

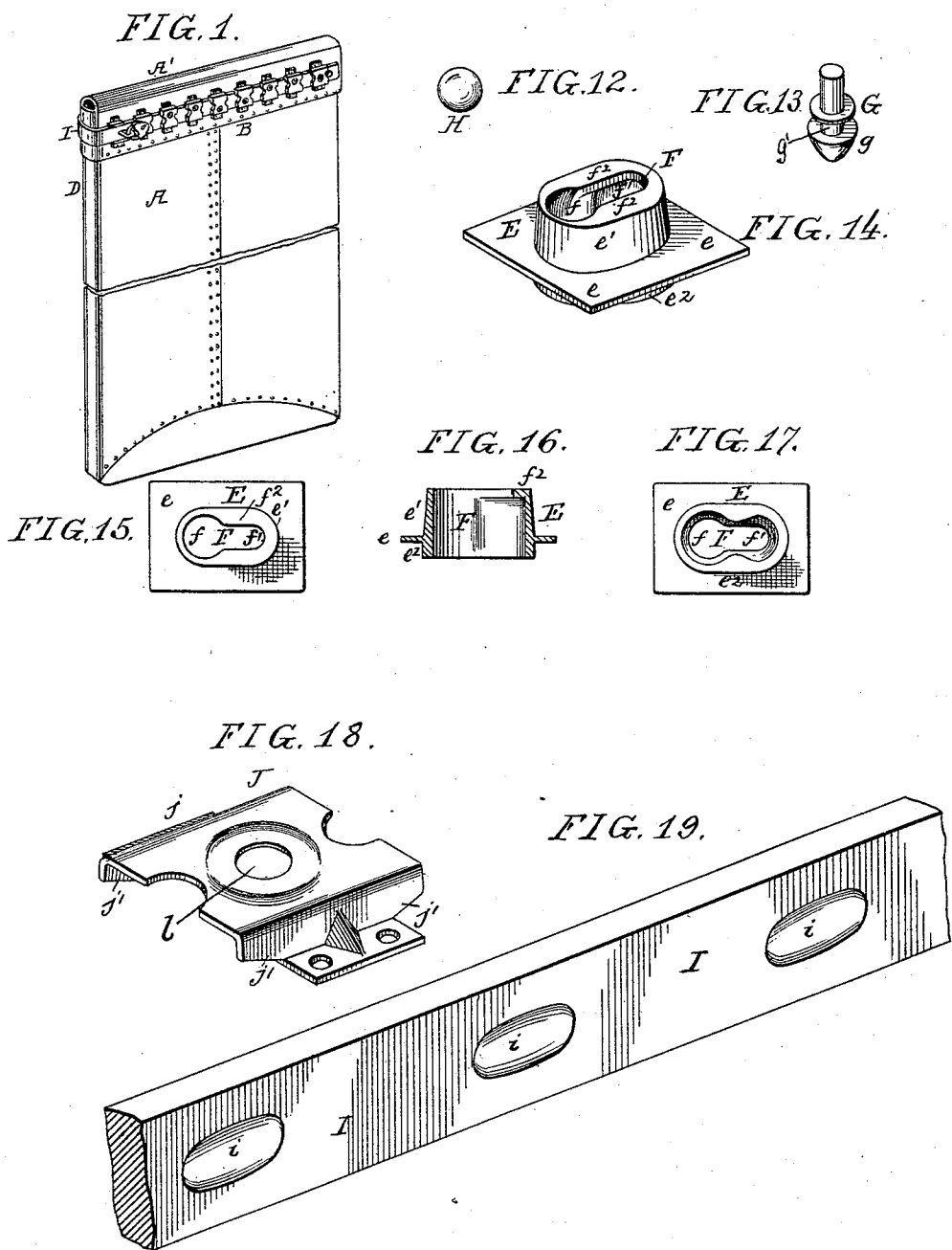
(No Model.)

4 Sheets—Sheet 1.

J. HELLINGS.
LOCKING DEVICE FOR MAIL BAGS.

No. 459,331.

Patented Sept. 8, 1891.



Witnesses:
R. Schlicher.
A. V. Groupe.

Inventor:
John Hellings
by his Attorneys
Howson & Howson

(No Model.)

4 Sheets—Sheet 2.

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FIG. 2.

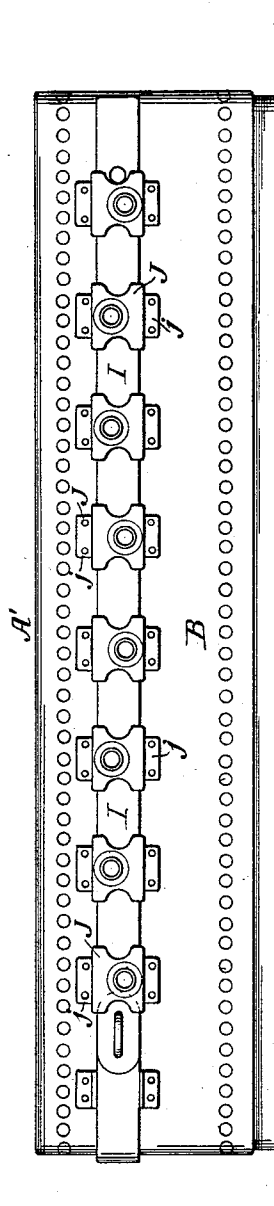


FIG. 20.

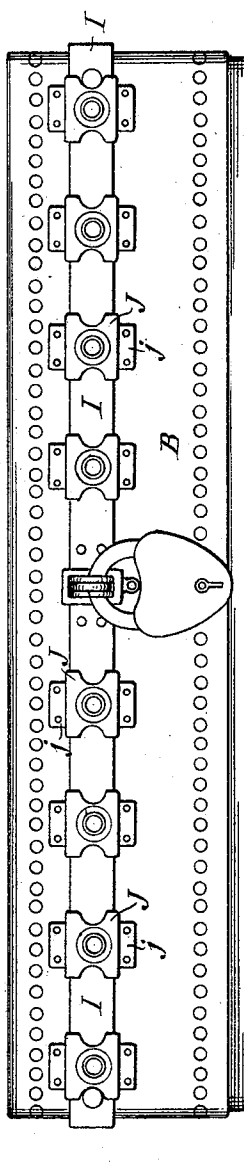
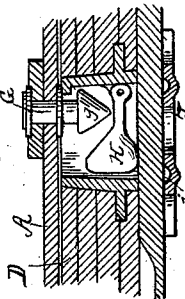


FIG. 21.



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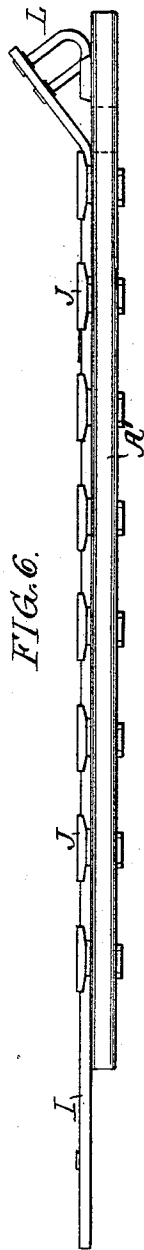
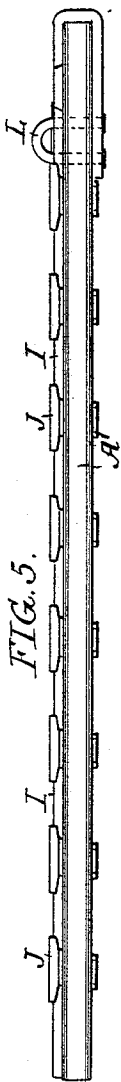


FIG. 4.

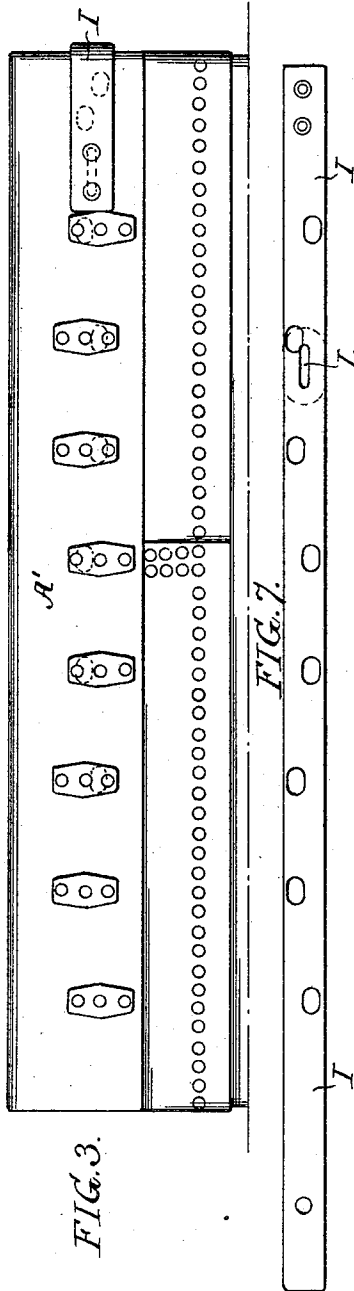
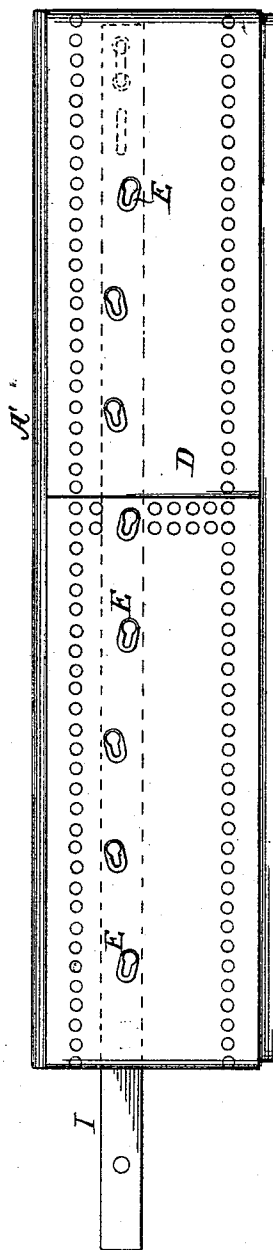


FIG. 3.

FIG. 7.

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UNITED STATES PATENT OFFICE.

JOHN HELLINGS, OF PHILADELPHIA, PENNSYLVANIA.

LOCKING DEVICE FOR MAIL-BAGS.

SPECIFICATION forming part of Letters Patent No. 459,331, dated September 8, 1891.

Application filed April 6, 1891. Serial No. 387,783. (No model.)

To all whom it may concern:

Be it known that I, JOHN HELLINGS, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Locking Devices for Mail-Bags, &c., of which the following is a specification.

The object of my invention is to construct an improved fastening device for bags, satchels, &c., which, when the bag is closed, will form a secure fastening across the top, which cannot be opened without a key or without mutilating a portion of the bag, being at the same time proof against dampness and rain.

My invention is especially applicable to mail-bags; but it will be understood that it can be applied to any article, such as satchels, money-receptacles, trunks, &c.

Referring to the accompanying drawings, Figure 1 is a perspective view of a mail-bag from the rear side, illustrating my invention. Fig. 2 is a view of the rear side of the bag, the lock being closed. Fig. 3 is a view of the front of the bag with the lock closed. Fig. 4 is a front view of the bag, looking in the direction of the arrow, Fig. 8, showing the flap opened. Fig. 5 is a plan view of Fig. 2. Fig. 6 is a plan view showing the locking device drawn, unlocking the bag. Fig. 7 is a detached view of the locking-strap. Fig. 8 is a transverse section showing the bag open. Fig. 9 is a transverse section showing the bag closed. Fig. 10 is a longitudinal section showing the bag open. Fig. 11 is a longitudinal section showing the bag closed. Figs. 12 to 18 are detached views of the ball, locking-pin, thimble, and cleat. Fig. 19 is a perspective view of a portion of the locking-strap. Fig. 20 is a view of a modification of the arrangement of parts as applied to a mail-bag, and Fig. 21 is a view of a modification of the locking mechanism.

I will describe my invention as applied to mail-bags.

A is the body of the bag, made of any suitable material, preferably of leather. Secured at the opening of the bag on one side is a strip *a* and on the opposite side is secured a strip *a'*.

A' is the flap, which extends over and closes the mouth and is secured by means which I will describe.

I will designate the portion of the bag carrying the locking devices and the flap B and the opposite portion having the openings D.

Secured at intervals along the side B of the bag is a series of thimbles E. (Shown clearly in Figs. 14, 15, 16, and 17.) Each thimble has a flange *e*, adapted to fit between two thicknesses of leather or other material composing the bag. The strip *a'* is secured to the bag by rivets or sewing, and as the flange *e* is between the two the thimbles are thus securely held in position. The portion *e'* of the thimble projects on the inside of the bag and the portion *e''* on the outside, as clearly shown in Fig. 8, the portion *e''* preferably extending only to the exterior surface of the bag.

In the side D of the bag is a series of openings *d* in line with the projections *e'* of the thimbles, so that when the bag is closed these projections enter the openings *d* and preferably extend flush with the outer surface D of the bag.

It will be noticed that each thimble has an elongated opening F, the portion *f* of the opening being larger than the portion *f'*. This opening *f'* is formed by a flange *f''*, extending on each side thereof. The opening F is sufficient to admit the head *g* of the locking-pin G, Fig. 13, and when said pin is forced into position, as shown in Figs. 9 and 11, it is moved along the slot F, so that its head *g* will come under the flanges *f''*, its shank *g'* entering the narrow portion *f'* of the slot, thus locking the flap securely down onto the body portion of the bag.

In order to prevent the withdrawal of these locking-pins, I provide a bolt, preferably a ball H, Fig. 12, which can be allowed to drop freely below the line of the head of the pin G during the insertion of the pin into the opening, as shown in Fig. 10; but when the pin is moved to its position in the narrow portion of the slot the ball is forced up back of the head of the pin, preventing it moving in the slot, thereby locking the pin firmly to the thimble, as shown in Figs. 9 and 11.

At the back of the thimble is a strap I. This strap is confined by cleats J, Fig. 18, which allow the strap to move longitudinally but otherwise confine it. In this strap is a series of recesses or cavities *i*, which, when

the strap is moved to a certain position, come opposite the openings in the thimble, allowing the balls to drop in the cavities *i* in the strap to such an extent that the pins *G* can enter the slots *F* and be moved into position, after which the strap or straps are moved longitudinally, forcing the balls into the thimbles back of the pins, locking them, as before remarked, in the narrow portion of the slot.

I preferably stamp up the several confining-cleats *J* for the strap from sheet metal, although in some instances they may be cast. These cleats have side wings *j j*, through which the rivets pass, which secure it to the bag. The body portion of each cleat extends on each side beyond the wings, so as to give as much bearing as possible to the strap. The extensions are undercut at *j'*, so as to allow the bag to bend freely, as one of the important points of a bag-fastening is to have it sufficiently yielding to allow the bag to be bent or otherwise roughly handled. The strap extends through the series of cleats and has a staple *L* at one end, so that when it is turned around the end of the bag the staple can be passed through the thicknesses of the bag and through an opening in the strap, and when a lock is applied to this staple the strap cannot be moved in either direction, the portion of the strap passing around the end of the bag, tightly closing that end. I prefer to stagger the thimbles and the recesses in the strap, as shown in Figs. 2 and 4, so that it will require a more extended movement of the strap and prevent any one opening the bag by doubling the bag up and moving the strap in the cleats.

In Fig. 20 I have shown the thimbles arranged in a single line, and when the bag is made carefully this arrangement is perfectly secure, the movement of the strap being limited. In this instance I have a staple on the flap at the center which passes through an orifice in the band, and I make the strap in two sections and provide each section with staples, so that when they are in the position shown in Fig. 20 a lock can be attached, as shown, thus securely locking the bag. Each cleat has an opening *l*, which, when the strap is removed, allows the locking-ball to be inserted or removed from the thimble.

When the invention is used on small bags or satchels or pocket-books, only one thimble may be used, and a short strap, either leather or metallic, or any number of thimbles may be applied, according to the construction of the article.

I claim as my invention—

1. The combination of the thimble, a locking-bolt therein, and a headed pin adapted to the thimble, with a strap adapted to lift the locking-bolt in the thimble and lock the pin therein, substantially as specified.

2. The combination of the body and the the flap of a bag, one of which carries a series of thimbles, a locking-bolt in each thimble, a strap back of the thimbles, and cavities in said strap, with headed pins carried by the opposite portion of the bag adapted to the thimbles, substantially as described.

3. The combination, in a mail-bag fastening, of the thimbles, slots in said thimbles, said slots having a wide and a narrow portion, headed pins adapted to pass in the wide portion of the slot, the heads of said pins being confined in the narrow portion of the slots, balls adapted to the thimbles, and a strap having recesses which can be moved into line with the openings in the thimble to allow the balls to fall clear of the pins, substantially as described.

4. The combination, in a mail-bag fastening, of the body portion *B*, a series of thimbles mounted in said body portion, said thimbles having cavities of the form substantially as described, a recessed band adapted to slide back of the thimbles, cleats for securing said band to the bag, balls in the thimbles, the portion *D* of the bag having a series of openings through which the thimbles extend, a flap, and headed pins on said flap adapted to the openings in the thimbles, substantially as described.

5. The combination of the bag, the locks on one portion of the bag, pins on the opposite portion adapted to said locks, a longitudinally-movable locking-strap, and securing-cleats for said strap, said cleats having undercut extensions which guide the strap, but allow the bag to be freely bent, substantially as described.

6. The combination of the bag, thimbles on one portion of the bag, locking-balls in said thimbles, headed pins on the opposite portion of the bag adapted to the thimbles, a locking-strap, and cleats for the strap situated back of the thimbles, said cleats having openings for the passage of the locking-balls, substantially as specified.

7. The combination, in a bag, of a series of thimbles and locking-bolts therein, some of said thimbles being arranged out of line with the other thimbles, with a longitudinally-moving locking-strap having recesses coinciding with the thimbles, so that an extended longitudinal movement of the strap is required to lock or unlock the bag, substantially as specified.

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

JOHN HELLINGS.

Witnesses:

H. F. REARDON,
EUGENE ELTERICH.