

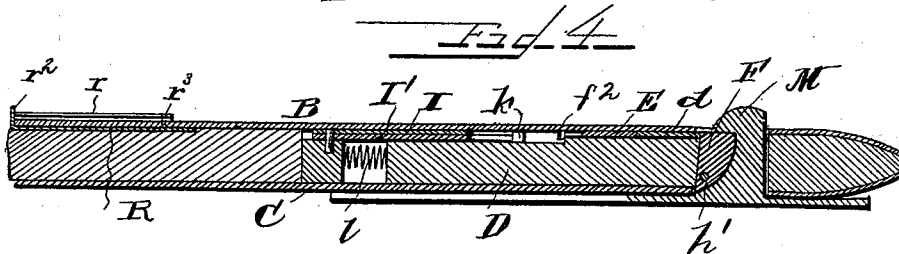
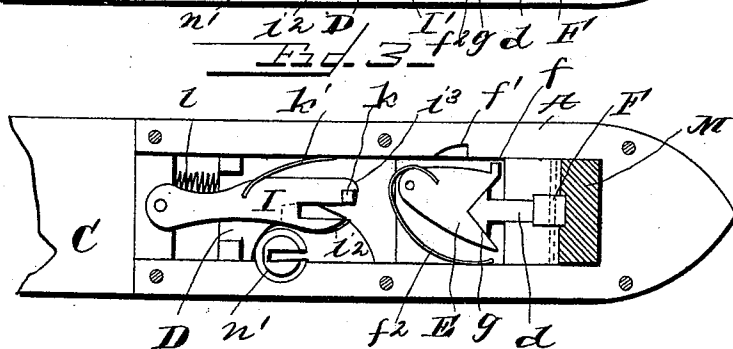
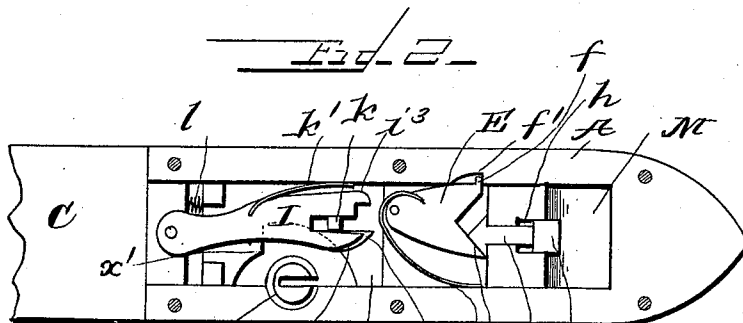
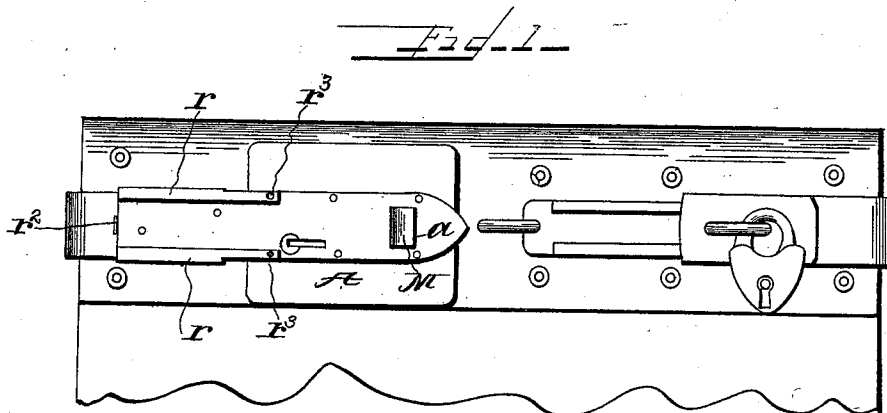
(No Model.)

2 Sheets—Sheet 1.

F. E. WINDSOR.
BAG LOCK.

No. 519,598.

Patented May 8, 1894.



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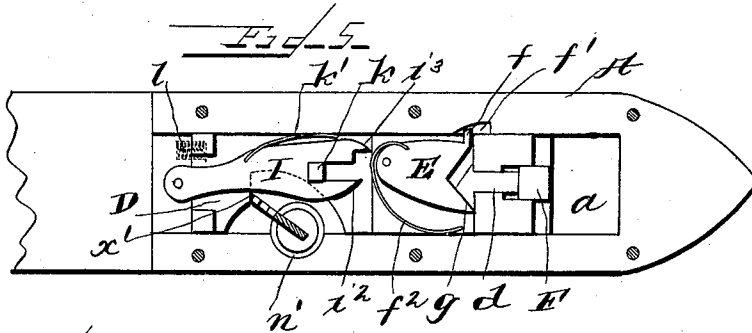
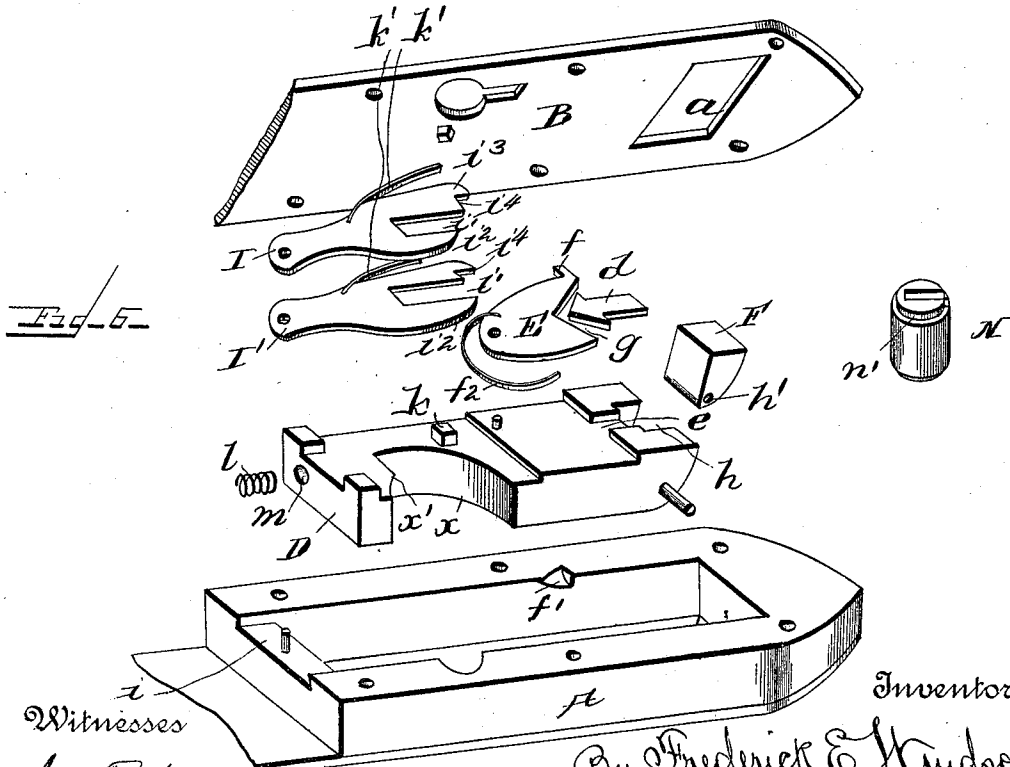
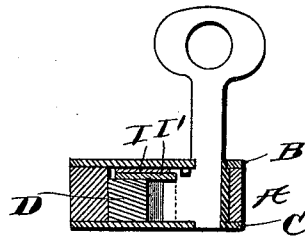
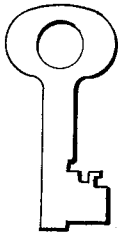


Fig. 7

Fig. 8



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UNITED STATES PATENT OFFICE.

FREDERICK E. WINDSOR, OF WARREN, PENNSYLVANIA.

BAG-LOCK.

SPECIFICATION forming part of Letters Patent No. 519,598, dated May 8, 1894.

Application filed May 20, 1893. Serial No. 474,954. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK E. WINDSOR, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Bag-Locks; and I do hereby 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.

My invention consists of certain new and useful improvement in locks, and relates more particularly to that class of locks adapted for use on mail bags and analogous articles, although locks containing my improvement and operating on a similar principle may be used to advantage in other places.

In order that my invention may be understood, I have illustrated it in the accompanying drawings, and described it in the specification following pointing it out more particularly in the claims at the end thereof.

In the drawings Figure 1 is a partial side elevation of a mail bag provided with my improved lock. Figs. 2 and 3 are interior views showing the bolt at different points of retraction. Fig. 4 is a sectional view. Fig. 5 is an interior view showing the bolt entirely retracted. Fig. 6 represents details of construction of different parts. Fig. 7 is a side view of the preferred form of key. Fig. 8 is a similar view showing the key inserted in the lock.

Similar letters of reference indicate identical parts throughout.

In the preferred form illustrated, my improved lock is shown as adapted to be used on a mail bag, and the description will be in accordance therewith, although as before stated the lock may be used in other places.

The lock is constructed with the ordinary rectangular frame A, tapering at one end and provided with the top and bottom plates B, C, which extend rearwardly beyond the casing, the extension being adapted for attachment to the strap of the bag. The sides of the frame are made somewhat less in diameter near the forward end to approximate more nearly a point, and the plates B and C are bent down upon them as clearly shown in Fig. 4.

The plates B and C are provided with openings *a* for the reception of the keeper and with openings for the barrel.

The bolt D is made substantially as represented in Fig. 6, and is provided with a movable part *d* fitting easily in the recess *e*, and having its inner end formed with inclined sides as shown, the said movable part being held in the recess by the plate B. The angular sides of the inner end of the part *d* are adapted to operate upon the detent E pivoted to the bolt near one side and provided with a laterally projecting lug *f* adapted to enter the recess *f'* in the frame in which it is normally held by the spring *f*², and also with the recess *g* having an inclined edge or face adapted to operatively engage the inner end of the part *d*. The forward end of the bolt is inclined upon one side and is provided with a recess *h*, in which is pivoted the trip F, which when retracted to fill the recess *h*, follows the contour of the end of the bolt, but which being pivoted in the recess *h*, at a very low point as at *h'* occupies normally the position shown in Fig. 2, being forced into said position by the detent E which when moved into the position shown in Fig. 2 by the spring *f*² acts as a wedge upon the part *d* forcing it forward against the inner side of the trip F which naturally falls into the position shown in Fig. 2. To the rear of the frame in the recess *i* there are pivoted on the same axis the tumblers I, I' formed as shown clearly in Fig. 6, with the recess *i'* the curved members *i*² *i*³ and the members *i*³ *i*³ provided with the notches *i*⁴ *i*⁴. The member *i*² of the tumbler I' is made somewhat longer than that of the tumbler I otherwise they are entirely similar, and are made to normally engage the stud *k* of the bolt with their notched portions by means of springs *k'* *k'*. The bolt is reduced at some point as *x* to permit of the operation of the key, and is held normally in an advanced position by a coiled spring *l* one end of which may be inserted in the annular recess *m* and the other end of said spring abutting against the rear side of the frame or fitting in a similar annular recess therein.

One side of the frame A is recessed at *n* to admit the barrel N which is of ordinary con-

struction and is held in place by the plates B and C coming in contact with the annular shoulder n' .

The key is constructed with members 5 formed so as to lift the tumblers and retract the bolt.

The operation of my improved lock is as follows: The bolt being in an advanced position as in Figs. 3 and 4, the key is inserted 10 and when turned lifts the tumblers I I' out of engagement with the stud k which movement is permitted by the reduced portion x of the bolt and finally engaging the shoulder x' retracts the bolt until the keeper M may 15 be released. When the key is removed the coiled spring l forces the bolt forward but in the operation of retracting the bolt, the spring f^2 will have forced the lateral projection f of the detent E into the recess f' in the side of 20 the frame, and the bolt is therefore stopped by said projection in the position shown in Fig. 2, the trip projecting into the openings a . It is now obvious that when the curved face of the keeper M is brought into contact 25 with the similarly formed face of the pivoted lip F, the latter will be forced into the recess e and against the outer end of the part d forcing the latter into engagement with the detent E which retracts the lateral projection 30 f from the recess f' and permits the bolt, actuated by the coil spring, to advance and engage the keeper, when the tumblers I I' engaging the stud k prevent the bolt from being retracted otherwise than by a key.

It is obvious that many differences may be 35 made in the form of the tumblers so that no two locks need be operated by the same key. It will also be seen that the keeper cannot be withdrawn except when the key is in the 40 lock, and holding the bolt back in its most retracted position as it is only at this time that the edge of the trip F is flush with the sides of the opening a .

The keeper is secured to the strap of the 45 bag in any preferred manner, and the plates B and C are extended so that they can be riveted to a strap placed between them. A slide may be placed on the top of the place B in which the address may be inserted.

I do not wish to limit myself to the exact 50 construction described as many modifications may be made without departing from the spirit of my invention.

To provide a suitable device for holding a

tag or card for an address, I use a piece of 55 thin sheet metal R or its equivalent the opposite edges of which are bent so as to extend over the edges of the plate B forming a frame to retain a suitable card upon which an address may be written, the said card being re- 60 tained by the sides r r and the upward projection r^2 and the rivets r^3 r^3 which also aid in holding the plate in place. It will be seen that by using this device the card may be removably secured so that it may be changed 65 whenever desired.

What I claim, and desire to secure by Letters Patent, is—

1. In a lock the combination with a spring actuated bolt, of a detent for engaging the 70 casing and holding the bolt in its retracted position, and a trip for said detent having a movement longitudinally of said bolt independently of said bolt and detent, said trip projecting beyond the end of the keeper en- 75 gaging end of the bolt, substantially as described.

2. In a lock the combination with the spring actuated bolt, of a detent pivoted to said bolt for engaging the casing and holding the bolt 80 in its retracted position, a trip carried by said bolt having a movement longitudinally of said bolt independently of the bolt and detent, said trip projecting beyond the keeper-engag- 85 ing end of the bolt, substantially as described.

3. In a lock the combination with the spring bolt, of a detent pivotally secured thereto for holding the bolt in its retracted position, said detent having an inclined face and a trip se- 90 cured to said bolt and movable longitudinally of said bolt having an inclined face to engage the inclined face of the detent to release the same, substantially as described.

4. The herein described card retaining device for a bag lock consisting of a plate of the 95 lock casing, provided with sheet metal turned over upon the plate to form grooves to receive the edges of the card, said grooves being closed at one end of the holder, a projection of the sheet metal turned up between 100 the open ends of said grooves to retain the card, substantially as described.

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

FREDERICK E. WINDSOR.

Witnesses:

THEODORE MESSNER,
T. G. NOYES.