

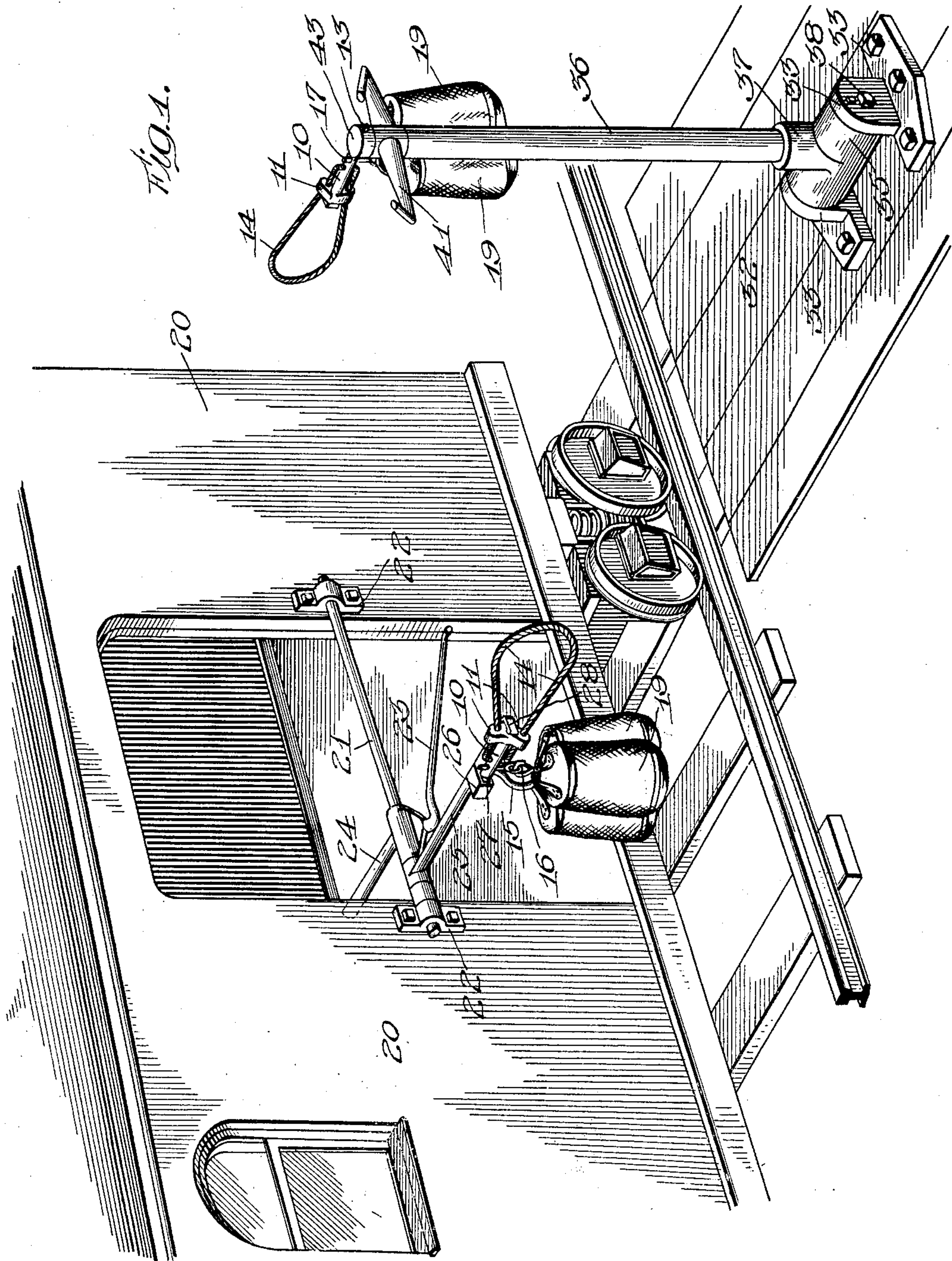
No. 827,067.

PATENTED JULY 24, 1906.

J. S. KAUFFMAN.
MAIL BAG CATCHING AND DELIVERY APPARATUS.

APPLICATION FILED APR. 11, 1906.

2 SHEETS—SHEET 1.



Witnesses:
S. V. Donnan.
A. C. Bird.

Inventor:
Jesse S. Kauffman

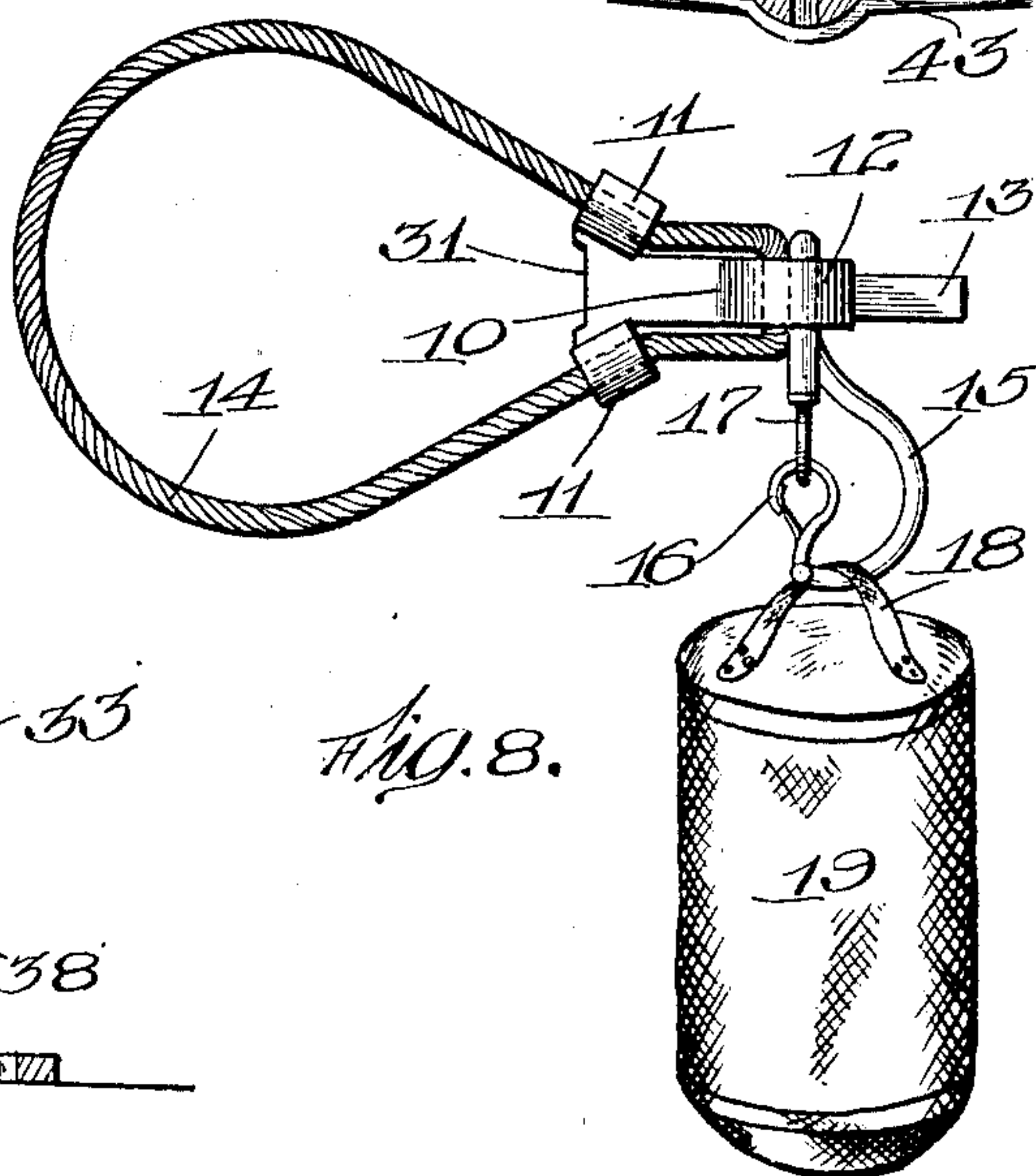
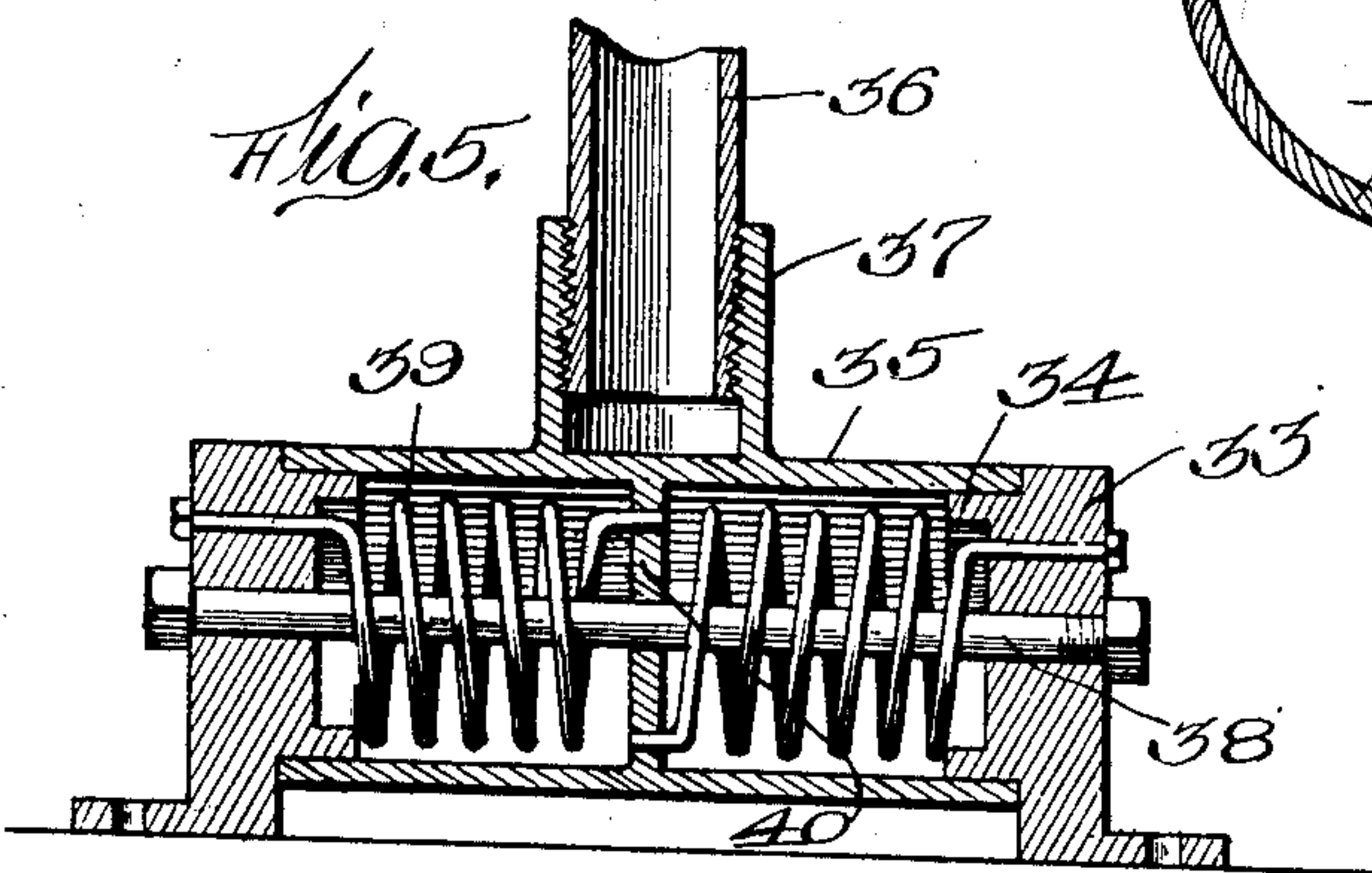
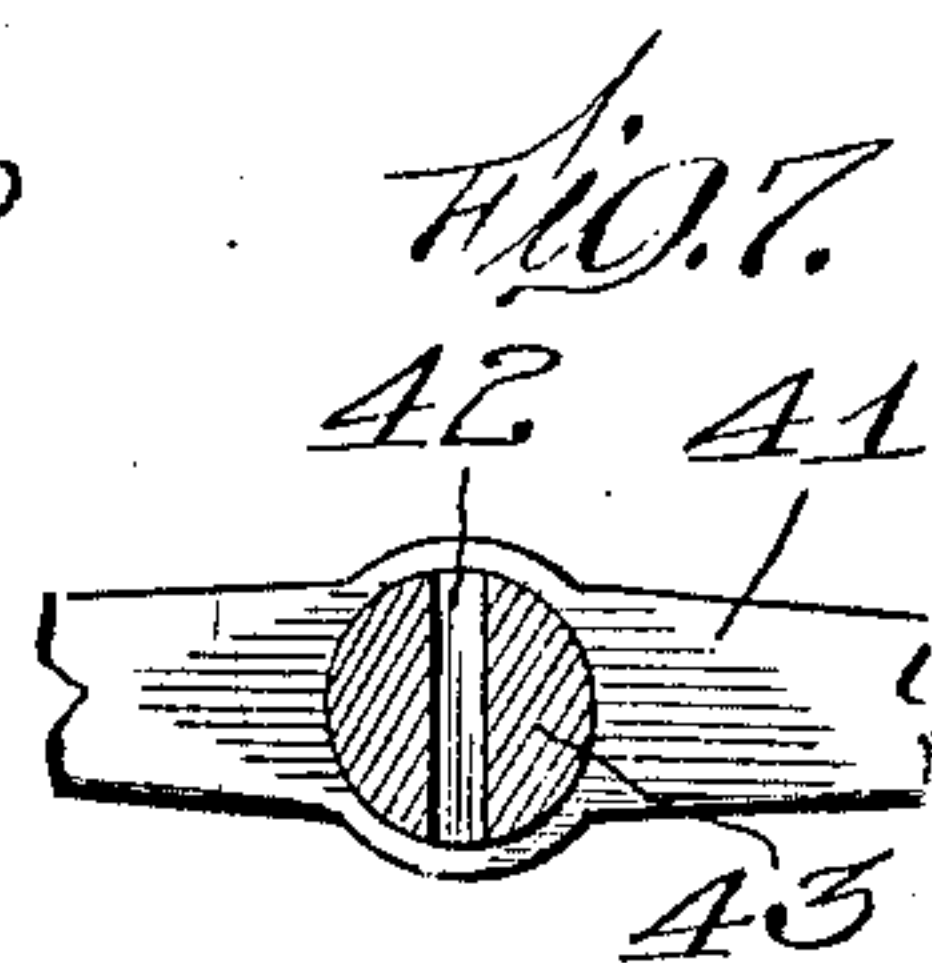
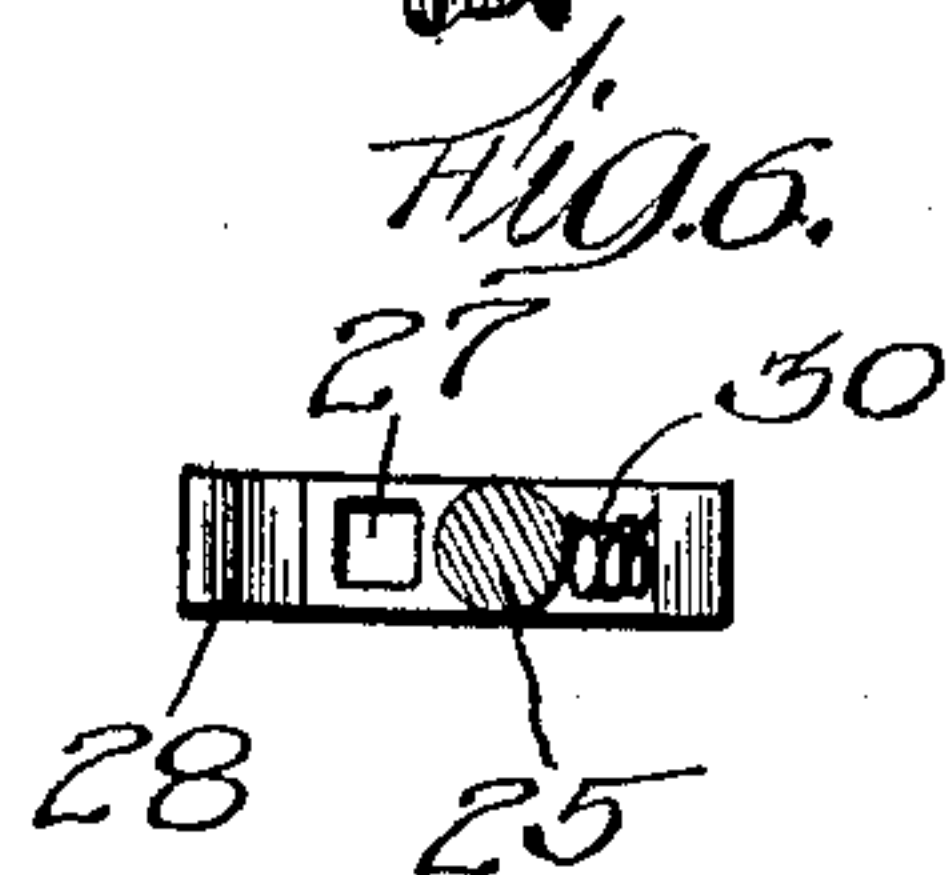
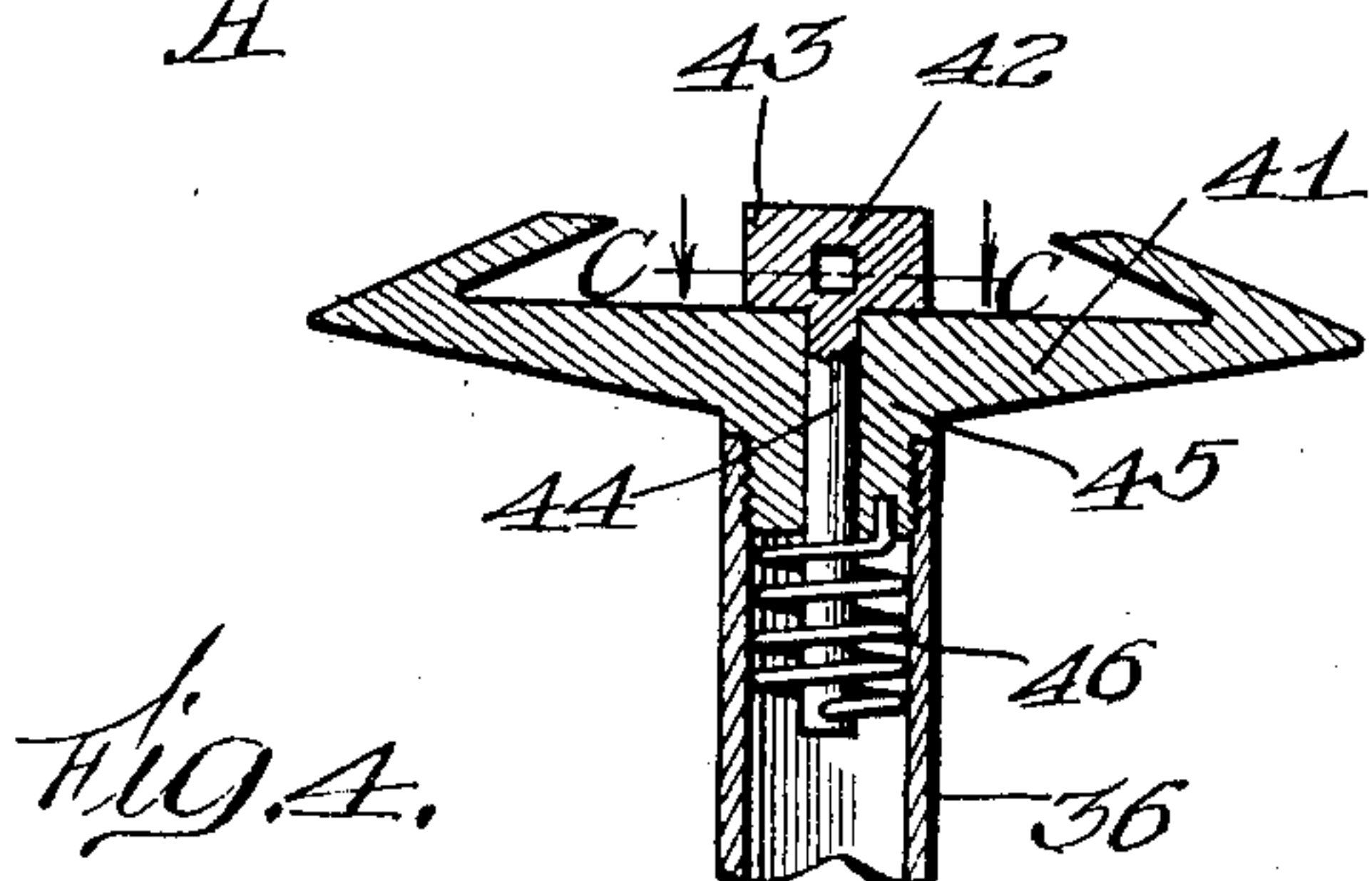
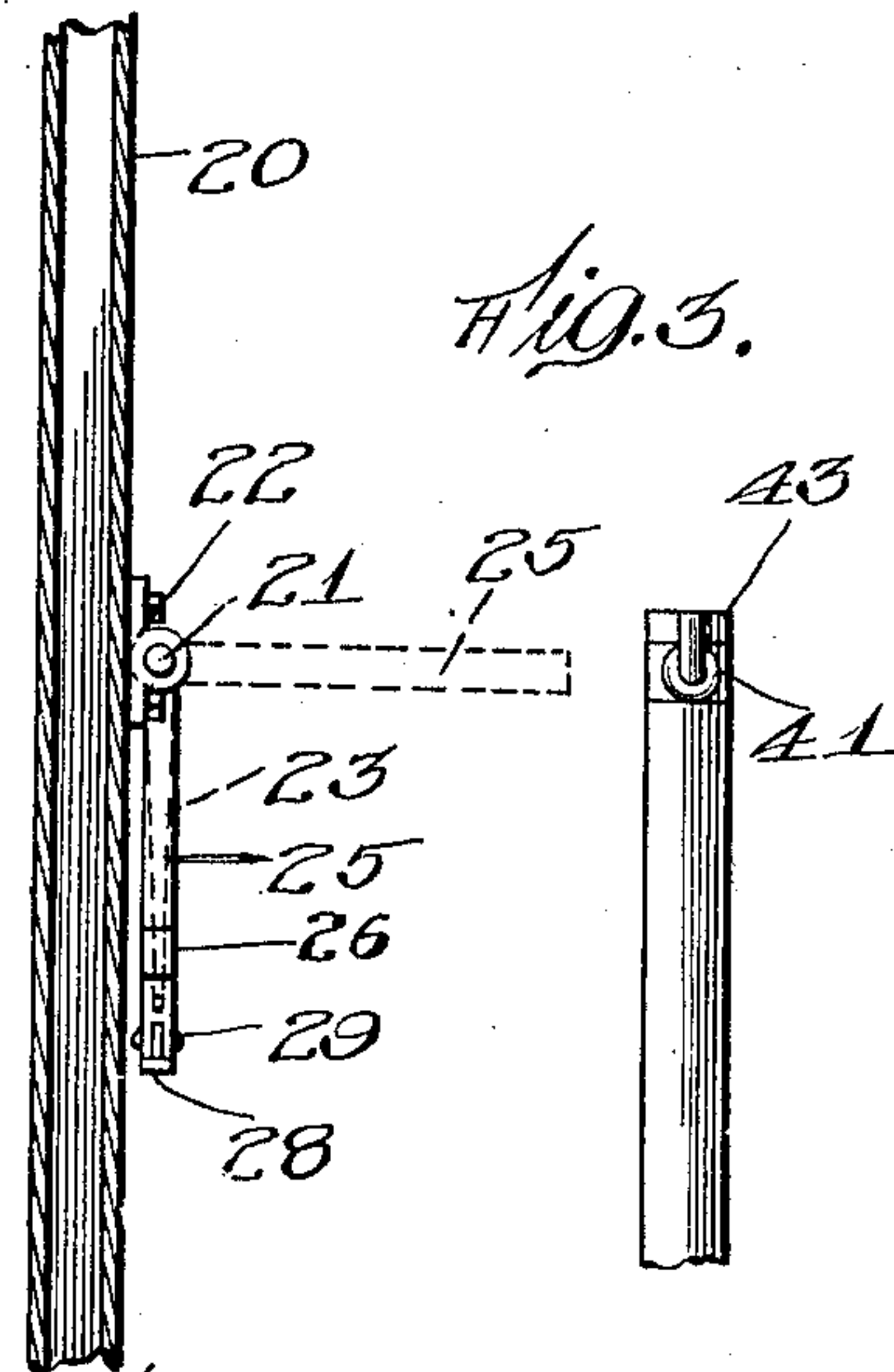
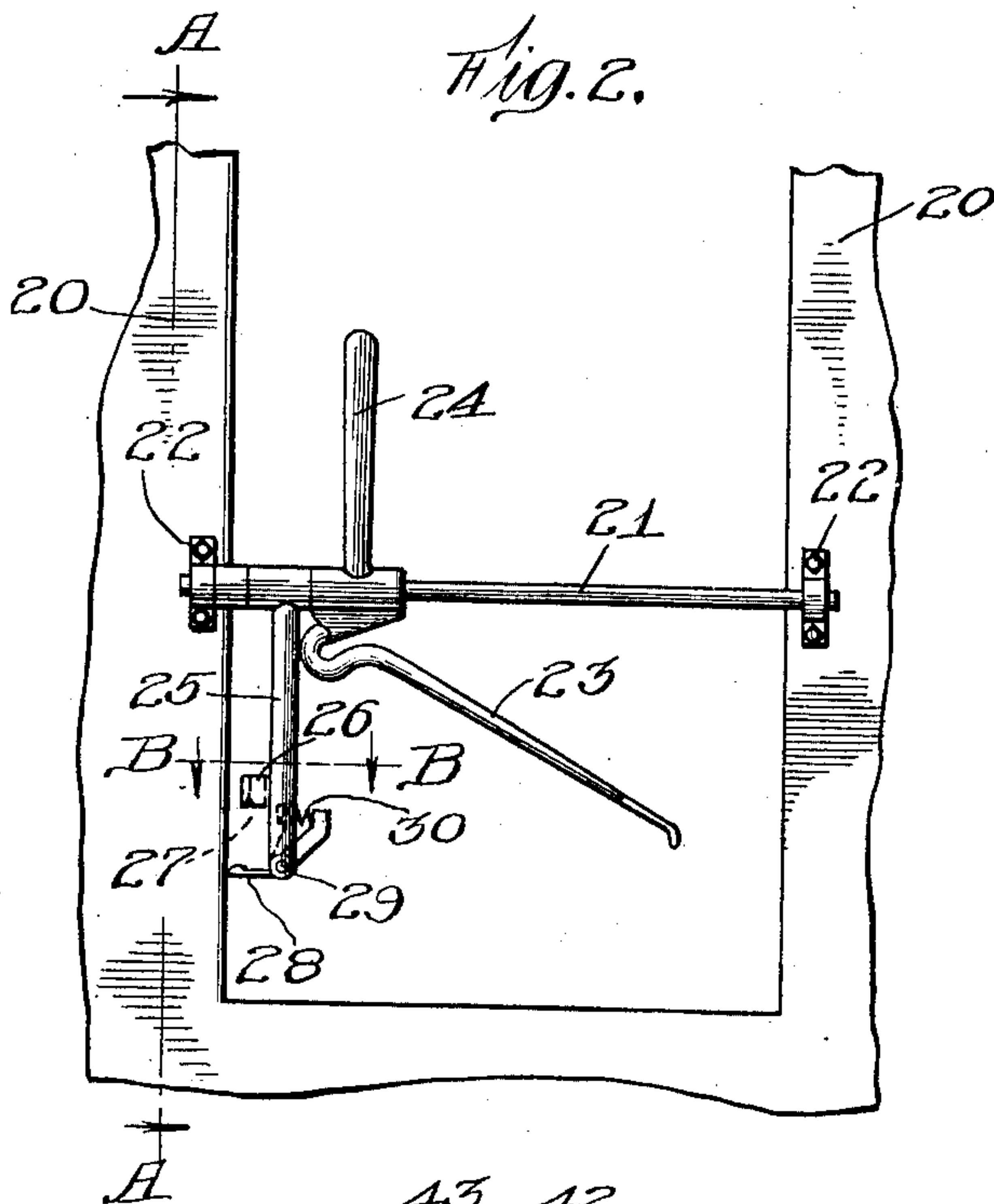
No. 827,067.

PATENTED JULY 24, 1906.

J. S. KAUFFMAN.
MAIL BAG CATCHING AND DELIVERY APPARATUS.

APPLICATION FILED APR. 11, 1906.

2 SHEETS—SHEET 2.



Witnesses:
E. V. Domarus.
A. C. Bird.

Inventor:
Jesse S. Kauffman

UNITED STATES PATENT OFFICE.

JESSE S. KAUFFMAN, OF CHICAGO, ILLINOIS.

MAIL-BAG CATCHING AND DELIVERY APPARATUS.

No. 827,067.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed April 11, 1906. Serial No. 311,058.

To all whom it may concern:

Be it known that I, JESSE S. KAUFFMAN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Mail-Bag Catching and Delivery Apparatus, of which the following is a specification.

My invention is concerned with a novel construction which is designed for both the delivery of mail-bags from the station to the mail-car and from the mail-car to the station, and is designed to produce apparatus for the purpose described that shall be simple in its construction, certain in its operation, which cannot be readily broken, and which can be used between two tracks to operate with a car passing in either direction on either track.

To illustrate my invention, I annex hereto two sheets of drawings, in which the same reference characters are used to designate identical parts in all the figures, of which—

Figure 1 is a perspective view of the complete apparatus, showing the relative positions of the parts just prior to the delivery of the bags to the car and to the delivery of bags from the car to the station. Fig. 2 is a side elevation of the apparatus in the car, but with it turned down at right angles to the position shown in Fig. 1. Fig. 3 is a vertical section on the line A A of Fig. 2 and showing the upper end of the station-standard in the distance. Fig. 4 is a vertical section through the top of the station-standard in the direction of the track. Fig. 5 is a similar view through the bottom of the station-standard in a direction at right angles to the track. Fig. 6 is a section, on enlarged scale, on the line B B of Fig. 2. Fig. 7 is a detail in section on the line C C of Fig. 4, and Fig. 8 is an enlarged view of the bag-holding member.

In carrying out my invention I provide for use both in connection with the delivery of the bags to and from the car a bag-holding member. (Best shown in Fig. 8, where it will be seen to consist of the body portion 10, which is preferably a casting which is provided with the two diverging ears 11 and the loop portion 12 and the shank 13.) A loop 14 is provided, and in order that this loop may always be in the open position shown I preferably form it of a twisted cable which passes through the diverging ears 11 and the aperture in the loop 12. A rope or strap

15 also passes through the aperture in the loop 12 and is preferably provided with the snap-hook 16 and ring 17, by means of which the rope or strap 15 can be readily passed through the loop or handle 18 in the mail-bag 19. As it is essential that the loop 14 stand in a vertical position, the shank 13 is of somewhat angular shape in cross-section, preferably square, so as to fit in the sockets and hold the loop from turning.

The car 20 will be provided with the customary rock-shaft 21, passing across the door and journaled in the bearings 22, and this rock-shaft has rigidly secured thereon the customary hook 23 for taking the bag from the station-standard and the handle 24 for rocking it into position. In addition to these elements it carries the arm 25, which is provided with the shank-holding lug 26, which has the aperture 27 therein, as indicated in dotted lines in Fig. 2, which is generally square in cross-section to correspond to the shape of the cross-section of the shank 13, except that at one side thereon and on the outer portion it is flared out, as indicated. The shank 13 is inserted in this aperture 27, so that the loop 14 will be vertical, as shown in Fig. 1, and it is held against accidental displacement by the latch 28, which is pivoted at 29 to the outer end of the arm 25 and has the helically-coiled expanding-spring 30 interposed between the arm 25 and the other end of the latch to hold it yielding in position. The latching end catches over the engaging surface 31 on the body 10 of the bag-carrying member and holds it against accidental displacement. When the loop is engaged by the station-standard, as to be hereinafter explained, the pressure releases the latch 28, and the shank of the bag-holding member is drawn out of the aperture 27, the flaring side being, as seen, placed in the upper direction, so that it allows the shank to turn as it is being drawn out of the aperture.

Upon the station-platform 32 is located the station-standard 36, which is preferably located equidistant between a pair of tracks, so that it can cooperate with mail-trains passing in either direction on either track. A pair of base-pieces 33 are employed which are bolted or otherwise secured to the station-platform and which have the cylindrical bearing-flanges 34, projecting inwardly from the adjacent faces and furnishing a support for the bearing cylinder or sleeve 35, which is substantially T-shaped and which has the

standard proper, 36, screwed into or otherwise secured to the vertical member 37. The bolt 38 is preferably employed to hold the two base-pieces 33 together and a pair of helically-coiled torsional springs 39 have one end secured to the base-pieces 38, as shown, and the other ends are secured to the web 40, cast or otherwise secured in the center of the cylinder. The action of these torsional springs will be to permit the standard 36 to swing about the bolt 38 as a center, thus permitting it to yield as much as may be necessary under the impact caused by the delivery thereto of the bags of mail from the car. After the car has passed the force of the springs will return the standard to its vertical position after the bags are removed therefrom if they do not have sufficient strength to carry it to vertical position with the bags in place. The upper end of the standard is provided with the pair of hook-shaped arms 41, which extend horizontally along the line of the track so as to engage with and secure the loops 14 of the bag-holding member supporting the bags to be delivered irrespective of the direction of the movement of the train. The shank of the bag-holding member for the bags to be delivered to the car is supported in a correspondingly-shaped recess 42, extending through the head 43 of the bolt 44, which is journaled in the bearing formed in the body 45 of the member carrying the hooks 41, and which is held yieldingly in its normal position with the aperture 42 at right angles to the line of the tracks by the helically-coiled torsion-spring 46, which is secured at one end to the bottom of the bolt or rod 44 and at the other end to the body 45. The operation of this portion of the apparatus will be readily apparent, as with the bag-holding member in position, as shown in Fig. 1, the hook 23 will engage the loop 14 and draw the shank 13 out of the aperture 42, the head 43 turning as much during the movement as is necessary to permit it to be freely withdrawn.

The operation of the complete apparatus in both the delivery of the mail to and from the car will be very apparent, and it will be likewise apparent that I have produced a simple and efficient structure that cannot readily be broken or get out of order in ordinary usage.

While I have shown and described my invention as embodied in the form which I at present consider best adapted to carry out the purposes, it will be understood that it is capable of modifications and that I do not desire to be limited in the interpretation of the following claims except as may be necessitated by the state of the prior art.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a device of the class described, the bag-holding member consisting of the body having the diverging eyes and a support-en-

gaging member, the cable passed through the diverging eyes to form a loop always held open, and means carried by said body for engaging and supporting a mail-bag.

2. In a device of the class described, the bag-holding member consisting of the body having the diverging eyes and the shank angular in cross-section adapted to engage a similarly-shaped recess in a supporting member, the cable passed through the diverging eyes to form a loop always held open, and means carried by the body for engaging and supporting a mail-bag.

3. In a device of the class described, the bag-holding member consisting of the body having the diverging eyes and the elongated slot therein and a support-engaging member, the cable passing through the slot and the diverging eyes to form a loop always held open, and means carried by the body and passing through the slot for engaging and supporting a mail-bag.

4. In a device of the class described, the bag-holding member angular in cross-section and provided with a loop adapted to be held at a certain angle to be engaged by a hook and means for supporting a bag, of the support for the bag-holding member correspondingly angular in cross-section, for the purpose described.

5. In a device of the class described, the combination with the supporting member having the aperture with one side thereof flaring, of the spring-detent opposed to said aperture and adapted to yield in the direction of the flaring side, and the bag-holding member having a shank adapted to fit in the aperture and a portion engaged by the detent, and a member by which the bag-holding member is caught.

6. In a device of the class described, the combination with the supporting member having the aperture angular in cross-section with one side flaring, of the spring-detent opposed to said aperture and adapted to yield in the direction of the flaring side, the bag-holding member having the loop and the shank angular in cross-section adapted to fit in the aperture and a portion engaged by the detent, and a member by which the loop is caught.

7. In a device of the class described, the combination with the supporting member having the aperture with one side flaring, of the spring-detent opposed to said aperture and adapted to yield in the direction of the flaring side, the bag-holding member having the loop and provided with means for holding the loop vertically and a shank adapted to fit in the aperture and a portion engaged by the detent, and a member by which the loop is caught.

8. In a device of the class described, the combination with the vertical standard carrying mechanism to support and catch the

bags, and adapted to swing in a vertical plane, of means for holding it yieldingly in and returning it to its vertical position.

9. In a device of the class described, the combination with the vertical standard carrying mechanism to support and catch the bags, and adapted to swing in a vertical plane, of the springs for holding it yieldingly in and returning it to its vertical position.

10. In a device of the class described, the combination with the vertical standard carrying mechanism to support and catch the bags and pivoted near the bottom thereof to swing through an angle in the direction of the tracks, of the opposed torsion-springs for holding the standard yieldingly in and returning it to its vertical position.

11. In a device of the class described, the combination with the base-pieces, of the T-shaped cylinder journaled between said base-pieces, the standard carrying mechanism to support and catch the bags carried by the cylinder, and the torsion-springs within said cylinder to hold it yieldingly in and returning it to its vertical position.

12. In a device of the class described, the combination with the bag-holding member having the shank 13, of a standard having the head adapted to hold said shank horizontally, and means for holding the head yieldingly in a certain position from which it may be swung in a horizontal plane as the bag-holding member is engaged by the hook on the car.

13. In a device of the class described, the combination with the bag-holding member having the shank 13, of the standard having the head adapted to hold said shank horizon-

tally, and a spring for holding the head yieldingly in a certain position from which it may be swung horizontally as the bag-holding member is engaged by the hook on the car.

14. In a device of the class described, the combination with a bag-holding member having the shank 13, of the vertical standard, means for holding said standard yieldingly in and returning it to its normal position, the head of said standard adapted to hold said shank horizontally, and means for holding the head yieldingly in a certain position from which it may be swung horizontally as the bag-holding member is disengaged therefrom.

15. In a device of the class described, the combination with the vertical standard pivoted near the lower end thereof, of the springs for holding it yieldingly in its vertical position, the shank-holding head journaled in the top of the standard, and the spring for holding the head yieldingly in a certain position from which it may be swung as the bag is disengaged.

16. In a device of the class described, the combination with the vertical standard, of means for holding it yieldingly in its vertical position so that it can swing in either direction along the line of the track, and the hooks supported at the top of the standard extending in both directions.

In witness whereof I have hereunto set my hand and affixed my seal this 7th day of April, 1906.

JESSE S. KAUFFMAN. [L. s.]

In presence of—

JOHN H. McELROY
E. K. MANCHESTER.