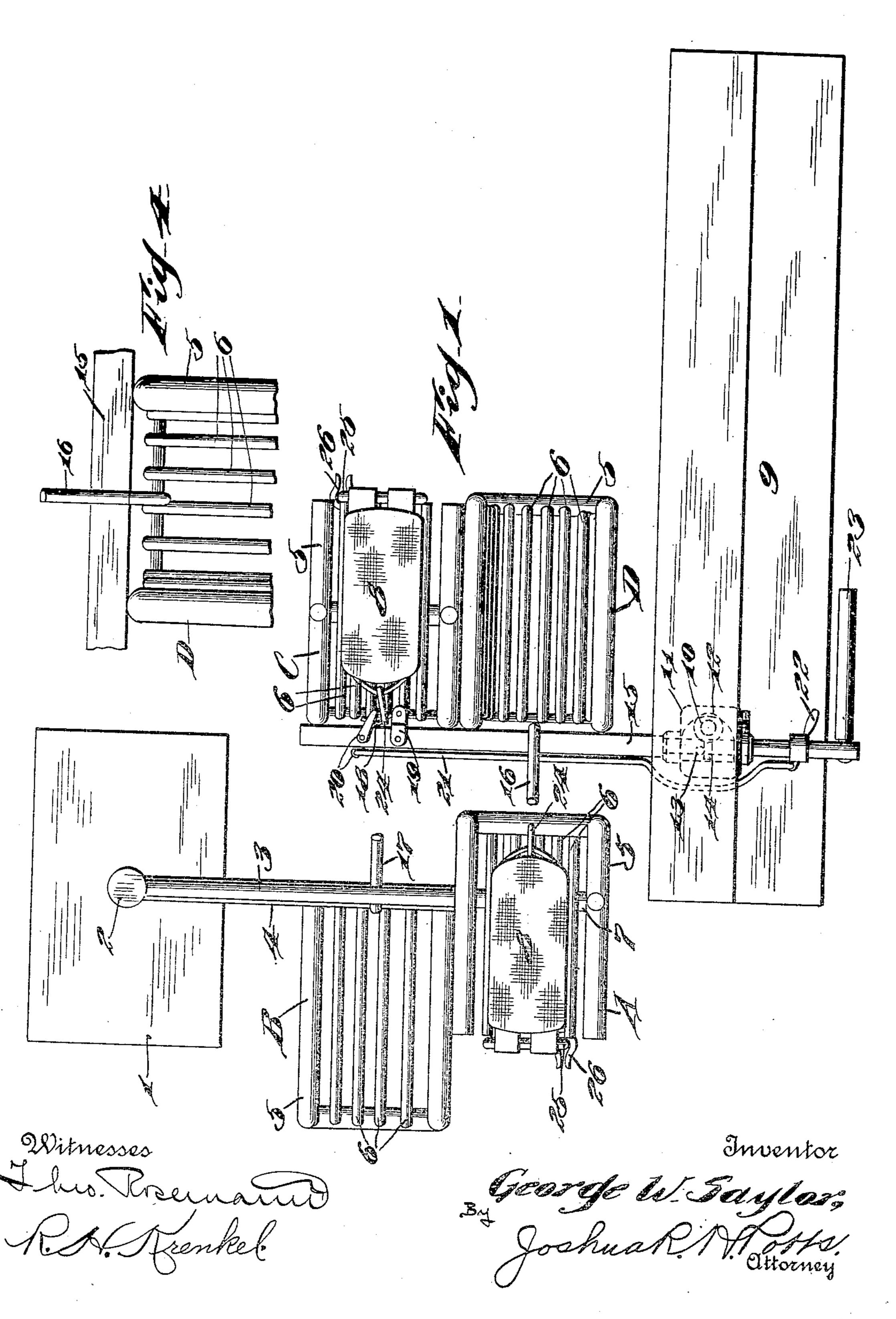
## G. W. SAYLOR. MAIL BAG CATCHING AND DELIVERING APPARATUS. APPLICATION FILED FEB. 17, 1910.

955,697.

Patented Apr. 19, 1910.

3 SHEETS-SHEET 1.



G. W. SAYLOR.

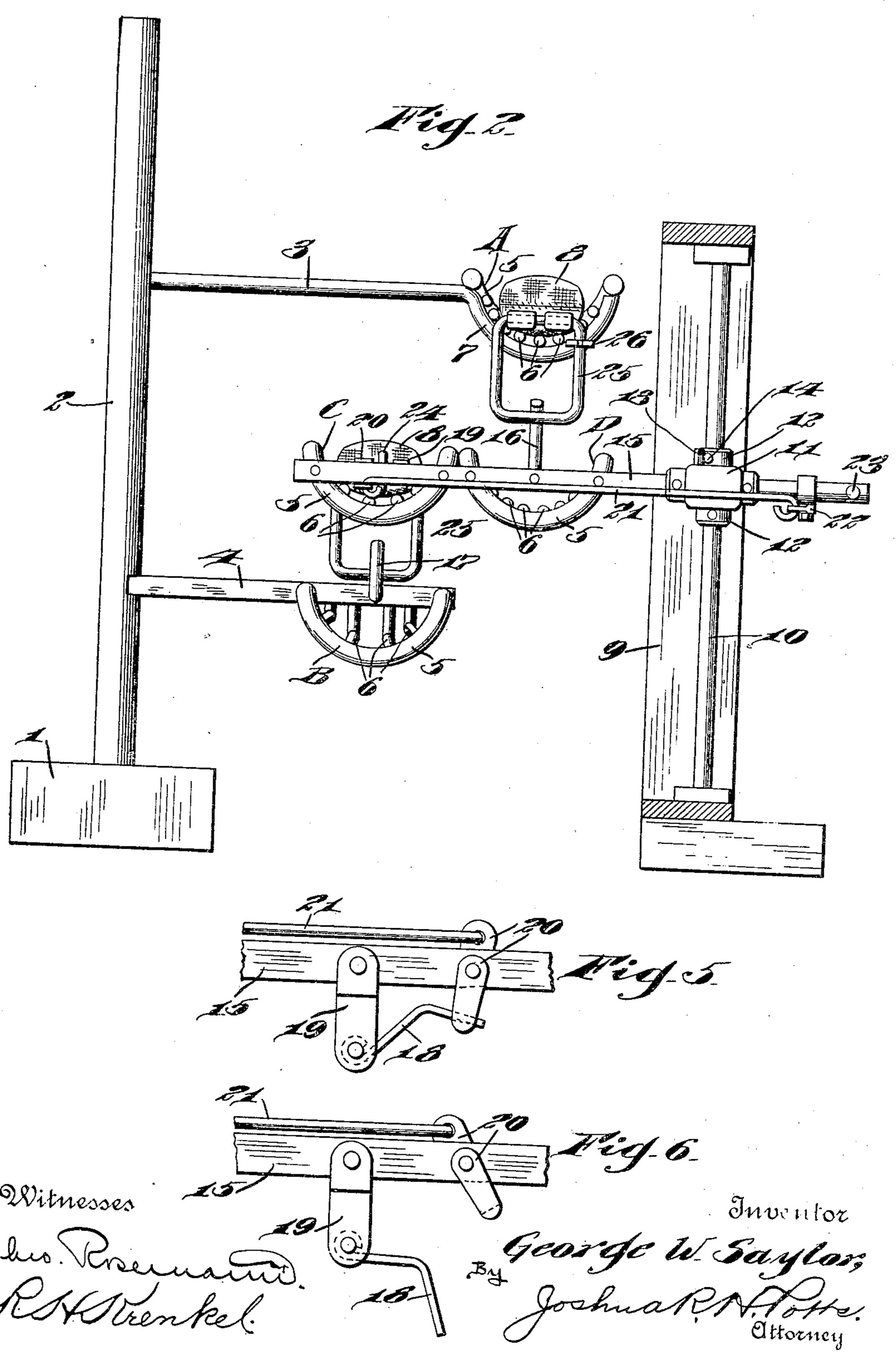
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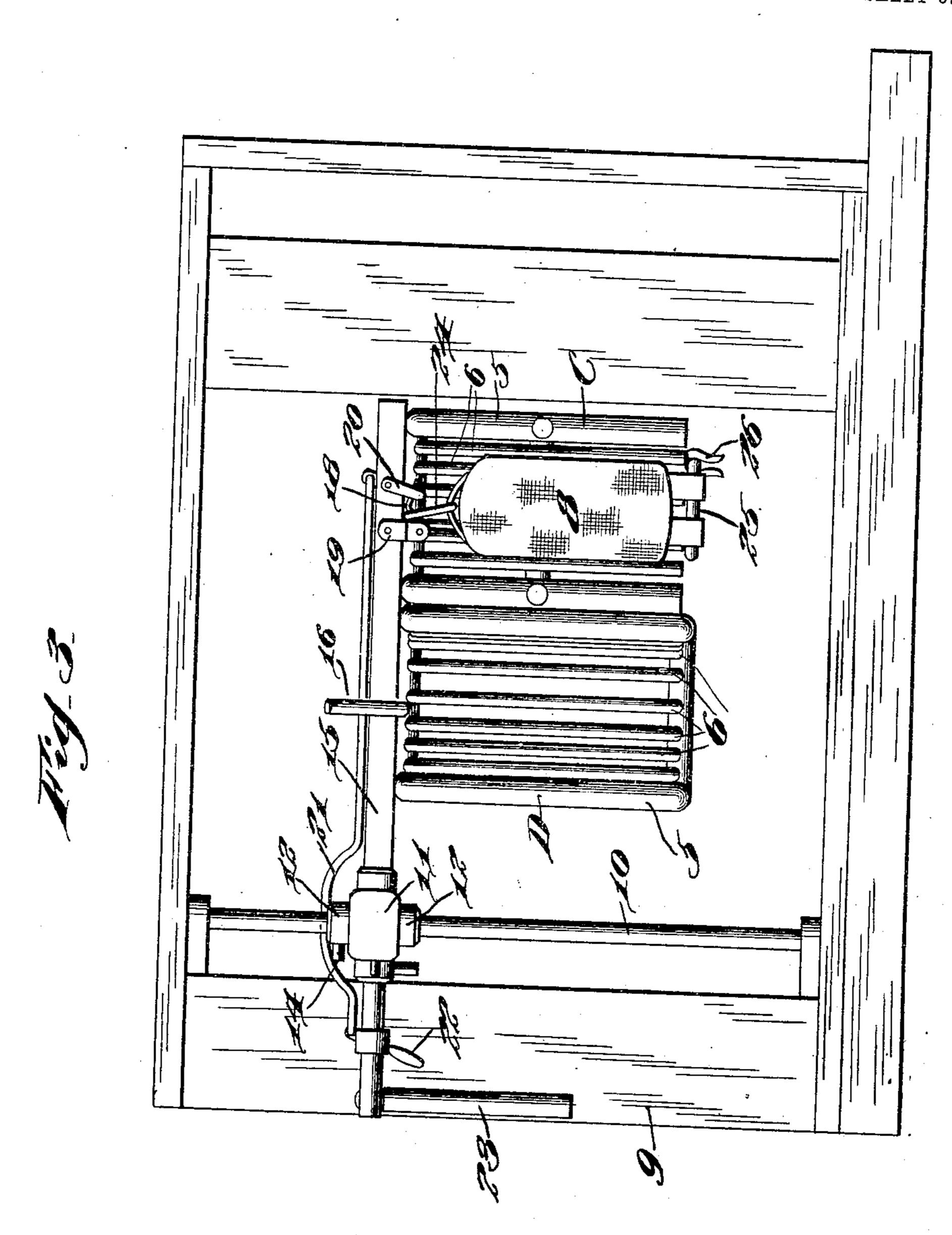


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3 SHEETS-SHEET 3.



Witnesses This Premaria. Attentel.

Inventor

Joshua PATotte. Attorney

## UNITED STATES PATENT OFFICE.

GEORGE W. SAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

MAIL-BAG CATCHING AND DELIVERING APPARATUS.

955,697.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed February 17, 1910. Serial No. 544,430.

To all whom it may concern:

Be it known that I, George W. Saylor, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Mail-Bag Catching and Delivering Apparatus, of which the following is a specification.

10 My invention relates to improvements in mail bag catching and delivering apparatus, the object of the invention being to provide improvements of this character which will deposit from a moving train, a bag of mail into a receptacle on the platform, and will take from a receptacle on the platform, a bag of mail in the latter, and perform both operations practically simultaneously.

20 proved construction of mail bag catching and delivering apparatus in a car which may be swung out through the doorway of the car, and disposed in a horizontal position, movable in a plane to coöperate with fixed receptacles on a station platform, and provide improved mechanism whereby the devices on the car will remove from one of the receptacles on the platform, a mail bag deposited therein, and will deliver onto the other receptacle on the platform, a mail bag supported by the devices on the car.

A further object is to provide improved mounting for the receptacles in the car, improved means for holding the mail bags in the receptacles, and improved means for releasing the bags from their holding means.

A further object is to provide improvements of this character which are of extremely, simple, inexpensive construction, strong and durable in use, and which will perform the catching and delivering of mail matter without injury to the mail, and which will be positive in action, and reduce to a minimum the possibility of a mail bag being thrown under the wheels of the car, or injuring persons on the platform of a station.

With these and other objects in view, the invention consists in certain novel features of construction, and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a diagrammatic plan view illustrating the position of parts when a train is ap-

proaching a station, and is about to take a mail bag from the station and deposit another. Fig. 2, is a view in front elevation of Fig. 1. Fig. 3, is a view in elevation taken from the inside of the car, showing the mechanism with a bag therein ready to be moved out into operative position outside of the car. Fig. 4, is an enlarged fragmentary plan view of the forward end of receptacle D on the car. Figs. 5, and 6, are enlarged detailed views illustrating the manner of temporarily holding the mail bag in the car delivery apparatus, and Fig. 7, is a detailed perspective view of one of the 70 mail bag link positioning devices.

mail bag link positioning devices. 1 represents a fixed base at or upon a station platform, supporting an upright 2, from which horizontal arms 3, and 4, project outward toward the railroad track, and the up- 75 per arm 3, made longer than the lower arm 4, to position a receptacle A on the outer end of arm 3, in a different vertical plane from a receptacle B at the outer end of arm 4. These receptacles are of general trough 80 shape, and may be made in various ways. A simple construction is illustrated in which a metal bar 5, is curved between its ends to give to the receptacle the general trough shape, and then the ends of the bar are ex-85 tended parallel, and to the curved portion of the bar, rods 6 are fixed and form a trough like receptacle. The upper receptacle is supported between its ends on the curved outer end 7, of arm 3, while the lower re- 90 ceptacle B is secured at one end to the arm 4. The upper receptacle A is designed as a delivery receptacle to support a mail bag 8, in position to be caught by the train while the lower receptacle B constitutes a catching 95 receptacle into which the mail bag is deposited.

9, represents the frame-work of a mail car, and 10, is a vertical rod secured in the doorway of the car, and supporting the catching and delivering apparatus of the car. A metal block 11, is mounted to turn on rod 10, between collars 12, secured to the rod, and 13, represents a stop which is provided on block 11, and adapted to engage a stop 14, on the upper collar 12, to limit the turning movement of the block 11, in one direction so as to position a rod 15, at right angles to the movement of the car, and projected out from the car the proper distance.

To the rod 15, two mail bag receptacles C and D respectively are secured. These re-

ceptacles are like the receptacles A and B above described, and they are so located that when in operative position they will move through a plane to position them between the upper receptacle A and the lower receptacle B, receptacle D lying directly below receptacle A, and receptacle C directly above receptacle B. Receptacle D constitutes a receptacle to catch a mail bag drawn from receptacle A, while receptacle C is a delivery receptacle and deposits its bag into receptacle B.

On rod 15, in front of receptacle D a forwardly projecting hook 16, is provided, pro-15 jecting in a direction in which the cars move. A similar hook 17, is provided on arm 4, in front of receptacle B, and this hook projects in the direction from which the train approaches. Rod 15, is mounted to turn in 20 block 11, so that when the rod is swung around to position the receptacles C and D in the car, said receptacles are disposed vertically. While in this position, a mail bag 8, is placed in receptacle C and to hold it in 25 the receptacle, I provide a catch 18, which is pivotally connected at one end on bracket 19, on rod 15, and its other end is adapted to be held by a link 20, pivotally supported on rod 15, and connected by rod 21, with a 30 lever 22. The lever 22, is pivotally supported on rod 15, near its shorter end where an arm or hand hold 23, is provided for manipulating the apparatus on the car.

Mail bags to be used in connection with 35 my improved mechanism, will be provided | bag from one movable receptacle and de- 100 at opposite ends with links 24, and 25, respectively. Link 24, is adapted to be caught over the catch 18, while the link 25, which is preferably larger and of rectangular form, 40 is positioned in the forked end of a spring holder 26, secured to the receptacle so as to hold link 25, at right angles to the recepta-

cle and prevent it from swaying.

When the bag is in position, as shown in 45 Fig. 3, rod 15, is swung outward and given a quarter turn by means of handle 23, to position the receptacles C and D in a horizontal plane. The operator in the car then swings lever 22, to release catch 18, so that 50 when the link 25, is engaged by hook 17, the mail bag will be drawn out of receptacle C and deposited in receptacle B, while a mail bag in receptacle A will have its link 25, engaged by the hook 16, to draw the mail bag 55 out of receptacle A and deposit it in receptacle D, it being understood that receptacle A is provided with a link holding device 26, as is receptacle C.

By means of this construction, a mail bag 60 may be delivered and one taken simultaneously, while the train is moving at a comparatively high speed, without injury to the mail, and without danger to the people at

the station.

Various slight changes might be made in !

the general form and arrangement of parts described without departing from my invention and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and altera- 70 tions as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention what I claim as new and desire to secure by Let-

ters Patent is:

1. In a mail bag catching and delivering apparatus, the combination with a stationary upright and two stationary horizontally disposed receptacles supported by the upright on different vertical and horizontal 80 planes, of a horizontal rod on a car, two receptacles on the rod, and adapted to be positioned horizontally and move between the stationary receptacles and adapted to be located in the same vertical planes as the 85 stationary receptacles, means on one of the stationary receptacles for taking a bag from one of the movable receptacles, and means on one of the movable receptacles for taking a bag from a stationary receptacle.

2. In a mail bag catching and delivering apparatus, the combination with two stationary horizontally disposed mail bag receptacles supported in different vertical and horizontal planes, of two receptacles car- 95 ried by a car and adapted to be positioned horizontally and to lie in a horizontal plane between the stationary receptacles, means on one stationary receptacle for taking a positing it in the stationary receptacle, and means on one movable receptacle for taking a bag from a stationary receptacle and de-

positing it in the moving receptacle.

3. In a mail bag catching and delivering 105 apparatus, the combination with two stationary receptacles supported in different horizontal and vertical planes, of two movable receptacles adapted to move between the stationary receptacles, of mail bags hav- 110 ing links at one end, a hook at one end of one of the stationary receptacles adapted to engage in the link of a bag in one of the movable receptacles, and a hook at one end of one of the movable receptacles adapted 115 to engage in the link of a bag in one of the stationary receptacles, whereby the bag from a movable receptacle will be deposited in a stationary receptacle and vice versa.

4. In a mail bag catching and delivering 120 apparatus, the combination with two stationary receptacles, located in different vertical and horizontal planes, of two movable receptacles adapted to be moved between the stationary receptacles, means on one 125 stationary receptacle for transferring thereinto, a bag in a movable receptacle, means on one of the movable receptacles for transferring thereinto a mail bag in a temporary receptacle, mail bags, links at both ends of 130

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the bags, and a catch adapted to temporarily engage a bag link and hold the bag in a

movable receptacle.

5. In a mail bag catching and delivering 5 apparatus, the combination with two stationary receptacles, located in different vertical and horizontal planes, of two movable receptacles adapted to be moved between the stationary receptacles, means on one station-10 ary receptacle, for transferring thereinto a bag in a movable receptacle, means on one of the movable receptacles for transferring thereinto a mail bag in a temporary receptacle, mail bags, links at both ends of the 15 bags, and a catch adapted to temporarily engage a bag link and hold the bag in a movable receptacle, and spring holders on the receptacles for holding links of the bags against swinging.

6. In a mail bag catching and delivering apparatus, the combination with two stationary receptacles located in different vertical and horizontal planes, of a vertical support adapted to be secured in a car, a 25 block mounted to turn on the vertical support, a rod located at right angles to the support and mounted to turn in the block, two receptacles secured to said rod and adapted to be supported thereby in horizon-30 tal position outside of the car, and means for transferring bags from a stationary to a movable receptacle, and from a movable to a

stationary receptacle.

7. In a mail bag catching and delivering apparatus, the combination with two stationary receptacles located in different vertical and horizontal planes, of a vertical support adapted to be secured in a car, a

block mounted to turn on the vertical support, a rod located at right angles to the sup- 40 port and mounted to turn in the block, two receptacles secured to said rod and adapted to be supported thereby in horizontal position outside of the car, mail bags adapted to rest in the receptacles, links at one end of 45 the mail bags, devices for holding said links in vertical position, a hook in front of one stationary receptacle, and a hook in front of one movable receptacle, to engage in said links.

8. In a mail bag catching and delivering apparatus, the combination with two stationary receptacles located in different vertical and horizontal planes, of a vertical support adapted to be secured in a car, a 55 block mounted to turn on the vertical support, a rod located at right angles to the support and mounted to turn in the block, two receptacles secured to said rod and adapted to be supported thereby in horizontal posi- 60 tion outside of the car, mail bags adapted to rest in the receptacles, links at both ends of the bags, hooks in front of one stationary and one movable receptacle to engage said links and transfer the bags, a catch on one 65 movable receptacle, to engage a bag link and hold the bag in the receptacle while the latter is in a vertical position and means at the inner end of the rod for releasing said catch.

In testimony whereof I have signed my 70 name to this specification in the presence of

two subscribing witnesses.

GEORGE W. SAYLOR.

Witnesses:

R. H. Krenkel, CHAS. E. POTTS.