

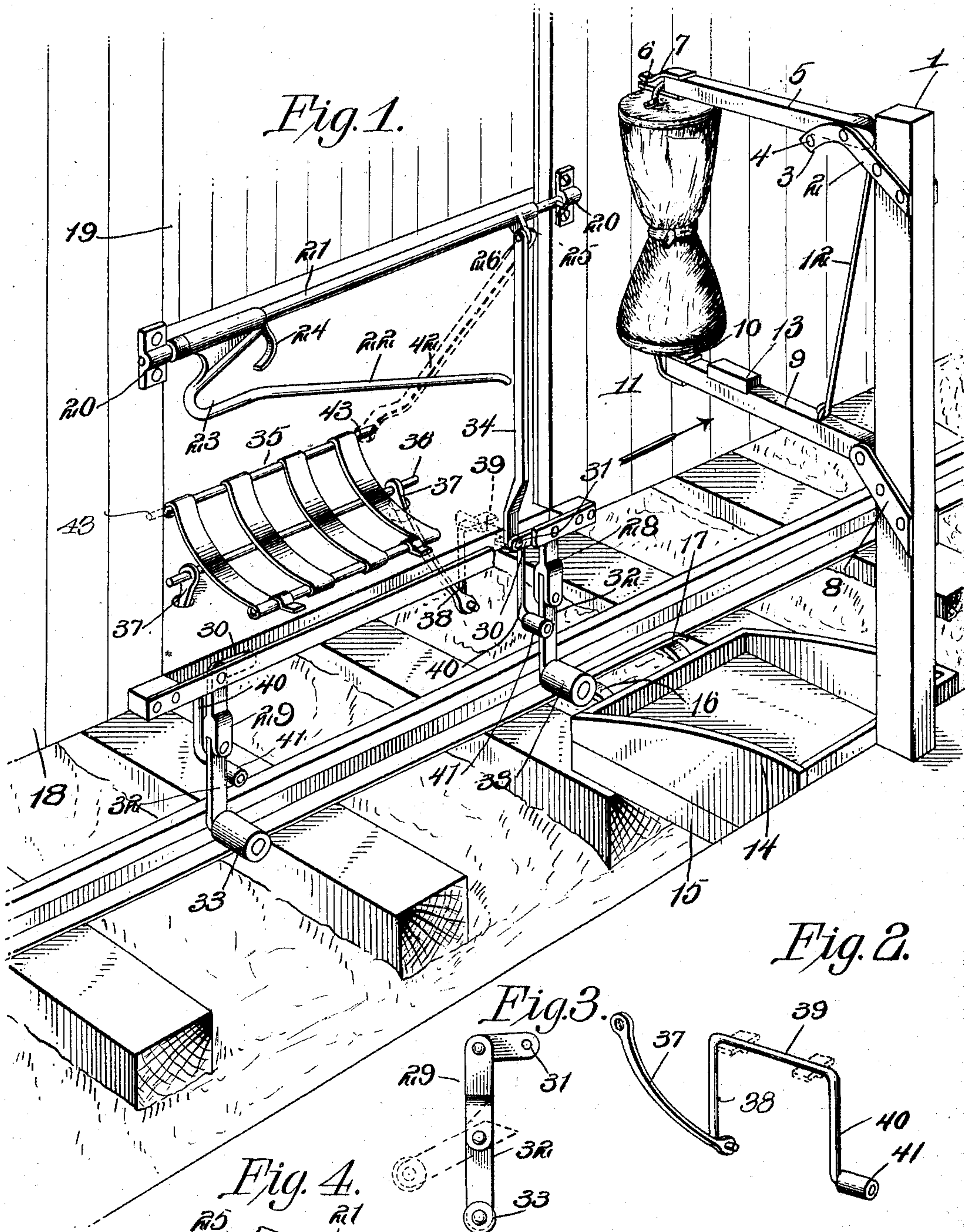
No. 759,982.

PATENTED MAY 17, 1904.

W. T. FULTON.
MAIL BAG CATCHING AND DELIVERING DEVICE.

APPLICATION FILED JAN. 16, 1904.

NO MODEL.



Witnesses

E. J. Stewart
D. J. Elmore

by

William T. Fulton
Inventor,
Chas. H. Snow
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM THOMAS FULTON, OF WINSLOW, ARKANSAS, ASSIGNOR OF ONE-HALF TO GEORGE WASHINGTON WILSON, OF WINSLOW, ARKANSAS.

MAIL-BAG CATCHING AND DELIVERING DEVICE.

SPECIFICATION forming part of Letters Patent No. 759,982, dated May 17, 1904.

Application filed January 16, 1904. Serial No. 189,348. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM THOMAS FULTON, a citizen of the United States, residing at Winslow, in the county of Washington and State of Arkansas, have invented a new and useful Mail-Bag Catching and Delivering Device, of which the following is a specification.

My invention relates to mail-bag catching and delivering devices, such as are employed on railroads for effecting an exchange of mail-bags between the mail-car and stations along the line of the road, and has for its object to produce a comparatively simple inexpensive device of this character which will be entirely automatic in its action.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a perspective view of the device. Figs. 2, 3, and 4 are detail views.

Referring to the drawings, 1 designates the bag-supporting member disposed at the side of the track and preferably in the form of a vertical post or standard having attached adjacent to its upper end a bracket 2 in the form of a pair of upwardly-inclined spaced plates having downturned outer ends 3, between which there extends a transverse bolt or stop 4, there being pivoted in the bracket to swing in a vertical plane an upper bag-supporting arm or member 5, having pivoted to its outer end an engaging finger 6, normally disposed beneath an overlying guard or shield 7. Attached to the post adjacent to its longitudinal center is a bracket 8, preferably in the form of a pair of spaced plates having pivoted between their outer ends a bag-supporting arm 9, having pivoted to its outer end a bag-engaging member or finger 10, normally in alignment with an underlying guard or shield 11, the inner ends of the arms 5 and 9 being connected by a link or analogous element 12, whereby the arms will normally swing, respectively, in upward and downward directions under the influence of a weight 13, attached to the arm 9.

Arranged in advance of the post 1 is a box

or receptacle 14, attached to and sustained by a base 15, preferably in the form of a block, to which is also attached an actuating member or abutment, preferably in the form of metal arms 16, projecting outward from the block toward and transversely of the adjacent track and connected at their outer ends by a bar 17, the purpose of which abutment will hereinafter appear.

18 designates a car of the usual construction having a doorway 19, to the side frame members of which are attached bearing-brackets 20, in which are removably journaled the opposite ends of a rotary shaft or member 21, carrying a bag-engaging fork 22 in advance of the crotch 23, of which there is disposed a spring 24, attached to the shaft, upon which latter there is also fixed a crank-arm 25, having oppositely-extending pintles or trunnions 26 and 27, there being disposed between the rear end of the frame and the adjacent bearing 20 a suitable rubber buffer.

Pivoted to the sill of the doorway, adjacent to the opposite ends thereof, is a pair of operating members 28 and 29, these members, which are identical in construction and operation, being each in the form of a bell-crank lever pivoted at its elbow and having a normally horizontal short arm 30, provided at its inner end with a laterally-projecting trunnion 31, and a long arm 32, normally depending vertically beneath the car and provided at its lower end with a laterally and outwardly projecting horizontal pintle carrying a roller 33, the vertical arm 32 of each lever being composed of a pair of sections pivotally connected and adapted to break joint in an outward direction relative to the opposite lever, or, in other words, the sectional arm of the rearmost lever relative to the direction of travel of the car will break joint under the influence of a blow upon its lower end. The short arm or member 28 is connected by a link 34 with the crank-arm 25 of shaft 21, said link being pivoted at its opposite ends upon the trunnions 26 and 31, respectively, whereby when the lever is operated in the manner hereinafter described the shaft will be rotated for swinging the bag-engaging fork thereon to engaging position.

Disposed within the car and pivoted at its forward edge to the floor of the latter is a bag receiving and discharging member or platform 35, adapted to swing or rock on its pivot in a vertical plane and outward toward the doorway. This member or platform, the upper face of which is slightly concaved, carries a transverse shaft 36, upon the projecting ends of which are pivoted the upper ends of oppositely-disposed links 37, projecting vertically downward through suitable openings provided in the floor of the car. These links are attached at their lower ends, respectively, with crank-arms 38, provided on corresponding rock-shafts 39, pivoted beneath the car and disposed, respectively, in line with the vertically-depending arms 32 of the operating members. Each rock-shaft has at its outer end a second crank-arm 40, provided with an outwardly-extending finger or pintle carrying a roller 41, lying within the path of the arm 32 of the adjacent operating member. From this construction it is apparent that when the arm 32 of either of the operating members receives a blow on its forward face adjacent to its lower end it will in swinging on its pivot engage the roller on the adjacent rock-shaft and, through the medium of the latter and the connecting-link 37, serve to throw the bag-discharging platform forward on its pivot, which movement of the platform will be simultaneous with the movement of the bag-engaging fork heretofore described.

In practice, supposing the car to be approaching a station in the direction indicated by the arrow, the member 28 will come into contact with the abutment 16 and be thereby actuated for operating the parts, as above described, whereby the fork 22 will engage and remove a bag suspended between the arms 5 and 9 simultaneously with the discharge of a bag from the car by the platform 35. When, however, the car is to travel in the opposite direction, the shaft is reversed endwise in its bearing to bring its fork 22 to proper position, the link 34, of course, being engaged with the arm 30 of member 29. The parts will then be adapted for operation in the manner just described by the member 29 coming into contact with the abutment 16. It is here to be noted that the reduced journal at the forward end of shaft 21 is of sufficient length to permit removal of the shaft for the purpose of reversing same.

I have shown a supplemental link 42, pivotally engaged at its ends, respectively, with one of the trunnions of crank-arm 25 and with a suitable pintle 43, provided upon the platform 35. This link subserves the function of operating the shaft directly from the

platform in the event of the link 34 or any of its connections becoming broken or otherwise inoperative.

From the foregoing it will be seen that I produce a simple, effective device, admirably adapted for the attainment of the ends in view; but it is to be understood that I do not limit myself to the precise details herein set forth, inasmuch as minor changes may be made without departing from the spirit of the invention.

Having thus described my invention, what I claim is—

1. In a device of the class described, the combination with a car, of a bag-receiving fork carried thereby and movable to and from engaging position, a bag-discharging member carried by the car, an actuating device adapted to be operated externally of the car, and means operable by the actuating device for simultaneously operating said member and fork.

2. In a device of the class described, the combination with a car, of a bag-engaging fork, a bag-discharging member pivotally connected with the car to swing vertically and outward, an actuating device adapted to be operated externally of the car, and mechanism operable by the actuating device for simultaneously operating the member and fork.

3. In a device of the class described, the combination with a car, of a bag-engaging fork carried thereby and movable to and from engaging position, a bag-discharging member pivoted to swing vertically and outwardly, an actuating device adapted to be operated externally of the car, a rock-shaft carried by the car and operatively connected with the member, and operable by the actuating devices for operating the member, and means actuated by the device for simultaneously moving the fork to engaging position.

4. In a device of the class described, the combination with a car, of a shaft carried thereby, a bag-engaging fork mounted upon the shaft and movable to and from engaging position, an actuating device carried by the car and adapted to be operated externally thereof, operative connections between the device and shaft for rotating the latter, a pivoted bag-discharging member carried by the car, and a rock-shaft operatively connected with said member, said rock-shaft being operable by the device simultaneously with the rotation of the shaft.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM THOMAS FULTON.

Witnesses:

J. W. FRAZIN,

J. O. LAND.