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PATENTED FEB. 25, 1908.

J. HOLLENBURGER & C. WILL.
MAIL BAG CATCHER AND DELIVERER.

APPLICATION FILED OCT. 17, 1907.

2 SHEETS—SHEET 1.

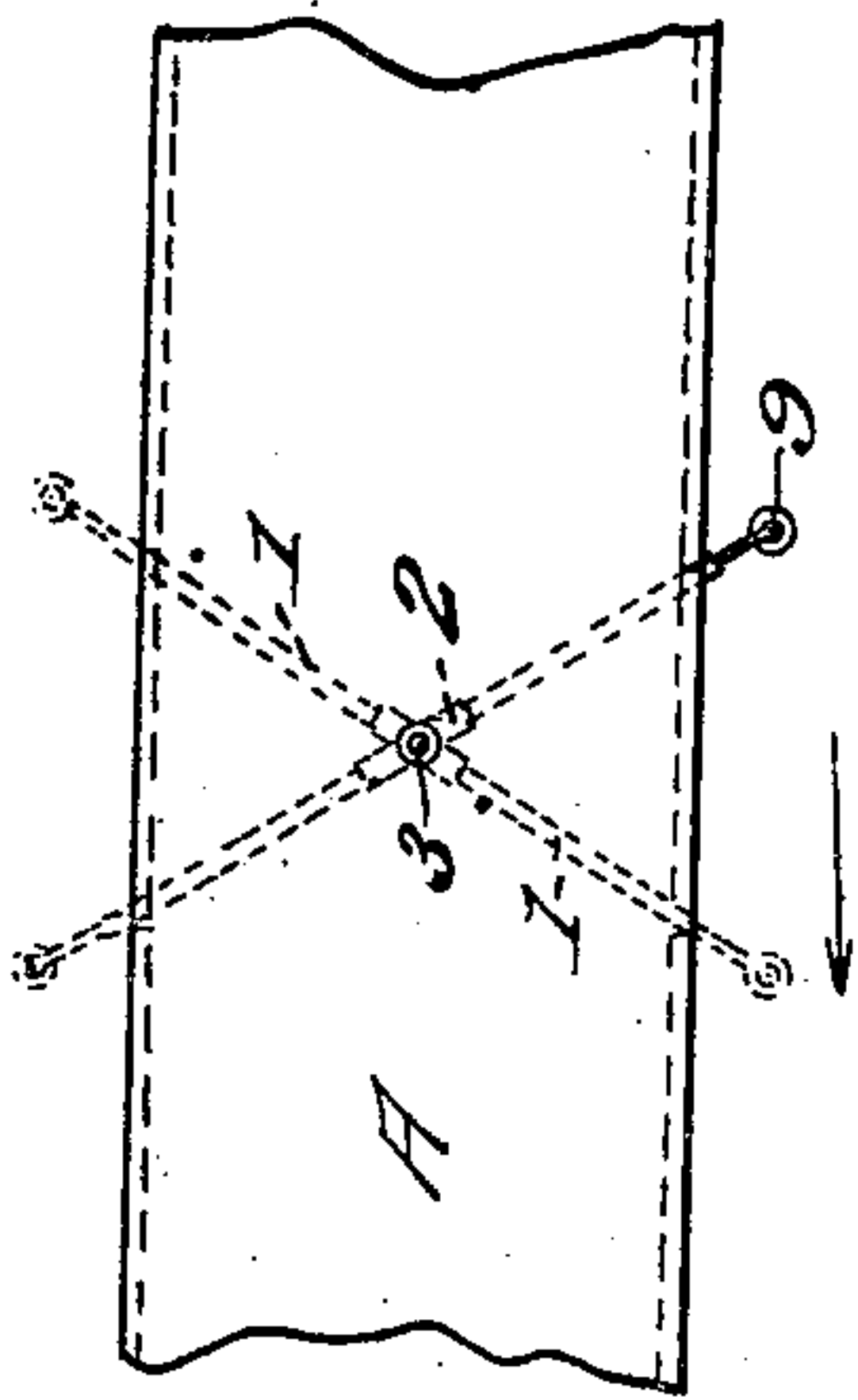
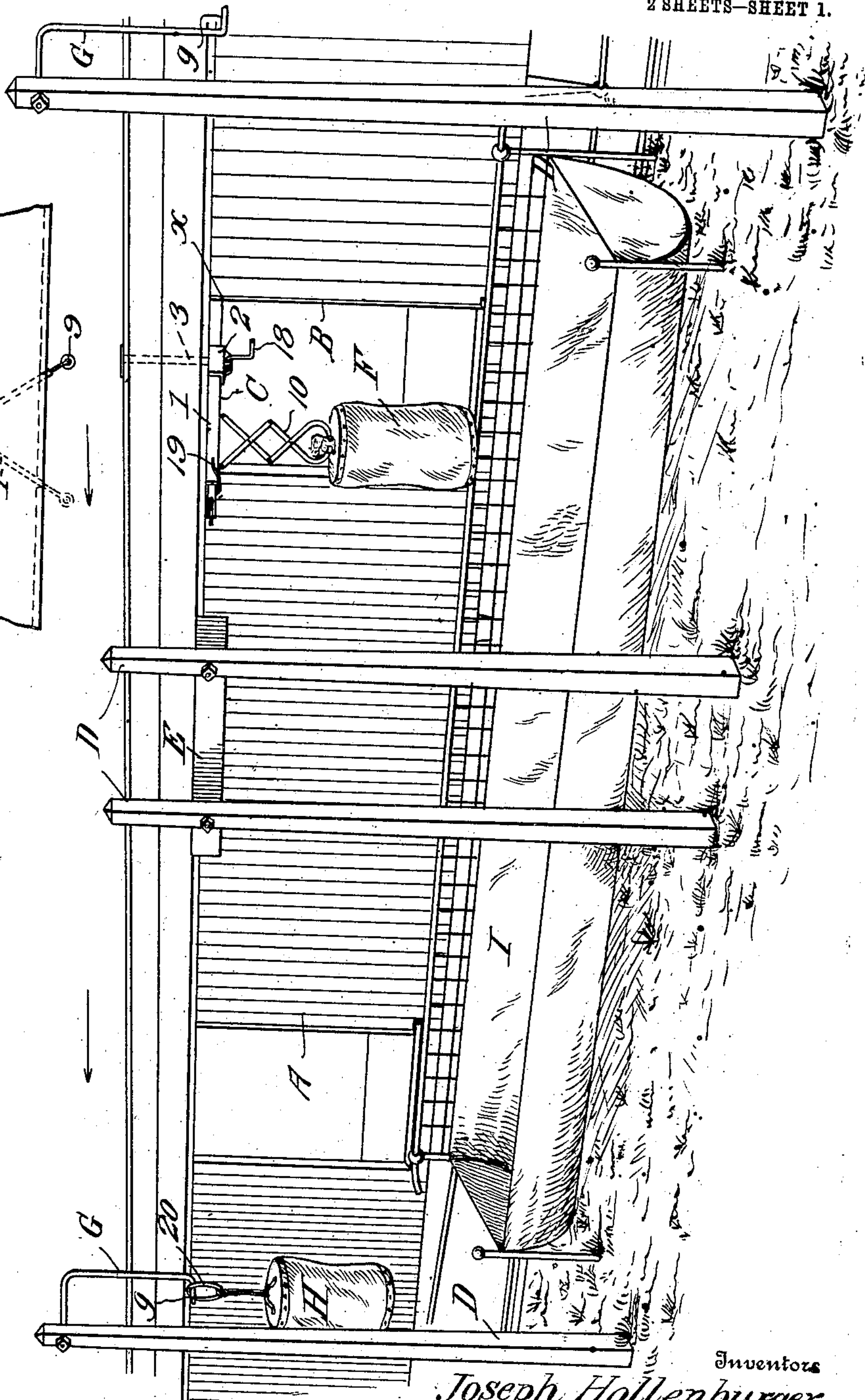


Fig. 7.

Fig. 1.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 2.

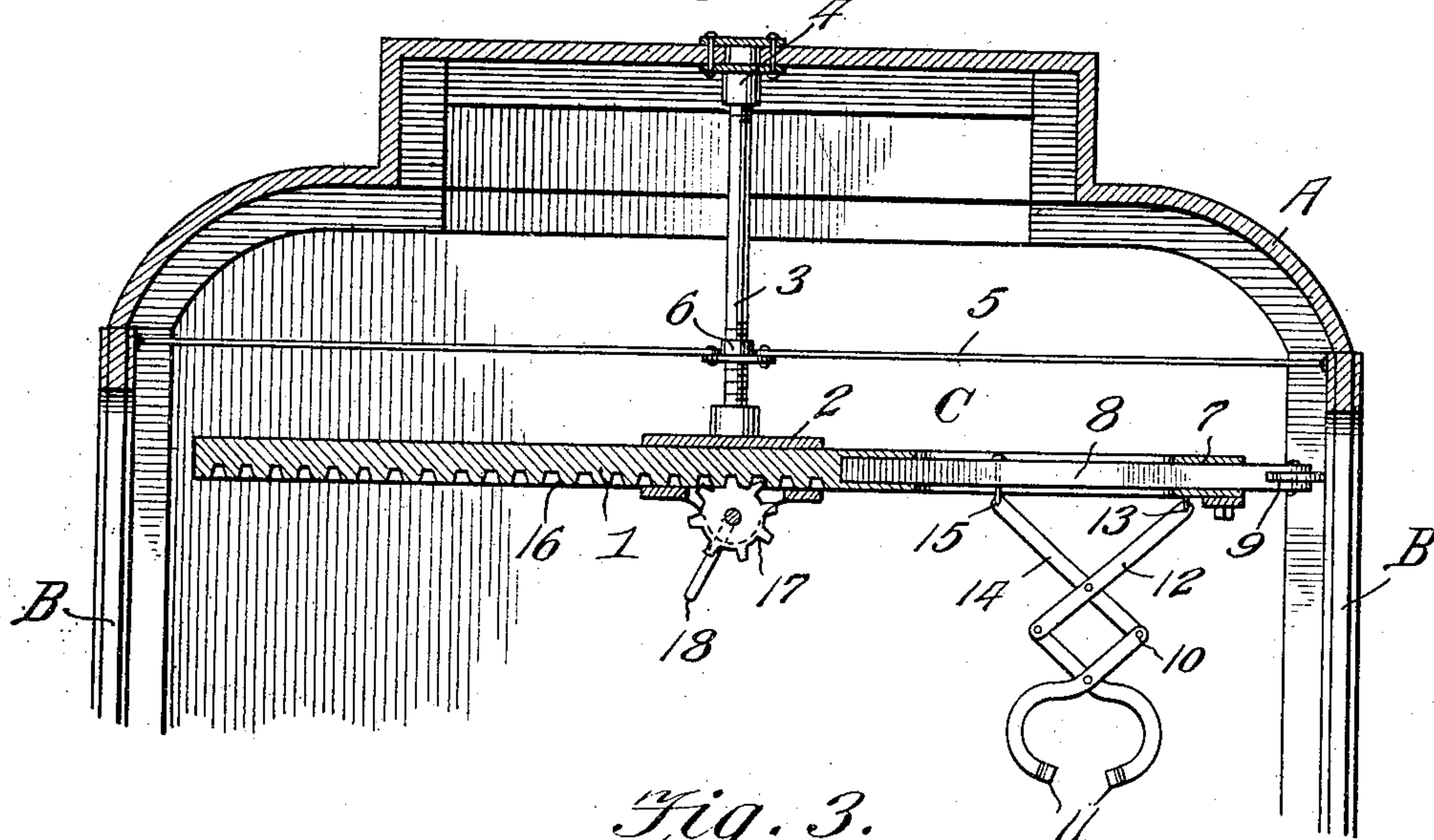


Fig. 3.

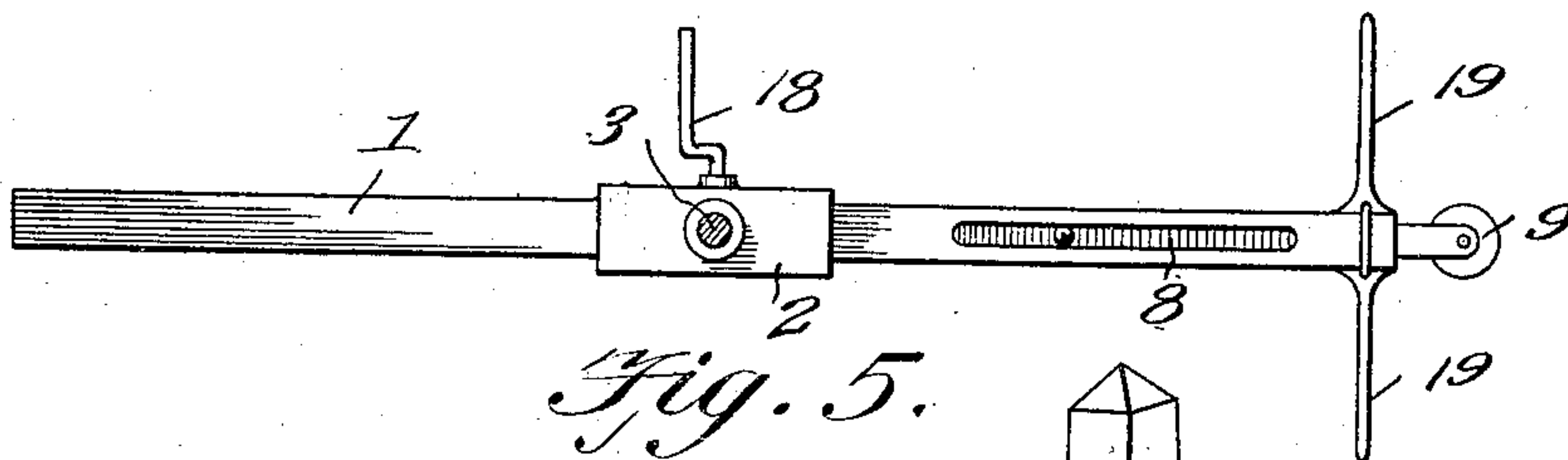


Fig. 5.

Fig. 4.

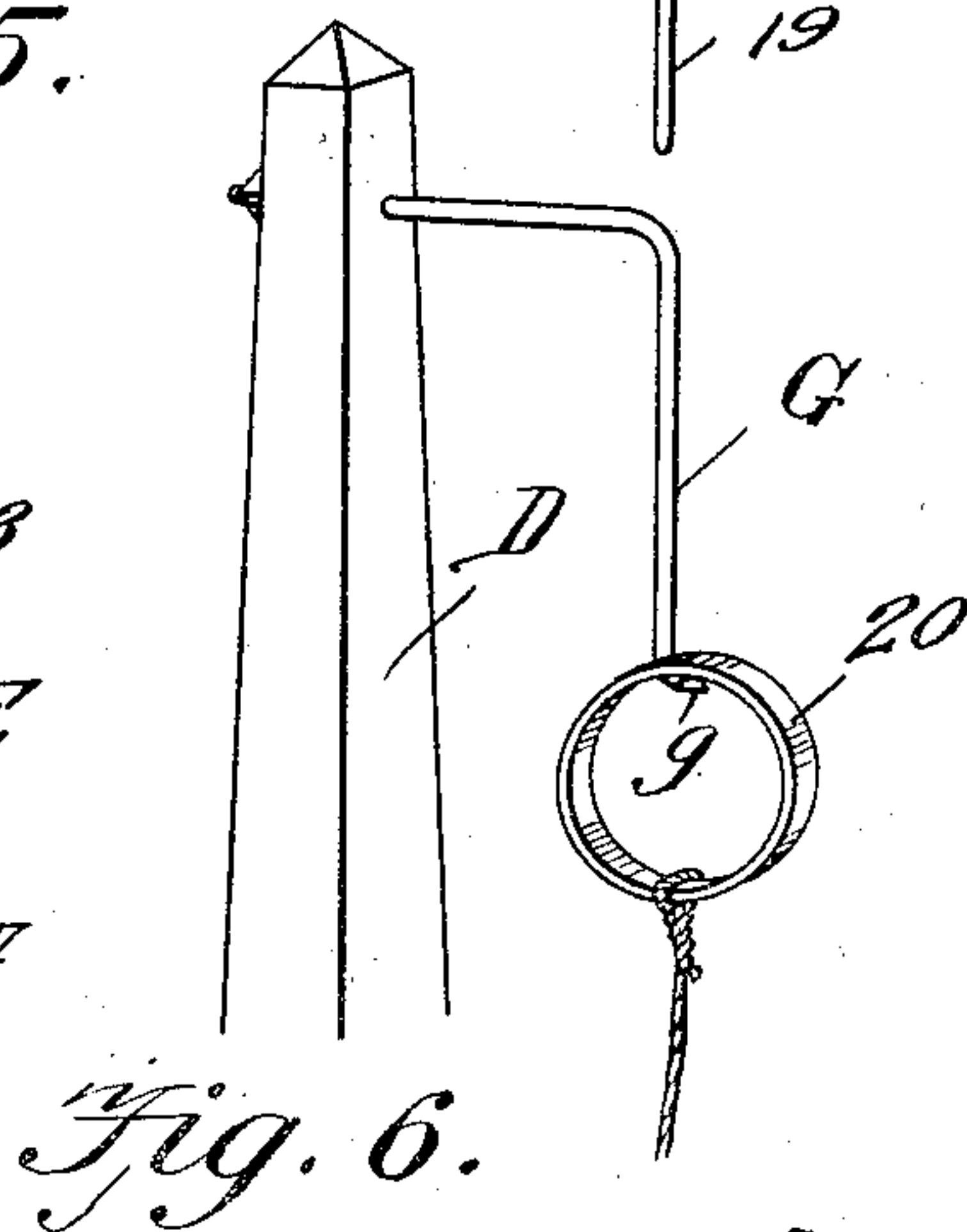
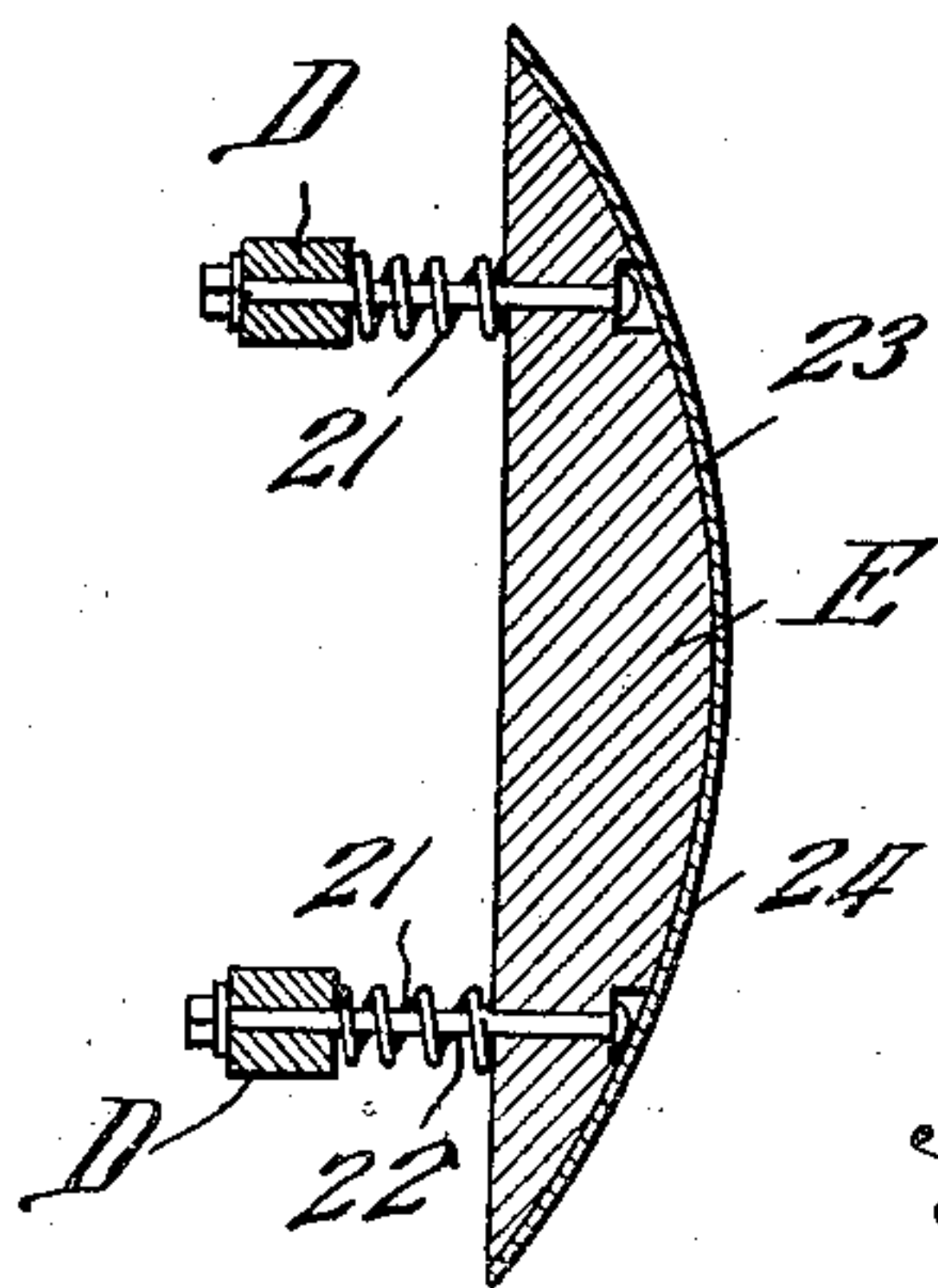
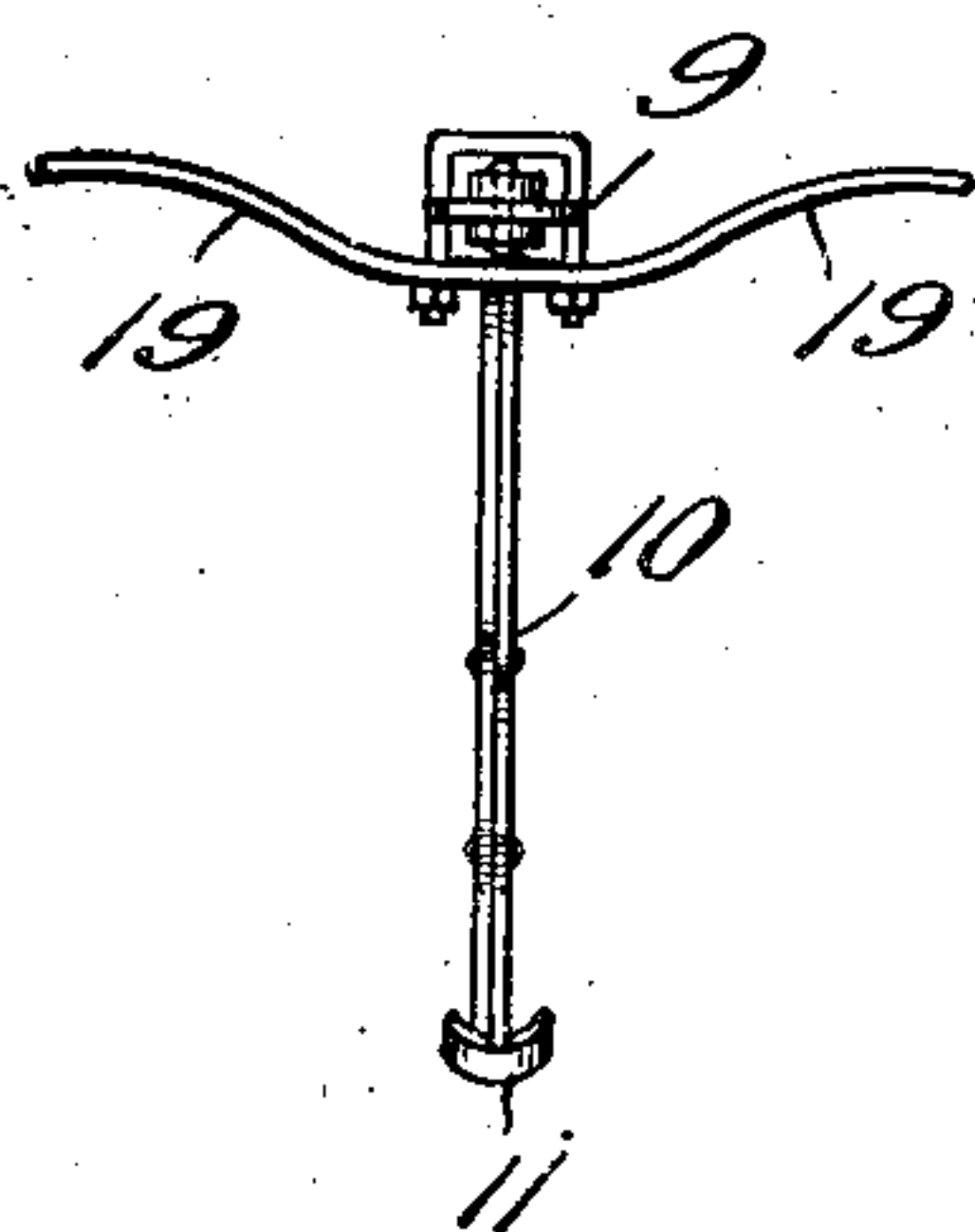


Fig. 6.

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UNITED STATES PATENT OFFICE.

JOSEPH HOLLENBURGER AND CHARLES WILL, OF NEW ORLEANS, LOUISIANA.

MAIL-BAG CATCHER AND DELIVERER.

No. 880,304.

Specification of Letters Patent.

Patented Feb. 25, 1908.

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To all whom it may concern:

Be it known that we, JOSEPH HOLLENBURGER, a citizen of Bavaria, Empire of Germany, and CHARLES WILL, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Mail-Bag Catchers and Deliverers, of which the following is a specification.

This invention relates to appliances whereby mail bags can be delivered from and to the mail car of a moving train and stations along the railroad over which the train passes, in a simple and effective manner and without danger of the mail bags and contents being damaged or destroyed.

The invention has for one of its objects to improve and simplify the construction and operation of devices of this character so as to be comparatively easy and inexpensive to install and operate, thoroughly reliable and efficient in use, and convenient to manipulate.

A further object of the invention is the provision of a mail bag catching and delivering device mounted on the mail car in such a position as to be projected from either door for catching and delivering bags at either side, and while the train is going in either direction.

A further object of the invention is to employ a bag suspending means on the mail car which is adapted to be released by suitable means arranged along the track to engage the device and cause the bag to be dropped, there being a net or other suitable means disposed along the track to catch the bag to prevent damage to the contents of the latter or the bag from being thrown under the wheels of the train.

Another object of the invention is to provide bag-supporting devices at the various mailing stations along the road whereby the bag catchers of the cars can pick up the mail bags while the train is moving in either direction.

With these objects in view and others, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawing, which illustrates one of the embodiments of the

invention, Figure 1 is a perspective view of a portion of a mail car showing the mail bag catching and delivering device thereon, and the necessary appliance at a mailing station along the road. Fig. 2 is a transverse section of the upper portion of the car showing the mail bag catching and suspending device thereon. Fig. 3 is a plan view of the said device. Fig. 4 is an end view thereof. Fig. 5 is a longitudinal sectional view of one of the relatively stationary abutments along the road for releasing the mail bag suspending means on the mail cars. Fig. 6 is a perspective view of one of the stationary mail bag supports at one of the mailing stations. Fig. 7 is a diagrammatic view of a portion of the mail car showing the different adjustments of the mail bag catching and delivering device.

Similar reference characters are employed to designate corresponding parts throughout the several views.

Referring to the drawing, A designates a mail car of ordinary construction that is provided with doorways B arranged one opposite the other, as shown in Fig. 2, and mounted in the car at a point between the doorway is the mail bag catching and suspending apparatus C. At each station where mail bags are to be delivered or taken up, there are planted four posts D arranged two together at one point and the others a suitable distance on opposite sides thereof, and on the two middle posts is supported an abutment or device E which controls the releasing of the mail bag F held by the apparatus C. On the outermost posts D are L-shaped arms G having their lower extremities *g* bent in opposite directions for the purpose of permitting the mail bag H to be taken off the same by the train moving in either direction. Disposed along the track is a catch net I of any suitable construction for the purpose of receiving the mail bags as they are dropped from the train, thereby preventing the contents of the bag from becoming broken or damaged or the bag from rolling under the train.

The apparatus C consists of a horizontally projecting member 1, Figs. 1 to 3, inclusive, which is slidably mounted in a head 2 that is rotatably secured to the lower end of a vertical rod or shaft 3, the said shaft being secured in a socket 4 attached to the roof of the car. To rigidly hold the shaft in ver-

tical position, it is braced by means of the braces 5 secured to the sides of the car and connected with the collar 6 on the shaft. The bar or member 1 is provided with a bore 7 at one end into which is mounted a slidable element 8 that carries on its outer extremity a wheel 9 that is adapted to engage with the device E at the mailing stations when the bar 1 is projected from either car door for dropping or catching a bag. Suspended on the bar 1 is a pair of lazy tongs 10 having jaws 11 which grip a mail bag and the weight of the bag serves to cause the jaws to tightly grip the bag. The link 12 of the tongs is attached to a fixed pivot 13, while the link 14 is connected at 15 with the sliding element 8 so that the movement of the element causes the tongs to be opened or closed. On the solid portion of the bar 1 are teeth 16 forming a rack bar, and with these teeth mesh a pinion 17 mounted on the head 2. The pinion is turned by a crank shaft 18 suitably connected therewith and journaled in the head, and by turning the crank shaft, the bar can be projected out of the car doorway, or returned. To pick up the mail bags from the stations along the road, the outer extremity of the bar is provided with oppositely extending fingers 19, as shown in Fig. 3.

Normally, the parts of the apparatus C are in the position shown in Fig. 2, and when it is desired to deposit the bag at any station and to receive the bag therefrom, the mail clerk places a bag so that the gathered top thereof can be gripped between the jaws 11 of the lazy tongs, and when held in this position, the longitudinally movable element 8 is moved outwardly so as to close the tongs and grip the bag. If the bag is to be dropped from the right side of the car, Fig. 2, it is merely necessary to turn the crank shaft 18 in a direction to project the bar 1 outwardly through the right door. When, however, it is desired to deliver the bag at the left side, the bar is turned half way around on the shaft 3, while the bar is in its central position, as shown in Fig. 2, so that it can be projected through the left door. The bar 1 is inclined to one side or the other, according to the direction in which the train is traveling so as to rest against the frame of the door and thus withstand the shock caused by the wheel 9 striking the device E and by the fingers 19 picking up the bag. By reference to Fig. 7, it will be observed that when the bar 1 is in the full line position, it is set to deliver or pick up bags while the train is going in the direction of the arrow, and the dotted lines illustrate the three other positions which the car can occupy for delivering and catching bags from either side and going in either direction. When the wheel strikes the device E, the element 8 is pushed inwardly so that the lazy tongs will open and

drop the bag into the net I. Immediately after this occurs, one of the fingers 19 will engage the suspending ring 20 attached to the mail bag H, Fig. 1, and thereby pick up such bag. In order to guard against shocks being brought to bear on the apparatus C by the device E, each of said devices is cushioned by compression springs 21, as shown in Fig. 5, which springs are mounted on the bolts 22 that support the device E on the posts D. The device E is formed with a concaved surface 23, and this surface may be faced with a metal strip 24 when the body of the device is made of wood, and by shaping the device in this manner, it will operate on the mail bag suspending device of the car, irrespective of the direction of motion of the latter.

It will be observed that the member 1 of the device C is shown in Fig. 1, as inclined forwardly or toward the direction of travel of the train, this being done to better illustrate the position and arrangement of the parts. In practice, however, the member 1 will be inclined rearwardly and bear on the door frame at x when the train is traveling in the direction indicated by the arrow.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while we have described the principle of operation of the invention, together with the apparatus which we now consider to be the best embodiment thereof, we desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired, as are within the scope of the claims. Having thus described the invention, what we claim is:—

1. The combination of a mail car provided with oppositely disposed doorways, with a mail bag catching and delivering device mounted on the car to be projected through either doorway thereof, and means supporting the entire device on the roof of the car.

2. The combination of a mail car provided with oppositely arranged doorways, with a mail bag catching and delivering device pivotally mounted on and suspended from the roof of the car in a position to be projected out of either doorway.

3. The combination of a mail car provided with doorways, with mail bag catching and delivering device, said device consisting of a horizontally movable carrying member mounted to be projected out of either doorway, and means for movably supporting the member on and close to the roof of the car, and means for projecting and retracting said member.

4. The combination of a mail car provided with doorways, with mail bag catching and

delivering device, said device consisting of a carrying member mounted to be projected out of either doorway, means for projecting and retracting said member, and a pivot on which the member turns.

5 5. The combination of a mail car provided with oppositely disposed doorways, with a mail bag carrying device, said device comprising a horizontally movable member, a pivot on the top of the car for supporting the member, and means for projecting one end of the member through either doorway.

10 6. The combination of a mail car having a doorway, a horizontally movable member adapted to be projected out of the doorway, a pivotal mounting for the member, and a rack and pinion device for projecting and retracting said member.

15 7. The combination of a mail car, with a supporting member projecting therefrom, a pair of lazy tongs on the member for releasably holding a mail bag, and stationary devices for actuating the lazy tongs to release a bag.

20 8. In a mail bag catching and delivering device, the combination of a supporting member, an element movably mounted thereon, a pair of lazy tongs opened and closed by the element and adapted to hold a mail bag, and means for actuating the element.

9. The combination of a supporting member adapted to be projected and retracted, mail bag catching and suspending devices thereon, a movable element controlling the suspending device and supported on the member, and a yielding abutment with which the element engages for actuating the bag-suspending devices.

10. The combination of a mail car, a bag-suspending device thereon comprising a means which when released permits the bag to drop, a stationary means controlling the device for releasing the bag, and a stationary net adapted to catch the dropped bag.

11. The combination of a mail car having oppositely-disposed doorways, with a mail bag catching and delivering device suspended from the ceiling of the car and including a member adapted to be projected through either door, and a mounting for the member for permitting the latter to bear against either side of each doorway for holding the member in operative position.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH HOLLENBURGER.

CHARLES WILL.

Witnesses:

H. W. KAISER,

J. D. BRESNER.