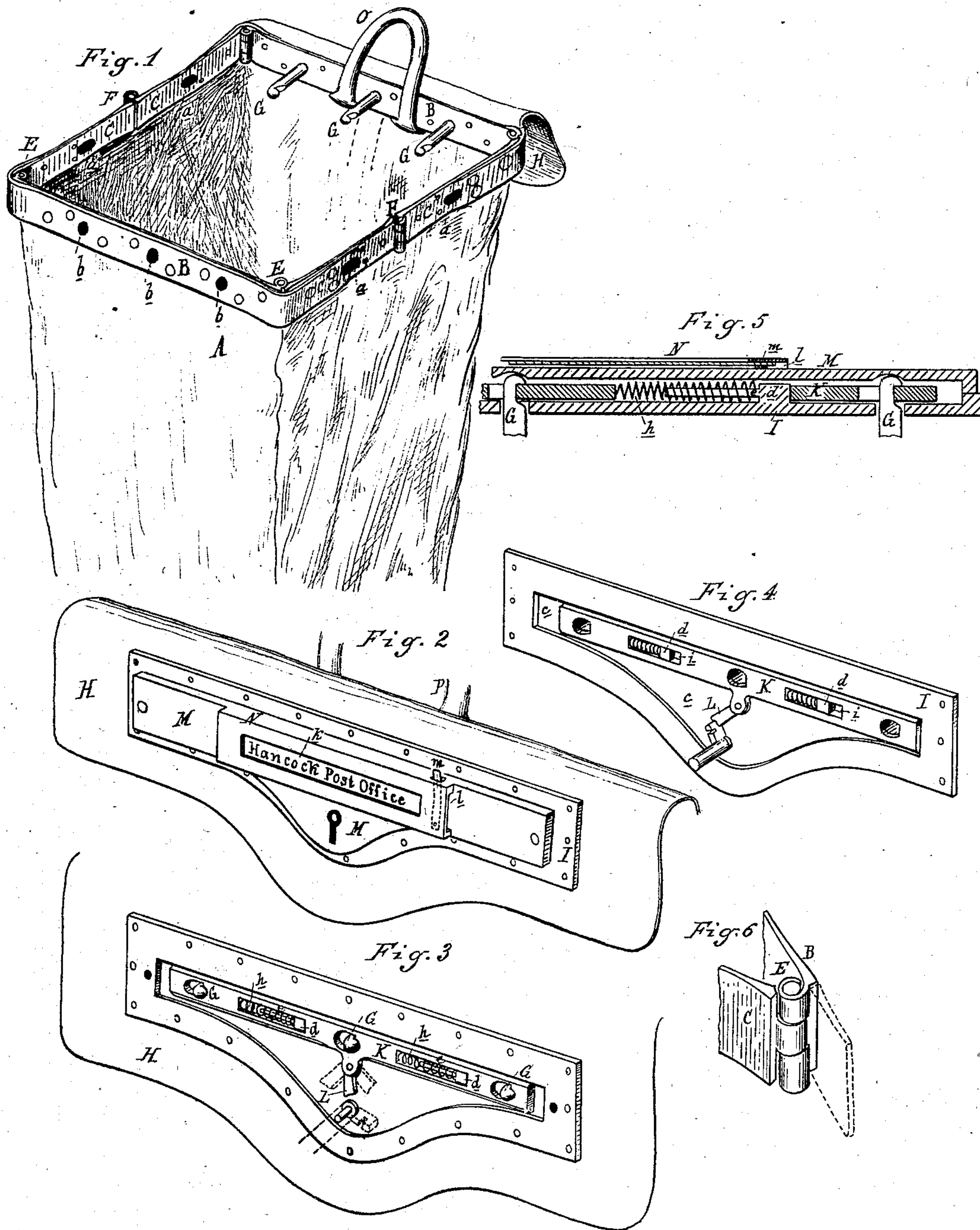


(No Model.)

A. O. KRUGER.
Mail Bag and Lock.

No. 238,127.

Patented Feb. 22, 1881.



Attest:
A. Barthel
E. B. Ward.

Inventor:
A. O. Kruger
By Phil C. Sprague
Atty

UNITED STATES PATENT OFFICE.

ANTHON O. KRUGER, OF HANCOCK, MICHIGAN.

MAIL BAG AND LOCK.

SPECIFICATION forming part of Letters Patent No. 238,127, dated February 22, 1881.

Application filed November 29, 1880. (No model.)

To all whom it may concern:

Be it known that I, ANTHON O. KRUGER, of Hancock, Houghton county, State of Michigan, have invented an Improvement in Mail-Pouches, of which the following is a specification.

My invention relates to improvements in mail bags and locks; and it consists in the peculiar arrangement and construction of the parts, as hereinafter more fully set forth.

Figure 1 is a perspective view of the mouth of the bag with the flap thrown over the side. Fig. 2 is a perspective of the flap with the lock attached thereto. Fig. 3 is a like view with the front of the lock removed. Fig. 4 is a perspective of the lock detached, and with front plate removed. Fig. 5 is an enlarged horizontal section through the longitudinal center of a section of the lock. Fig. 6 is an enlarged perspective of one of the joints of the bag-frame.

In the accompanying drawings, which form a part of this specification, A represents the bag, the upper end of which is rigidly secured to a metallic frame formed of two bars B and four C, the bars B being of equal length, and at their ends hinged by rule-joints E to the shorter bars C, which are also hinged together by the rule-joints F, two of the bars C being equal in length to one of the bars B, and so arranged that the joints F will fold inwardly between the bars B when it is desired to close the mouth of the bag. To the rear bar B there is rigidly secured a series of notched studs, G, projecting inwardly, and with the notches presented all in the same direction. In the bars C there are cut the slots *a*, and in the front bar B are cut the holes *b*, in such position that when the bars are folded upon themselves and each other to close the mouth of the bag the slots and holes will engage with the studs G, leaving the notched heads thereof protruding through the front bar B to engage with the lock.

H is the folding flap of the bag, which, when the mouth is closed, folds over the top of the bag, and as the lock is secured to this flap, the lock engages with the studs G, as I will now describe.

I is a plate, rigidly secured to the front of the flap, and is provided with an irregularly-

shaped chamber, *c*, to inclose the operating parts of the lock. This plate is provided with studs *d*, rigidly secured to the bottom of the chamber, and each of these studs has projecting from it a small pintle or stem, *e*, upon which is placed the coil-spring *h*, and through the back of the plate are holes coincident with other holes in the flap, to which it is attached and to the studs G.

K is a sliding locking-plate provided with slots *i*, which engage with the studs *d*, and inclose the coil-springs *h*, one end of each of these springs resting against the studs *d*, while the opposite end rests against the opposite end of the slots *i* in such manner as to compel the locking-plate to engage with the notches of the protruding studs, as shown in Fig. 3, except when released from such engagement by the operation of the key.

L is a pawl, pivoted to the locking-bar K, and so arranged that the bit of the key, in order to move the bar and release the studs, must act upon the free end of the pawl, as shown in Fig. 4. If the bag is held vertically, the position of the pawl will be vertical, and the key, being inserted, may be turned continuously in either direction without unlocking the bag; but to unlock the bag in this position the key should be turned to the left slowly, until the bit thereof has carried the pawl in the same direction, until the free end of the pawl will rest against the end of the bit, as shown in Fig. 4, the two parts standing in a position at nearly right angles to each other, when a turn of the key in the opposite direction will disengage the locking-bar from the notches in the studs and allow the bag to be opened. Slight practice will enable the operator acquainted with the operation of the lock to open and close the bag with great facility, while a person unacquainted with the operation of the lock would not be able to unlock it, except by accident or violence, and the lock cannot be picked.

M is a plate which, when screwed or otherwise secured to the plate I, forms the front of the lock, and secures the working parts thereof in place. To the front of this plate is secured the plate N, through which is an opening, *k*, to disclose a card or label designating the name of the post-office. This card is slipped under

the plate through the slot *l* at one end thereof, the spring *m* being depressed to allow this to be done. The spring released from pressure holds the label in its position.

5 The object in the employment of rule-joints in the frame is to prevent the mouth of the bag, when opened, assuming any other than a rectangular form. A loop-handle, *O*, is secured to the inside of the bag, to the rear part
10 of the frame, by means of which the bag is suspended to be filled. This handle in this position prevents the flap *H*, which must be folded backward in this construction, from folding forward and accidentally locking on
15 the ends of the studs, as would be the case were the bag suspended by the usual outside handle, *P*.

What I claim as my invention is—

20 1. The combination, with the bag *A* and metallic frame consisting of the bars *B B*, hinged at their ends by rule-joints *E* to the side bars, *C C*, centrally hinged by rule-joints *F*, of the recessed studs *G*, flap *H*, plate *I*, se-

cured thereto and provided with the studs *d*, having stems *e* and coil-springs *h*, and sliding 25 locking-plate *K*, having slots *i*, and perforations for the passage of the studs *G*, substantially as described, and for the purpose set forth.

2. The combination, with the recessed studs 30 *G* and plate *I*, provided with the chamber *c*, studs *d*, having stems *e* and coil-springs *h*, of the perforated locking-plate *K*, having slots *i*, and pawl *L*, pivoted to the plate *K*, substantially as described, and for the purpose set 35 forth.

3. The combination, with the plate *M*, secured to the plate *I*, of the plate *N*, secured to the plate *M*, and provided with the opening *k* in its front face, slot *l*, and spring *m*, substan- 40 tially as described, and for the purpose set forth.

ANTHON O. KRUGER.

Witnesses:

WILLIAM HITCHINGS,
THOMAS D. MASON.