R. L. SLAGLE. MAIL BAG CATCHER.

(Application filed Dec. 18, 1901.)

(No Model.) Inventor Robert L. Slagle.

UNITED STATES PATENT OFFICE.

ROBERT L. SLAGLE, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO THE AUTOMATIC RAILWAY MAIL POUCH DELIVERY COMPANY, OF WASHINGTON, DISTRICT OF COLUMBIA, A CORPORATION OF SOUTH DAKOTA.

MAIL-BAG CATCHER.

SPECIFICATION forming part of Letters Patent No. 708,930, dated September 9, 1902.

Application filed December 18, 1901. Serial No. 86,443. (No model)

To all whom it may concern:

Be it known that I, ROBERT L. SLAGLE, of Washington, in the District of Columbia, have invented certain new and useful Im-5 provements in Mail-Bag Catchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The primary object of this invention is to provide an improved simple and highly-efficient device for use in connection with mailbag catchers whereby a mail-bag properly positioned adjacent the railroad-track may be 15 effectively caught and held locked within the

catcher.

A further object is to provide such a device capable of ready attachment to and removal from the catchers now commonly used.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view showing my improvement at-25 tached to a mail-bag catcher. Fig. 2 is an end view showing a crane and the catcher engaging a mail-bag suspended therefrom. Fig. 3 shows a detail of the crane. Fig. 4 is a detail sectional view through the crotch of the 30 catcher.

In Letters Patent No. 693,167, dated February 11, 1902, and issued on an application of Edwin F. Pywell and myself, is shown and described an apparatus for automatically de-35 livering mail bags or pouches from a train in motion. In that patent is shown a pouch suspending a rope or chain, on the free end of which is a ball. A wheeled carrier mounted upon an overhead track arranged divergently 40 to the rails and provided with V-shaped jaws is designed to withdraw the bag from its support, the ball engaging and being held by the carrier from which the bag is suspended. My present invention contemplates the pro-45 vision of means for catching on a moving train a pouch held suspended by a chain and ball of the character pointed out in said patent.

Referring to the drawings, 1 designates the 50 catcher or fork of the type in general use at

the present time. It comprises inner and outer divergent arms 2 and 3, the former being secured to a sleeve 4 on a bar 5, mounted in bearings at either side of a car-door. By means of the handle 6 the carrier is turned to 55 project the outer divergent arm 3 into the plane of a bag or pouch suspended from a

crane adjacent the track.

7 designates a Y-shaped or forked attachment, the divergent arms 8 and 9 thereof be- 60 ing bent near their crotch to form parallel jaws, between which the rope or chain secured to the bag is designed to be caught. Projecting from the inner end of the crotch is a bifurcated extension 10, which sandwiches 65 the crotch of the catcher, a bolt 12 being passed through the ends of the sides of the extension. A coil-spring 13 encircling the latter tends to normally hold the attachment in its outer position, the bolt 12 acting as a 70 stop to prevent detachment from the catcher. The arm 9 is bifurcated at its outer end to accommodate the arm 3 of the catcher, while the inner arm 8 may be held in any preferred manner. It is shown as having a ring 15, 75 surrounding the bar 5. It is necessary that this ring be sufficiently large to permit sliding on the bar.

16 designates a spring-held catch pivotally secured to one of the arms and designed to 80 normally close the space between the jaws. It is shown as being formed with a cam-surface, against which bears a plate-spring 17.

18 designates a crane on which the bag is suspended preparatory to its being caught by 85 the train and may be of any preferred construction. In order, however, to insure its effectively delivering the mail-bag suspended by rope 19 from ball 20, it is preferred that the beam 21 of the crane be provided with a 90 short extension 22, having an open-ended slot. By this means the pouch may be readily pulled from the crane in the direction in which the train is moving. It is obvious that where a single track is used two of these ex- 95 tensions may be oppositely disposed from the crane.

In practice, the bag being positioned on the crane, as shown in Fig. 2, upon the approach of the train the operator swings the catcher 100 out into position. As the chain is caught between arms 8 and 9 it is directed into the jaws and held as against rebounding by spring-catch 16. The space between the jaws is such as to permit the rope or chain to slip through, but being less than the diameter of the ball the bag is securely caught and held

suspended by the ball and chain.

When a train is moving at a high rate of 10 speed, the ordinary forked catcher contacts with a pouch with very great force. The result is that unless some resilient means be employed there is danger of destroying or injuring the various kinds of mail-matter which 15 the bag may contain. To overcome this difficulty, numerous contrivances have been devised; but so far as I am aware they have been lacking in the essentials of simplicity and durability, the presence of which is necessary 20 to adoption in the service. It is apparent that my invention fulfils these requirements. Not only is the device composed of but few parts unlikely to become deranged, but it may be employed in connection with the 25 catchers now commonly used without any additions to or modifications of the latter whatever. The device has sliding connections with the catcher, and its sliding movement as against the tension of the coil-spring be-30 ing in parallelism with the direction of movement of the train the jar with which the pouch is caught is reduced to a minimum. I claim as my invention—

1. The combination with a mail-bag catcher, of an auxiliary device for the purpose stated having a crotch, means holding such device to the catcher to allow of a limited independent movement thereof, said device having two divergent arms, and a spring between the catcher and the crotch of the auxiliary device, substantially as set forth.

2. The combination with a mail-bag catcher having a divergent arm, of an auxiliary device for the purpose stated, means yieldingly holding such device to the catcher to allow of a limited movement thereof, said device having divergent arms one of which is loosely secured to the catcher-arm, substantially as

set forth.

having divergent arms and an intermediate crotch, of an auxiliary device arranged between the arms of the catcher and also having divergent arms and an intermediate crotch, and a sliding connection between said device and the crotch of the catcher, substantially as set forth.

4. The combination with a mail-bag catcher having divergent arms and an intermediate.
60 crotch, of an auxiliary device arranged between the arms of the catcher and also having divergent arms and an intermediate crotch, and a bifurcated extension projecting from said latter crotch to accommodate the crotch of the catcher, substantially as set forth.

5. The herein-described mail-bag-catching apparatus comprising, in combination, a bar mounted on a car, a forked catcher having divergent arms, an auxiliary device arranged within said catcher and also having divergent 70 arms, and sliding connections between said latter arms and said bar and catcher, sub-

stantially as set forth.

6. The herein-described mail-bag-catching apparatus comprising, in combination, a bar 75 mounted on a car, a forked catcher having divergent arms, an auxiliary device arranged within said catcher, and also having divergent arms, one of said latter arms having a ring on its end, and the other bifurcated at its 80 outer end, designed, respectively, to slidingly engage the said bar, and the outer divergent arm of the catcher, substantially as set forth.

7. The herein-described mail-bag-catching apparatus comprising, in combination, a bar 85 mounted on a car, a forked catcher having divergent arms, an auxiliary device arranged within said catcher, and also having divergent arms, one of said latter arms having a ring on its end, and the other bifurcated at its 90 outer end, designed, respectively, to slidingly engage the said bar, and the outer divergent arm of the catcher, a bifurcated extension projecting from the crotch of said device and designed to accommodate the crotch of said 95 catcher, and a coil-spring encircling said extension, substantially as set forth.

8. The combination with a mail-bag having a rope or chain secured thereto, a ball on said rope or chain, of a catcher mounted on the 100 car, an auxiliary device arranged within said catcher and slidingly connected thereto, said auxiliary device having jaws between which said rope or chain is designed to be caught and by which said ball is designed to be sup- 105

ported, substantially as set forth.

9. The herein - described attachment for mail-bag catchers comprising a Y-shaped device designed to be removably positioned within such catcher and having sliding connections therewith, the arms of said device forming jaws, and a spring-catch for closing said jaws, substantially as set forth.

10. The herein-described attachment for mail-bag catchers comprising a Y-shaped de-115 vice designed to be removably positioned within such catcher and having sliding connections therewith, the arms of said device forming jaws, and a spring-catch for closing said jaws, said spring-catch having a cam 120 portion and a plate-spring bearing thereon, substantially as set forth.

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

ROBERT L. SLAGLE.

Witnesses:

GRAFTON L. MCGILL, FRANK S. MAGUIRE.