

J. M. HOUGH.
MAIL CRANE.
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1,036,246.

Patented Aug. 20, 1912.

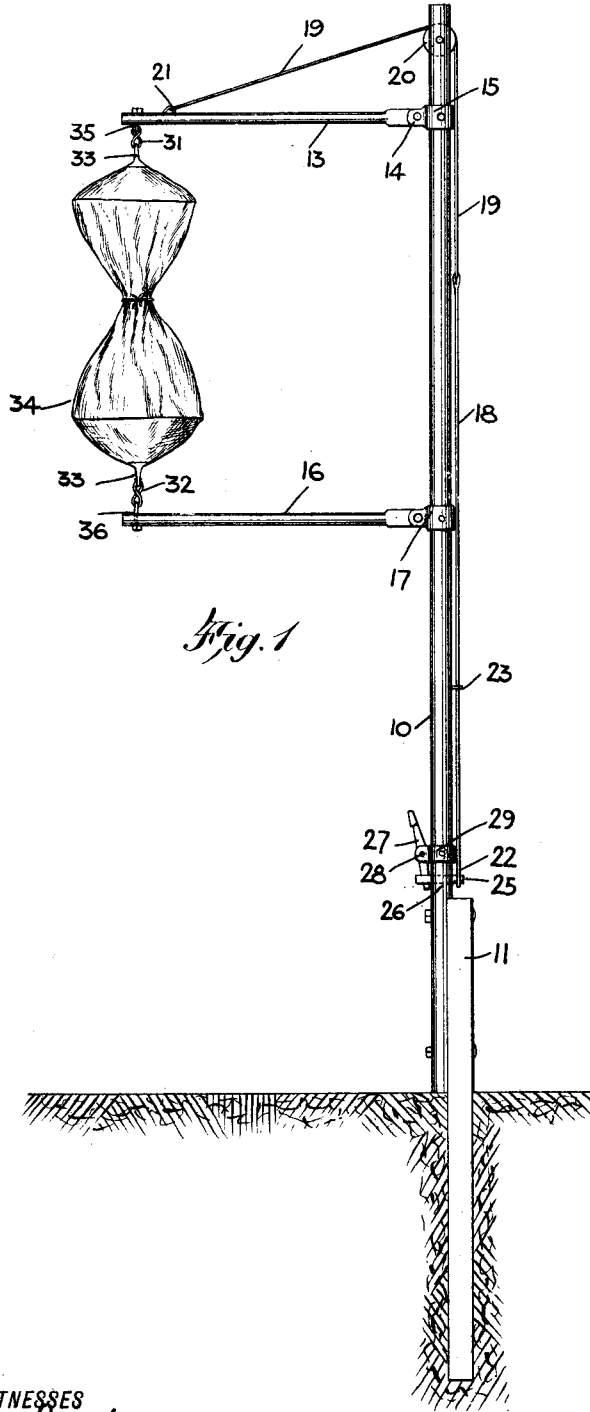


Fig. 1

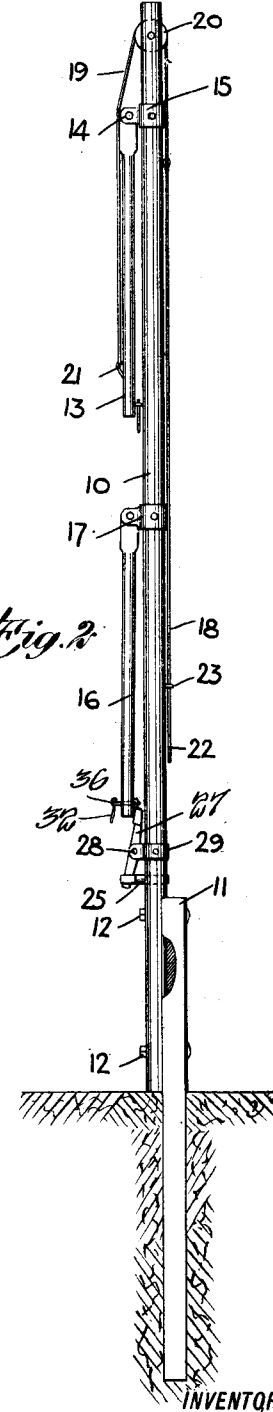


Fig. 2

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JAMES MADISON HOUGH, OF WOODBINE, IOWA.

MAIL-CRANE.

1,036,246.

Specification of Letters Patent.

Patented Aug. 20, 1912.

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To all whom it may concern:

Be it known that I, JAMES M. HOUGH, a citizen of the United States, and a resident of Woodbine, in the county of Harrison and State of Iowa, have invented a new and Improved Mail-Crane, of which the following is a full, clear, and exact description.

My invention relates to cranes adapted to be erected at the side of a railway track and having means for so holding the mail bag as to permit the bag to be automatically taken up by a passing train.

An object of my invention is to provide an improved crane of simple construction, and involving minimum cost in its manufacture.

The invention will be particularly explained in the specific description hereinafter to be given.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an elevation showing the crane and its appurtenances in the position of holding a mail bag; and Fig. 2 is a similar view with the elements in inoperative position.

In constructing a practical embodiment of my invention as illustrated, a post or standard 10 is provided, which may have an anchor piece 11 at the lower end, the anchor being adapted to be inserted in the ground with the upper end projecting for the attachment of the standard. The anchor may have a concave face, and the standard may be round, as shown, bolts 12 being employed, or other expedients, to secure the standard to the anchor. An upper arm 13 is pivoted, as at 14, to a shackle or bracket 15 secured to the standard 10, and a lower arm 16 may be similarly pivoted to a suitable bracket or shackle 17, secured to the standard below the upper arm, said arms being in vertical alignment, or approximately so. To raise the upper arm to the horizontal position, as in Fig. 2, a pull rod 18 is provided, the upper end being connected by cord or other flexible connection 19, which passes over a pulley or other guide surface 20 in the standard above the upper arm, the end of the cord or flexible element being connected with the upper arm near the outer end, as at 21. The lower end of the pull rod is provided with a suitable handle 22, and said

rod may have suitable guided movement in eyes 23, or other expedients, the arrangement being such that the handle of the pull rod may be grasped, and as the rod is drawn downward the arm connected therewith will be raised, as will readily be understood.

On the standard 10 below the upper arm there is supported a retaining device to engage the pull rod and thereby hold the upper arm raised, and a trip is provided in connection with the said retaining device, the said trip being actuated by the lower arm when the latter drops to its lowered position. A pin 25 moves in a transverse hole 26 in the standard, and the outer end of the pin is pivoted to the lower end of a rocking lever 27, which is fulcrumed intermediate its ends in any suitable manner on the standard, as by a pin 28 which passes through said lever intermediate its ends and through a shackle or bracket 29. The upper end of the lever extends to a point within the path of movement of the lower bag-holding arm when the latter drops to the lowered position.

The upper and lower arms are provided with any suitable catches 31, 32, for engaging the usual loops 33 in a mail bag 34. In the form shown, the catches are of twisted wire, loosely connected to eyes 35, 36 respectively on the mail bag arm. It will be understood that any other form of fastener may be employed in practice.

With the described construction, the upper arm is raised to the horizontal position by drawing downward on the pull rod, and the said rod is engaged with the described retaining device, the lower arm is now raised, and the mail bag suitably held by the fastener. Upon the mail bag being taken up by the train, the lower arm will drop, and will strike the upper end of the trip lever, and thus the pin 25 will be withdrawn from engagement with the pull rod, and allow the upper arm to drop.

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

In a mail crane, the combination with a standard, of an upper arm pivoted to the standard to rock in a vertical plane, a lower arm also pivoted to the standard to rock in the vertical plane, and devices on said arms for engaging a mail bag, a flexible element connected at one end with said upper arm, a pulley on the standard and over which

the flexible element runs, a pull rod suspended on the opposite free end of the flexible element, a guide on the standard for guiding said pull rod, said pull rod terminating in an eye at its lower end, a transverse pin mounted to slide in the standard and adapted to engage the eye on the said pull rod when the eye is in the lower position and the upper arm is raised, a strap on said standard above the pin, and a vertically disposed lever fulcrumed between its ends on the said strap, the mentioned pin having the end adjacent to the lever connected

with the lower end of said lever, the upper end of the lever being free and disposed in the path of movement of the lower bag-holding arm, to be struck by the said arm. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 20

JAMES MADISON HOUGH.

Witnesses:

E. E. MORSE,

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."