

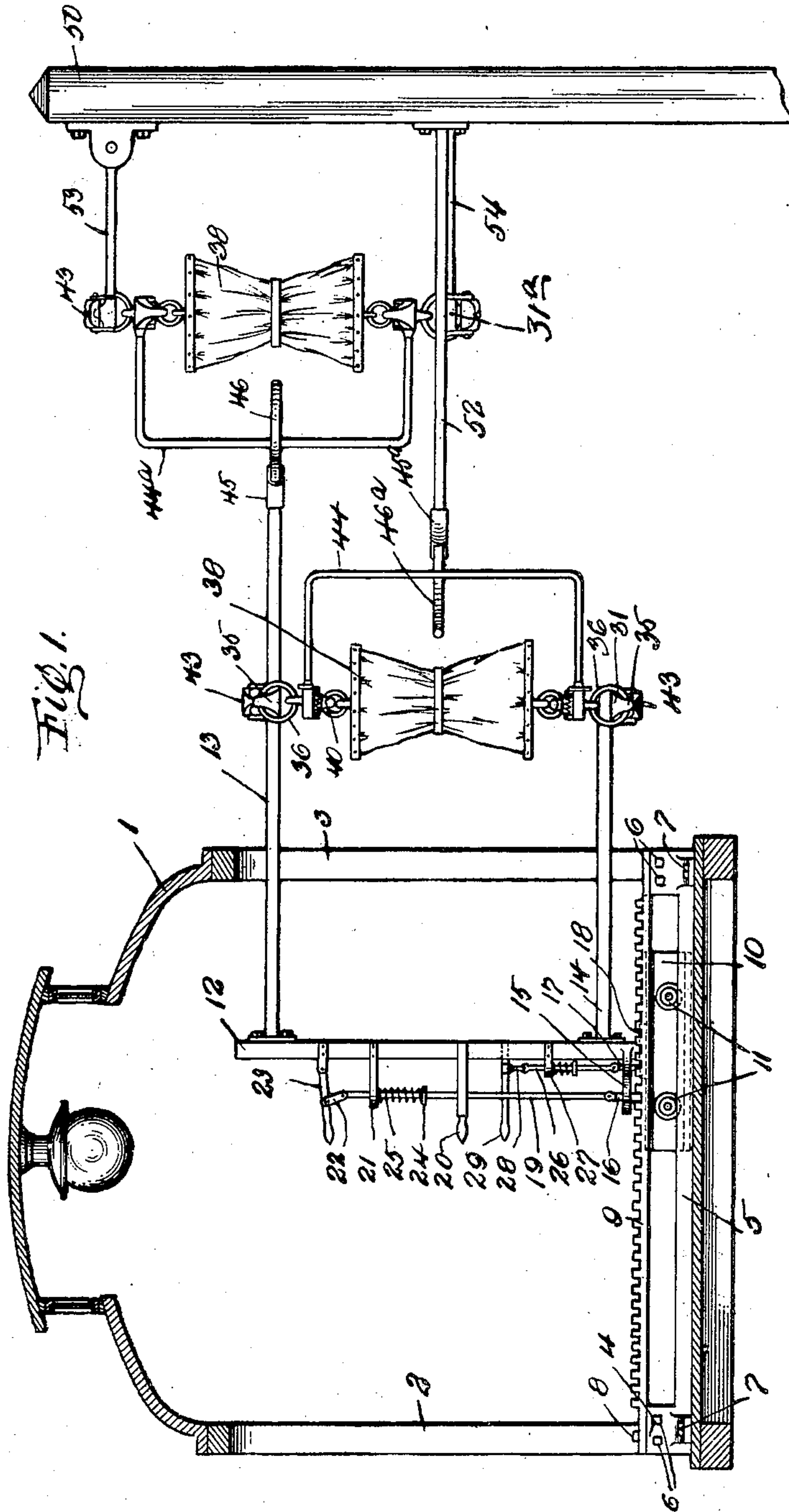
No. 891,006.

PATENTED JUNE 16, 1908.

F. W. RENNER.
MAIL CATCHING AND DELIVERING DEVICE.

APPLICATION FILED APR. 20, 1908.

4 SHEETS—SHEET 1.



Inventor
F. W. Renner.

Witnesses

Samuel Payne
C. H. Butler

By

J. H. Everts

Attorney S.

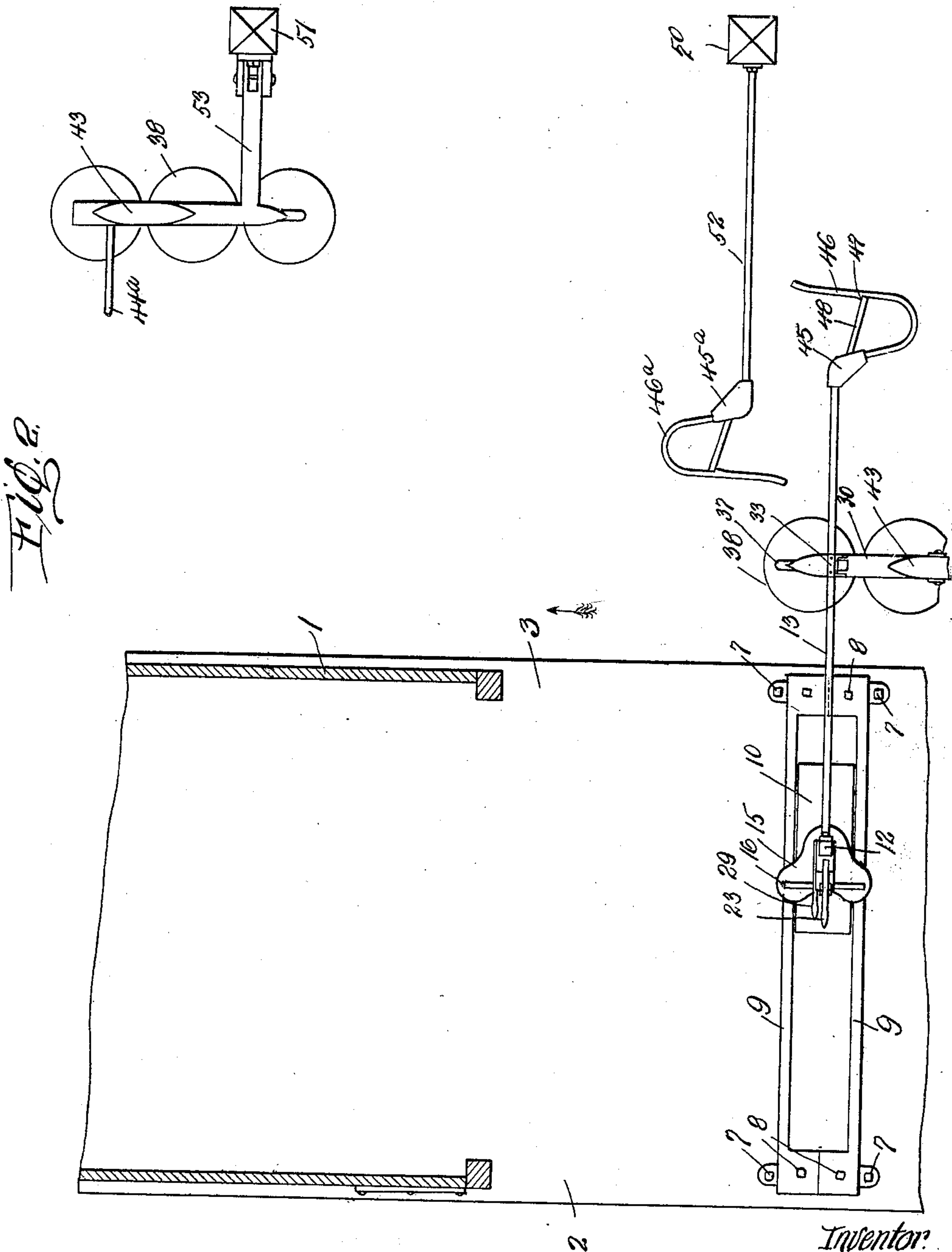
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Witnesses

Samuel Payne.

R. H. Butler

Inventor:

F. W. Renner.

334

H. C. Everett & Co.

Attorney.

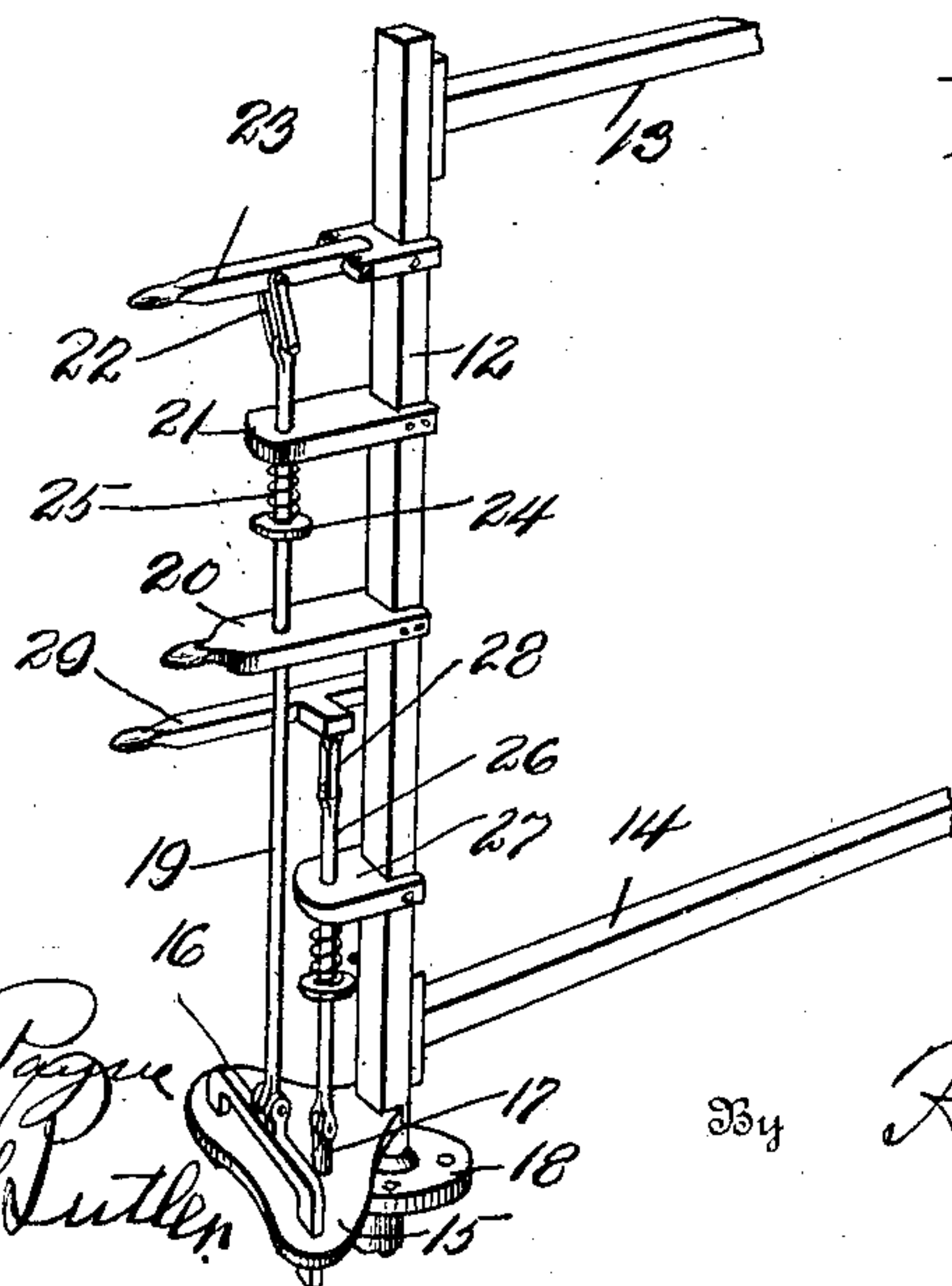
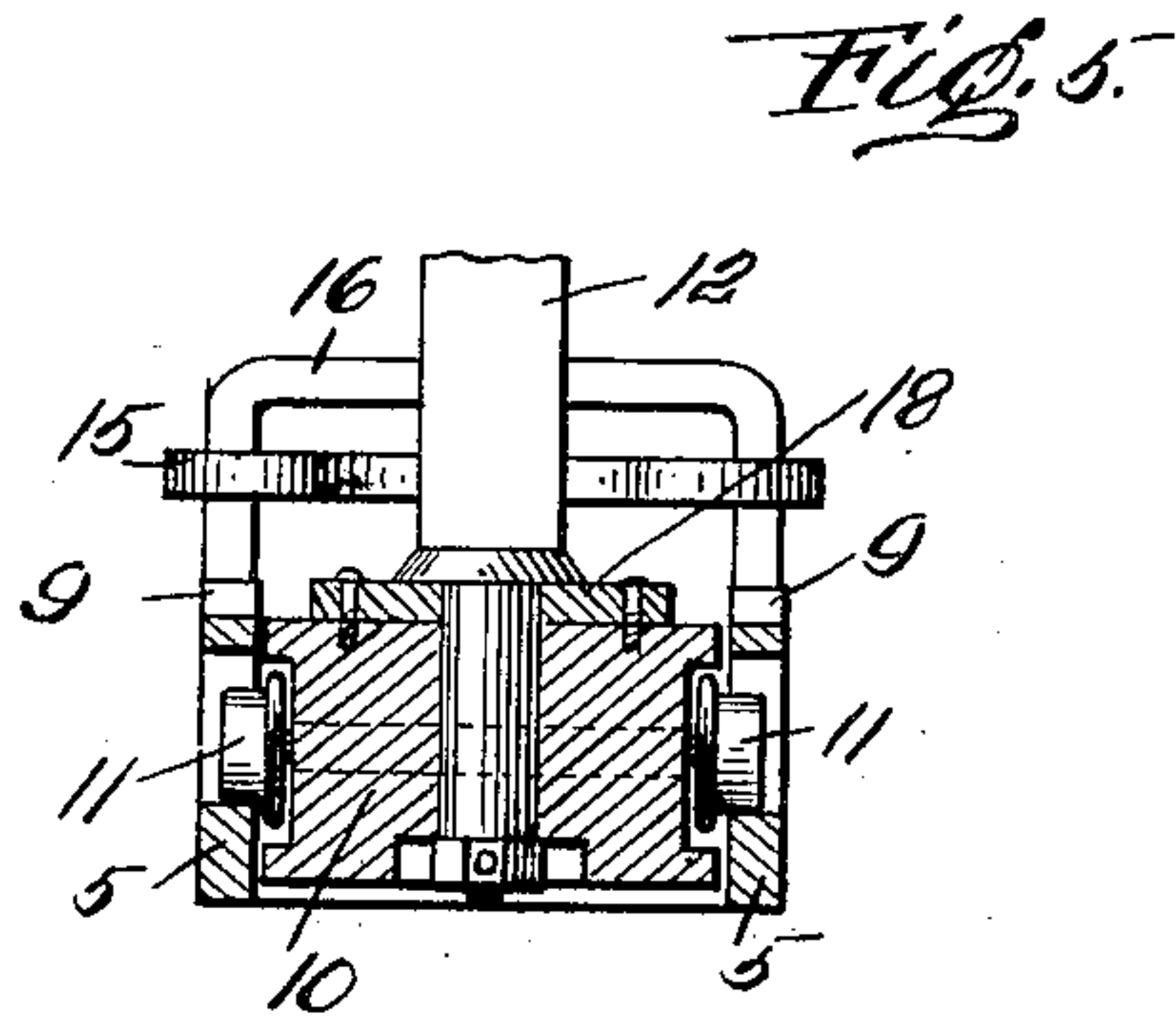
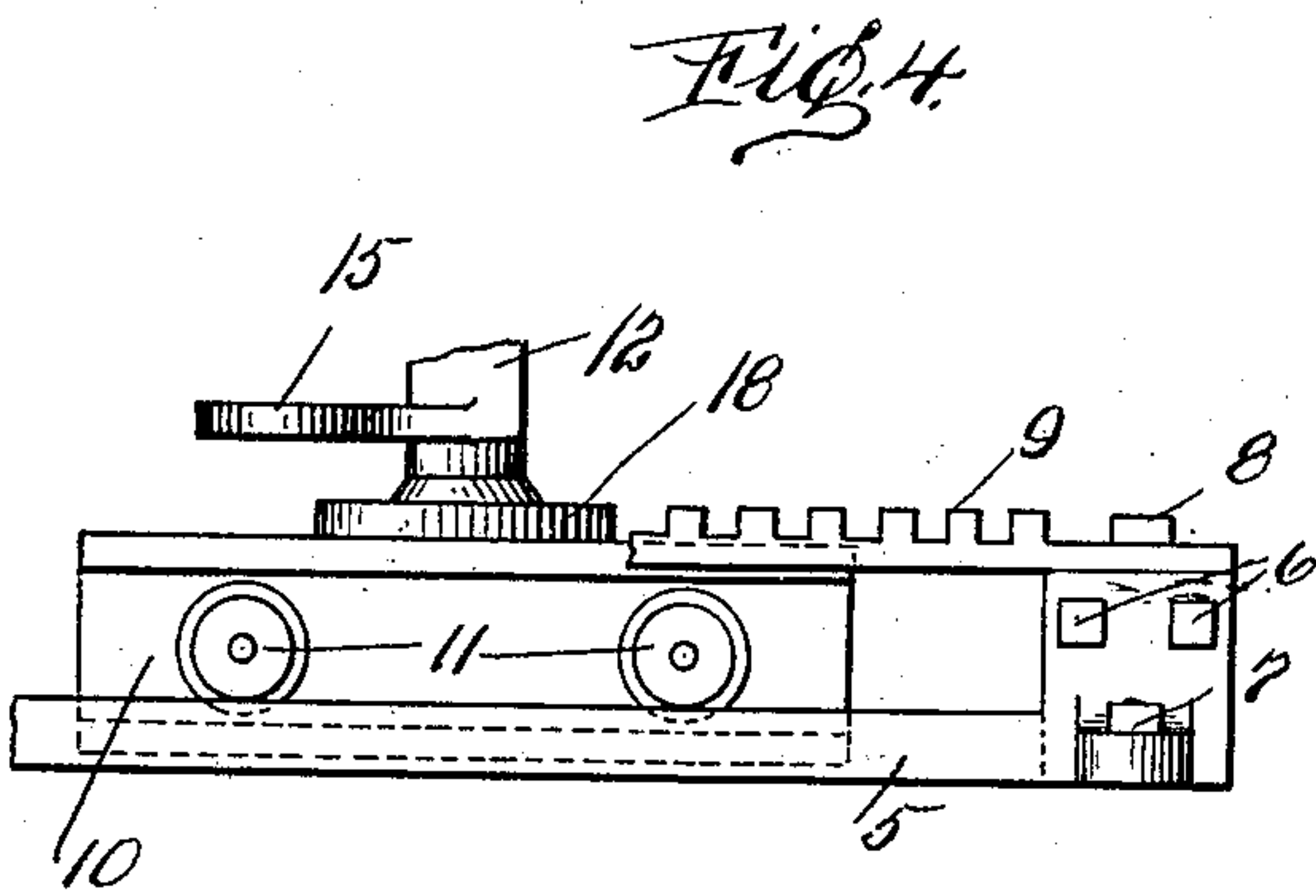
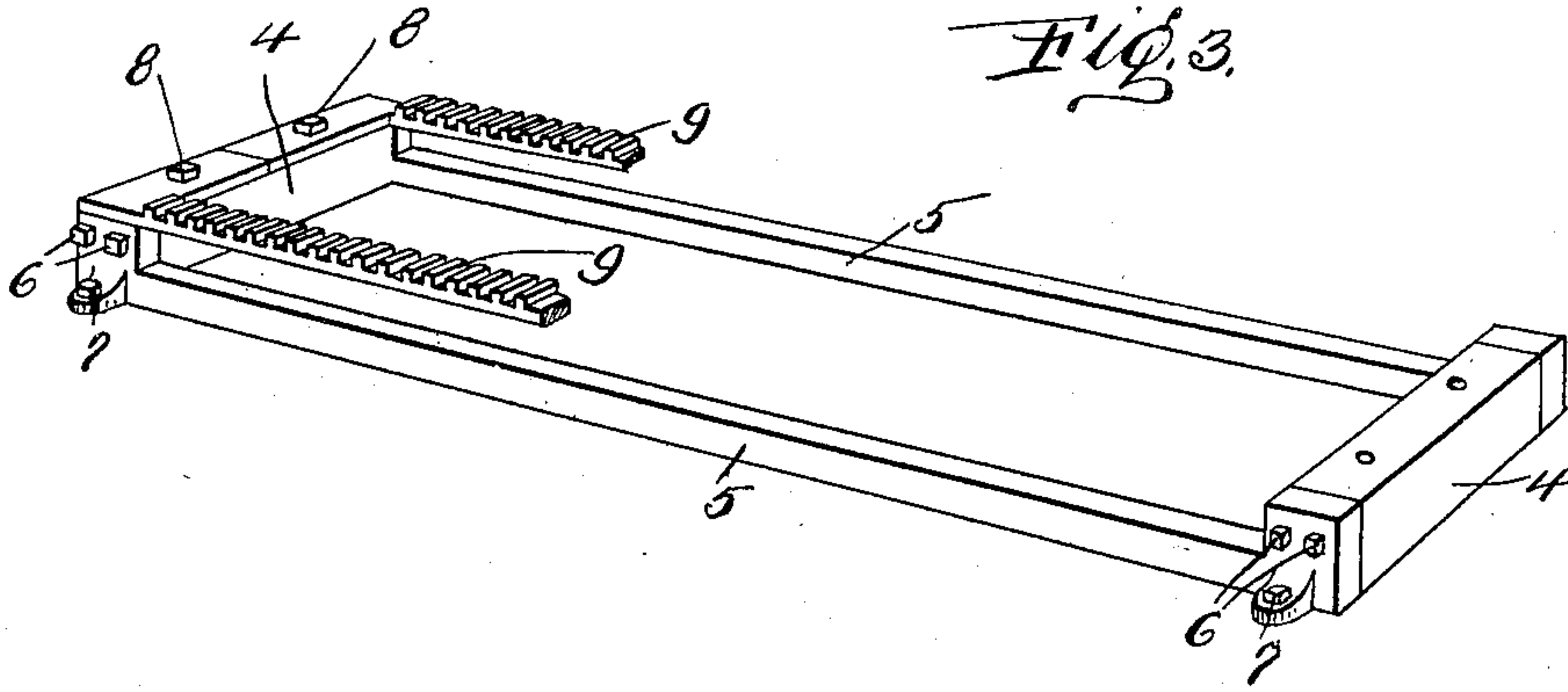
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4 SHEETS—SHEET 3.



Witnesses

Samuel Page
A. H. Butler

By

H. C. Everts

Attorney S.

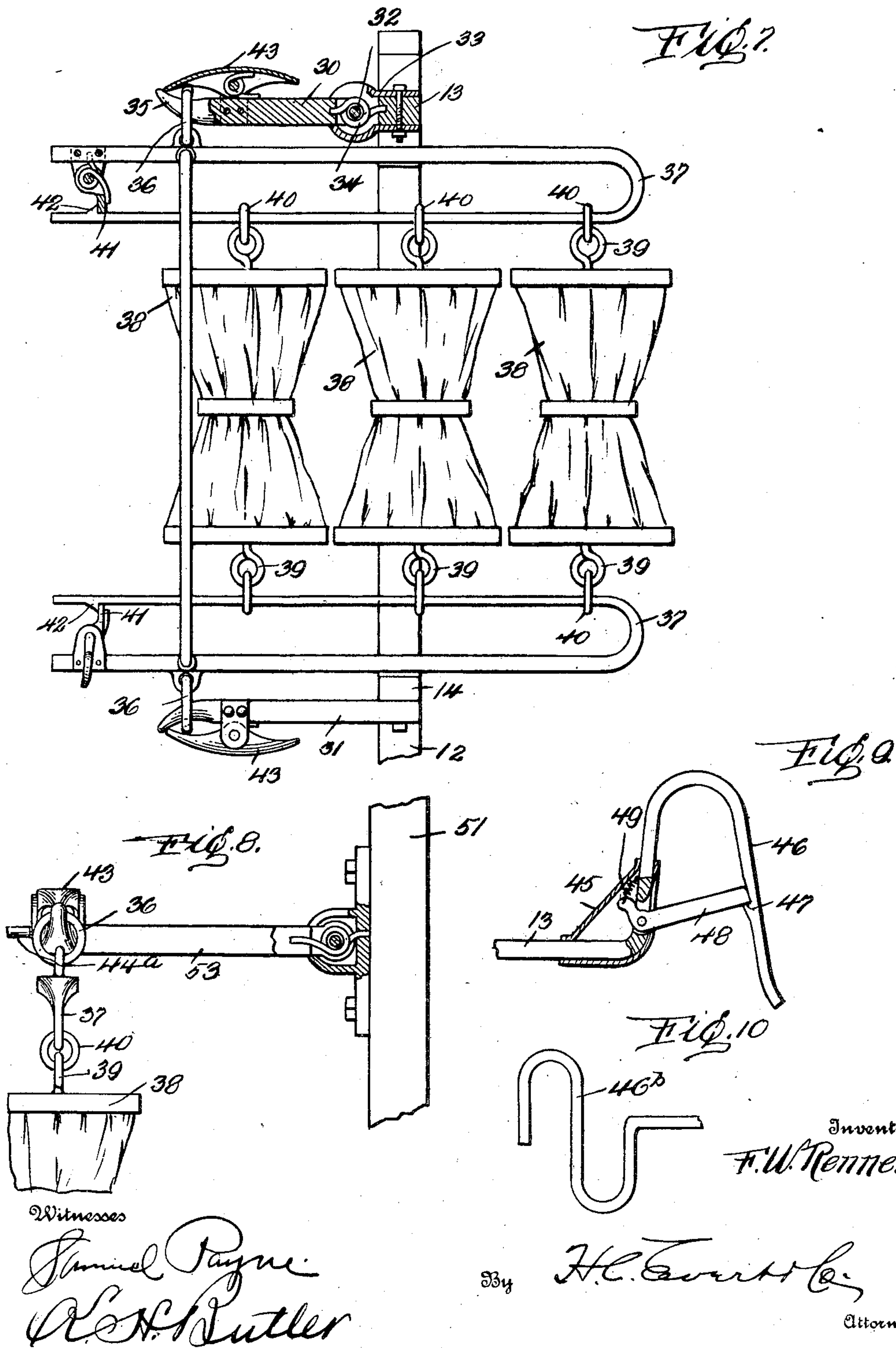
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4 SHEETS—SHEET 4.



UNITED STATES PATENT OFFICE.

FREDERICK W. RENNER, OF CREIGHTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO LEON S. BRISKER, OF NEW KENSINGTON, PENNSYLVANIA.

MAIL CATCHING AND DELIVERING DEVICE.

No. 891,006.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed April 20, 1908. Serial No. 428,075.

To all whom it may concern:

Be it known that I, FREDERICK W. RENNER, a citizen of the United States of America, residing at Creighton, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Mail Catching and Delivering Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to mail catching and delivering devices, designed for mail cars and similar conveyances.

The objects of my invention are, first, to provide positive and reliable means in connection with a car for simultaneously catching and delivering mail without injuring mail bags or endangering persons' lives; second, to provide a mail catching device that can be easily and quickly placed in an operative position; third, to provide a novel mail delivering device for safely depositing mail bags at a predetermined point irrespective of the rapidity or speed of the mail car; and fourth, to provide a simple and effective mail catching and delivering device by which one or more bags of mail can be caught or delivered.

I attain the above objects by a device that will be presently described in detail and then specifically pointed out in the appended claims.

Referring to the drawings:—Figure 1 is a cross sectional view of a car equipped with my device, illustrating the same in connection with a station equipment, Fig. 2 is a plan of my device with the car partly broken away and partly in section, Fig. 3 is a perspective view of a portion of a car equipment partly broken away and partly in section, illustrating the base of the device, Fig. 4 is an elevation of a portion of the same, Fig. 5 is a cross sectional view of the same, Fig. 6 is a perspective view of the movable standard of the car equipment, Fig. 7 is an elevation of the bag supporting racks, Fig. 8 is a similar view, partly broken away and partly in section of a station equipment, Fig. 9 is a plan, partly broken away and partly in section of a hook used for catching mail bags, and Fig. 10 is a modification of the same.

In the accompanying drawings, 1 designates a car having oppositely disposed doorways 2 and 3. Upon the floor of the car 1 and extending from one doorway to the other is the base of the car equipment device, this

base comprising heads 4 connected together by side rails 5, said side rails being bolted to the ends of the heads 4, as at 6, and to the floor of the car, as at 7. Secured to the heads 4 by screw bolts 8 and lying parallel with the rails 5 are longitudinal racks 9, the object of which will presently appear.

Adapted to move back and forth in the base of the car equipment is a truck 10, said truck being supported by flanged wheels 11 upon the rails 5.

Revolubly mounted upon the truck 10 is a standard 12 provided with right angular arms 13 and 14, the object of which will presently appear. The standard adjacent to the truck 10 is provided with a guide block 15 for guiding a yoke 16 and a pin 17, the former being adapted to engage in one of the racks 9, while the latter is adapted to engage in the plate 18 provided therefor and fixed to the trucks 10. The plate 18 is provided with openings to receive the pin 17 and prevent the standard 12 from rotating while the yoke 16 is adapted to lock said standard and said truck in any position to which it may be adjusted in the base of the device. The yoke 16 is connected to a rod 19 extending upwardly through guides 20 and 21 and connecting by links 22 to a pivoted lever 23. The rod 19 is provided with a washer 24 beneath the guide 21, and interposed between said washer and the guide 21 is a coil spring 25, said spring encircling the rod 19 and normally holding said rod in a depressed position whereby the yoke 16 will engage one of the racks 9.

The pin 17 is connected to a rod 26 guided by a bracket 27 carried by the standard 12, said rod connecting by links 28 with a lever 29, pivotally connected to the standard 12. The rod 26 is normally held in depressed position similar to the rod 19.

The guide 20 serves functionally as a handle for rotating the standard 12 when the pin 17 and the yoke 16 are elevated through the medium of the levers 23 and 29.

The arm 13 intermediate its ends is provided with a right angular extension 30, while the arm 14 terminates with a right angular extension 31 directly beneath the extension 30. The extension 30 is connected to the arm 13 by a pivot pin 32 housed by a casing 33 suitably secured to the arm 13. The casing is formed to allow the extension 30 to swing upwardly and a spring 34 is employed upon

the pivot pin 32 for swinging said extension upwardly, the spring being held under tension when the extension 30 is in a horizontal position. The object of this construction will presently appear.

The outer ends of extensions 30 and 31 are curved and tapered, as at 35, for supporting the links 36 of U-shaped bag racks 37. These U-shaped bag racks are adapted to support mail bags 38 in a vertical position, said bags having their ends provided with eyelets 39 and rings 40; the rings being loosely mounted upon the racks 37, whereby they can be easily removed from said racks.

To prevent accidental displacement of the bags 38 from the racks 37, I provide each rack with a pivot spring held latch 41, said latch being adapted to engage a beveled lug 42 and prevent the rings 40 from accidentally sliding from the racks, and at the same time allowing the rings to be slipped upon the racks, when the device is being prepared to deliver mail to a station.

Accidental displacement of the links 36 is prevented by spring pressed retainers 43 mounted upon the ends of the extensions 30 and 31.

The racks 37 are connected by an outwardly extending frame 44, by which the racks and the mail bags carried thereby are removed from the extensions 30 and 31.

The end of the arm 13 is provided with a casing 45 and a hook 46, said hook having a notch 47 for an inwardly swinging latch 48, said latch being pivotally mounted in the casing 45 and retained in the notch 47 by a spring 49 located in the casing 45. The hook 46 is employed for catching mail from a station, as will presently appear.

The station equipment comprises posts 50 and 51, the post 50 being provided with a stationary arm 52 having a casing 45^a and a hook 46^a similar to the arm 13, and positioned opposite, whereby a train moving in the direction of the arrow of Fig. 2 will deliver the mail bags 30^a by the frame 44 engaging in the hook 46^a and strip the racks 37 from the extensions 30 and 31. The post 51 which is located a short distance from the post 50 is provided with an upwardly swinging L-shaped arm 53, and a stationary L-shaped arm 54, said arms being constructed similar to the extensions 30 and 31 for holding racks and bags similar to the car equipment.

Operation: When the device is not in use, the truck 10 is moved adjacent to the doorway 2, and the standard 12 rotated to swing the device into the car, the doorway 3 being of a sufficient width to permit of this swinging movement. In order to rotate the standard 12, the levers 23 and 29 are elevated to release the standard and after the standard has been swung and these levers can be released, the pins 17 engage in the plate 18

locking the standard, whereby the arms 13 and 14 can freely swing within the car during the movement of the train. The mail bags 38 are arranged upon the racks 37 within the car and the racks placed in position before the arms 13 and 14 are swung out of the doorway 3. Assuming that the mail bags are in position as illustrated in Fig. 1 of the drawings, the car equipment will first deliver mail to the station, the frame 44 being caught by the hook 46^a and then the hook 46 engages the frame 44^a and removes the mail from the station equipment. As soon as the racks 37 are removed from the extensions 30 and 31, the extension 30 swings upwardly, this also being true of the L-shaped arm 53.

In Fig. 1 of the drawings, I have illustrated a hook 46^b that can be used in lieu of the hook 46, when the spring pressed latch 48 is dispensed with, and said hook would readily prevent the frame and the racks carried thereby from becoming accidentally detached after being caught.

It is apparent from the novel construction of the car equipment, that the device can be used upon either side of a car and suitable means can be provided in connection with the station equipment, whereby the racks 37 and the mail bags 38 can be easily placed in position.

My invention is susceptible to such variations as are permissible by the appended claims.

Having now described my invention what I claim as new, is:—

1. The combination with a car having oppositely disposed doorways, of a car equipment, said equipment consisting of a base arranged in said car, said base comprising rails, racks, a truck movably mounted upon said rails; a standard revolvably carried by said truck, a spring pressed yoke carried by said standard for engaging said rack, a spring pressed pin carried by said standard for locking said standard with relation to said truck, arms carried by said standard, an upwardly swinging extension carried by one of said arms, a stationary extension carried by the other of said arms, spring pressed clasps carried by the ends of said extensions, racks detachably connected to said extensions and adapted to support a plurality of mail bags, a frame connecting said racks, spring pressed latches carried by said racks, a hook carried by one of said arms, a spring pressed latch arranged to close said hook, a station equipment, said station equipment comprising posts, an arm carried by one of said posts, a hook carried by said arm and adapted to engage the frame of said car equipment, an upwardly swinging L-shaped arm carried by the other of said posts, a stationary L-shaped arm carried by the same post, racks detachably connected to said arms for supporting mail bags, and a frame

connecting said racks and adapted to be engaged by the hook of said car equipment, substantially as described.

2. The combination with a car having oppositely disposed doorways, of a car equipment, said equipment comprising a base, a truck movably mounted upon said base, a standard revolubly carried by said truck, a spring pressed yoke carried by said standard for engaging said base, a spring pressed pin carried by said standard for locking said standard with relation to said truck, arms carried by said standard, an upwardly swinging extension carried by one of said arms, a stationary extension carried by the other of said arms, spring pressed clasps carried by the ends of said extensions, racks detachably connected to said extensions and adapted to support a plurality of mail bags, a frame connecting said racks, spring pressed latches carried by said racks, a hook carried by one of said arms, a spring pressed latch arranged to close said hook, a station equipment, said station equipment comprising posts.

3. The combination with a car, of a car equipment, said equipment comprising a base, a truck movably mounted upon said base, a standard revolubly carried by said truck, means for locking said standard with relation to said truck, arms carried by said standard, extensions carried by said arms, spring pressed clasps carried by the ends of said extensions, racks detachably connected to said extensions and adapted to support a plurality of mail bags, a frame connecting said racks, spring pressed latches carried by said racks, a hook carried by one of said arms, a spring pressed latch arranged to close said hook, a station equipment, said station equipment comprising posts, an arm carried by one of said posts, a hook carried by said arm and adapted to engage the frame of said car equipment, an upwardly swinging L-shaped arm carried by the other of said posts, a stationary L-shaped arm carried by the same post, racks detachably connected to said arms for supporting said mail bags, and a frame connecting said racks and adapted to be engaged by the hook of said car equipment, substantially as described.

4. The combination with a car, of a car equipment, said equipment comprising a base, a truck movably mounted upon said base, a standard revolubly carried by said truck, means for locking said standard with relation to said truck, arms carried by said standard, extensions carried by said arms, racks detachably connected to said extensions and adapted to support a plurality of mail bags, a frame connecting said racks, spring pressed latches carried by said racks, a hook carried by one of said arms, a spring pressed latch arranged to close said hook, a station equipment, said station equipment comprising posts, an arm carried by one of said posts, a hook carried by

said arm and adapted to engage the frame of said car equipment, an upwardly swinging L-shaped arm carried by the other of said posts, a stationary L-shaped arm carried by the same post, racks detachably connected to said arms for supporting said mail bags, and a frame connecting said racks and adapted to be engaged by the hook of said car equipment.

5. The combination with a car, of a car equipment, said equipment comprising a base, a truck movably mounted upon said base, a standard revolubly carried by said truck, means for locking said standard with relation to said truck, arms carried by said standard, extensions carried by said arms, racks detachably connected to said extensions and adapted to support a plurality of mail bags, a frame connecting said racks, a hook carried by one of said arms, a spring pressed latch arranged to close said hook, a station equipment, said station equipment comprising posts, an arm carried by one of said posts, a hook carried by said arm and adapted to engage the frame of said car equipment, an upwardly swinging L-shaped arm carried by the other of said posts, a stationary L-shaped arm carried by the same post, racks detachably connected to said arms for supporting said mail bags, and a frame connecting said racks and adapted to be engaged by the hook of said car equipment.

6. The combination with a car, of a car equipment, said equipment comprising a base, a truck movably mounted upon said base, a standard revolubly carried by said truck, means for locking said standard with relation to said truck, arms carried by said standard, extensions carried by said arms, racks detachably connected to said extensions and adapted to support a plurality of mail bags, a frame connecting said racks, a hook carried by one of said arms, a station equipment, said station equipment comprising posts, an arm carried by one of said posts, a hook carried by said arm and adapted to engage the frame of said car equipment, an upwardly swinging L-shaped arm carried by the other of said posts, a stationary L-shaped arm carried by the same post, racks detachably connected to said arms for supporting said mail bags, and a frame connecting said racks and adapted to be engaged by the hook of said car equipment.

7. The combination with a car, of a car equipment, said equipment comprising a base, a truck movably mounted upon said base, a standard revolubly carried by said truck, means for locking said standard with relation to said base, arms carried by said standard, extensions carried by said arms, racks detachably connected to said extensions for supporting a plurality of mail bags, a frame connecting said racks, a station equipment, said station equipment com-

prising posts, a hook supported by one of said posts for engaging the frame of said car equipment, arms carried by the other of said posts, racks detachably connected to said arms for supporting mail bags, and a frame connecting said racks and adapted to be removed by said car equipment.

8. The combination with a car, of a car equipment, said equipment comprising a base, a standard movably supported by said base, means for fixing said standard with relation to said base, arms carried by said standard, racks detachably supported by said arms and adapted to support mail bags, a frame connecting said racks, a station equipment, said station equipment comprising posts, means carried by one of said posts for engaging the frame of said car equipment, and means carried by the other of said posts for supporting mail bags to be collected by said car equipment.

9. A mail catching and delivering device embodying a car equipment and a station equipment, said car equipment comprising a movable support, arms carried thereby, racks detachably connected to said arms for supporting mail bags, a frame connecting said racks, means for fixing said standard with relation to said base, said station equipment comprising posts, a hook carried by one of said posts for engaging the frame of said car equipment, racks detachably carried by the other of said posts for supporting mail bags adapted to be collected by said car equipment.

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

FREDERICK W. RENNER.

Witnesses:

J. E. SHIELDS,

OSCAR W. BRISKER.