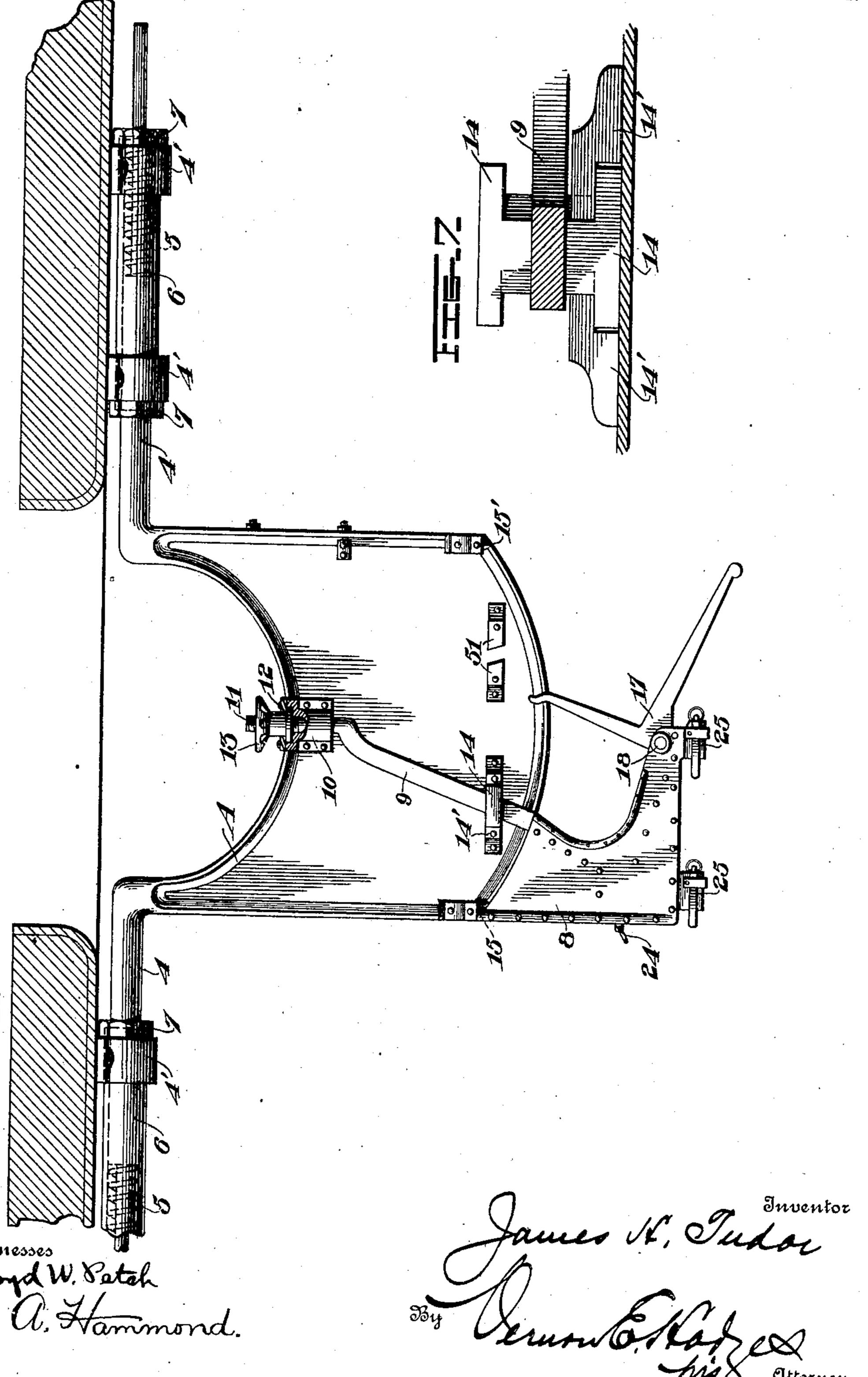
J. H. TUDOR.

MAIL BAG CATCHER.

APPLICATION FILED MAR. 30, 1908.

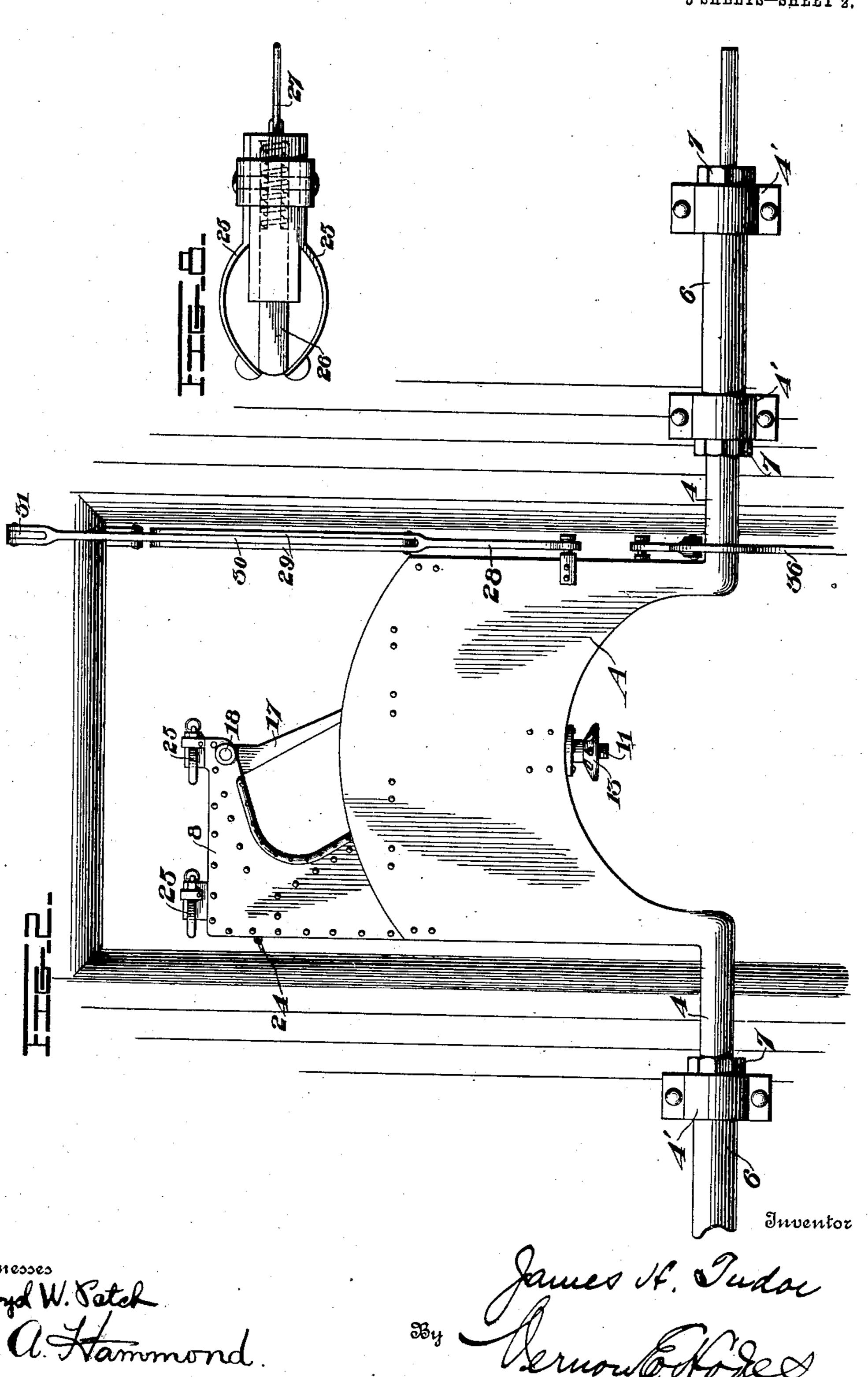
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PATENTED JUNE 23, 1908.

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5 SHEETS-SHEET 2.



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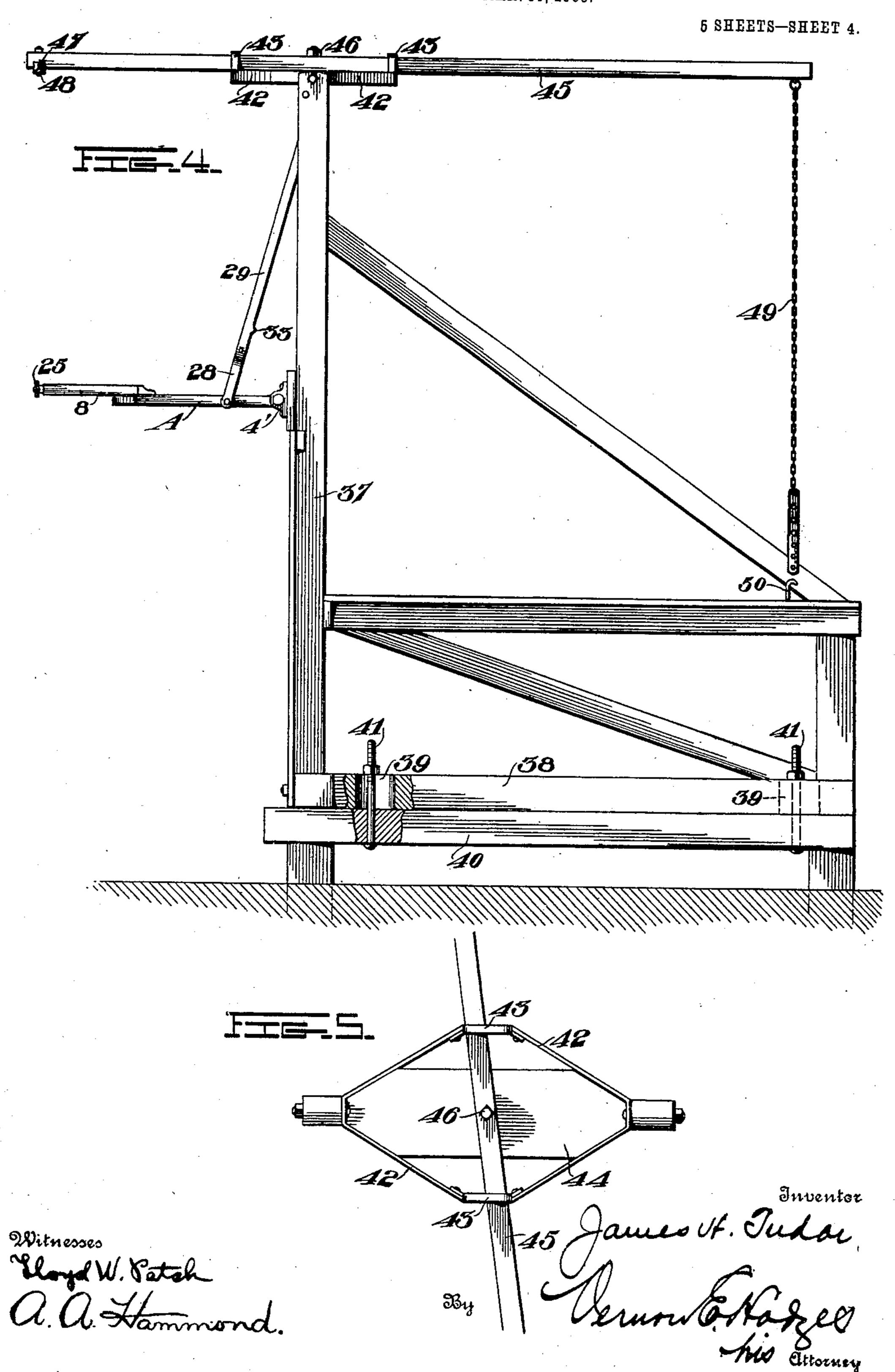
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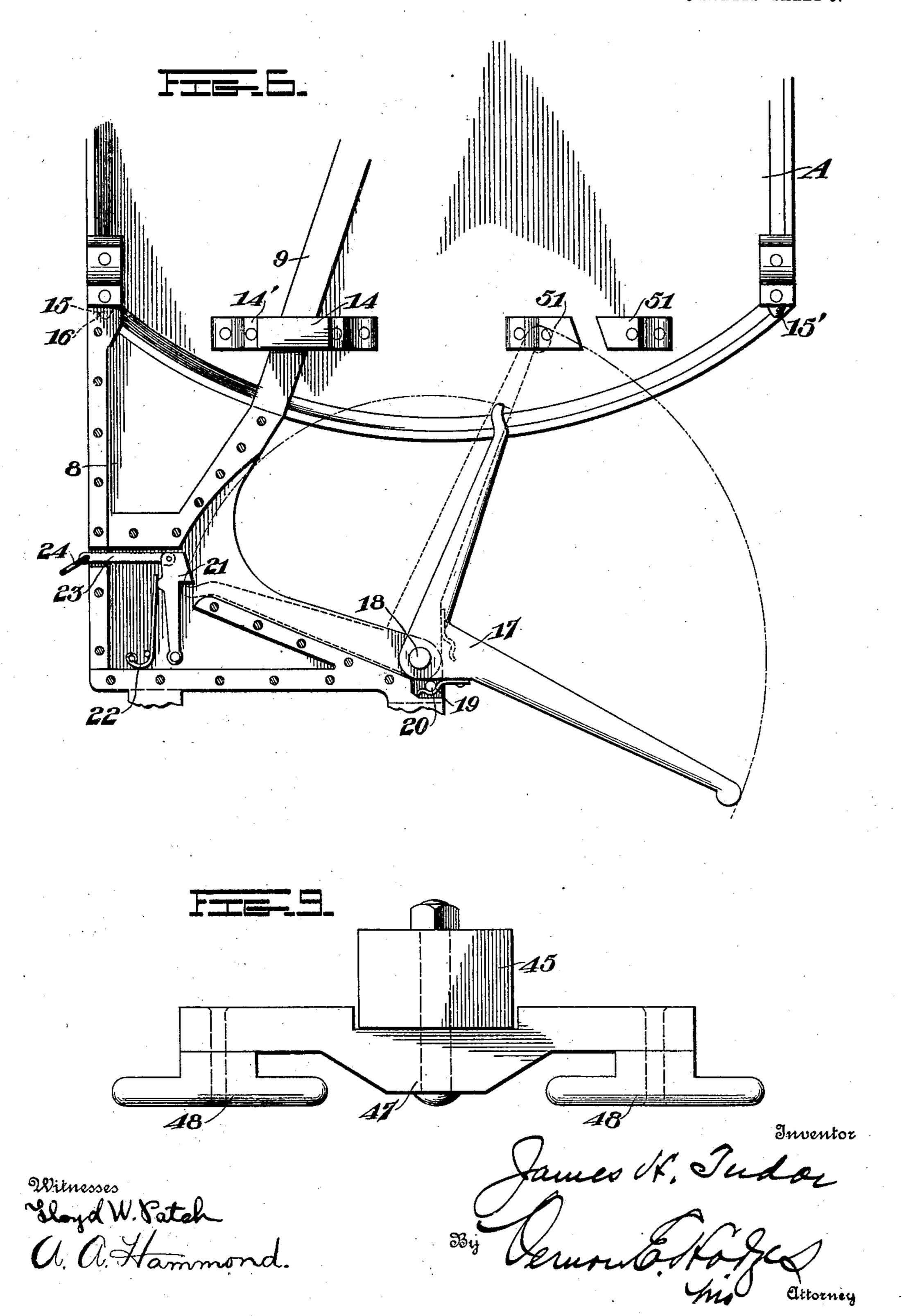
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5 SHEETS-SHEET 5.



UNITED STATES PATENT OFFICE.

JAMES H. TUDOR, OF LEXINGTON, KENTUCKY.

MAIL-BAG CATCHER.

No. 891,751.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed March 30, 1908. Serial No. 424,070.

To all whom it may concern:

Be it known that I, James H. 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 device consists in having the crane attached to the car and to a post or platform along side the track, both cranes having features in common for catching and delivering the mail pouch.

The object is to provide a simple and efficient means for catching and depositing a mail pouch or pouches whereby the sack can be drawn into the car and to the platform.

The invention consists still further in certain novel features of construction and combinations of parts which will be hereinafter 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 view in side 25 elevation. Fig. 3 is a transverse section through the car door and showing the post in the rear, Fig. 4 is a view in side elevation showing the crane in its elevated position and attached to the post, Fig. 5 is a top plan 30 view showing the arm for holding one end of the sack supported on the posts. Fig. 6 is a view of the catcher head partly broken away to show the means for holding the catcher arm when in closed position, and Fig. 7 is a 35 detail. Fig. 8 is a view of one of the clips for holding the sacks, and Fig. 9 is a view of the clips on the arm which is supported on the posts.

A, represents the crane which is preferably

U-shaped and is made of tubing or solid metal, having a boiler plate 1 secured thereto by rivets 2, 2, which are provided with partially rounded ends 3, 3, which act as buffers and prevent any injury to the body of the crane, or the crane may be made of steel casting with raised edges. The ends 4, 4 of the crane extend through boxes 4', 4' on the side of the car door in which they are capable of turning axially and sliding endwise.

Springs 5, 5 encircle the ends of the crane and are held in the tubing 6 by nuts 7, 7.

A catcher head 8 similarly constructed to the crane A is connected to the crane A, and is capable of being reversed so that the catcher arm can be used in any direction in which the car may be traveling. A bar 9 is along the forward end, are spring clips 25,

connected to the catcher head 8 and is held on the crane A by a clamp 10. The end of the bar is preferably screw-threaded as at 11, and a clutch nut 12 is placed on the 60 screw-threaded end which holds the bar in the position desired. A hand wheel 13 is placed on the screw end of the bar whereby the bar is operated. At the forward end of the crane a clutch 14 engages the bar for 65 holding it in either of its positions. On the ends of the crane A are male sockets or projections 15, 15'. On the inner end of the catcher head a female socket 16 is formed which is adapted to receive the male socket 70 therein for holding the head in position. When it is desired to reverse the catcher head when the train is traveling in a different direction from which the crane is set, the wheel 13 is turned, causing the head 8 to be 75 moved outwardly releasing the clutch 14 from the brackets 14^a, 14^a, and at the same time releasing the engagement of the sockets 15 and 16 of the head and crane, and permitting the head to be reversed so that the 80 socket 16 will engage with the male socket 15' on the crane A when the catcher head is drawn in toward the crane A so that the engagement will be made between the socket 15' and 16 when the clutch will be received in 85 brackets 51, 51. By this means I obtain a mechanical adjustment or mechanism for reversing the catcher head. The usual catcher arm 17 is pivoted to the end of the catcher head as at 18, and the longer arm of the su catcher arm 17 is provided with a curved spring 19 which is adapted to engage a pin 20 on the catcher head to hold the arm in position when a mail bag is to be caught. When the sack or pouch has been caught on the 95 catcher arm, the impact of the catching operation will cause the catcher arm 17 to swing inwardly whereby the short arm will lie against the head 8, and a dog 21 which is pivoted to the head will engage the end of 100 the shorter arm and hold the same in locked position. A spring 22 is adapted to press against the dog 21 to keep it in engagement with the short arm of the catcher arm. A rod 23 is connected to the free end of the dog 105 and extends through the head 8 and to the free end of the rod a ring 24 is connected whereby the dog can be pulled from engagement with the catcher arm when it is desired to release the sack from the catcher 110 arm. On the catcher head, and preferably

25. Between these clips bolts 26, 26 ex- | forked arms 42 pivotally secured to the post, tend, which are spring controlled. These bolts are adapted to hold the mail sacks, and the bolt 26 is drawn inwardly by a ring 27, which is connected to one end of the bolt, sufficiently to allow the ring on the mail sack to enter between the clips, when the bolt is released and slides through the ring to support the sacks, and the clips 25 are adapted to engage the end of the bolt to hold it in position and prevent the bag from slipping off the bolt.

Pivotally connected to one side of the crane A is a link 28 which is provided with a forked 15 end 29. Pivotally connected between the forked arms or ends 29 of the link 28 is a link 30 which in turn is connected to a shorter link 31 which is connected to the top or head of the car door. The forked ends 29 of the link 28 are provided with a handle 32 which is grasped by the mail clerk when it is desired to draw the crane into the car after a catch and delivery has been made. By pulling on the handle 32 and by the pivotal connections 25 of the different arms, the crane will be drawn inward into the car for the removal of the sacks, and when it is desired to simply place the crane in a position so that it will be out of the way of anything passing along the track, 30 it will be held in the door-way of the car in the position indicated by dotted lines in Fig. 3. On the link 28 is a lug or projection 33 which is adapted to engage the arm 30 to retain it between the forked portion 29 of arm 28, and 35 to hold the crane in position for delivering and catching sacks and to hold the crane in an approximately horizontal position when drawn into the car. Hinged to the bottom of the car is an arm 34 which is provided with 40 spring clips 35 similar to the clips 25 which are adapted to engage and hold the lower end of the sack which is suspended from the catcher head 8. The arm 34 is pivotally connected to a lever 36 which is connected to the 45 body of the crane whereby the arm 34 is caused to be raised and lowered by the different movements of the crane.

The post or posts for supporting the crane may be made of any approved construction, 50 but I have connected the posts 37 to a base 38 whereby it is capable of horizontal and vertical adjustment through a slot 39 in the lower frame-work 40, through which slots bolts 41, 41 extend into and through the post 55 38. When it is desired to give a vertical adjustment wedges (not shown) may be inserted between the base and frame-work. The mechanism used and connected to the post is practically identical with that described in 60 connection with the crane on the car, and duplicate numbers have been applied for corresponding parts on the posts and crane, and it will therefore be unnecessary to describe the details of construction further as to these simi-65 lar parts. Secured to the top of the post are

and between the end of the forked arms are iron loops 43, 43. A board 44 is secured to the forked arms and upon which the pivoted arm 45 is pivoted as at 46. The arm 45 is 70 adapted to pass through the loops 43, 43. Connected at the outer end of the arm 45 is a plate 47 having clips 48, 48 at each end upon which clips the mail sacks are suspended. Connected to the free end of the arm is a chain 75 49 which is capable of engaging a hook 50 whereby the arm can be adjusted to suit requirements, and for holding back the sack in rigid position until the catch is made. The lower end of the sack or sacks which are sus- 80 pended from the clips 48 are adapted to be held by clips 25 on the catcher head 8.

It is evident that more or less slight changes might be made in the form and arrangement of the several parts described without depart- 85 ing 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 Let- 90 ters Patent, is:—

1. The combination with a crane, of a catcher head, a bar mounted on the crane and connected to the catcher head, a portion of said bar extending in a direction out of the 95 axial center, and adapted to be supported by the crane whereby the weight of the parts prevents the bar from turning.

2. The combination with a crane, of a reversible catcher head, a bar mounted on the 100 crane and connected to the catcher head, a portion of said bar extending in a direction out of the axial center and supported by the crane whereby the weight of the parts prevents the bar from turning.

3. The combination with a crane, of a catcher head, an endwise movable bar mounted on the crane and connected to the head, and locking means on the bar for preventing endwise movement of the bar and for secur- 110 ing the catcher head in position.

4. The combination with a pivotally supported crane, of a catcher head pivotally and reversibly connected thereto, and having its center of oscillation upon the crane, a catcher 115 arm pivotally connected to the catcher head, and a dog for engaging the catcher arm for holding it in closed position.

5. The combination with a pivotally supported crane, of a catcher head pivotally and 120 reversibly connected thereto, and having its center of oscillation upon the crane, a catcher arm pivotally connected to the catcher head, a dog for engaging the catcher arm for holding it in closed position, and means con- 125 nected to the dog whereby the catcher arm is released.

6. The combination with a crane, of a catcher head, a bar mounted on the crane and connected to the head, and means for 130

operating the bar for reversing the position of the head.

7. The combination with a crane, of a catcher head, a bar mounted on the crane 5 and connected to the head, a clutch on the bar adapted to engage the crane, and means for operating the bar for reversing the position of the head.

8. The combination with a crane, of a catcher head, a bar mounted on the crane and connected to the catcher head, brackets on the crane, a clutch on the bar adapted to be received in the brackets for holding the

catcher head in either position.

9. The combination with a crane, of a catcher head, a bar mounted on the crane and connected to the catcher head, means for operating the bar for reversing the position of the head, a clutch on the bar, brackets on the crane in which the clutch is received for holding the catcher head in either position, and means on the crane and catcher head whereby they are locked.

10. The combination with a crane, of a catcher head pivotally and reversibly con-

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nected to the crane, links connected to the crane, and a handle connected to one of the links for raising and lowering the crane.

11. The combination of a catcher head pivotally and reversibly connected thereto, 30 links connected to the crane, means for supporting the sacks on the catcher head, a lever connected to the crane, an arm engaging the sack and pivotally connected to the lever and catcher head, and means on one of 35 the links for raising and lowering the crane and arm.

12. The combination with a crane, of a catcher head pivotally and reversibly connected thereto, a catcher arm pivotally connected to the head, means for holding the head in open position, a bolt on the catcher head for holding the sack, and clips engaging the end of the bolt to hold it in position.

In testimony whereof I affix my signature 45

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in presence of two witnesses.

JAMES H. TUDOR.

Witnesses:

J. W. Rodes, J. W. Rodes, Jr.