## W. A. GRANT. LOCK.

APPLICATION FILED MAY 26, 1904.

NO MODEL.

Fig.1.

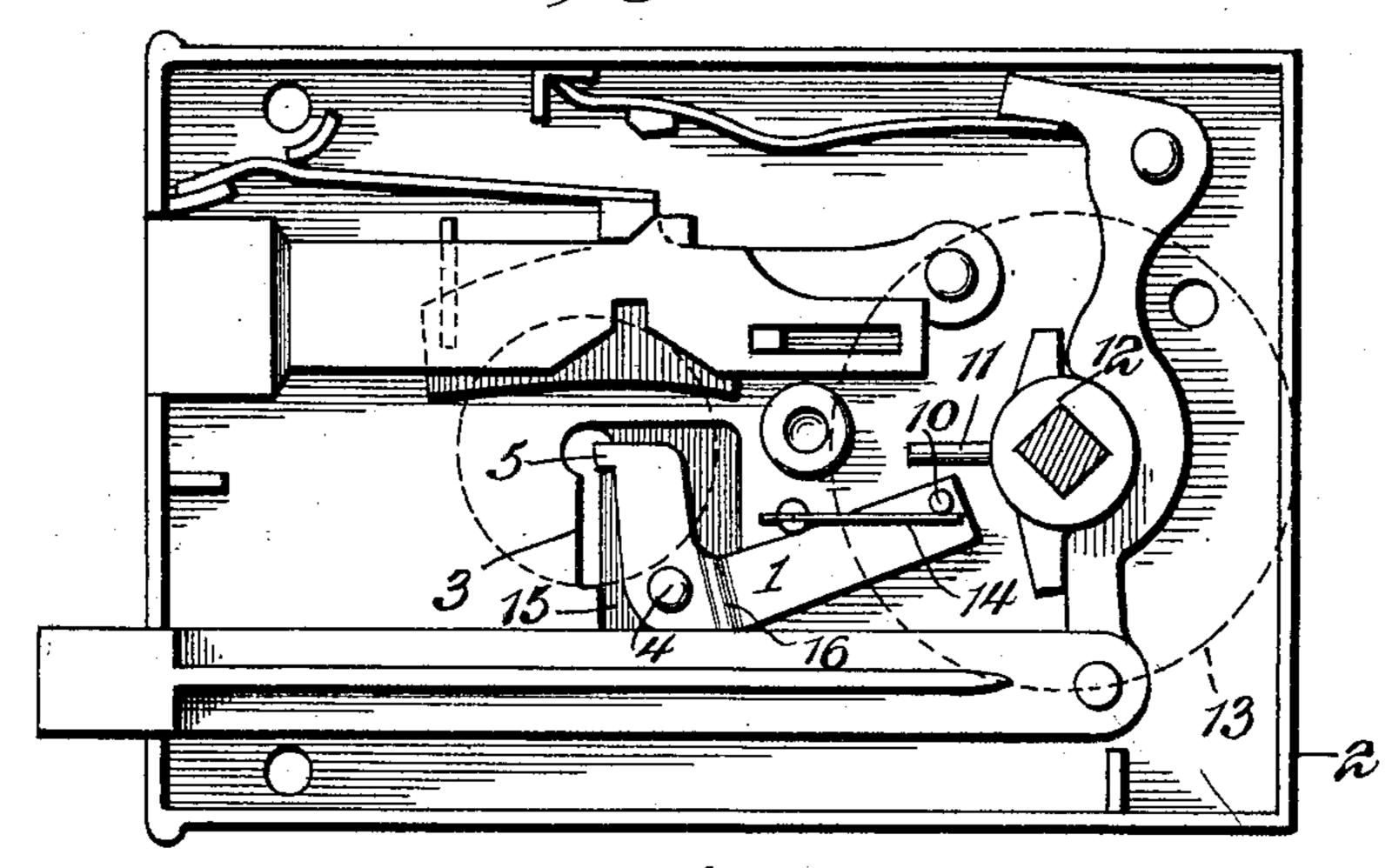
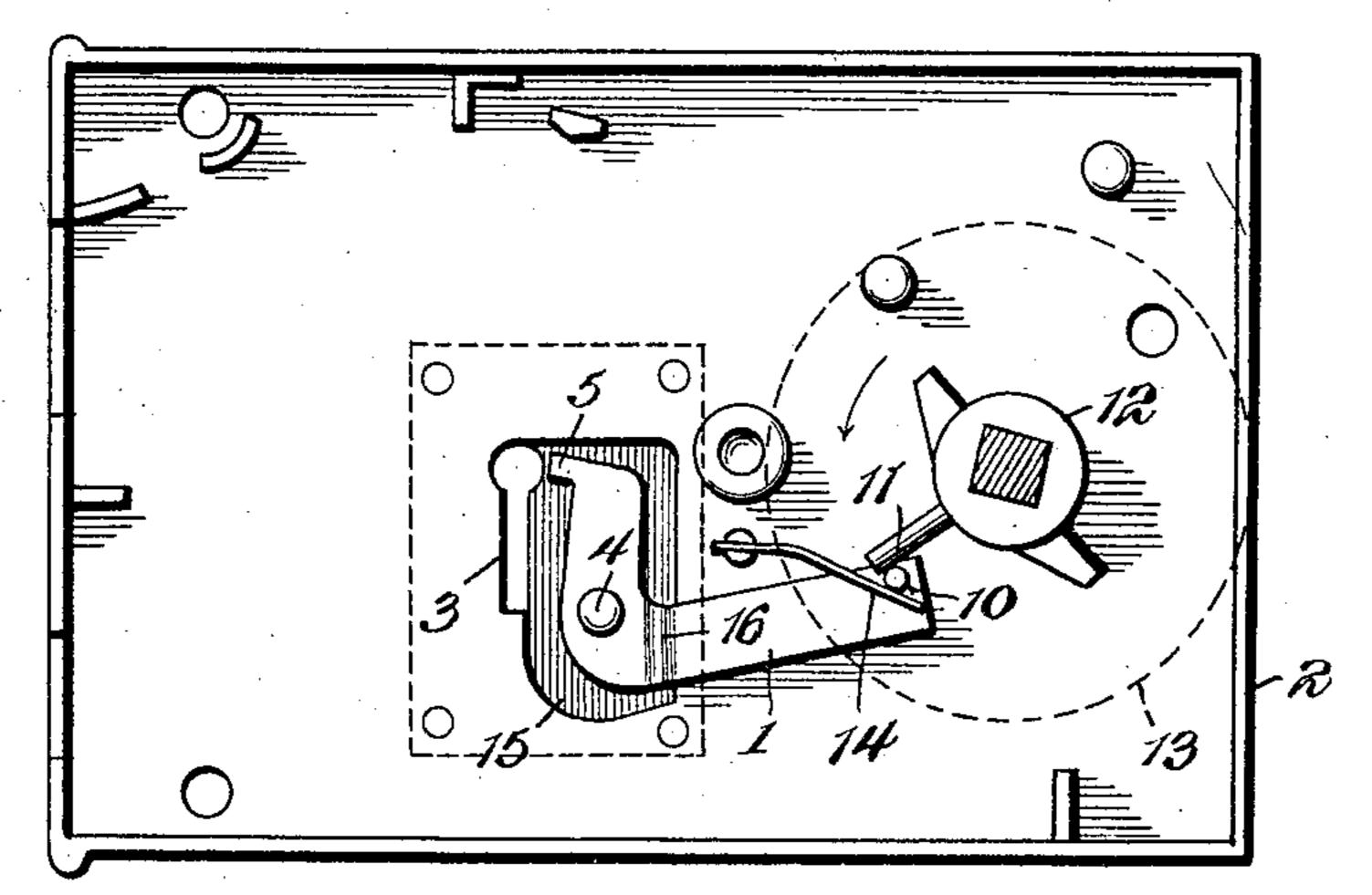
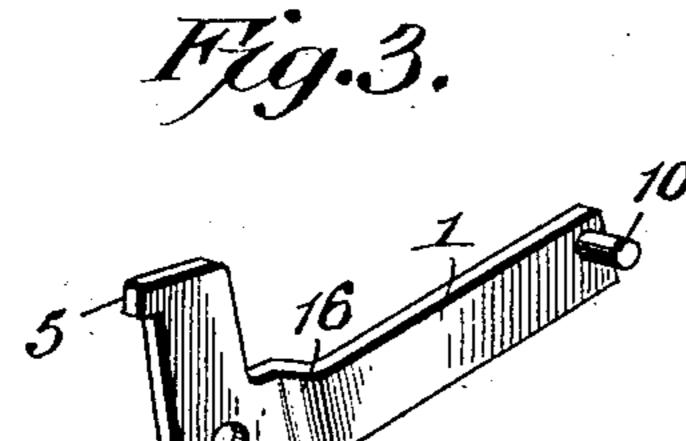
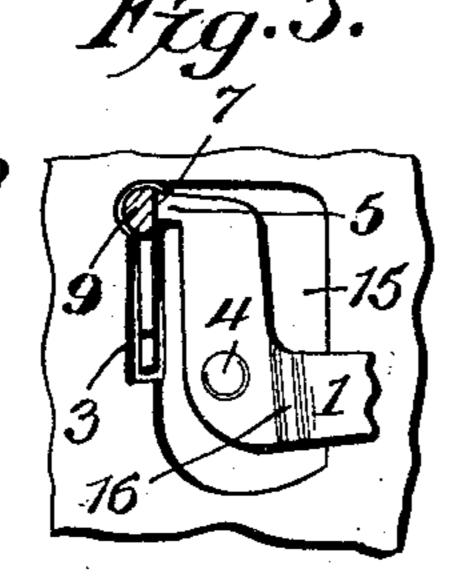
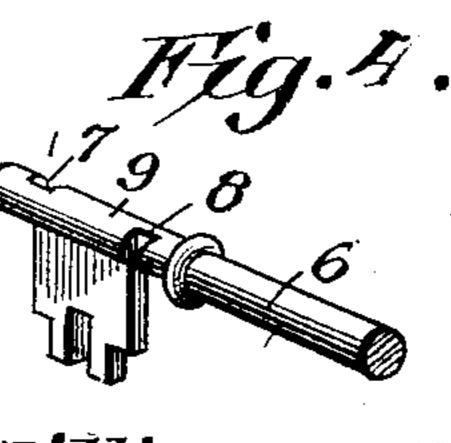


Fig.2.









William H. Grant, Inventor

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## United States Patent Office.

WILLIAM ALEXANDER GRANT, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO DENSLO D. HANLIN, OF BROOKLYN, NEW YORK.

## LOCK.

SPECIFICATION forming part of Letters Patent No. 771,305, dated October 4, 1904.

Application filed May 26, 1904. Serial No. 209,955. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ALEXANDER GRANT, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Door-Lock, of which the following is a specification.

The invention relates to improvements in door-locks.

The object of the present invention is to improve the construction of door-locks and to provide a simple, inexpensive, and efficient device adapted to be readily applied to door-locks and capable of engaging a key and of pre-venting the same from falling out of a lock when a door is slammed and also of preventing the removal of a key by small children, whereby the loss of the key will be prevented.

A further object of the invention is to provide a device of this character which will enable a key to be readily introduced into the lock and which will permit the ready removal of the same from the lock by a person acquainted with the manner of operating.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a door-lock provided with a device constructed in accordance with this invention, the face-plate of the lock being removed. Fig. 2 is a similar view illustrating the manner of operating the device for releasing the key. Fig. 3 is a detail perspective view of the pivoted key-engaging device or catch. Fig. 4 is a detail view of the key. Fig. 5 is a detail view showing the pivoted locking device in engagement with one of the notches of the key.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a locking device or catch con- 50 structed of suitable metal and designed to be pivoted within a lock-casing 2, adjacent to the keyhole 3 thereof, by means of a rivet 4 or other suitable fastening device. The catch, or locking device 1 is substantially L-shaped, 55 being composed of two arms arranged at an angle to each other. One of the arms is located adjacent to the keyhole 3 and is provided with a lug or projection 5, adapted to engage the key 6 of the lock, whereby the 60 key is retained therein and is prevented from falling out when the door is slammed or being removed by children too small to understand the operation of the device. The key is provided at opposite sides with notches 7 65 and 8, arranged to be engaged by the catch or locking device when the key is inserted in the lock from either side thereof. The notches are located at the inner and outer edges of the bit 9 of the key and are engaged by the lock- 70 ing device when the bit is in alinement with the keyhole, whereby the key is effectually prevented from being removed from the lock. The other arm of the locking device or catch extends to a point adjacent to the roll-back 75 and is provided with a pin or projection 10, adapted to be engaged by an arm 11 of the roll-back 12, whereby when the roll-back is turned in the direction of the arrow by the knob 13 the locking device or catch will be 80 swung out of engagement with the key and will permit the removal of the same from the lock. The projection or lug 10 of the catch or locking device is also engaged by a spring 14, which holds the catch normally in its en- 85 gaging position. The spring 14 may be mounted in any desired manner, and the catch or locking device may be provided with any suitable means for engagement with the roll-back. The key-engaging arm of the locking device 90 or catch is located within a recess or depression 15 of the lock-casing to arrange it clear of the bit of the key, and its operated arm is angularly bent at 16 beyond the path of the bit of the key to arrange it clear of the lock- 95 casing.

Instead of operating the locking device or catch by the roll-back any other suitable

means may be provided for enabling it to be operated from the exterior of the lock-casing

when it is desired to remove the key.

It will be seen that the device is exceedingly simple and inexpensive in construction, that it is adapted to be applied to various kinds of locks, and that it will prevent the loss resulting from keys falling out of the locks or being removed therefrom by small children.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. A lock provided with a catch or locking device arranged adjacent to the keyhole for engaging a key to retain the same in the lock, and means actuated by the knob for operating the catch or locking device.

2. The combination of a lock, a locking device or catch arranged adjacent to the key-hole in position for engaging a key to retain the same in the lock, and means carried by the roll-back for operating the locking device

or catch to release the key.

3. The combination with a lock, of a spring-actuated catch or locking device arranged adjacent to the keyhole in position for engaging a key to retain the same in the lock, and means

carried by the roll-back for engaging the locking device or catch to release the key.

4. The combination with a lock, of a pivoted spring-actuated locking device or catch pivoted between its ends and having one arm arranged adjacent to the keyhole in position for engaging a key, the other arm of the 35 locking device or catch being arranged adjacent to the roll-back of the lock, and means carried by the roll-back for engaging the arm.

5. The combination with a lock, of an approximately L-shaped locking device or catch 40 pivoted between its ends and provided at one arm with a lug or projection arranged adjacent to the keyhole, said catch being provided at its other arm with a laterally-extending projection or pin, an arm carried by the roll-back by the lock for engaging the projection or pin, and a spring also engaging the lug or projection for holding the locking device normally in engagement for engaging a key.

In testimony that I claim the foregoing as 5° my own I have hereto affixed my signature in

the presence of two witnesses.

WILLIAM ALEXANDER GRANT.

Witnesses:

ARTHUR A. PALMER, DENSLO D. HAMLIN.