I. SCHRECK.

MAIL BAG CATCHER.

APPLICATION FILED JULY 24, 1909.

947,703. Patented Jan. 25, 1910.

2 SHEETS—SHEET 1.

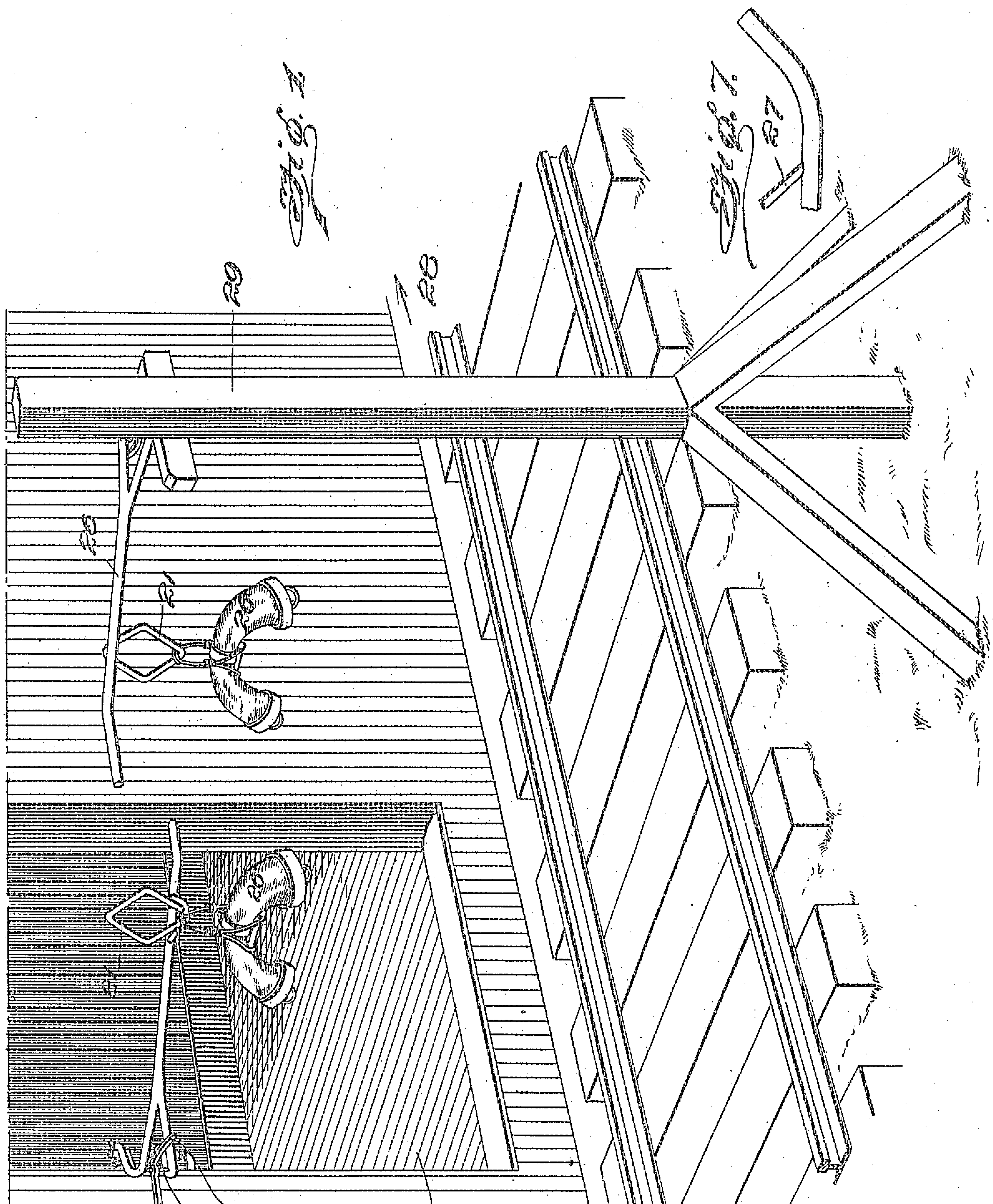

Fig. 1

Fig. 7

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2 SHEETS—SHEET 2.

Fig. 2.

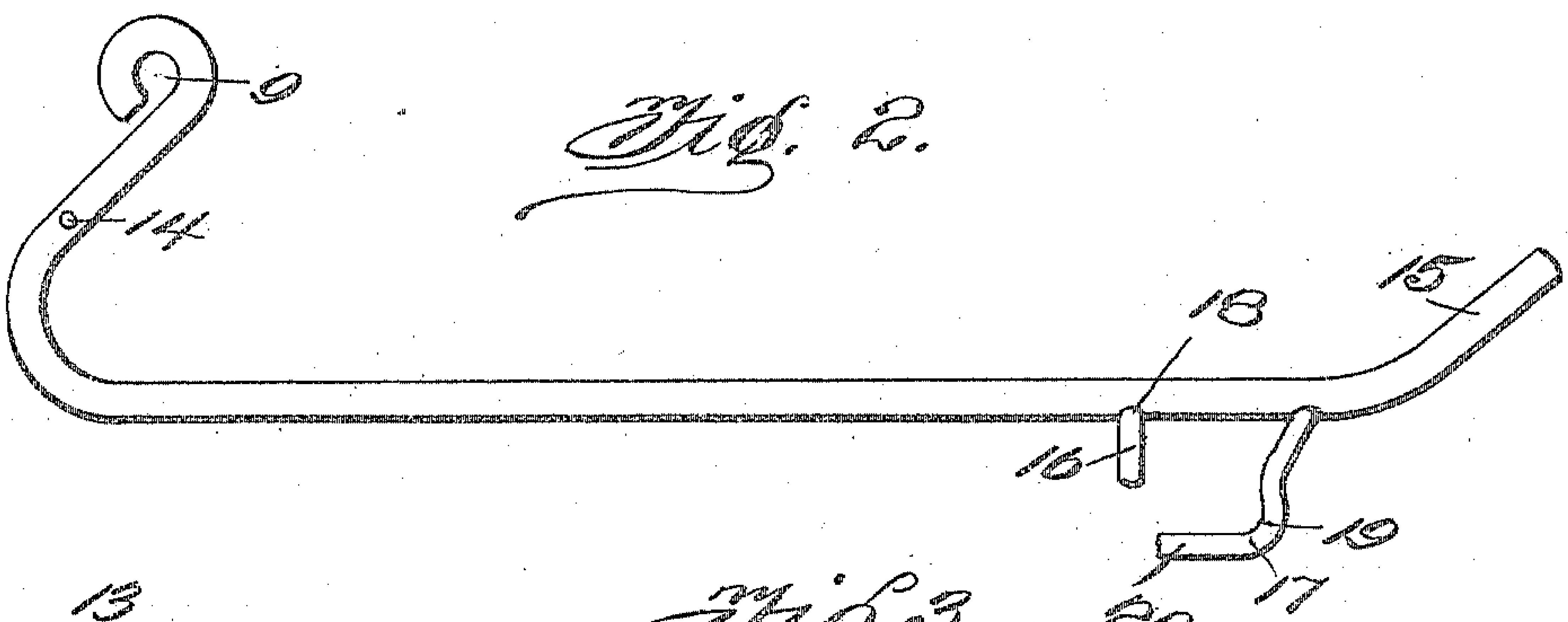


Fig. 3.

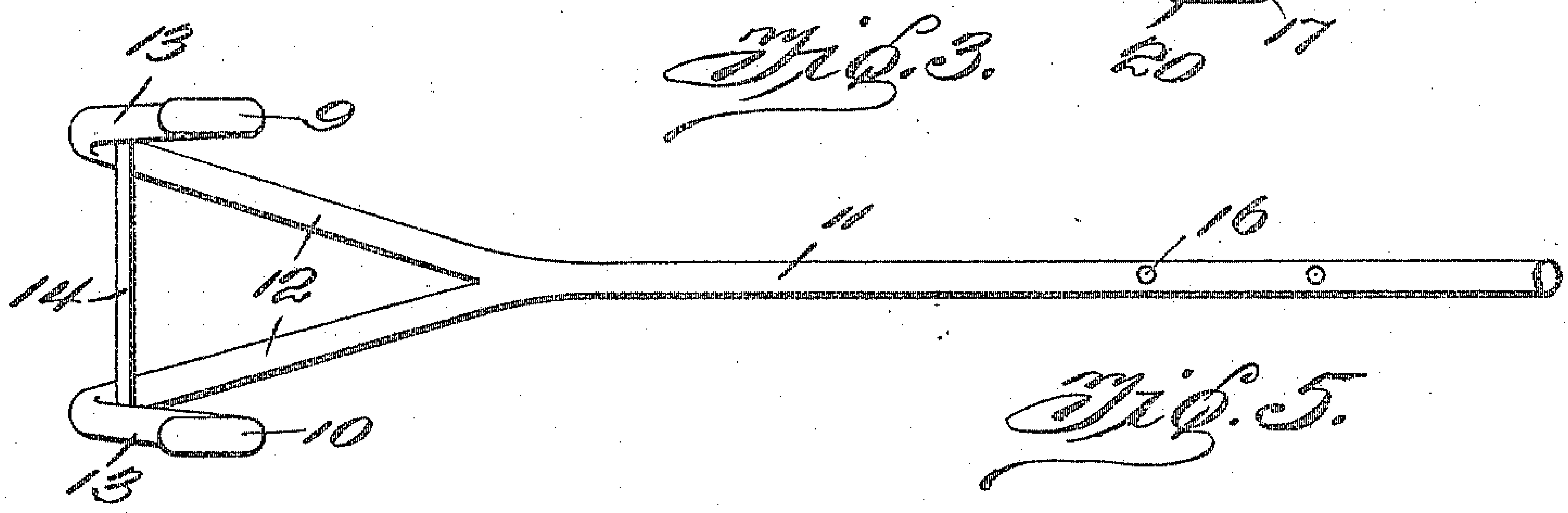


Fig. 4.

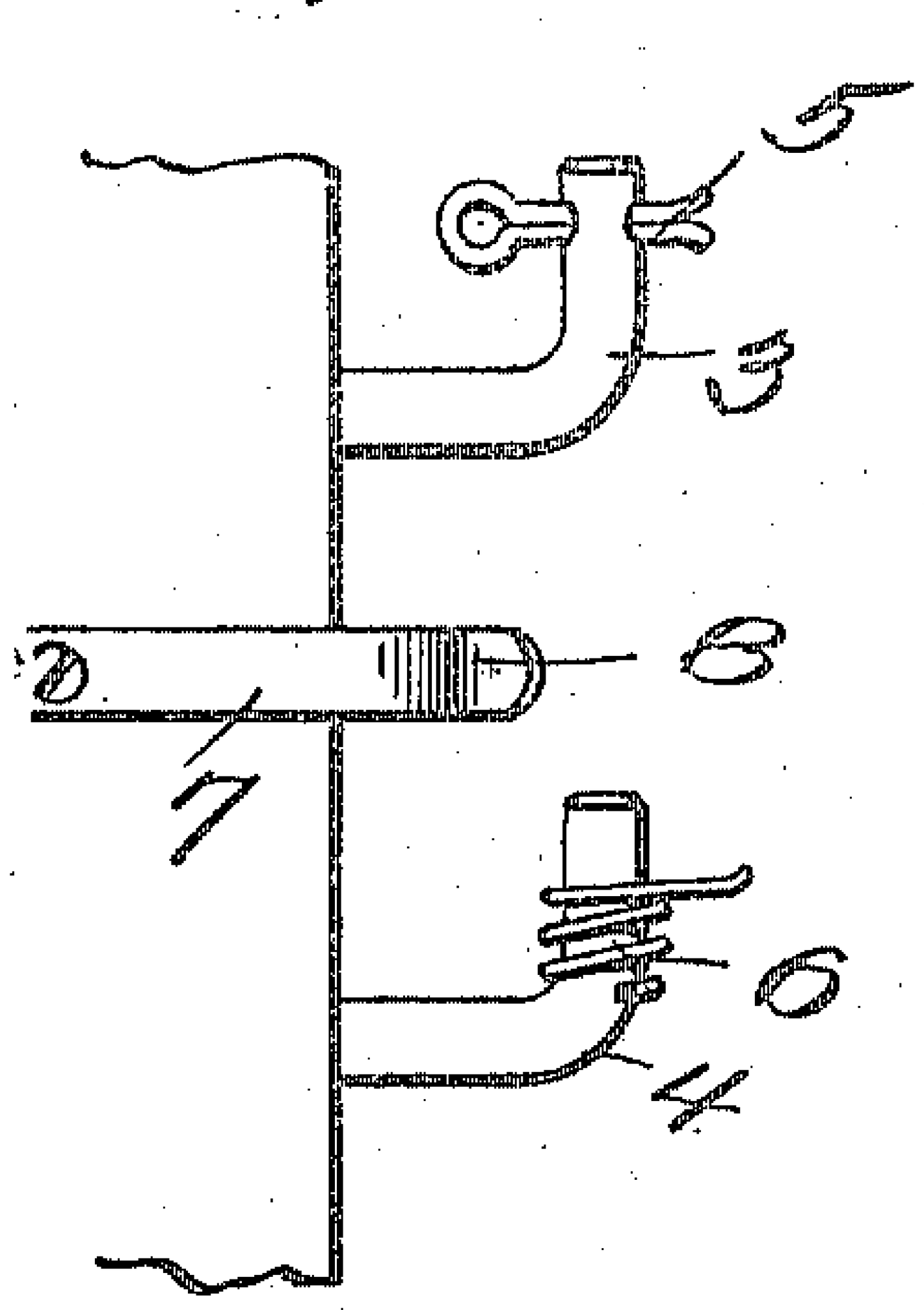


Fig. 5.

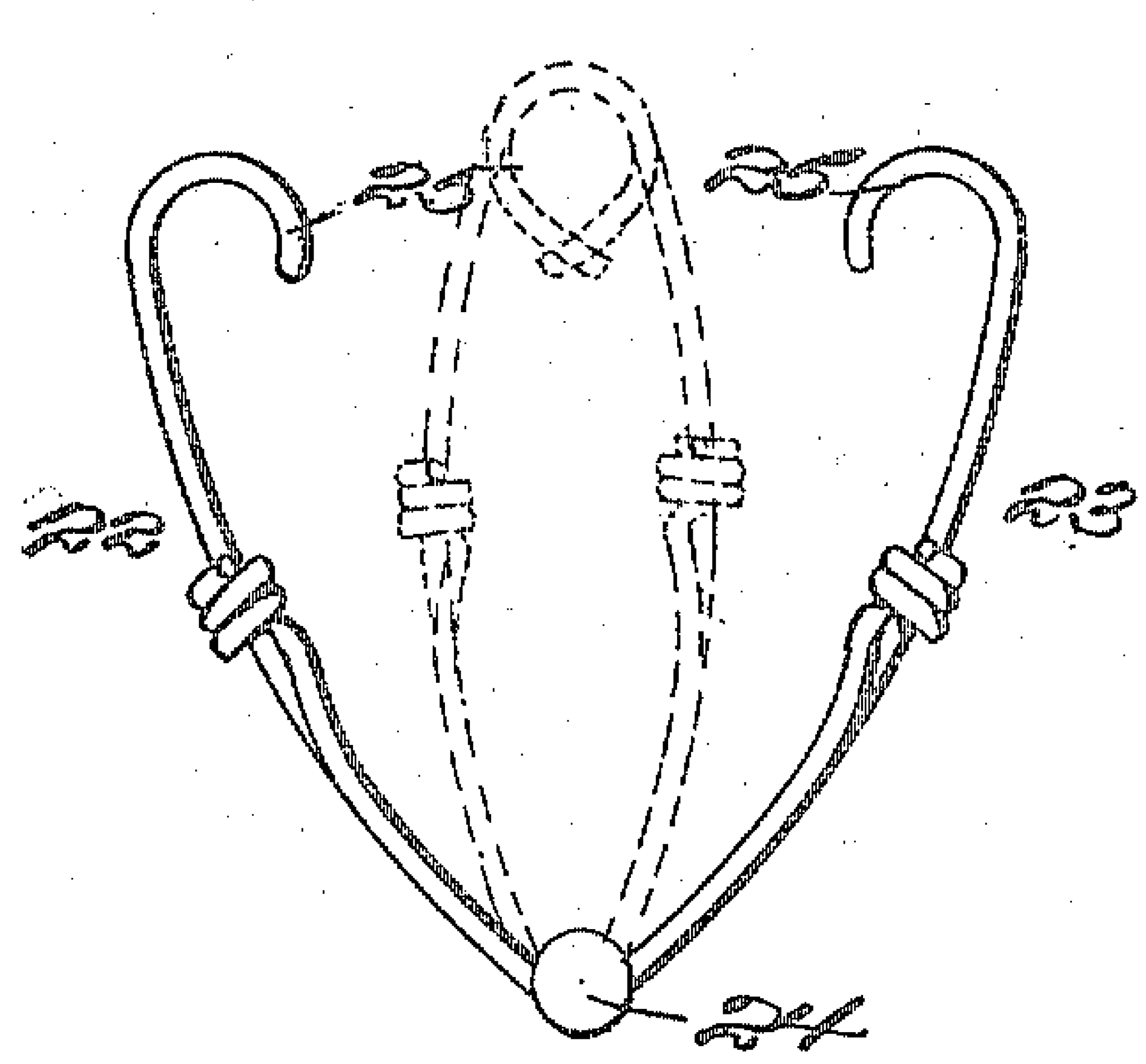
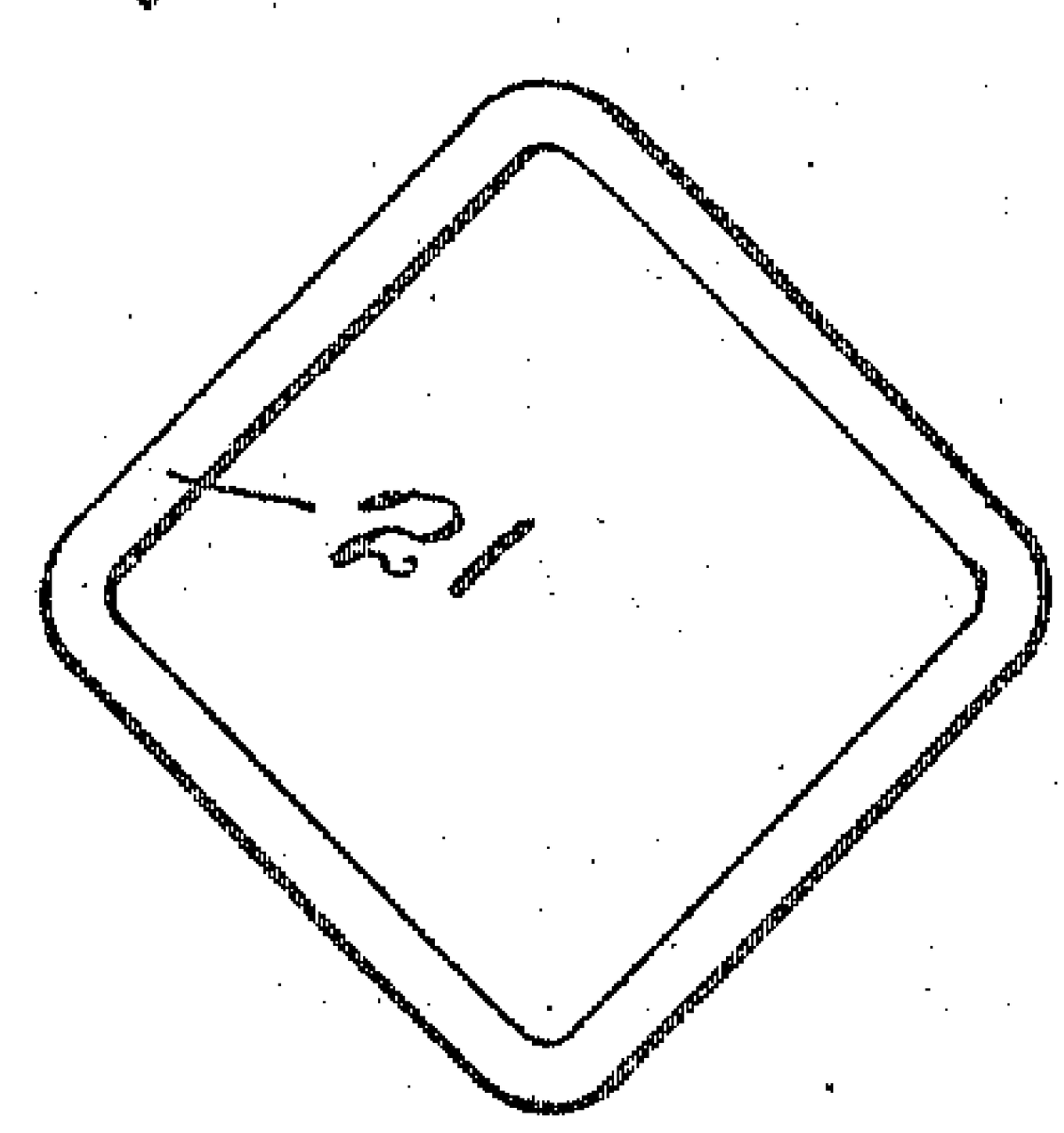


Fig. 6.



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UNITED STATES PATENT OFFICE.

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MAIL-BAG CATCHER.

947,703. Specification of Letters Patent. Patented Jan. 25, 1910.

Application filed July 24, 1909. Serial No. 509,333.

To all whom it may concern:

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

This invention relates to improvements in transferring mail sacks from a holding device at a station to a moving mail car or from a moving train to a holding device and for simultaneously transferring from one device to the other, and the object of the invention is to provide a device of this character which is simple in construction adapted to operate quickly and which is not liable to get out of order.

Another object of the invention is to provide a device of this character having means whereby the receiving and delivery arms are effectively locked in either a receiving or delivery position and which when the mail is received will swing automatically to deliver the mail either within the car or to the station.

A still further object of the invention is to provide a device of this class having novel means whereby the mail sack may be effectively supported without danger of accidental dislodgment of the same when contacted by the train.

With the above and other objects in view which will appear as the description progresses the invention resides in the novel construction and arrangement of elements hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of the improvement illustrating the same in applied position upon the mail car and station post. Fig. 2 is a top plan view of one of the cranes. Fig. 3 is an elevation of the same. Fig. 4 is a detail view of the crane supports illustrating the pintles for the crane and the spring latch attached thereto. Fig. 5 is an elevation of the mail retaining device. Fig. 6 is a plan view of one of the rings. Fig. 7 is a detail.

Referring to the drawings the numeral 1 designates the side of a mail car. The car 1 is provided with the usual side door way 2 and upon one or both of the vertical frames of the door way is a pair of spaced substantially L-shaped pintles 3 and 4. In the present instance these pintles 3 and 4 have been shown upon only one side of the door frame, and the pintle 3 is provided with a suitable opening adapted for the reception of a cotter pin 5, while the lower pintle 4 has connected therewith one of the end convolutions of a helical spring 6. Positioned upon the car 1 directly intermediate of the pintles 3 and 4 is a spring catch member 7 provided with an offset or engaging lip 8. The pintles 3 and 4 are each adapted for the reception of a pair of eye members 9 and 10 integrally formed upon a receiving and delivery arm or crane 11. The said frame 11 has its inner extremity slit to provide substantially V-shaped extensions 12 and these extensions are bent at an angle in relation to the plane of the said arms 11 as indicated by the numeral 13, the said bent portions terminating in the eyes 9 and 10. The offset members 13 are retained in spaced relation with each other, through the medium of a suitable bar 14 which also serves another purpose presently to be described.

When the crane 11 is positioned upon the pintles 3 and 4 it will be noted that the lower arm providing the eye 10 is contacted by the extending upper member or convolution of the spring 6 and that the said member 11 is retained in proper position upon the pintles 3 and 4 through the medium of the cotter pin 5. The spring 6 is adapted to exert a pressure against the lower arm 12 of the frame so as to normally force the latter within the door way of the car 1. When the crane is swung outwardly the connecting bar 14 will be contacted by the offset member 8 of the resilient catch, so as to effectively retain the said crane in this position. The crane 12 has its outer extremity bent at an angle approximately equaling that of the angle of the offset portions 13 as indicated by the numeral 15 and the said crane is provided with a substantially right angular offset or projecting member 16 which is adapted to coact with a larger angular offset member 17 arranged upon the face of the crane opposite to that of the offset 15. The crane 11 at its point of connection with the offset member 16 is provided with a depression or groove 18 and the member 17 is also provided with the usual U-shaped depression 19 from which the said member is extended in a substantially parallel plane with that of the body of the crane 11 as designated by the numeral 20.

The numeral 21 designates the ring which

is adapted to be positioned between the offset rounded depression 19 of the member 17 and the depression 18 of the crane.

By reference to Fig. 6 of the drawing it will be noted that the ring 21 is preferably diamond shaped so that the same will fit snugly within the pocket provided by the depressions 18 and 19 and will be effectively retained therein when the car is in motion. It is to be understood however that I do not limit myself to the precise construction of the ring 21 as the same may be constructed in various forms which will prove clearly efficient. The mail bag supporting member illustrated in Fig. 5 is preferably constructed of wire of a suitable gage and comprises a pair of members 22 and 23 hingedly connected together as at 24. Both of the members 22 and 23 have their upper extremities bent inwardly toward each other to provide suitable loops 25. By this arrangement it will be noted that the arms 22 and 23 may be swung away from each other and the mail bag positioned intermediate thereof and that the ring 21 may be inserted between the said arms 22 and 23 and the latter swung toward each other as indicated by the dotted lines in Fig. 5 so as to engage the said ring 21 by the curved loops 25.

In order to effectively support the mail sack 26 upon the device I have constructed each of the arms 22 and 23 with a substantial V-shaped lower portion and each of the arms thus provided have suitable loops wherein the connecting member or pintle 24 is positioned.

When the mail bag 26 is positioned upon the receiving device and the latter collapsed upon the ring 21, the said ring is placed within the pocket provided by the offsets 18 and 19 of the crane 11, as clearly illustrated in Fig. 1 of the drawings and it will be noted that the weight of the bag 26 as well as the bag supporting device tends to force the ring tightly within the pocket so as to prevent the accidental removal thereof, but at the same time provides for the ready removal of the ring when contracted by the station crane now to be described.

The station or stationary catch is substantially similar to that of the device previously described, the crane having a V-shaped extension terminating in offset arms having eyes similar to the eyes 9 and 10 and the said arms being spaced apart by a suitable bar similar to the bar 14. The pintles for the said eyes being previously similar to that heretofore described and the catch for the bar 14 is also of a similar construction. The body or arm of the crane has its extremity offset as is the crane 11 but the said crane designated by the numeral 26 has its face opposite to that of the face of the crane 11 provided with offset members 16 and 17 formed with an angular member 27. The crane 26 is adapted to employ an eye and a bag receiving device similar to that described in connection with the mail car apparatus and in this instance the crane is supported at a greater elevation than is the crane of the mail car and the eye 21 is positioned upon an offset 27 and directly in the path of the offset 15 of the said crane member 11, while the eye 21 positioned within the pocket of the crane 11 lies directly within the path of the offset extension of the crane 26. By this arrangement it will be noted that as the car 1 moves in the direction of the arrow 28, the arm 26 will contact the eye and receive the mail sack and support carried by the crane 26 and remove the same from the offset member 27 thereof. It will be noted that the velocity of the car will force the mail connecting apparatus to travel at a greater speed upon the cranes 26 and 11 and that the eyes connected with the said apparatus will contact an offset lip portion 28′ provided upon the catch members 7 so as to cause the latter to become disengaged from the bars 14 and thereby allow the resilient members 6 to swing the crane of the car within the doorway thereof and the crane of the stationary post member 29 out of the path of the track so as to not interfere with other rolling stock.

From the foregoing description, taken in connection with the accompanying drawing it will be noted that the construction and arrangement of the various elements provide a simple and durable device whereby the mail may be lifted at the station from the car without the necessity of receiving mail from the station or vice versa.

It is to be understood that while I have illustrated and described the preferred embodiment of the invention as it now appears to me, minor changes in proportion and degree within the scope of the following claims may be resorted to if desired as for instance it may be preferable to have the cranes 11 and 26 arranged at an angle so that the mail received thereon, will be automatically fed downwardly when the catch has been operated.

Having thus fully described the invention what is claimed as new is:

1. A mail bag catcher and deliverer comprising a crane having substantially V-shaped offset arms pivotally connected with the side of the car, a brace rod between the arms provided by the V-shaped offset, a spring catch connected with the car adapted to engage the connecting bar to secure the crane when swung outwardly from the car, a resilient element contacting the crane and means comprising the mail bag support adapted to contact the catch to allow the resilient element to swing the crane within the car.

2. A mail bag catcher and deliverer comprising a frame having a V-shaped offset extension provided with eyes a connecting rod for the V-shaped arms, pintles upon the car adapted to engage the eyes of the crane, a resilient element upon one of the pintles contacting with one of the arms of the crane, a flexible catch member adapted to engage the rod between the arms of the crane when the latter is swung outwardly from the car, a stationary member provided with a mail sack support, and said support adapted to be engaged by the crane and to contact the catch to allow the resilient element to swing the said crane within the car.

3. The combination with a car and a station post, spaced pintles upon both the car and the post, cranes having V-shaped extensions provided with eyes for engaging the pintles, resilient elements upon the pintles normally contacting the cranes, reinforcing rods for the V-shaped extensions, spring catches adapted to engage the said rods when the cranes are swung outwardly, one of said cranes being positioned above the other and bag supporting devices including rings adapted to be engaged by both of the cranes and to swing rearwardly thereon to contact the catches and to allow the cranes to swing inwardly under the influence of the resilient elements.

4. In a mail bag catcher and deliverer, the combination with a car and a station post, cranes for the car and the post, said cranes being provided with eyes, pintles for the eyes, a resilient element normally contacting the cranes, a resilient catch member adapted to engage and retain the cranes when swung outwardly, one of said cranes being positioned above the other, and being provided with an angular offset, the opposite crane being provided with offsets forming pockets, mail bag supporting devices comprising rings and a loop, one of said rings adapted to engage with the angular offset of one of the cranes and to lie in the path of the opposite crane, the other ring adapted to be positioned within the pocket provided by the second crane and adapted to lie within the path of the first crane, substantially as and for the purpose described.

5. In a mail bag catcher and deliverer, the combination of a car and a station post, crane members pivotally connected with both the post and the car, means for retaining the cranes when swung outwardly, resilient elements contacting the cranes and adapted to force the same inwardly, one of said cranes being positioned above the other and being provided with an angular offset, the opposite crane having a pair of offset arms adapted to form a pocket, mail bag supporting elements comprising diamond shaped rings engaging the offset of one of the cranes and the pocket of the remaining crane, a bag carrying device for the rings, said carrying device comprising a pair of arms hingedly connected together and having their free ends curved to provide loops and said loops adapted to engage the rings, substantially as described.

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

IRVIN SCHRECK.

Witnesses:

FRANK PIGMAN,

ROY JAY SNYDER.