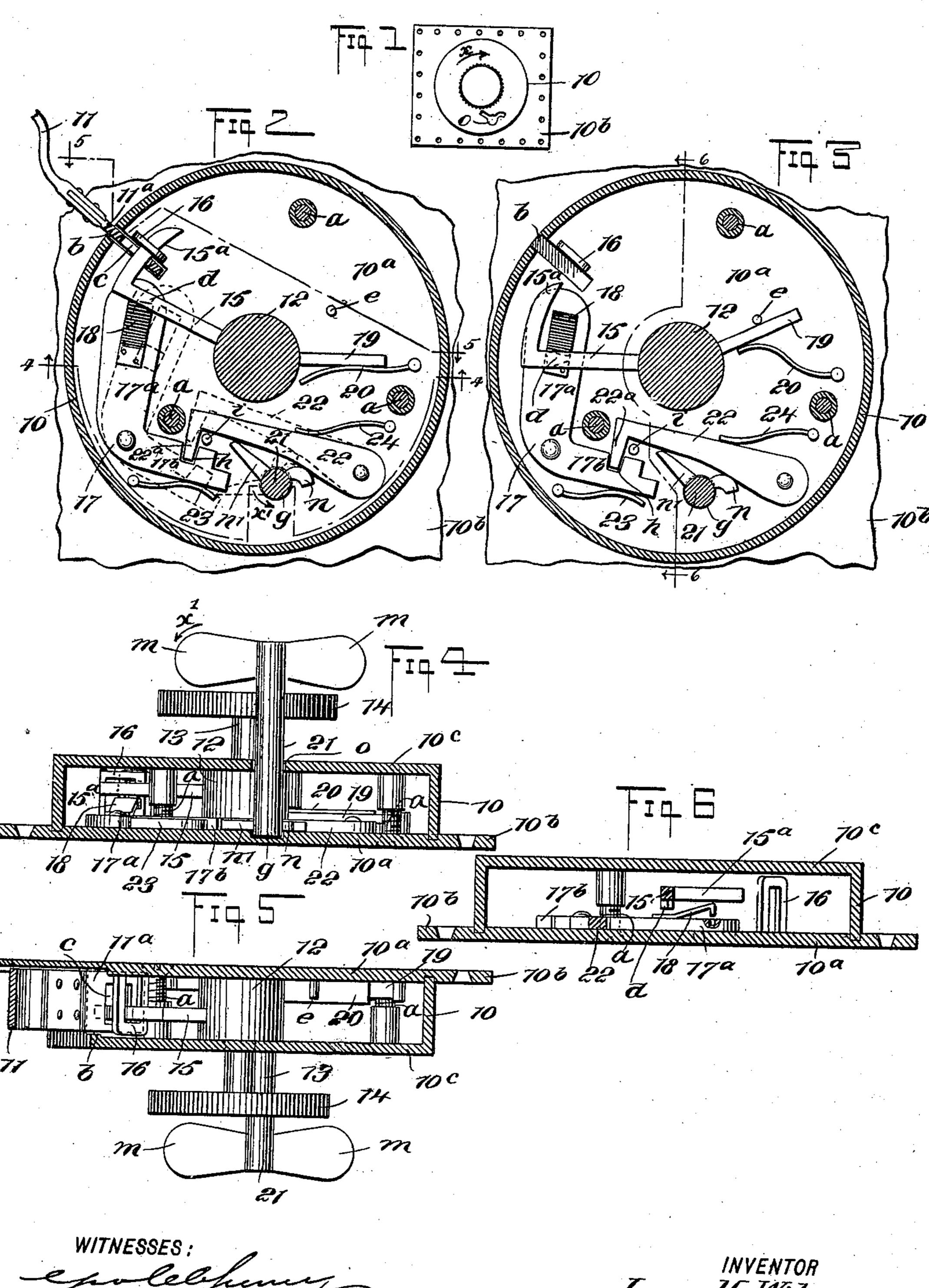
J. H. WILSON. LOCK.

(Application filed Feb. 9, 1901.)

(No Model.)



WITNESSES:

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Mm:1212 1

INVENTOR
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JASPER H. WILSON, OF ROCKWOOD, TENNESSEE.

LOCK.

SPECIFICATION forming part of Letters Patent No. 685,080, dated October 22, 1901.

Application filed February 9, 1901. Serial No. 46,658. (No model.)

To all whom it may concern:

Be it known that I, JASPER H. WILSON, a citizen of the United States, and a resident of Rockwood, in the county of Roane and State of Tennessee, have invented a new and Improved Lock, of which the following is a full, clear, and exact description.

This invention relates to bag-fastening locks, and particularly to a class of locks employed for securing the mouths of mail-bags in closed condition, and has for its object to provide a lock of the character indicated which is of novel simple construction, securable upon the throat-frame of a mail-bag, and adapted for very efficient service as a mail-bag lock.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of the lock on a reduced scale. Fig. 2 is an enlarged sectional side view of the lock-case, details of the lock being shown in the case in locked adjustment. Fig. 3 is a view similar to Fig. 2, but showing the mechanism of the lock in unlocked condition. Fig. 4 is a transverse sectional view substantially on the line 4 4 in Fig. 2. Fig. 5 is a transverse sectional view substantially on the line 5 5 in Fig. 2, and Fig. 6 is a transverse sectional view substantially on the line 5 6 6 in Fig. 3.

In the drawings which illustrate the invention and its operation, 10 indicates the case of the lock, held in place upon the base-plate 10° thereof by screws a, that pass through the base-plate into screw-holes in the case, as usual, and preferably a peripheral flange 10° is extended from the base-plate to afford means for securing the lock upon the throat-frame of an ordinary mail-bag. (Notshown.)

15 The case 10 may with advantage be circular in its side wall, and through said wall an aperture b is formed for the free insertion of the tip-plate 11^a, which is affixed upon one end of a flexible strap 11, that in complete of a mail-bag in the ordinary way, the tip-plate serving as a hasp that commonly passes

over a staple projected from the throat-frame of a mail-bag to be engaged by the shackle member of a padlock. Near the center of the 55 case 10 a hub-block 12 is located, having a shank 13 extended axially from one end, the shank passing loosely through a perforation in the top wall 10° of the case and having a thumb-piece 14 on its outer end.

A latch-bar 15 extends from the side of the hub-block 12, substantially in direction of the aperture b, and on the extended end of the latch-bar a hook member 15° is formed, the nose of which is rounded on one corner 65 to adapt it to freely pass through a slot c in the tip-plate 11° and thence through a staple 16, erected on the base-plate 10°, as clearly shown in Fig. 2.

On the base-plate 10^a an angle-lever 17 70 is pivoted at the angle thereof, so that the longer member 17^a may project toward and below the latch-bar 15, and upon this member of the angle-lever a plate-spring dog 18 is secured by one end, and its free end is adapted 75 to contact with a depending lug d, projected from the lower face of the latch-bar, when the latter is rocked toward the staple 16, and passes through said staple.

Upon the hub-block 12 an arm 19 is pro- 80 jected nearly opposite the trend of the latchbar 15, and upon said arm a plate-spring 20 bears, so as to rock the latch-bar away from the staple 16, when said latch-bar is released from the spring-dog 18, as will be explained, 85 the rocking movement of the hub-block 12 and latch-bar 15 being limited by the impinge of the arm 19 upon a post e, that projects from the base-plate 10^a, as clearly shown in Fig. 3. The shorter member 17^b of the an- 90 gle-lever 17 extends below the hub-block 12 and at its free end is adjacent to a circular socket or depression g, formed in the baseplate 10^a for the loose reception of an end of the barrel of a locking-key 21, as indicated in 95 Fig. 4.

Upon the bottom plate 10^a, between the socket g and the hub-block 12, a tumbler-bar 22 is pivoted by one end, so as to extend from a point near the side wall of the case 10 100 toward and above the angle-lever 17. A toe 22^a is formed upon the free end of the tumbler-bar 22 and bent toward the upper edge of the member 17^b of the angle-lever 17, which toe

normally engages within a notch h, formed Iin this edge of the angle-lever, as shown in

Figs. 2 and 3.

The member 17^b of the angle-lever 17 is 5 pressed toward the hub-block 12 by the finger-spring 23, and the tumbler-bar 22 receives pressure of a similar spring 24, a stop-pin i, that projects from the base-plate 10°, preventing too great a depression of the tum-10 bler-bar.

The key 21, provided for the bag-lock, is preferably formed as shown, comprising a cylindrical barrel having opposite wings m on one end for manipulation of the key, and 15 two bits n n' projected laterally from the barrel near its opposite end. The key-bit nis curved somewhat to adapt it to have a sliding and rocking engagement with the lower edge of the tumbler-bar 22. The remaining 20 key-bit n' is straight in the body and longer than the other bit n, said bit n' being projected toward and above the free end of the member 17^b of the angle-lever 17 when in position for use, and the upper corner of the 25 free end of said lever member 17b is preferably cut away to afford a seat whereon the key-bit n' may impinge.

A suitable keyhole o is formed in the capplate 10° or top surface of the case 10 and is 30 of a shape to correspond with the shape and dimensions of the key-barrel and bits thereon, as indicated in Fig. 1, which will prevent the use of any but an appropriate key.

Assuming that the mechanism of the lock 35 is in unlocked condition, as represented in Fig. 3, then to lock the mail-bag whereon the lock is affixed the tip-plate 11° is inserted into the aperture b of the lock-case 10 after the strap 11 has been properly engaged in the 40 usual manner with staples on one side member of the throat-frame of the bag that have passed through openings in the other side of said throat-frame. The slot c in the tip-plate 11^a being disposed opposite the opening in 45 the staple 16 affords a free passage for the hook member 15° of the latch-bar 15.

As will be observed, the lug d (shown by dotted lines in Figs. 2 and 3) is disposed above the spring-dog 18 when the working details 50 of the lock are adjusted as shown in Fig. 3, or in unlocked condition, so that when the thumb-piece 14 is turned toward the right, or in direction of the arrow x in Fig. 1, the latchbar 15 and lug d will be rocked over the 55 spring-dog, which yields until the hook member 15° is fully inserted within the slot in the tip-plate 11^a and the opening in the staple 16.

At the instant the latch-bar 15 has received a full rocking movement the lug d passes off 60 the free end of the spring-dog 18 and the latter assumes a normal position due to its resilience, which will provide a reliable abutment against which the lug will impinge if an attempt is made to unlock the lock by a 65 reversed movement of the thumb-piece 14. Hence the lock must remain in locked condition until the mechanism in the case 10 is readjusted by means of the key 21.

To unlock the bag-lock, the key 21 is introduced through the keyhole o and then turned 70 in direction of the arrow x', which will cause the bit n to raise the tumbler-bar 22 against the tension of the finger-spring 24 into the position indicated by dotted lines in Fig. 2. The turning movement of the key 21, just 75 described, correspondingly depresses the keybit n', which contacts with the free end of the angle-lever member 17^b, thereby locking the upright member 17° of said angle-lever into the position shown by dotted lines in 80 Fig. 2.

The movement of the upper end of the member 17^a toward the hub-block 12, as just explained, removes the $\log d$ from the abutting end of the spring-dog 18, which will permit 85 the stress of the spring 20 to actuate the arm 19 and simultaneously remove the hook member 15^a from engagement within the slot of the tip-plate 11° and staple 16, thus releasing the tip-plate, which may now be withdrawn 90 from the lock-case and the strap 11 be manipulated for opening the mail-bag in the usual

manner.

Having thus described my invention, I claim as new and desire to secure by Letters 95 Patent—

1. In a mail-bag lock, the combination with a case securable on the mail-bag, and slotted to receive a tip-plate that extends from an extremity of the flexible mail-bag strap and 100 has an aperture therein, of a rockable latchbar having a lateral hook member on one end that works near the case-slot, a staple in the case through which the hook member passes after rocking through the aperture of the tip- 105 plate, and a transverse hub-block carrying the latch-bar and operative by a thumb-piece thereon exterior of the case.

2. In a mail-bag lock, the combination with a case slotted in its side to receive an aper- 110 tured tip-plate on the mail-bag strap, the case being securable on the mail-bag, of a staple in the case, a rockable latch-bar, a hook member thereon adapted to pass through the tipplate and then through the staple, a spring 115 adapted to rock the latch-bar away from the tip-plate and staple, means for retaining the latch-bar engaged with the tip-plate and staple, and means operative by a key to release the hook member of the latch-bar from the 120 tip-plate and staple.

3. A lock, comprising a case, a base-plate therefor, means for securing the base-plate and case together, a hub-block in the case, rockable by a thumb-piece from the exterior 125 of the case, a staple in the case near a slot in the side wall of the case, a latch-bar extended from the hub-block and having a hook member adapted to engage the staple, an arm extended from the hub-block, a spring pressing 130 said arm, the tension of said spring normally removing the hook member of the latch-bar

from the staple, a rockable angle-lever, a spring pressing one member of said lever, a spring-dog on the other member of the angle-lever, a spring-pressed tumbler-bar pivoted by one end and having a toe at the opposite end engaging a notch in the spring-pressed member of the angle-lever, the spring-dog being adapted to lock upon a toe which depends from the latch-bar, and a key adapted to release the tumbler-bar from the angle-lever, and simul-

taneously rock the spring-dog away from the lug on the latch-bar for release of said latch-bar.

In testimony whereof I have signed my name to this specification in the presence of 15 two subscribing witnesses.

JASPER H. WILSON.

Witnesses:

STEPHEN TANY, JOHN J. FERGUSON.