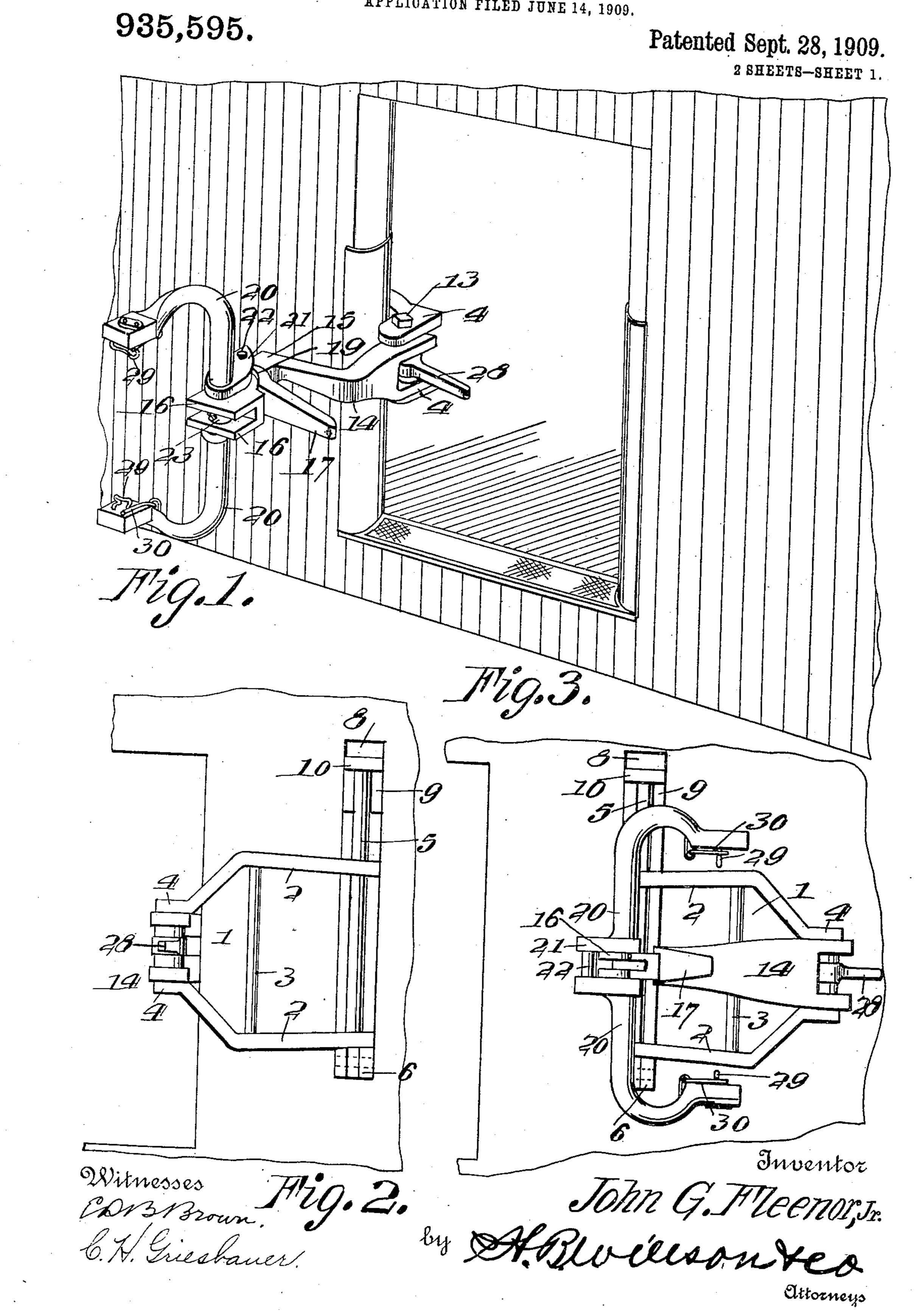
J. G. FLEENOR, JR.

MAIL BAG DELIVERY APPARATUS.

APPLICATION FILED JUNE 14, 1909.

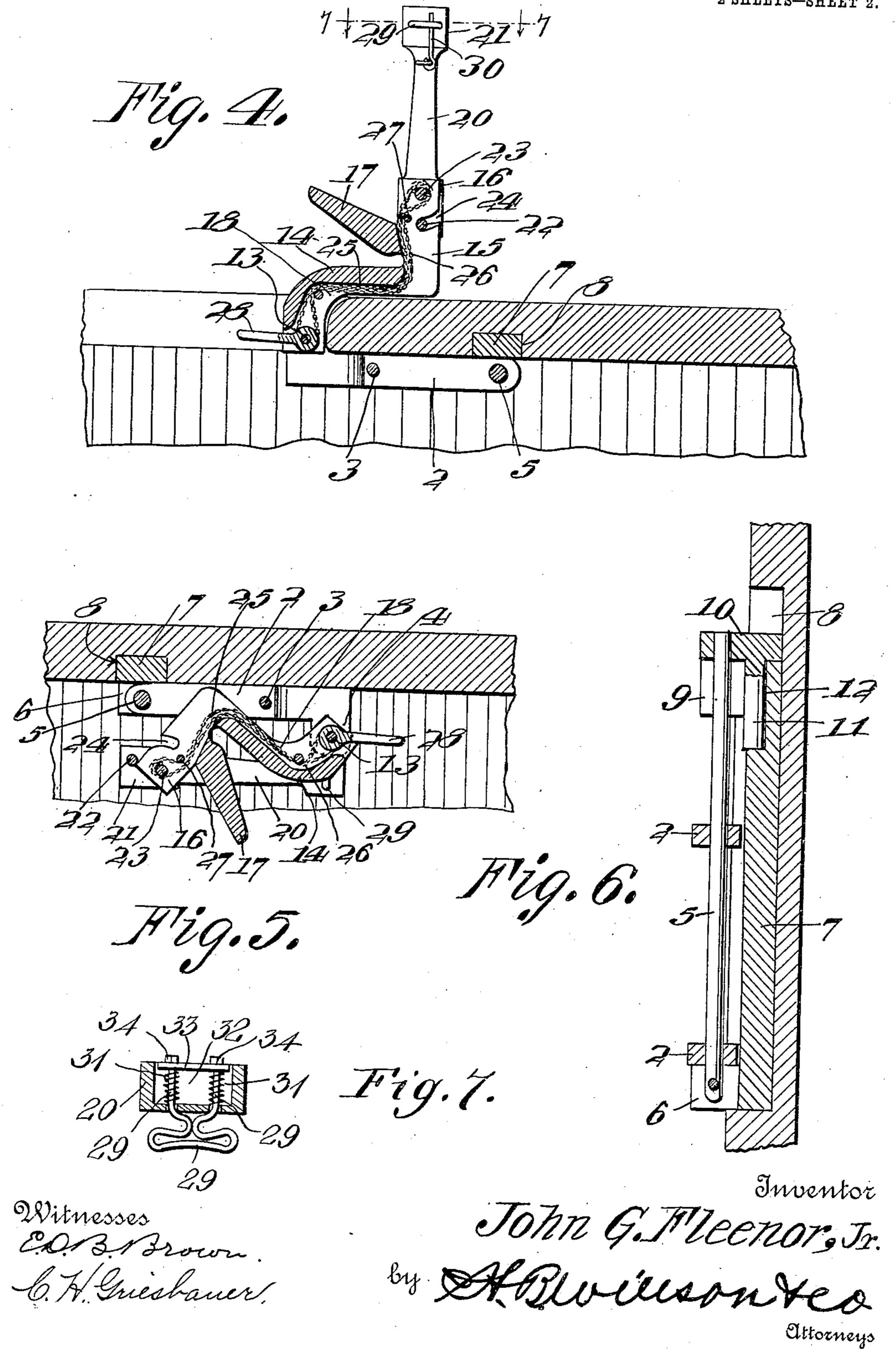


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935,595.

Patented Sept. 28, 1909.

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UNITED STATES PATENT OFFICE.

JOHN G. FLEENOR, JR., OF BENHAMS, VIRGINIA.

MAIL-BAG-DELIVERY APPARATUS.

935,595.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed June 14, 1909. Serial No. 502,081.

To all whom it may concern:

Be it known that I, John G. Fleenor, Jr., a citizen of the United States, residing at Benhams, in the county of Washington and 5 State of Virginia, have invented certain new and useful Improvements in Mail-Bag-Delivery Apparatus; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable 10 others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in

mail bag delivery apparatus.

The object of the invention is to provide 15 an improved construction of mail bag delivery and catching apparatus for railway cars having means whereby the parts may be readily folded and unfolded and swung into and out of operative position.

A further object is to provide an improved means for detachably pivoting the appara-

tus to the inner side of the car.

With the foregoing and other objects in view, the invention consists of certain novel 25 features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in

the appended claims.

In the accompanying drawings, Figure 1 30 is a perspective view of a portion of the outside of a car, showing my improved mail bag delivery apparatus and catcher arranged thereon in operative position; Fig. 2 is an inner side view of a portion of a car with 35 the apparatus in operative position, as shown in Fig. 1; Fig. 3 is a similar view, showing the apparatus when brought into the car and folded to an inoperative and out of the way position; Fig. 4 is a horizontal 40 sectional view of one side of the car taken through the center of the apparatus with the latter in the position shown in Fig. 1; Fig. 5 is a similar view showing the bag holding arms turned inwardly to permit the appa-⁴⁵ ratus to be swung back through the car door and into the car; Fig. 6 is a vertical sectional view through the side of a car showing the manner in which the apparatus is detachably and hingedly connected to the car. Fig. ⁵⁰ 7 is a cross sectional view through the outer end of one of the bag holding arms taken on the line 7-7 of Fig. 4, showing the manner in which the keeper members of the bag holding devices are yieldingly secured to the arms.

In the embodiment of the invention, I pro-

vide a supporting bracket 1 comprising upper and lower arms or bars 2 which are connected together by a cross bar 3 and which preferably converge inwardly toward their 60 outer ends and have formed on said ends apertured bearing ears 4. The inner ends of the arms 2 are pivotally engaged with a pintle or pivot rod 5, the lower end of which is pivotally mounted between a pair of aper- 65 tured ears 6 formed on an attaching bar 7 which is preferably set into a recess 8 in the inner side of the car and is secured therein in any suitable manner. The upper end of the pintle 5 is engaged with a pair of out- 70 wardly projecting lugs 9 on the upper end of the bar 7 and the upper end of the pintle above the lugs 9 is engaged by an apertured retaining block 10 having a stem or shank 11 which is engaged with the socket 12 formed 75 in the upper end of the attaching bar 7 thus securely holding the upper end of the pintle in position to hingedly support the bracket 1. In the ears 4 of the bracket is arranged a pivot bolt 13, on which, between the ears 4, 80 is pivotally mounted the bifurcated inner end of a curved supporting arm 14, on the outer end of which is formed a right angularly projecting extension 15 having on its outer end upper and lower apertured bear- 85 ing plates 16 and having on one side a diagonally arranged bag catching hook 17 which is adapted to engage and catch a mail bag from a train alongside the track while the car is in motion. The arm 14 and the ex- 90 tension 15 are provided on their inner sides with a continuous groove or channel 18 and on the upper and lower sides of the extension 15 are formed stop shoulders 19.

Pivotally mounted on the extension are 95 upper and lower bag holding arms 20, said arms being preferably curved outwardly and have on their inner ends substantially right angular inwardly projecting lugs 21, between and secured in which is a trans- 100 versely disposed stop pin 22 which is spaced a suitable distance from the pivot pin 23 which is arranged between the lugs 21, opposite the inner ends of the arms 20. The pivot pin 23 is pivotally engaged with the ¹⁰⁵ apertures in the lugs 21, thereby hingedly or pivotally supporting the bag holding arms. The stop pin 22 is adapted to be engaged with a notch 24 formed in the inner edge of the extension 15 whereby the arms 20 are 110 held in an operative position to support the mail bag whereby the same may be taken by

a train or catching apparatus arranged along the car track. When the arms 20 are in an operative position, the inner ends of the lugs 21 also engage the stop shoulders 19 formed on the upper and lower sides of the extension, thus more firmly holding the

arms in position.

In order that the bag holding arms 20 may be folded inwardly in position to permit 10 the apparatus to be swung through the car door and into the car, I provide a suitable arm operating mechanism comprising two chains or cables 25 and 26, the outer end of one of which is passed half way around the 15 pivot pin 23 of the bag supporting arms and is connected to a fastening stud arranged on one side of the pivot pin, while the other chain 26 passes half way around the pivot pin 23 in the opposite direction and is se-20 cured to a stud projecting from the opposite side of the pivot pin. The chains 25 and 26 are arranged in the groove or channel 18 in the inner side of the arm 14 and extension 15 and pass around the guide pins 27 25 arranged in said arm and extension across the groove therein. The inner ends of the chains or cables are connected to a hand lever 28 which is pivotally mounted on the pivot pin or bolt 13 between the bifurcated inner 30 end of the arm 14, whereby when the lever is swung in one direction or the other, the pivot pin 23 of the bag holding arms will be turned in the bearing aperture of the plates 16 and will thus swing the arms to opera-35 tive and inoperative or folded positions on the outer end of the extension 15. By thus arranging the lever 28, the arms may be operated from within the car, while the apparatus is in an operative position on the 40 outer side of the car.

Any suitable means may be provided on the outer ends of the arms 20 to secure the mail bag in position, said means being here shown and preferably comprises a keeper 45 member 29 having a T-shaped head, the projecting ends of which are adapted to be engaged by the outer end of a latch bar 30, which is loosely connected in any suitable manner to the adjacent portions of the ends 50 of the arms. When the mail bag is arranged between the outer ends of the arms 20, the strap loops on the opposite ends of the bag are engaged by the latch bars 30 after which they are engaged with one end or the other of the T-headed keeper, so that when the bag is engaged by the catching apparatus on the train alongside of the track, the catches will be readily jerked from their engagement with the ends of the keeper and 60 will thus readily permit the strap loops of the bag being disengaged from the latch bars and the bag thus released.

The keeper members 29 are preferably yieldingly secured in the outer ends of the bag holding arms 20 by means of coiled

springs 31 which are arranged on the ends of the members 29 and have their inner ends engaged with the inner wall of a recess 32 formed in the end of the arms, 20. The outer ends of the springs 31 are engaged 70 with a retaining plate 33 which is arranged on the ends of the keeper members 29 and said plate is held by means of nuts 34 which are screwed onto the threaded outer portion of said ends. By thus securing the members 75 29, they will be held in a retracted position and will provide a yielding keeper for the latch bars 30 when engaged therewith, thus permitting the latch bars to be readily disengaged from the keeper to release the mail 80 bag without danger of injuring the latter.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood with- 85 out requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advan- 90 tages of the invention, as defined in the appended claims.

Having thus described my invention, what

I claim is:

1. In a mail bag delivery and catching 95 apparatus of the character described, a supporting bracket, means to hingedly and detachably secure the bracket to the inner side of a car, a supporting arm pivotally mounted between the outer ends of said bracket, upper 100 and lower bag holding arms pivotally mounted in the outer end of said supporting arm, a stop pin on the inner end of said arm to hold the latter in operative position, flexible operating elements connected at their outer 105 ends to said arms, and extending inwardly to said bracket, and an operating lever connected to the inner ends of said operating elements whereby the latter are actuated to swing the bag holding arms to operative and 110 inoperative positions.

2. In a mail bag delivery and catching apparatus, a supporting bracket, means to pivotally and detachably secure said bracket to the inner side of a car, a supporting arm 115 pivotally mounted in the outer end of said bracket, a bag catching hook formed on the end of said arm, bag holding arms pivotally mounted on the outer end of said supporting arm, means to swing said bag holding arms 120 to operative and inoperative positions, and means on the outer ends of said arms to detachably hold a mail bag between the same.

3. In a mail bag delivery and catching apparatus of the character described, an at- 125 taching bar adapted to be secured to the inner side of a car, a pintle or pivot rod pivotally connected at its lower end to said attaching bar, means to detachably secure the upper end of the pintle or pivot rod to the 130

upper end of said attaching bar, a supporting bracket pivotally mounted on said pintle, a supporting arm pivotally mounted on said bracket, bag holding arms pivotally mounted on the outer end of said supporting arm, and means to operate said bag holding arms from the inside of the car.

4. In a mail bag delivery and catching apparatus, a supporting bracket, means to pivotally connect said bracket to the inner side of a car, a bag holding arm having formed on its inner side a longitudinal groove, a right angularly notched extension on the outer end of said supporting arm, apertured bearing plates on the outer end of said extension, upper and lower bag holding arms, a pivot pin to pivotally mount said arms in the apertured plates on said extension, a stop pin carried by said arms and

adapted to engage with the notch in said 20 extension to hold said arms in operative position, an operating lever pivotally mounted in the outer end of said bracket, flexible arm operating elements connected at their outer ends to opposite sides of the pivot pin of 25 said arms and at their inner ends to said operating lever, whereby the arms may be swung to an operative position when the apparatus is on the outer side of the car and to an inoperative or folded position to permit 30 the apparatus to be swung back into the car.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses.

JOHN G. FLEENOR, JR.

Witnesses:

W. A. TINSCANNON, W. H. FLEENOR.