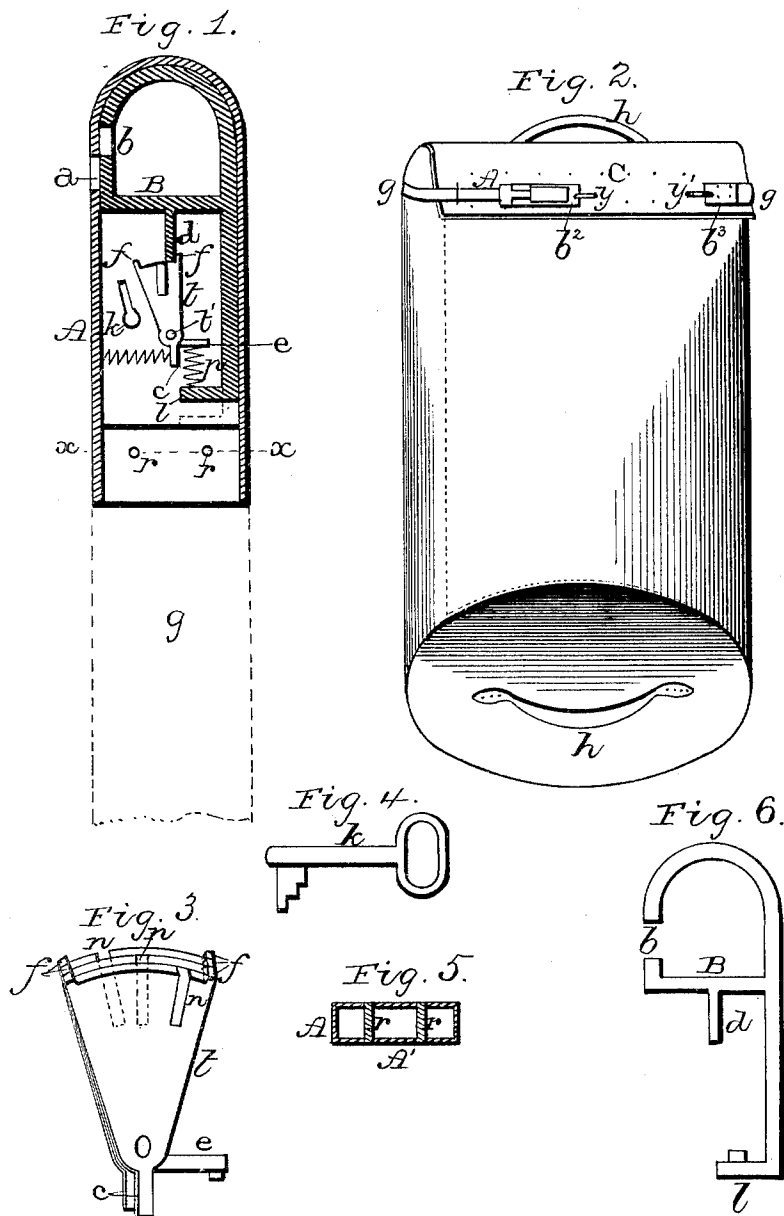


(No Model.)

H. S. GASKILL.
BAG LOCK.

No. 586,792.

Patented July 20, 1897.



Witnesses

J. S. Barker
Theo. Mungen.

Inventor

H. S. Gaskill.

per Martin Metcalf
Attorney

UNITED STATES PATENT OFFICE.

HENRY S. GASKILL, OF BATTLE CREEK, MICHIGAN, ASSIGNOR OF ONE-HALF
TO JAMES J. LARMOUR, OF SAME PLACE.

BAG-LOCK.

SPECIFICATION forming part of Letters Patent No. 586,792, dated July 20, 1897.

Application filed September 28, 1896. Serial No. 607,200. (No model.)

To all whom it may concern:

Be it known that I, HENRY S. GASKILL, a citizen of the United States, residing at Battle Creek, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Automatic Locks or Mail-Bag Fastenings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention pertains particularly to the fastenings for mail-bags and the like, but obviously may be utilized for most kinds of locks wherever ready automatic adjustment combined with the greatest degree of safety is the desideratum.

My invention consists in a frame having an opening through one side and which frame is permanently secured to one end of the mail-bag strap, a sliding bolt having an inwardly-extending projection to engage the tumblers, and a leg which extends in a line with the movement of the bolt, combined with pivoted tumblers having recesses in their inner ends, one of which tumblers is provided with a laterally-projecting arm, a spring placed between said arm and a projection on the inner end of the leg, and a second spring applied to all the tumblers on the other side of their pivot from the spring which moves the bolt endwise, as will be more fully described hereinafter.

In the drawings forming part of this specification, and wherein letters of reference are used, the same designate like parts in all of the views.

Referring to the illustrations, Figure 1 represents the casing drawn in longitudinal section, and Fig. 2 is the mail-bag now in universal use with my novel invention applied. Fig. 3 is a perspective view of an assemblage of the tumblers, enlarged. Fig. 4 is an enlarged elevation of the key for unlocking the automatically-acting locking device, and Fig. 5 is a sectional view of the casing drawn on line *xx* of Fig. 1, while Fig. 6 is an elevation of the locking-bolt proper detached.

Referring to the several views and reference-letters, A is the casing, made of suitable inside dimensions to contain the fixed and movable parts pertaining to the lock proper, which is closed and secured to the casing A by the face-plate A by means of rivets or bolts *r*. The portion of the casing A situated above the tumblers of the fastening-lock may be cast integral or as part of the said casing, as is evident.

At the base of the semicircular top part of the casing is the opening *a*, which exactly registers at certain times, as the bolt B is made to reciprocate or slide within the casing with a like opening *b* of the adjacent side of said bolt, and a bar or lug *z*, forming the lowermost extremity of said bolt B, reaches at right angles inwardly a sufficient distance to furnish firm support for the vertically-acting principal spiral spring *p*, the opposite extremity of which spring engages the horizontal arm *e* of the central latch *t* of the assemblage of tumblers located about centrally of the casing and pivoted on the fixed pin *t'* thereof. The spring *p* is closely coiled, so as to exert a constant tension upon the bolt B for the purpose of forcing it upward. When the bolt is moved into the position shown in dotted lines in Fig. 1, the spring is stretched, and as soon as it is left free to move it forces the bolt up into the position shown in solid lines.

In the automatic lock shown are but three members or tumblers *t*, the central one having engagement by its projecting arm *e* with the principal spiral springs *p*, the double duty of which latter is to actuate the said tumblers and the locking-bolt B; but I do not intend to confine myself to the three members, as any plurality may be employed, according to the various uses to which this novel construction may be put, as is evident. These tumblers have upwardly-projecting stops *f* on either top extremity, limiting the throw thereof in the locking and unlocking of the device, and the outer tumblers *t* are provided with vertically-depending arms *c* for engagement with the lesser horizontal spiral springs *S*, which find fixed support on the inner wall of the casing A opposite to the principal spring *p*. Between the stops *f* of the tumblers *t* are located vertical slots *n*, one in each tumbler

at about third equal divisions of their arcs, in which engages the depending leg *d* of the bolt B when the said tumbler-slots are brought in proper line with each other when the device is unlocked by means of the key K in the well-known way. With the bolt B in the position represented by the dotted lines, Fig. 1, the said depending leg *d* will drop down into said engaging slots *n* of said tumblers *t* when the key is applied; and, as is obvious to those skilled in the art to which this automatic fastening pertains, the opening *a* of the casing coinciding with the opening *b* of the bolt B, by simply passing the proper staple of the mail-bag having its binding-strap in proper place, a slight pull lengthwise thereon will disengage the leg *d* of the locking-bolt B from the slots of the tumblers, when the principal spring *p*, coacting with the oppositely-placed lesser springs S, forces upward into locking position the said bolt B, as seen in Fig. 1.

Having thus clearly illustrated and described my invention, together with its mode of operation, and pointing out some of its many great advantages over anything hitherto known and used, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a lock, the frame, the sliding latch having an opening through its top, an inwardly-turned inner end, and a depending leg, combined with a series of spring-actuated tumblers having openings in their inner ends and one of which has a laterally-projecting arm; and a spring placed between the arm and the inwardly-projecting end, substantially as shown.

2. In a lock, the frame having an opening in one side, and a sliding bolt having an inward projection, and a leg which extends in a line with the movement of the bolt, combined with a series of pivoted tumblers, having recesses in their inner ends to receive the leg, and one of them being provided with a laterally-projecting arm; a spring placed between said arm and the projection on the bolt; and a spring applied to all the tumblers on the other side of their pivot from the spring which moves the bolt endwise, substantially as described.

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

HENRY S. GASKILL.

Witnesses:

ALBERT N. BROWN,
ANDREW BYERS.