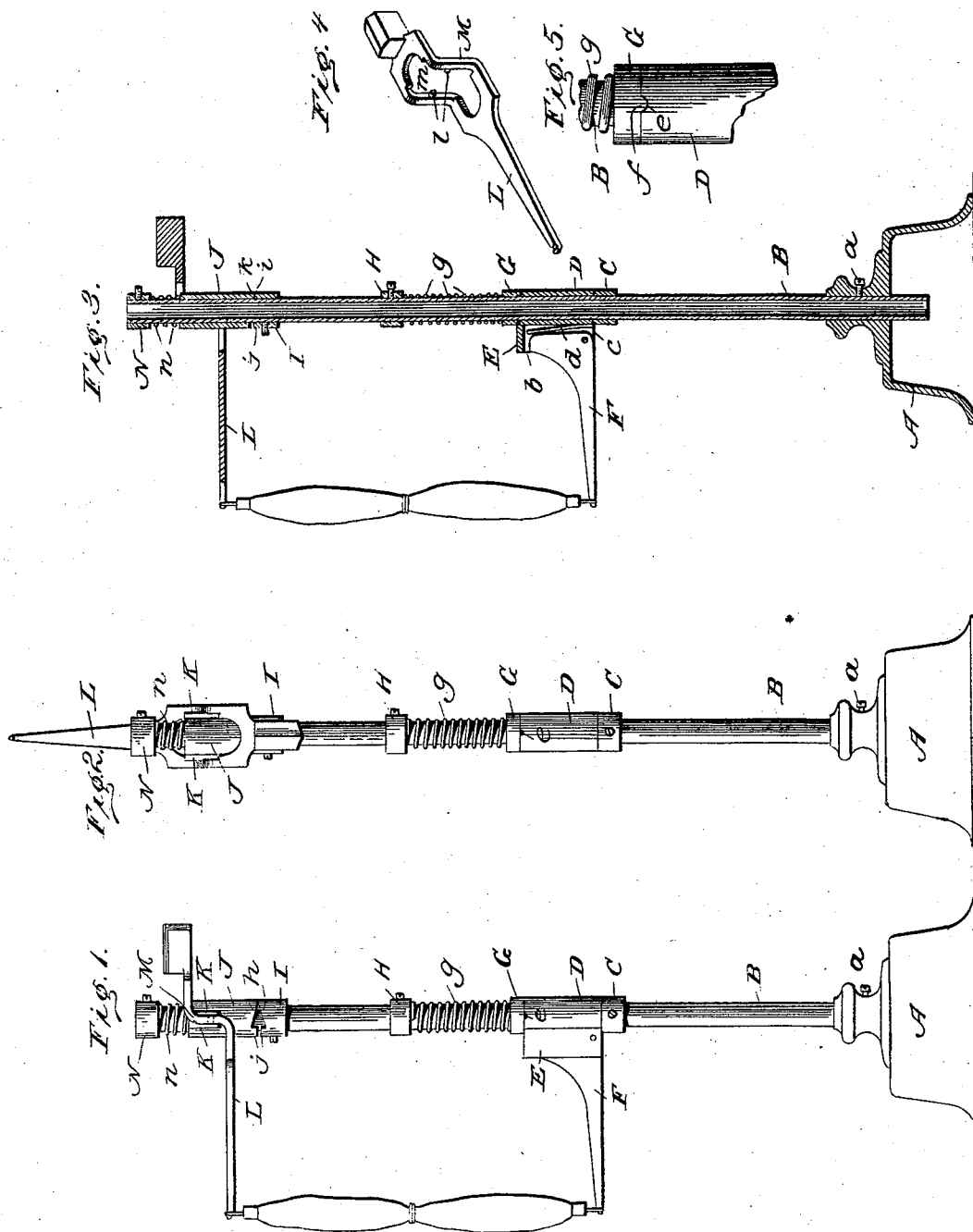


(No Model.)

J. TEETER.
MAIL CRANE.

No. 503,221.

Patented Aug. 15, 1893.



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UNITED STATES PATENT OFFICE.

JACOB TEETER, OF HAGERSTOWN, INDIANA.

MAIL-CRANE.

SPECIFICATION forming part of Letters Patent No. 503,221, dated August 15, 1893.

Application filed December 22, 1892. Serial No. 456,088. (No model.)

To all whom it may concern:

Be it known that I, JACOB TEETER, a citizen of the United States, residing at Hagerstown, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Mail-Cranes; 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.

My invention relates to mail cranes, and has for its object improvements in this class of devices, whereby mail bags or pouches are delivered to passing trains with accuracy, precision, and the least possible danger to employes either on or off the moving train. For the accomplishment of such objects I have devised the crane hereinafter described, same being arranged, designed and adapted to receive the bag or pouch, to hold it lightly suspended in a vertical position, to promptly release it when grasped from a moving car, and finally to so dispose of the bag-supporting arms as to render accidents impossible.

The invention will now be particularly described and pointed out in the claims.

In the accompanying drawings which form part of this specification, and in which like letters of reference indicate like parts wherever employed: Figure 1, represents a side elevation of my invention in position for use; Fig. 2, a similar view thereof after the bag has been removed by action of a passing train; Fig. 3, a vertical longitudinal section of Fig. 1; Fig. 4, a detail view representing in perspective the upper arm of the crane detached; Fig. 5, a similar fragmentary view illustrating the means of yieldingly locking the arms with relation to the mast on which they are secured.

Reference being had to the drawings and letters thereon A represents a base block or casting which should be firmly screwed or otherwise secured to a bed or foundation, not shown.

B indicates a mast vertically adjustable in the base A with relation to which it is secured by means of screw *a*, said mast being prefer-

ably of wrought metal, tubular in form, and of uniform diameter throughout its entire length.

Upon mast B at a suitable distance from base A is secured a collar C above which is a sleeve D the latter bearing on its face an integral rectangular box E open on its front side and lower end, as shown at *b c* respectively.

F represents the lower bag supporting arm, same being pivoted in the lower end of box E where, when raised to a horizontal position it compresses a leaf spring *d* located at the back of box E as shown by Fig. 3 of the drawings. The upper end of sleeve D is provided with one or more small indentations or recesses *e*, while immediately above a vertically movable annulus G is provided upon its lower surface with a projection or pintle *f* adapted to engage one of the recesses *e* for the purpose of yieldingly locking these parts.

Surrounding mast B at a point above sleeve D is adjustably secured a collar H, in all respects similar to that lettered C, and interposed between said collar H and annulus G is a mast encircling compression spring *g* tending to normally hold sleeve D in contact with collar C for a purpose that will hereinafter appear.

Near the upper end of the mast B is secured by means of a set-screw, collar I similar and for a similar purpose to those marked C and H, except that the collar I is inclined on each side of its upper surface as shown at *h*; at the point where said inclines meet is provided with a small recess *i* similar to those marked *e*; and at the forward or lower ends of the incline *h*, is further provided with a vertical stop *j* for purposes that will hereinafter appear. Above the last named part and like it encircling mast B is a vertically movable sleeve J the lower end of which corresponds exactly with the upper end of collar I except that a small pintle *k* at the rear thereof is substituted for the recess *i* in the latter.

On diametrically opposite sides of sleeve J is cast or otherwise formed vertical guides K, K, connected at their lower ends and affording supports for inwardly extending trunnions *l* constituting part of an over balanced upper bag-supporting arm L, more clearly shown in Fig. 4 by inspection of which it will be seen that said arm is provided with a goose-neck

bend M and is apertured as at *m* so as to surround sleeve J for the purpose of allowing a free vertical movement thereof when the mail bag has been detached. At the upper-most point of mast B is keyed a stop N between which and the upper end of sleeve J is interposed a compression spring *n* for the purpose of holding parts I, J, normally in engagement. This being substantially a description of my invention its operation is too apparent to require much explanation. It will be observed however, that in practice a mail bag is first suspended as shown by Fig. 1 and when taken by a train passing in either direction the arms are forced into the position illustrated by Fig. 2 or the reverse springs *g n* yielding sufficiently to allow pintles *f k* to leave their recesses *e i* respectively, when sleeves D J are free to move with the swing of arms F L until properly checked. The movement of last named parts is arrested as follows: Pintle *k* having left recess *i* rides down one of the inclines *h* until it engages stop *j*; while at the same time sleeve D provided with recesses *e* turns upon its axis until an adjacent recess *e* prevents further rotation by receiving the spring pressed pintle *f* as shown in Fig. 5; arm L in the meantime having assumed a vertical position under influence of its counter-weight. Having thus described my invention, what I claim is—

1. In a mail bag supporting crane the combination with a vertical mast of upper and lower sleeves loosely mounted thereon, horizontally rotating vertically swinging arms pivoted to the latter, and spring-pressed pintles or projections engaging the sleeves for yield-

ingly holding them against accidental rotation, substantially as described.

2. In a mail bag supporting crane the combination with a vertical mast of adjustable collars secured thereto, an upper and lower arm journaled upon the mast, and a compression spring surrounding the mast above each arm for holding the latter in contact with its adjacent collar to prevent accidental rotation of the arms, substantially as described.

3. In a mail bag supporting crane the combination with a vertical mast of adjustable collars C, H secured thereto; a horizontally rotating and vertically swinging spring-pressed arm interposed between the collars; a similar arm pivoted upon a sleeve surrounding the mast above; and a collar having an inclined upper edge upon which said sleeve is held by action of a spring, substantially as described.

4. In a mail bag supporting crane the combination with a vertical mast of a horizontally rotating and vertically swinging lower arm; a collar above adjustably secured to the mast and having an inclined upper edge; a sleeve having a similar lower edge also surrounding the mast; and an over-balanced upper arm pivoted upon said sleeve and constructed with an angular bend near its pivoted point to facilitate a vertical movement of the arm, substantially as described.

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

JACOB TEETER.

Witnesses:

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