

(No Model.)

2 Sheets—Sheet 2.

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MAIL BAG CATCHER.

No. 475,307.

Patented May 24, 1892.

Fig. 4.

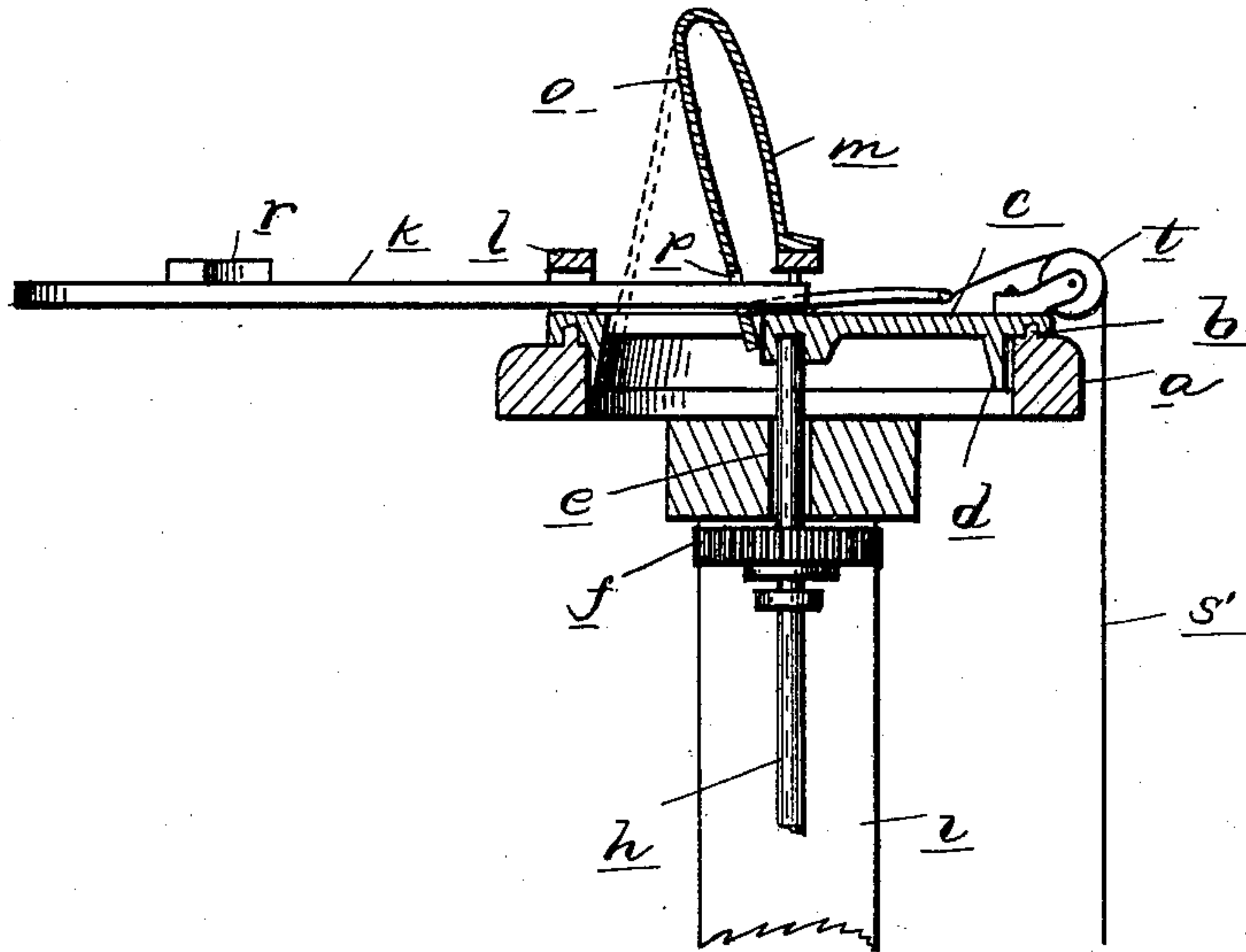
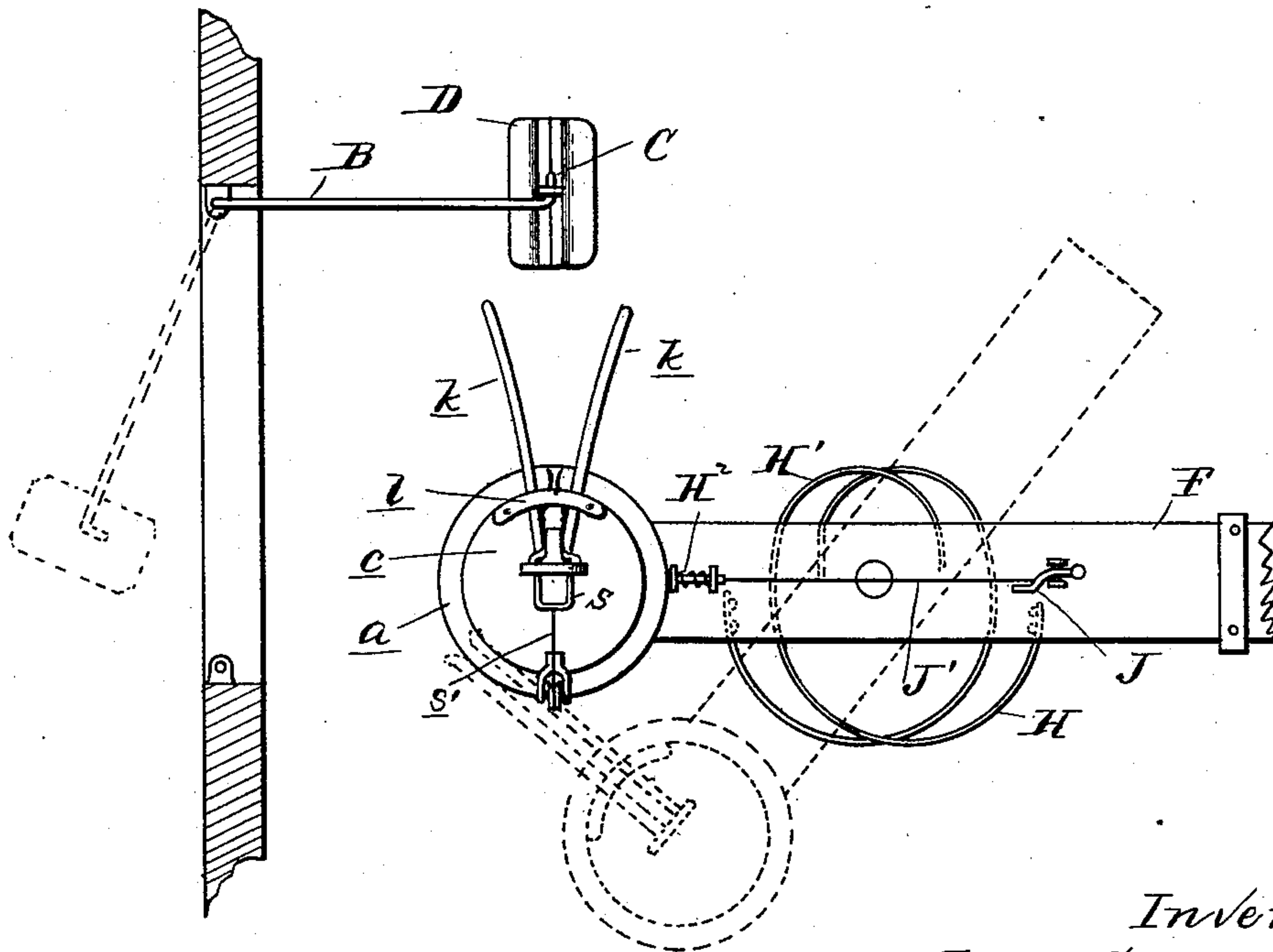


Fig. 2.



Witnesses
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JOHN GLEASON, OF DEARBORN, MICHIGAN; MARCELLUS GLEASON ADMINISTRATOR OF SAID JOHN GLEASON, DECEASED.

MAIL-BAG CATCHER.

SPECIFICATION forming part of Letters Patent No. 475,307, dated May 24, 1892.

Application filed September 21, 1891. Serial No. 406,342. (No model.)

To all whom it may concern:

Be it known that I, JOHN GLEASON, a citizen of the United States, residing at Dearborn, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Mail-Bag Catchers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in mail-bag catchers, and relates to that class of catchers designed to take the bag from a moving train.

The invention consists in the peculiar construction of a catching device having spring-jaws to receive the mail-bag and hold it, these jaws being secured upon a resilient arm or frame and adapted to be turned to receive the mail from either direction.

The invention further consists in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter described.

In the drawings Figure 1 is an elevation of my improved device, showing a car with the bag-holder in position to deliver the mail to the catcher. Fig. 2 is a plan view thereof, showing in full and dotted lines the position of the catcher at different times. Fig. 3 is an enlarged view of the catching device and the turn-table to which it is secured. Fig. 4 is a vertical section thereof on line *x x*.

A is the mail-car, having hinged to one side of the door a suitable frame B, provided with any securing means—such as a hook C—for the bag D. This frame is of sufficient length to extend clear from the car and carry the bag into the path of my catching device.

E is a standard or frame of any desired construction secured beside the railway-track and carrying at its upper end a cross-frame F, pivotally secured thereto and free to turn upon its pivot around the standard E. The cross-bar G is provided with suitable bearings on the standard E to steady the frame F in its pivotal motion.

H and H' are two oppositely-coiled springs secured to the cross-frame F, as plainly shown in Fig. 2; and adapted to act against the rotary movement of said frame. It is evident from this description that the frame F may turn in either direction by compressing one

of the springs H H'. These springs are so arranged as to hold the frame F normally at right angles to the railway-track, so that the forward end of the frame will be in the path of the mail-bag when it is supported upon the frame B on the car, as shown in Fig. 2. The outer end of this frame F is provided with suitable catching device, which I preferably construct as follows:

a is a platform at the outer end of the frame F, having a circular track *b* formed thereon, adapted to receive a turn-table *c*, provided with a suitable groove to engage with the rail *b* and having a flange *d* extending within the rail to prevent its displacement.

e is a shaft centrally secured to the turn-table and extending downward through the frame F, provided on its lower end with the gear-wheel *f*, with which the pinion *g* meshes. This pinion is secured to the upper end of the shaft *h*, which is journaled in a standard *i* of the frame F, and is provided at its lower end with the crank *j* or any other suitable means for rotating the same. Pivoted centrally upon this turn-table and preferably upon the upper face thereof are the two jaws or arms *k*, extending some distance outwardly from the turn-table and moving in suitable guide-bearings *l*, formed on the edge of the turn-table.

m is a spring secured at one end to the central bearing *n* of the turn-table and extending upwardly therefrom. It is provided, also, with the downwardly-extending arm *o*, having the eye *p*, adapted to embrace the rear ends of both the arms *k*, as plainly shown in Fig. 4. When drawn back to near the pivotal point of these arms, as shown in full lines in Fig. 4, it is evident that the arms will be separated, as shown in Fig. 3, by the springs *p'*, and when thus separated a spring-trigger *q*, which is pivoted to one of the arms, will engage in the bearing *r* in the other arm and hold the jaws apart. To withdraw the springs *n* to this position, I provide an arm *s*, to which is secured a cord *s'*, passing over a wheel or pulley *t*, extending to near the ground in proximity to the operator. The jaws, having been thus opened, may be turned in a direction in which the train is coming by means of the mechanism described, the turn-table

being held in its adjusted position by means of a spring-bolt H^2 , adapted to engage in a suitable aperture in the side thereof. To retract this bolt when desired, I arrange a pulley-cord I, connected with a bell-crank lever J, the cord J' connecting this crank-lever with the bolt, as plainly shown in Fig. 1. As the train approaches, the operator on the train throws out the arm B with the mail-bag attached, the hook C extending rearwardly. The bag will enter between the jaws, striking the trigger q and releasing it, allowing the spring m to move outward over the arms and tightly clamp the bag between the jaws. The force of the blow of the bag upon the catching device will be materially lessened from the fact that the arm F, carrying the catching device, can turn it upon its pivot and compress the springs $H H'$, and thus prevent danger of breaking articles of merchandise which may be in the mail-bag or injury to the bag itself.

While I have shown a spring-backed frame carrying the catching device, it is evident that other constructions may be devised, embodying a resilient arm or frame to receive the mail, to lessen the shock in transmitting it from the moving train to the stationary receiving device, and I do not desire to limit myself to the specific construction shown.

What I claim is—

1. In a mail-bag catcher, the combination, with a standard, of a frame pivoted thereon, a yielding connection between the frame and standard, a rotating catching device on the frame, and means for retaining the catching device in an adjusted position, substantially as described.

2. In a mail-bag catcher, the combination of a standard secured beside a railway-track,

a spring-backed frame pivoted to said standard, a catching device on said frame, and means for turning said catching device to receive from either direction, substantially as described.

3. In a mail-bag catcher, the combination of the following elements: a standard, a frame pivoted to the top thereof, check-springs applied to said frame, a turn-table on said frame, spring-actuated jaws on said turn-table, and means for turning said turn-table to receive mail from either direction, substantially as described.

4. In a mail-bag catcher, the combination of the following elements: a standard, a frame pivoted to the top thereof, check-springs applied to said frame, a turn-table on said frame, jaws pivoted to said turn-table, a trigger adapted to be released by the reception of a mail-bag for holding said jaws open, and a spring for closing said jaws when said trigger is released, substantially as described.

5. In a mail-bag catcher, the frame F, platform a , circular rail b , turn-table c , arms k , hinged thereto, spring m , having the arm o and eye p , and the trigger q , the parts being arranged and adapted to operate substantially as and for the purpose described.

6. In a mail-bag catcher, the combination, with the jaws pivoted to a turn-table, of means for rotating said turn-table, a trigger for holding the jaws apart, and a spring for compressing said jaws, substantially as described.

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

JOHN GLEASON.

Witnesses:

N. L. LINDOP,

M. B. O'DOHERTY.