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PATENTED DEC. 10, 1907.

B. STANLEY.

DEVICE FOR RECEIVING AND DELIVERING MAIL POUCHES.

APPLICATION FILED OCT. 22, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

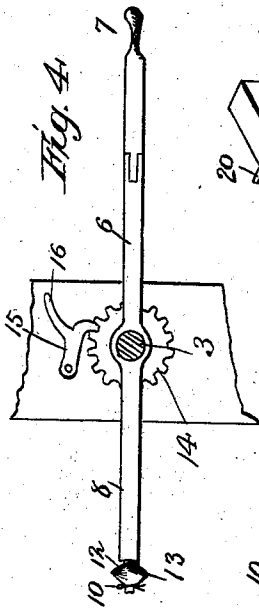
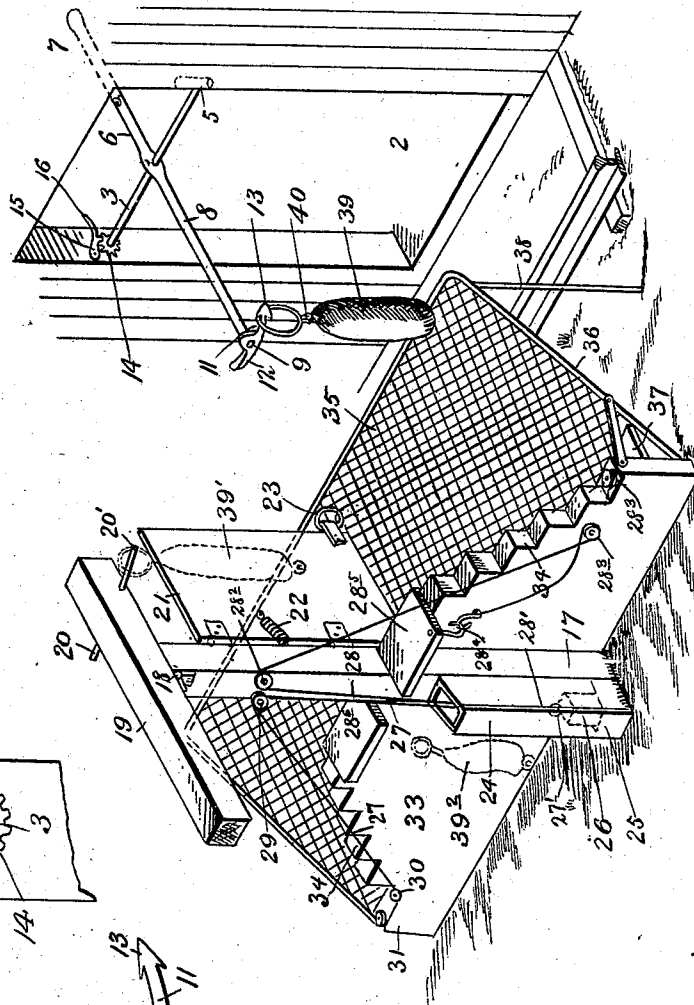
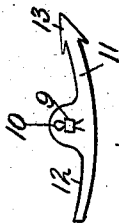


Fig. 5.



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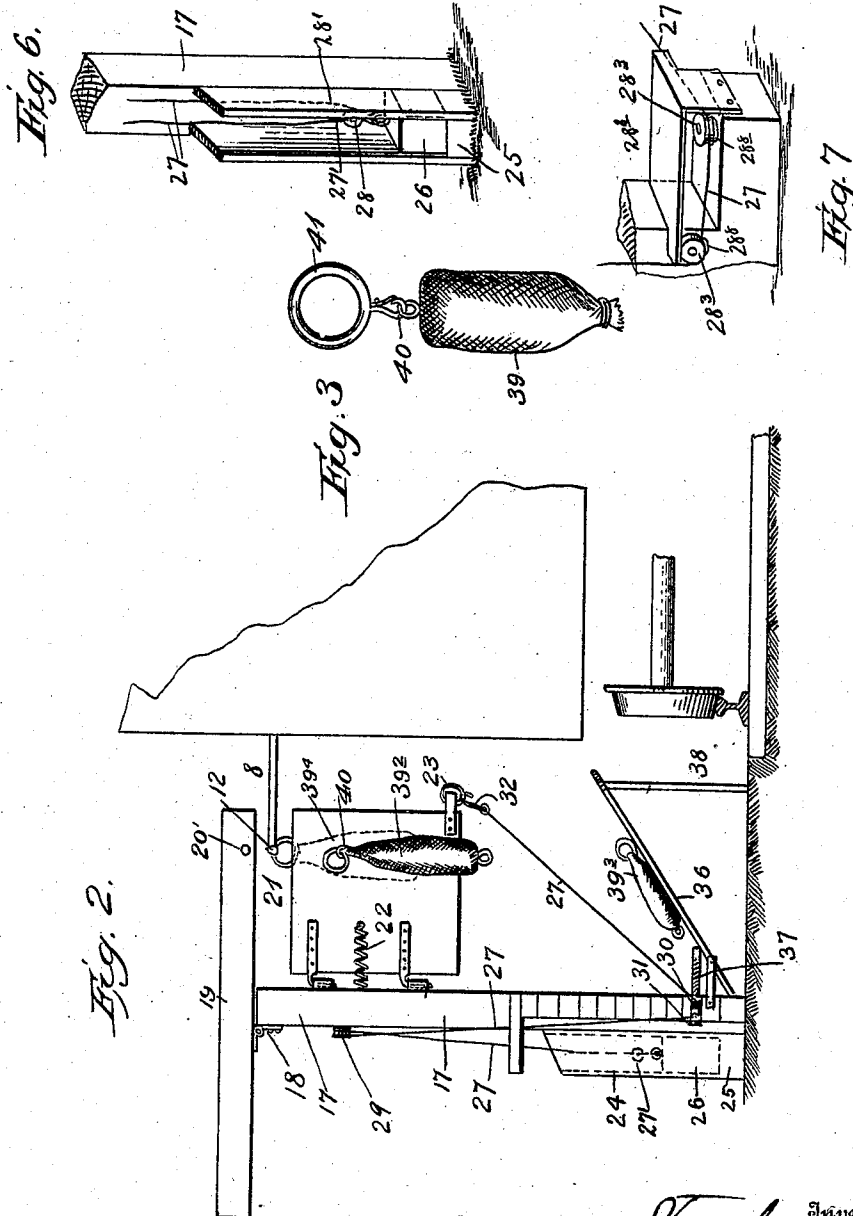
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

BUELL STANLEY, OF HERNDON, VIRGINIA.

DEVICE FOR RECEIVING AND DELIVERING MAIL-POUCHES.

No. 873,276.

Specification of Letters Patent.

Patented Dec. 10, 1907.

Application filed October 22, 1907. Serial No. 398,557.

To all whom it may concern:

Be it known that I, BUELL STANLEY, a citizen of the United States, residing at Herndon, in the county of Fairfax and State of Virginia, have invented certain new and useful Improvements in Devices for Receiving and Delivering Mail-Pouches, of which the following is a specification.

My invention is a device for receiving and delivering mail pouches to and from railroad cars while in motion, and holding the same when delivered.

In the accompanying drawings, Figure 1, is a perspective view of my invention. Fig. 2, is an end view. Fig. 3, is a perspective view of a mail pouch, secured in the snap of a ring. Fig. 4, is a perspective view of the swinging arm, ratchet wheel and dog. Fig. 5, is a face view of the receiving and delivering arms. Fig. 6, is a perspective view of a post, set in the ground, its top broken away and having secured to its outer face a housing, its outer wall removed so as to show the weight, cables and weight-seat. Fig. 7, is a detail view, showing two of the pulleys secured to one of the steps, and showing the pulley housings.

Similar numerals refer to similar parts throughout the several views.

In describing my invention I read the drawings from left to right.

In the accompanying drawings, the numeral 1, represents a portion of a mail car; 2, indicates the door through which the pouches are passed in and out; 3, represents a bar, arranged across the upper part of the opening of the door, which bar is supported and journaled in a horizontal position by suitable bearings 4 and 5, that are fixed to the inner faces of the door-frame. Rigidly secured to, and extending inwardly from said bar is a handle 6, and hinged to the inner end of said handle is an extension handle 7; said handle 6, extends outwardly from said bar, forming an arm 8. The extreme end 9, of said arm 8, is square, and on said square part 9, is secured, horizontally, by a cotter pin 10, the receiving and delivering arms 11 and 12, respectively, for receiving and delivering the mail pouches.

The delivering arm 12, has its rear end slightly curved upwardly, for preventing the mail pouch from slipping off too easily. The forward end of the receiving arm 11, is provided with an arrow-head 13, to retain the pouch received until it is swung into the car.

The bar 3, is provided at one end with a ratchet-wheel 14, which ratchet-wheel is rigidly secured to said bar, and works against the door-frame. Pivoted to said door-frame, and immediately above said ratchet-wheel is a dog 15, provided with a handle 16. This handle extends inside of the car, and within easy reach of the mail clerk.

The numeral 17, represents a post, set up near the railway track at the station where the mail pouches are to be received and delivered. Secured on the upper end of said post, by a hinge 18, or other substantial means, is a cross-beam 19, its inner end extending inwardly, and secured to the inner face of said post are rods 20 and 20¹. These rods run parallel with the railway track, and are immediately over the receiving and delivering arms 11 and 12. Hinged to the inner face of said post 17, is a swinging door 21, in position to be struck by the mail pouch as the car passes the station. This door is provided, on each side, with a spring 22, which causes it to stand out in the direction of the track, and immediately under the cross-beam 19. Said door is provided at its lower inner corner with a ring 23.

Secured to the outer face of the post 17, is a housing 24, provided with a weight-seat 25. Resting in this housing is a weight 26. Secured to this weight 26, are two cables 27 and 28. The cable 27, has one of its ends 27¹, secured to said weight; said cable passes thence around a pulley 29, secured to the outer face of said post, near its top end, thence downwardly and around a pulley 30, secured to the lower part of the steps 31, thence upward again, and is secured to the lower part of the steps 31, thence upward again, and is secured to the ring 23, by a hook 32, which is secured to this end of said cable. (See Fig. 2.) The cable 28, has one of its ends 28¹, secured to said weight; it passes up, thence over a pulley 28², thence downwardly over pulleys 28³, thence backwardly and hooked to a hook 28⁴, secured on the platform 28⁵. Each one of these pulleys is provided with a hood 28⁶, as shown in Fig. 7, to keep the cables from running off of the pulleys. These hoods are not shown in the drawings, except in Fig. 7. The platform 28⁶, is provided with a hook 28⁷, similar to the hook 28⁴, just described, and is intended to hold the hook 32, on the end of cable 27, when said cable is not in use. Secured to the inner face of said post, and running par-

allel with the railroad track, is a wall 33, provided with steps 34, and with platforms 28⁵ and 28⁶, on each side of the post, so that the mail clerk may easily mount upon either platform and place the mail pouches in position. Running from the base of said wall, upwardly and inwardly, is a wire gauze 35, secured in a frame 36; the inner edge of said gauze extends a little below the lower sill of the car door, and near enough thereto to catch the falling pouches and keep them from being sucked in under the moving train, and far enough away to be out of the danger of coming in contact with the passing car. This wire gauze performs three functions; it keeps the pouches from being sucked in under the train, it breaks the fall of the pouches and prevents them from falling in the dirt and becoming soiled. Running along the base of said wall, and the lower part of said wire gauze, is a foot-board 37. The inner edge of said frame 36, may be supplied with legs 38.

The mail-pouch 39, is secured to the snap 40, which is secured to a ring 41. (See Fig. 3.) It is apparent that the pouch may be secured to said snap at either end. It is also apparent that this invention may be used on either side of the track, and on either side of the car; it is constructed, however, so that it will take on and deliver the pouches, going or coming. When the train is going to the right, the receiving arm 11, goes forward, but if the train is coming in the opposite direction the mail clerk removes said receiving and delivering arms from the square 9, and reverses the ends, so that they will receive and deliver, going in the other direction.

The drawing shown in Fig. 1, represents the car as going to the right, in which case it is seen that the pouch 39, is taken on from the arm 20¹; the dotted lines 39¹, indicate where the pouch 39, was before the train passed; the dotted lines 39², show that a pouch has fallen on the opposite side of the door. This device will take on and deliver one, two or more pouches at the same time. The drawing, Fig. 2, represents the car as going in the other direction, that is to the left, and the numeral 39², shows the pouch being dropped on the wire gauze 35, while the numeral 39³, shows the position of the pouch when it first falls. The dotted line, 39⁴, shows the position the pouch occupied before it was delivered from the delivering arm 11.

It is usual to receive and deliver pouches at the same time, but in case there is no pouch to take on, and the car is going to the left, I attach the hook 32, on the free end of the cable 27, and hook it in the ring 23; the other end of the cable being attached to the weight 26, gives enough resistance to the door, to throw the pouch to the ground. In case the car is going in the other direction, to

the right, the hook end of the other cable is secured to the ring 23, of the door.

The operation of my invention is as follows:—The mail agent hangs the pouch, or pouches, to be delivered, on the delivering arm 11, and the pouches to be taken, on the arm 20¹, then, by means of the handle 6, swings the arms 11 and 12, out in position, immediately under said rods 20—20¹, and the dog 15, is then set to hold said arm in proper position. When the mail car passes the post 17, said arms pass immediately under said rods, and over the door, whereby the pouch on the forward side of the door is taken onto the receiving arm 12, and the pouch on the rear side of the door is thrown, by said door, from said delivering arm and falls down onto the wire gauze, and then slides down to the foot-board 37. As soon as the pouches are delivered and received from and on said arms, the agent releases the dog, and said arm and received pouches then swing immediately downward, and by momentum, some little distance into the car; when the car reaches its terminal and is to return, the agent takes the arms 11 and 12, off of the square 9, and reverses the ends. This reverses the operation of the device when the car goes in the other direction.

The advantage of the swinging door is, that it saves the two pouches from coming in immediate contact with each other. The pouch to be delivered first comes in contact with the door; the door then comes in contact with the pouch to be received, and thus the swinging door takes half of the sudden jar off of each pouch, and in addition to this advantage the door operates to deliver the pouch when there is no opposing pouch to be taken on.

Although I have specifically described the combination, construction and arrangement of the several parts of my invention I do not confine myself particularly to such combination, construction and arrangement, as I claim the right to make such changes and modification therein as may clearly fall within the scope of my invention, and which may be resorted to without departing from the spirit, or sacrificing any of my patentable rights therein.

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

1. In a device for receiving and delivering mail pouches to and from railroad cars, while in motion, and holding same when delivered, in combination with a railroad car, a bar 3, pivoted near the upper end of the door opening of said car in bearings 4 and 5; a ratchet-wheel 14, rigidly secured to one end of said bar; a dog, pivoted to the face of said door, and adapted to work with said ratchet-wheel; a handle 6, extending inwardly from said bar; an extension handle 7, hinged to

the inner end of said handle 6; an arm 8, having a square end 9, extending outwardly from said bar; delivering and receiving arms 11 and 12, secured, horizontally, on said square end 9; a post 17, erected on the side of the railroad track; a cross-beam 19, secured on the top of said post, and having secured to its inner end, rods 20 and 20¹, running parallel with said track; a swinging door 21, hinged to said post, and made to swing immediately under said cross-beam, by means of springs 22; a ring 23, secured to the lower end and inner corner of said door; a wall 33, provided with steps 34, and platforms 28⁵, and 28⁶, secured to the inner face of said post 17, some little distance from said track and running parallel therewith; a wire gauze, running inwardly and upwardly from the base of said wall, nearly to and under the door of the car; a housing 24, secured to the outer face of said post, having a weight-seat; pulleys 28³, secured to the right-hand end of said wall; pulleys 30, secured to the left-hand end of said wall; pulleys 28² and 29, secured to the outer face of said post, near its top end; a weight 26, seated in said housing; a cable 27, having one end 27¹, secured to said weight, passing up over pulley 29, thence down over pulleys 30, its free end provided with a hook 32, and adapted to be hooked in the ring 23, of said door, or in the hook 28⁷, secured to the platform 28⁶, of said wall, and a cable 28, having one end 28¹, secured to said weight, passing thence upwardly over pulley 28², then downwardly over pulleys 28³, its free end adapted to be hooked to said ring 23, or to the hook 28⁴, secured to the platform 28⁵, substantially as shown and described and for the purposes set forth.

2. In a device for receiving and delivering mail pouches to and from railroad cars,

while in motion, and holding same when delivered, in combination with a railroad car, a bar 3, journaled near the top of the door of said car; a ratchet-wheel 14, rigidly secured near one end of said bar, said bar adapted to be held in position by a dog 15; a handle 6, extending inwardly from said bar; delivering and receiving arms 11 and 12, respectively, secured horizontally to the free end of said arm 8; a post 17, erected near the railroad track; a beam 19, secured horizontally on the upper end of said post; rods 20—20¹, secured to the inner end of said post and running parallel to said track; a swinging door 21, hinged to the inner face of said post, and springs 22, causing said door to swing immediately under the inner end of said cross-beam 19, substantially as shown and described and for the purposes set forth.

3. In a device for receiving and delivering mail pouches to and from railroad cars, while in motion, and holding same when delivered, the combination of a post erected near a railroad track; a wall 33, provided with steps 34 and platforms 28⁵, and 28⁶, secured to the inner face of said post, and running parallel with said track; a wire gauze, secured in a frame 36, its outer edge secured to the base of said wall, its inner edge running inwardly and upwardly, nearly to the door of said car and a little below the door; legs 38, supporting the inner edge of said wire gauze, and a foot-board 37, resting on said frame near its outer edge, substantially as shown and described and for the purposes set forth.

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

BUELL STANLEY.

Witnesses:

FRANK W. HUDDLESON.
W. F. MIDDLETON.