H. BARRY. LOCK. APPLICATION FILED JAN. 18, 1904.

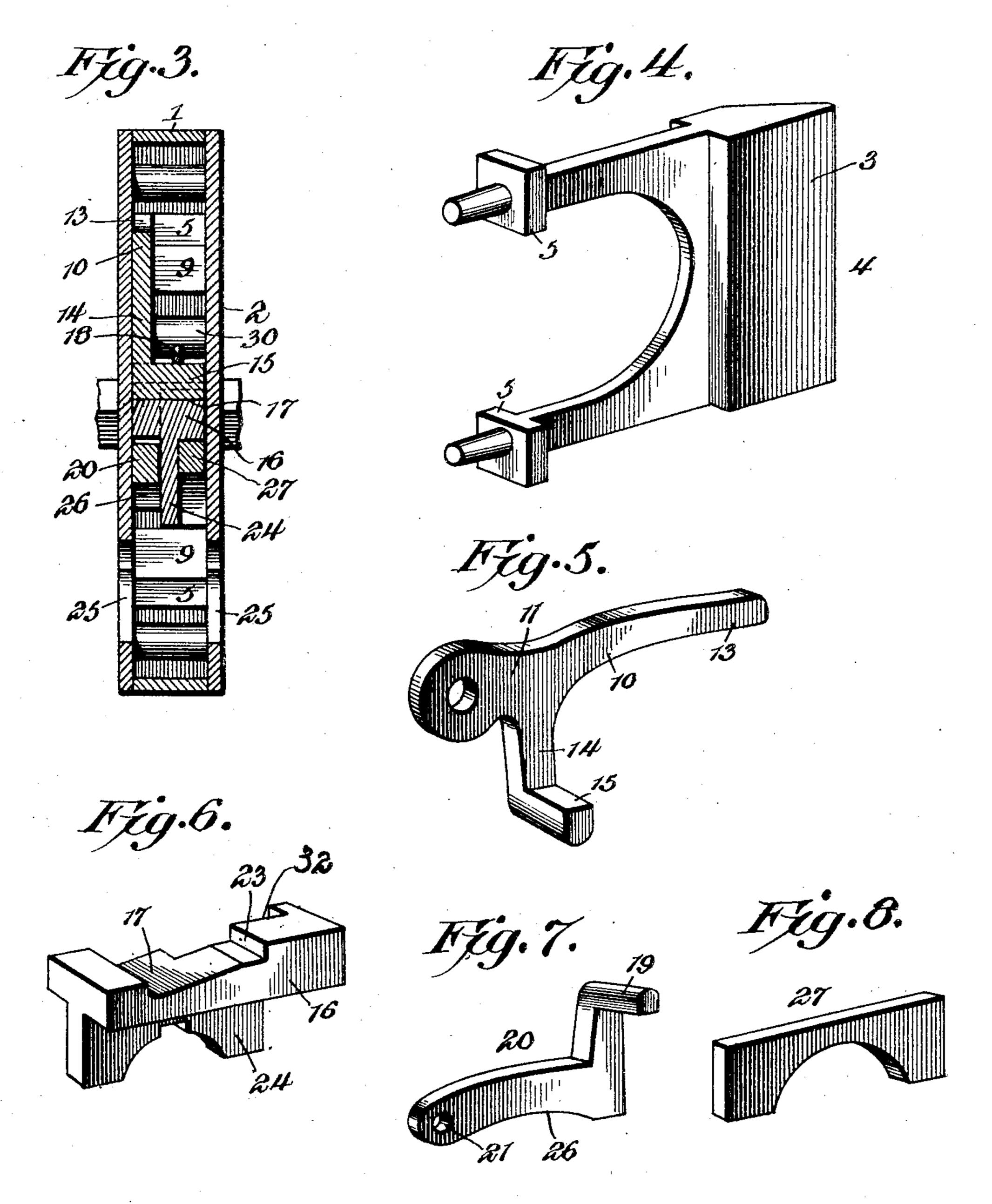
2 SHEETS-SHEET 1. 30

Henry Barry, Inventor,

## H. BARRY. LOCK.

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2 SHEETS-SHEET 2.



Henry Barry, Inventor,

By

Witnesses Howard W. Orr.

## United States Patent Office.

HENRY BARRY, OF CHICAGO, ILLINOIS.

## LOCK.

SPECIFICATION forming part of Letters Patent No 779,899, dated January 10, 1905.

Application filed January 18, 1904. Serial No. 189,485.

To all whom it may concern:

Be it known that I, Henry Barry, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Lock, of which the following is a specification.

The invention relates to improvements in locks.

The object of the present invention is to improve the construction of locks and to provide a simple, inexpensive, and efficient one adapted to operate as a latch and capable of being set to lock the bolt in its extended or engaging position and of preventing the same from being retracted without its proper key.

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 an elevation of a lock constructed in accordance with this invention, the removable face-plate being deo tached and the bolt being locked in its extended position. Fig. 2 is a similar view, the parts being arranged to release the bolt to permit the same to be operated by the rollback. Fig. 3 is a sectional view on the line 5 3 3 of Fig. 1. Fig. 4 is a detail perspective view of the bolt. Fig. 5 is a detail perspective view of the catch for locking the bolt in its extended or engaging position. Fig. 6 is a detail perspective view of the slide for ac-• tuating the catch. Fig. 7 is a detail perspective view of the pivoted tumbler for holding the slide against movement. Fig. 8 is a detail view of the slidable tumbler.

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

1 designates a lock-casing having a removable face-plate 2 and having an opening at one end for the head 3 of a slidable bolt 4.

The bolt is enlarged, being of increased width 50 to prevent it from being sprung. The slidable bolt is provided with a yoke, and the sides thereof are provided with shoulders formed by projecting flanges 5 and adapted to be engaged by the arm 6 of a roll-back 7 of the or- 55 dinary construction, consisting of a collar or hub and the said arms 6. The roll-back is provided with a rectangular opening and is adapted to receive a knob-spindle to enable the bolt to be operated by knobs in the or- 60 dinary manner. The bolt is spring-actuated, being normally locked in its extended or engaging position by a coil-spring 8, disposed on a rounded end portion of one of the sides of the yoke and interposed between the adja- 65 cent flange 5 and a post 9. A similar spring may be arranged on the other side of the yoke, if desired. When the bolt is free to move, it is adapted to act as an ordinary latch.

The bolt is locked in its extended or engag- 70 ing position to enable it to serve as a lockbolt by means of a catch 10, approximately L-shaped and pivoted at its angle 11 by a stud or post 12. The catch is extended slightly at the angle, and one arm, 13, is arranged in 75 line with one side of the yoke and is adapted to engage the flange 5 thereof, whereby the bolt is held against inward movement. The other arm, 14, of the catch extends transversely of the lock and is provided with a 80 projecting portion or finger 15, arranged to be engaged by a reciprocating key-actuated slide 16, whereby the catch is operated to disengage it from the bolt. The slide is provided with an inclined upper face 17, which 85 when the slide is moved backward operates as a wedge and is adapted to engage and lift the finger, and thereby raise the arm 13 out of engagement with the bolt. The slide is adapted to hold the catch out of engagement with the 90 bolt, and when it is moved forward to the position shown in Fig. 1 the catch is moved downward into its engaging position by means of a spring 18, consisting of a coil and opposite arms. The coil is disposed on the stud or 95 post 12, with one end of its arms in engagement with the casing, and its other arm, which is bent, as shown, engages the finger 15 of the

depending arm 14 of the catch. The spring is also extended beyond the finger of the catch and engages a finger or projecting portion 19 of a pivoted tumbler 20, which is adapted to 5 lock the slide in the position shown in Fig. 1 to prevent the slide from being moved backward by any means other than the key belonging to the lock. The tumbler consists of a substantially L-shaped piece or plate, pro-10 vided at one arm with the said finger 19 and having an opening 21 at the end of the other arm to receive a short stud or pivot 22. The slide is provided at its upper face or edge with a notch 23, forming a shoulder for engage-15 ment with the tumbler. A web or flange 24 depends from the slide and is arranged above a keyhole 25 and is adapted to be engaged by a suitable key. The flange or web 24 has an approximately semicircular recess, and the 20 tumbler 20 is also provided with a curved recess 26, which is engaged by the key. A slidable tumbler 27, which is provided with a curved key-receiving recess, is interposed between the key-engaging portion of the slide 25 and the casing. A plurality of such tumblers may be employed to enable the locks to be constructed sufficiently different to prevent the key of one lock from operating another lock. The lock is provided with suitable posts 30 28, 29, 30, and 31, arranged to guide the slide and the slidable tumbler. The slide is provided at one side with a longitudinal recess 32, in which the pivotally-mounted tumbler oscillates. This permits the slide 16 to fit against 35 the sides of the lock-casing.

It will be seen that the lock is exceedingly simple in construction, that it is adapted to operate as a latch, and that it is capable of effectually preventing the bolt from being retracted or moved inward without the use of

a proper key.

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

Letters Patent, is—

1. In a lock, the combination of a bolt, a catch pivoted in rear of the bolt and having a longitudinal arm for engaging the same and provided with a second arm located in rear of the bolt and extending transversely of the same, and a key-operated slide also located in rear of the bolt and provided with means for engaging the transverse arm of the catch to swing the longitudinal arm thereof out of en-

gagement with the bolt, substantially as described.

2. In a lock, the combination of a bolt, a catch engaging the bolt, a key-operated slide provided with means for actuating the catch, a key-operated tumbler for holding the slide against movement, and a spring engaging the 60 catch to hold the same in engagement with the bolt and also engaging the tumbler for maintaining the same in operative relation with the slide, substantially as described.

3. In a lock, the combination of a bolt, a 65 catch engaging the bolt, a key-operated slide provided with means for actuating the catch, a pivoted key-actuated tumbler arranged to engage the slide, and a slidable key-actuated tumbler, substantially as described.

4. In a lock, the combination of a bolt, a pivoted catch provided with a finger, a key-actuated slide having an inclined surface for engaging the said finger, said slide being also provided with a shoulder, a pivoted tumbler 75 having a finger for engaging the shoulder of the slide, and a spring for engaging both of the said fingers for holding the catch in engagement with the bolt and the tumbler in engagement with the slide, substantially as 80 described.

5. In a lock, the combination of a slidable bolt, a pivoted substantially L-shaped catch located in rear of the bolt and having one of its arms engaging the same for locking the 85 said bolt in its extended position, and a reciprocating key-operated slide located in rear of the bolt and arranged to engage the other arm of the catch for releasing the bolt, substantially as described.

6. In a lock, the combination of a slidable bolt, a pivoted catch located in rear of the bolt and arranged to lock the latter in its extended position, and a reciprocating key-operated slide located in rear of the bolt, and 95 having an inclined side face forming a wedge for moving the catch out of engagement with the bolt, substantially as described.

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

HENRY BARRY.

Witnesses:

Benj. E. Underwood, J. A. Getty.