

C. A. LOTRIDGE.
MAIL BAG DELIVERER.
APPLICATION FILED JULY 27, 1911.

1,037,942.

Patented Sept. 10, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

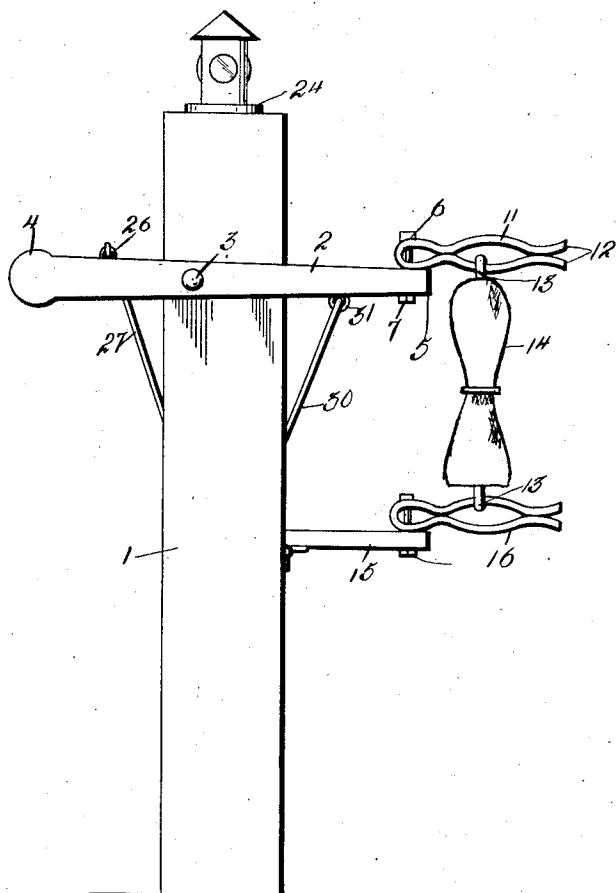


Fig. 2.

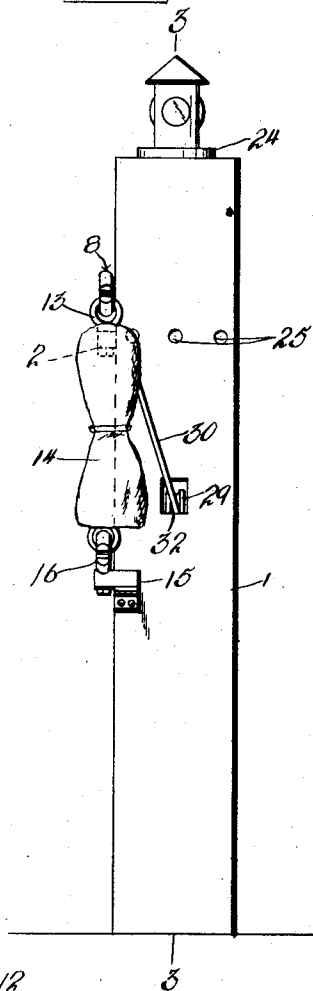
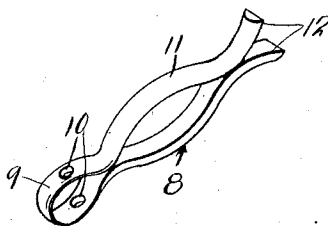


Fig. 3.



Witnesses
J. E. Little
to H. C. Woodman.

Inventor
C. A. Lotridge.

By *[Signature]*

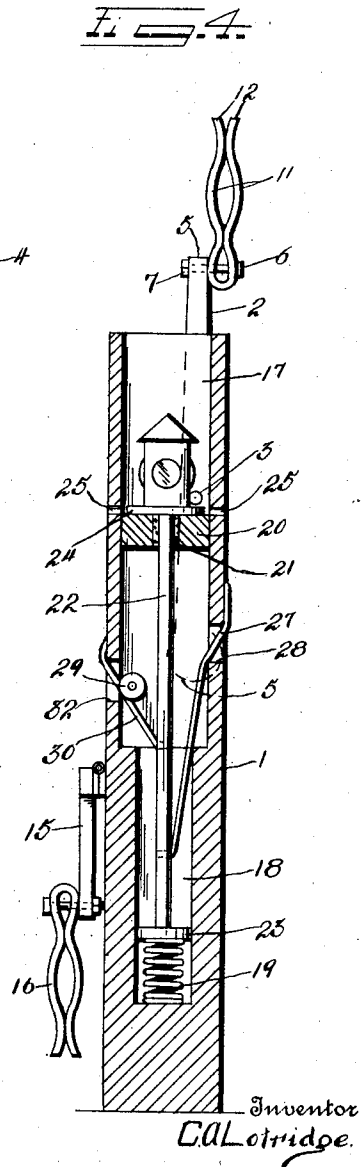
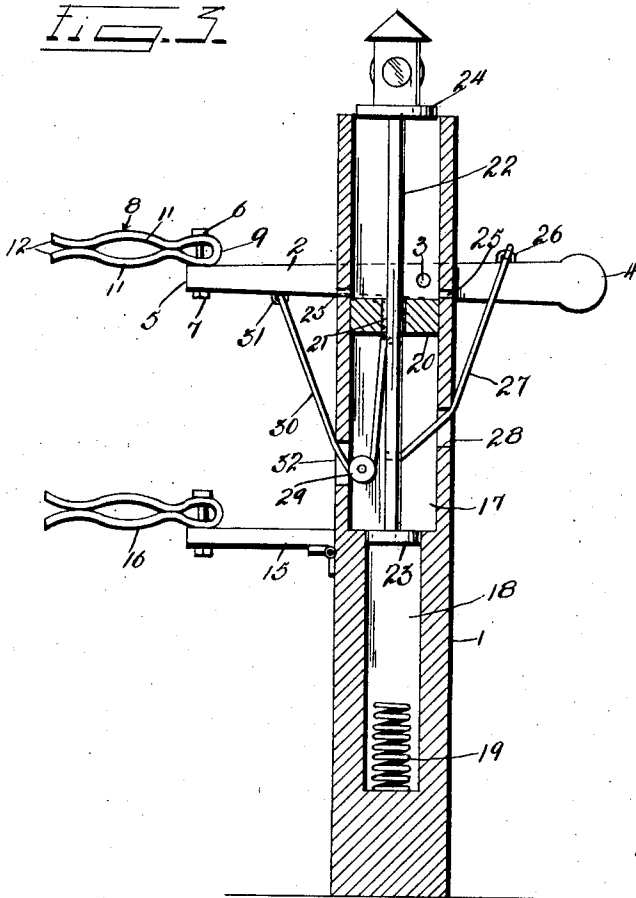
Attorneys

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

CLINTON A. LOTRIDGE, OF WEST POINT, ARKANSAS.

MAIL-BAG DELIVERER.

1,037,942.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLINTON A. LOTRIDGE, a citizen of the United States, residing at West Point, in the county of White, State of Arkansas, have invented certain new and useful Improvements in Mail-Bag Deliverers; 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 relates to new and useful improvements in mail delivering devices and more especially to cranes upon which mail bags are supported and positioned to be taken up by a passing train and the object of my invention is to improve the construction and increase the efficiency of devices of the above described character.

A further object of my invention is to provide means adapted to be actuated by the supporting arm or crane from which the bag is hung which will cause the display of a suitable signal or light when a mail bag is in position and which will automatically move the light or signal to a shielded position upon the removal of the bag.

A still further object of my invention is to provide an improved form of spring clip for use in suspending the mail bag upon the crane.

With these and other objects in view my invention will be more fully described, illustrated in the accompanying drawings which show a preferred embodiment of my mail delivering mechanism and then specifically pointed out in the claims which are attached to and form a part of this application.

In the accompanying drawings:—Figure 1 is a side elevation of the mail delivering mechanism showing a mail bag in position to be taken by the train. Fig. 2 is a front elevation of the same. Fig. 3 is a section on the line 3—3 Fig. 2. Fig. 4 is a similar section showing the mechanism in inoperative position. Fig. 5 is a detail perspective of one of the spring clips used in securing the mail bag in position.

Referring more specifically to the accompanying drawings in which similar refer-

ence numerals designate corresponding parts throughout, 1 designates in general the supporting post having the supporting arm or crane 2 pivotally mounted adjacent its upper end by a bolt or other preferred means 3. This arm or crane is of the customary form, the end 4 being heavier than the end 5 by which means the crane is normally held in vertical position.

Rotatably mounted by means of a bolt 6 which is passed through the lighter end of the crane 2 and secured in place by the nut 7 is a spring clip which as a whole is designated by the numeral 8, and from which the mail bag is adapted to be hung in the customary manner. This spring clip as best shown in Fig. 5 of the drawing is formed from a single strip of spring metal bent back upon itself intermediate its ends to form a bight portion 9, the opposite sides of which are provided with bolt receiving apertures 10 through which the bolt 6 passes. The terminals of this strip are then bowed outwardly and then inwardly to form the curved arms 11 which bear one against the other adjacent their ends which are curved outwardly as shown at 12.

In operation one of the rings 13 of the mail bag, which is conveniently shown at 14 is inserted between the flared ends 12 of the clip and then forced inwardly between the bearing portions of the clip, by which means the bag is suspended from the lowermost of the bowed arms, while the upper arm acts to normally retain the bag against casual displacement.

As a means for holding the bag against displacement through swinging caused by wind, I have provided the arm 15 which is hingedly secured by one end to the front face of the post and which carries upon its other end a second spring clip 16 similar in all respects to the clip previously described and which is adapted to receive and hold the lower ring of the mail bag. As shown the hinged end of this arm 15 is squared in such a manner as to bear against the post when the arm is extended at right angles thereto and thus limit its upward movement. Because of this the arm 15 will serve to

maintain the mail bag in proper position even if the bag is too light to of itself counterbalance the weight of the heavier side of the crane. It will of course be understood that this post together with its crane is to

5 be positioned adjacent the track in such a manner that the bag when in position will extend toward the track in position to be taken up by the customary form of mail
10 bag catching arm of the mail car in passing. By rotatably mounting the clips 8 and 16 which support the bag they may be swung to extend either up or down the track according to the direction in which the train is
15 coming thus greatly decreasing the force necessary to detach the bag and at the same time doing away to a great extent with the severe shock and strain which would otherwise be communicated to the crane 2 and the arm 15.

20 Referring more specifically to Figs. 3 and 4 of the drawings it will be seen that the post, which as a whole has been designated by the numeral 1, and which may be constructed of wood or metal as preferred, is
25 provided throughout a portion of its length with a centrally located longitudinal bore 17, the lower end of which communicates with a reduced bore or socket 18 in the bottom of which is seated a helical compression
30 spring 19. Secured in the bore 17 intermediate its length is a disk or plate 20 provided with a central aperture 21 through which is slidably mounted a rod 22 the
35 lower end of which is enlarged as shown at 23, said enlarged end being so proportioned as to fit loosely in the bore 18 of the post. In normal position, that is, in lowered position, this enlarged end 23 is seated upon
40 the upper end of the spring 19 and cushioned thereby while the upper end of the rod 22 extends a slight distance above the plate 20 and is provided with a supporting plate 24 upon which is detachably secured
45 a lamp or other suitable signal device and as will be readily seen by referring to Fig. 4 of the drawings the plate 20 together with the upper end of the post form a housing which effectually shuts off all light rays
50 when the lamp is in its lowered position. As a means for supplying the necessary air to the lamp and also as a means for permitting escape of water in case of rain, I have provided the post with a plurality of apertures or ports 25.

55 Secured to the heavier end of the crane 2 by means of an eye bolt 26 is a cable or other suitable flexible member 27, the other end of which extends through a suitable slot 28 formed in the rear face of the post and is connected to the rod 22 adjacent its lower end. This cable is so proportioned that
60 when the crane 2 is swung into active position the rod 22 will be raised to a sufficient extent to position the light above the top of

the post as shown in Fig. 3. Secured within the bore 17 of the post is a pulley 29 over which is passed a second cable 30 one end of which is secured by means of an eye bolt 31 to the lighter side of the crane 2 while its
70 other end is secured to the rod 22 at such a point as to be fully extended when the crane is in operative position, a suitable slot 32 being formed in the post for the passage of this cable. The function of this cable is to
75 insure the lowering of the rod 22 and the light or signal carried thereby upon the swinging of the crane to normal vertical position and as will be seen this cable will serve to effectually lower the rod irrespective of any binding which may occur in the
80 bore of the plate 20. Because of this the bore 21 may be supplied with any suitable packing to form a water tight joint and thus protect the interior mechanism from
85 moisture and rain.

The operation of my improved mechanism will be readily understood from the above and needs but slight description. In normal position the crane is in vertical position and the arm 15 hangs against the side of the post while the light is seated upon the plate 20 and completely screened from view. When the device is to be used the crane is swung to the position shown in Fig.
90 3 which raises the light as above described, and the mail bag is supported upon the clip 8 and secured at its lower end by means of the clip 16. As the car passes the catcher arm engages with the mail bag and disconnects the same allowing the arm 15 to drop
95 against the post and the crane to swing back into normal position at the same time lowering the light, any sudden shock or jar which might otherwise be transmitted to the light being taken up by the cushioning spring 19.

What is claimed, is:—

1. A mail bag delivering mechanism, comprising a supporting post having a longitudinal bore, a rod slidably mounted in said bore, a signal carried by the upper end of said rod, a counterweighted crane arm pivotally secured to said post, mail bag supporting means carried by said crane, and
110 means co-acting with said crane to raise and lower the rod and its signal.

2. A mail bag delivering mechanism, comprising a supporting post having a longitudinal bore, a rod slidably mounted in said bore, and carrying a signal at its upper end, a counterweighted crane arm pivoted to said post, mail bag supporting means carried by said crane, a cable connecting the weighted end of the crane with the lower end of the
120 rod, a pulley secured within the post, and a second cable connecting the bag supporting end of the crane with the rod intermediate the length of the latter, said second cable being passed under said pulley.

3. A mail bag delivering mechanism, comprising a supporting post provided with a longitudinal bore, a signal movable in and out of said post, a crane pivotally secured to
5 said post, means co-acting with said crane to actuate said signal, and means carried by said crane to support a mail bag.

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

CLINTON A. LOTRIDGE.

Witnesses:

T. B. DAVIS,
WILLIS PETERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
