

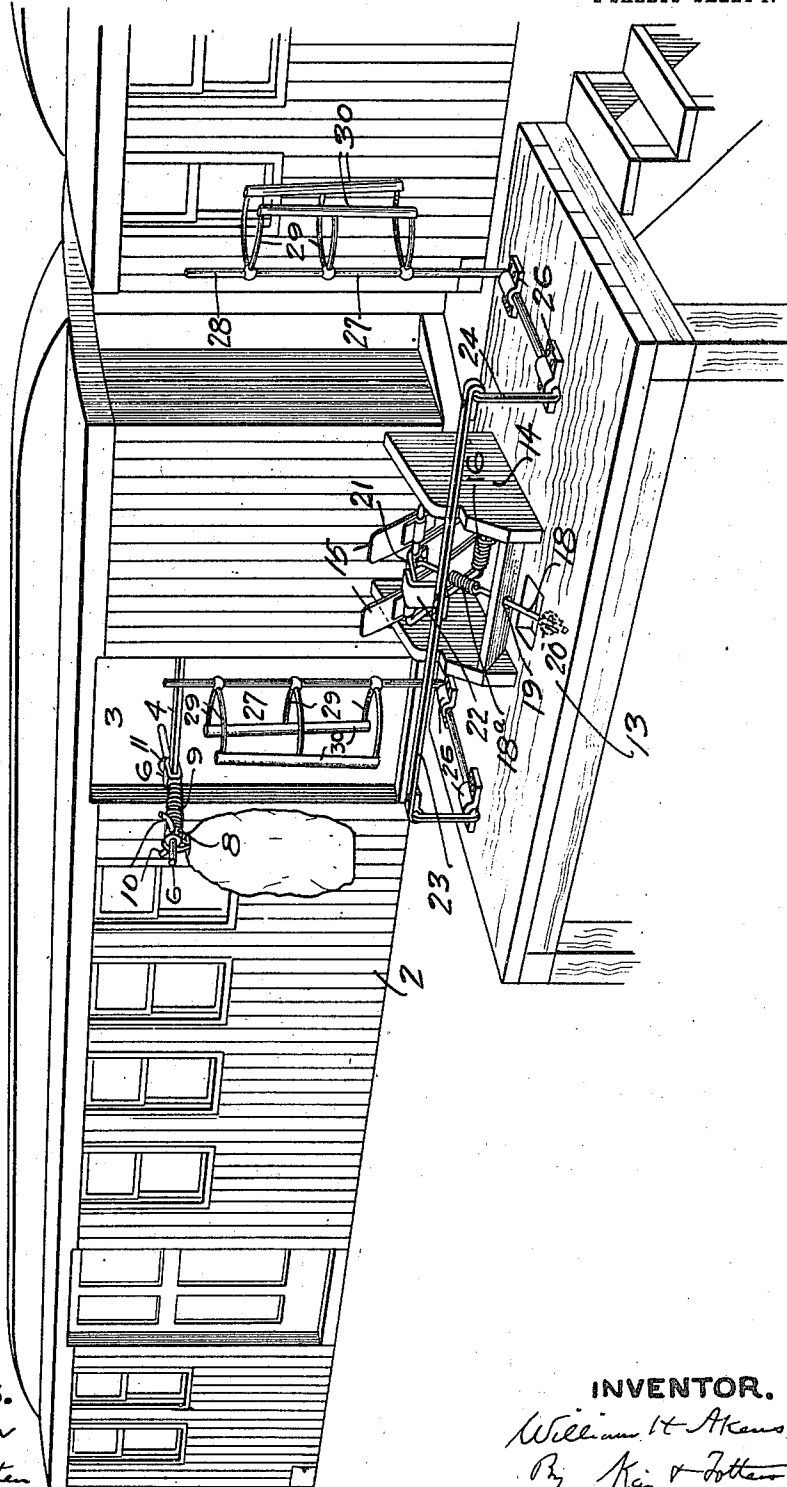
W. H. AKENS.
MAIL BAG HANDLER.
APPLICATION FILED JUNE 3, 1912.

1,043,892.

Patented Nov. 12, 1912.

2 SHEETS—SHEET 1.

FIG. 1



WITNESSES.

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2 SHEETS—SHEET 2.

FIG. 2

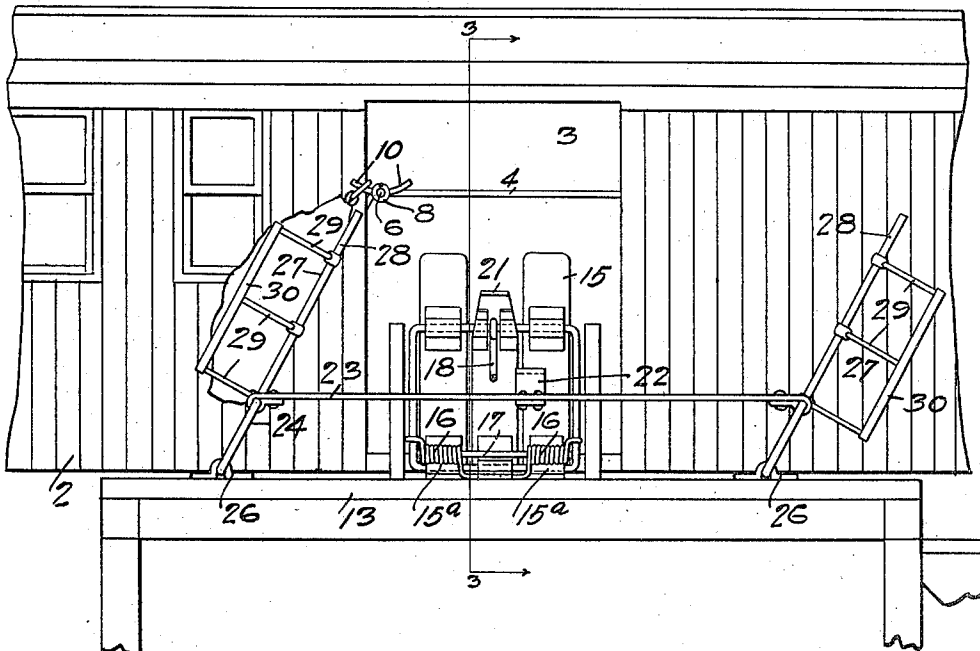


FIG. 3

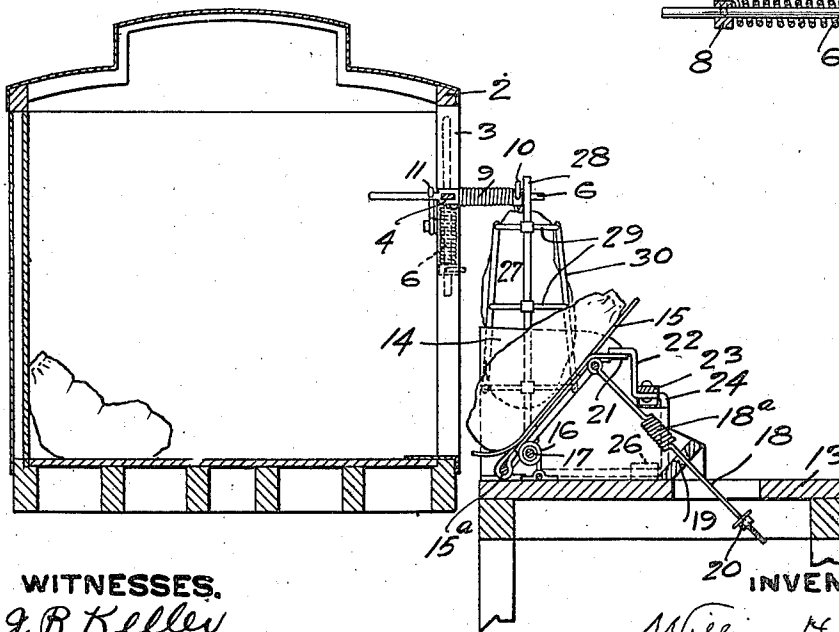
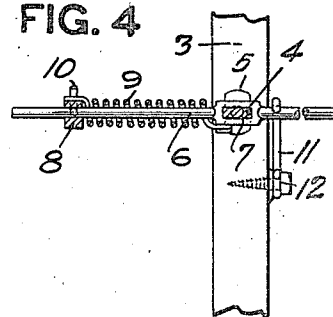


FIG. 4



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UNITED STATES PATENT OFFICE.

WILLIAM H. AKENS, OF ESPYVILLE STATION, PENNSYLVANIA.

MAIL-BAG HANDLER.

1,043,892.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Application filed June 3, 1912. Serial No. 701,344.

To all whom it may concern:

Be it known that I, WILLIAM H. AKENS, a citizen of the United States, resident of Espyville Station, in the county of Crawford and State of Pennsylvania, have invented a new and useful Improvement in Mail-Bag Handlers; and I do hereby declare the following to be a full, clear, and exact description thereof.

10 My invention relates to mail bag catchers and dischargers.

The object of my invention is to provide a simple and efficient form of apparatus by means of which the outgoing mail bag is delivered to the interior of the car with great accuracy, and the incoming mail is delivered to a support adjacent the track in which it is securely held, the apparatus being adapted to work with trains running at very high speed, and precluding the liability of the mail bags getting beneath the car, and being ground up by the wheels, which frequently happens in the forms of apparatus now generally employed.

25 To these ends my invention comprises the novel features hereinafter set forth and claimed.

In the drawings Figure 1 is a perspective view of my improved apparatus in position to operate in connection with a moving train. Fig. 2 is a side view with the parts in position where the outgoing bag has been discharged into the car and the incoming bag is engaged by the rack for same. Fig. 3 is a section on the line 3—3, Fig. 2; and Fig. 4 is a detail.

Referring to the drawings the numeral 2 designates a suitable postal-car provided with a doorway 3. Extending across the doorway 3 is the bar 4 which is trunnioned at its ends in the side-plates 5 of the door. Carried by the bar 4 is the bag supporting arm 6, which has the square opening 7 through which the bar 4 passes and said arm may be moved back and forth on said bar 4 to adjust the arm to the proper side of the doorway corresponding to the direction in which the train is moving. A collar 8 surrounds the arm 6 and is adapted to oscillate thereon, said collar being actuated by the spring 9 which is connected to said collar and at its inner end to the arm 6. The collar 8 is provided with the projections or fingers 10. This collar 8 forms a

trip for the mechanism for discharging the outgoing mail bag into the car, as fully hereinafter set forth.

In order to secure the arm 6 in horizontal position as shown in Fig. 4, I provide a suitable lock for holding said rod in this position, the lock illustrated consisting simply of the latch-hook 11 which is pivoted at 12 to the side frame of the door, and this hook is adapted to engage the inner end of the arm 6, as indicated in Fig. 4. When the arm 6 is not in use, it may be swung down into the vertical position indicated in dotted lines Fig. 3, so as to be out of the way and not to interfere in any way with the closing of the door of the car.

Located along the track at a suitable point is the platform 13 raised a suitable height above the track, and carried by said platform is the frame 14 which supports the mechanism for discharging the outgoing mail-bag into the car. This mechanism consists of the spring actuated discharging plate 15 which is hinged at its lower end as at 15^a to the platform 13. A spring 16 surrounds the shaft 17, and said spring acts normally to throw the plate 15 outwardly or toward the car. The rod 18 is connected to the rear of the discharge plate 15 and said rod has the spring portion 18^a. The rod 18 passes through the opening 19 in the frame, and the outer end of said rod is provided with the collar or stop 20, which is adapted to engage the frame to control the movement of said discharge plate 14.

The discharge plate 14 is provided with the tongue 21 which is adapted to be engaged by the lug 22 of the rocker-bar 23 of the rocker-frame 24. The end portions 25 of the rocker-frame are journaled in bearings 26 secured to the platform 13, and racks 27 are carried by the vertical rods 28 of the rocker-frame. These racks 27 consist of the curved arms 29 connected by the bars 30. These racks are made flaring, that is, they are wider at the lower portion than at the top, as clearly indicated in Fig. 3, for the purpose fully hereinafter set forth.

When my invention is in use, the outgoing mail-bag is placed on the discharge-plate 15, said discharge-plate having been drawn back and its tongue 21 engaged by the lug 22 of the rocker-bar 23 as clearly indicated in Figs. 1 and 3. The incoming mail bag is

suspended from one of the fingers 10 on the arm 6, said arm having been secured in the horizontal position shown in Figs. 1 and 3. As the train approaches the platform 13 the arm 6 will engage the upper end of the rod 28 of the adjacent rack 27, and the engagement of the arm 6 with said rod will act to move said rod to the right as shown in Fig. 2, which movement of the rod 28 will act to rock the rocker-frame 24 and move the rocker-bar 23 to the right, and cause the lug 22 to be disengaged from the tongue 21 of the discharge-plate. Just as soon as this takes place, the spring 16 will act to move the discharge plate toward the car and this action is timed to take place when the door of the car has arrived opposite the discharge mechanism so that the mail-bag carried by the discharge plate 15 will be thrown through the open door of the car into the car, and with sufficient force to throw it well over into the car, as indicated in Fig. 3, so that there is absolutely no possibility of its being swept out of the car by the suction created by the fast moving train. In the meanwhile the incoming mail-bag suspended from one of the fingers 10 moves into the rack, and as said rack assumes the inclined position shown in Fig. 2 the further movement of the car will act to draw the bag into the rack and the finger 10 will yield owing to the spring 9 and the incoming bag will be left in the rack as the train passes on. Owing to the flaring construction of the racks the bag will be wedged in the rack and there will be no liability of its being dragged therefrom by the moving car, and it is securely held therein so that there is no danger of its falling from said rack and being carried beneath the wheels of the train.

I have provided a very simple and efficient form of apparatus by means of which the outgoing mail bag is discharged with great accuracy through the open door of the car, and at the same time the incoming bag is received in the rack without danger of falling therefrom and as the parts composing the mechanism are few in number and of simple form. The device is not liable to get out of order and has many advantages over the form of apparatus now commonly in use.

What I claim is:

1. In apparatus of the character described, the combination with a suitable support, of a spring actuated discharge member, a tongue on said discharge member, a rocking-frame, a bar carried by said frame, said bar adapted to engage said tongue, and means for

moving said bar longitudinally to release said discharge member by the moving car.

2. In apparatus of the character described, the combination with a suitable support, of a spring actuated discharge, a rocking frame adapted to engage said discharge member, a rack carried by said rocking frame, and a projection on the car adapted to engage said rack to operate said rocking frame and release said discharge member.

3. In apparatus of the character described, the combination with a suitable support, of a spring actuated discharge member, a rocking-frame adapted to engage said discharge member, a rack carried by said rocking-frame, and a trip device carried on the car in the path of said rocking frame.

4. In a device of the character described, the combination with a suitable support, of a spring actuated discharge-plate, a rocking-frame adapted to engage said discharge-plate, a rack carried by said rocking-frame, a projection on the car adapted to engage said rocking-frame to release said discharge member, and a yieldingly mounted projection on the car from which the bag is suspended.

5. In a device of the character described, the combination with a suitable support, of a spring actuated discharge member, a rocking frame adapted to engage said member, a projection on the car in the path of said rocking frame to release said spring actuated member, a yielding support on said car from which the bag is suspended, and a rack carried by said rocking frame, said rack being narrower at the top than at the bottom.

6. In apparatus of the character described, the combination of a suitable support, of a spring actuated discharge member, a rocking frame adapted to engage said member, a rack carried by said rocking frame, an arm projecting out from the car, a spring actuated finger carried by said arm supporting the bag.

7. In apparatus of the character described, the combination of a rack narrower at the top than at the bottom, and a yielding projection on the car adapted to support the bag.

In testimony whereof, I the said WILLIAM H. AKENS have hereunto set my hand.

WILLIAM H. AKENS.

Witnesses:

ROBERT C. TOTTEN,
JOHN F. WILL.