No. 886,832. PATENTED MAY 5, 1908.

G. J. MEIER.

MAIL BAG CATCHER AND DELIVERER.

APPLICATION FILED FEB. 26, 1908.

Fig. 1.

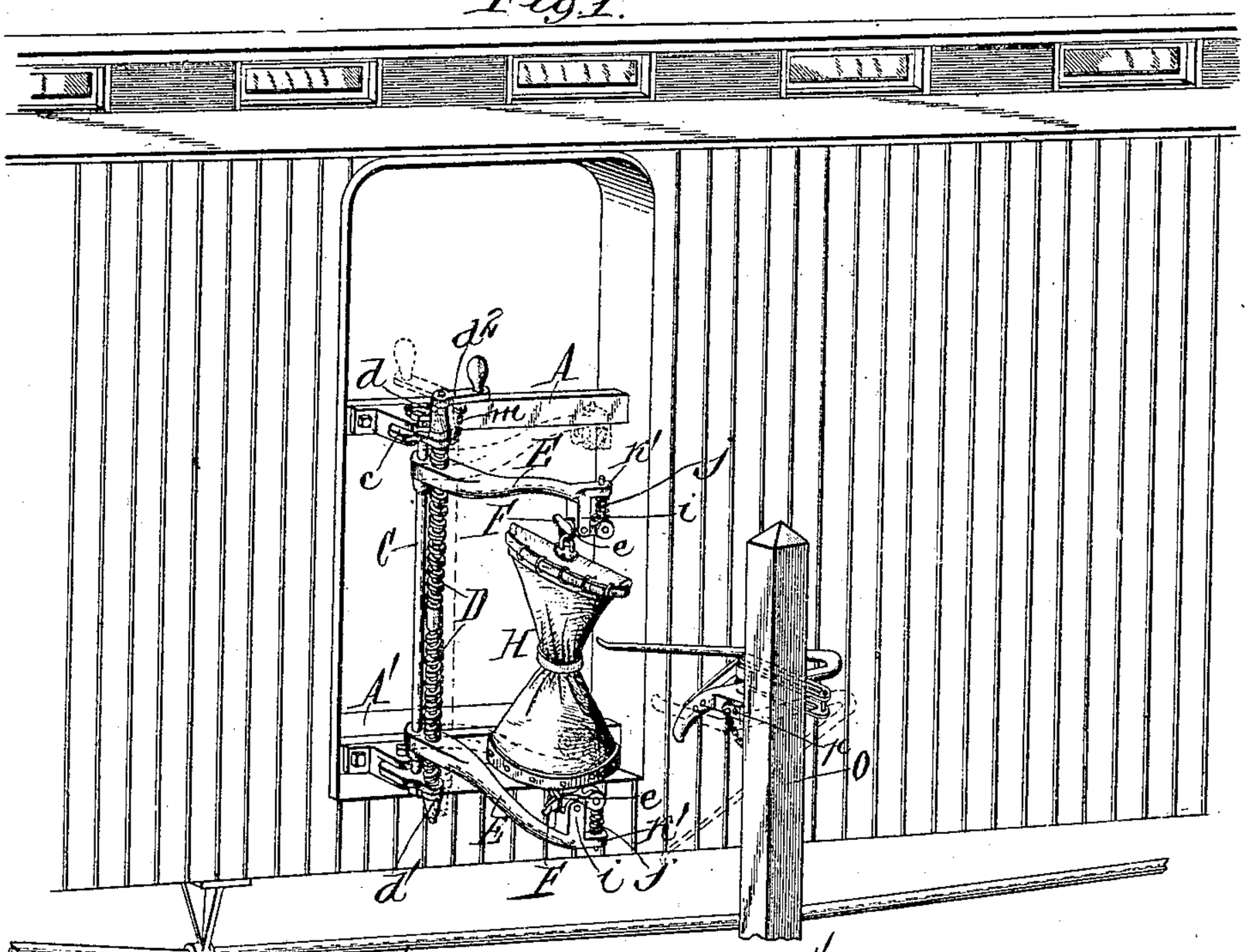


Fig. 2.

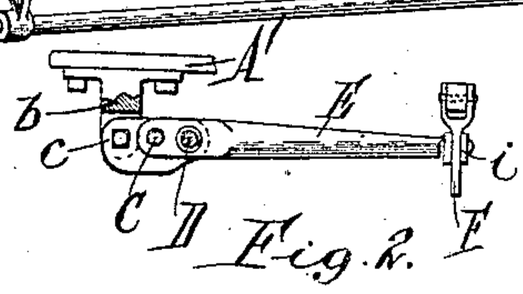


Fig. 3.

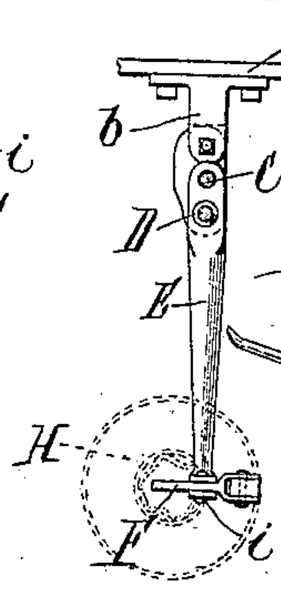


Fig. 4.

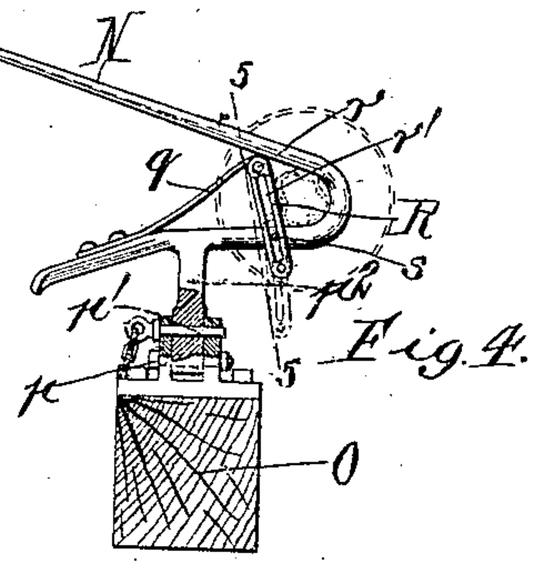


Fig. 6.

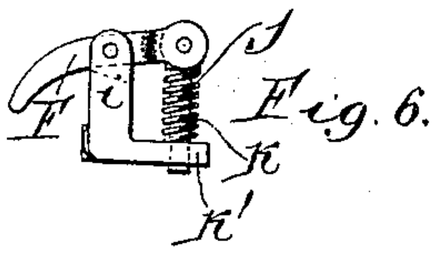


Fig. 5.

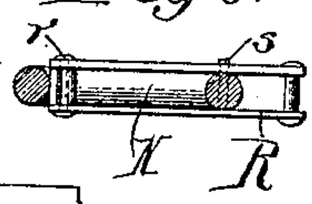


Fig. 7.

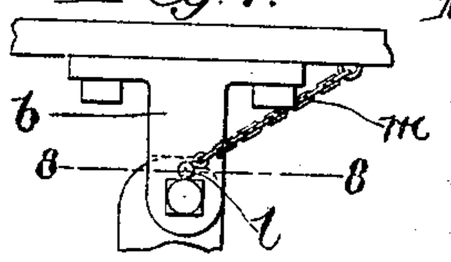
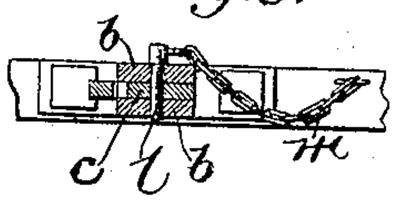


Fig. 8.



Witnesses:
Richard Sommer.
Gustav W. Hoss.

George J. Meier, Inventor.
by Geyer & Popp
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE J. MEIER, OF BUFFALO, NEW YORK.

MAIL-BAG CATCHER AND DELIVERER.

No. 886,832. Specification of Letters Patent. Patented May 5, 1908.

Application filed February 26, 1908. Serial No. 417,933.

To all whom it may concern:

Be it known that I, GEORGE J. MEIER, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Mail-Bag Catchers and Deliverers, of which the following is a specification.

This invention relates to an improved mail-bag catching and delivering apparatus.

One of its objects is to so construct the bag-holding or supporting devices that they can be readily adjusted to accommodate mail-bags of different lengths.

Another object is to improve the construction of the catches which engage the ends of the bag.

A further object is to provide the customary bag-catching arm with a reliable detent device of simple construction for retaining the bag in the same.

In the accompanying drawings: Figure 1 is a fragmentary perspective view of a mail-car and a track-standard equipped with the improved apparatus. Fig. 2 is a horizontal section of the bag-holding device taken between its upper and lower supporting arms, showing the device in its folded position. Fig. 3 is a similar section, showing the device unfolded to its operative position. Fig. 4 is a top plan view, partly in section, of the catching-arm, the standard being shown in section. Fig. 5 is a transverse section of the catching arm, in line 5—5, Fig. 4, on an enlarged scale. Fig. 6 is an enlarged end view of the lower arm of the bag-supporting device. Fig. 7 is a fragmentary top plan view of the bag-supporting device, on an enlarged scale, showing the means for locking it in its operative position. Fig. 8 is a transverse vertical section in line 8—8, Fig. 7.

Similar letters of reference indicate corresponding parts throughout the several views.

Referring to the bag-supporting devices, they are supported upon fixed upper and lower cross-pieces A, A^1, extending across the door-opening of the car. Projecting forwardly from these cross-pieces are a pair of lugs *b* to which are pivoted horizontally-swinging arms or brackets *c* which carry an upright guide-rod C which is rigidly secured thereto. In the outer ends of these brackets a right and left-hand screw D is journaled, the same being held against endwise movement therein by collars or shoulders *d*, *d*^{1} and provided at its upper end with a crank *d*^{2} or other suitable means for turning it.

E, E indicate a pair of bag-supporting arms slidably mounted at their inner ends on the guide-rod C and provided in front of the latter with screw-threaded openings with which the corresponding right and left-hand threads of the screws D engage, whereby upon turning the screw in one or the other direction, the arms are caused to approach or receded from each other in an obvious manner. At their outer ends, the bag-supporting arms are provided with catches or fingers F adapted to engage eyes or loops *e* at the ends of the bag or pouch H. In their preferred construction, these catches consist of vertically-swinging levers pivoted centrally of lugs *i* of the arms E and yieldingly held in engagement with the eyes of the bag by springs *j*, the spring of the upper catch tending to swing its finger upward and the spring of the lower catch tending to swing its finger downward. These springs surround rods *k* pivoted at their inner ends to the rear arms of the catch-levers and guided at their outer ends in lateral ears *k*^{1} at the outer ends of the bag-supporting arms E. The fingers are curved upward and downward respectively, to prevent accidental detachment of the bag therefrom. This construction permits the bag-supporting arms to be readily adjusted to mail-bags of different lengths, by the simple operation of turning the adjusting screw D in the proper direction, no clamping devices or other additional means being required to hold the arms in their adjusted position.

The swinging brackets *c* permit the bag-supporting arms to be unfolded to the operative position shown by full lines in Figs. 1 and 3, or to be folded into the door-openings substantially parallel with the car, when not required for use, as shown in Fig. 2 and by dotted lines in Fig. 1. The bag-supporting arms may be locked in either of these positions by any suitable means. The preferred device consists of a pin *l* removably inserted in holes formed in the upper lug *b* and the adjacent bracket *c*, as shown in Figs. 7 and 8, this pin being connected with the upper cross-piece A by a chain *m* to prevent loss of the same.

N indicates the bag-catching arm, preferably having the usual V-shaped form, and supported on a track-standard or post O at the proper height to intercept and catch the

mail-bag held between the extended bag-supporting arms E, the bag entering the bight of the catching-arm and being stripped from the catches F in a manner common to this class of devices. The catching arm is preferably hinged to the post by a horizontal pivot p, so that it can be swung down out of the way when not in use, as shown by dotted lines in Fig. 1. It may be locked in its normal horizontal position by a pin p^1 passing through holes in its supporting bracket and the lateral arm p^2 of the carrying arm in front of its pivot.

A detent spring q extends across the mouth of the catching arm for retaining the mail-bag therein. This spring is secured at its outer end to one side or branch of the arm and extends obliquely to the other branch with which it forms a V-shaped throat leading to the bight of the arm. To the inner free end of this spring is pivoted a detent link R, as shown at r which normally extends across the arm, so as to retain the contracted waist of the mail-bag in the bend of the arm. This link is composed of upper and lower bars straddling the inner branch of the arm and each having a longitudinal slot r^1 through which passes a pin s secured to said branch. This link also forms a guide for the free end of the detent spring q. When the bag strikes this spring, the latter is deflected aside to the dotted position shown in Fig. 4, and as soon as the bag clears the spring, the link R is returned to its inner position in which it extends across the rear side of the bag, holding it in the catching arm.

While the mail-supporting devices are herein shown as carried by the car, and the mail catching arm as carried by a track-post, the arrangement of these two elements may obviously be reversed, without departing from my invention.

I claim as my invention:—

1. A mail delivery apparatus, comprising a pair of bag-supporting arms movable toward and from each other, and an adjusting screw engaging said arms, substantially as set forth.

2. A mail delivery apparatus, comprising a pair of bag-supporting arms, a right and left hand adjusting screw for said arms, and means for rotating the screw; substantially as set forth.

3. A mail delivery apparatus comprising a guide, a pair of bag-supporting arms slidable on said guide, and a right and left hand adjusting screw engaging said arms, substantially as set forth.

4. A mail delivery apparatus comprising brackets, a guide rod carried by the same, a pair of bag supporting arms slidably mounted on said rod, and a right and left-hand adjusting screw journaled in said brackets on the front side of said guide rod and engaging said supporting arms, substantially as set forth.

5. A mail delivery apparatus comprising a support, foldable brackets pivoted to said support, a guide rod carried by said brackets, bag-supporting arms slidable on said rod, and a right and left hand adjusting screw engaging the bag-supporting arms, substantially as set forth.

6. In a mail delivery apparatus, a bag-supporting arm having a catch adapted to engage a mail-bag, said catch consisting of a lever pivoted between its ends to said supporting arm, a rod guided on said arm and pivoted to the rear arm of said lever, and a spring applied to said rod and bearing at its ends against the supporting arm and said lever respectively, substantially as set forth.

7. In an apparatus of the character described, a bag-catching arm having a detent spring secured to one side thereof, a slotted link pivoted to the free end of the spring and extending across the bight of the arm, and a pin secured to the arm and engaging the slot of the link, substantially as set forth.

Witness my hand this 22d day of February, 1908.

GEORGE J. MEIER.

Witnesses:
C. F. GEYER,
ANNA HEIGIS.