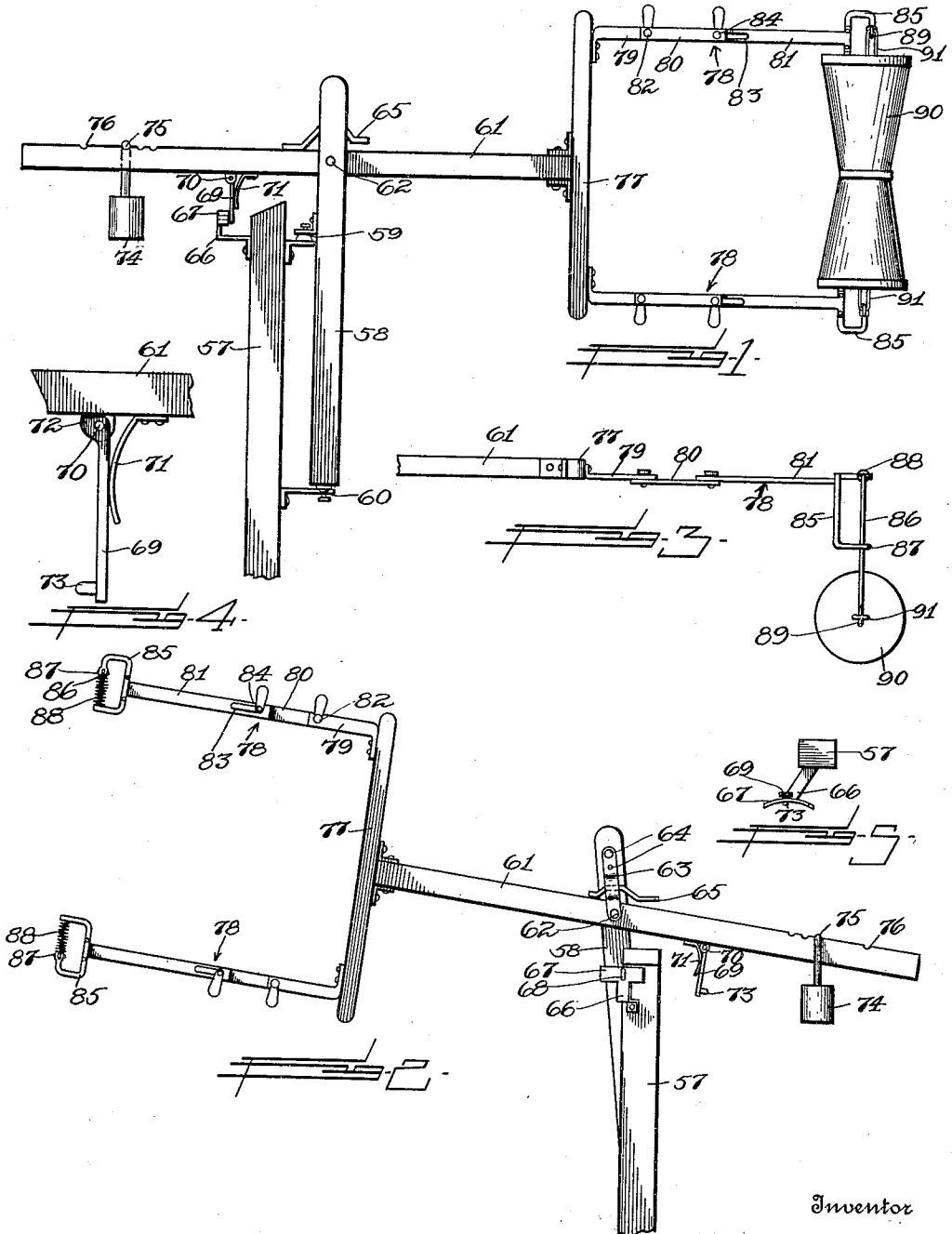
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MAIL BAG DELIVERY APPARATUS.

APPLICATION FILED MAY 26, 1913.

1,067,473.

Patented July 15, 1913.



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MAIL-BAG-DELIVERY APPARATUS.

1,067,473. Specification of Letters Patent. Patented July 15, 1913.

Original application filed April 22, 1913, Serial No. 762,770. Divided and this application filed May 26, 1913. Serial No. 769,902.

To all whom it may concern:

Be it known that I, GEORGE N. DOUTTIEL, a citizen of the United States, residing at Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Mail-Bag-Delivery Apparatus, of which the following is a specification.

The subject matter of this invention is shown but not claimed in my pending application for mail bag handling apparatus, filed April 22, 1913, Serial No. 762,770, of which the present application is a division.

The present invention relates to mail bag delivery apparatus and has particular reference to means of this character which are adapted to detachably hold the mail bag in the desired position, and will automatically swing away from the track upon the removal of the mail bag therefrom.

An important object of this invention is to provide means of the above mentioned character, which are simple in construction, strong, durable and automatic in operation.

Other objects and advantages of this invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same, Figure 1 is a side view of the delivery apparatus, Fig. 2 is a similar view taken at right angles to the showing in Fig. 1, the mail bag holding arm being swung around at a right angle to the position shown in Fig. 1, Fig. 3 is a plan view of the inward end of the mail bag holding arm and associated elements, Fig. 4 is an enlarged side view of the pivoted latch included in the apparatus, and, Fig. 5 is a plan view of the upstanding post included in the apparatus showing the stationary element of the latch.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 57 designates an upstanding post. The numeral 58 designates an upstanding support or bar, which is pivotally connected with the post 57 to swing in a horizontal plane, by means of hinges 59 and 60, the hinge 60 having its pivot point disposed at a much greater distance from the post 57 than that of the hinge 59, whereby when the support 58 and associated elements are released, they automatically swing laterally away from the track and with relation to the post 57.

Disposed upon one side of the support 58 is a horizontal arm 61, which is pivotally connected therewith to swing in a vertical plane by means of a transverse bolt 62, which also passes through a bracket 63, which is rigidly connected at its upper end with the support 58, as shown at 64. The vertically swinging movement of the arm 61 in both directions is positively limited by an approximately U-shaped bracket 65, which is rigidly connected with the support 58 by any suitable means, the same being preferably arranged within the bracket 63. Rigidly connected with the upper end of the post 57 and upon the opposite side thereof with relation to the hinges 59 and 60, is a bracket 66, provided at its upper end with a horizontal head 67 having an upstanding slot 68 formed therethrough.

The numeral 69 designates a depending latch, which is pivotally connected with the arm 61, as shown at 70, and is swung in one direction by a leaf spring 71, attached to the arm 61, as shown. The latch 69 is provided at its upper end with a laterally extending head 72, which engages the arm 61 to positively prevent the latch 69 being swung laterally beyond a given point in one direction. At its lower end the depending latch 69 carries a laterally extending bolt 73, the end of which is tapered or rounded. The bolt 73 is adapted for insertion within the opening 68 of the head 67.

The numeral 74 designates a counterweight, which is adjustably mounted upon the outer or free end of the arm 61, the same being provided with a hook 75, adapted for insertion within transverse grooves 76, formed upon the upper surface of the arm 61. Rigidly connected with the forward or inner end of the arm 61 is an upstanding tranverse bar 77, to which are rigidly connected forwardly extending horizontal arms 78. Each of the arms 78 is preferably formed in a plurality of sections 79, 80 and 81. The section 80 is pivotally connected with the section 79 by means of a clamping bolt 82, whereby the section 80 may be vertically angularly adjusted. The section 81 is provided with an elongated slot 83, to receive a clamping bolt 84 carried by the section 80, whereby the section 81 may be longitudinally and angularly ad-

justed, when desired. Rigidly connected with the outer sections 81 are approximately L-shaped brackets 85, with which are pivotally connected normally horizontal holding fingers 86, as shown at 87. The inner ends of these holding fingers are connected with retractile coil springs 88, which are connected with the opposite ends of the approximately L-shaped brackets 85. It is obvious that these springs 88 tend to swing the outer curved ends 89 of the holding fingers 86 apart.

The numeral 90 designates a mail bag, of the type that is provided with a contracted central portion. At its opposite ends the mail bag 90 carries rings 91, to be placed upon the curved ends 89.

The operation of the apparatus is as follows:—When the mail bag is removed from the holding fingers 86, the counter-weight 74 will at once swing the arm 61 in a vertical plane to move the mail bag holding end of the arm upwardly, whereby the tapered or rounded end of the bolt 73 will engage the end wall of the openings 68 and be thereby moved out of the opening. As soon as this takes place, owing to the location and arrangement of the pivot points of the hinges 59 and 60 at different distances from the post 57, the arm 61 and associated elements will automatically swing laterally in a horizontal plane away from the track and remain in that position until reset.

It is to be understood that the form of my invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:—

1. In apparatus of the character described, the combination with an upstanding post, of an upstanding support having hinged connection therewith to automatically swing in one direction in a horizontal plane upon being released, an approximately horizontal arm pivoted to the upstanding support to swing in a substantially vertical plane with relation thereto, means for detachably connecting a mail bag with one end of the approximately horizontal arm, latch means adapted to be disconnected upon the swinging movement of the approximately horizontal arm to elevate the mail bag connecting means, and a weight connected with one end of the approximately horizontal arm to swing the same downwardly upon the removal of the mail bag.

2. In apparatus of the character described, the combination with an upstanding post, of an upstanding support hinged thereto to automatically swing in a horizontal plane in one direction upon being released, an approximately horizontal arm pivoted to the upstanding support to swing in a substantially vertical plane and having its rear end weighted to swing the forward end thereof upwardly, mail bag attaching means connected with the forward end of the arm, a latch element connected with the rear end of the arm, and a co-acting latch element connected with the upper end of the post.

3. In apparatus of the character described, the combination with an upstanding post, of an upstanding support hinged thereto to automatically swing in one direction in the horizontal plane upon being released, an arm pivotally connected with the upstanding support to be swung in a substantially vertical plane, means to positively limit the vertical swinging movement of the arm in both directions, means detachably connecting a mail bag to one end of the arm, a weight to swing the arm in a vertical plane, and a latch normally holding the arm from swinging movement in a horizontal plane and being released upon the upward movement of that end of the arm carrying the mail bag connecting means.

4. In apparatus of the character described, the combination with an upstanding post, of an upstanding support having hinged connection therewith to automatically swing in one direction in a horizontal plane upon being released, an arm pivotally connected with the upstanding support and being counter-weighted to swing in a substantially vertical plane, means to limit the vertical swinging movement of the arm in both directions, mail bag connecting means carried by the light end of the arm, a bracket connected with the upper end of the upstanding post provided with an elongated slot, a latch pivotally connected with the arm and carrying a laterally extending pin adapted for insertion within the elongated slot, and a spring carried by the arm and engaging the pivoted latch.

5. In apparatus of the character described, the combination with an upstanding post, of an upstanding support having hinged connection therewith to automatically swing in one direction in a horizontal plane upon being released, an arm pivotally connected with the upstanding support and being counter-weighted to swing in a substantially vertical plane, mail bag connecting means carried by the light end of the arm, a bracket connected with the upper end of the upstanding post provided with an elongated slot, a latch pivotally connected with the arm and carrying a laterally extending pin adapted for insertion within the elongated slot, and a spring carried by the arm and engaging the pivoted latch.

6. In apparatus of the character described, the combination with an upstanding post,

of an upstanding support hinged thereto to swing in a substantially horizontal plane, an arm pivotally connected with the upstanding support to swing in a substantially vertical plane with relation thereto, a bracket attached to the upper end of the upstanding support and provided with a vertically-elongated slot, a depending latch pivotally connected with the arm and provided at its lower end with a laterally extending pin having its free end tapered and adapted for insertion within the elongated slot, a leaf spring carried by the arm and engaging the depending latch, and means to positively prevent the leaf spring from moving the latch in one direction beyond a certain point with relation to the arm.

7. In apparatus of the character described, the combination with an arm, a transverse bar connected therewith, and extensible and angularly adjustable mail bag connecting arms connected with the ends of the transverse bar.

8. In apparatus of the character described, the combination with a support, of mail bag connecting arms attached to the opposite ends of the support, each mail bag connecting arm comprising a plurality of sections which are pivotally connected to be angularly adjusted with relation to each other, one section being provided with an elongated slot to receive the pivot means whereby such section may be longitudinally adjusted in addition to its angular adjustment.

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

GEORGE N. DOUTTIEL.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."