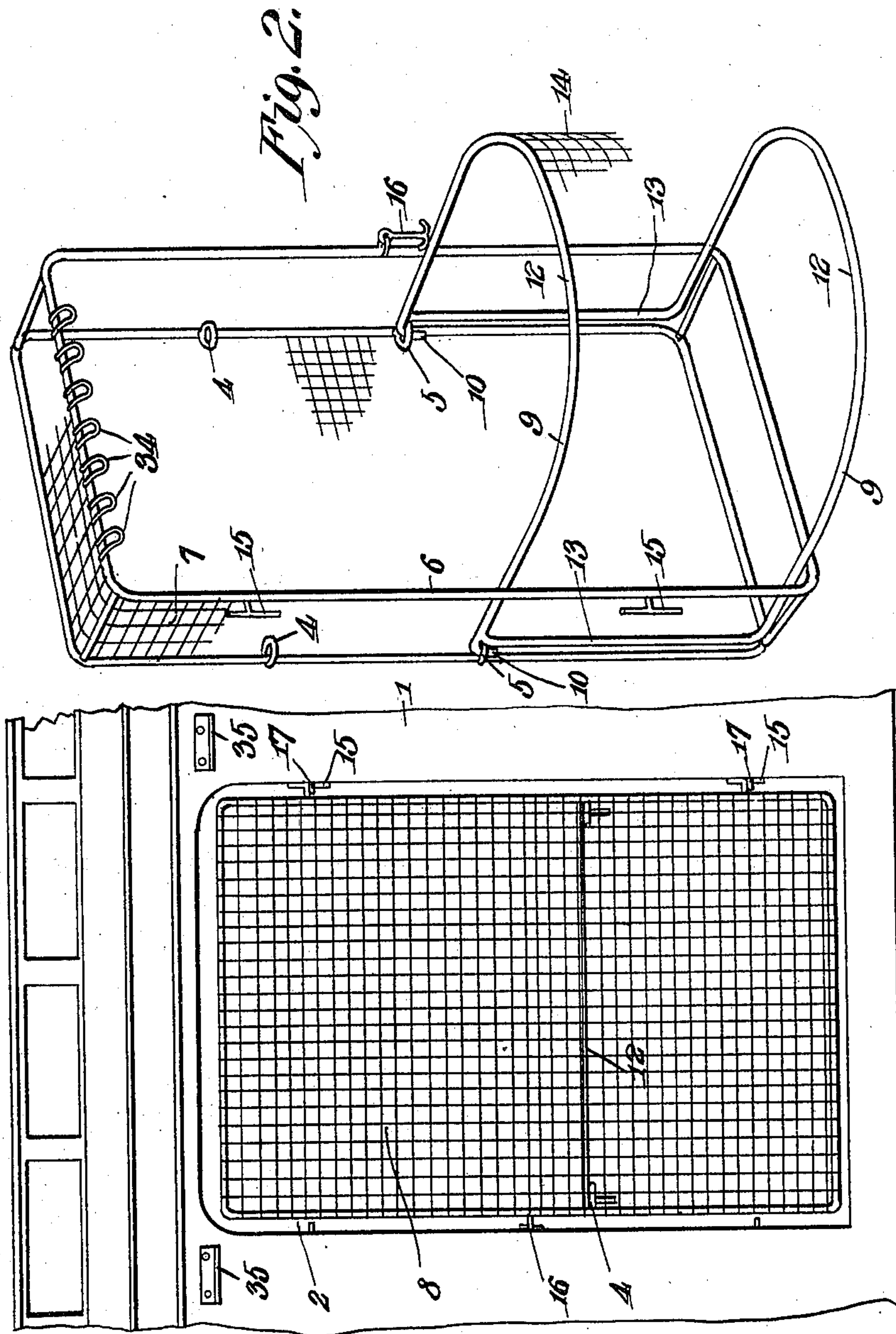


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MAIL BAG CATCHER.
APPLICATION FILED MAR. 4, 1910.

976,041.

Patented Nov. 15, 1910.

2 SHEETS—SHEET 1.



Witnesses
V. D. Galt.

W. P. Bunge

Fig. 1.

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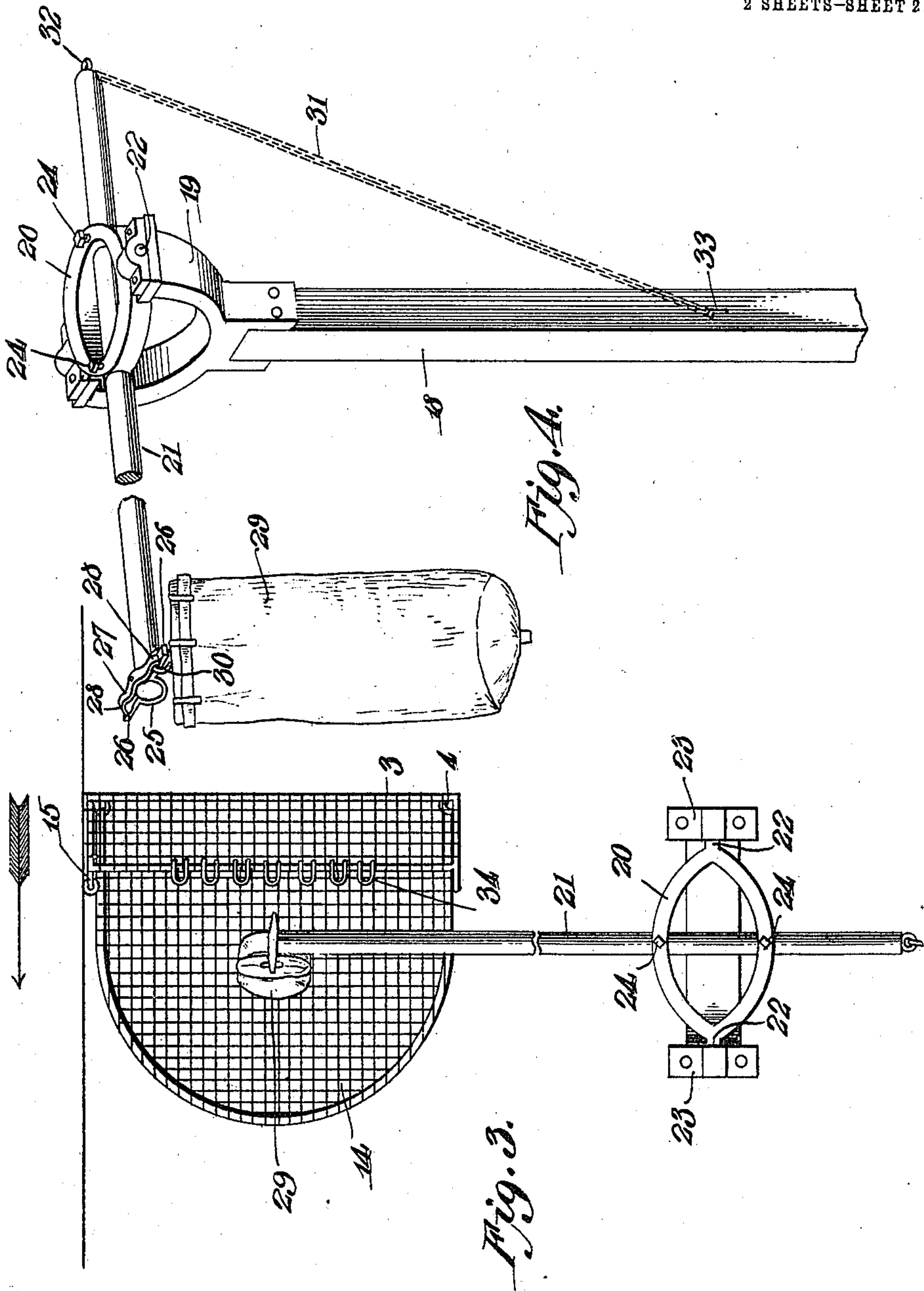
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UNITED STATES PATENT OFFICE.

WILLIAM A. CARPENTER, OF CHARLOTTE, NORTH CAROLINA.

MAIL-BAG CATCHER.

976,041.

Specification of Letters Patent.

Patented Nov. 15, 1910.

Application filed March 4, 1910. Serial No. 547,344.

To all whom it may concern:

Be it known that I, WILLIAM A. CARPENTER, a citizen of the United States of America, residing at Charlotte, in the county of Mecklenburg and State of North Carolina, have invented new and useful Improvements in Mail-Bag Catchers, of which the following is a specification.

This invention relates to mail bag catchers, and one of the principal objects of the same is to provide a mail bag catcher of simple construction which is adapted to swing out from the door of a mail car and to catch a mail bag suspended from a crane at the station while the train is passing by the station at the usual speed.

Another object of the invention is to provide a combined wire fabric door and basket for catching a mail bag suspended from a crane, said door and basket being hinged to the door opening of the car and adapted to be swung out in position for use whenever required.

Still another object of the invention is to provide a crane having a ring pivoted to the upper end thereof and a mail bag supporting arm adjustably mounted in the ring and having a spring device for holding a bag in position to be caught by the catcher on the moving train, said arm being held in horizontal position by means of a chain connected to the arm and crane.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which,—

Figure 1 is a side elevation of a portion of a mail car showing the reticulated door and bag catcher hinged in the door opening and closed to form a ventilating door and catcher. Fig. 2 is a perspective view of the door and catcher removed from the door opening, the reticulated fabric being partly broken away. Fig. 3 is a top plan view of the entire device for suspending and catching the mail bag. Fig. 4 is a detail perspective view of the crane and bag support.

Referring to the drawing, the numeral 1 designates the side of a mail car provided with a door opening 2. The combined door and catcher for the mail bag comprises a rectangular frame 3 preferably formed of a metal rod of the required gage for the purpose, said rod being bent into substantially

rectangular form and provided with eyes 4 at opposite sides thereof and similar eyes 5 below the eyes 4. A similar frame 6 also formed of a metal rod is bent into rectangular form of substantially the same size as the frame and is disposed in parallel relation to the frame 3, and connecting these two frames is a reticulated wire cloth screen or protector 7 which extends around between the frames 3 and 6 and holds them in parallel relation, as shown. Extending from end to end and across the frame 3 is a reticulated metal door 8 which is adapted to fit in the door opening 2 of the car. A reticulated metal catcher or basket is formed of metal rod frame bars 9 provided with hooks 10 at their rear ends, said frame bars being curved at their front portions, as at 12, and connected by upright members 13. This catcher or basket is covered with reticulated metal fabric 14 at the sides and bottom. On the frame bars 6 downwardly projecting hooks 15 are provided, and a latch 16 is also connected to said frame. The hooks 15 are adapted to be pivoted in eyes 17 secured to the door frame of the car, and the latch 16 is adapted to be used for holding the door closed.

The crane consists of a post 18 having at its upper end a yoke 19. Mounted in the yoke is an oval-shaped supporting device 20 for the rod or arm 21. The supporting device is provided with integral trunnions 22, and these trunnions are pivoted in bearing plates 23 secured to the upper ends of the yoke 19. The arm or rod 21 is adjustably connected to the supporting device 20 by means of set screws 24 which extend through the ring and bearing upon the arm 21 to hold it in adjusted position. At the outer end of the arm 21 is a spring metal bag support comprising a ring 25 having outwardly projecting members 26 and a spring 27 connected to the arm 21 at a central point and provided with downwardly extending spring feet 28 which normally bear against the projections 26 to hold a mail bag 29 suspended from the arm 21 by means of the ring 30 engaging the projection 26 underneath the spring feet 28, as shown more particularly in Fig. 4. At the opposite end of the arm 21 a chain 31 is connected to a ring 32 on the arm, the opposite end of the

chain being connected to a staple 33 and the post 18 to hold the arm 21 in horizontal position and to permit said arm to be lowered for permitting the bag to be suspended therefrom. Formed upon the upper bar of the frame 6 are a series of projecting metal loops 34 said loops being bent downwardly, as shown in Fig. 2. Stops 35 are secured to the side of the car to prevent the door from rising to detach the same from the eyes 17.

The operation of my invention may be briefly described as follows:—The mail bag 29 is connected to the arm 21 in the manner already described, and the chain 31 is connected to the staple 33 to hold the arm 21 in horizontal position. When the car is nearing a station, the catcher is thrown in the position shown in Fig. 3 by disconnecting the latch 16 and swinging the door outward until one edge thereof rests against the side of the car with the basket projected in the direction of movement of the train. As the train passes the crane, the bag 29 is projected against the loop 34 to detach the bag from the spring supporting device and to drop the same within the catcher or basket. It will be understood that the arm 21 is of sufficient height to pass over the top of the door of the car and that the loops 34 are at the required height to hit the bag above a central point to detach it from the spring-suspending device. Whenever it is desired to use the basket or catcher for bundles of mail the basket may be adjusted vertically by placing the hooks 5 in the rings 4, thus holding the same at the required height for the purpose. The hooks 15 may have upwardly projecting points, and the basket can be reversed to either side of the car door when the train is running in either direction.

From the foregoing it will be obvious that my invention is of simple construction, can be made of wire cloth of the required gage

for the purpose at slight cost, is reliable in operation and requires but little attention.

I claim:—

1. A combined door and mail bag catcher consisting of metal frames having reticulated metal fabric covers forming a door and a basket or catcher connected thereto, means for suspending the door and basket in the door opening of a car, and means adjacent to the track for suspending a mail bag in position to be detached therefrom by contact with the basket.

2. A mail bag catcher comprising a reticulated metal door, a reticulated adjustable basket or catcher connected to the frame, metal detaching loops connected to the upper side of the frame, means for adjusting the basket vertically in the frame, and a crane provided with an adjustable arm having means for detachably suspending a bag therefrom.

3. A mail bag catcher comprising a reticulated metal door frame and catcher, in combination with a crane comprising a post, a yoke secured to the post, a support pivoted to the yoke, an arm adjustable in the support, means for holding the arm in horizontal position, and means for yieldingly suspending a mail bag upon the outer end of the arm.

4. A mail bag catcher comprising a reticulated metal door having a curved basket or catcher adjustably connected thereto, means for hinging the door and basket in the door opening of a car, a crane provided with a pivoted arm, means for folding said arm in horizontal position, and means for supporting a mail bag on the outer end of the arm.

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

WILLIAM A. CARPENTER.

Witnesses:

J. B. CARPENTER,

J. W. CARPENTER.