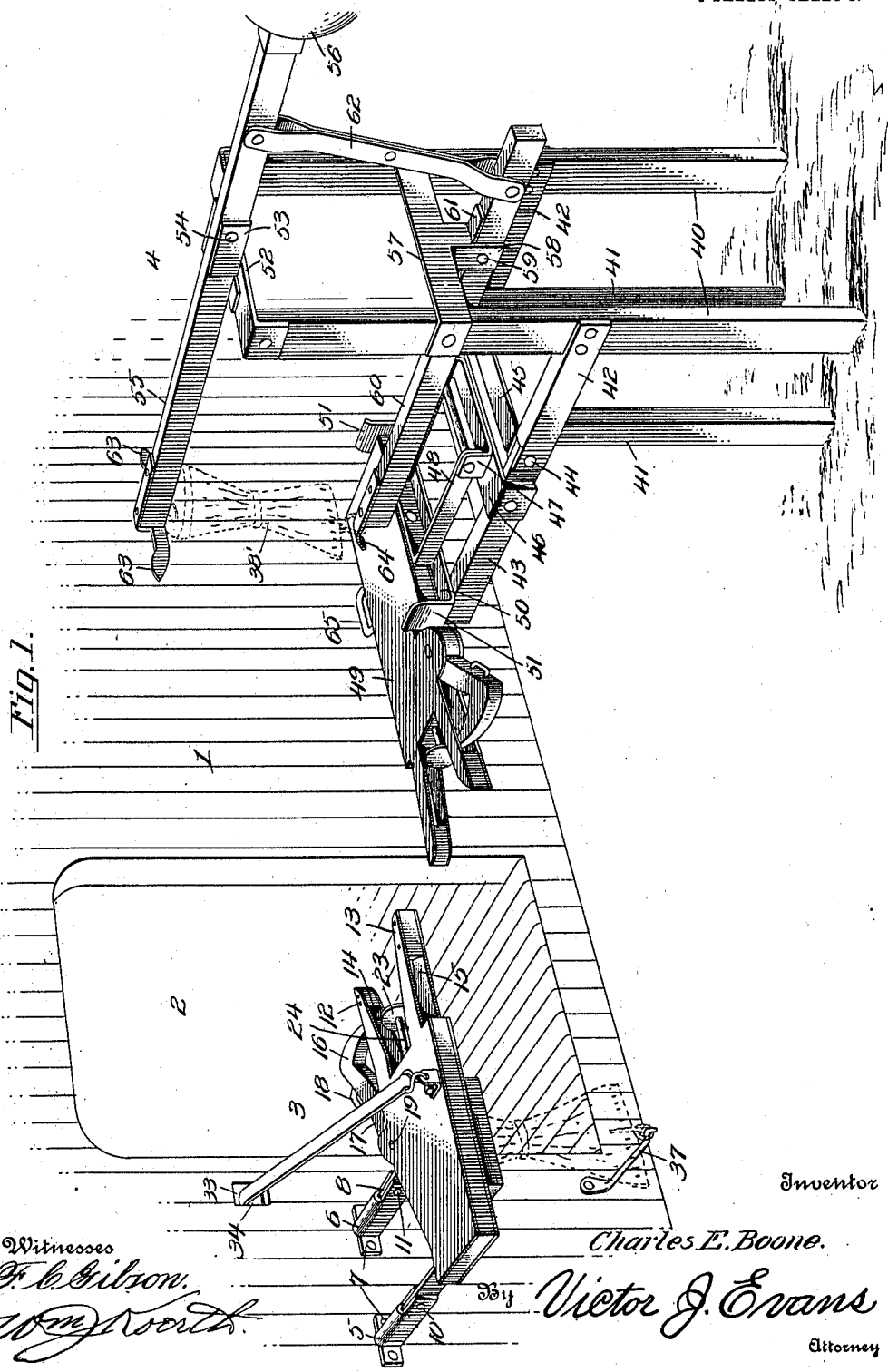


982,568.

C. E. BOONE.
MAIL BAG CATCHER.
APPLICATION FILED AUG. 9, 1910.

Patented Jan. 24, 1911.

4 SHEETS—SHEET 1.

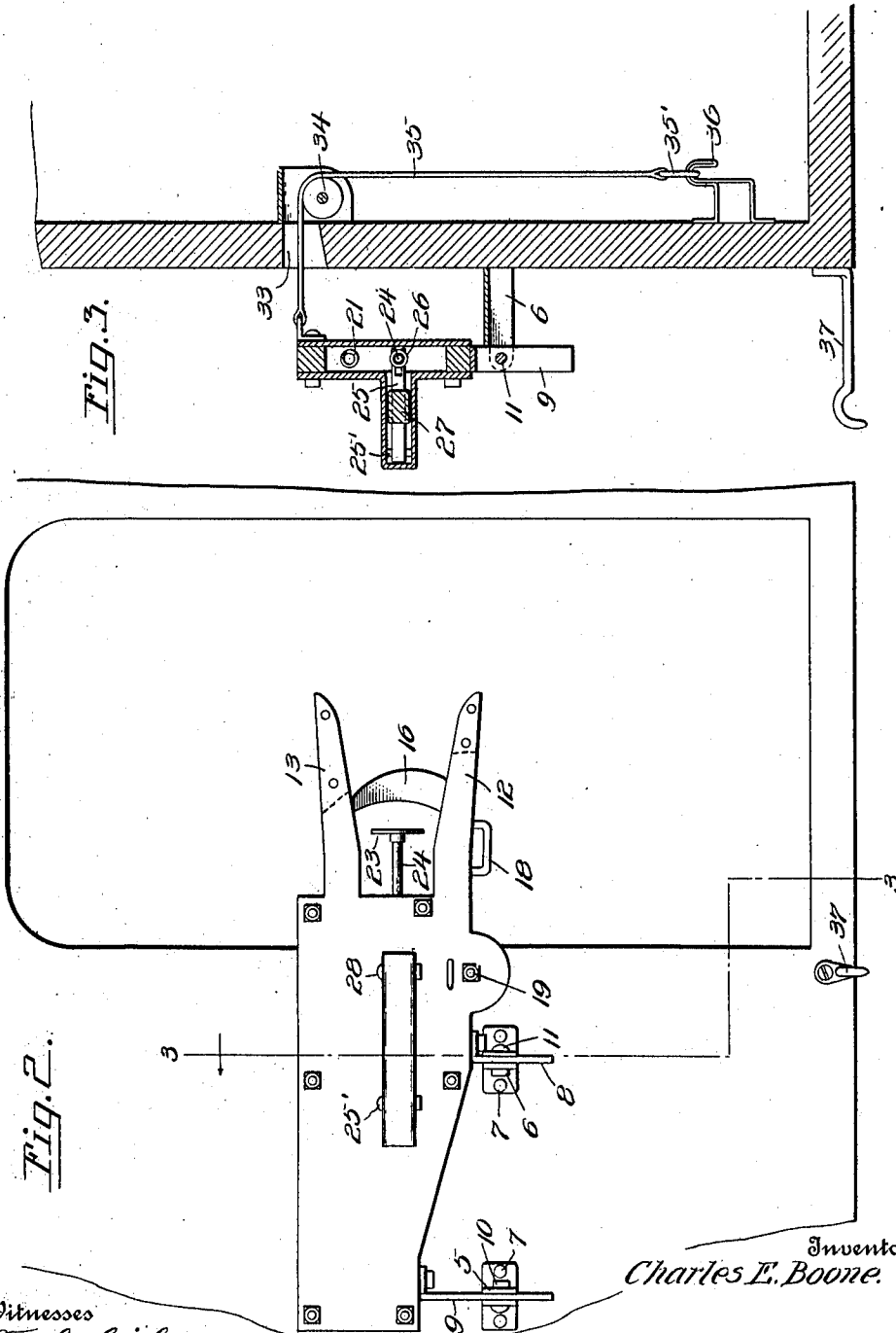


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4 SHEETS—SHEET 2.



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4 SHEETS—SHEET 3.

Fig. 4.

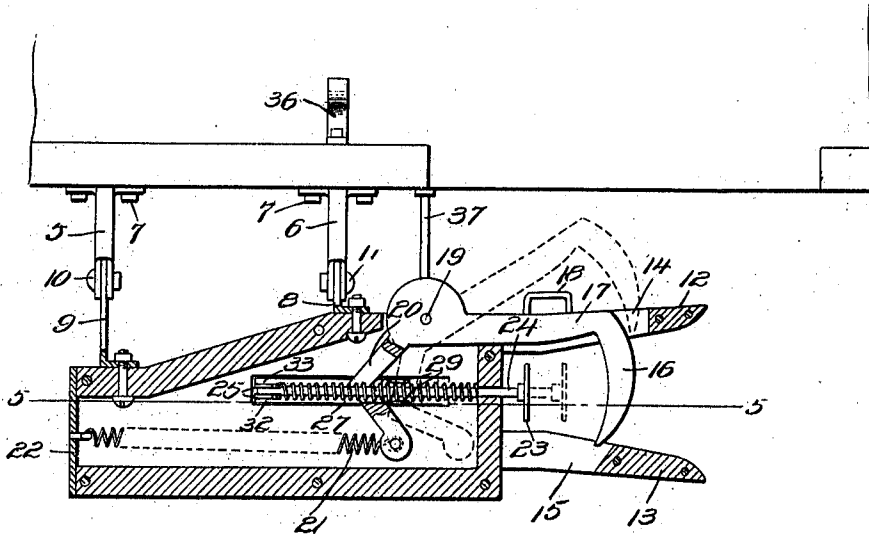
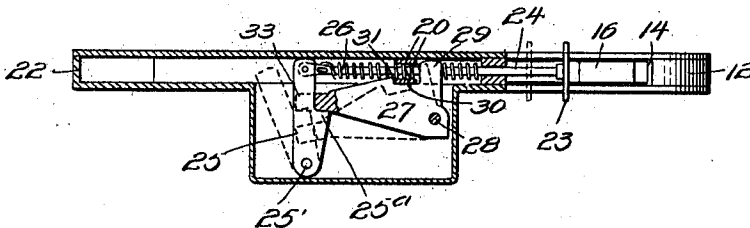


Fig. 5.



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4 SHEETS-SHEET 4.

Fig. 6.

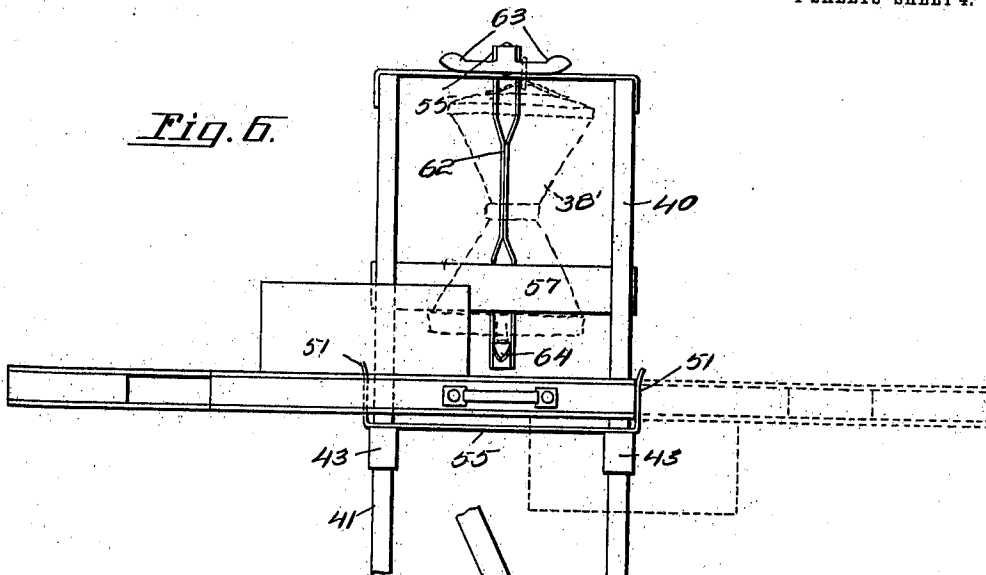
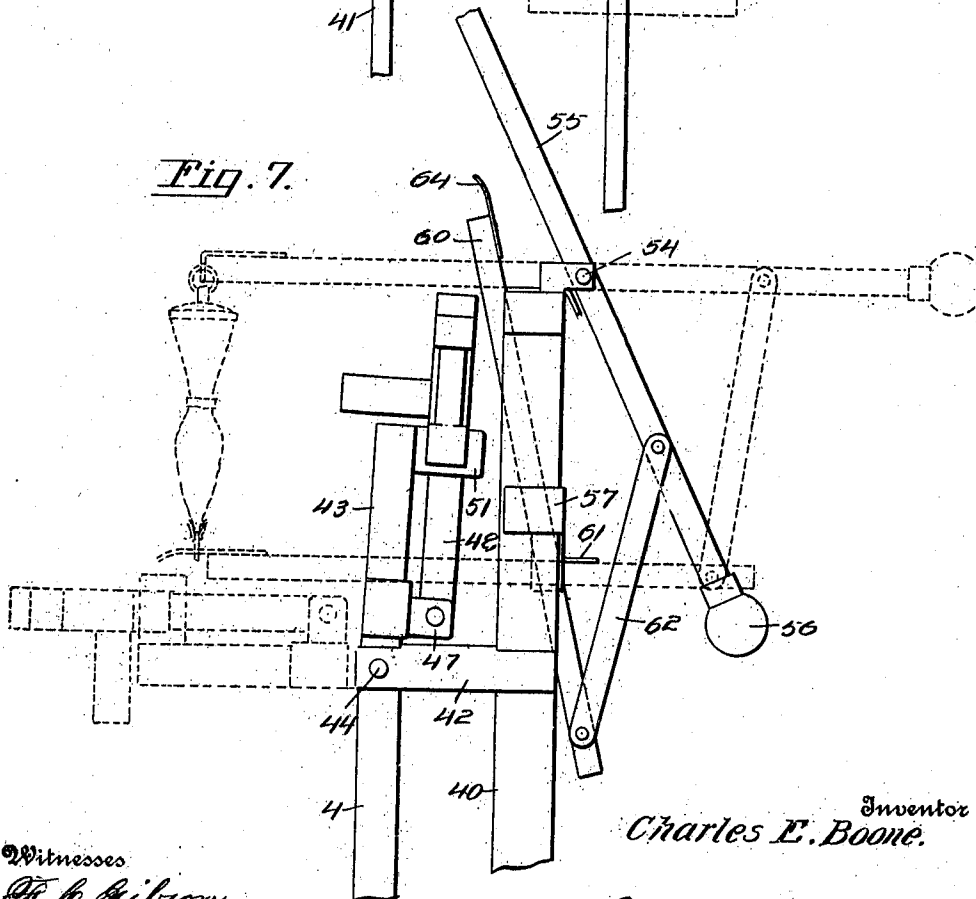


Fig. 7.



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UNITED STATES PATENT OFFICE.

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MAIL-BAG CATCHER.

982,568.

Specification of Letters Patent.

Patented Jan. 24, 1911.

Application filed August 9, 1910. Serial No. 576,277.

To all whom it may concern:

Be it known that I, CHARLES E. BOONE, a citizen of the United States, residing at Elk Creek, in the county of Johnson and State of Nebraska, have invented new and useful Improvements in Mail-Bag Catchers, of which the following is a specification.

This invention relates to mail receiving apparatus of that type whereby mail may be transferred from a traveling car to a station or delivered from a station to a traveling car or both delivered to the station and received by the traveling car, and the primary object of the invention is to provide a device of this class which is comparatively simple in construction, which will grip and tightly hold the mail until relieved therefrom and which may be easily swung against the car when not in employment and which provides a foldable station which will also occupy small space when not employed.

A further object of the invention is to provide a device having a flaring mouth, the said device being provided with a spring-pressed plunger which is actuated by mechanism attached to a pivoted gripping arm when the said arm is swung free of the flaring member or arms, so that when a mail bag contacting the said plunger will be forced forward between the flaring arms and the gripping member released, thereby retaining the mail sack between the plunger and the gripping arm.

With the above, and other objects in view which will appear as the description progresses, the invention resides in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the improvement, and in which drawings,

Figure 1 is a perspective view of the apparatus showing one bag taken up by the catching device and the other bag in a position to be taken up by the catching device at a mailing station. Fig. 2 is a side elevation of the mail car device when in its inoperative position. Fig. 3 is a vertical transverse sectional view of the device taken upon the line 3—3 of Fig. 2. Fig. 4 is a horizontal sectional view taken through the catching apparatus and the car when the apparatus is in its lowered position. Fig. 5 is a longitudinal sectional view taken centrally of the catching apparatus and illustrating the

method of sustaining the gripping arm in its operative position. Fig. 6 is a vertical longitudinal sectional view of the station device, in its lowered or operative position. Fig. 7 is a side elevation of the station device in its folded position.

In the accompanying drawings the numeral 1 designates a car provided with the usual doorway 2. This car is provided with a mail delivery and receiving apparatus which is designated by the numeral 3.

The numeral 4 designates the station device, which will hereinafter be more fully set forth.

The car 1, to one side of its doorway is provided with a pair of parallel spaced brackets 5 and 6. Each of the brackets 5 and 6 comprise a substantially U-shaped body member provided with offset ears having openings adapted for the reception of securing elements 7 whereby the devices may be attached to the sides of the car. The tops of the said brackets are cut away a suitable distance from their outer extremities or ends, for a purpose hereinafter to be set forth. Pivotally secured within the brackets 5 and 6 are a pair of L-shaped arms 8 and 9, one of these arms 8 being of a shorter or less length than the arm 9. The offset portions of each of these arms are provided with suitable openings, the latter being adapted for the reception of retaining elements 10 and 11 whereby the same are adapted to support the combined mail deliverer and receiver. This apparatus 3 has its inner wall inclined from its upper extremity toward the doorway 2 of the car 1 and its outer wall or edge arranged in a parallel plane with the car, as clearly shown in Fig. 1 of the drawing.

The apparatus proper comprises a housing and the said housing has its forward extremity provided with oppositely flared arms or members 12 and 13. Both of these arms are provided with suitable openings 14 and 15. The opening 15 upon the outer flaring arm 13 is of less length than the opening 14 upon the arm 12. Adapted to be positioned between the openings of these arms is the arcuate face of a gripping member 16 when the device is brought to engage with a mail pouch, in a manner hereinafter to be set forth, the offset portion or extension 17 of the gripping member 16 has its outer extremity provided with a suitable bail or handle 18 whereby the said member may be

easily gripped by the occupant of the car 1. The said arm extends rearwardly a suitable distance within the housing and is pivotally connected thereto as at 19. The inner extremity of the member 17 is provided with a substantially V-shaped member 20 and the said member 20 has its opposite end connected with a spring 21 which extends horizontally of the housing and is secured to the rear wall thereof as designated by the numeral 22. It will be noted that by this construction the gripping member 16 is effectively sustained within the openings provided by the flaring arms 12 and 13. The numeral 23 designates the plunger head which projects through the front of the housing and approximately central of the arcuate face of the gripping member 16. This plunger head is provided with a suitable plunger rod 24, and the said plunger rod has its inner extremity pivotally connected with the retaining member 25 of the device. This retaining rod 25 comprises substantially a member and is pivoted at its lower extremity as indicated by the numeral 25'. The inner face or that portion of the device facing the plunger head, and adjacent its connection with the rod 24 is provided with a shoulder 25^a. Surrounding the plunger rod 24 and adapted to normally force the same rearwardly toward the face of the member 3 is a spring 26.

The numeral 27 designates the trigger of the device. This trigger 27 comprises a substantially rectangular member which is pivoted to the housing at its forward end as designated by the numeral 28. Extending above the pivot 28 the trigger is preferably provided with a pair of bifurcated arms 29 which are adapted to straddle the plunger rod 24, and the said projecting portions form one end of a cut away portion or depression 30. The opposite portion of the member 27 is preferably inclined from the shoulder 31 provided by the depression or cut away portion 30 toward its outer extremity, and the said outer extremity is also bifurcated to provide the arms 32 and 33, and these arms are adapted to embrace the rectangular retaining member 25.

The operation of the device thus far described is as follows:—When it is desired to receive a mail pouch or bag from a station, the housing is lowered so that its pivoted offset members contact the upper faces of the brackets upon the side of the car. The operator standing within the doorway of the car grasps the bail or handle 18 of the gripping member 16, rotating the same upon its pivot so as to cause its V-shaped extension to contact the arms 29 and to rotate the member 27 so as to bring the end of the latter into engagement with the shoulder 25^a. By this operation it will be noted that the V-shaped members will lie within the pocket

30 of the member 27 and the retaining element is sustained in an upright position under the tension of the spring 21. It will be noted that when the plunger head is contacted by the mail the rod will be forced rearwardly so as to rotate the retaining member 25 in an opposite direction. It should have been stated that the inner face of the member 25 provided with the offset or catch 25^a is arranged at an incline, so it will be understood that when the said rod is forced backwardly against the pressure of the spring 21 the rear portion of the device between the offset arms 32 will become free from the said retaining member 25. The said offset member is heavier at its rear portion than at its front and acting under the influence of the spring 21 the trigger member will be forced downwardly so as to allow the arcuate face of the gripping member to securely contact the said plunger and retain the mail bag in proper position on the receiving device. After the mail has been secured it is merely necessary for the clerk to grasp the same and grease the arcuate head of the gripping member, when the device may be folded upon the side of the car.

The car adjacent the doorway is provided with a small opening 33 and positioned for rotation within the walls provided by the said openings is a roller 34. A chain or other suitable flexible member 35 is secured to the housing adjacent its inner pivot point, and the said chain is adapted to play upon the roller 34. The free extremity of the flexible member is provided with a handle member 35', and the interior of the car is provided with a hook 36, the latter being adapted to engage the handle 35 and sustain the receiving member in its raised position.

The lower extremity of the car adjacent its doorway is provided with a hook 37 as is the lower face of the housing, and adapted to be suspended between these two hook members is a mail bag 38.

The post or station member 4 is provided with a gripping mechanism substantially similar to that heretofore described in connection with the car device, and for this reason, it is believed, a detail description thereof is unnecessary. The station member 4 comprises essentially a platform constructed of a pair of spaced rear posts 40 and a pair of spaced vertically extending posts 41, the latter being much shorter than the posts 40. Connected with each of the sides of the posts 40 and 41 is a substantially U-shaped member 42. This member 42 is preferably constructed of some suitable material and has both of its ends bifurcated, the arms provided by the bifurcations of its rear end being connected with each side of the posts 40, as clearly illus-

trated in Fig. 1 of the drawings. The forward bifurcations are adapted for the reception of a pair of members 43, the same having their extremities reduced and being pivoted between the arms provided by the outer portion of the members 42, as indicated by the numeral 44. These members 43 have their inwardly projecting portions contacting the upper walls of the members 42 so that when the device is in its lowered or engaging position, as illustrated in Fig. 1 of the drawings, the said members 43 will be held in parallel relation with each other and in a substantially horizontal position. The members 42 are connected by suitable strips 45, and the members 43 have their rear portions provided with a connecting strip 46. This connecting strip 46 is provided with upwardly extending arms or offsets 47 which are adapted to pivotally connect a bail 48 which is connected with the side of the gripping and retaining member 49. The extremities of the arms 43 are connected through the medium of a strip 50, the latter having both of its ends upturned as at 51 to provide a sustaining means for the bail 48 and whereby the said gripping device 49 is sustained in proper position to receive the mail from the car.

The posts 40 have their upper portions connected through the medium of a strip 52 and provided upon this strip is a pair of spaced eye members 53, these members being pivotally connected as at 54 with the upper mail bag sustaining member 55. This member 55 has its inner portion weighted as at 56, the purpose of which will presently be apparent. The posts 40 are further provided with a suitable strip 57 which is positioned a suitable distance below the top strip 52, and this strip 57 is provided with spaced eyes 58 which are adapted for pivotal connection as at 59 with the lower mail bag engaging member 60. The depending portion of the member 57 provided with the eyes 58 is further provided with an offset member 61, which is adapted to contact the upper face of the member 60 and to limit the downward movement of both the members 60 and 55. The numeral 62 designates a connecting rod between the members 55 and 60, and the member 55 has its upper extremity provided with a hook 63 which is adapted to extend upon each side thereof and in a plane parallel to the track for the car 1. The lower member 60 is also provided with a suitable offset or hook 64 which is adapted to engage the lower ring portion of the mail bag 38', while one of the members of the hook 63 engage the upper ring portion thereof. By this arrangement it will be noted that the device may be readily swung to the position illustrated in Fig. 7 of the drawings when the device is not in use, it being noted that the members

55 and 60 will be thrown upwardly through the medium of the weight 56, while a slight upward push upon the handle 65 provided upon the outer face of the member 49 will cause the same to swing upon its brackets 47 while the members 43 may be also swung upon their pivots 44 as clearly shown in the said figure.

From the above description, taken in connection with the accompanying drawings, it will be noted that I have provided an extremely simple and effective device for the purpose intended, and while I have illustrated and described the preferred embodiment of the improvement, as it now appears to me, minor details of construction, within the scope of the following claims may be resorted to if desired.

Having thus fully described the invention, what I claim as new is:—

1. In an apparatus of the class described, the combination of a housing provided with a flaring mouth, a plunger member positioned within the mouth, a gripping member for the plunger member, means for retaining the device horizontally with the car, means for swinging the device in a vertical plane with the car, and means for retaining the device in either of its swung positions.

2. In an apparatus of the class described, the combination of a pivoted housing having a flaring mouth, means for pivoting the housing to the car to sustain the same in a horizontal position thereon, a plunger within the flaring mouth of the housing, a gripping member, a gripping arm connected with the flaring mouth, means for forcing the gripping arm into engagement with the plunger after the latter has been contacted, and means for swinging and retaining the housing vertically of the car.

3. In an apparatus of the class set forth, the combination with a car, of a housing pivotally connected with the car, said housing being provided with a flaring mouth, a spring-pressed plunger within the mouth and having its rod within the housing, a retaining member for the plunger rod, a pivoted trigger within the housing and having one of its ends normally contacting the retaining member, a gripping member having one of its faces adjacent the plunger and having an extension pivoted within the housing, all substantially as and for the purpose set forth.

4. In an apparatus of the class described, a car, a bag receiving member pivoted horizontally of said car, means for sustaining the receiving member in a horizontal position, means for raising the member vertically of and adjacent the side of the car, said means comprising a flexible element and the car being provided with an opening adapted for the reception of said flexible element, the inner side of the car being provided

with a hook, and said hook adapted to engage the flexible element, substantially as and for the purpose set forth.

5 In an apparatus of the class set forth, the combination with a mail bag gripping device, said device comprising a housing provided with oppositely flared arms, a plunger, a gripping element, and means for forcing the gripping element into engagement with the plunger after the plunger
10 has been contacted.

6. In an apparatus of the class described, the combination with a mail receiving device, means for sustaining the device in
15 either a horizontal or a vertical position, said device comprising a housing having flaring arms, a plunger positioned between the arms and having a rod extending within the housing, a retaining member pivoted
20 within the housing and connected with the plunger rod, said retaining member having one of its faces inclined and provided with a shoulder, a spring connected with the plunger rod and retaining device, a trigger
25 pivoted within the housing, said trigger being provided with a projection adjacent its pivot and a depression adjacent said projection, the face of the trigger being beveled and being provided with a bifurcated portion at one of its ends adapted to engage
30 the sides of the retaining member, a gripping element for the device, said gripping element having a curved face adapted to be projected through the arms of the housing, said member being pivotally connected with
35 the housing, the member being further provided with an offset portion adapted to lie within the path of the projection of the

trigger, a spring contacting the offset of the gripping member and adapted to force the same between the arms of the housing, substantially as and for the purpose set forth.

7. In an apparatus for the purpose set forth, means for normally supporting a mail bag, a weight for returning said means to
45 an upright position after the mail bag has been relieved therefrom, a receiving device, said receiving device comprising a housing provided with a pair of flared arms, a plunger for the housing, a movable retaining arm
50 for the flared arms and for the housing, and means for forcing the gripping member toward the plunger after the said plunger has been contacted.

8. In an apparatus of the class described, in combination with a railway car and a station post, means for suspending a bag upon the station post, means upon the car for releasing said bag, said means comprising
60 a plunger adapted to be contacted by the bag, and a gripping device adapted to be actuated by the plunger, a mail bag suspended upon the car, means upon the station post for removing the mail bag from the car, said means comprising a plunger
65 adapted to be contacted by the mail bag, and a gripping element adapted to be actuated by the plunger when contacted by the mail bag.

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

CHARLES E. BOONE.

Witnesses:

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H. W. BLUME.