

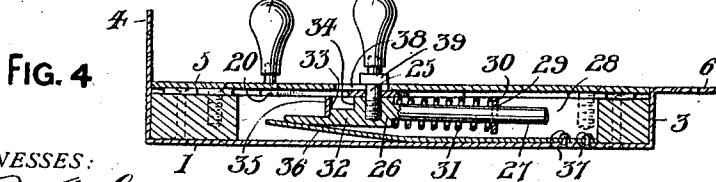
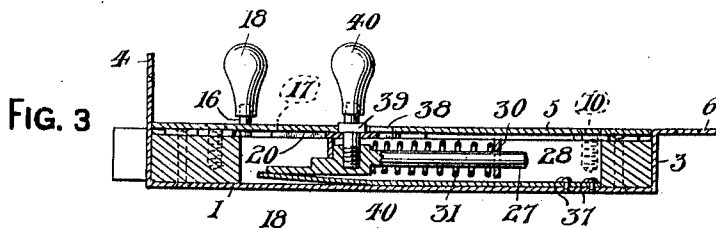
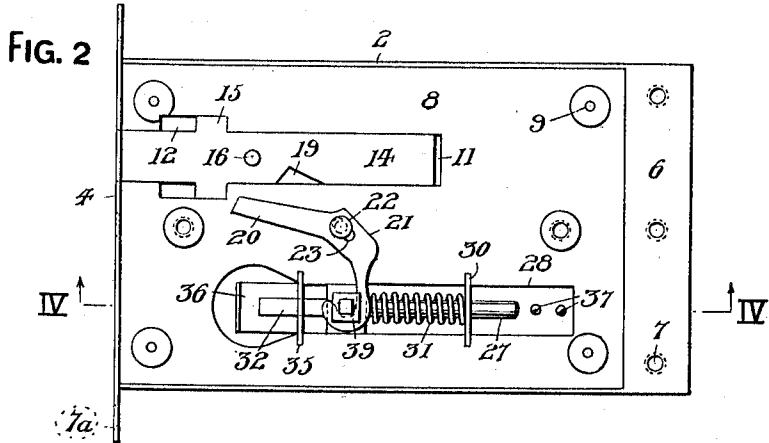
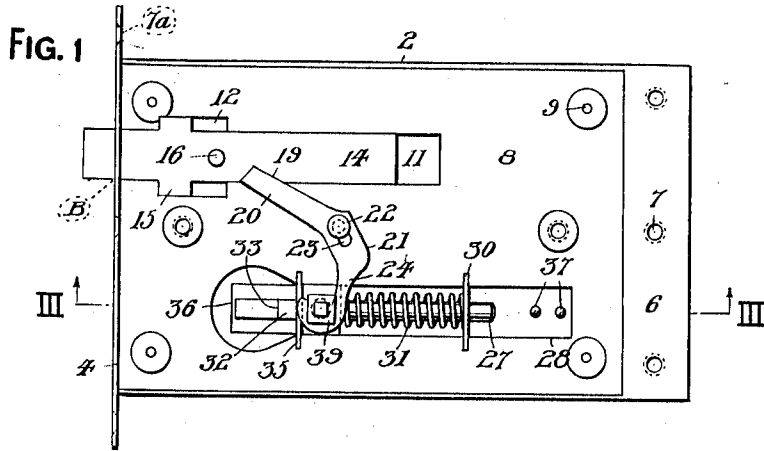
F. GADECKI.

LOOK.

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1,004,407.

Patented Sept. 26, 1911.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK GADECKI, OF MYSTIC, IOWA.

## LOCK.

1,004,407.

Specification of Letters Patent.

Patented Sept. 26, 1911.

Application filed April 21, 1911. Serial No. 622,509.

*To all whom it may concern:*

Be it known that I, FRANK GADECKI, a subject of the Czar of Russia, residing at Mystic, in the county of Appanoose and State of Iowa, have invented certain new and useful Improvements in Locks, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to locks particularly designed for the inside of a door whereby the door can be locked to prevent entry from the outer side thereof.

The object of my invention is to provide a lock of the above type that is positive in its action, free from injury by ordinary use and highly efficient for securing a door in a locked and closed position.

A further object of the invention is to provide a lock consisting of comparatively few parts easily and quickly assembled and maintained in an operatable condition.

I attain the above objects by a mechanical construction that will be hereinafter specifically described and then claimed, and reference will now be had to the drawing, wherein like numerals denote corresponding parts throughout the several views, in which:—

Figure 1 is a side elevation of the lock in a locked position, Fig. 2 is a similar view showing the lock in an unlocked position, Fig. 3 is a longitudinal sectional view of the lock taken on the line III—III of Fig. 1, and Fig. 4 is a similar view taken on the line IV—IV of Fig. 2.

The reference numeral 1 denotes a base plate having side walls 2, an end wall 3, a face plate 4 and a cover plate 5. The end wall 3 has a lateral flange 6 provided with openings 7 for screws or other fastening means (not shown) adapted to secure the end of the lock to a door. The face plate 4 is of a greater width than the lock and is provided with openings 7<sup>a</sup> for screws or other fastening means (not shown) adapted to secure the lock to the edge of a door.

The plate 1, walls 2 and 3 and face plate 4 constitute a casing for a flat lock body 8, which is connected to the base plate 1 by rivets 9 or other fastening means. The cover 5 can be secured to the lock body 8 by screws 10 or other fastening means. The lock body 8 is provided with a longitudinal slot 11 having the walls thereof provided

with diametrically opposed recesses 12. The slot 11 is in communication with another opening 13 in the face plate 4, and in said slot is movably arranged a locking bolt 14 having diametrically opposed lugs 15 extending into the recess 12, the ends of said recesses limiting the movement of the bolt 14. The bolt 14, adjacent to the lugs 15, has a pin 16 extending through a slot 17 provided therefor in the cover plate 5, and mounted upon the end of the pin 16 is a knob 18.

The lock body 8 is of a less depth than the walls 2 and the bolt 4 is of a depth equivalent to the depth of said walls, whereby the bolt will protrude above the body 8, and that portion of said bolt protruding above the body 8 is provided with a notch 19 in which is adapted to engage the long arm 20 of a latch 21 loosely mounted upon the lock body 8 by a headed pin 22, said pin extending through the slot 23 provided therefor in the latch 21. The latch 21 has a hook-shaped arm 24 engaging the shank of a bolt 25 mounted in the head 26 of a plunger 27. The head 26 and the plunger 27 are located in a longitudinal slot 28 provided therefor in the lock body 8. The plunger 27 has the rear end thereof loosely mounted in an opening 29 of a bearing 30 arranged transversely of the slot 28, and encircling said plunger and between the head 26 and the bearing 30 is a coiled compression spring 31. The head 26 has a stepped extension 32 providing shoulders 33 and 34 adapted to engage a stop 35 arranged transversely of the slot 28. The stepped portion 22 of the head 26 is normally maintained in engagement with the stop 35 by a flat compression spring 36 arranged in the slot 28 and secured to the base plate 1, as at 37.

The bolt 25 extends through a longitudinal slot 38 provided therefor in the cover plate 5, said bolt having a head 39 and a knob 40. The head 39 prevents the hook-shaped arm 24 of the latch 21 from becoming accidentally displaced, and the knob 40 facilitates the moving of the head 26.

By pressing inwardly upon the knob 40, the head 26 is lowered and the spring 31 immediately shifts the shoulder 34 into engagement with the stop 35, thereby moving the hook-shaped arm 24 of the latch 21 and shifting the long arm 20 into the notch 19; the bolt 14 having been previously moved by

shifting the same through the medium of the knob 18 to place the notch 19 into position to receive the end of the arm 20. To unlock the lock, the knob 40 is pushed toward the end wall 3, until the shoulder 33 engages the stop 35. Such movement of the head 26 shifts the latch 21, and then the knob 18 can be moved to withdraw the bolt 14.

10 The lock in its entirety can be made of light and durable metal and of various sizes.

What I claim is:—

1. A lock comprising a body having a slot formed therein, a bolt movably mounted in said slot and having a notch formed therein, a latch pivotally mounted upon said body and having an end thereof adapted to engage in the notch of said bolt, said body having a slot formed therein, a head movably mounted in said slot, a bolt carried by said head and adapted to engage said latch, a stop arranged transversely of the last mentioned slot of said body, a stepped extension carried by said head and adapted to engage said stop, and means including springs arranged in the last mentioned slot and

adapted to retain said stepped extension in engagement with said stop.

2. A lock comprising a body, a locking bolt movably mounted in said body and having a notch formed therein, a latch pivotally mounted upon said body and adapted to engage in the notch of said bolt, a head movably mounted in said body, a bolt carried by said head and adapted to engage said latch, a stepped extension carried by said head, a stop carried by said body and adapted to be engaged by said stepped extension, a knob carried by said bolt and adapted to facilitate the shifting of said head, a knob carried by said locking bolt and adapted to facilitate the shifting of said bolt, and means arranged in said body and including springs adapted to normally retain the stepped extension of said head in engagement with said stop, substantially as described.

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

FRANK GADECKI.

Witnesses:

WINCENTY WALAG,  
STANISTOW GADECKI.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."