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PATENTED MAY 19, 1908.

T. ROGERS & H. J. KANE.
MAIL BAG CATCHER AND CRANE.

APPLICATION FILED SEPT. 16, 1907.

2 SHEETS—SHEET 1.

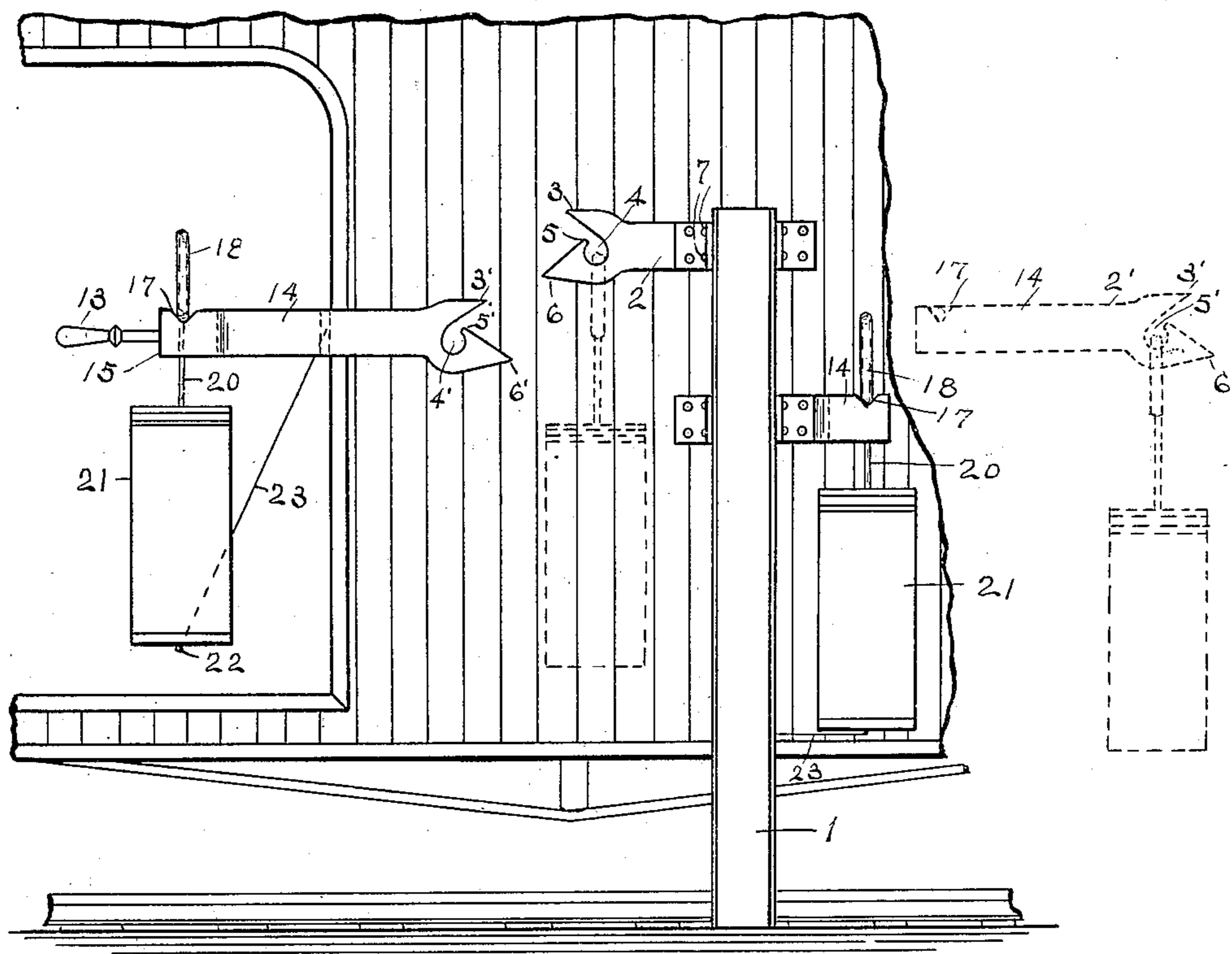


Fig. 1

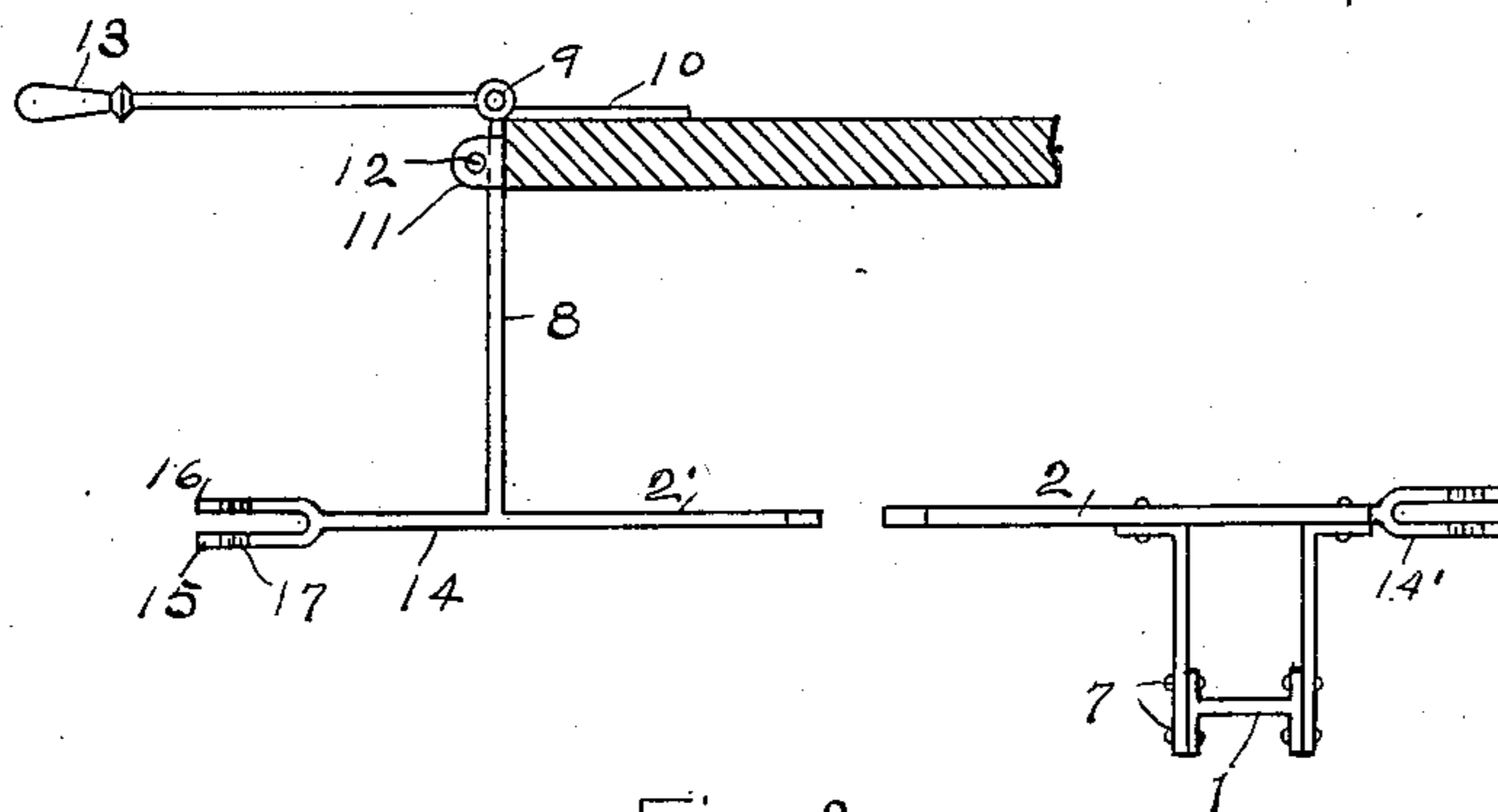


Fig. 2

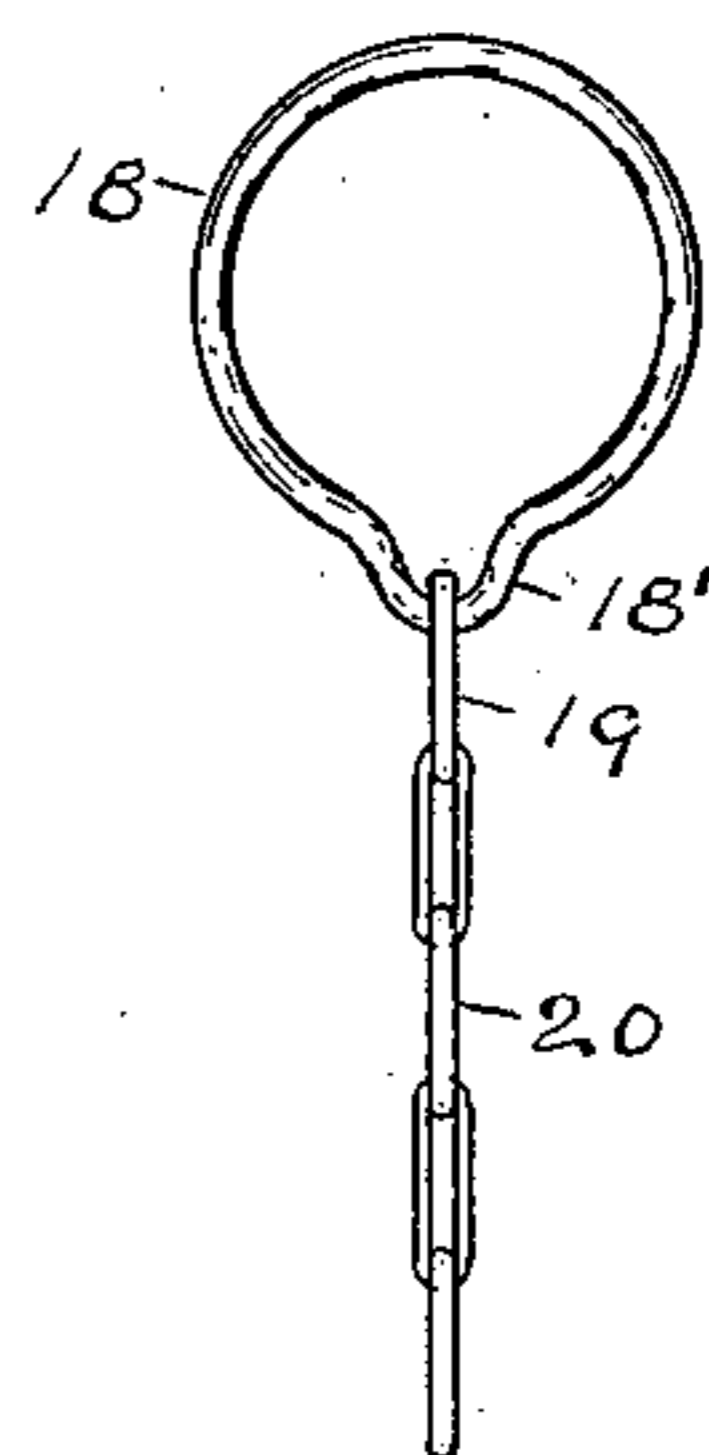


Fig. 3

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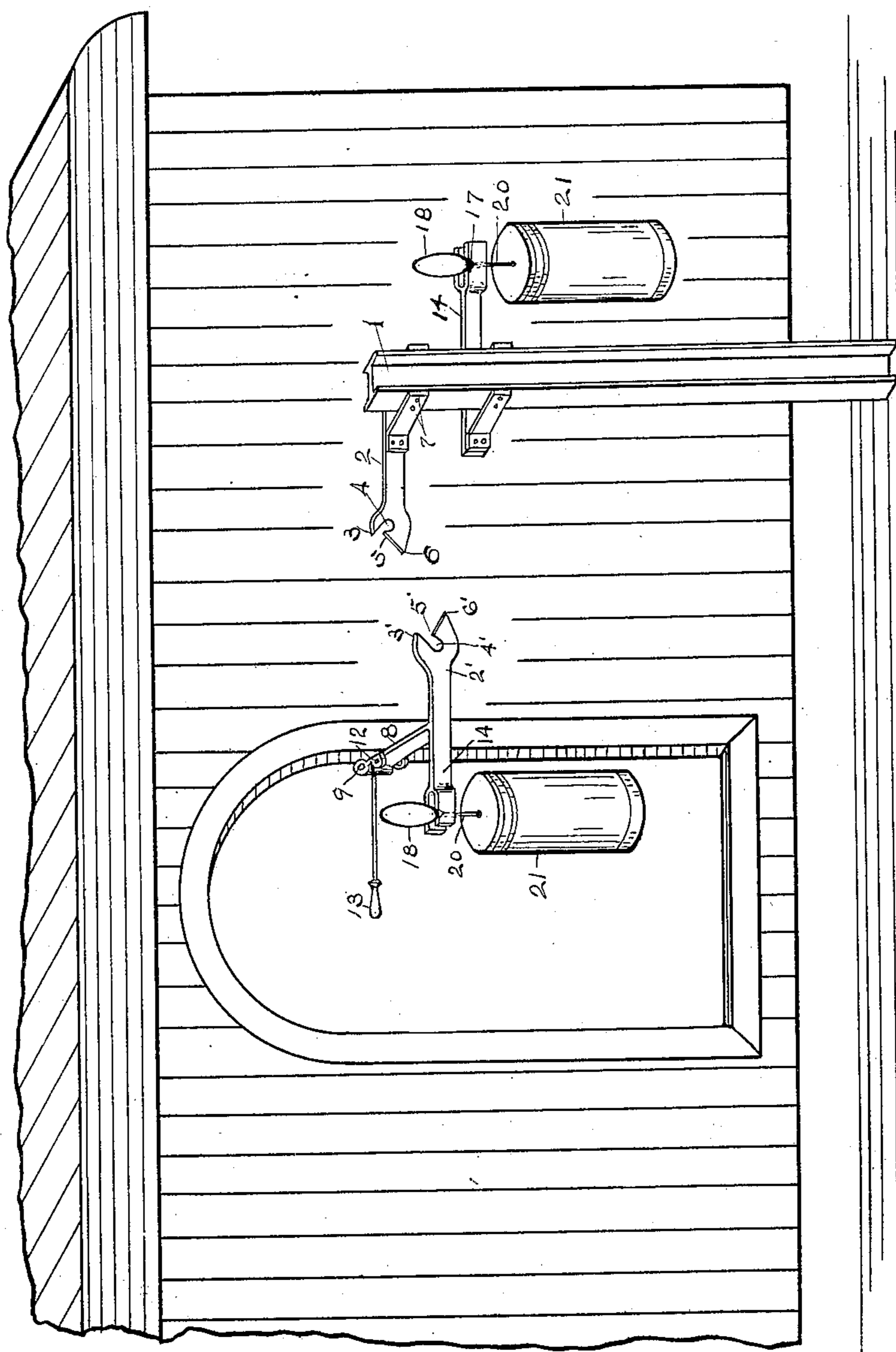


Fig. 4

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UNITED STATES PATENT OFFICE.

THOMAS ROGERS AND HARRY J. KANE, OF PHILADELPHIA, PENNSYLVANIA.

MAIL-BAG CATCHER AND CRANE.

No. 887,849.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed September 16, 1907. Serial No. 392,979.

To all whom it may concern:

Be it known that we, THOMAS ROGERS and HARRY J. KANE, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in a Mail-Bag Catcher and Crane, of which the following is a specification.

This invention relates to mail bag catchers and cranes and particularly to that kind in which one member is secured to a post, adjacent to a rail-way, and the other to a mail-car passing thereon; the objects of this invention are, first, to provide means which extended from arms, attached to a suitable standard, may intersect and engage with similar means extended outwardly from a car side, thereby effecting a simultaneous exchange of mail or express matter, as pouches, sacks, bags or bundles, or the reception, or delivery, independently, of the same, without retarding, or interrupting, the speed of the train and without detriment to the packages interchanged. Second, to provide means for safely securing such mail bags, etc., when disposed from the arms, in such manner as to prevent displacement by the wind, or other causes, during the interval in which they await exchange.

These, and other useful objects are obtained by the novel combination and arrangement of parts hereinafter fully described and shown in the accompanying drawings, in which are used like characters of reference on like parts.

Figure 1, is a side elevation of my invention illustrating its operation. Fig. 2, is a plan view of the apparatus. Fig. 3, is a side elevation of the part attached to the mail bag, and; Fig. 4, is a perspective view of the apparatus and its attachment to a car and post.

The invention consists of a post, or other suitable standard 1, preferably a steel I beam positioned and firmly anchored adjacent to a railway track, having near its upper end an arm 2, securely attached, extending outwardly towards the track and turned so as to point in the direction of an advancing train; the upper front edge of the arm 2, terminates in an acute angle 3, leading downward and rearward to the upper edge of the spirally profiled central recess 4, angularly downward from the hook 5 to the extreme front point 6, and thence rearwardly, encir-

cling the recess 4, until the contour becomes parallel with upper edge beyond the bend. This arm is preferably a metal plate with straight sides and of an appropriate thickness, rigidly secured at its end to the post as at 7. A similar arm 2', having the same general shape and characteristics, is adapted to be secured to the leaf member 8, of the hinge 9, the other leaf member 10, being secured to a mail car as indicated; a bent plate or yoke 11, fastened to the side of the car doorway, provided with a removable pin 12, keeps the leaf member rigidly positioned thereby at right angles to the car when in use.

An operating lever or handle 13, is attached to the leaf 8, for convenience in manipulating the arm as it is swung in and out of the car.

Integral with the arm 2', and extending in the opposite direction,—that is rearwardly of the car,—is the parallel arm 14, spread at the extreme ends as at 15 and 16, and provided on the upper surfaces of the spread and open ends with substantially "V" shaped, transverse grooves or notches 17, adapted to have positioned on them, transversely of the arms, the rings 18, the loops 18', extending downwardly between the spread ends 15 and 16, the same being provided with the links 19, to which is attached the short chains 20, connecting with the mail bags 21, by means of straps or other convenient means. These bags or pouches have, at their lower ends, a ring 22, to which may be detachably secured the light brace member 23, in such manner as to be readily disconnected or broken under the influence of the rapid interchange or transmission subsequently taking place, but which has sufficient strength to resist the wind and maintain the bags in a practically vertical position while suspended from the supporting arms.

On the post 1, positioned in the same vertical plane but below the arm 2, is an arm 14', bent oppositely to the arm 2, and having the same general shape and the same purpose as the arm 14.

It will be noticed that when a ring 18, is properly disposed on the notches in the arm 14, that the extreme forward point 6, of the arm 2, is positioned to intersect with its center, also that the angle 3, is such as to bend the ring over, should it contact with it first, and insure engagement of the ring in the recess 4, as it is advanced; the lower angle

from the point 6, assists in these results while the hook 5, prevents inadvertent withdrawal.

Similarly a ring positioned on the arm 14', will be taken off by the arm 2', in its passage, the conditions being alike. Thus it is necessary only at the station to place a mail bag in position and after the interchange remove the bag received on the advance arm; the operator in the car does not need to lean out, or even closely approach the door as the arm can be readily swung in by the handle, either to have bags disposed thereon or to remove them.

Obviously the shock is largely absorbed by the ring and chain and communicated to the bag in such manner as not to injure it.

Manifestly the proportion of parts and minor arrangement thereof may be varied without departing from the general spirit of my invention.

What we claim as new and desire to secure by Letters Patent is:

1. In a mail bag catcher and crane, the combination with a suitable standard, of an arm attached thereto having a bifurcated outer end, transverse grooves on each side of the opening at the top thereof, a substan-

tially circular ring, links connecting with said ring passing downward through said opening and adapted to maintain said ring vertically on said grooves, a second arm similarly attached above the first arm extending oppositely, provided with an angularly projecting point and spiral recess below said point adapted to engage with a moving ring on a similar traveling arm as it passes.

2. In a mail bag catcher and crane, the combination with a traveling arm and a stationary arm, each provided with an acute angular point and spiral recess adjacent, at the front ends, bifurcated and transversely recessed rear ends, rings resting on their periphery, transversely to said arms in said recesses, links connecting said rings to mail bags, said traveling arm being adapted to act coöperatively in transferring said mail bags.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS ROGERS.
HARRY J. KANE.

Witnesses:

WARREN E. WILLIS,
CHAS. E. POTTS.