

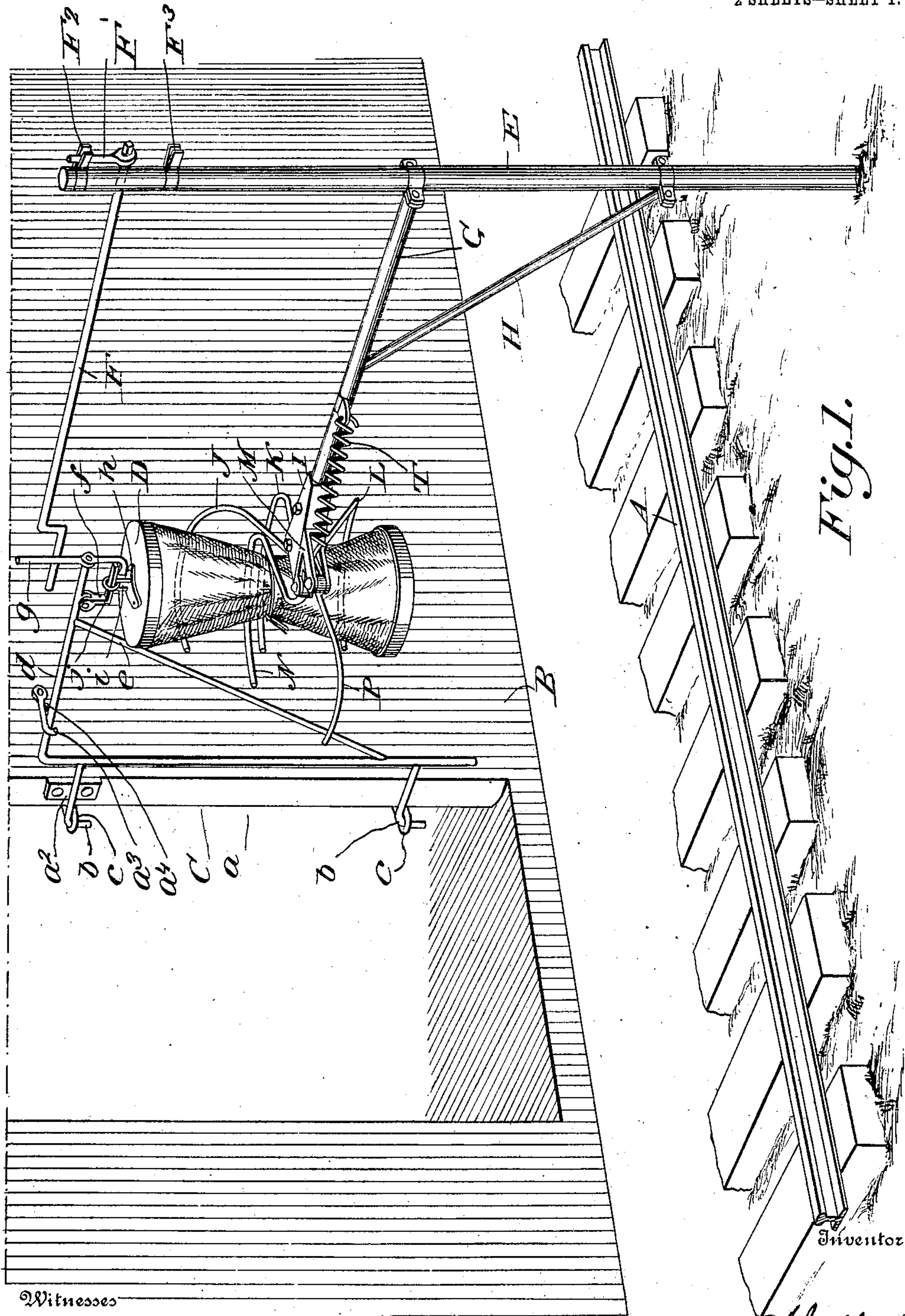
No. 877,240.

PATENTED JAN. 21, 1908.

O. SHAFFER.
MAIL BAG CATCHER.

APPLICATION FILED NOV. 16, 1907.

2 SHEETS—SHEET 1.



Witnesses

Phil E. Barnes
m. C. Shuckey

By

Ora Shaffer
James Shuckey Attorney

No. 877,240.

PATENTED JAN. 21, 1908.

O. SHAFFER.
MAIL BAG CATCHER.
APPLICATION FILED NOV. 16, 1907.

2 SHEETS—SHEET 2.

Fig. 2.

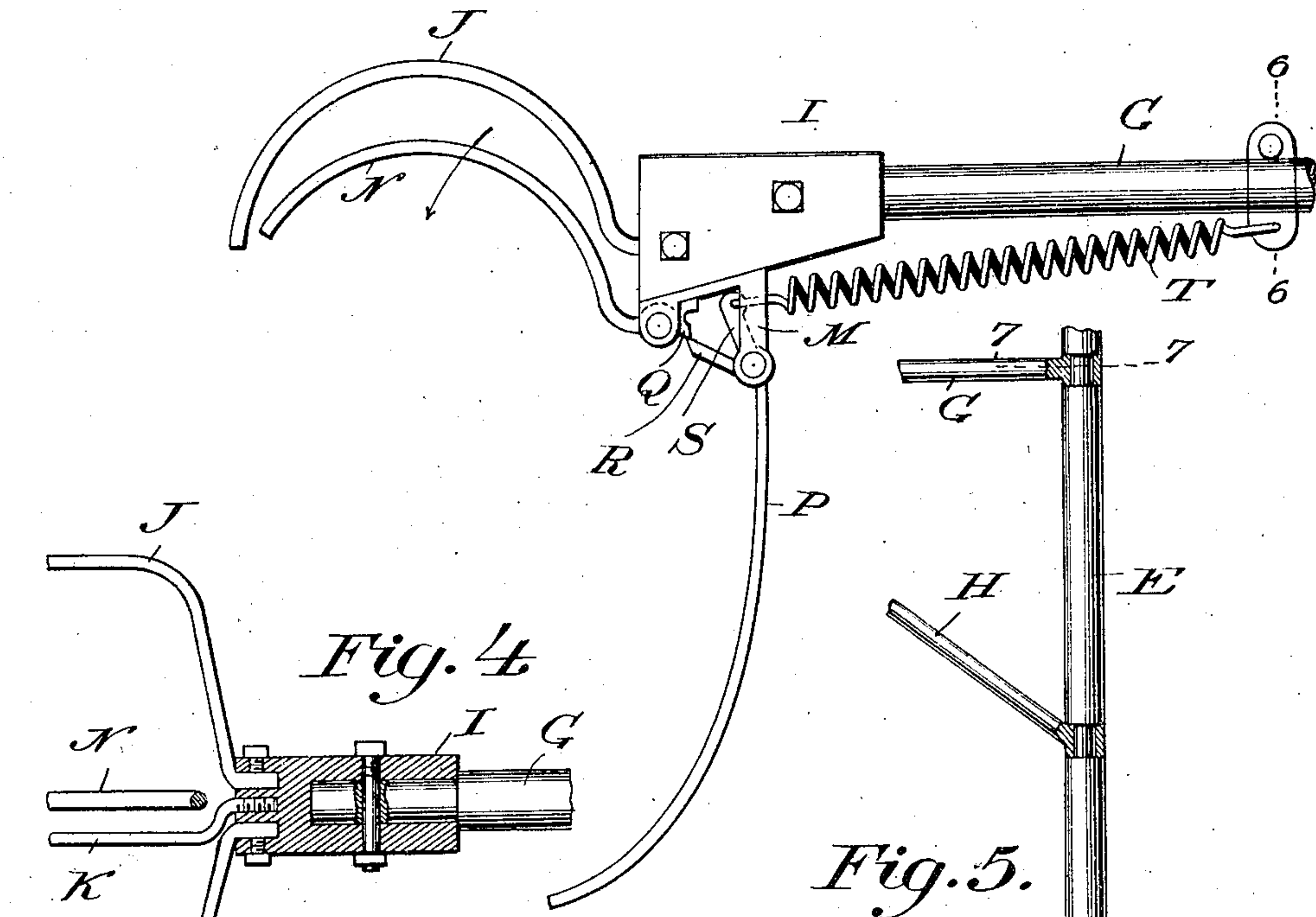


Fig. 5.

Fig. 3.

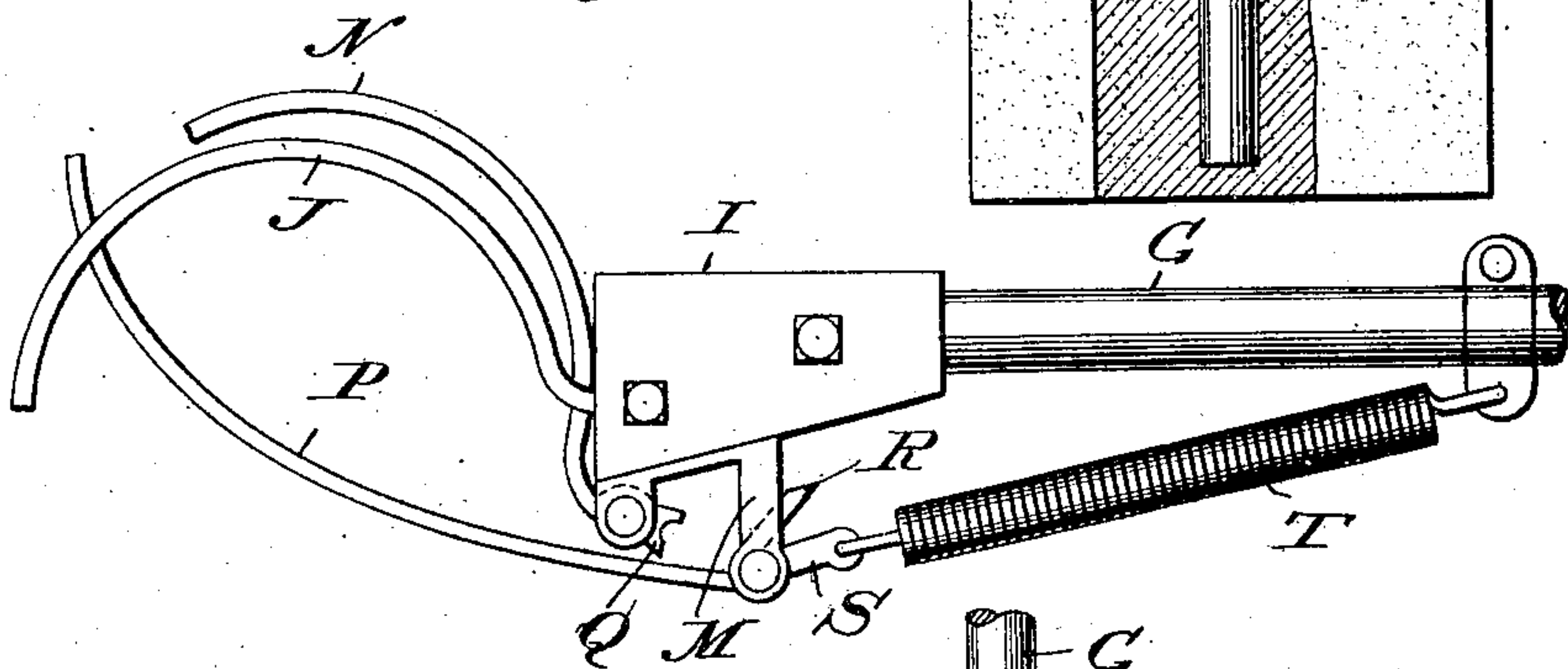


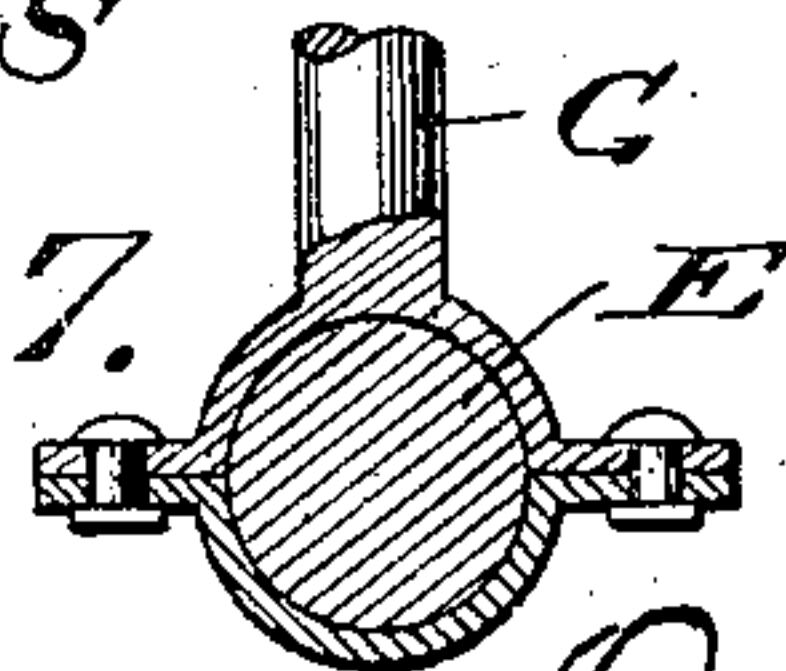
Fig. 6.

Witnesses

Phil E. Barnes
W. L. Shufly

Fig. 7.

By



Inventor

Ora Shaffer
James Shufly
Attorney

UNITED STATES PATENT OFFICE.

ORA SHAFFER, OF VAN WERT, OHIO.

MAIL-BAG CATCHER.

No. 877,240.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed November 16, 1907. Serial No. 402,369.

To all whom it may concern:

Be it known that I, ORA SHAFFER, citizen of the United States, residing at Van Wert, in the county of Van Wert and State of Ohio, have invented new and useful Improvements in Mail-Bag Catchers, of which the following is a specification.

My invention pertains to means for transferring mail bags from fast-moving cars to holders located at the side of a railway; and it has for one of its objects to provide a catcher arranged to cooperate with a deliverer on a car and embodying such a construction that when it is engaged by a bag moving with a car it will tightly grasp and hold the bag.

Another object of the invention is the provision of a mail bag catcher constructed with a view of utilizing the momentum of the caught bag to swing the catcher around to a position alongside the railway and parallel to a platform upon which a person in authority may stand and conveniently remove the bag from the catcher.

Other objects and advantageous features of my invention will be fully understood from the following description and claims when the same are read in connection with the accompanying drawings, forming part of this specification, in which:

Figure 1 is a perspective view showing a portion of a railway, a portion of a car, and my improvements properly arranged relative to the same. Fig. 2 is an enlarged, detail plan of the bag engaging arm of the catcher; the said arm being shown with its working parts in position to receive and automatically grasp a mail bag. Fig. 3 is a similar view of said arm with its working parts in the positions they assume after the trigger is struck by a bag carried by a moving car. Fig. 4 is a detail view illustrative of the manner in which I prefer to socket the fixed tangs of the catcher in the enlargement on the outer end of the bag engaging arm. Fig. 5 is a detail view showing the post and its appurtenances. Fig. 6 is an enlarged detail section taken in the plane indicated by the line 6—6 of Fig. 2, and: Fig. 7 is a similar view taken in the plane indicated by the line 7—7 of Fig. 5.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A is a portion of a railway.

B is a portion of a railway car, and C is my mail-bag deliverer, which is used on said car. The said deliverer comprises an upright having pintles *b* journaled in vertically disposed bearings *c* inside the car, an arm *d* reaching outwardly from the upright *a* and arranged above a brace *e*, a vertically swinging piece *f* arranged under and pivoted to the outer portion of the arm *d*, and a trigger *g* pivoted to and extending above and below the end of arm *d* and arranged to swing vertically, though at a right angle, to the piece *f*, and having a toe *h* at its lower end adapted to rest under and support the swinging end of piece *g*.

D is a mail bag on the upper end of which is a loop *i*, preferably of leather, to which a ring *j* is loosely connected. This ring *j* is designed to be placed on the swinging piece *f* of the deliverer C, and said swinging piece is supported by the adjustment thereunder of the toe *h*, after the manner shown in Fig. 1. From this it follows that when the car is moved and the upper arm of the trigger *g* brings up against an obstruction in its path, said trigger will be swung in the direction of the cars movement, and its toe will be moved from under the piece *f*, when said piece *f* will be free to swing downward and the bag will be free to leave the piece.

Located at one side of the railway and fixed in any approved manner is a post E, and extending through and inward from the upper portion of said post is a tappet arm F, the office of which is to engage the upper arm of the trigger *g* for the purpose before set forth.

Connected to and arranged to swing horizontally on the post E is a bag-engaging arm G and a brace H thereof. At its outer end the arm G is provided with an enlargement I, which is preferably slipped on and pinned thereto, and in said enlargement are socketed and fixed by thread or set screws the ends of the upper, intermediate and lower fixed, bag-grasping tangs J, K and L which tangs are preferably curved as shown in Fig. 1.

The enlargement I is provided at its side toward the direction from which the car approaches with a bracket M in which are fulcrumed the horizontally swinging trigger arm N and the horizontally swinging bag-clamping arm P of my improvements. The arm N is provided with a bifurcated heel Q,

and the arm P is provided with a beveled toe R and a rearwardly extending portion S to which is connected one end of a tractile spring T the other end of which is connected to the horizontally swinging arm G.

When a mail bag is attached in the manner before described to the deliverer C, said deliverer is swung out through the door opening of the car so as to rest against a metallic wear plate a^2 , and is detachably secured in said position by a pivoted hook a^3 which is held by a pin a^4 against undue downward movement. After the bag is delivered, the hook a^3 is raised and the deliverer C is swung back to a position inside the car.

The tappet F is arranged to rock in and to be moved endwise through an opening in the post E. A piece F' is suitably secured on the square rear end of the tappet, Fig. 1, and when the tappet is not in use it is drawn rearward through the aperture in the post E—i. e., in a direction away from the railway so as to be out of the path of triggers g on mail cars. The drawings, Fig. 1, show the tappet in position to actuate a trigger g on a mail car moving in one direction, the piece F' being seated in an upper V-shaped projection F² on post E, and when the apparatus is reversed to receive mail from a car moving in the opposite direction, the tappet F is moved rearward to disengage piece F' from the projection F² and is then rocked and moved forward to seat piece F' in a lower V-shaped projection F³.

In the practical operation of my improvements, the bag catcher is set as shown in Figs. 1 and 2—that is to say one side of the bifurcated heel Q rests against bracket M to limit the movement of the trigger arm in the direction indicated by arrow in Fig. 2 and the other side of said bifurcated heel is engaged by the toe R of the clamping arm P. From this it follows that when the bag carried by the moving car contacts with the trigger arm N the clamping arm P will be released and by the contraction of its spring T will be forced forward so as to clamp the bag against the fixed tangs J, K and L. Immediately before this, the trigger g will have engaged the tappet F and released the bag from the deliverer C, and then the momentum of the bag will swing the arms G and H around to a position parallel with the railway and convenient to a platform (not shown) upon which a person may stand while removing the bag from the catcher.

The bag may be expeditiously and easily removed from the catcher when the arm P is moved back to the position shown in Fig. 2, and with said arm P in said position it will be seen that the catcher is set and will work in the manner before described when returned to the position shown in Fig. 1, relative to the railway and the car.

The construction herein illustrated and de-

scribed constitutes the best embodiment of my invention known to me, but it is obvious that in the future practice of the invention such changes or modifications may be made as fairly fall within the scope of my invention as defined in the claims appended.

Having described my invention, what I claim and desire to secure by Letters-Patent is:

1. A mail bag catcher, comprising a bracket, a clamping arm fulcrumed at an intermediate point of its length on said bracket and having a forwardly extending toe, a spring connected to the rear portion of said clamping arm and arranged to move same, and a trigger arm fulcrumed on the bracket in position to be engaged by a bag and having a bifurcated heel to engage the toe of the clamping arm.

2. A mail bag catcher, comprising a bracket, a clamping arm fulcrumed at an intermediate point of its length on said bracket and having a forwardly extending toe, a spring connected to the rear portion of said clamping arm and arranged to move same, a trigger arm fulcrumed on the bracket in position to be engaged by a bag and having a bifurcated heel to engage the toe of the clamping arm, and fixed tangs opposed to the clamping arm.

3. A mail bag catcher, comprising supporting means, a bracket thereon, fixed tangs socketed and detachably secured in said supporting means, a clamping arm fulcrumed at an intermediate point of its length on said bracket and having a forwardly extending toe; a spring connected to the rear portion of said clamping arm and arranged to move same, and a trigger arm fulcrumed on the bracket and having a bifurcated heel arranged to engage the toe of the clamping lever.

4. The combination of a suitably supported, horizontally swinging arm, automatic bag-clasping means carried by said arm, a tappet, a car, and a device carried by the car and having a bag-delivering trigger arranged to be operated by contact with the tappet.

5. The combination of a suitably supported, horizontally swinging arm, automatic bag-clasping means carried by said arm, a tappet, a car, and a deliverer pivoted to the car and having a vertically swinging device to hold a bag and also having a trigger arranged to normally hold said vertically swinging device against downward movement and also arranged to contact with the tappet.

6. The combination of a post, an arm arranged to swing horizontally thereon, automatic bag-clasping means carried by said arm, a tappet arranged to rock in and move endwise through the post, cooperating devices on the post and tappet for adjustably fixing the latter in different positions, a car,

and a deliverer pivoted to the car to swing through the door opening thereof; said deliverer having a vertically swinging device to hold a bag and also having a trigger arranged
5 to normally hold said vertical swinging device against downward movement and also arranged to contact with the tappet.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ORA SHAFFER.

Witnesses:

A. C. GILPIN,
H. C. GLENN.