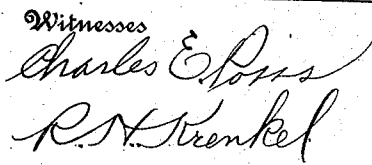


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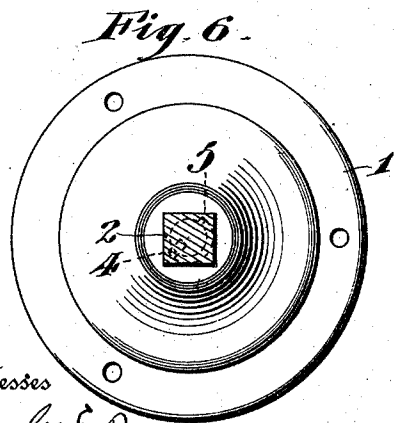
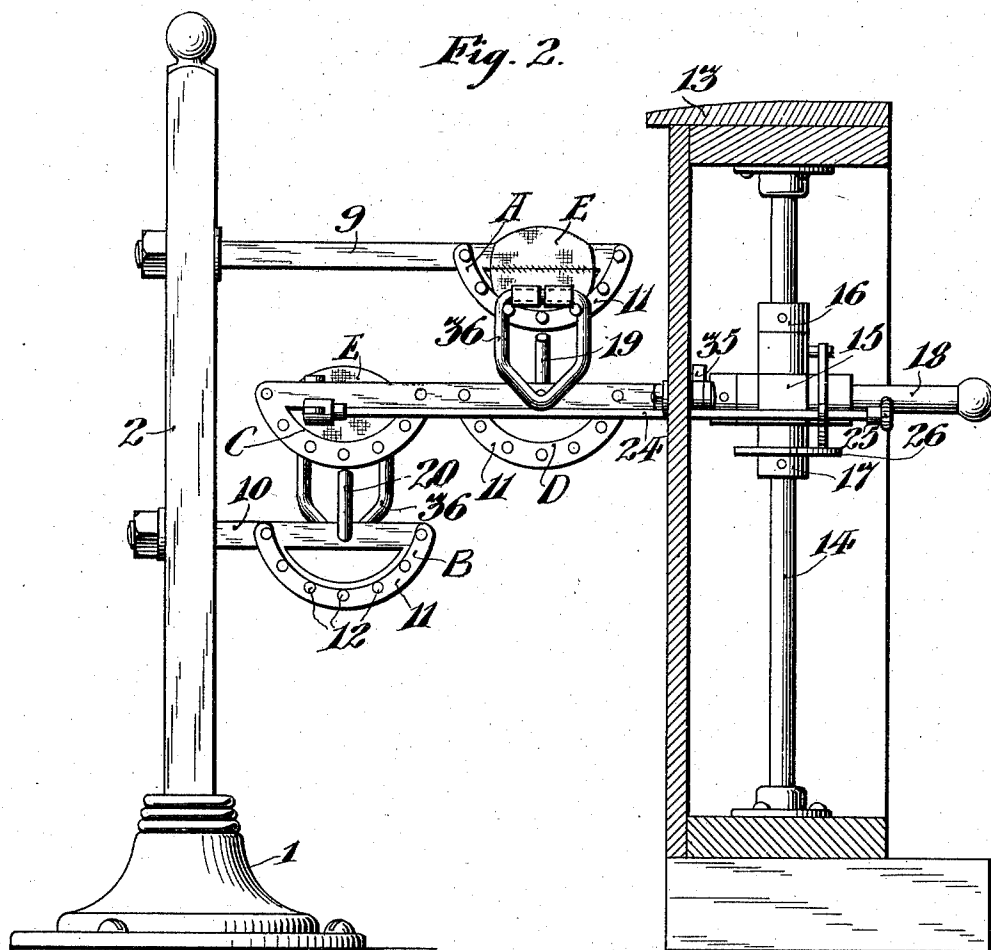
3 SHEETS—SHEET 1.



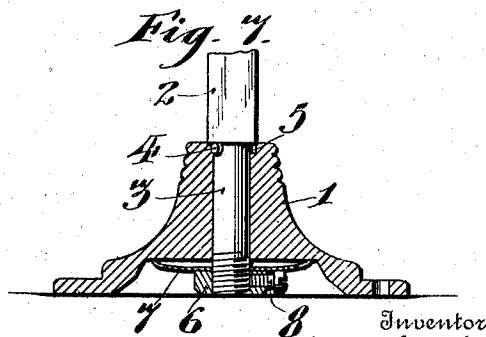
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3 SHEETS--SHEET 2.



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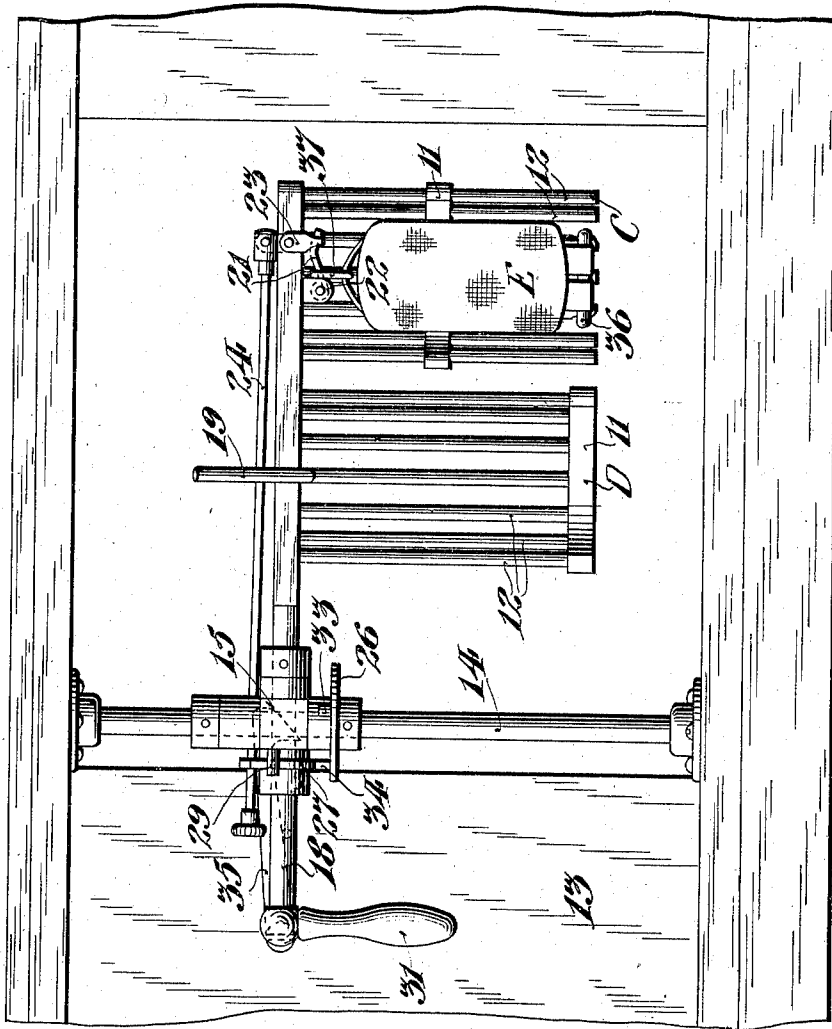
G. W. SAYLOR.
MAIL BAG CATCHING AND DELIVERING APPARATUS.
APPLICATION FILED JUNE 9, 1910.

965,753.

Patented July 26, 1910.

3 SHEETS—SHEET 3.

Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE W. SAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

MAIL-BAG CATCHING AND DELIVERING APPARATUS.

965,753.

Specification of Letters Patent. Patented July 26, 1910.

Application filed June 9, 1910. Serial No. 565,947.

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.

My invention relates to improvements in mail bag catching and delivering apparatus, more particularly to improvements upon the construction disclosed in my Patent No. 955,697 of April 19, 1910, the object of the invention being to provide improved means for compelling the mail bag receptacles on the car to remain in horizontal position until said receptacles have been moved within the car inclosure, to provide improved means for holding the receptacle carrying arm against swinging movement during the catching and delivering of mail, and provide an improved rotary post on the platform supporting the receptacles at the 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 approaching the 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 a plan view of the mail receptacle A. Fig. 5, is a detail view of bracket 27, and Figs. 6, and 7, are views in horizontal and vertical section illustrating the rotary mounting of the post on the platform.

1, represents a base fixed to a station platform or at some point designed for the delivery of mail, and 2 is a post having rotary mounting in the base 1. Post 2 is provided on its lower end with a journal 3 mounted to turn within the base within certain limits, controlled by a lug 4 on the journal, movable in a recess 5. The lower end of journal 3 is screw-threaded and a nut 6 screwed

thereon against a spring washer 7 securely holds the post in the base, the nut 6 being locked by a screw 8.

Parallel arms 9, and 10, are secured to and extend horizontally from post 2, and are adapted when the post is turned to a proper position to project outwardly toward the railroad track, the upper arm 9 being longer than arm 10, to position a receptacle A on the outer end of arm 9, in a different vertical plane from receptacle B at the outer end of arm 4. These receptacles are of general trough shape, and may be made in various ways. A similar construction is illustrated in which a metal bar 11 is curved to give to the receptacle the general trough shape, and a series of parallel rods 12 are fixed to this bar 11, and are adapted to support a mail bag in a horizontal position. The upper receptacle is supported between its ends on the curved outer end of arm 9, while the lower receptacle is fixed at one end to the arm 10. The upper receptacle A is designed as a delivery receptacle to support a mail bag E in position to be caught by the apparatus on the train, while the lower receptacle B constitutes a catching receptacle into which a mail bag is deposited by the apparatus on the train.

13, represents the framework of a mail car, and 14 is a vertical rod secured in the door-way of a car and supporting the catching and delivering apparatus of the car. A metal block 15 is mounted to turn on rod 10, between collars 16, and 17, secured to the rod, and in this block 15 a horizontally disposed rod or arm 18 has rotary mounting. This arm 18 carries two receptacles C and D respectively, which correspond with the receptacles A and B, and are so positioned with relation to the arm, that when the latter is swung out at right angles to the car, these receptacles will move through a horizontal plane, between receptacles A and B, receptacles C will be directly above receptacle B, and receptacle D will be directly below receptacle A, receptacle C constituting a delivery receptacle, and receptacle D a catching receptacle.

On the forward end of receptacle D, a hook 19 is provided, projecting in a direction in which the car moves. A similar hook 20 is provided on the forward end of receptacle B, and this hook projects in the direction from which the car approaches.

Rod or arm 18 above referred to, is mount-

ed to turn in block 15, so that when the arm is swung around to position with receptacles C and D in the car, said receptacles are disposed vertically. While in this position, a mail bag E is placed in receptacle C and to hold it in the receptacle, I provide a catch 21, which is pivotally connected at one end to a bracket 22, and at its other end is adapted to be held by a link 23, pivotally supported on arm 18, and pivotally connected to a rod 24, the latter supported beside the arm and adapted to move longitudinally of the arm to move the link 22 into or out of locking position, and to facilitate this movement a knob or button 25 is provided on the inner end of this rod. On the lower collar 17, a horizontal plate 26 is fixed, and cooperating with this plate 26, is my improved bracket 27, which is fixed to the rod 18. The purpose of the bracket 27 and the plate 26, is to control the positions of the receptacles C and D on the car, that is, to compel said receptacles to be maintained in a horizontal position when swung outside of the car, and permit said receptacles to assume a vertical position when inside the car. To accomplish these functions, bracket 27 is recessed as illustrated at 28, and a pin 29 fixed to block 15, projects into this recess and the end walls 30 of said recess are adapted to engage said pin and limit the rotary movement of the rod 18. To facilitate this turning movement of the rod 18, a crank arm 31 is fixed to the end of the rod, and when the rod is turned in one direction to move the receptacles C and D from a vertical position to a horizontal position, one of these end walls 30 will engage the pin. When the rod 18 is swung so as to move the receptacles C and D into the car, rod 18 may be readily turned within the limits above set forth, and when the receptacles are held in a horizontal position and the rod moved so as to turn block 15, the flat face 32 of the bracket will be moved onto plate 26, and will prevent any turning movement of the rod 18 as long as the receptacles are outside of the car, and this outward swinging movement of the rod is limited by a lug 33 on plate 26, which is engaged by a shoulder 34 on bracket 27, and any retrograde movement of the rod is prevented by means of a pivoted hook 35 pivotally connected to the car and adapted to engage over the rod 18, as clearly shown, and this hook 35 sustains the shock of contact in the delivery and the catching of mail.

The mail bags E above referred to, have metal loops 36 secured to one end, and rings 37 secured at their other ends. The rings 37 are adapted to be caught and held by the catches 21, while the bags are being positioned in receptacle C, while the loops are adapted to be engaged by the hooks 19 and 20 above referred to. To prevent any swinging movement of these loops while the

mail bags are in the receptacles and thereby maintaining them in proper position to be engaged by said hooks 19, and 20, two of the rods 12 that make up receptacles C and A are beveled and notched at their free ends as illustrated at 38, which operate as spring catches to hold the metal loops, as will be readily understood.

In operation when a train is approaching the station at which we will assume a mail bag is to be left and another one collected, the railway mail clerk fastens the bag E in receptacle D, while the receptacle is in a vertical position as illustrated in Fig. 3. To hold the bag in this position, he locates the catch 21 through the ring 37, and then moves rod 24 so as to position link 23 over the free end of the catch. At the same time, he swings the metal loop 36 so that the notched ends 38 of two of the rods of the receptacle hold said loop at right angles to the receptacle. At the same time, the post master at the station places the bag of mail in receptacle A. The receptacle C and D on the car are swung out and are held in their horizontal position by means of bracket 27 and plate 26, and are held against swinging movement by the catch 35. Before the car reaches the station, the mail clerk manipulates the rod 24 to release catch 21. When the receptacles C and D pass the receptacles A and B, the hook on the forward end of receptacle D engages the loop 36 of the mail bag in receptacle A, and the hook on the forward end of receptacle B engages the hanging loop of the mail bag on the receptacle C, so that when the receptacles C and D pass, the bag E will be drawn out of receptacle C into receptacle B, and the bag E in receptacle A will be drawn into the receptacle D. The railway mail clerk then swings the rod 18 into the car, and takes off the caught bag, while the post master at the station swings post 2 around and takes the bag out of receptacle B.

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 alterations 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 Letters 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 planes, of a horizontal rod on a car, two receptacles on the rod, and adapted to be positioned horizontally and between the stationary receptacles and adapted to be located in the

same vertical planes as the stationary receptacles, a bracket fixed to said rod, a plate constructed to be engaged by said bracket and hold said rod against turning movement when the latter is swung to position its receptacles outside of the car, said bracket and said plate so constructed that said receptacles on the rod may be moved to a vertical position only when said rod is inside the car, 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, substantially as described.

2. 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 support 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, a bracket fixed to said rod, a plate constructed to be engaged by said bracket and hold said rod against turning movement when the latter is swung to position its receptacles outside of a car, said bracket and said plate so constructed that said receptacles on the rod may be moved to a vertical position only when said rod is inside the car, and means for transferring bags from a stationary to a movable receptacle, and from a movable to a stationary receptacle, substantially as described.

3. 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 support 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, a bracket fixed to said rod, a plate constructed to be engaged by said bracket and hold said rod against turning movement when the latter is swung to position its receptacles outside of a car, said bracket and said plate so constructed that said receptacles on the rod may be moved to a vertical position only when said rod is inside the car, mail bags adapted to rest in the receptacles, links at one end of 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, substantially as described.

4. In a mail bag catching and delivering apparatus, the combination with two stationary receptacles located in different ver-

tical 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 support 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, a bracket fixed to said rod, a plate constructed to be engaged by said bracket and hold said rod against turning movement when the latter is swung to position its receptacles outside of the car, said bracket and said plate so constructed that said receptacles on the rod may be moved to a vertical position only when said rod is inside 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 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, substantially as described.

5. 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 support 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, a bracket fixed to said rod, a plate constructed to be engaged by said bracket and hold said rod against turning movement when the latter is swung to position its receptacles outside of the car, said bracket and said plate so constructed that said receptacles on the rod may be moved to a vertical position only when said rod is inside the car, a pin on the block, a recess in the bracket receiving said pin, whereby the turning movement of said rod is limited, and a catch in the car constructed to engage the rod when the latter is projected outside of the car and sustain the shock of contact in the catching and delivering of mail, and means for transferring bags from a stationary to a movable receptacle, and from a movable to a stationary receptacle, substantially as described.

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 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 position outside of the car, a bracket fixed to said rod, 130

a plate constructed to be engaged by said bracket, and hold said rod against turning movement when the latter is swung to position its receptacles outside of the car, said
 5 bracket and said plate so constructed that said receptacles on the rod may be moved to a vertical position only when said rod is inside the car, a pin on the block, a recess in the bracket receiving said pin, whereby the
 10 turning movement of said rod is limited, a catch in the car constructed to engage the rod when the latter is projected outside of the car and sustains the shock of contact in the catching and delivering of mail, mail
 15 bags adapted to rest in the receptacles, links at one end of 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
 20 engage in said links, substantially as described.

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
 25 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 position out-

side of the car, a bracket fixed to said rod, a plate constructed to be engaged by said bracket and hold said rod against turning
 35 movement when the latter is swung to position its receptacles outside of the car, said bracket and said plate so constructed that said receptacles on the rod may be moved to a vertical position only when said rod is inside the car, a pin on the block, a recess in
 40 the bracket receiving said pin, whereby the turning movement of said rod is limited, a catch in the car constructed to engage the rod when the latter is projected outside of the car and sustain the shock of contact in
 45 the catching and delivering of mail, 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
 50 catch on one 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, substantially as described. 55

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

GEORGE W. SAYLOR.

Witnesses:

CHARLES E. POTTS,
 R. H. KRENKEL.