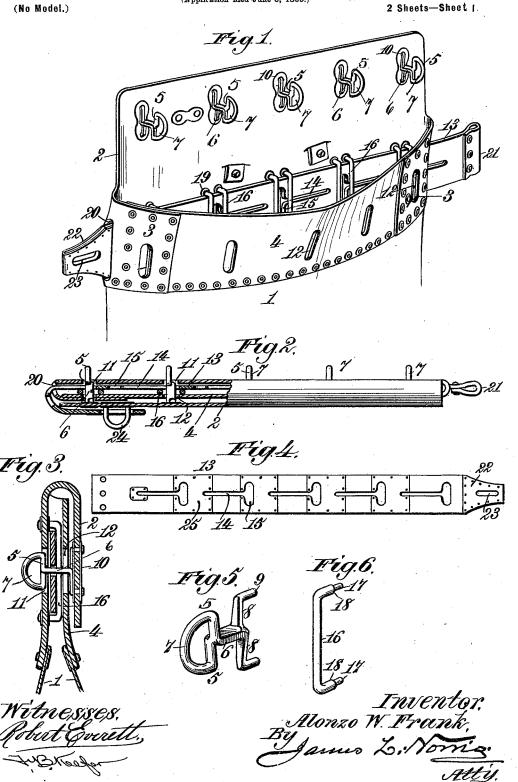
A. W. FRANK. MAIL BAG.

(Application filed June 6, 1899.)

2 Sheets—Sheet 1.



No. 645,799.

(No Model.)

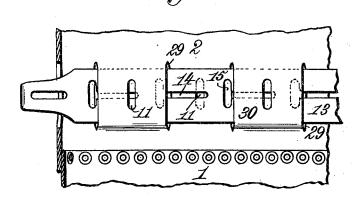
Patented Mar. 20, 1900.

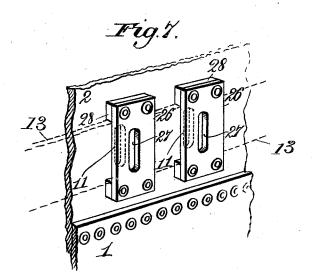
A. W. FRANK. MAIL BAG.

(Application filed June 6, 1899.)

2 Sheets-Sheet 2

Fig.8





Witnesses. Pohet Eventt, Inventor.
Alonzo W. Frank.
By
James L. NorrisAthi

UNITED STATES PATENT OFFICE.

ALONZO W. FRANK, OF JAMESTOWN, NEW YORK.

MAIL-BAG.

SPECIFICATION forming part of Letters Patent No. 645,799, dated March 20, 1900.

Application filed June 6, 1899. Serial No. 719,609. (No model.)

To all whom it may concern:

Be it known that I, ALONZO W. FRANK, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State 5 of New York, have invented new and useful Improvements in Mail-Bags, of which the fol-

lowing is a specification.

This invention relates to mail-bags, and particularly to the means for closing and fasten-10 ing the mouths of the same; and it has for its object to provide novel, simple, and strong means for fastening the mouth of the bag in a secure manner and which may be manipulated with ease and rapidity to either close 15 or open the bag and in which also the fasten-

ing-strap is effectually concealed from view.

It also has for its object to provide such a device with apertured T-headed fasteners that serve when the bag is unfastened as a 20 means for suspending the bag in an open position from the rods or hooks usually employed in connection with the racks used for holding the bags while the mail-matter is be-

ing distributed into the bags.

To these ends my invention consists in the features and in the construction, combination, and arrangement of parts hereinafter described, and particularly pointed out in the claims following the description, reference so being had to the accompanying drawings, forming a part of this specification, wherein-

Figure 1 is a detail view of my improved mail-bag open. Fig. 2 is a longitudinal sectional view of the end of the bag, the parts being shown closed. Fig. 3 is a transverse sectional view thereof. Fig. 4 is a detail view of the strap. Fig. 5 is a detail view of one of the locking-studs. Fig. 6 is a similar view of one of the strap-clips, and Figs. 7 and 8 40 are detail views of modified means for securing the strap movably in place.

Referring to the drawings, the numeral 1 indicates a mail-bag of ordinary and usual construction, and secured to the rear upper edge 45 thereof is a flap 2 for closing the bag-mouth. The lower portion of the flap 2 is preferably provided with end extensions 3, which are turned around the edges of the bag, as shown, and are secured to the ends of a strip 4, at-50 tached to the front edge of the bag-mouth. The flap 2 is adapted to fold over the mouth of the bag and close it in the usual manner.

Projecting inward from the inner side of the flap 2 is a series of stude 5. As shown, each of said studs comprises a flat shank 6, pro- 55 vided with an apertured head 7 at one end and at its other end with arms 8 8, extending in opposite directions to the shank 6 and at right angles thereto, the extremities of the arms 8 being also bent at right angles to form 60 rivets 9. The studs are secured to the flap by passing the rivets 9 through the flap and through washers 10, arranged on the opposite sides of the flap, and then upsetting or heading down the ends of the rivets. As shown, 65 the studs are arranged in a row or in alinement with one another. Formed in the lower portion of the flap 2 are slots 11, that register with corresponding slots 12, formed in the strip 4, and when the flap is folded down over 70 the mouth of the bag to close the latter the studs 5 project through said slots.

Disposed on the inner side of the lower portion of the flap 2 is a strap 13, arranged to slide in guides attached to the flap, as here 75 inafter described. The strap 13 may be formed either of leather or metal, but in the present instance I have shown it formed of leather. Formed in the strap at suitable intervals are keyhole-slots, each comprising a 80 narrow longitudinal slit 14 of just a sufficient width to receive the flat shank 6 of one of the fastening-studs and terminating at one end in a transverse slot 15, corresponding in size and shape to the slots 11 and 12, before re- 85 ferred to. The strap is movably held in place

by guides in the following manner:
The numeral 16 indicates a metallic guideclip, consisting of a metallic rod slightly longer than the width of the strip and bent 90 up at right angles at its opposite ends. The extremities of the bent portions of the rod are reduced, as at 17, to form rivets, thereby forming shoulders 18 on such bent portions. The guide-clips are secured to the flap 2 by 95 passing the rivets 17 through said flap and through washers 19, arranged on each side of the flap, the shoulders 18 abutting the washers on the inner sides of the flap, after which the ends of the rivets are upset or headed 100 down against the outer washers. As shown, the clips are arranged in pairs, there being one such pair for each slot 11, the clips of each pair being arranged on the opposite sides

of one of the slots. The strap 13 is passed through the clips 16 and is free to be drawn back and forth therethrough. The end portions of the strap extend through vertical slits or slots provided in the opposite edges of the bag, as at 20, and, as here shown, these slits or slots are formed in the turned or lapped edges of the flap part 2. One projecting end of the strap is folded upon itself and 10 riveted to form a stop, as at 21, on one end of the strap outside the bag, that operates against one slitted edge part 20 of the bag to prevent the withdrawal of the strap. To the opposite projecting end of the strap is se-15 cured a hasp plate or cap 22, in which and the strap is formed a longitudinal slot 23, so that when the bag is closed a staple 24, secured to the outside of the flap 2, is adapted to pass and be locked. To accomplish this, 20 the end of the strap carrying the hasp-plate 22 is adapted to bend around the edge of the closed bag to engage the staple 24 on the outside of the bag-flap 2, as clearly shown.

Riveted to the back of the strap is a series 25 of wear and stiffening metallic plates 25. The plates are disposed in such manner that each plate will surround one of the slots 15 and one end of the slit 14, formed in the adjacent keyhole-slot, the plates being cut away or 30 punched out to register with said slotted and slitted portions of the strap. The purpose of the plates is to prevent wear of the strap and to stiffen and strengthen the latter at those points where the headed stude engage it.

The operation of my improved fastening device is as follows: Let it be assumed that the bag is open and the strap is in such position that the slots 15 are in register with the slots 11 in the flap. Then in order to close and 40 fasten the bag it is only necessary to fold the flap over the mouth of the bag, when the studs 5 will pass through the slots 11 and 12 and through the slots 15 in the strap, the heads 7 projecting through the slots 11 of the 45 flap, after which the strap is pulled lengthwise as far as the stop 21 will permit, thus

causing the slitted portions 14 of the strap to engage the flat shanks of the stude and the under side of their heads 7, preventing the 50 withdrawal of the studs. The slotted end 23 of the strap is next slipped over the staple 24 and is fastened thereon by a padlock in the usual manner. To open the sack, it is obvious that the above operation has merely

55 to be reversed—that is to say, after the padlock has been unlocked and removed and the end of the strap slipped from over the staple the strap is pulled in the proper direction until the slots 15 register with the slots 11 and

60 12, thus disengaging the heads of the studs. when the flap may be folded back to open the mouth of the bag.

It will be noted that when the bag is closed and locked the metallic plates 25 engage the 65 under sides of the heads of the studs, thus offering a stiff and strong resistance against the withdrawal of the latter through the slots, I

and said plates in turn are firmly and rigidly supported on each side of the stude by the clips 16, the whole forming a strong, secure, 70 and unyielding lock or fastening.

When the sack is open, the apertured heads of the stude may be engaged by the usual rods or hooks employed on the racks commonly used in the post-office service for sus- 75 pending the bags in an open position for the reception of the mail-matter precisely in the same manner as the staples on the service mail-bag are engaged and which the apertured studs take the place of.

I have shown and described the strap as being made of leather; but it will be readily understood by those skilled in the art that the same may be made of metal, the end of the strap being hinged to fold back on the staple 85

in a well-known manner.

In Figs. 7 and 8 of the drawings I have illustrated slightly-modified means of movably securing the strap to the flap 2, whereby the metallic clips 16 are dispensed with. Re- 90 ferring to Fig. 7, the numeral 2 indicates the flap, and 13 the strap, constructed in every respect in the manner before described. The strap is indicated by dotted lines. Strips 26, of leather or other similar or suitable material, 95 are riveted at their opposite ends to the flap 2, opposite the slots 11, said strips being provided with slots 27 of the same size and shape as the slots 11 and registering with the latter. The strips 26 constitute strap-guides and are 100 arranged tranversely of the strap, as shown, and the latter passes between said strips and the flap. In order to prevent the strips from binding or pinching the strap, and thus render it difficult to move the latter, distance- 105 pieces 28 are interposed between the ends of the strips and the flap, between which the strap may freely move and which operate to raise the strips from the flap, so that they will not clamp the latter.

In Fig. 8 I have illustrated a still further modification, wherein the strap-guiding metal clips 16 are dispensed with and vertical slits or incisions 29 are made in the flap 2 on each side of the slots 11, said slits being 115 slightly longer than the width of the strap, thus forming strap-guides composed of strips or bands 30, that are integral with the flap 2. The strap is secured and retained in position by inserting it beneath the strips or bands 120 30, or, in other words, between said strips or bands and the inner side of the flap.

IIO

In the arrangements shown in both Figs. 7 and 8 of the drawings the operation of the device is precisely the same as that before de- 125 scribed.

Having described my invention, what I claim is-

1. The combination with a mail-bag, of a flap for closing the end thereof carrying a 130 plurality of locking-studs, each of said studs comprising a flat shank having oppositelyextending arms at one end riveted to the flap, and terminating at its other end in an apertured head, said heads being adapted to be projected through slots formed in the opposite edges of the mouth of the bag, a locking-strap disposed between the edges of the mouth of the bag and having keyhole-slots for engaging the headed studs, and means for locking the strap against endwise movement, substantially as described.

2. The combination with a mail-bag, of a flap for closing the end thereof carrying a plurality of headed locking-studs arranged to be projected through slots formed in the attached edge of the flap and the opposite edge of the mouth of the bag, U-shaped clips riveted to the flap on opposite sides of the slots in the flap, a strap movably disposed within said clips and provided with keyhole-slots for engaging the headed studs, and means for locking said strap against endwise movement, substantially as described.

3. The combination with a mail-bag, of a

flap for closing the end thereof carrying a plurality of headed locking-studs arranged to be projected through slots formed in the attached edge of the flap and the opposite edge of the 25 mouth of the bag, a locking-strap movable endwise in guides fixed to the inner side of the flaps and provided with keyhole-slots for engaging the headed studs, metallic plates riveted to the rear side of said strap and each 30 embracing the enlarged portion of one keyhole-slot and the end of the slitted portion of the adjacent keyhole-slot, and means for locking said strap against endwise movement, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALONZO W. FRANK.

Witnesses:

WM. T. MARSH, H. C. BOLTORS.