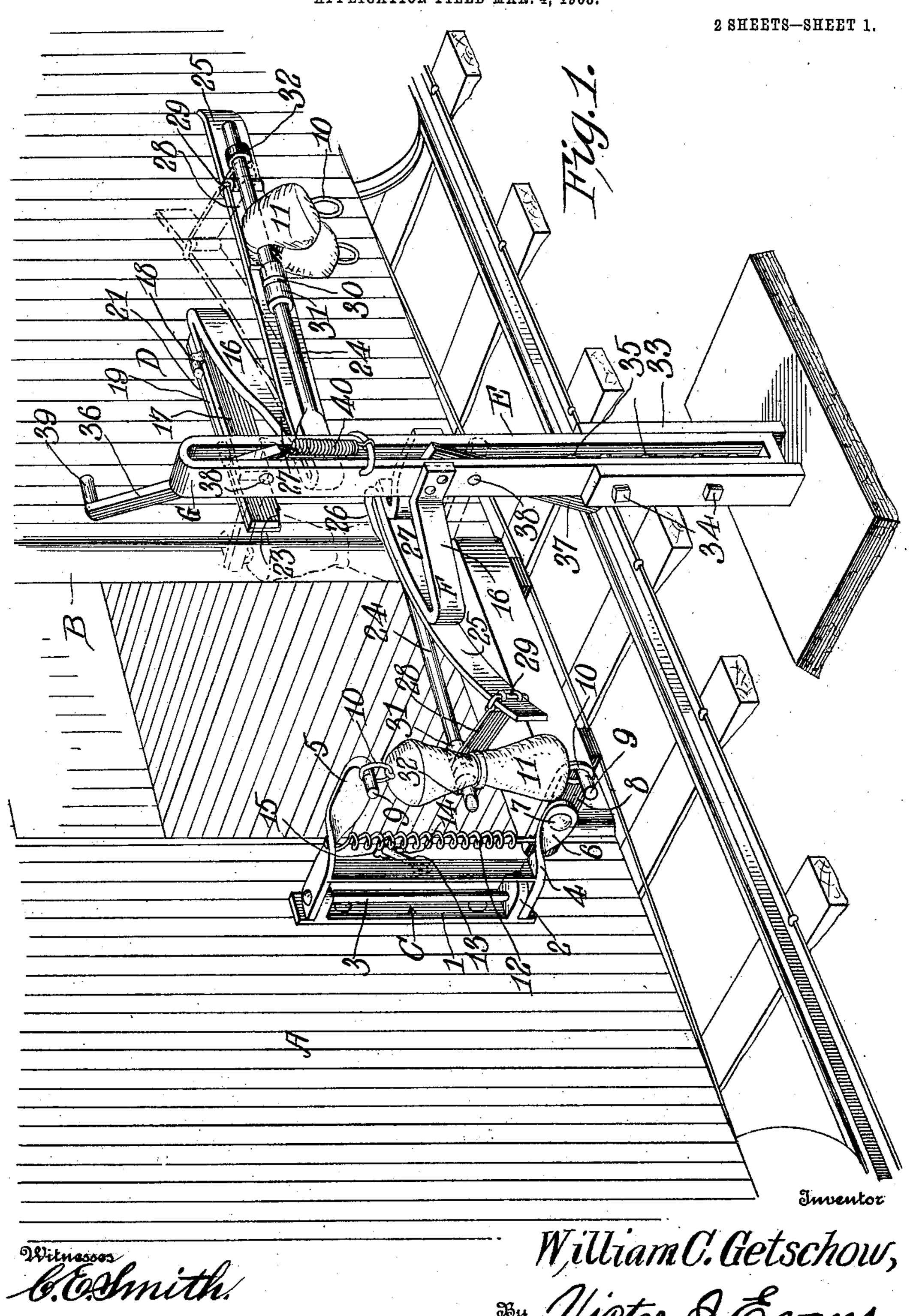
No. 891,058.

PATENTED JUNE 16, 1908.

W. C. GETSCHOW. MAIL BAG DELIVERY APPARATUS. APPLICATION FILED MAR. 4, 1908.

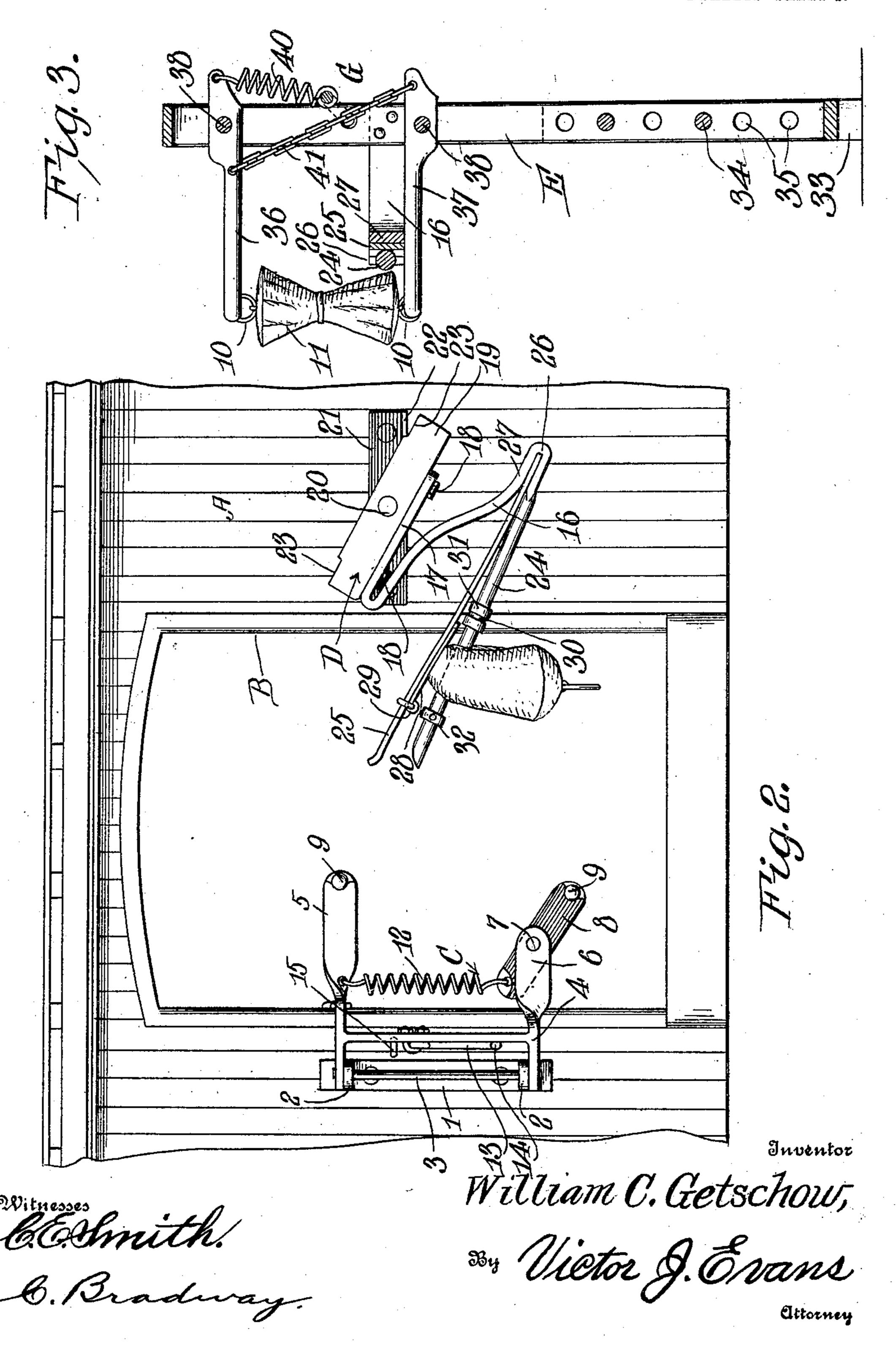


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UNITED STATES PATENT OFFICE.

WILLIAM C. GETSCHOW, OF LITTLETON, COLORADO.

MAIL-BAG-DELIVERY APPARATUS.

No. 891,058.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed March 4, 1908. Serial No. 419,216.

To all whom it may concern:

Be it known that I, William C. Gets-CHOW, a citizen of the United States, residing at Littleton, in the county of Arapahoe and State of Colorado, have invented new and useful Improvements in Mail-Bag-Delivering Apparatus, of which the following is a specification.

This invention relates to mail bag deliver-10 ing apparatus of that type whereby mail bags can be transferred to and from trains while

in motion. The invention has for one of its objects to improve and simplify the construction and 15 operation of devices of this character so as to be comparatively easy and inexpensive to manufacture, highly efficient in operation, and so designed as to permit the deposit of mail bags without danger of the bags and

20 their contents being injured.

A further object of the invention is the provision of a mail bag catching device composed of a pair of gripping jaws which are normally held open by a spring keeper dis-25 posed in such a position as to be struck by a mail bag for releasing the keeper to permit the jaws to close, the said device being mounted on a car or other support in such a manner as to be swung down close to the car when 30 not in use.

Another object of the invention is to provide a pair of bag-supporting arms which are normally spread apart by a spring or equivalent means for the purpose of holding a bag 35 in extended position so as to be readily taken

up by the catching device.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel fea-40 tures of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the

claims appended hereto.

In the accompanying drawings, which illus-45 trate one of the embodiments of the invention, Figure 1 is a perspective view of the apparatus showing one bag taken up by the | base portion 17 connected by hinges 18 with catching device on a mail car, and the other bag in position to be taken up by the catch-50 ing device at a mailing station. Fig. 2 is a side view of the mail bag catching and supporting devices mounted on a mail car. Fig. 3 is a vertical sectional view of the supporting post at a mail station showing the bag-sup-55 porting device thereon.

Similar reference characters are employed

to designate corresponding parts throughout the several views.

Referring to the drawings, A designates an ordinary mail car provided with a doorway 60 B and supported on the side of the mail car is a bag-supporting device designated generally by C and the bag-catching device D is disposed at the side of the doorway opposite from the supporting or holding device C. 65 Arranged along the railroad at the various mailing stations are substantially similar catching and holding devices so that as the train passes the stations, bags can be transferred between the car and station. At each 70 station is a supporting post E that supports the catching device F and the bagholding means G.

The bag-holding device on the mail car consists of a supporting plate 1 having aper- 75 tured lugs 2 for the vertical pintle 3 and on the pintle is a swinging frame 4. The frame 4 has a laterally-extending arm 5 at its upper end and a projection 6 at its lower end, on which projection is fulcrumed, at 7, a swing-80 ing arm 8. The arms 8 and 5 have parallel fingers 9 that extend rearwardly parallel with the side of the car and are adapted to receive the rings 10 of the mail bag 11, the fingers permitting the rings of the mail bag 85 to be readily slipped off as the car passes the station-catching device F. The arm 8 is connected with a spring 12 that has its upper end fixed on the arm 5 whereby the outer end of the arm 8 is pulled downwardly away from 90 the upper finger 9 so as to hold the mail bag stretched. The swinging frame 4 is held in outstanding position with relation to the car by a rod 13 pivoted on the frame and terminating in a hook 14 that is adapted to engage 95 in an eye 15 on the side of the car A. When the device C is not in use, the frame 4 is swung around on the pintle 3 close to the side of the car so as to be out of the way of objects along

the track. The bag-catching means D on the mail car comprises a Z-shaped bracket 16 that has its a supporting plate 19, this supporting plate being mounted on a pivot 20 extending out- 105 wardly on a base plate 21 secured directly to the body of the car. The base plate 21 has a lug 22 forming a stop that is adapted to engage in a notch 23 on the supporting plate 19 when the bracket 17 is in set position. The outer 110 member 24 of the bracket 17 forms a jaw with which coöperates a spring 25 which forms a

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second jaw, the said spring having one end fastened in the elbow 26 that forms a recess between the connected extremities of the members 24 and 27 of the bracket 16. On the 5 spring 25 is a keeper or trigger 28 hingedly connected therewith at 29. When the jaws are opened, the trigger 29 is disposed at right angles to the jaw 24 and the free end of the trigger engages in the notch or groove 30 10 of a sleeve 31 that is freely sliable on the relatively-fixed jaw or member 24. On the member 24 is a collar 32 that forms a stop for limiting the outward movement of the sleeve 31. When the trigger is in set position, it is 15 readily released by a mail bag coming into contact therewith, and the sleeve 31 enables the trigger to be readily opened without undue friction.

When the catching device D is set as 20 shown in Fig. 1 to pick up a bag, the bracket 16 is outstanding from the car body in a horizontal plane and the hinges 18 are disposed at the top of the bracket so that the weight of the latter will hold the catching 25 device in outstanding position. When the mail bag is caught by the catcher, it, by its momentum, assumes a pendent position with its jaws extending across the doorway so that the mail clerk may remove the bag. 30 That is to say, when a bag is picked up by the jaws, the momentum and weight of the bag will cause the jaws to swing around on the pivot 20 and during this swinging movement, the bracket 16 will swing on the 35 hinges 18 so as to assume the position shown in Fig. 2, thereby throwing the jaws automatically to a position where the mail clerk can conveniently remove the bag.

The post E is mounted in a base 33 and 40 secured adjustably in position by bolts 34. The post is provided with spaced bolt-receiving apertures 35 so that the post can be raised or lowered to bring the catching and delivering devices thereon into proper rela-45 tion with the same devices of the mail cars. The catching device F is substantially similar to the device D of the mail car and the corresponding parts are similarly numbered, the only differences being that the bracket 50 16 is rigidly secured or bolted directly to the post, but if desired, provision may be made for mounting the catching device so that it can be let down when not in use. The mail bag holder G consists of a pair of arms 36, 55 37, that are fulcrumed on pivots 38 on the post E, the outer extremities of the arms be-

pointed in the same direction so as to enable 30 the bag to be readily removed from the holder by the catching device of the mail car. The arm 36 has its rear end connected with a spring 40 which tends to swing the arm 36 upwardly when the mail bag is removed, and 35 between the two arms is a flexible element

ing provided with fingers 39 for receiving the

rings 10 of the mail bag 11, the fingers being

such as a chain 41 which is attached to the rear end of the bottom arm 37 and to the upper arm 36 at a point in front of the fulcrum 38. As the arm is swung upwardly by the spring 40, the chain will pull upwardly 70 on the rear end of the lower arm so as to swing the front end of the arm downwardly when a bag is released from the holder G. In Fig. 1, the bag-holding device of the station apparatus is shown with its arms in re- 75 leased or inoperative position, while in Fig. 3, the arms are set in proper position to hold a bag. It will be noted that the lower arm 37 engages under the catching device F on the post 2 when the arms are in set position, 80 and the upward pull on the mail bag by the spring 40 acting through the arm 36 will hold the bag steady, since the lower arm 37 will be maintained against the device F.

From the foregoing description, taken in 85 connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described 90 the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and 95 that such changes may be made when desired as are within the scope of the claims.

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

1. In an apparatus of the class described, 100 the combination of a pair of jaws, a pivoted supporting member, a horizontally-extending pivot therefor, and means for hingedly connecting the jaws with the said member to swing on an axis at right angles to that of the 105 pivot.

2. In an apparatus of the class described, the combination of a pair of jaws tending normally to close, means for holding the jaws open and to be released by a bag striking the 110 same, and a mounting for the jaws designed to permit the latter to swing on two different axes, the axes being so disposed that the momentum and weight of a bag caught by the jaws will cause the latter to automatically 115 drop to discharging position.

3. In an apparatus of the class described, the combination of a bag-receiving element, a support having a horizontal pivot a member mounted on the pivot, and means for 120 hingedly connecting the element with the member.

4. In an apparatus of the class described, the combination of a supporting bracket, a fixed jaw thereon, a spring jaw arranged on 125 the bracket in coöperative relation with the other jaw, a pivoted plate, hinged connections between the plate and bracket, and a trigger for holding the jaws in set position.

5. In an apparatus of the class described, 130

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the combination of a bag-catching device, a support, and a mounting between the support and device, said mounting comprising means for supporting the device in outstanding or receiving position by its own weight and permitting the device to automatically drop to a pendent position under the momentum and weight of a bag caught by the device.

6. The combination of a car having a door10 way, a bag-catching device on the car body
at one side of the doorway, said device comprising bag-receiving jaws, a bracket supporting the jaws, a fixed horizontally extending pivot on the car body, a plate on the
15 pivot adapted to swing to approximately a
half circle, and means for hingedly connecting the bracket with the plate for permitting
the bracket to assume an outstanding or
hanging position.

7. In an apparatus of the class described, the combination of a bracket formed into an elbow and having its extremity constituting a jaw, a resilient jaw secured to the elbow, and

means for holding the jaws open.

8. In an apparatus of the class described, the combination of a pair of jaws normally tending to close, one jaw consisting of a stiff member and the other a resilient member, a trigger pivotally connected with one of the jaws and adapted to engage the other for holding the jaws open, and a mounting for the jaws.

9. In an apparatus of the class described, the combination of a pair of jaws normally tending to close, a trigger pivotally connected with one of the jaws and adapted to engage the other for holding the jaws open, a

sleeve on the other jaw, a mounting for the jaws, and a stop on the sleeve-carrying jaw for limiting the movement of the sleeve.

10. In an apparatus of the class described, the combination of a supporting structure, arms mounted thereon and having their extremities formed into parallel fingers for holding a mail bag, means connected with 45 the arms for moving the latter apart when the mail bag is removed, a catching device on the structure, and means for vertically adjusting the structure with the device and arms thereon.

11. The combination of a post, a base in which the post is vertically adjustable, a pair of bag-holding arms pivotally mounted on the post, a spring for retracting one of the arms, and a connection between the arms for retracting the latter simultaneously in opposite directions, with a catching device on the post with which one of the arms engages when the arms are holding a bag.

12. In an apparatus of the class described, 60 the combination of a support, a pivot thereon, a stop adjacent the pivot, a reversible member on the pivot and adapted to engage the stop, a bag-catching device, and means for mounting the device on the member for 65 holding the device in operative or inoperative position by the reversing of the said member.

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

WILLIAM C. GETSCHOW.

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Witnesses:

JOHN T. SHADWELL, ELLA F. STEWART.