

H. C. WEHLING.
MAIL DELIVERY AND RECEIVING DEVICE.
APPLICATION FILED AUG. 21, 1908.

908,632.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 1.

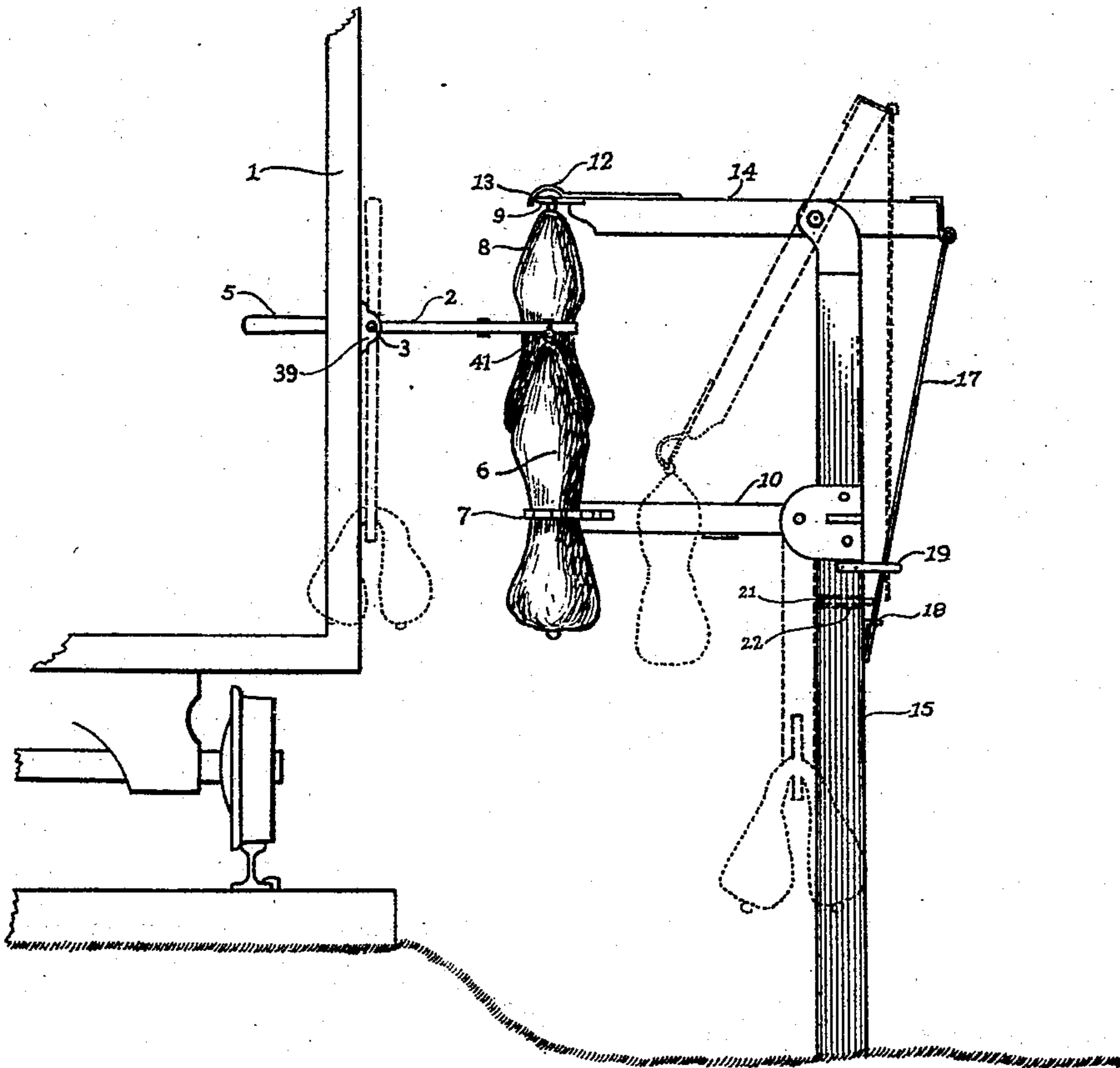


Fig. 1.

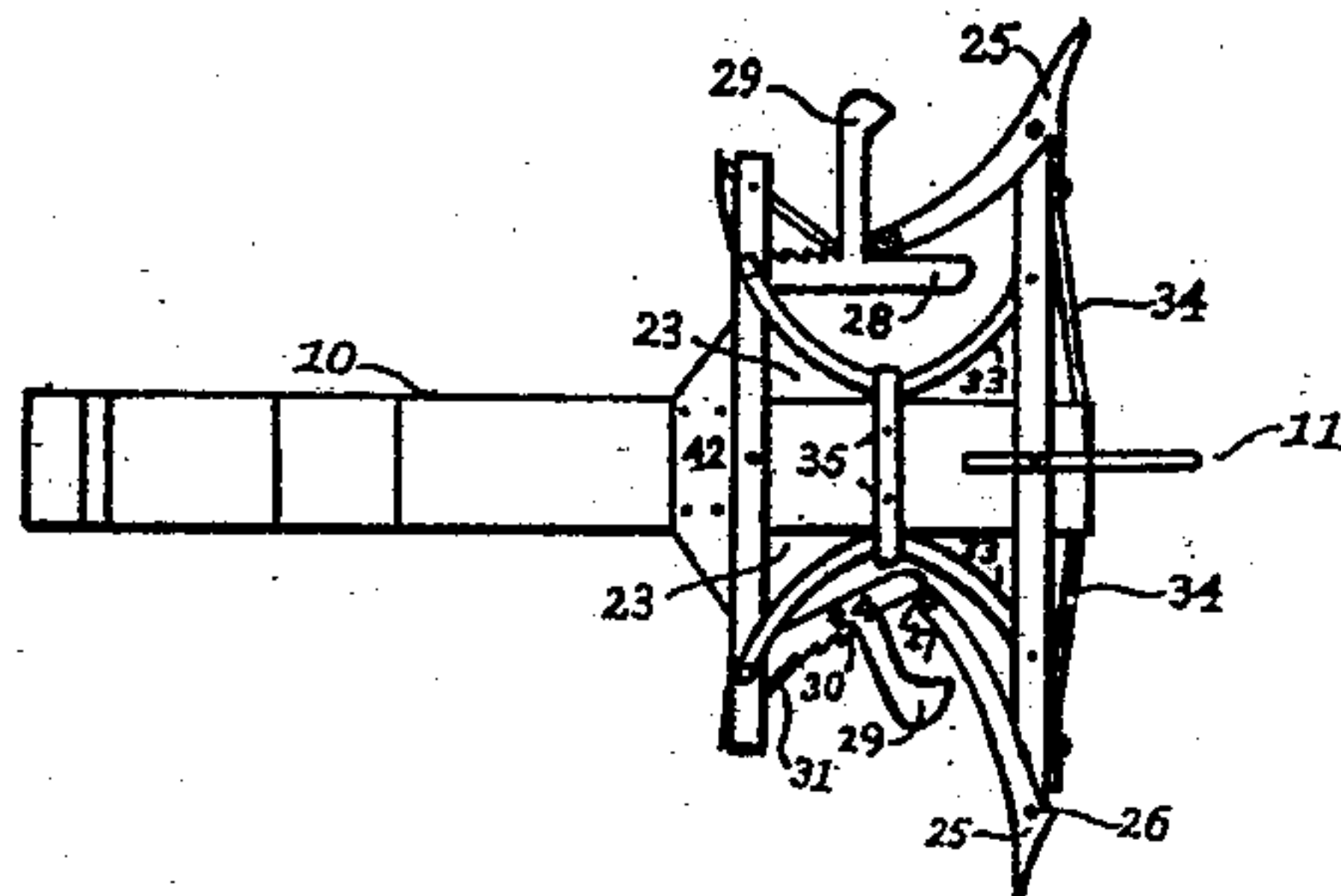


Fig. 2.

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Witnesses
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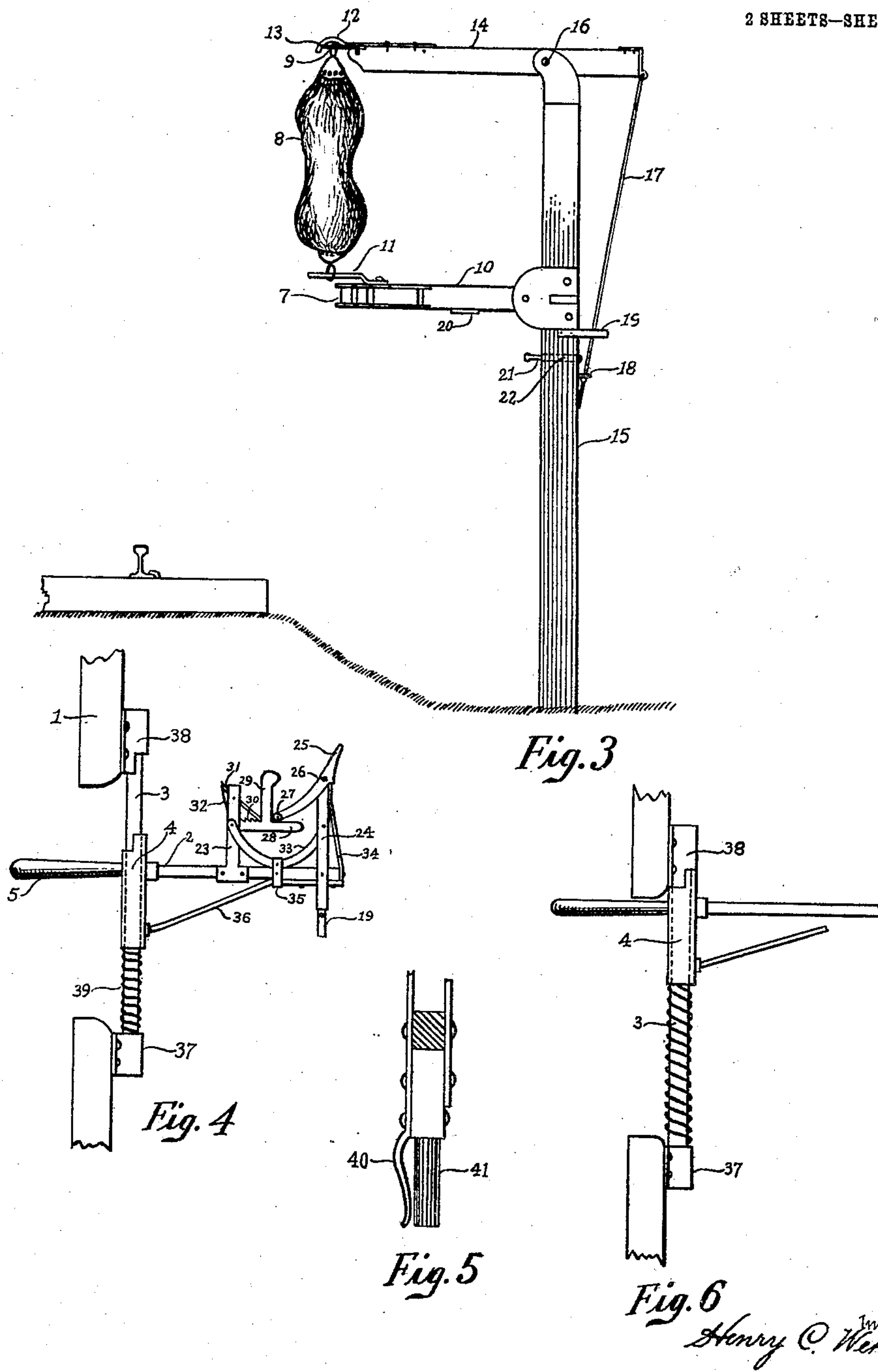
by Edward V. Hardway,
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UNITED STATES PATENT OFFICE.

HENRY C. WEHLING, OF HOUSTON, TEXAS.

MAIL DELIVERY AND RECEIVING DEVICE.

No. 908,632.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed August 21, 1908. Serial No. 449,686.

To all whom it may concern:

Be it known that I, HENRY C. WEHLING, a citizen of the United States, residing at Houston, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Mail Delivery and Receiving Devices, of which the following is a specification.

My invention relates to new and useful improvements in mail receiving and delivering devices.

The object of the invention is to provide a device of the character described that will deliver to and receive, simultaneously, mail from, a moving train.

Another feature of the device resides in the provision of means whereby the mail bag to be delivered to the passing train may be placed upon the deliverer without the use of a ladder or other means than the deliverer itself.

Finally the object of the invention is to provide a device of the nature described that will be efficient and durable one which will be easily made and easily kept in repair and one which will work automatically in delivering and receiving the mail bags.

With the above and other objects in view my invention has particular relation to certain novel features of construction and arrangement an example of which is given in this specification and illustrated in the accompanying drawings which form a part thereof, wherein:

Figure 1 is a side elevation of my complete device showing the same in the act of delivering the mail bag to and receiving one from a moving car. Fig. 2 is a plan view of the receiving device. Fig. 3 is a side elevation showing the device with mail bag ready for delivery to the car. Fig. 4 is a plan view of the receiving device attached to the car door, showing also the device to which the mail bag to be discharged from the car is to be attached. Fig. 5 is a detailed plan view of the discharging device attached to the receiver which is fastened to the car door. Fig. 6 shows the clutch which holds the device attached to the car door in position for receiving the mail, at right angles to the car door.

Referring now more particularly to the drawings the numeral 1 refers to the car, a portion of which is broken away that a de-

tailed view of the receiver attached thereto may be seen.

The numeral 2 indicates a lever operating upon the supporting rod 3 by means of a slidable runner 4, carrying upon one end the receiving device and extending beyond said rod and forming a handle 5 by which means anyone in the car may operate said device. This runner is also revoluble on rod 3.

The numeral 6 designates a mail bag being delivered from the moving train to the receiver 7.

8 represents a mail bag being received by the receiver on the train. This mail bag is suspended from tongue 9 and serves to support in its proper position the arm 10 which carries receiver 7, by means of a tongue 11 which protrudes from said arm through a ring at the lower end of said mail bag.

The numeral 12 indicates a stationary guard having near its outer end a groove 13. The tongue 9 is pivotally mounted upon the arm 14 so that it slides in groove 13. This arrangement is provided so that when the mail bag is suspended on the tongue 9, and the same is placed in slot 13, the bag will be securely held thereon but when the receiving device on the moving car catches said mail bag the tongue 9 will move laterally around out of said slot and allow the bag to readily slide off from its support. Tongue 11 is also pivotally mounted so that it will permit the mail bag 8 to readily slide therefrom. The guard 12 as well as the tongue 9 are attached to an arm 14 which is hingedly mounted upon support 15 by means of a hinge 16. This arm is held in a horizontal position by means of a rod 17 attached to its rear end. The lower end of this rod is secured to a catch 18 in such a manner as to be readily released therefrom and is held in position by a guard 19. When the mail bag 8 is removed the arm 10 which is hingedly connected to the support 15 immediately falls down and the iron plate 20 on the underside thereof strikes the rod 21 and forces it against the lower end of rod 17 thereby releasing it from catch 18. This permits the arm 14 to take the position as indicated by the dotted lines in Fig. 1 and the receiving device 10 takes a position parallel to support 15, as is also indicated by dotted lines in Fig. 1. It is intended

that this rod 21, shall pass through a metal tube 22 in said support 15, so that it will not wear away and enlarge the opening through which it passes and thus be allowed too much play.

The receiving device carried by the car is constructed as follows: Upon lever 2 a frame is constructed composed of arms 23 and 24 which lie in a plane with rod 3 and at right angles to arm 2. Upon the outer extremity of arm 24 is a lever 25. This lever is preferably constructed of two metal plates, one on either side of arm 24, fastened together by means of bolts 26 and 27. The lever 28 is hingedly mounted upon arm 23 at a point intermediate the ends thereof, and from the central point of this lever an arm 29 integral with said lever extends at substantially right angles thereto. An angle is thereby formed in which the inner end of lever 25 rests while the receiver is open for catching the mail bag. When the bag passes between the lever 25 and the arm 29 the impact forces both levers 25 and 28 back causing the outer end of lever 25 and arm 29 to move toward each other and firmly clasp the mail bag. The lever 28 is provided with a ratchet 30 between arms 23 and 29. A metal trigger 31 is pivotally mounted on arm 23 near its free end and is so controlled by a flat spring 32 as to cause it to engage the ratchet 30 and hold the arm 28 firmly against the mail bag after it has once clasped the same. This entire frame is strengthened by braces 33, 34, 35 and 36.

Fig. 6 shows the method by which the receiving device on the car is held in an extended position for taking on the mail bag and automatically released from said position. The parts 37 and 38 are bearings on either side of the car door which support the rod 3. 38 is so shouldered as to engage a corresponding shoulder on runner 4, thus forming a clutch which will hold the device in an extended position. This engagement is secured by means of the coil spring 39 which is fastened both to bearing 37 and runner 4. The impact caused by the mail bag striking this receiver forces this clutch out of engagement and the receiver falls down and thus brings the bag in the door within reach of the clerk. The coil springs serve the further purpose of breaking this fall and causing the device to descend gradually. Arm 24 extends rearwardly beyond lever 2 and is provided with a curved spring 40 as is shown in detail in Fig. 5. This device is provided to carry the mail bag which is to be discharged at the station, by slipping the ring of the same over the end 41 of discharge arm and under the spring 40.

In Fig. 2 a plan view of the receiving device which is to be stationary by the railway track is shown. This device is hingedly mounted on support 15 which is located

at a suitable distance from the railroad track. This receiver is held in an extended position by means of mail bag 8 as above described. It is constructed in its details just as the receiver carried by the car, omitting brace 36 and adding brace 42 and is made double so as to receive mail from a car moving in either direction. The different parts thereof are designated by the same numerals as the similar parts of Fig. 5.

The operation of my device is as follows:—When the deliverer at the station is empty the arms 14 and 10 take the position indicated by the dotted lines in Fig. 1. The ring of the bag to be delivered to the car is then passed over the tongue 9 which is slid in slot 13 and the ring will thus be held on the tongue while the arm 14 is being raised. This arm is raised by the operator pulling down on rod 17. The lower end of the rod is then fastened to catch 18 and the arm 14 is thus held in position. The arm 10 and the mechanism carried thereby is held in an elevated position, as explained above by the passing tongue 11, through a ring on the lower end of bag 8. The advantage of this arrangement is that the mail bag may be placed in position to be taken on the car without the use of a ladder, or substitute therefor, but the operator may remain on the ground while placing the mail bag in position to be delivered to the car. The receiving device carried by the car and the discharging device carried thereby are so positioned with relation to the receiving and delivering device stationed by the railroad track that the mail bag to be discharged from the car and the one to be taken on the car will be caught by their respective receivers simultaneously.

What I claim is:

1. A mail receiving and delivering device comprising a support, a lever hingedly mounted thereon, an arm hingedly mounted thereon below the said lever, said lever and arm so disposed as to operate in substantially the same plane, means for holding said lever and arm in a position at substantially right angles to said support, means for automatically lowering said lever and arm, a supporting device carried by the free end of said lever for supporting the mail bag, a receiving device carried by the free end of said arm for receiving the mail bag, a receiver carried by the car similar to the receiver carried by said arm, a discharging device carried thereby, means for automatically lowering said car receiver, said first mentioned receiving and delivering devices so disposed as to act simultaneously and in conjunction with said last mentioned receiving and discharging devices.

2. A mail receiving device comprising a support, a lever mounted thereon, an arm carried thereby, said arm being below said

lever and in substantially the same plane therewith, means for holding said lever elevated to a position at substantially right angles to said support, means for automatically lowering said lever, a supporting device carried by the free end of said lever for supporting the mail bag, a movable rod carried by the free end of said arm for supporting same, a receiving device carried by the free end of said arm for receiving the mail bag, a receiver carried by the car similar to the receiver carried by said arm, means for automatically and gradually lowering said car receiver, a discharging device carried by said car receiver, said first mentioned receiving and delivering devices so disposed as to act simultaneously and in conjunction with said last mentioned receiving and discharging devices.

3. A mail receiving and delivering device comprising a support, a lever hingedly mounted thereon, means for holding said lever in an elevated position, means for automatically releasing said lever from its elevated position and allowing it to swing in a position substantially parallel to said support, a supporting device carried by the free end of said lever, comprising a stationary guard and a movable tongue to operate in conjunction therewith, an arm hingedly mounted on said support below said lever and substantially in the same plane therewith, a receiving device carried by the free end of said arm, means for supporting the free end of said arm in position for receiving the mail bag.

4. In a combined mail receiving and delivering device the combination with a support and a lever hingedly mounted thereon carrying at its free end a supporting mechanism, of an arm hingedly mounted on said support, said arm carrying at its free end a mail receiving mechanism, means for holding said arm in an extended position at right angles to its support and means for automatically releasing said last named means and allowing said lever to assume a substantially vertical position.

5. A mail receiving device comprising a support, a frame mounted on said support, composed of arms lying substantially in the same plane and extending substantially at right angles to said support, a lever pivotally mounted on one of said arms near its free end, a secondary arm hingedly attached to the other of said first mentioned arms at a point intermediate the ends thereof, said secondary arm being provided with an engaging hook and means for securing the engagement of said hook.

6. In a mail receiving device the combination with a supporting arm, of means for hingedly securing same to a support, means for holding the free end of same in an elevated position, a frame immovably mounted

on said arm, levers carried by said frame so disposed as to operate in conjunction with each other and grip the mail bag and means for securing the grip of said levers on said bag.

7. In a mail receiving device the combination with a supporting shaft, of means for securing the same to a car, a clutch fixed on the shaft, a frame revolubly mounted on the shaft, adapted to engage with the clutch, levers pivotally mounted on the frame adapted to operate in conjunction with each other and engage the mail bag, means for securing said engagement, and means for automatically and gradually swinging the frame to a vertical position at the side of the car.

8. In a mail receiving device, a support, means for attaching said support to a car, a lever mounted upon said support and extending at substantially right angles thereto, a frame carried by said lever comprising arms extending at substantially right angles to said lever, said arms being provided with means for automatically catching and holding a mail bag, means for holding said device in an extended position from said car and means for automatically lowering the same.

9. In a mail receiving device, a support, means for attaching said support to a car, a lever mounted upon said support, a frame carried by said lever comprising arms extending at substantially right angles to said lever and being provided with means for catching and automatically holding the mail bag, means for raising said lever to an extended position from its car, means for holding said lever in said position and means for automatically lowering the same.

10. In a mail receiving device, a support, means for attaching said support to a car, a lever mounted upon said support, said lever carrying a frame, comprising arms extending at substantially right angles to said lever and being provided with means for catching and holding a mail bag, a discharge device carried by one of said arms, means for holding said device in an extended position from said car and means for automatically lowering the same.

11. In a mail receiving device, a support, means for securing the same to a car, a clutch fixed upon said support, a frame removably mounted on said support, adapted to engage with the clutch, means for securing said engagement, levers pivotally mounted upon the frame adapted to operate in conjunction with each other and engage the mail bag, means for securing said engagement, a discharge device also carried by said frame and means for automatically and gradually swinging the frame to a vertical position at the side of the car.

12. A mail receiving and delivering de-

vice, comprising a support, a lever hingedly
mounted thereon, an arm also hingedly
mounted thereon, said lever and arm so dis-
posed as to operate substantially in the same
5 plane, a rod attached to said lever, in such a
manner as to hold said lever in an extended
position, a catch for engaging the lower end
of said rod, means for automatically releas-
ing said engagement, means for holding said
10 arm in an extended position, means carried
by the free end of said lever for supporting
the mail bag, a receiving device carried by

the free end of said arm comprising braces
extending at substantially right angles to
said arm and being provided with coöperat- 15
ing levers for catching and holding a mail
bag.

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

HENRY C. WEHLING.

Witnesses:

L. E. BLANKENBECKER,
LA VERA MILLER.