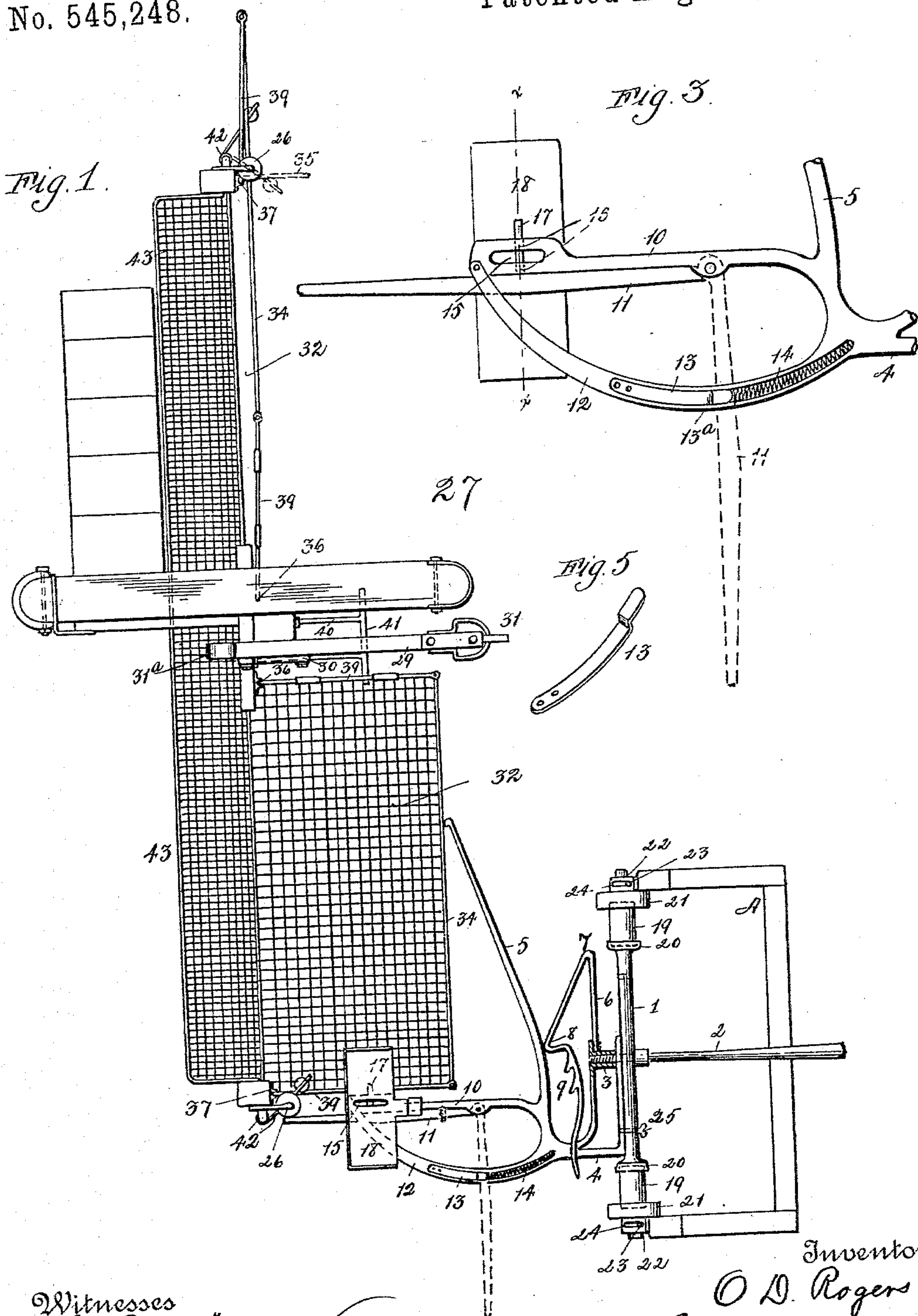


(No Model.)

O. D. ROGERS.  
RAILWAY MAIL DELIVERY DEVICE.

Patented Aug. 27, 1895.

No. 545,248.



Witnesses  
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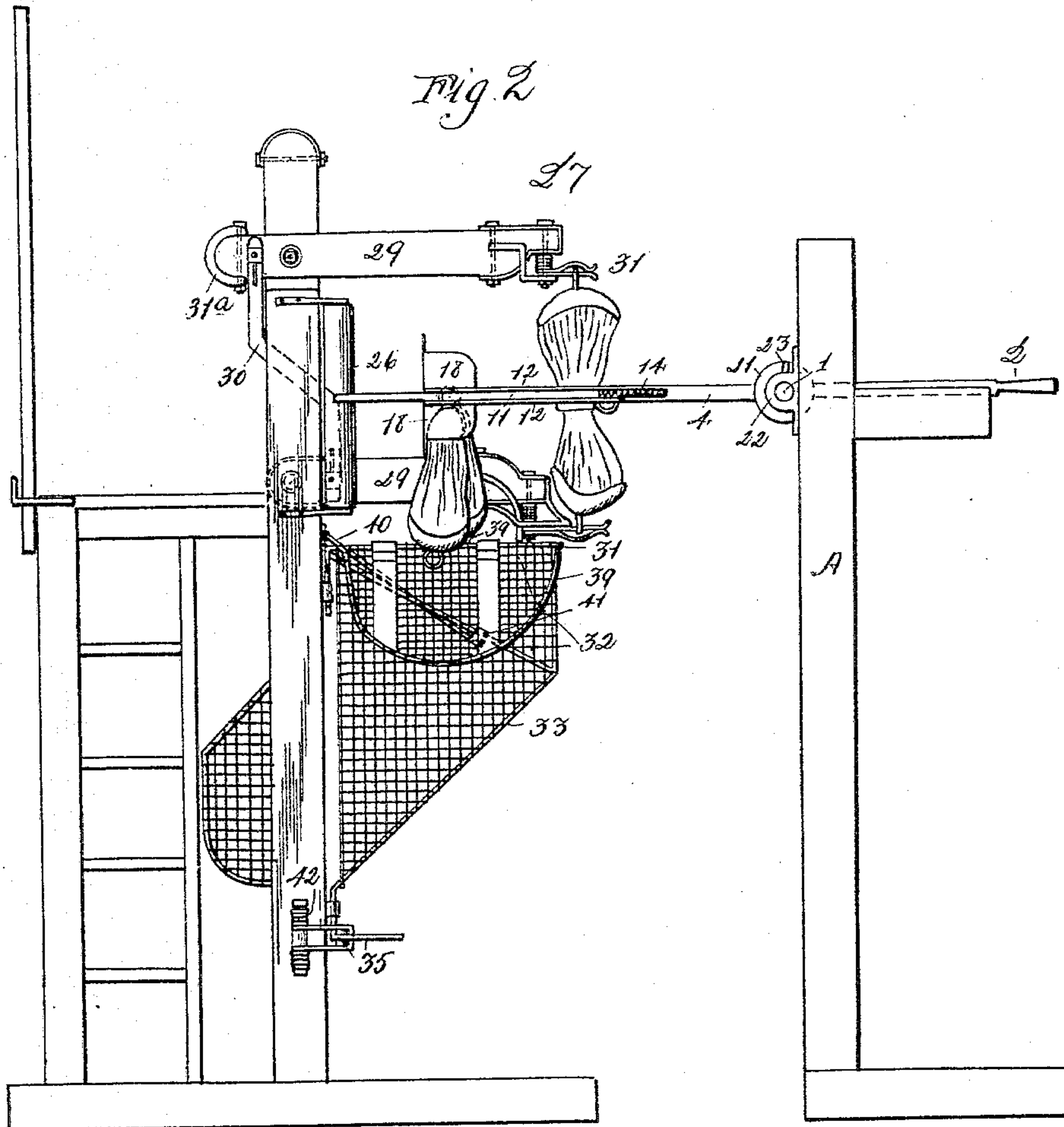
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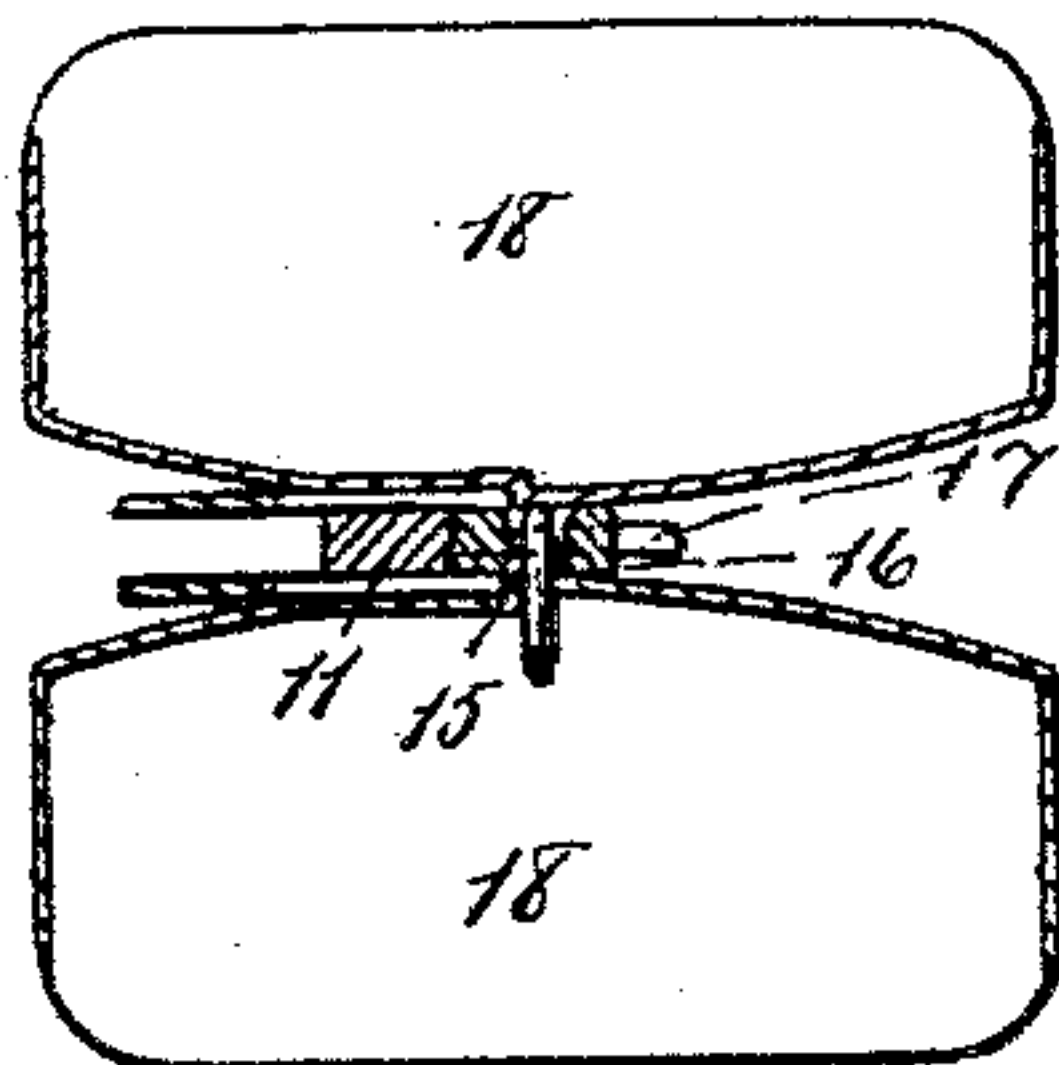
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*Fig. 1*



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# UNITED STATES PATENT OFFICE.

ORVILLE D. ROGERS, OF SHOALS, INDIANA.

## RAILWAY MAIL-DELIVERY DEVICE.

SPECIFICATION forming part of Letters Patent No. 545,248, dated August 27, 1895.

Application filed March 1, 1895. Serial No. 540,212. (No model.)

*To all whom it may concern:*

Be it known that I, ORVILLE D. ROGERS, a citizen of the United States, and a resident of Shoals, in the county of Martin and State of Indiana, have invented certain new and useful Improvements in Railway Mail-Delivery Devices; 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 letters and figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a plan view of the invention as in operation. Fig. 2 is an end elevation of same. Fig. 3 is an enlarged plan of the forward portion of the catching device with top fender-pan removed. Fig. 4 is a section on line *x x*, Fig. 3, with top fender-pan in place. Fig. 5 shows a detail of the invention.

This invention has relation to certain new and useful improvements in apparatus for the delivery of mail bags or pouches from moving trains and for the taking by the train of similar bags or pouches, the object being to provide improved means of this character whereby one or more mail-pouches may be safely delivered from the train while another pouch is taken from a suitable holding-crane.

With this object in view the invention consists in a combined pouch-delivery and pouch-catching device, designed to be carried by the train, and in the combination with such of a holding-crane for the pouches to be caught by the train and with catch-baskets designed to receive the pouches as they are delivered from the train.

Referring to the accompanying drawings, the letter A designates a suitable frame designed to be carried by the mail-car of a train. Journaled in this frame is a transverse rock-bar 1, having attached thereto or secured therein a handle 2, which also screws into a socket 3 of the catching device. Said device consists of a bent rigid frame 4, rigidly connected to the bar 1, and which has an oblique forward and downwardly extended arm 5, which constitutes the pouch-catching arm. Attached to the opposite end of the frame 4 is a clutch-spring 6, which is bent reversely and acutely

upon itself at the point 7, its free arm extending from said bend obliquely downward to a point just over the inner portion of the arm 5. At this point the spring is bent upon itself to form a heel 8, from which its free portion is extended upwardly and laterally to form, with the inner portion of the arm 5, a pocket or throat to receive the pouch, this portion of the spring being provided with spurs 9.

10 is the delivery-stem, to which is hinged or pivoted a trip-arm 11.

12 12 are two parallel curved guides, between which the trip-arm is arranged to slide. 13 is a check-spring carried by said guides, and 14 is a coil-spring, also carried thereby. In the free end of said stem 10 is a ring-slot 15, and a pin-slot 16 at right angles to the ring-slot. On the trip-arm 11 is a pin or stud 17, arranged, when in normal position, to engage said slot 16.

18 18 are two fender-pans which are secured to the free end of the stem 10.

On each end portion of the bar 1 is a rubber sleeve or cylinder 19, which is held between a shoulder 20 on the bar and the bearing-piece 21.

22 22 are the boxes in which bar 1 is journaled. Carried by each journal of said bar is a pin 23, which works in a slot of the boxing and is stopped by a check 24 to limit the movement of said bar to a rotation of ninety degrees.

25 is a removable screw which secures the catcher-frame and delivery-stem to the bar 1, provision being made, as indicated, for placing said frame and stem in either right or left handed relation.

The center rings of the pouch or pouches to be delivered are placed in the ring-slot 15, and the trip-arm 11 dropped into place, its stud or pin 17 passing through the ring or rings and into the slot 16. The fender-pans 18 18 form guards to prevent the pouch from swinging. When a delivery and catch is to be made, the lever 2 is thrown back through an angle of ninety degrees, raising the catcher and delivery stem into horizontal position, as seen in Figs. 1 and 2.

At the point where the pouch or pouches are to be delivered, and a little in advance of the mail-crane, is a trip-actuating device 26. When the arm 11 comes in contact with this



device, it is thrown back between the fender-pans into the guides 12 12, under the check-spring 13, and against the coil-spring 14, which causes said arm to rebound, and it is caught and held by a shoulder 13<sup>a</sup> of said check-spring until it is subsequently released by hand. As the arm is thrown back in this manner, the pin or stud 17 is withdrawn from the pouch-rings and the pouch or pouches drop into the basket provided therefor. The arm 5 now strikes the pouch to be caught, and which is held in a crane 27, and draws said pouch in under the heel 8 of the clutch-spring 6 and into the throat or pocket of the catcher.

The crane 27 comprises a post to which are pivoted the two arms 28 29, connected by a link 30, and having each at its outer end a hook 31 for the end rings of the pouches. The upper arm 28 has a counterbalancing-weight 31<sup>a</sup>. Upon each side of the crane is a net-basket 32, the frame of which consists of two bent end rods 33, connected by a longitudinal rod 34. Said end rods have each a crank 35, which is loosely journaled, one at 36 on the crane-post and the other at 37 on a post 38 to one side of the crane-post.

39 39 are bars which constitute the upper end portions of the frame and which are also provided with cranks journaled loosely on said posts. It will be seen that an endwise movement of the rod 34 toward the center or crane post will swing the rods 33 and 39 outward to open the basket away from the posts, while a reverse movement 34 will close the basket up against the posts. To hold the baskets open an arm 40 is hinged to the front face of the crane-post, said arm having at its free end a T-head 41, with which, when said arm is extended and the baskets are open, arms 33<sup>a</sup> of the basket-frames are engaged. When the pouch is taken from the crane, the falling lower crane-arm 29 strikes this arm 40 and knocks it down, freeing the baskets, which are then closed by the action of springs 42.

43 43 are the back guards for the baskets, and 44 44 are pockets at the rear into which the pouches are delivered by the closing of the baskets.

The trip-actuating devices 26 preferably consist each of a vertical roller, preferably of rubber or some other material which will yield somewhat under concussion.

Inasmuch as the crane and catch basket devices form the subject of a separate application, filed March 1, 1895, Serial No. 540,213, in which they are fully described and claimed, I have not deemed it necessary herein to enter fully into the details of construction thereof, but have only described said devices in so far as is necessary to an understanding of the operation thereof.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein described railway mail delivery and catching device, comprising a suit-

able frame, a transverse rock bar journaled therein, an operating handle attached thereto, a rigid catcher frame secured to said bar, and having an oblique projecting catcher arm, a clutch spring attached to the catcher frame and forming with said frame and arm a throat or pocket for the pouch, a delivery stem, independent of the said catcher arm means for attaching the pouches thereto, and a trip device for releasing said pouches, substantially as specified.

2. In a railway mail catching and delivering device, the rock-bar 1, its operating handle, means for limiting the rotation of said bar, the catcher frame rigidly secured thereto, the clutch spring secured to said catcher frame, the extended catcher arm, said arm frame and spring forming a throat or pocket adapted to hold the bag when caught the delivery stem, independent of the said catcher arm the trip arm pivoted to said stem and arranged to hold the pouches thereon, and means for releasing said arm, substantially as specified.

3. In a railway mail catching and delivering device, the rock-bar 1, its handle 2, the rigid catcher frame 4, having the arm extension and the clutch spring 6, having the reverse bend 7, the heel at 8 adjacent to said arm, and the free portion forming with said arm a throat or pocket for a mail pouch, said free portion having spurs substantially as specified.

4. In a railway mail catching and delivering device, the combination with the rock-bar 1, and the catching devices of the delivery stem 10 having the pin and ring slots therein, the trip arm 11 pivoted to said stem and having a stud or pin adapted to engage the pin slot of said stem, the guides 12 for said arm, the check-spring 13 carried by said guides, and having a catch shoulder for said trip arm, the coil spring 14 also carried by said guides, and the fender pans attached to said stem, substantially as specified.

5. The combination with the train device arranged to deliver one or more pouches and at the same time to catch a pouch from a holding crane, said device having a projecting catch arm, and a trip arm controlling the release of the pouches to be delivered, of a crane having the pivotal pouch-holding arms, folding catch baskets adjacent to the crane, a device attached to the crane post for holding said baskets open, said device being operated to release the baskets by the falling of the lower crane arm, pockets in connection with the catch baskets for receiving the pouches as the baskets close, and a device adjacent to said baskets for actuating said trip arm, substantially as specified.

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

ORVILLE D. ROGERS.

Witnesses:

CHARLES T. BROWN,  
WILLARD S. GAREY.