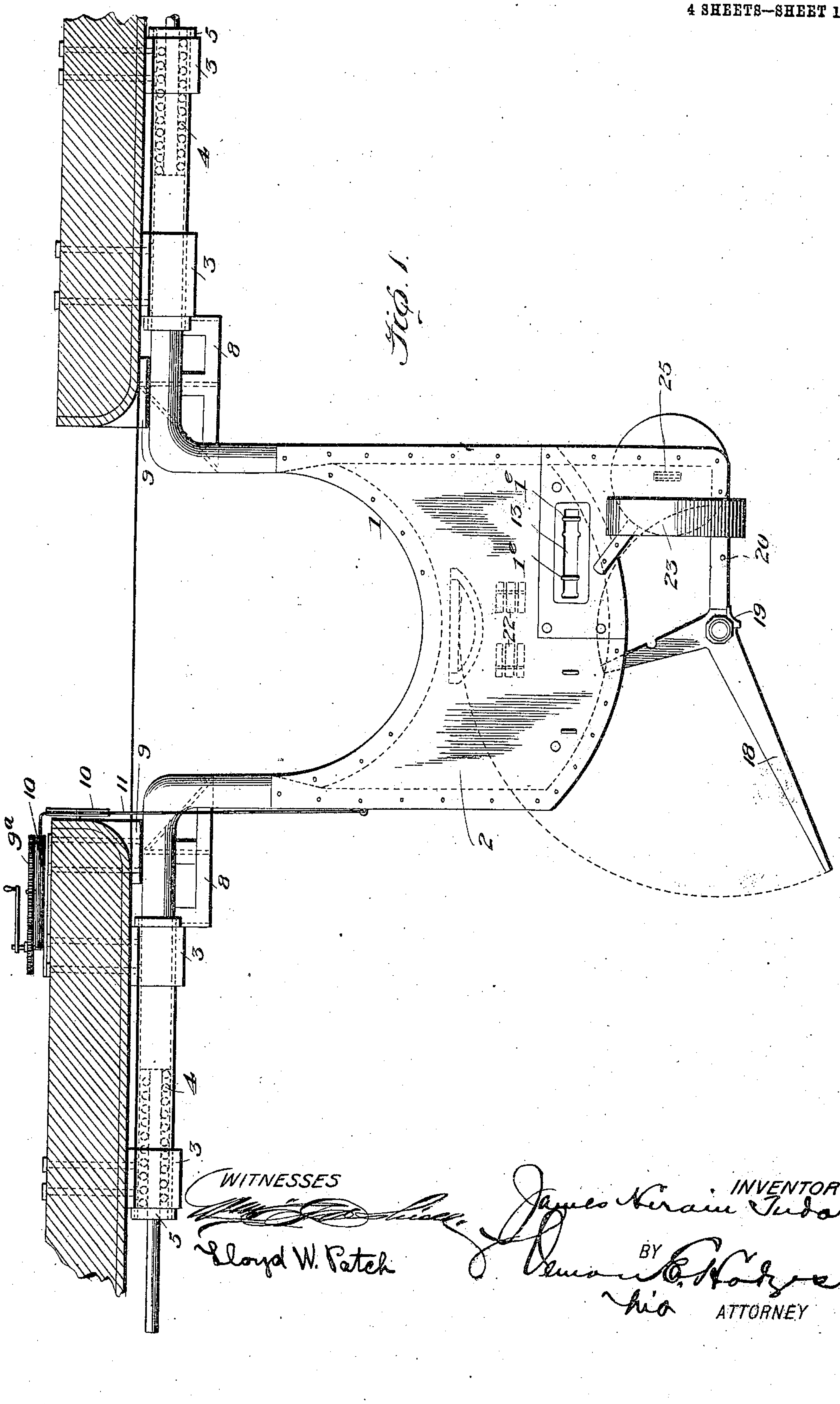
No. 847,215. PATENTED MAR. 12, 1907.

J. H. TUDOR.

MAIL BAG CATCHER.

APPLICATION FILED JAN. 26, 1907.

4 SHEETS—SHEET 1.



WITNESSES

Lloyd W. Patch

INVENTOR

James Hiram Tudor

BY

his ATTORNEY

THE NORRIS PETERS CO., WASHINGTON, D. C.

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4 SHEETS—SHEET 2.

Fig. 2.

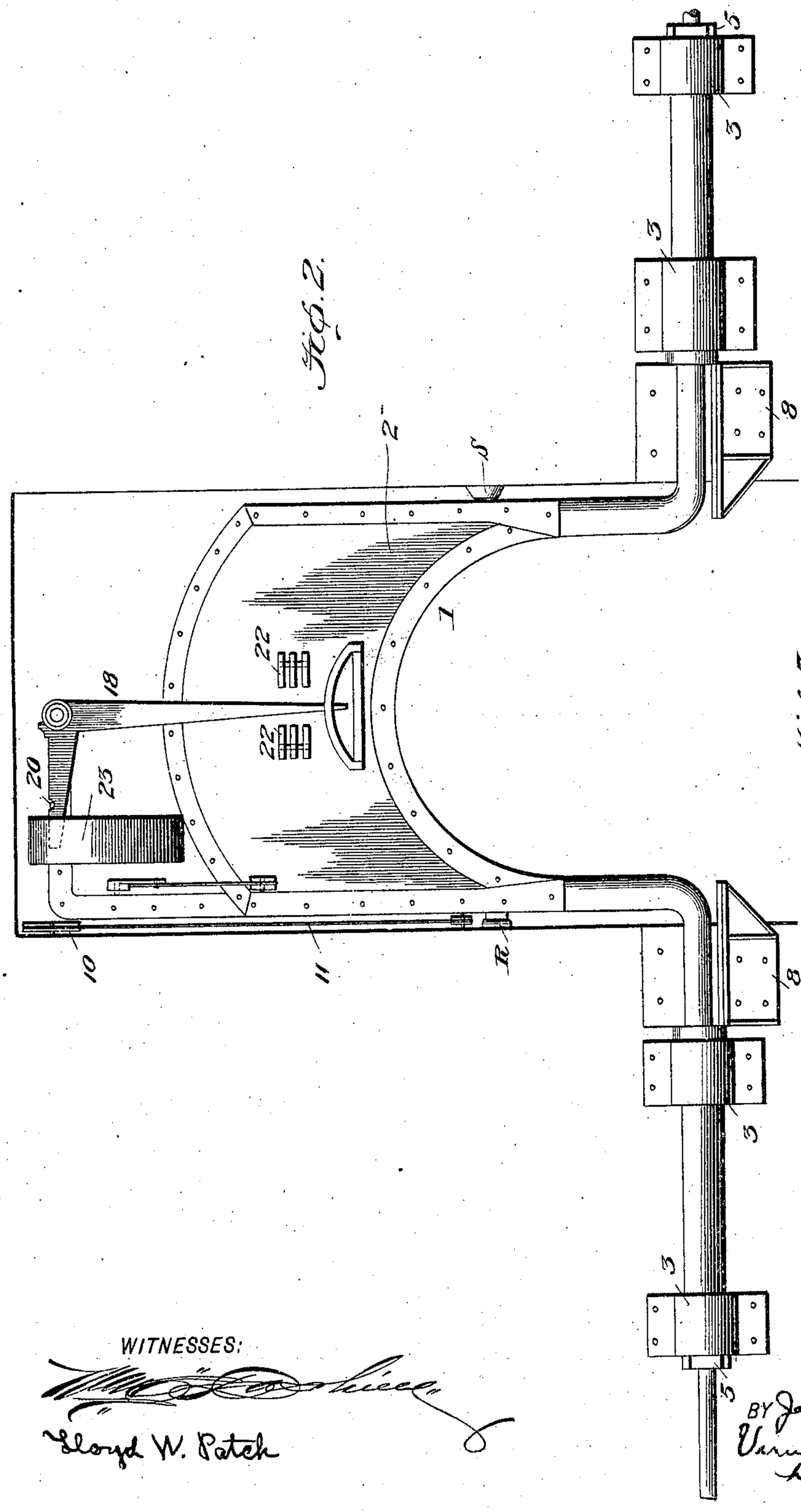
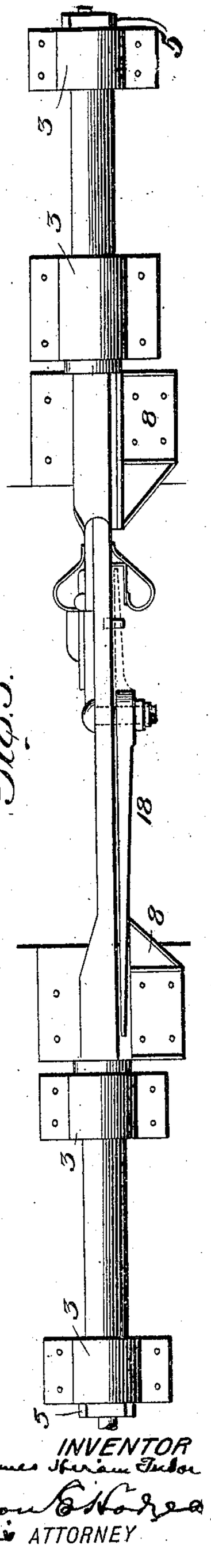


Fig. 3.



WITNESSES:

Lloyd W. Patch

INVENTOR

BY James Hiriam Tudor

Vernon G. Hodges

his ATTORNEY

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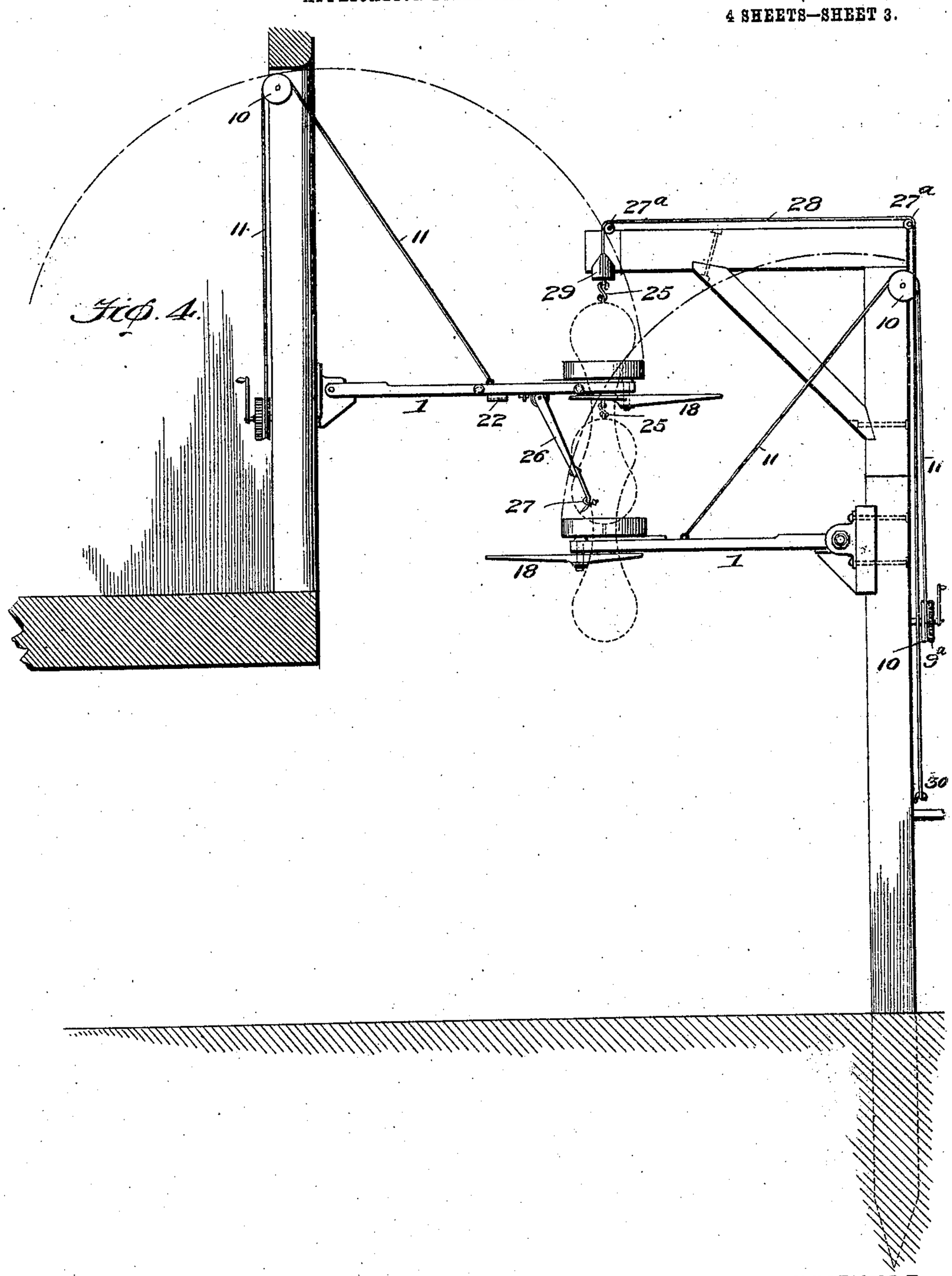
4 SHEETS—SHEET 3.

Fig. 4.



WITNESSES:

Lloyd W. Patch

James Hiram Tudor
INVENTOR

BY Vernon E. Forbes
his ATTORNEY

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4 SHEETS—SHEET 4.

Fig. 5.

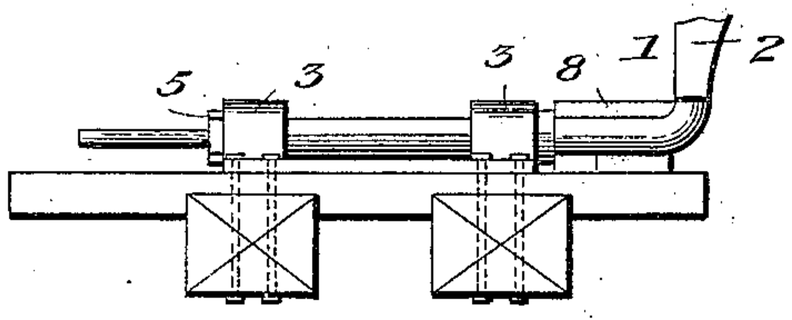
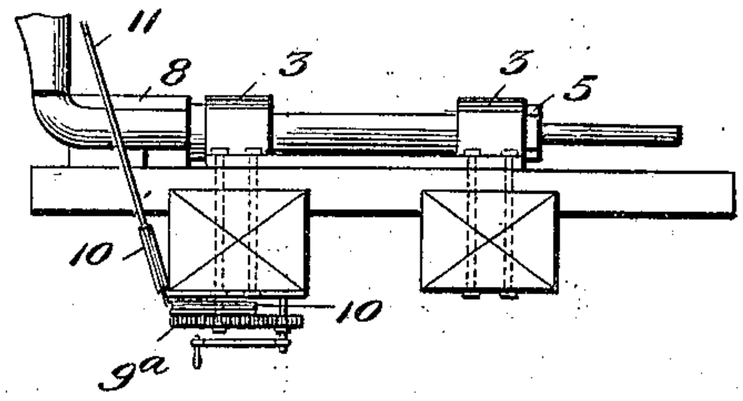
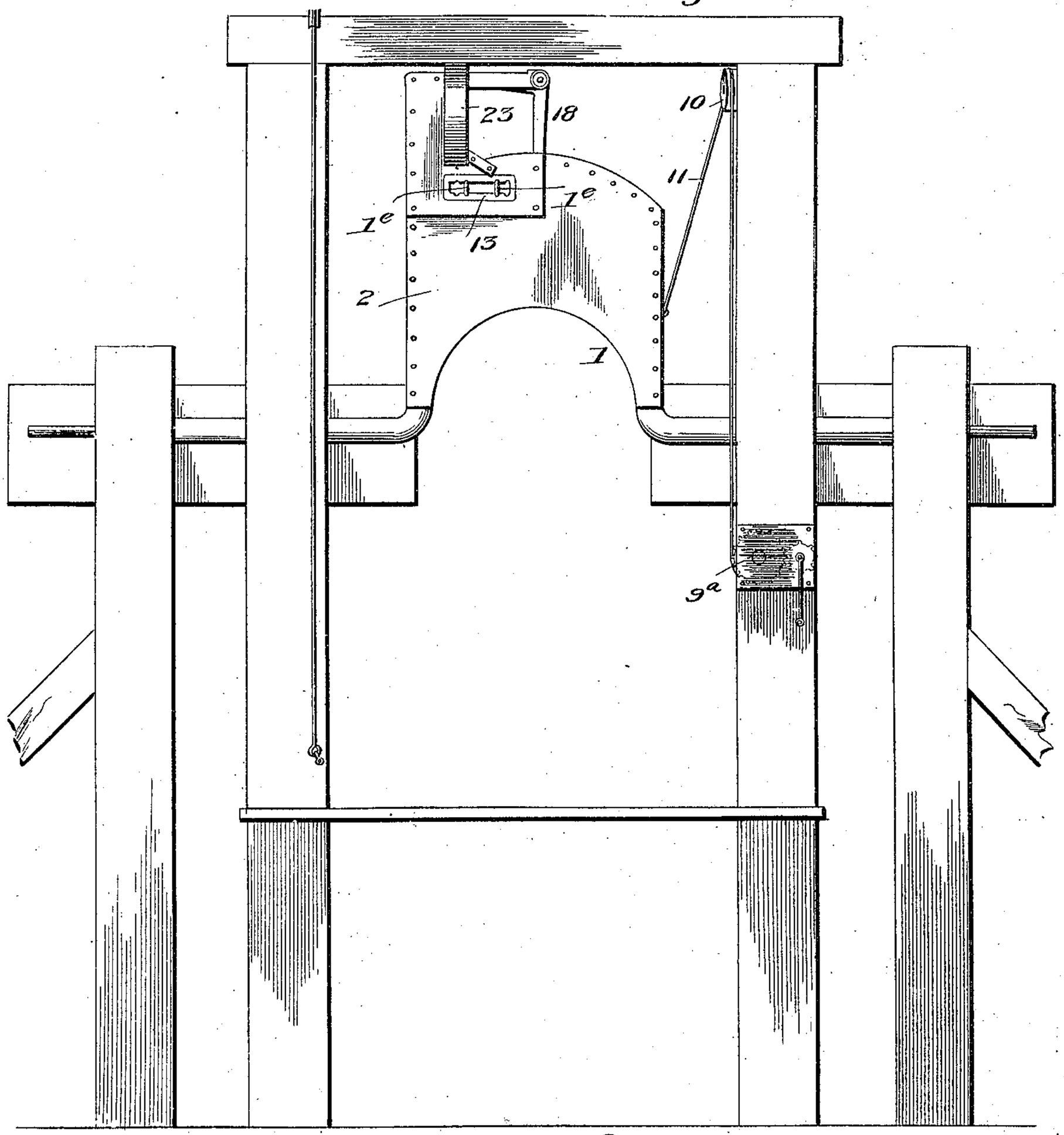


Fig. 6.





WITNESSES:

Lloyd W. Patch

INVENTOR

James Hiram Tudor

BY Edmund E. Lodge

his ATTORNEY

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES HIRAM TUDOR, OF LEXINGTON, KENTUCKY.

MAIL-BAG CATCHER.

No. 847,215. Specification of Letters Patent. Patented March 12, 1907.

Application filed January 26, 1907. Serial No. 354,282.

To all whom it may concern:

Be it known that I, JAMES HIRAM TUDOR, a citizen of the United States, residing at Lexington, in the county of Fayette and State of Kentucky, have invented certain new and useful Improvements in Mail-Bag Catchers, of which the following is a specification.

My invention relates to an improvement in mail-bag catchers, and the complete device consists in two main parts—namely, the crane attached to the car and the post alongside the track—both having features in common for catching the mail-pouch.

The object is to provide a simple and efficient means for both catching and depositing the mail-pouch, the car-crane being constructed and adapted to perform both functions.

With these objects in view my invention consists in certain novel features of construction and combinations which will be described and pointed out in the claims

In the accompanying drawings, Figure 1 is a plan view showing the frame of the car in horizontal section. Fig. 2 is a side elevation showing the crane in its elevated position. Fig. 3 is a similar view, in side elevation, showing the crane in its horizontal position. Fig. 4 is a transverse section through the car-door, showing the post from the rear. Fig. 5 is a plan view of the post. Fig. 6 is a front elevation showing the post.

The crane 1 is approximately U-shaped and made of tubing or solid metal, it having the boiler-plate 2 secured thereto by rivets or otherwise. The ends of the crane extend through boxes 3 3, secured in pairs on opposite sides of the car-door, in which they are capable of turning axially or sliding endwise, the springs 4 4 encircling the ends of the crane and abutting against nuts 5 5, secured to the ends of the bearings. Rests or supports 8 8 are in position to sustain the weight of the crane when in its horizontal position.

An extension on the outer end of the crane receives the catcher-arm 18, which is pivoted thereto and sustained in its outward position by means of the shoulder 19. This extension is reversible to provide for the car running in either direction, and it is held on the crane by means of the wedge-key 13 and the lugs 14, which hold it rigidly in place. The pouch is caught in the angle of the catcher-arm and its impact swings the arm around until its long end is held between the spring-latches 20 20 and its weight sustained between the jaws 22 22 on the bottom of the boiler-plate 2. A stop 20 on the extension affords a rigid abutment for the shorter end of the catcher-arm when in the position shown in Fig. 2 after it has caught the pouch and is in the position shown in Fig. 2. The solid impact of the tube is further caught by the buffer 23, held on the extension 12, back of the catcher-arm. Iron plates 9 9 are attached to the car immediately back of the bends which form the arms of the crane in order to take the first impact of the crane when the catch is made.

The crane is raised and lowered by means of crab-gearing 9^a and the cable 11, which extends over sheaves 10 10, and thence to the outer end of the crane, as shown in Fig. 4. The crane is so supported that it may be swung either outward or inward in the arc indicated in dotted lines in Fig. 4 and to the extreme position indicated in that figure, and it is swung into position indicated in dotted lines as a convenient position for removing or attaching the pouch inside the mail-car.

On the jamb of the car-door is placed a steel spring R, which catches a lug on the side of the crane, this spring operating whenever the crane is turned upward in the door. This spring is attached to the lever-arm in the car-wall, which when pressed draws back the jaws of the spring and releases the lug on the crane to hold the spring back, so that the crane may be swung freely either inwardly or outwardly.

The lever-arm slides on a bar which contains a notch at the proper point to hold the lever in place, by which operation the spring is drawn back and inoperative. At a corresponding point on the opposite jamb of the door is located a bumper S, which takes up any sidewise movement of the crane that may result from the door being larger than the crane.

On the bottom of the plate 2 of the crane is attached a hook 25, (see Fig. 4,) to which the mail-pouch is hung when it is to be delivered from the crane to the post. There is also pivoted to the bottom of the crane an adjustable jointed arm 26, the lower end of which is inserted in a ring 27, which is attached to the pouch, the object of the ring 27 being to hold the pouch in a steady vertical position until caught by the catcher on the post.

The post may be of any approved form to

give it strength and rigidity, and its mechanism is practically identical with that described in connection with the crane on the car, and hence duplicate numbers have been employed for corresponding parts on the post and crane, and it will be unnecessary to dwell upon details further than to call attention to the cable 28, which passes over sheaves 27^a 27^a and is provided at its outer end with a weight 29, which pulls it down within reach when released at the bottom 30, and when thus lowered the hook 25, attached to the pouch, is hooked to the weight, and the lower end of the pouch is steadied and held in position by a clip 31, which is fastened to the upper surface of the arm 3 on the post.

To briefly describe the operation which has heretofore been alluded to, suppose the bag is to be caught by the car. The pouch is suspended from the weight 29, where it is held in the path of the crane, as shown in Fig. 4, and the latter is projected, as is customary, into the horizontal position shown in that figure, whereupon the bag is caught as the train passes and hoisted into the car by winding up the crab-gear 9^a. The bag is delivered from the car by suspending it from the outer end of the crane and the arm 26 is raised into the path of the arm 3 on the post, as shown in Fig. 4, where it is caught and removed.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a pivotally-supported and endwise-cushioned crane, of a catcher-arm pivoted thereto, and means for locking said arm to the crane.

2. The combination with a pivotally-supported and endwise-cushioned crane, of a catcher-arm pivoted thereto, means for locking said arm to the crane, and a spring-buffer for catching the impact of the pouch.

3. The combination with a pivotally-supported and endwise-cushioned crane, of a catcher-arm pivoted to the crane, a pair of jaws connected with the crane between which one arm of the catcher extends when closed, and spring-latches for locking the catcher-arm in this position.

4. The combination with a pivotally-supported and endwise-cushioned crane, of an extension removably and reversibly connected with the crane and a catcher-arm pivotally connected with the extension.

5. The combination with a pivotally-supported and endwise-cushioned crane, of an extension removably and reversibly connected with the crane, a catcher-arm pivotally connected with the extension, and an abutment for said arm and means for locking it.

6. The combination with a pivotally-supported and endwise-cushioned crane, of an extension removably and reversibly connected with the crane, a catcher-arm pivotally connected with the extension, and a spring-buffer carried by said extension.

7. The combination with a crane and means for raising and lowering the crane, of means for sustaining the pouch on its outer end and an adjustable arm extending from the crane and adapted to hook to the side of the pouch.

8. The combination with bearings and brackets, of a crane approximately U-shaped journaled in the bearings, and capable of sliding therein and adapted, when in its horizontal position, to rest upon the brackets, and springs for sustaining the endwise movement of the crane in its bearings.

9. The combination with bearings and brackets, of a crane approximately U-shaped journaled in the bearings, and capable of sliding therein and adapted, when in its horizontal position, to rest upon the brackets, springs for sustaining the endwise movement of the crane in its bearings, and means for raising and lowering the crane.

10. The combination with a crane composed of a bar or tube bent approximately U-shaped, and having a boiler-metal sheet secured thereto, of an extension removably and reversibly connected with the outer end of the crane, lugs thereon, and a wedge-key for locking the extension to the crane.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES HIRAM TUDOR.

Witnesses:
T. T. FORMAN,
DAISY W. HAYS