J. A. SCHINNER.

MAIL BAG CATCHER.

APPLICATION FILED DEC. 13, 1909.

950,870.

Patented Mar. 1, 1910.

2 SHEETS—SHEET 1.

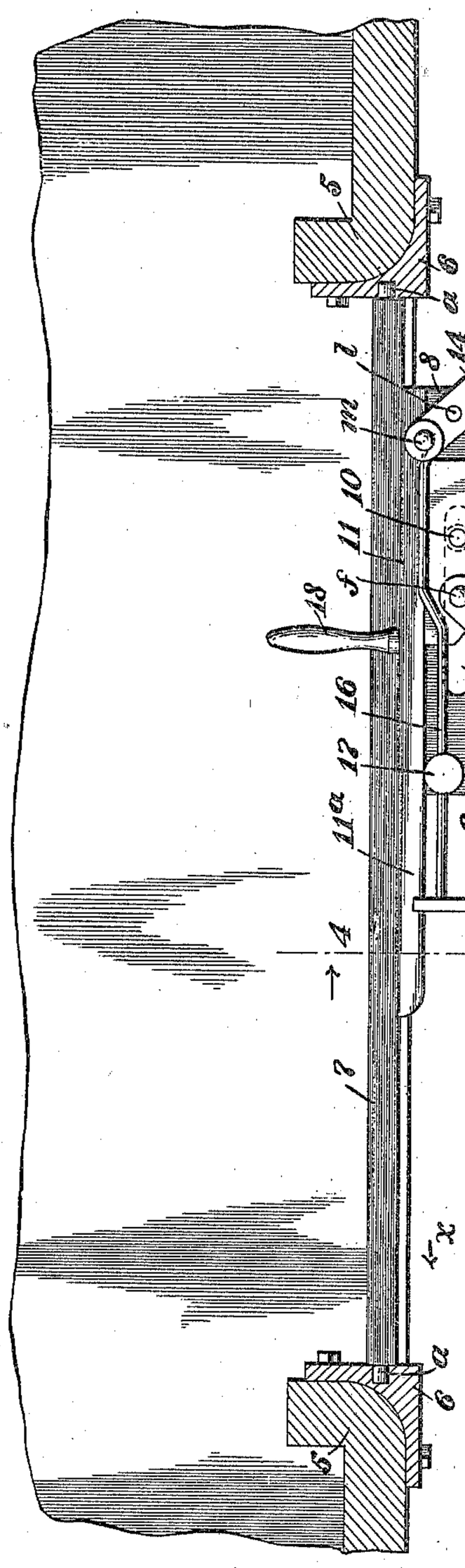

FIG. 1.

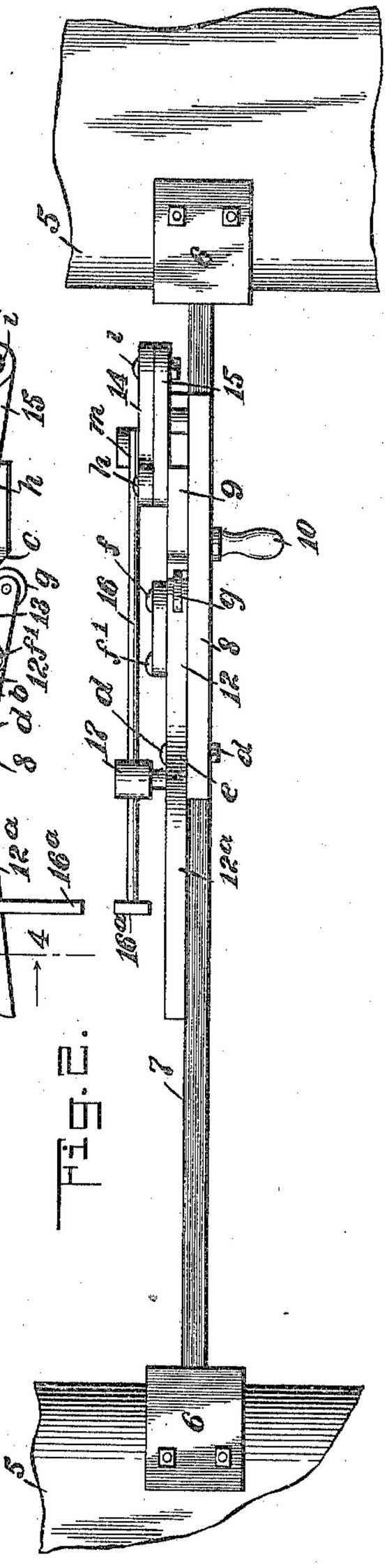

FIG. 2.

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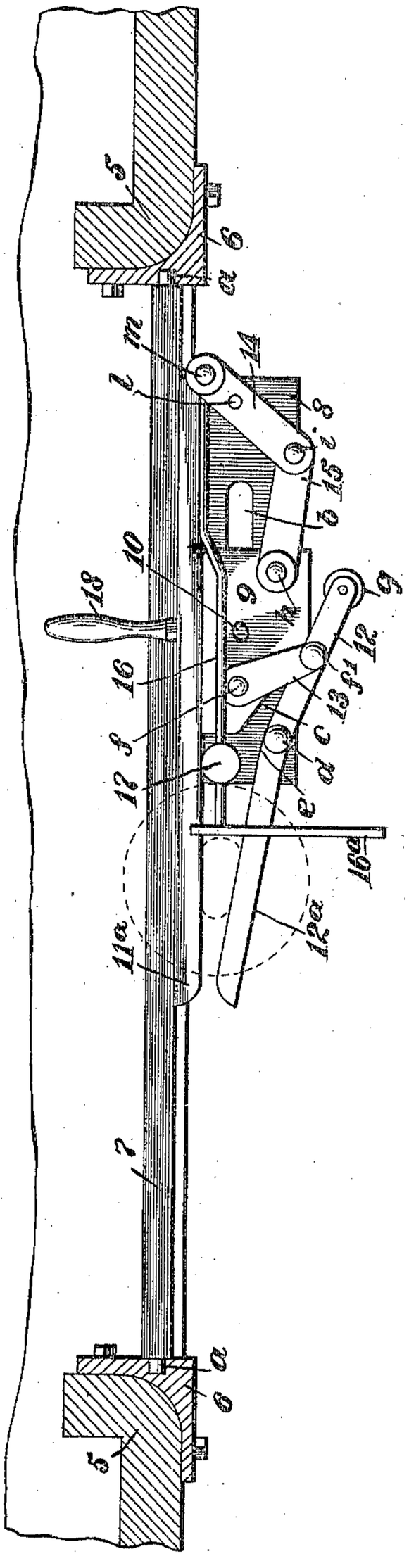

FIG. 5.

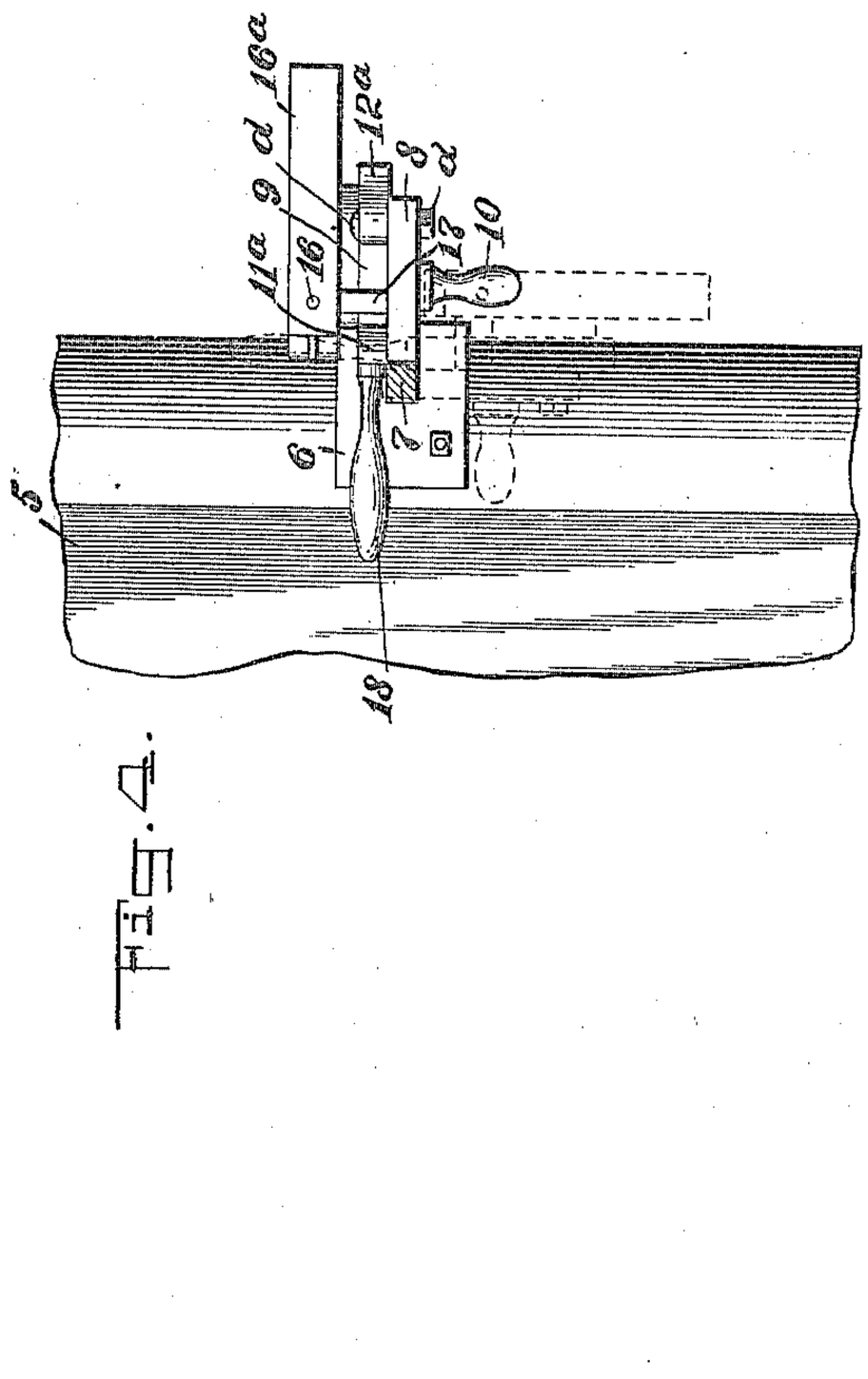

FIG. 4.

WITNESSES

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JOSEPH A. SCHINNER, OF GREENFIELD, OHIO.

MAIL-BAG CATCHER.

950,870. Specification of Letters Patent. Patented Mar. 1, 1910.

Application filed December 13, 1909. Serial No. 532,727.

To all whom it may concern:

Be it known that I, JOSEPH A. SCHINNER, a citizen of the United States, and a resident of Greenfield, in the county of Highland and State of Ohio, have invented a new and Improved Mail-Bag Catcher, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide novel details of construction for a mail bag catcher that adapt it for reliable service, either to catch a mail bag and deliver it at the open door of a mail car on a moving train, or transfer a mail bag from a train in motion to a station at the side of the track on which the train is moving.

The invention consists in the novel construction and combination of parts, as is hereinafter described and defined in the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a partly sectional plan view of a portion of a mail car, and a plan view of the improved bag catcher adjusted for grabbing a mail bag from a stationary support; Fig. 2 is a front view of the improvement in position on a car, the parts thereof being adjusted as shown in Fig. 1; Fig. 3 is a plan view of details similar to those shown in Fig. 1, but represented in closed adjustment, holding a mail bag indicated by dotted lines; and Fig. 4 is a transverse, partly sectional view of the bag catcher and a door jamb in part, the section being taken substantially on the line 4—4 in Fig. 1.

In the drawings, that represent the improvement mounted on the casement jambs of a doorway, in a side wall of a mail car body, 5, 5, indicate said jambs. At a suitable height from the floor of the car, two similar bracket blocks 6, 6, are secured oppositely on the jambs 5, 5. A rock shaft 7, having journaled ends *a*, *a*, is rockably secured on the blocks 6 by an engagement of said journals within sockets formed oppositely in said bracket blocks. Upon the normally outer side of the rock shaft 7, which is preferably rectangular in cross section, a base plate 8 is secured at a suitable point, that may be nearer one of the doorway jambs than the other.

In the base plate 8, a longitudinal slot *b* is formed, that is parallel with the rock shaft 7. A slide block 9 seats upon the base plate 8 and is loosely secured in place by a shouldered shank on a depending handle 10; said shank that passes up through the slot *b* at its upper end, is attached to said block, thus enabling the sliding movement of the slide block to be effected by manipulating the handle 10. On the base plate 8, between the rock shaft 7 and the slide block 9, an elongated jaw bar 11 is secured, against which the block 9 slides, and as shown, the bar 11 is extended at one end beyond the base plate, and forms a gripping jaw 11^a for the bag catcher. The outer corner on the slide block 9, that is nearest to the fixed jaw 11^a, is removed and an inclined edge portion *c* is thus formed thereon, as appears in Figs. 1 and 3. Upon the end portion of the base plate 8 that is adjacent to the rear end of the fixed jaw 11^a, a gripping jaw is pivoted, said jaw 12^a being formed on an obtuse angularly-bent bar 12 that is rockably secured upon the base plate by the pivot *d*, which passes loosely through a perforation in said bar at its angle *e* and is secured in the base plate near the side edge thereof which is farthest from the rock shaft 7.

The relative position of the bent bar 12, serves to dispose the gripping jaw 12^a thereon opposite to and spaced from the fixed jaw 11^a. The free end of the jaw bar 12, that is disposed near to the inclined edge *c* on the slide block 9, is provided with a small roller *g*, which contacts with said edge when the gripping jaw 12^a is rocked away from the fixed jaw 11^a, and it determines the degree of separation between said jaws.

Between the pivot *d* and roller *g*, one end of a link bar 13 is pivoted on the jaw bar 12, as shown at *f*; the other end of said link that laps upon the slide block 9 is thereon pivoted near the sloped edge *c* on the latter, as shown at *f'* in Figs. 1 and 3.

Upon the base plate 8 near the end portion of the fixed jaw bar 11 that is farthest from the jaw 11^a thereon, one end of a flat rock arm 14 is pivoted, as shown at *l*, and on the adjacent end portion of the slide block 9, near its outer edge, one end of a similar rock arm 15 is pivoted, as shown at *h* in Figs. 1 and 3, the remaining ends of said rock arms being lapped together and pivoted upon each other, as shown at *i* in said views. Upon the end of the rock arm 14, that is disposed above and near the jaw bar 11, one end of a pusher rod 16 is pivoted, as

shown at *m*, said rod extending toward and above the jaws 11ª, 12ª, and having slidable engagement with a post 17 through which it passes. On the end of the pusher rod 16 that is disposed above the gripping jaws 11ª, 12ª, an abutment arm 16ª is secured, which extends laterally therefrom and across the gripping arms.

A handle 18 is secured on the fixed jaw bar 11 at a convenient point, so as to project laterally therefrom and away from the side of said bar whereon the edge of the slide block 9 has loose contact. As shown in Figs. 1 and 4, if the handle 18 is raised into a horizontal position from the normally pendent one shown by dotted lines in Fig. 4, and the handle 10 is moved away from the jaws 11ª, 12ª, the slidable movement of the block 9 away from said jaws will cause the jaw 12ª to rock away from the fixed jaw 11ª its full throw and thus open a gap between said jaws, this divergence of the pivoted jaw 12ª being effected by the link bar 13, which pulls upon the jaw bar 12 when the slide block 9 is moved rightward. The roller *g* on the end of the jaw bar 12 only impinges upon the incline *c* when the pivoted jaw 12ª is nearly opened, and it will be noted in Fig. 2 that the impingement of said roller on the incline mentioned, serves to enforce the complete open adjustment of the pivoted jaw, and retains it in such condition until the slide block is moved away from the pivoted jaw. It will also be noted that the rock arms 14, 15, coöperate with the link bar 13, serving to retain the block 9 in free slidable engagement with the base plate 8.

When the handle 16 is rocked into a horizontal position, the catcher device will be projected out of the car door opening, and thus be disposed in the path of a mail bag that is supported in the usual manner at a railroad station, and adjacent to the track whereon the mail car is moved.

Assuming that the catcher device is properly adjusted into a level position, that the jaw 12ª is diverged from the jaw 11ª, and that the car having the improved catcher device is traversing the railroad track in the direction of the arrow *x* in Fig. 1, if a mail bag is supported removably by usual means, so as to be disposed in the path of the opened jaws 11ª, 12ª, the trend of the car will cause the mail bag to impinge against the abutment arm 16ª and slide the rod 16 toward the rock arm 14 whereon it is pivoted at its opposite end. The rock arms 14, 15, will thus be rocked into the relative positions shown in Fig. 3, which will adapt the arm 15 to push the slide block 9 leftward, thus rocking the link bar 13 into the position shown in said view, and simultaneously closing the free end of the gripping jaw 12ª toward the corresponding end of the fixed jaw 11ª. It will be seen that the closure of the arm 12ª as explained, will grip the mail bag and hold it, so that said bag will be removed from its stationary support and be in position for removal into the mail car.

It will be apparent that if the catcher device is placed on a support adjacent to a railroad track, a mail bag that may be hung on a horizontal arm extended parallel with the side of a mail car near the door therein, will be removed from said hook as the car rapidly passes the station, due to the impact of the bag on the abutment arm 16ª.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A mail bag catcher, embodying a supported rock shaft, a base plate thereon, a slide block controlled by a handle and reciprocal on the base plate, a fixed jaw on the base plate, a mating jaw pivoted on the base plate, and means controlled by the slide block adapted for rocking the pivoted jaw toward or from the fixed jaw.

2. A mail bag catcher, embodying a supported rock shaft, a base plate thereon, a slide block reciprocal on the base plate, a fixed jaw on the base plate, a mating jaw pivoted on said base plate and disposed opposite the fixed jaw, a link bar connecting the slide block and the pivoted jaw, and means controlled by the slide block adapted for closing the pivoted jaw when the slide block is moved toward said jaws.

3. A mail bag catcher, embodying a supported rock shaft, a base plate thereon, having a longitudinal slot therein, a slide block pivoted on the base plate through said slot, a fixed jaw on the base plate extended from one end thereof, a mating jaw pivoted on said base plate and disposed opposite the fixed jaw, a link bar pivoted at its ends on the rockable jaw and on the slide block, a rock arm pivoted on the base plate near one end of said arm, a similar rock arm pivoted by one end on the slide block, the remaining ends of said arms being pivoted together, and means engaging one rock arm and actuated by the impact of a mail bag, adapted for sliding the slide block and closing the pivoted jaw.

4. The combination with the side jambs of a car door opening, and bracket blocks secured thereon having sockets therein, of a rock shaft journaled on its ends which engage the sockets, a base plate thereon, a slide block reciprocal on the base plate, a fixed jaw on the base plate at one end thereof, a mating jaw pivoted on the base plate and disposed opposite the fixed jaw, a link bar connecting the pivoted jaw with the slide block, a pair of rock arms pivoted together at the lapped ends and respectively pivoted at the remaining ends on the slide block and base plate, a pusher rod, slidable on the base plate and pivoted by one end on

an end of one rock arm, and a transverse abutment arm on said rod.

5. The combination with the side jambs of a car door opening, and two bracket blocks secured thereon having opposite sockets therein, of a rock shaft journaled on its ends which engage the sockets, a base plate on the rock shaft, a slide block mounted on the base plate and having one outer corner removed forming a slope thereon, a fixed jaw on the base plate extended from one end thereof, an angularly-bent jaw disposed opposite the fixed jaw and having a roller on one member thereof that contacts with the sloped edge on the slide block when said pivoted jaw is fully diverged from the fixed jaw, means connecting the pivoted jaw with the slide block, and means actuated by the impact of a mail bag and adapted for closure of the pivoted jaw, thus gripping the bag between the fixed jaw and pivoted jaw.

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

JOSEPH A. SCHINNER.

Witnesses:
MARGARET WILLET,
BERTHA MIDDLETON.