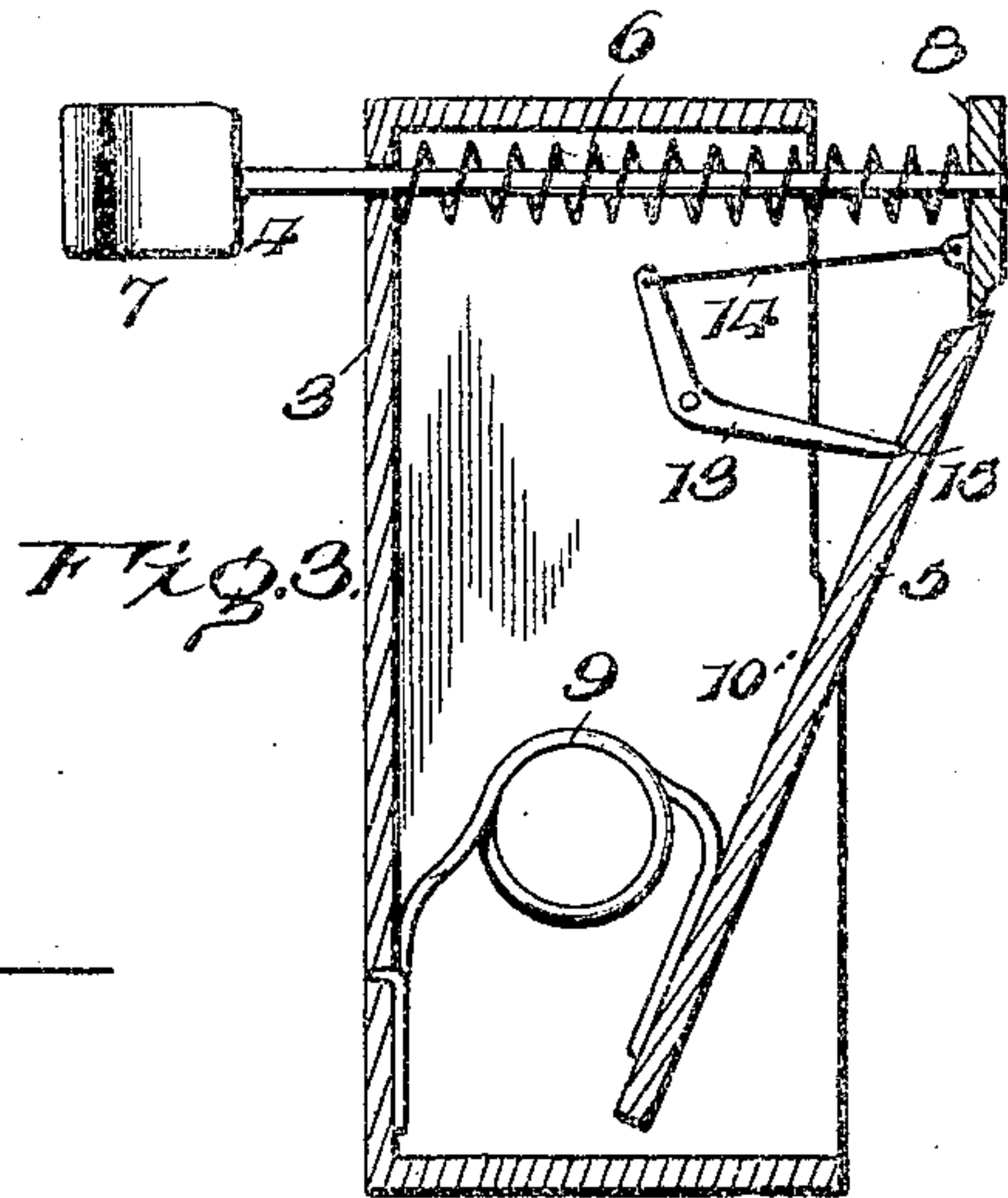
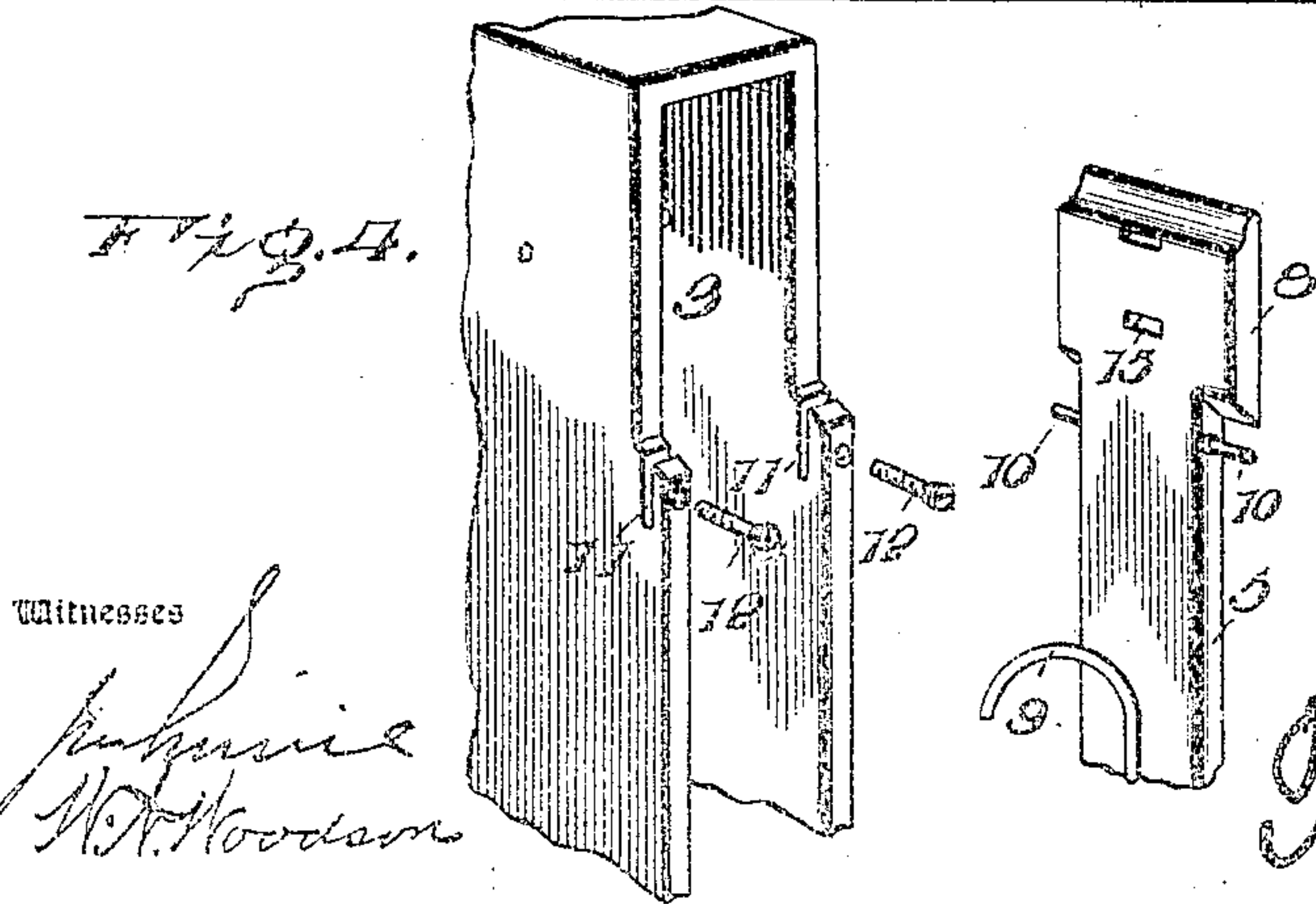


Fig. 4.



Witnesses

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FRANK UHRI, OF MELROSE, IDAHO.

LOCK.

SPECIFICATION forming part of Letters Patent No. 778,469, dated December 27, 1904.

Application filed June 21, 1904. Serial No. 213,521.

To all whom it may concern:

Be it known that I, FRANK UHRI, a citizen of the United States, residing at Melrose, in the county of Nez Perces and State of Idaho, have
5 invented certain new and useful Improvements in Locks, of which the following is a specification.

This invention relates to improvements in latch or lock devices, and in its preferred adaptation is utilized on doors wherein removable
10 panels are provided, being utilized to secure such panels in position upon the door.

It is often desirable, as well known, to provide a door structure which may be converted
15 into a screen-door, a transparent-panel door, or a solid ordinary wooden-panel door, and the lock means which I have devised is especially designed for doors having interchangeable panels, such as above premised upon,
20 since it admits of ready removal and securance of the panels whenever necessary.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the
25 means for effecting the result reference is to be had to the following description and accompanying drawings.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view showing the application of the invention. Fig. 2 is a vertical sectional view through the lock-casing, bringing out clearly the interior arrangement
35 of parts. Fig. 3 is a view similar to Fig. 2, the operating-lever being depressed. Fig. 4 is a perspective view, partially broken away, showing more clearly the means for mounting
40 the operating-lever upon the casing.

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

In carrying out the invention the drawings illustrate a door 1, in which is mounted a removable panel 2, and it will be understood that said panel 2 may be solid, transparent,
50 or provided with a screen, as the case may

be. It is preferred to provide upon the door four of the lock devices contemplated in my invention. However, it will be understood that any number of such devices may be used as found best in the actual use thereof. The
55 lock devices being of the same form, one only will be described, and the same comprises, essentially, a casing 3, a lock-bolt 4, slidable in the casing 3, and an operating-lever 5, which coöperates in a manner which
60 will be described hereinafter. The lock-bolt 4 is slidable transversely in the upper portion of the casing 3, and a spring 6, disposed about the lock-bolt, tends to normally hold said
65 lock-bolt at the limit of its movement toward the casing. The end of the bolt 4, which coöperates to prevent displacement of the panel 2, is enlarged, as shown at 7. The opposite end of the bolt is provided with a head
70 or plate 8, between which and the inner side of the casing 3 is disposed the spring 6, above mentioned. The lever 5 is pivoted between its ends and closes one side of the casing
75 when in its normal position, with the lock-bolt projected outward from the casing. A spring 9 is interposed between one end of the lever 5 and the casing 3 and normally holds said lever with its opposite end in contact with the
80 head or plate 8 of the lock-bolt. Journals 10 are projected from the lever 5 and are preferably received in bearings 11 in the casing 3, which bearings constitute open slots, and screws or removable fastenings 12 prevent displacement of the journals of the lever 5 from
85 its bearings 11. A detent 13 of somewhat elbow form is pivoted between its ends within the casing 3, and one end of the detent 13 is operably connected with the bolt 4 by means of a rod 14. The rod 14 is connected at one
90 end with the head or plate 8 of the bolt 4 and at its opposite end with the detent. The end of the detent 13 opposite to that connected with the bolt 4 is adapted to engage with the lever 5 and by coöperation with this lever to hold the bolt 4 at the limit of its outward or
95 inward movement. The detent 13 is thus adapted to hold the lock-bolt in such a position as to admit of removal of the panel 2, and said detent is also designed to hold the bolt normally in engagement with said panel
100

after the same has been placed in position upon the door 1. The end of the detent 13 which coöperates with the lever engages in a recess 15, which is some distance from the end of the lever when the said detent is holding the bolt out of engagement with the panel.

When the bolt 4 is in operative position engaging the panel 2, the spring 6 is compressed and the detent 13 engages the end of the lever 5 adjacent the head or plate 8. In other words, the detent 13 is adapted by its coöperation with the lever 5 to be locked in a position holding the spring 6 compressed and the bolt 4 at the limit of its outward movement relative to the casing, and when it is desired to remove the panel 2 depression of the lever 5, so as to compress the spring 9, which coöperates with this lever, will disengage the end of the lever 5 from the detent 13, and the lock-bolt 4 under the actuation of the spring 6 will be forced out of engagement with the panel. As the lock-bolt 4 moves under the tension of the spring 6 the rod 14 is pulled upon, and this causes the detent to be thrown into interlocking engagement with the recessed portion 15 of the lever 5, thereby locking the lock-bolt out of engagement with the panel. The enlarged portion 7 of the lock-bolt 4 passes through keepers 16, which are attached to the door and the panel. When the lock-bolt 4 is projected the limit of its movement from the casing 3, the lever 5 and the head or plate 8 are in alinement and close one side of the casing, and said lever and plate are preferably flat for this reason.

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

1. In a lock, the combination of a lock-bolt, an operating-lever, and a detent coöperating with the bolt and lever to hold the lock-bolt in engaged or disengaged position.

2. In a lock, the combination of a casing, a lock-bolt mounted in said casing, a spring coöperating with said lock-bolt, a lever pivoted in the casing, a spring bearing against the lever, a detent pivoted in the casing, and connecting means between one end of the detent and the lock-bolt, the opposite end of the detent engaging the lever.

3. In a lock, the combination of a casing, a lock-bolt slidable in said casing and having a head, a spring interposed between the head and casing, a spring bearing against said lever, a detent pivoted between its ends in said casing, connecting means between one end of the detent and the head of the lock-bolt, and interlocking means between the opposite ends of the detent and the lever.

4. In a lock, the combination of a casing, a lock-bolt slidable in said casing, a spring coöperating with the lock-bolt, a head projected from the bolt, a lever pivoted in the casing, a spring coöperating with the lever, a detent pivoted between its ends in the casing, a bar connecting one end of the detent with the head of the lock-bolt, the lever being provided with a recess or engaging portion adapted to interlock with the detent.

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

FRANK UHRI. [L. s.]

Witnesses:

M. A. RATCLIFFE,
H. R. GRAY.