C. H. ANTHONY.

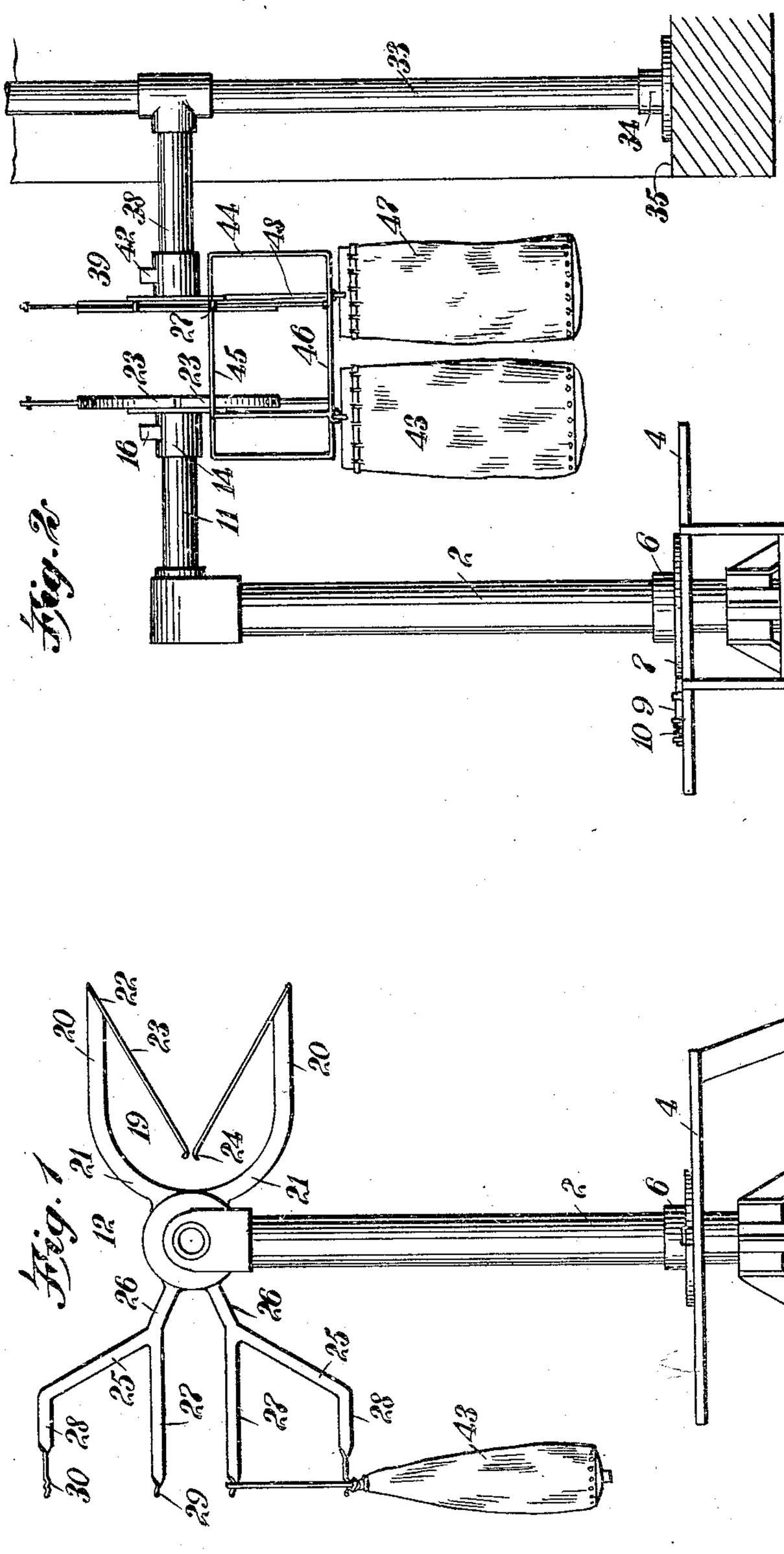
MAIL BAG CATCHER AND DELIVERER.

APPLICATION FILED AUG. 24, 1909.

952,861.

Patented Mar. 22, 1910.

2 SHEETS—SHEET 1.



WITNESSES

H. D. Sweet

F. W. Anderson

INVENTOR

Charles H. Anthony

BY Munn & Co

ATTORNEYS

ANDREW B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

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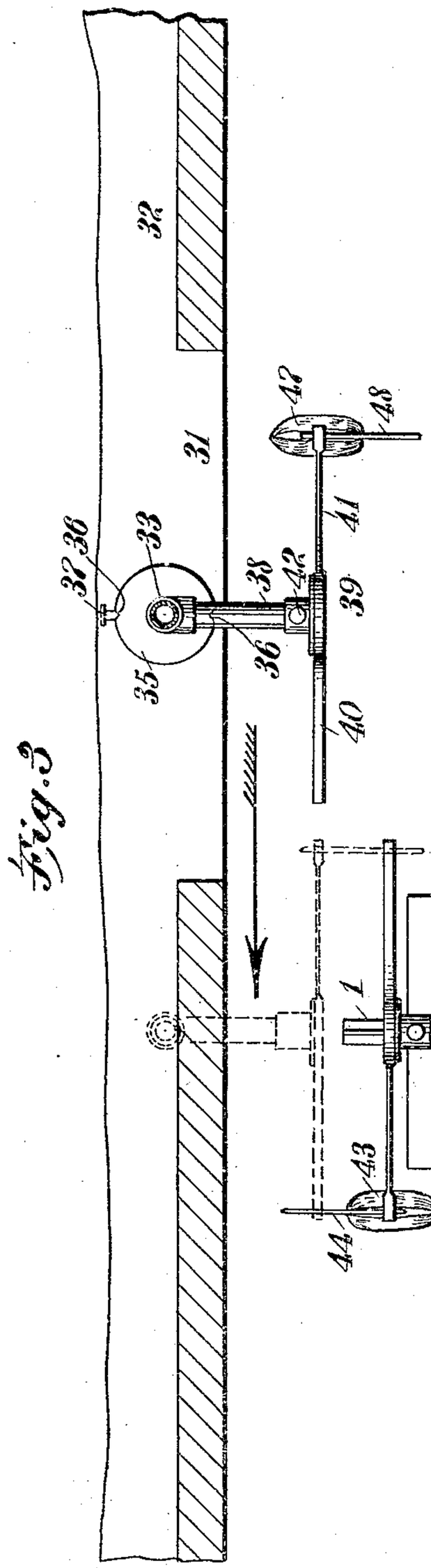

Fig. 3.

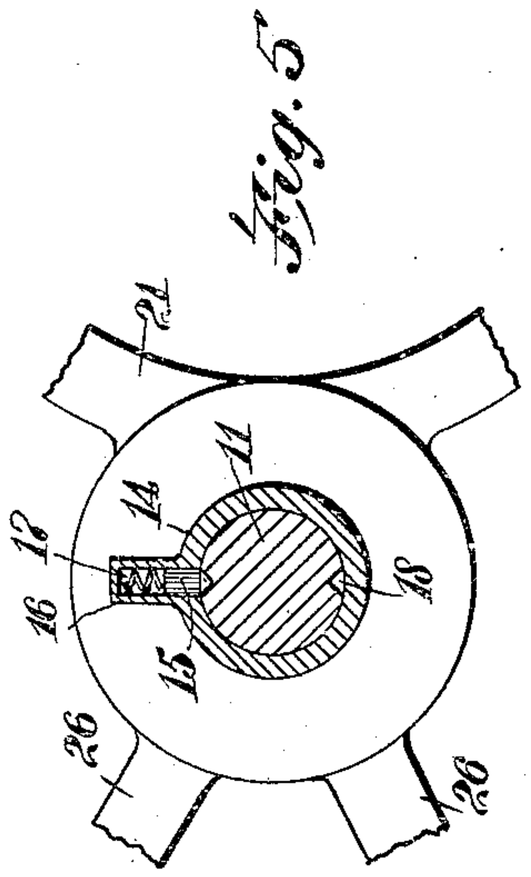

Fig. 5.

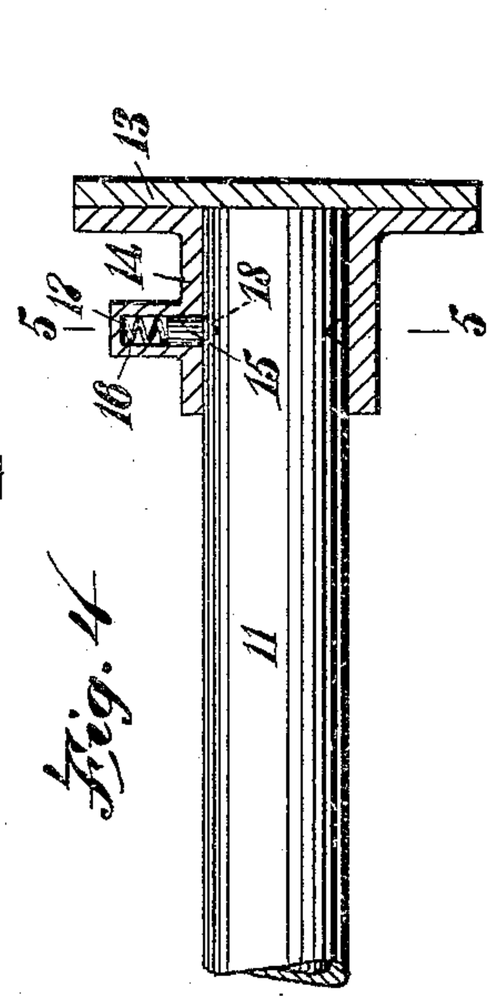

Fig. 4.

WITNESSES

F. D. Smith

F. H. Stevens

INVENTOR

Charles H. Anthony

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES H. ANTHONY, OF ST. JAMES, MISSOURI.

MAIL-BAG CATCHER AND DELIVERER.

952,861. Specification of Letters Patent. Patented Mar. 22, 1910.

Application filed August 24, 1909. Serial No. 514,365.

To all whom it may concern:

Be it known that I, CHARLES H. ANTHONY, a citizen of the United States, and a resident of St. James, in the county of Phelps and State of Missouri, have invented a new and Improved Mail-Bag Catcher and Deliverer, of which the following is a full, clear, and exact description.

This invention relates to mail bag catching and delivering devices, and the object of the invention is to produce a device of this class which is simple of construction and which will be reliable in operation, and which will operate so as to take mail from a passing train, and deliver a bag of mail to the train simultaneously. The construction is such as to facilitate the delivering or catching of more than one bag of mail if desired.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the device and showing the same holding a mail bag about to be delivered to a passing train, this view being taken in a plane parallel with the track; Fig. 2 is an elevation taken in a plane at right angles to the track and showing a portion of a coach of the passing train so as to indicate the manner in which the mail bags are caught and delivered; Fig. 3 is a plan and partial section through a coach supposed to be passing the device and further illustrating the mode of operation of the parts; Fig. 4 is a section taken through the arbor which supports the bag; and Fig. 5 is a vertical section through the arbor taken on the line 5—5 of Fig. 4 and illustrating the means for moving the arms of the device in different positions.

Referring more particularly to the parts, and especially to Figs. 1 and 2, 1 represents a stand formed of inclined braces, which supports a vertical post 2, the lower end of said post being rotatably stepped in a bearing 3 on or about the ground line. Above the stand 1, a platform 4 is placed, upon which the attendant stands in arranging the mail bag, or in taking the mail bag from the catcher. This platform 4 may be reached from the ground by a short ladder 5 arranged as indicated. At the point where the post 2 passes through the platform 4, a collar 6 is received on the post which forms a bearing for the post, in which it may rotate. This collar 6 has a horizontal flange 7, and this flange has notches 8 at diametrically opposite points in the edge thereof, as indicated in Fig. 3. At a suitable point on the upper side of the platform, a locking bolt 9 is mounted to slide, and the nose of this bolt is normally held in either of the notches 8 by means of a coil spring 10 arranged behind the bolt, as shown.

The upper end of the post 2 is provided with a rigid horizontal arbor 11 which projects toward the track when the device is in use. On the end of this arbor a bag frame 12 is mounted rotatably. The middle portion of this bag frame is formed into a disk 13 which seats against the end of the arbor, as shown in Fig. 4, and rigid with this disk there is provided a sleeve 14 which fits neatly on the end of the arbor, as shown. This sleeve 14 is provided with a pin 15 having a conical point, and this pin slides freely in a radially disposed barrel 16, which is formed on the sleeve 14. Within this barrel, behind the pin, a coil spring 17 is formed which forces the pin toward the arbor, as will be readily understood. At diametrically opposite points on the arbor, notches or recesses 18 are provided which are adapted to receive the point of the pin so as to lock the frame yieldingly in position.

The bag frame 12 includes a catcher 19 which is in the form of a fork, presenting horizontal tines 20 connected integrally by two bows 21, as shown. The ends of these tines 20 present inclined faces 22 to which guard springs 23 are rigidly attached. These guard springs consist of flat resilient bars which project toward each other so that they nearly touch, their adjacent ends being bent so as to form curved lips 24 disposed slightly apart, as shown. The point where these lips 24 nearly meet is on the horizontal axis of the bag frame when in its operative position. Opposite to the catcher 19, the bag frame comprises two pairs of delivering forks 25 which are connected integrally with the disk 13 by arms 26. These arms 26 diverge slightly, as shown, and are disposed symmetrical with respect to the horizontal axis of the bag

frame. Each of the forks 25 presents two tines 27 and 28, the tines 27 being disposed near the axis of the bag frame. The outer extremities of the tines 27 are bent so as to form hooks 29, for a purpose which will appear more fully hereinafter. The ends of the arms 28 are similarly bent so as to present waves or notches 30, as shown.

Referring now particularly to Figs. 2 and 3, in the doorway 31 of the mail coach 32, a rotatable post 33 is mounted, the lower part of said post being stepped rotatably in a collar 34 which seats upon the car floor 35. The flange of this collar which rests upon the floor, is provided at diametrically opposite points with notches 36, and either one of these notches is adapted to be engaged by a locking bolt 37 similar to the locking bolt 9, described above. The upper end of the post 33 is rotatably mounted at the lintel of the doorway in any suitable manner. The post 33 is provided with a horizontal arbor 38, which when the device is in operation projects outwardly through the doorway, as indicated in Fig. 3. On the end of this arbor, a bag frame 39 is rotatably mounted, and this bag frame is similar in construction to the bag frame 12, and similarly attached to the arbor 38. It therefore presents a catching device 40 on its forward side, with respect to the direction of advance of the train which is indicated by the arrow, and it presents a delivering device 41 which projects toward the rear, the delivering device being constructed in all respects like the delivering forks 25.

At the point where the bag frame 39 is attached to the arbor, a spring barrel 42 is provided, having means coöperating with the arbor in a manner similar to that indicated in Fig. 4, for holding the bag frame in a horizontal position and so that the bag frame may be held in a reverse position for an opposite direction of movement of the train.

Referring again to Figs. 2 and 3, 43 represents the mail bag which is to be delivered to the train. This bag is held on the lower fork 25. The bag is attached to the lower corner of a rectangular bail 44, said bail presenting an upper horizontal bar 45 which is engaged by the end of the tine 27, and a lower horizontal bar 46 which is engaged by the spring on the end of the tine 28. In this way the body of the frame is made to project out toward the track. The mail bag 47 which is to be caught from the train, is provided with a similar bail 48 which is secured to the delivering device 41 of the train device, and the bail is arranged so that it projects away from the coach, as indicated in Fig. 3. As the train passes, the bail 48 comes in contact with the catching device 19 and the guide members 23 guide the bail into the back part of the fork so that the upper bar of the bail passes between the lips 24; the bail then hangs on the lower tine of the device until removed by the attendant.

A somewhat similar mode of operation takes place at the forward end of the train device. At the forward part of the device is the catcher 40 which is similarly constructed to the catcher 19, and this catcher takes the bail 44 from the bag frame 12. It will be noted that the bails of the bags are held by the ends of the arms yieldingly and in such a way that the bags may be readily removed by pulling them in a rearward direction or away from the ends of the arms. If the bag frame 12, as shown in Fig. 1, is held in a reverse position it is then adapted to deliver mail and catch mail from a train passing in an opposite direction. In the same manner, the bag frame 39 may be reversed so as to enable the train to deliver and catch mail when passing in the opposite direction. After the train device has been operated, the bolt 37 will be withdrawn and the arm or arbor 38 will then be swung into the doorway so as to enable the bag to be removed, and the post 33 will be locked in its opposite position, that is, with the arbor 38 projecting toward the interior of the coach. When the bag frame 12 is not to be used, it is similarly swung around to an inoperative position with the arbor 11 projecting away from the track, and is locked in this position by means of the bolt 9.

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

1. In a device of the class described, in combination, a post having a substantially horizontal arbor, a bag frame rotatably mounted on said arbor, having a catching device formed on one side thereof adapted to catch a mail bag, and having a delivering device on the opposite side thereof, said delivering device having a pair of forks for supporting the bag disposed symmetrical with respect to the horizontal axis of said bag frame, and means for yieldingly holding said bag frame in two positions, each of said positions being reversed with respect to the other.

2. In a device of the class described, in combination, a rotatable post, an arbor carried thereby, means for holding said post with said arbor projecting toward the track, a bag frame rotatably mounted on said arbor, said bag frame having a catching device consisting of a fork disposed symmetrical with respect to the horizontal axis of said bag frame, said fork being adapted to catch a bag and having means for retaining the bag, said bag frame having a pair of forks disposed in a vertical plane and disposed symmetrical with respect to the horizontal axis of said bag frame, said forks having horizontally extending tines having

means at the ends thereof for retaining the bail of a mail bag, said bag frame having a sleeve disposed about said arbor, a pin carried in said sleeve, and means for resiliently forcing said pin toward said arbor, said arbor having notches therein adapted to cooperate with said pin to hold said bag frame in either of its two horizontal positions.

3. In combination, a rotatable post adapted to stand near the track and having an arbor projecting substantially horizontally therefrom, means for holding said post with said arbor projecting toward the track or away from the track, a bag frame rotatably mounted on said arbor and symmetrical with respect to a longitudinal axis, means for holding said bag frame in either of two positions reversed with respect to each other, one side of said bag frame being formed into a catching device, the other side of said bag frame being formed into a pair of delivering devices disposed symmetrical with respect to said longitudinal axis, a mail bag having a bail in the form of a closed frame adapted to be attached to one of said delivering devices and adapted to project toward the track, and means adapted to be mounted on a coach affording means for delivering a mail bag to said catching device and affording means for taking a mail bag from said delivering device.

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

CHARLES H. ANTHONY.

Witnesses:

R. W. CARPENTER,

R. R. CARPENTER.