L. B. JOHNSTON.

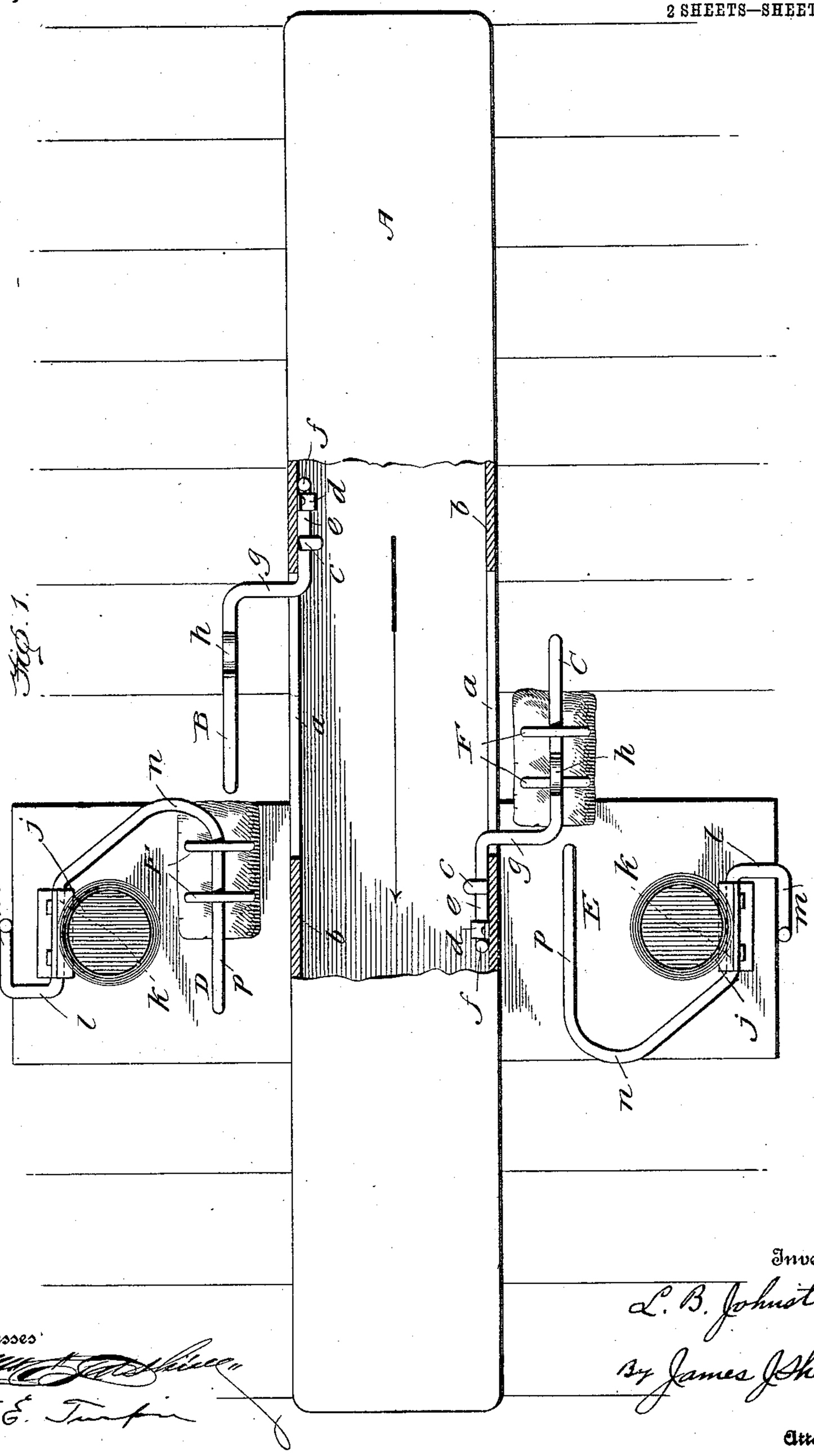
MAIL BAG CATCHER AND DELIVERER.

APPLICATION FILED FEB. 10, 1909.

917,307. Patented Apr. 6, 1909.

2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2.

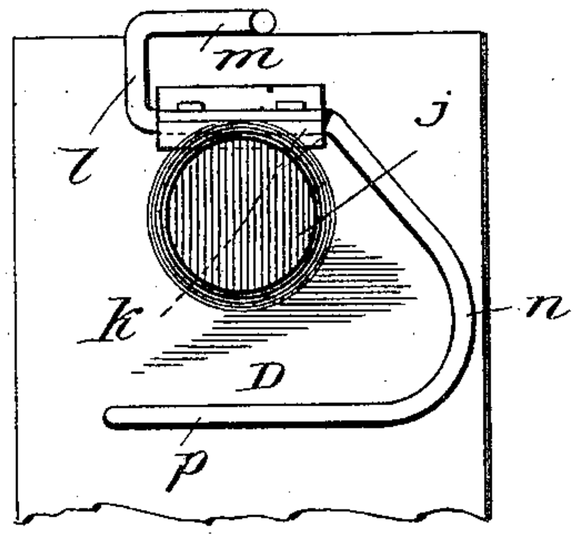


Fig. 3.

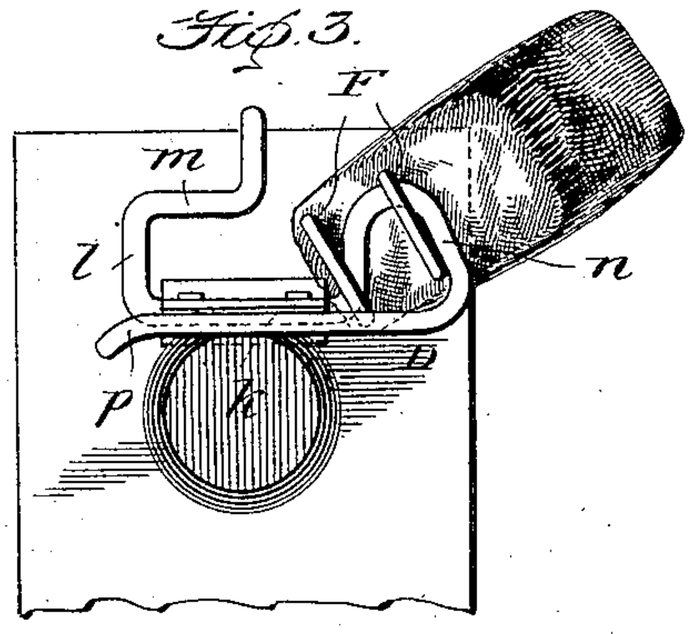


Fig. 4.

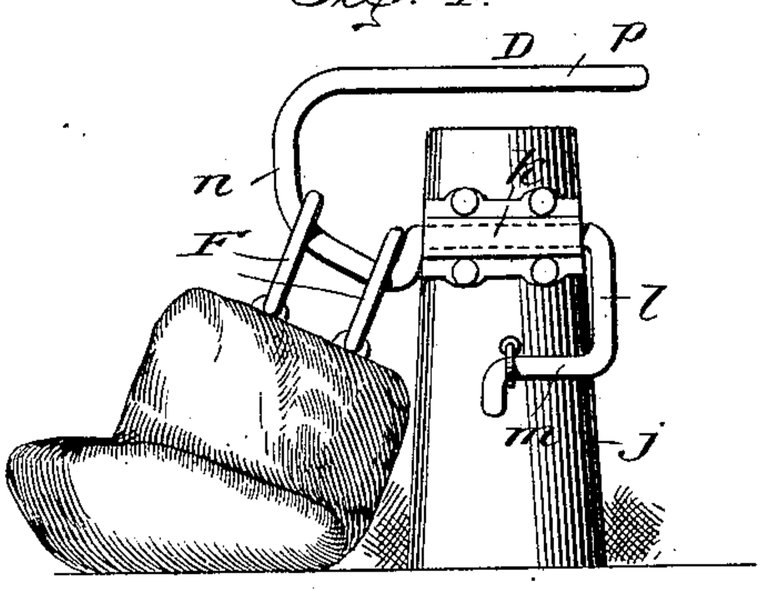
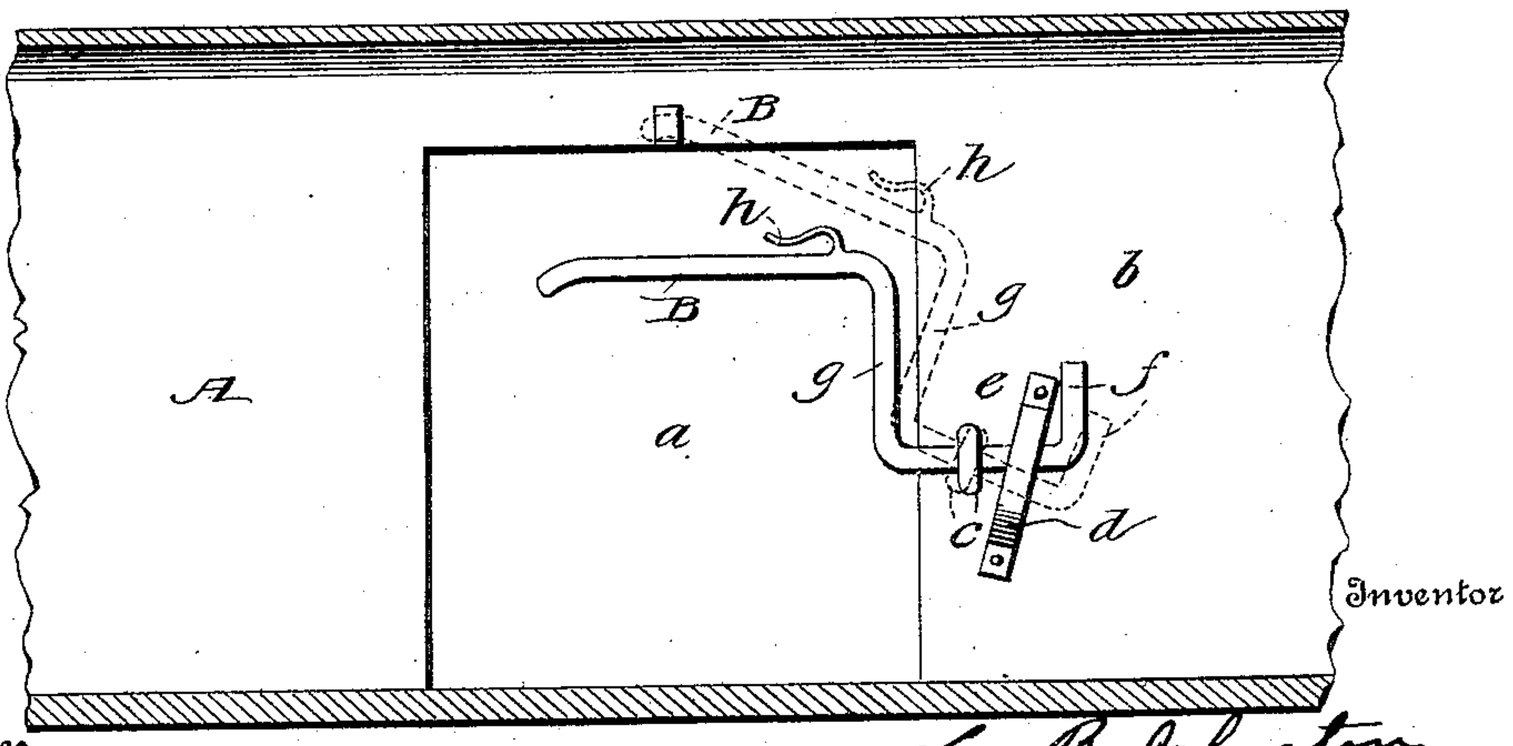


Fig. 5.



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UNITED STATES PATENT OFFICE.

LASURE B. JOHNSTON, OF LORAIN, OHIO.

MAIL-BAG CATCHER AND DELIVERER.

No. 917,307. Specification of Letters Patent. Patented April 6, 1909.

Application filed February 10, 1909. Serial No. 477,152.

To all whom it may concern:

Be it known that I, LASURE B. JOHNSTON, citizen of the United States, residing at Lorain, in the county of Lorain and State of Ohio, have invented new and useful Improvements in Mail-Bag Catchers and Deliverers, of which the following is a specification.

My invention pertains to apparatus for putting mail bags on and taking the same off moving cars; and it consists in the peculiar and advantageous apparatus hereinafter described and particularly pointed out in the claims appended.

In the drawings, accompanying and forming part of this specification: Figure 1 is a plan view illustrating diagrammatically the arrangement of my novel apparatus when a mail bag is to be put on and another mail bag taken from a car that is moving in the direction indicated by the arrow. Fig. 2 is a plan view showing one of the platform devices of my improvements with the swinging element thereof in the position said element occupies when it is to deliver a bag to or take a bag from a moving car. Fig. 3 is a plan view of said device showing the swinging element in the position in which it is placed after a bag is caught or is delivered, and also illustrating a bag connected with said swinging element. Fig. 4 is an elevation showing the outer side of the platform device with the swinging element in the same position as in Fig. 3. Fig. 5 is a detail view taken from a point within the car and illustrating the arrangement of one of the car devices relative to a side wall of the car and the door opening therein, and also illustrating the car device in full lines in the position in which it is placed for operation.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A is a mail car having the usual door openings *a* in its side walls *b*.

B and C are the car devices of my novel apparatus, and D and E are the platform devices; the said devices D and E being located at opposite sides of the car track, as represented in Fig. 1.

The car devices B and C are reversely arranged, Fig. 1, but are otherwise identical in construction, and therefore a detailed description of the device B shown in Fig. 5 will suffice to impart a definite understanding of both devices B and C. The said device B, Fig. 5, is preferably made up of a journal bearing *c*, connected in a swiveled manner to the adjacent car wall, a fixed keeper-loop *d*, arranged back of the bearing *c*, a rock-shaft *e* journaled in the bearing *c* and arranged in the keeper-loop *d* and having an angularly disposed handle *f* at its rear end, and also having a forward portion *g*, of approximate right angle formation, and a spring clip *h* mounted on the outer arm of the said portion *g*. The said spring clip *h* is designed to receive and yieldingly hold one of the bag rings hereinafter described, when a bag is to be delivered from the car to a platform device on the left-hand side of the car, with reference to the direction in which the car is moving, and after the bag ring is placed in engagement with the said clip, the portion *g* of the rock-shaft is swung outwardly through the door opening until the handle of the rock-shaft brings up against the inner side of the car wall so as to limit the outward movement of the portion *g* and assure the same remaining in the said position. I would also have it understood that the portion *g* of the rock-shaft is placed in the position stated, when the device B is to be used to take a bag from the platform device located at the right-hand side of the car with reference to the direction of movement thereof. Subsequent to the delivery of a bag from or the taking of a bag upon the portion *g* of the rock-shaft, an attendant within the car rocks the rock-shaft through the medium of the handle *f* so as to swing the portion *g* inwardly through the door opening *a*, after which the said attendant may swing the rock-shaft as a whole upwardly, this because of the swivel connection between the bearing *c* and the car wall, and place the outer arm of the portion *g* over the bracket *i* located above the opening *a*, after the manner illustrated by dotted lines in Fig. 5. In this latter position it will be manifest that the car device leaves the door opening *a* practically unobstructed, and yet when it is desired to use the said car device, the outer arm of the portion *g* may be quickly and easily displaced from the bracket *i*, and then the car device may be manipulated in the manner and for either of the purposes before described.

The platform devices D are similar in construction, except that they are reversely arranged for use at opposite sides of the car track, and therefore a detailed descrip-

tion of the platform device D shown in Figs. 2, 3 and 4, will suffice to impart a definite understanding of both devices D and E. The device D, Figs. 2, 3 and 4, comprises a fixed post or upright *j* and a swinging element; the said fixed post or upright being preferably of wood, and the swinging element being preferably of metal. As clearly shown in the figures mentioned, the said swinging element comprises a rock-shaft *k*, journaled in the post *j*, as shown by dotted lines, a handle portion *l* which extends at a right angle from one end of the rock-shaft and is provided at an intermediate point of its length with an angularly disposed shoulder *m* located opposite the outer side of the post *j*, and a bag deliverer and receiver extending from the opposite end of the rock-shaft *k*, with reference to the handle portion *l*. The said bag deliverer and receiver comprises a loop *n* extending in the same general direction as the handle portion *l*, and an arm *p* which reaches in a curved manner from the outer end of the loop *n* and then extends in a direction substantially parallel to the car track. By virtue of the said construction of the swinging element of the platform device, it will be manifest that when said swinging element is placed in the position shown in Fig. 2, its shoulder *m* will bring up against the outer side of the post *j* and retain it in said position. Then when the rings of a bag are received on the arm *p*, and the swinging element is moved from the position shown in Fig. 2 to that shown in Fig. 3, until the shoulder *m* again brings up against the outer side of the post *j* to limit the swinging movement of the element, it will be manifest that the rings on the bag will gravitate to the bight of the loop *n*, and consequently both the swinging element and the bag will be out of the way of passing cars, and the bag will be held by the swinging element in such manner that there is no liability of the bag being casually released and permitted to fall. Notwithstanding this, however, it will be noted that the bag received on the swinging element may be readily removed from said element by running the rings on the bag up the loop *n* and off the arm *p*.

My invention contemplates providing the bags to be handled with rings such as indicated by F, and when a bag so equipped is placed on the outer arm of the portion *g* of the car device C, and a similar bag is placed on the arm *p* of the platform device D, and the portion *g* of the rock-shaft comprised in the car device B is set as shown in Fig. 1, and the portion *g* of the rock-shaft comprised in the car device C is similarly set, it will be manifest that incidental to the passage of the car between the platform devices D and E, a bag will be taken from the arm *p* of platform device D to the outer arm of the rock-shaft comprised in the car device B, and at the same time the bag on the outer arm of the rock-shaft of the car device C will be delivered to the arm *p* of the swinging element comprised in the platform device E.

I would have it understood at this point that while I have elected, for the sake of convenience, to show the platform devices D and E at opposite sides of a single track, the said devices may obviously be used to advantage at opposite sides of a double track.

It will be readily understood from the foregoing that the car devices as well as the platform devices of my improvements are simple and compact in construction, and at the same time are well adapted to withstand exposure to weather and the rough usage to which mail bag catchers and deliverers are ordinarily subjected.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:

1. In a device for delivering mail bags from and taking mail bags upon a moving car, the combination of a car wall having a door opening and a bracket located above the said door opening, a bearing connected in a swiveled manner with the car wall at one side of the door opening, a keeper-loop connected to the car wall and arranged at the opposite side of the swiveled bearing, with reference to the door opening, and a rock-shaft extending through the swiveled bearing and the keeper-loop and having an angularly disposed handle portion at its rear end and a portion, of approximate right-angle formation, at its forward end, substantially as and for the purpose described.

2. A device adapted for location at the side of a railway track to deliver mail bags to and take mail bags from a moving car, comprising a fixed upright or post, and a swinging element supported by the upright or post and made up of a rock-shaft journaled in the upright and extending parallel to the track, a handle portion extending from one end of the rock-shaft and having a shoulder at an intermediate point of its length adapted in two positions of the swinging element to bring up against the outer side of the upright, and a loop extending from the opposite end of the rock-shaft, with reference to the handle portion, and terminating at its outer end in an arm disposed approximately parallel to the track.

3. In an apparatus for the purpose described, devices located at opposite sides of a railway track and comprising fixed uprights and reversely arranged swinging elements supported by the uprights and each made up of a rock-shaft journaled in its upright and extending parallel to the track, a handle portion extending from one portion

of the rock-shaft and having a shoulder at an intermediate point of its length adapted in two positions of the swinging element to bring up against the outer side of the upright, and a loop extending from the opposite end of the rock-shaft, with reference to the handle portion, and terminating at its outer end in an arm disposed approximately parallel to the track, in combination with a car having door openings and brackets located above said door openings, bearings connected in a swiveled manner with the car walls and arranged one in front and the other in rear of the adjacent door opening, keeper-loops connected to the car walls, and rock-shafts extending through the swiveled bearings and the keeper-loops and having angularly disposed handle portions at their rear ends and portions, of approximate right angle formation, at their forward ends.

4. In a device for delivering mail bags from and taking mail bags upon a moving car, the combination of a car wall having a door opening and also having a suitable support located above said door opening, a bearing connected with the car wall, at one side of the door opening, and adapted to swing toward and from said door opening, and a device journaled in and adapted to rock independent of the bearing and to swing with said bearing and also adapted in one position to be projected through the door opening and in another position to be placed on the support located above said door opening.

5. A device adapted for location at the side of a railway track to deliver mail bags to and take mail bags from a moving car, comprising a fixed upright, and a swinging element supported by the upright and mounted to swing toward and from the railway track and having a loop which terminates in an arm arranged approximately parallel to the track, and also having a handle portion equipped with an abutment adapted in two positions of the swinging element to bring up against the side of the element remote from the track.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LASURE B. JOHNSTON.

Witnesses:

G. A. FRIDAY,

RALPH JOHNSTON.