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PATENTED FEB. 24, 1903.

F. M. EDWARDS.
MAIL CATCHER ARM.
APPLICATION FILED AUG. 11, 1902.

NO MODEL.

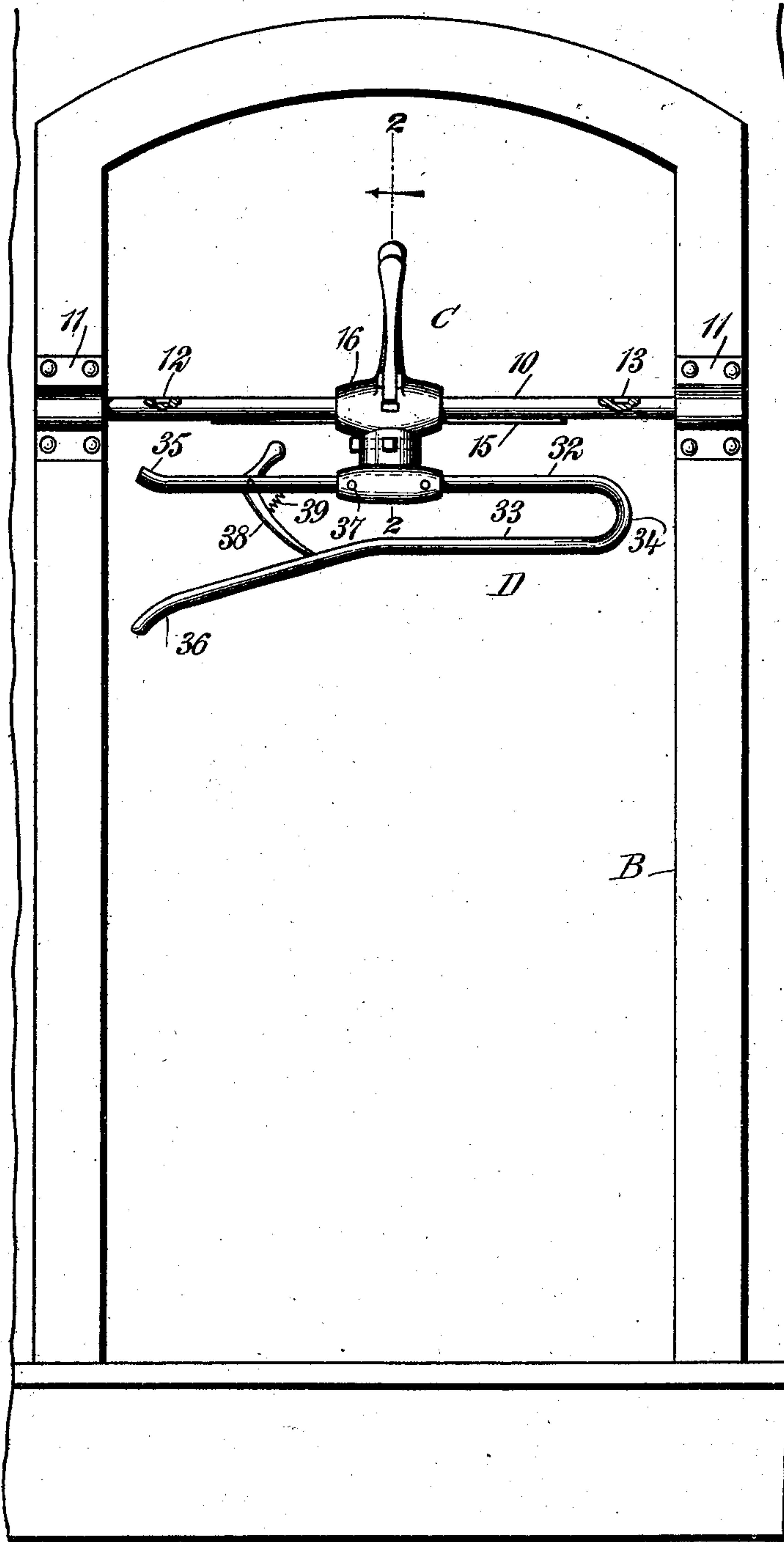
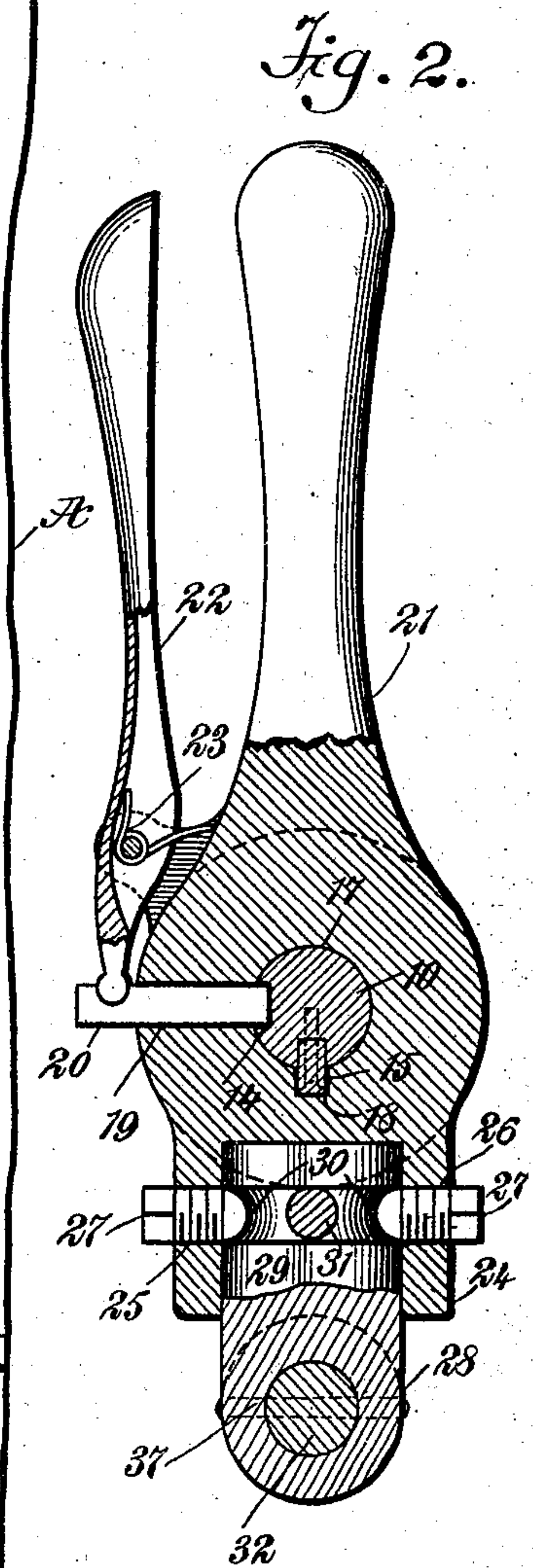


Fig. 1.

WITNESSES:

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MAIL-CATCHER ARM.

SPECIFICATION forming part of Letters Patent No. 721,551, dated February 24, 1903.

Application filed August 11, 1902. Serial No. 119,232. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS M. EDWARDS, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Mail-Catcher Arm, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a novel form of mail-catcher arm so constructed that when the arm is not required it can be locked at the center of its supporting-bar within the plane of the outer surface of the door-jamb, and, further, to so construct the catcher-arm that it may be quickly and conveniently reversed to bring its receiving end facing the direction of travel of the train and whereby the catcher-arm can be expeditiously and readily brought to a horizontal or receiving position beyond the plane of the outer surface of the door-jamb and locked in such position at either end of its supporting-bar.

Another purpose of the invention is to provide an automatically-operating locking device which will offer no obstruction to the reception of a bag on the arm, but which will act to prevent the bag leaving the arm until purposely removed.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the 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 figures.

Figure 1 is a partial side elevation of that portion of a mail-car at which the mail receiving and dispensing door is located; and Fig. 2 is a vertical section through the catcher-arm, drawn upon an enlarged scale, the section being taken practically on the line 2 2 of Fig. 1.

A represents a portion of the side of a mail-car, and B the doorway through which the mail is delivered and at which the mail is received. At a suitable distance above the center of the doorway B a supporting-arm 10 in the form of a shaft is rigidly secured at its end portions to the door-jambs. As illustrated in the drawings, the fastening is accomplished through the medium of socket-

plates 11, which extend over the end portions of the supporting-bar or shaft and are secured to the outer faces of the door-jambs. This supporting-bar or shaft 10 is circular in cross-section and is provided near each end, at its upper surface, with a recess. These recesses are designated, respectively, as 12 and 13, and are shown in Fig. 1. At the front central portion of the supporting-bar or shaft 10 a third recess 14 is produced. (Shown in Fig. 2.) The shaft or supporting-bar 10 is provided at its bottom surface with a feather 15, which is centrally located and stops short of the recessed end portions of the said supporting-bar or shaft, as is also shown in Fig. 1. This feather may be an integral portion of the supporting-bar or shaft 10, and ordinarily the feather is a separate piece, as is shown in Fig. 2, introduced into a longitudinal recess in the under surface of the supporting-bar and held therein by screws or their equivalents.

A carrier C is mounted to slide on the supporting-bar or shaft 10. The body portion 16 of this carrier is more or less elongated, as is shown in Fig. 1, and is provided with a bore 17, extending through from end to end to receive the shaft 10, and at the bottom portion of the said bore 17 a longitudinal channel 18 is formed, as shown in Fig. 2, to receive the feather 15. At the central front portion of this carrier-body 16 a slot 19 is produced, extending from its outer surface to the bore 17, and in this slot a latch 20 is adapted to slide, as is shown in Fig. 2. When the catcher-arm D, to be hereinafter described, is not in position for use, the carrier is locked to the central portion of the shaft or supporting-bar 10 by the said latch 20 entering the side recess 14 in the said shaft or supporting-bar. A handle 21 extends upward from the body 16 of the carrier C, and at the front of this handle a lever 22 is located, suitably fulcrumed at its lower portion on the outer front surface of the body 16 of the carrier, the lower end of the said lever being connected with the latch 20 as the latch is operated by the said lever. The lever 22 is held out of engagement with the said handle 21 by a spring 23, interposed between the said handle and the said lever, as is shown in Fig. 2, and this spring 23 serves to hold

the lever in such position as to bring the latch 20 in locking engagement with the shaft or supporting-bar 10. When the carrier is to be turned on the shaft or supporting-bar 10, it is first slid along the said shaft until an end of the feather 15 has been passed, the latch 20 having been previously withdrawn from its engagement with the shaft at the recess 14 by pressing the lever 22 in direction of the handle 21. When the carrier has passed an end of the feather 15, it will be over one or the other of the upper recesses 12 or 13 and can be readily turned on the shaft, and when turned so as to bring the catcher-arm D to an outer horizontal position to receive a mail-bag the latch 20 will enter the recess 12 or 13, over which the carrier is placed, thus holding the catcher-arm in operative position, it being understood that the carrier will be moved upon the shaft to a recess 12 or 13, which is nearest the front of the train.

The body 16 of the carrier is provided with a neck 24, extending centrally downward therefrom, and this neck is provided with threaded openings 25 and 26 at opposite sides, into which openings screws 27 are passed, the inner ends of which screws are segmental or semispherical, as is shown in Fig. 2. A socket-block 28 is rotated beneath the body of the carrier C and constitutes virtually a portion of the carrier, and the normal position of the socket-block, which is more or less elongated, is parallel with the body 16 of the carrier. This socket-block 28 is provided with an upwardly-extending central shank 29, and this shank is fitted to turn in the neck 24 of the carrier C, as is also shown in Fig. 2. This shank 29 within the neck 24 is provided with an annular concaved groove 30, which groove receives the segmental ends of the screws 27, and these screws serve to hold the socket-block 28 suspended from the body 16 of the carrier and yet permit the socket-block to be turned so as to reverse the position of the catcher-arm, which is supported directly by the socket-block.

When the socket-block has been turned to effect a proper adjustment of the carrier-arm, a pin 31 is passed through a suitable opening in the neck and a corresponding opening in the shank of the socket-block, and when the socket-block is to be turned to effect an adjustment of the catcher-arm this pin 31 is removed or drawn out sufficiently to disengage the shank-section of the socket-block.

The catcher-arm D consists of two members 32 and 33, connected by a return member 34 at one end. At the free or receiving end 35 of the front member 32 of the catcher-arm the said member is bent outward more or less from the opposing member 33, and the corresponding end 36 of the member 33 is likewise bent away from the opposing member 32. That portion of the member 33 of the catcher-arm adjacent to the end 36 and extending from said end to a point below the socket-

block 28 is given a decided inclination outward or away from the member 32, as is clearly shown in Fig. 1. The member 32 of the catcher-arm D is passed through the socket-block and is secured thereto by means of suitable pins 37.

At the receiving end of the catcher-arm D an angular locking-trigger 38 is pivoted in a suitable opening in the member 32 of the said catcher-arm, as is shown in Fig. 1. The handle member of the locking-trigger extends beyond the outer surface of the member 32 at an inward inclination or in direction of the carrier C, while the other section of the said locking-trigger normally rests upon the inner surface of the member 33 of the catcher-arm, being held in such position by a suitably-located spring 39, so that when the member 33 of the catcher-arm at its receiving end passes through a loop at an end of a mail-bag properly suspended the said loop will readily pass by the locking-trigger 38 in direction of the closed end of the said arm; but should the bag have a tendency to slip in direction of the receiving end of the catcher-arm the locking-trigger 38 will effectually bar its progress in that direction.

In operation the pin 31 is removed from the carrier and the socket-block is turned to cause the receiving end of the catcher-arm D to face the front of the train. When the catcher-arm is not required, the handle of the carrier is brought to a vertical position at the center of the supporting-bar or shaft 10, and the latch 20 will enter the central side recess 14. The catcher-arm will now be held in a lower position below the supporting-bar 10 and within the plane of the outer surface of the door-jambs of the door-opening B. When the mail-catcher is to be set for service, the lever 22 is drawn in direction of the handle 21 of the carrier, and the carrier is slid on the shaft 10 in direction of the front of the train until the carrier is freed from the feather 15, whereupon the handle of the carrier is drawn downward in direction of the interior of the car, the lever 22 being released, and when the carrier is turned on the shaft or bar 10 a sufficient distance to cause the latch 20 to enter the end recess at the top of the supporting-bar or shaft the catcher-arm will be held and locked in its receiving horizontal position.

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

1. A stationary shaft adapted to be secured to the jambs of a doorway or like opening, a carrier mounted on the shaft to be free to turn at the ends of the shaft and to be held from turning at the intermediate portion thereof, a locking device for locking the carrier to the shaft after it has been turned into operative position thereon, and a mail-catcher arm carried by the carrier, as set forth.

2. A stationary shaft adapted to be secured to the jambs of a doorway or like opening, a

carrier having a feather connection with the central portion of the shaft and free to turn on the end portions thereof, a locking device for locking the carrier to the shaft after it has been turned thereon into operative position, a support revolubly mounted on the carrier, a mail-catcher arm carried by the support, and means for locking said support in position, as set forth.

3. A shaft adapted to be fixed in the jambs of a doorway or like opening, a carrier held to slide and turn on the said shaft, a locking device for the carrier, a socket-block revolubly mounted in the carrier, means for locking the socket-block in a predetermined position, a mail-catcher arm carried by the said block, and an adjustable spring-controlled locking-finger located at the receiving end of the mail-catcher arm, adapted to normally close the said receiving end, the said finger being adapted to be lifted from locking position by contact with the mail-bag entering the said arm, as described.

4. A shaft adapted for attachment at its ends to the jambs of a doorway or like opening, the said shaft being provided with recesses at its upper portion near its ends and with a central recess in its forward surface, the said shaft being likewise provided with a longitudinal feather between the end recesses, a carrier adapted to slide on the feathered portion of the shaft and turn upon the end-recessed portion of the shaft, a lever-operated latch device forming a portion of the carrier and adapted to enter any of the recesses in the shaft, a socket-block pivotally attached to the bottom portion of the carrier, a locking device for the socket-block, and a catcher-

arm consisting of two members connected at one end, one of which members is secured to the said socket-plate for the purpose described.

5. A shaft adapted for attachment at its ends to the jambs of a doorway or like opening, the said shaft being provided with recesses at its upper portion near its ends and with a central recess in its forward surface, the said shaft being likewise provided with a longitudinal feather between the end recesses, a carrier adapted to slide on the feathered portion of the shaft and turn upon the end-recessed portion of the shaft, a lever-operated latch device forming a portion of the carrier and adapted to enter any of the recesses in the shaft, a socket-block pivotally attached to the bottom portion of the carrier, a locking device for the socket-block, a catcher-arm consisting of two members and a return connecting member at one end, the open or receiving ends of the members being inclined from each other, one of the said members being secured to the said socket-block, and a spring-controlled locking-trigger pivotally attached to one member of the catcher-arm, extending normally to an engagement with the opposing member in direction of the closed end of the catcher-arm, for the purpose described.

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

FRANCIS M. EDWARDS.

Witnesses:

J. FRED. ACKER,

EVERARD BOLTON MARSHALL.