

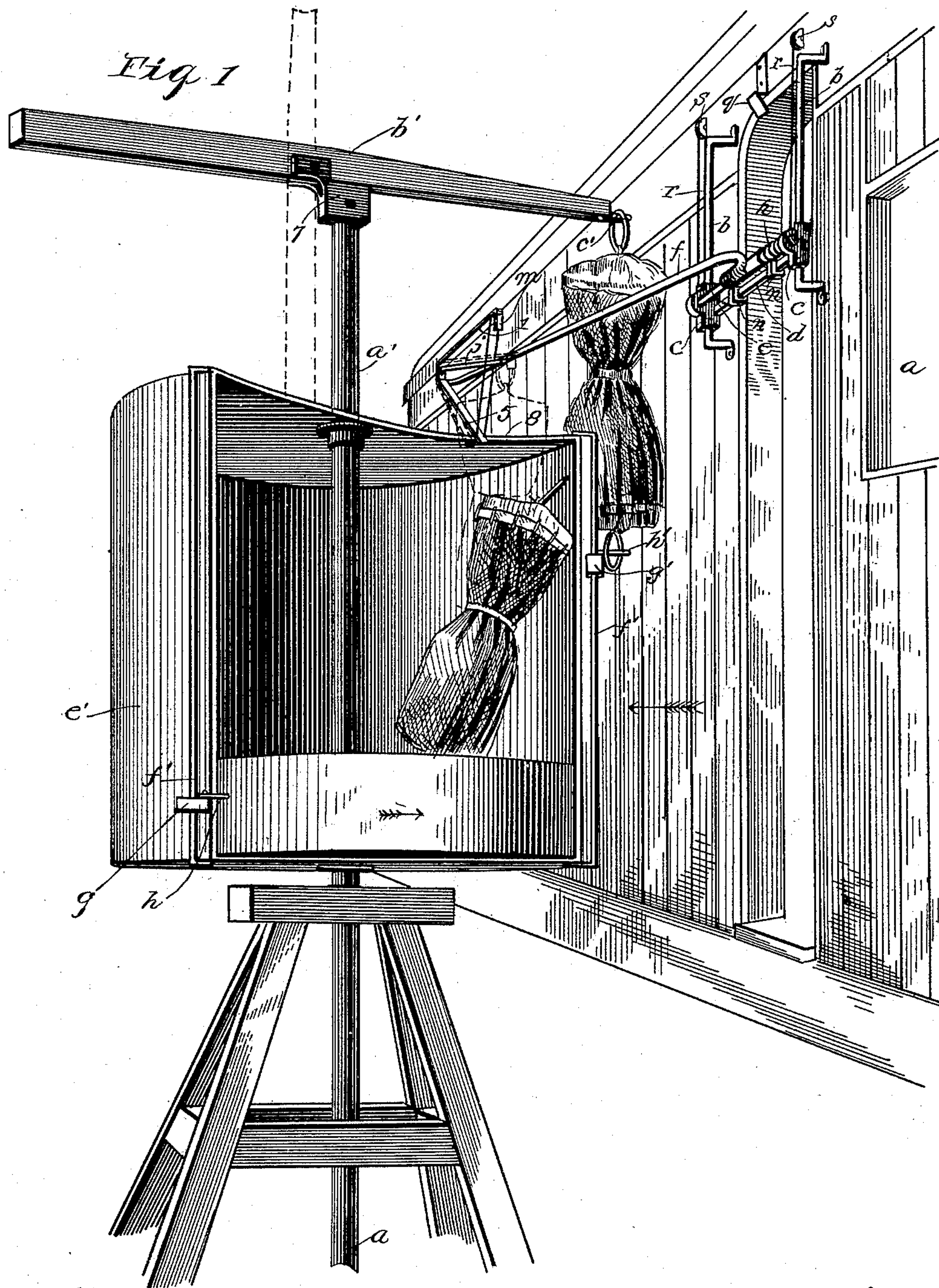
(No Model.)

2 Sheets—Sheet 1.

H. & C. SOGGS.  
MAIL BAG CATCHER AND DELIVERER.

No. 441,986.

Patented Dec. 2, 1890.



Witnesses  
C. C. Burdette.  
H. E. Peck

Inventors  
H. Soggs  
per C. Soggs.  
O. E. Duffett

(No Model.)

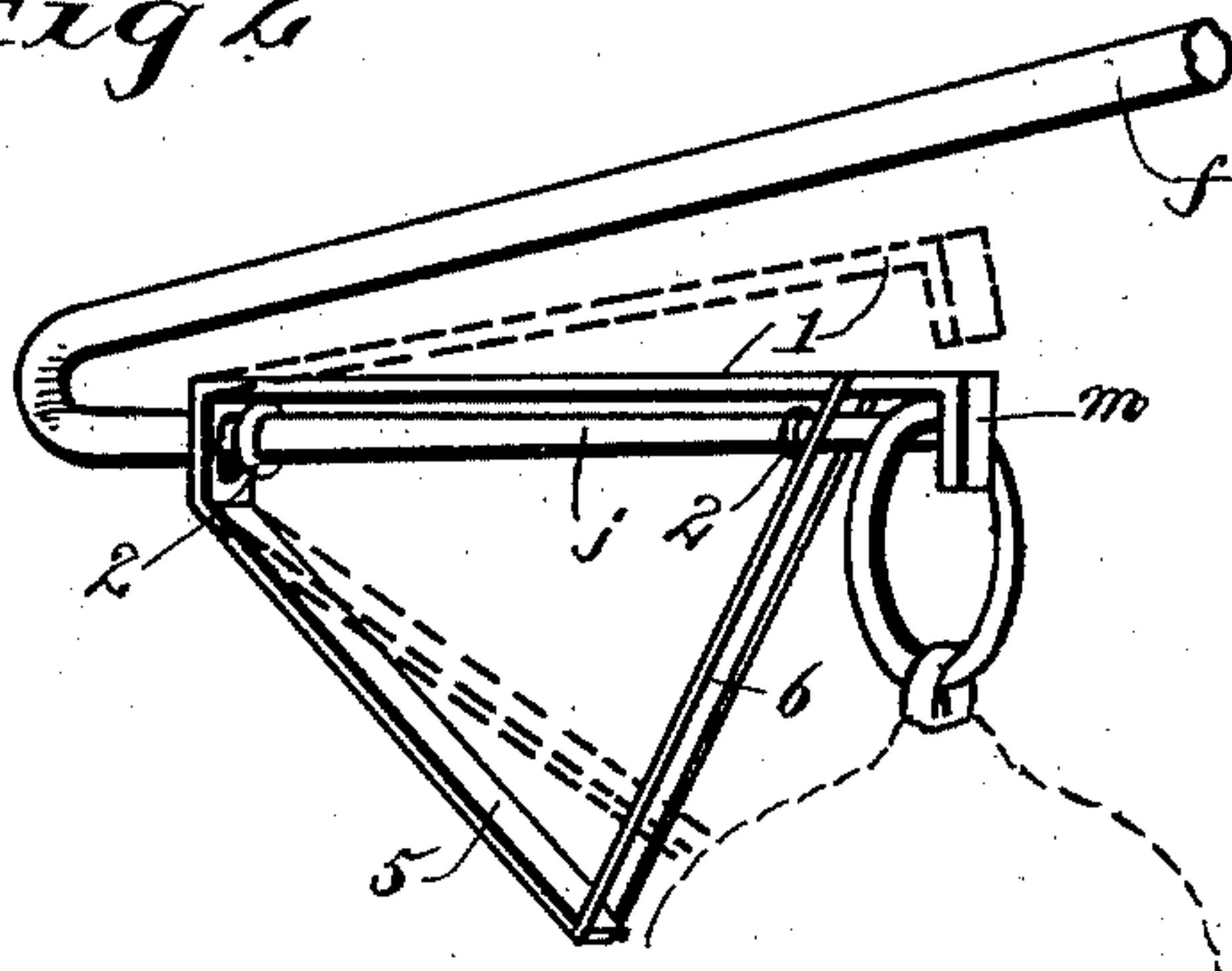
2 Sheets—Sheet 2.

H. & C. SOGGS.  
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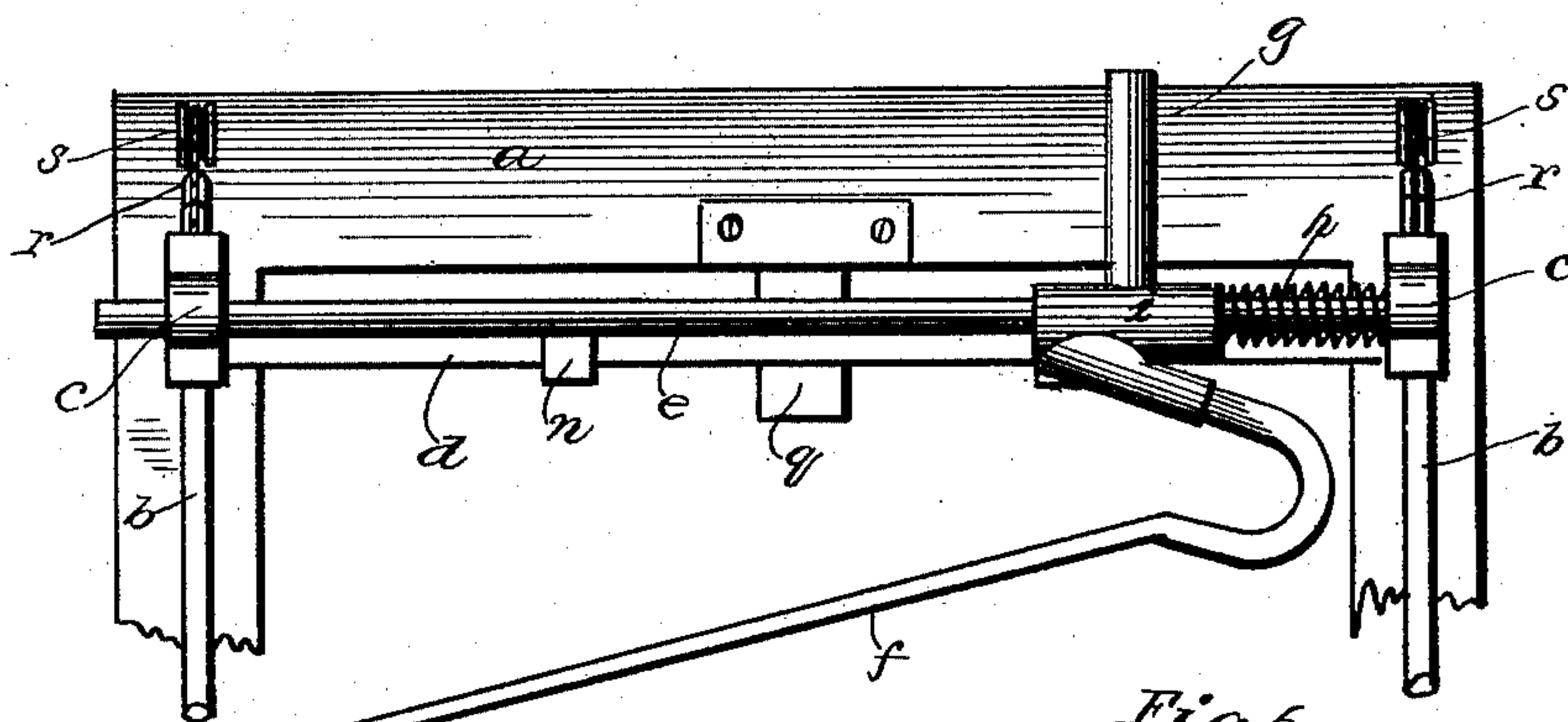
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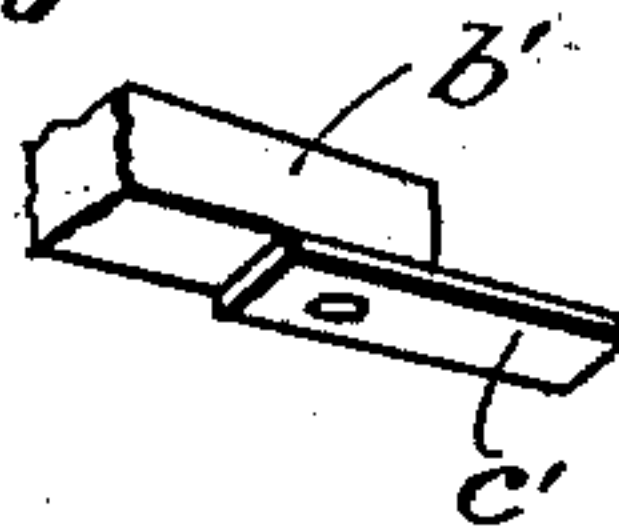
*Fig 2*



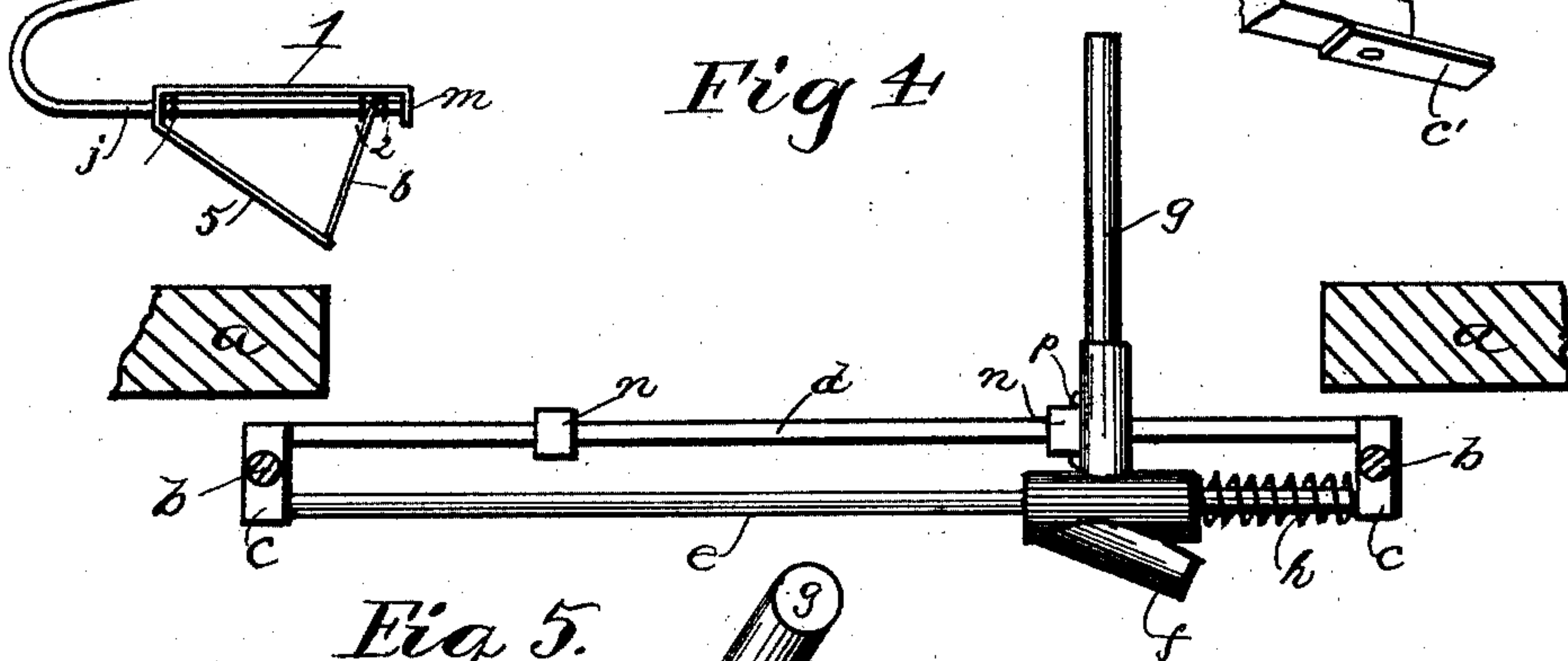
*Fig 3*



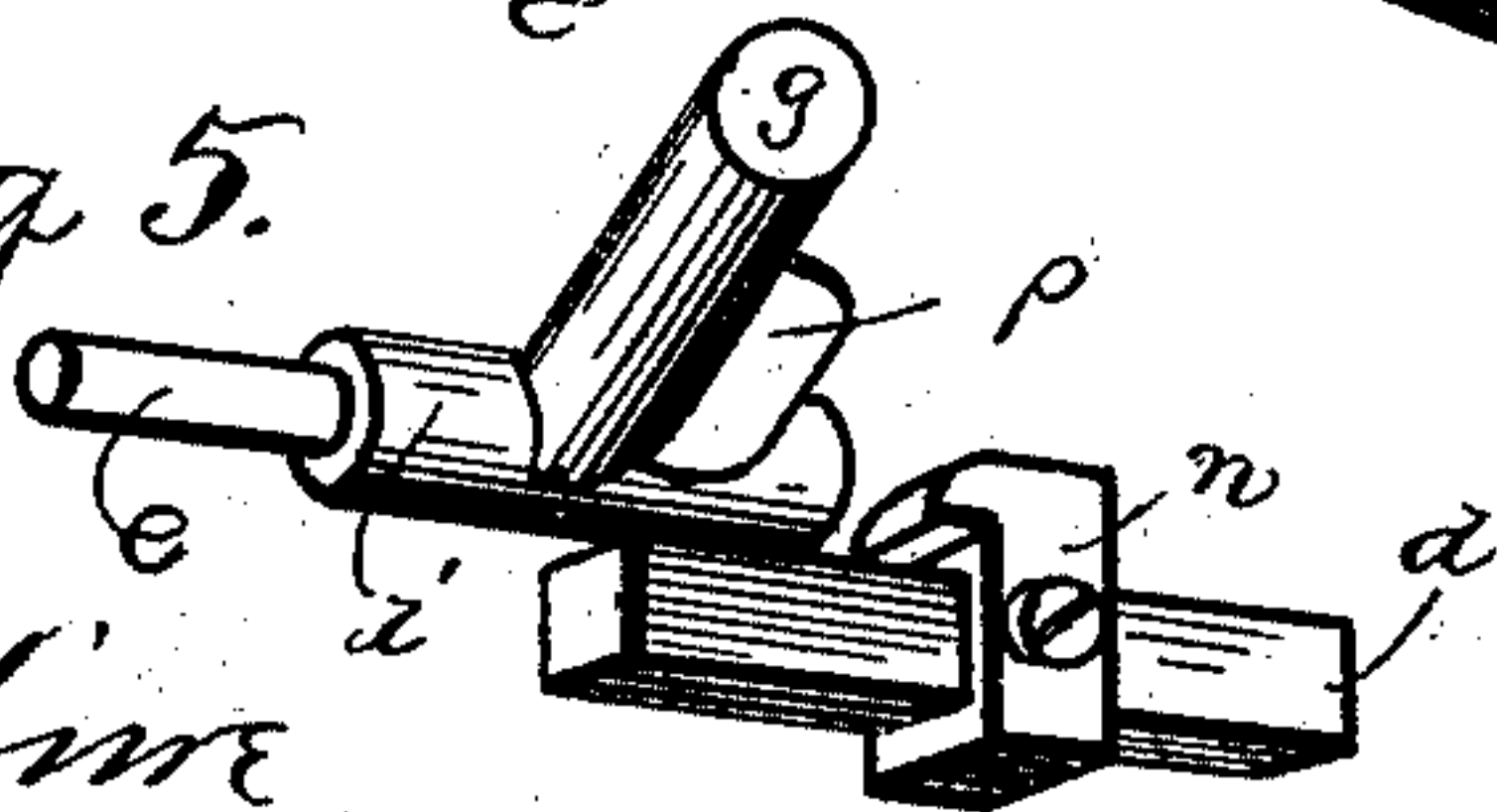
*Fig 6*



*Fig 4*



*Fig 5*



Witnesses  
C. C. Burdine  
H. C. Deek

Inventors  
H. Soggs  
C. Soggs  
per O. E. Duff  
att'y.



# UNITED STATES PATENT OFFICE.

HENRY SOGGS AND CLAYTON SOGGS, OF JAMESTOWN, NEW YORK, AS-  
SIGNORS OF ONE-HALF TO CHARLES E. WEEKS, OF SAME PLACE.

## MAIL-BAG CATCHER AND DELIVERER.

SPECIFICATION forming part of Letters Patent No. 441,986, dated December 2, 1890.

Application filed April 21, 1890. Serial No. 348,776. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY SOGGS and CLAYTON SOGGS, of Jamestown, in the county of Chautauqua and State of New York, have  
5 invented certain new and useful Improvements in Mail-Bag Catchers and Deliverers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in  
10 the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

15 This invention relates to certain improvements in mail-bag catchers and deliverers.

Usually fast mail-trains do not stop at all the stations, and the postal clerks have to kick or throw the mail-bags for such stations  
20 from the car-door as the train goes past the station at a high rate of speed. This is attended with considerable risk to the clerks, and any person standing beside the track is apt to be hit by a bag when such a train passes.  
25 The bags often fall into the mud, water, or snow and are worn and torn and their contents liable to become injured, and the bags are very apt to fall beneath the cars and be cut up by the wheels, and have their contents partially de-  
30 stroyed and scattered along the ground. Mail-bag catchers are now employed, but they are defective in many respects. It is difficult to hold them steadily in position to catch the bag, and they are in the way when at large  
35 stations the bags are thrown into and out of the car by hand.

The object of our invention is to provide an improved automatic deliverer whereby the bags will be automatically delivered from  
40 the car while at full speed into a suitable receptacle beside the track, thereby avoiding and obviating all the disadvantages above mentioned; and a further object is to provide an improved mail-bag catcher overcoming all  
45 the disadvantages above mentioned and provided with an automatic catch whereby the catcher can be held out in position to catch the bag or to deliver a bag without requiring a clerk to hold it in such position; and a fur-  
50 ther object is to provide an improved catcher and deliverer so mounted upon the car that

it can be moved up out of the way when it is desired to load or unload the car. These objects are accomplished by and this invention consists in certain novel features of construction, and in combinations of parts more fully  
55 described hereinafter, and particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a perspective showing the portion  
60 of a car provided with the catching and delivering apparatus, and also showing the receiving-receptacle beside the track and its support. Fig. 2 is a detail perspective of the end of the catching-arm provided with the  
65 automatic releasing device which drops the bag into the receptacle beside the track. Fig. 3 is an elevation of the upper portion of a car-door, showing the catching and delivering device in elevation and pushed up out of the  
70 way. Fig. 4 is a section through the car-door looking down on the catching and delivering device, portions thereof being broken away and the catching-arm being shown locked in operative position by its catch. Figs. 5 and  
75 6 are details.

In the drawings, the reference-letter *a* indicates a car provided with the usual side door through which the mail bags are received and delivered. Upon opposite sides  
80 this door is provided with vertical ways or guide-rods *b b*, rigidly and strongly constructed and extending a suitable distance down from the top of the door. Each rod has a heavy bearing block or box *c*, confined and  
85 vertically slidable thereon, and said two blocks are rigidly secured together by the horizontal bar *d*, extending transversely across the door and preferably secured to the inner portions of the blocks. In their outer  
90 portions the blocks are provided with transverse horizontal bearings in which a shaft *e* is loosely mounted at its ends, so that the shaft extends across in front of the door parallel with said secured rod or bar *d*. This  
95 shaft is removably located in said blocks, so that it can rotate therein or be removed and reversed. The catcher-rod *f* at its inner end is rigidly secured to said shaft near one end thereof, and extends at an angle from said  
100 shaft, as usual. A handle *g*, rigid with said shaft, extends laterally from the same at or



about the point of union between the catcher-rod and the shaft, and a coil or rubber spring *h* is secured on and embraces the shaft between one of said blocks and the enlargement *i*, formed by the junction between the catcher-rod and its shaft. The catcher-rod is provided with an extension *j* at its outer end, extending back in the same plane with the length of the rod. An automatic releasing-catch is loosely located on this extended end of the catching-rod, and is formed triangular in shape, with said extension extending loosely through the apex and base of the angle, so that the side 1 of the releasing-catch will normally rest on the said extension, while the other side 5 will hang down from the same. The base 6 of the triangle is longitudinally slotted, as shown, so that the arm *l* of the catch can be raised and lowered by the other arm. The arm *l* is provided with a downwardly-bent end *m*, projecting down in rear of the end of said extension, for the purpose hereinafter mentioned. The releasing-catch is loosely confined on said extension by means of rigid collars or washers 2 2.

The shaft and its catching-rod normally assume the positions in Fig. 3, with the catching-rod hanging down in front of the door; but when it is desired to have said catching-rod project outwardly and horizontally it is swung into such position by its handle *g*, which handle when swung back the required distance is locked by means of a shouldered lug *n*, extending up from the rod *d*, engaged by a flange or projecting rib *p* on the handle, the rib *p* being held under the shoulder by the coiled spring *h*, and being allowed to swing under or from engagement with the same by reason of the longitudinal movement allowed the shaft, the bar being provided with two lugs or catches *n* near the ends of the same, so that the catcher-rod can be reversed to project in either direction by reason of its removable shaft, and yet a catch will always be located opposite the handle *g*. The blocks or boxes, the bar rigidly connecting the same, and the shaft carrying the catcher-arm can be moved the length of the guide-rods or ways on opposite sides of the car-door, and when it is desired to keep the same raised they are pushed up until the spring-catch *q* engages the bar connecting the two blocks, and thus holds said parts raised. If desired, said parts can be rendered freely movable up and down by means of counter-weights (not shown) in the car or wall thereof and secured to said sliding blocks by chains or connections *r*, passing over pulleys *s*.

At the proper location beside the track a suitable and rigidly supported and mounted vertical shaft *a'* is secured and at its upper end is provided with a vertically-swinging arm *b'*, pivoted within its length to a plate or castings 7 on the upper end of said shaft, so that its lighter end will be normally held up (see dotted lines, Fig. 1) by the opposite end, and can swing into a horizontal position, ex-

tending toward the track. The outer free end of this swinging arm is provided with a pivoted finger *c'*, projecting beyond the end of the arm and capable of swinging horizontally, so as to extend either up or down the track. (See Fig. 6.) Upon this shaft and a suitable base a rotary receiving receptacle or drum *e'* is centered and mounted. This drum is closed on all sides except one, on which side it is open, and is closed at the bottom and is partially open at the top—that is, its top is provided with a sector-shaped opening with inclined edges. The exterior of the drum at the longitudinal edges of the opening is provided with a pair of rigid guide-rods *f' f'*, extending parallel with said vertical edges, and upon which rods vertically-movable slide-blocks *g' g'* are located and provided with horizontal pivoted fingers *h'*. The proportions of the drum and supporting-shaft are such that the outer end of the swinging-arm *b'* when in a horizontal position will be in a horizontal plane above the catcher of the car, and the top of the drum will be in a horizontal plane to cut the plane of the lower arm of the releasing-catch as the train passes the drum.

As a train passes a station, by this device a mail-bag is automatically delivered from the car into the rotary receptacle and a mail-bag is caught from the swinging arm and delivered into the car.

The operation of the device is as follows: The mail-bag from the station has its upper loop hung on the finger *c'* of the swinging arm, said arm being swung into its horizontal position and its lower loop caught under the finger *h'* of the block *g'* at the edge of the receiving-opening next the railroad-track, (see Fig. 1,) the receiving-drum being swung so that its open side will face toward the direction from which the train will approach. The mail-bag is now in position to be caught and delivered into the car. While approaching the station the catching and delivering device on the car is lowered on the ways to its normal position at the lower ends of the ways. The upper loop of the mail-bag to be left at the station is caught on the rear end of the extension *j* by lifting the upper arm of the catch so that the loop can be placed thereon. The catch will then drop to its normal position by gravity and the end *m* of the upper arm *l* will extend down over the rear end of said extension and hold the bag thereon. (See Fig. 2.) By means of the handle *g* the shaft will be rocked so that the catcher-arm will extend forwardly and outwardly in a horizontal position and hold the bag in a vertical position depending from the extension *j* and a distance out from the car. The parts will be held in this position without requiring the attention of the postal clerk by means of one of the catches *n* on the horizontal securing-bar *d*. The bag is thus in position to be delivered into the revolving receptacle and the catcher rod or arm is in position to receive the bag



from the station. When the train reaches the revolving drum, the bag on the end of the catcher-arm passes into the opening of the revolving drum, and the front edge 8 of the top engages the lower hanging side 5 of the releasing-catch, thereby swinging up the arm 7 and its end *m* from the end of the extension *j*, and the loop of the mail-bag is pushed from said extension by engaging the top of the drum and falls into the receptacle, and as the car proceeds the catcher-arm engages the belted-in center of the bag to be taken from the station and draws said bag in between said arm and the shaft of said arm and draws it from the fingers *c'* and *h'*, and the back-pressure on said arm and its shaft throws back said shaft against the tension of spring *h*, which breaks the force of the resistance and throws the rib *p* of the handle *g* from engagement with the shoulder of catch *n*, thereby allowing said catcher-arm, by reason of the weight of the bag caught between it and the shaft, to swing down and in, so that the bag will swing into the car and can be removed easily and quickly. The straight pivoted fingers *c'* and *h'* firmly hold the bag, and yet quickly and easily release it when the catcher-arm engages it.

At large depots, where many bags have to be removed from or placed in the car, the catching and delivering device can be pushed up out of the way. This is a great improvement.

This device can be constructed at a very low cost, and it is very durable and not apt to become broken or injured, and is sure and reliable in action and almost entirely automatic.

The peculiar bag-receiving devices herein shown and described are not claimed in this present application, but form the basis of an application filed by us November 11, 1890, Serial No. 371,080.

It is evident that various slight changes can be made in the form and arrangement of the parts described without departing from the spirit and scope of the invention. Hence we do not wish to limit ourselves to the precise construction herein set forth.

What we claim is—

1. In an apparatus of the class described, the combination, with a car, of the catcher-arm, the shaft therefor, the blocks in which the shaft is mounted, and the ways or guide-rods for said blocks arranged so that said blocks and the catcher-arm carried thereby can be slid up out of the way.

2. In a mail-bag catcher and deliverer, the combination, with the vertically-adjustable blocks and means to hold the same raised, of the catcher-arm and its shaft mounted in said blocks and carried by the same, substantially as described.

3. In a mail-bag catcher and deliverer, the combination of the vertical ways or guide-rods on opposite sides of the car-door, the sliding blocks or boxes mounted thereon and

rigidly secured together, the shaft mounted in and carried by said boxes, and the catcher-arm carried by said shaft.

4. In combination, the boxes on opposite sides of the car-door, a horizontal bar rigidly connecting the same and provided with a catch, the shaft mounted in said blocks to permit rocking and longitudinal movement, the catcher-arm carried by said shaft, and a handle rigid with the shaft to rock the same and the catcher-arm and arranged to be held down by said catch, as and for the purpose set forth.

5. The combination, with the catcher-arm, a horizontal rocking shaft carrying said arm, and the operating-handle rigid with said arm, of a catch to hold the catcher-arm in its operative position and arranged to automatically release said arm when it has caught the bag.

6. In combination, the two boxes, the bar rigidly connecting the same and provided with a rigid catch extending up therefrom, the longitudinally-movable rocking shaft mounted in said boxes and provided with a spring to hold it to its limit of movement in one direction, the catcher-arm carried and operated by said shaft, and a handle rigid with and adapted to operate the shaft and arranged to be held down by said catch and in engagement with the same by said spring, as and for the purpose mentioned.

7. The forwardly-extending catcher-arm provided with a bag-delivering device upon its outer extremity, comprising a gravity-catch loosely mounted on said end to prevent the bag slipping therefrom, and provided with a downwardly-extending arm to engage a stationary body at the station and lift the catch, substantially as described.

8. In a mail-bag catcher and deliverer, the catcher-arm having its outer extremity extended rearwardly on the outer side to form an arm from which to suspend the bag, and a swinging catch loosely mounted on said rearwardly-extended arm to normally prevent the bag slipping from said arm, and arranged to be lifted by a stationary body at the station to allow the bag to slip from said arm, substantially as described.

9. In a mail-bag catcher and deliverer, the catcher-arm having its outer extremity extended and bent back on the outer side and in the same plane with the main portion of the arm to receive a mail-bag loop, and the swinging gravity-catch mounted on said rearward extremity to normally prevent the bag slipping therefrom, substantially as described.

10. The catcher-arm having its outer extremity extended and doubled rearwardly on the outer side in substantially the same plane as the main portion of the arm to receive the bag-loop, in combination with a freely-movable catch mounted on said extended end and having a portion to normally project across the extremity of said end and prevent said loop slipping therefrom, as set forth.

11. The combination, with a vertically-mov-



able catcher-arm and its support, of vertical guides therefor, upon which said catcher arm is adapted to slide, substantially as described.

12. The catcher-arm having the rearwardly-  
5 extending rod or arm to loosely hold the bag to be delivered, in combination with the loose vertically-swinging arm having an end to normally extend across the extremity of said rod or arm and normally prevent the bag slipping  
10 therefrom, and having a downwardly-extending arm to engage means located at the sta-

tion and lift the swinging arm and its end and allow the bag to slip from said end, substantially as described.

In testimony that we claim the foregoing as  
our own we affix our signatures in presence of  
two witnesses.

HENRY SOGGS.  
CLAYTON SOGGS.

Witnesses:

JAMES I. FOWLER,  
EZRA T. SMITH.