

R. S. VEACH.
MAIL BAG CATCHER.
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1,014,678.

Patented Jan. 16, 1912.

FIG. 1

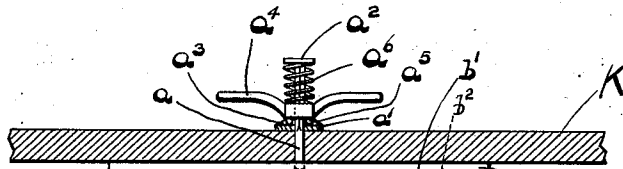


FIG. 2

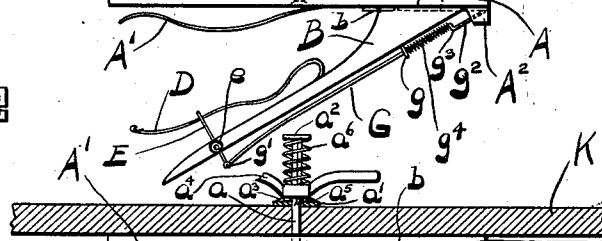


FIG. 3

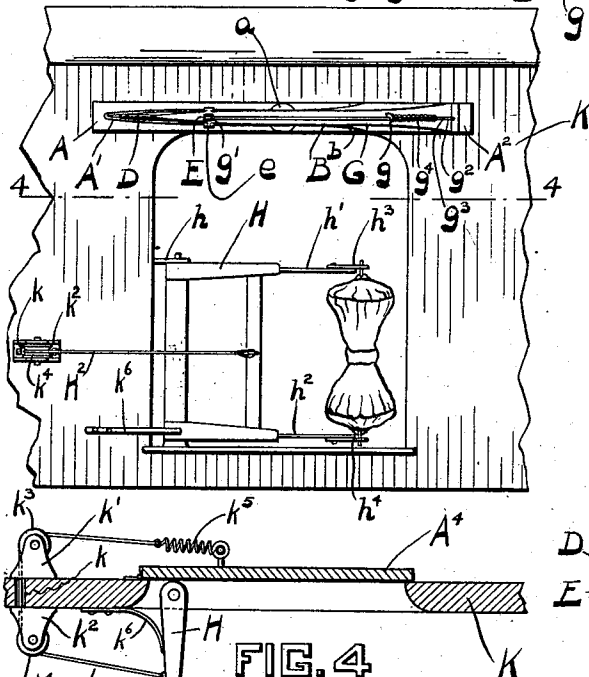
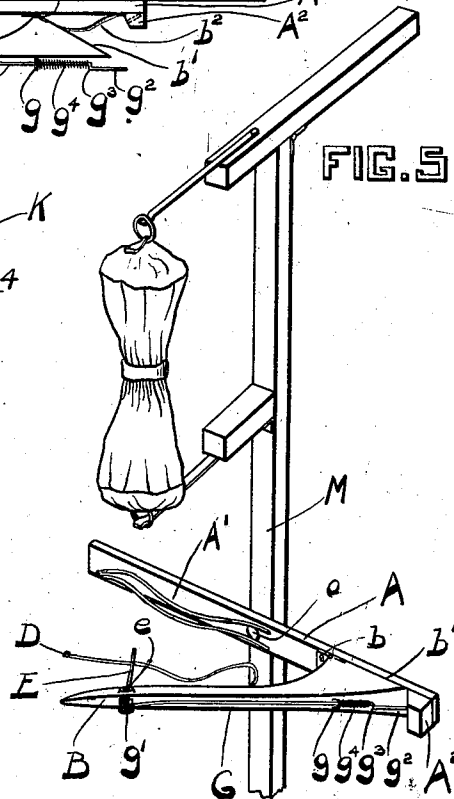


FIG. 4

FIG. 5



Witnesses

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MAIL-BAG CATCHER.

1,014,678.

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To all whom it may concern:

Be it known that I, RICHARD S. VEACH, a citizen of the United States of America, and resident of Walton, county of Boone, and State of Kentucky, have invented certain new and useful Improvements in Mail-Bag Catchers, of which the following is a specification.

10 An object of my invention is a mail bag catcher, whose gripping action is quick and accurate.

Another object of my invention is a mail bag catcher which may readily be turned and locked in either direction.

15 Another object of my invention is a support for holding the bag on the mail car, which is swung to and from its operative position by the movement of the car door.

20 These objects are attained by the means described in the specification, and illustrated in the accompanying drawings, in which:

Figure 1 is a plan view of a mail bag catcher, embodying my invention, in its receiving position. Fig. 2 is a similar view, but showing the mail catcher in its sprung position. Fig. 3 is an elevation of a part of the mail car, showing the mail catcher and the bag supporting frame in elevation. Fig. 4 is a sectional view taken upon line 4-4 of Fig. 3. Fig. 5 is a perspective view of a crane with a mail bag catcher embodying my invention mounted thereon.

Referring to the parts: The mail bag catcher embodying my invention consists of a base plate A, which is pivoted to the car K or the crane M, a bag receiving arm B, upon which is a bag receiving hook D, a bag operated trigger arm E, and a lock bolt or rod G, for holding the arm B in the path of the bag to be received, until the arm is released by the bag's striking the trigger arm E. Base plate A is pivoted to the car K by a rotatory bolt a , which passes through the side of the car and through a plate a' , which is secured to the car and terminates in a head a^2 . Plate a' has in it a diametrical groove a^3 . Splined upon the bolt a is a crank a^4 , which has a diametrical lug a^5 to engage the diametrical groove a^3 in the plate. Between the crank a^4 and the head a^2 is a coiled spring a^6 , which tends normally to press the lug a^5 into the groove a^3 . By grasping the crank a^4 , drawing the lug a^5 out of its notch a^3 , bolt a may be rotated, thereby rotating the base plate A. When the rotation has been carried through 180

degrees, the lug a^5 , taking into the groove a^3 , will lock the base plate in its new position, which is that of 180 degrees distance from its former position. Base plate A has upon it a spring arm A' , and at its end has a buffer-lug A^2 , which has a bore for receiving the end of the rod G. Arm B is connected to the base plate by a hinge b , which is located upon the base plate at a distance from the buffer-lug A^2 , equal to the width of the contact face b' of the arm. Between the contact face b' and the base plate A, is a leaf spring b^2 , which tends normally to press the contact face b' away from the base plate A and to carry the opposite end of the arm B toward the base plate. Hook D is secured to the inner side of the arm B, and with its end forming with the end of the arm a mouth for the reception of the bag. Trigger arm E is pivoted at e upon the arm B, adjacent to the mouth of the hook. Rod G passes through an eye or staple g , upon the front of the arm B, is pivoted at one end g' to the trigger arm E, and at its opposite end g^2 is adapted to enter the bore in the buffer-lug A^2 . The rod G has an offset g^3 , between which and the staple g , is a coiled spring g^4 , which tends normally to hold the end g^2 in the bore of the buffer-lug.

In the operation of this bag catching apparatus, as soon as the bag enters the mouth of the hook, which is standing in the position shown in Fig. 1, it strikes the trigger arm E, throws it rearward, draws the rod G out of contact with the buffer-lug A^2 , the spring b^2 throws the arm B toward the train immediately. The bag having passed the trigger arm E, it immediately is thrown back to its normal position, across the mouth, by the spring g^4 . The bag is thus immediately gripped between the hook D, the arm B and the trigger arm E. When the arm B strikes the base plate, the spring arm A' further supports and holds the bag.

I will now describe the means of mounting the bag which is to be delivered from the car. A frame H is pivoted between a bracket plate h and the bottom of the door frame. Frame H has outwardly projecting arms h' h^2 , which have spring jaws h^3 h^4 , which engage the rings upon the bag. In the rear of the hinges of the car door A^4 , a cable hole h is formed in the walls of the car, adjacent to which are mounted pulley frames h' h^2 , which carry pulleys h^3 h^4 . A

cable H² is secured to the frame H, passes over the pulleys k³ k⁴, and is secured upon the interior of the door A⁴, preferably by means of a coiled spring k⁵. A leaf spring k⁶ is secured to the side of the car and bears at its free end against the frame H, thereby tending normally to swing the frame toward the car door. When the car door A⁴ is swung open, the tension of the spring k⁵ is released and the weaker spring k⁶ swings the frame H in toward the door, where the mail bag may be easily mounted upon the receiving jaws h³ h⁴. When the car door A⁴ is closed, the cable and the spring k⁵ draw the frame H outward, so as to carry the bag into the path of the mail catcher, upon the crane M.

What I claim is:

1. In a mail bag catcher, the combination of an arm hinged to the side of a mail car, a mail receiving hook secured to the arm, a bolt mounted upon the arm and in its normal position adapted to hold the arm at an angle outward from the car, a spring holding the bolt in its normal position, and a trigger arm pivoted to the arm and to the bolt and normally held by the bolt across the mouth of the hook.

2. In a mail bag catcher, the combination of a base plate, an arm hinged to the base plate, a mail receiving hook secured to the arm, a bolt mounted upon the arm and adapted to engage the base plate and to hold the arm normally at an angle to the base plate, and a trigger arm pivoted to the arm and to the bolt and normally held by the bolt across the mouth of the hook.

3. In a mail bag catcher, the combination of an arm hinged to the side of the car, a spring secured to the car and normally tending to throw the arm in toward the car, a mail receiving hook secured upon the inner side of the arm, a spring pressed bolt mounted on the arm and in its normal position adapted to hold the arm at an angle to

the car against the pressure of the first-named spring, a bag-contacting trigger arm pivoted to the arm and to the bolt and normally held by the bolt across the mouth of the hook, whereby when a bag strikes the trigger arm it releases the bolt and puts the arm under the domination of the first-named spring.

4. In a mail catcher, the combination of a base plate, a support for the base plate, a pivot bolt mounting the base plate rotatably upon its support, means carried by the bolt for locking the base plate in diametrically opposite directions, an arm hinged to the base plate, a mail receiving hook secured upon the arm, and a spring arm secured upon the base plate and cooperating with the mail receiving hook to hold a bag upon the arm.

5. The combination of a mail car having a swinging door, a frame pivoted in the door of the mail car, the pivot point of the frame being adjacent to the hinges of the door of the mail car, the walls of the mail car having an opening adjacent to the hinges of the door, a cable secured to the frame, passing through the opening and secured upon the inside of the car door, a spring tending normally to carry the frame toward the car door, and mail bag supporting arms mounted upon the frame.

6. In a mail catcher, the combination of a mail car, a base plate, a mail receiving hook mounted upon the plate, a rotatory bolt passing through the wall of the mail car, a detaining lug upon the bolt, a plate secured to the car and having a notch adapted to receive the lug, and a spring mounted upon the bolt and pressing the lug toward the notch.

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Witnesses:

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