

No. 826,721.

PATENTED JULY 24, 1906.

O. HANSEN.
MAIL BAG CRANE.
APPLICATION FILED MAR. 29, 1906.

Fig. 1.

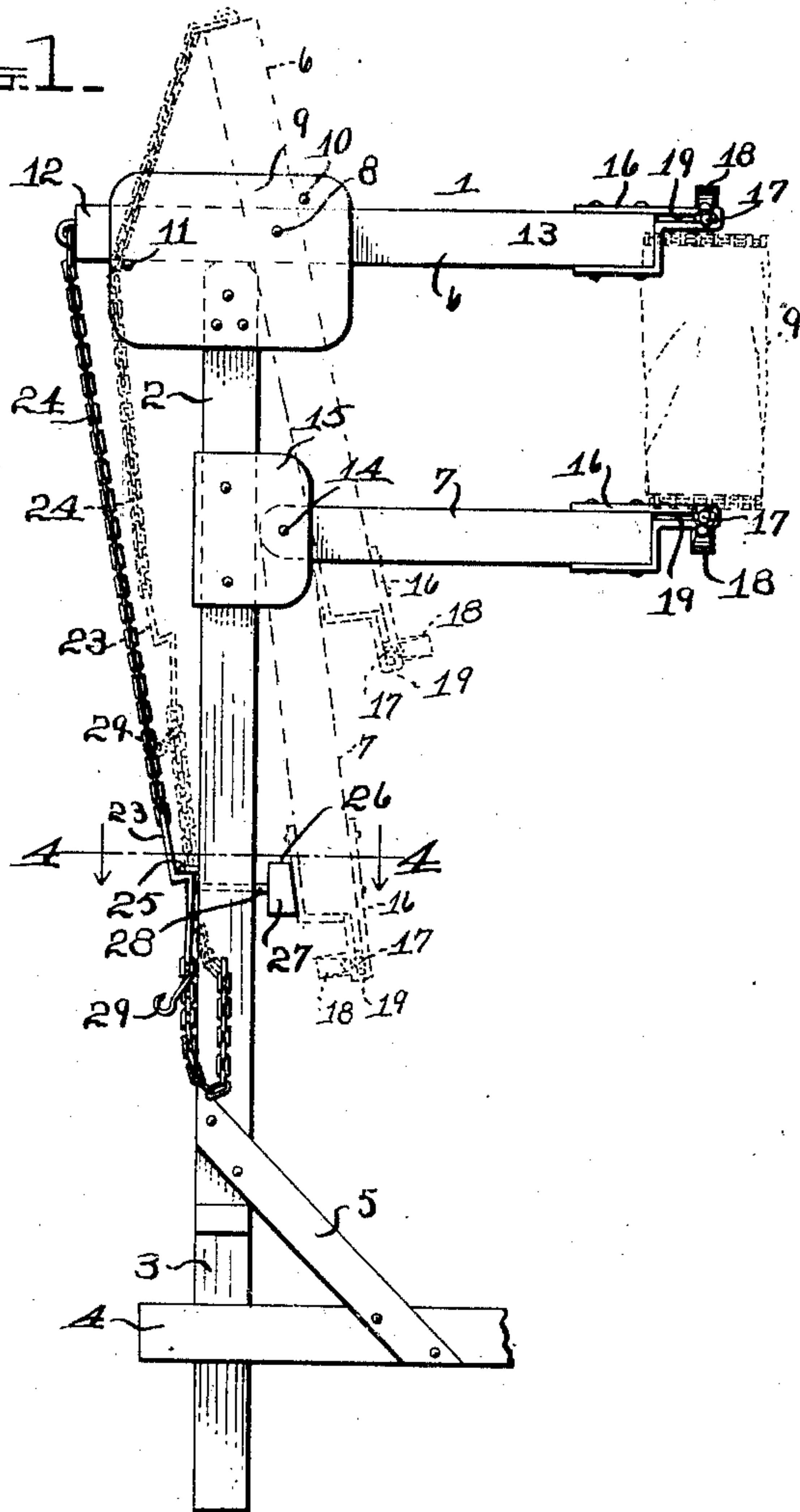


Fig. 2.

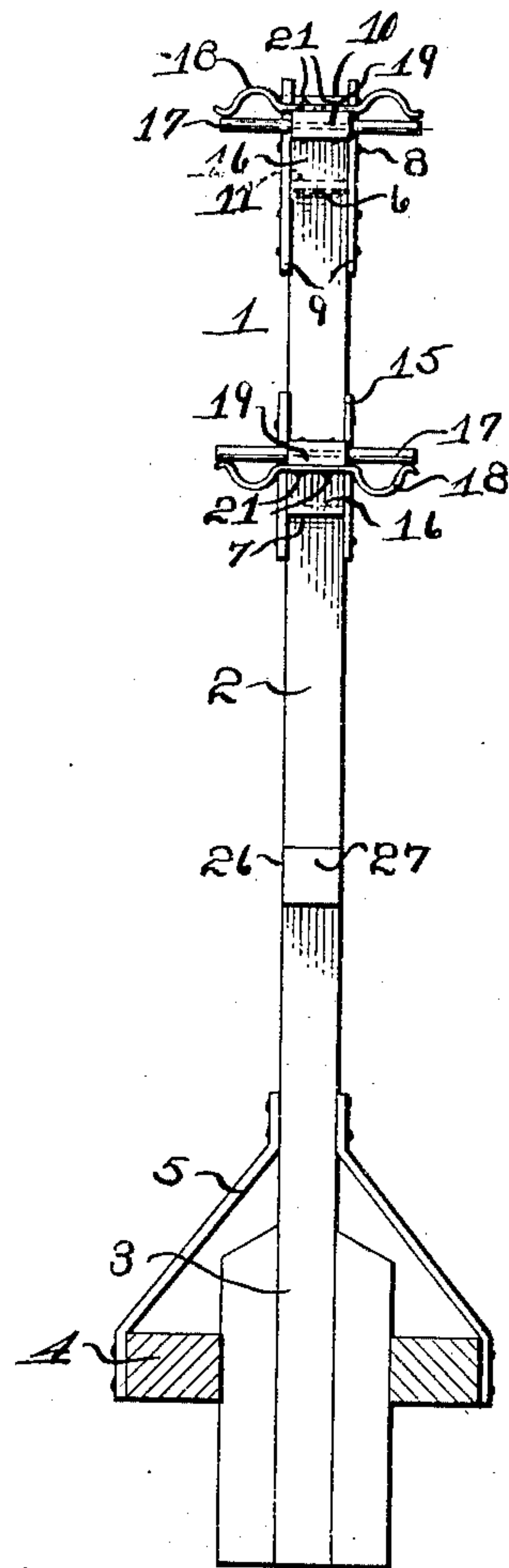


Fig. 3.

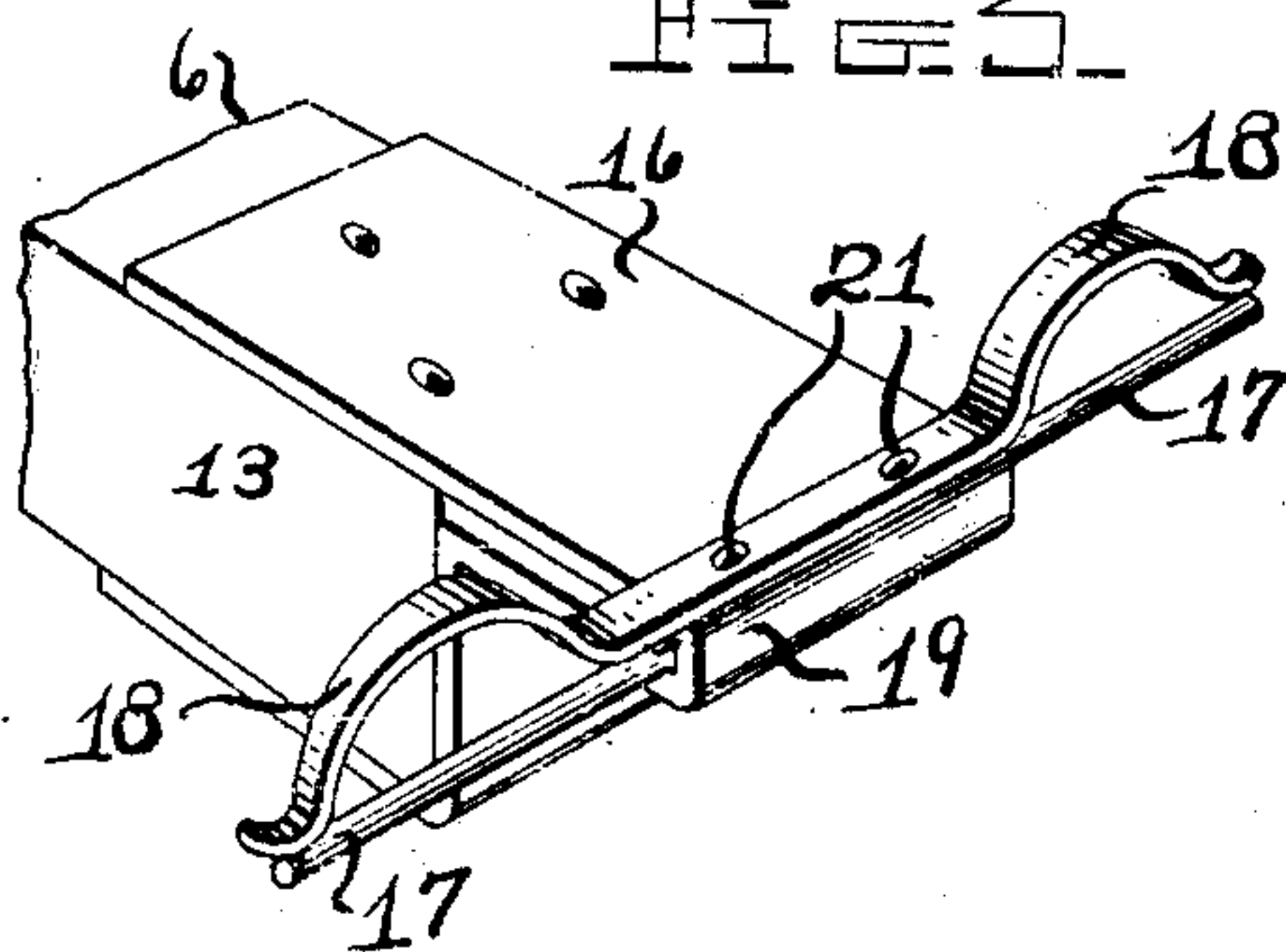
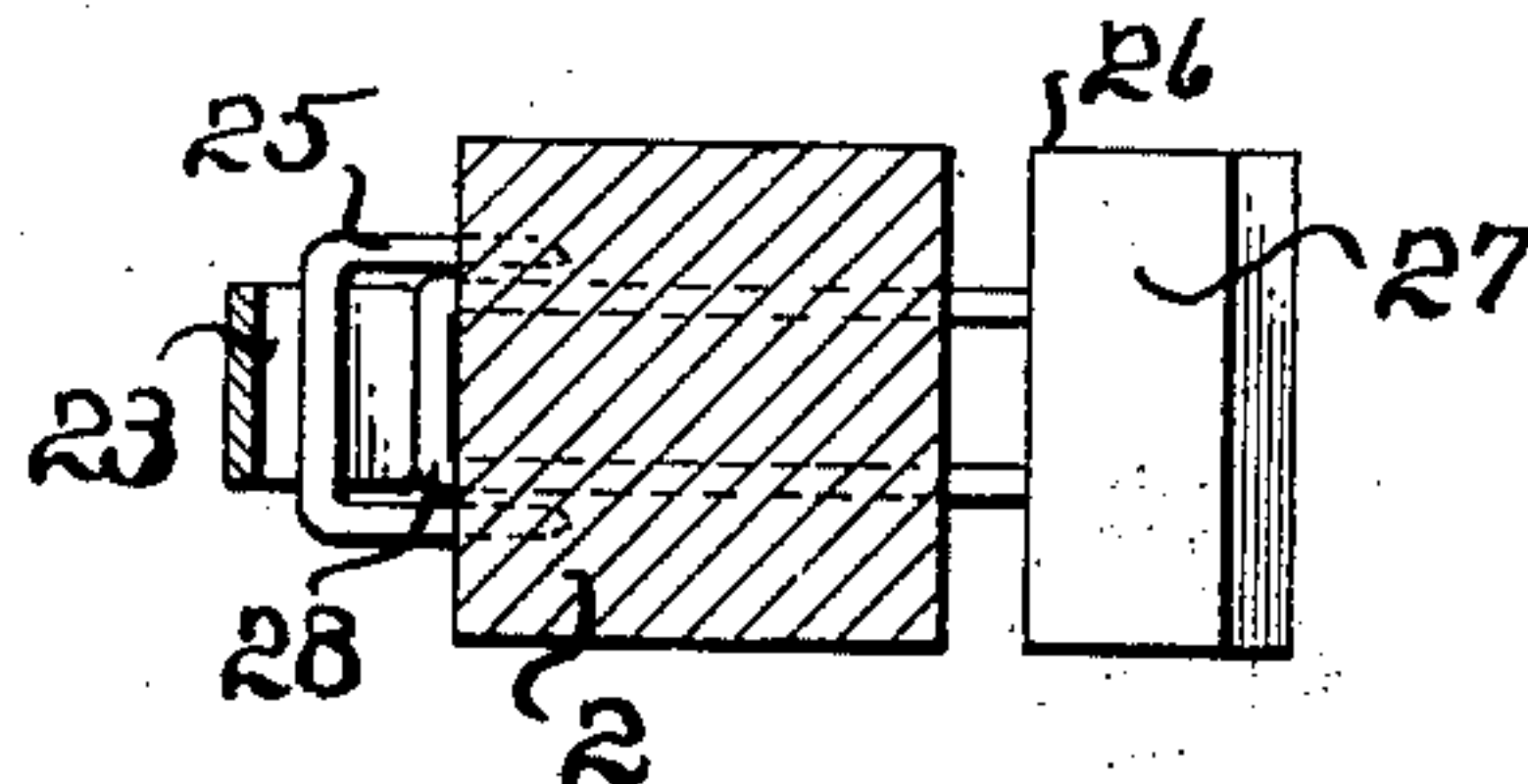


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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MAIL-BAG CRANE.

No. 826,721.

Specification of Letters Patent.

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Application filed March 29, 1906. Serial No. 308,754.

To all whom it may concern:

Be it known that I, OLE HANSEN, a citizen of the United States, residing at Escanaba, in the county of Delta and State of Michigan, have invented certain new and useful Improvements in Mail-Bag Cranes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in mail-bag cranes of that class adapted to be located along railroad-tracks to support mail bags or pouches in position to be caught by moving trains.

The object of the invention is to provide a crane of this character of simple and practical construction which will fold automatically when the train takes the mail bag or pouch from it.

With the above and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of my improved mail-bag crane, showing its parts in an operative position in full lines and in a folded position in dotted lines. Fig. 2 is a front elevation of the same. Fig. 3 is a detail view, on an enlarged scale, of the bag-holding devices upon one of the swinging arms of the crane; and Fig. 4 is a detail horizontal sectional view taken on the plane indicated by the line 4 4 in Fig. 1.

Referring to the drawings by numeral, 1 denotes my improved mail-bag crane, which comprises an upright 2, having its lower enlarged end 3 embedded in the ground and secured between the extended ends 4 of two cross-ties or to any other suitable support adjacent to a railroad-track. As shown, the upright 2 is further strengthened by diagonal braces 5 between the same and the ties or beams 4. Mounted upon the upper portion of the post or upright 2 are upper and lower vertically-swinging arms 6 7, which are adapted to support a mail bag or pouch 9 between them. The upper arm 6 is pivoted intermediate its ends, as shown at 8, between two metal plates 9, which are secured upon the outer side faces of the upright to form guides for said arm 6. The plates 9 are also con-

nected by rods or bolts 10 11, which serve as stops to limit the swinging movement of the arm 6, as will be readily seen upon reference to the drawings. The short end 12 of the arm 6 projects rearwardly or away from the track, and its long end 13 carries devices for engaging the usual loops or eyes upon the mail-bag 9. Similar devices are carried by the outer end of the lower arm 7, which latter has its inner end pivoted, as shown at 14, between the projecting ends of a U-shaped bracket or plate 15, which engages three sides of the upright 2 and is secured thereto, as shown. Each of these mail-bag-engaging devices upon the forward ends of the arms 6 7 consist of a metal strap or bracket 16, a transverse bar or rod 17, and a keeper-spring 18. The bar or rod 17 has its central portion flattened and disposed between the folded or doubled portion 19 of the strap or bracket 16, and its ends project in opposite directions and parallel with the track, so as to receive the loops or eyes upon the mail-bags. The keeper-springs 18 have their central portions secured upon the folded portions 19 of the brackets by rivets or the like 21, which are passed through said parts, and their resilient outer ends are curved and bent, as clearly shown in Fig. 3, to retain the eyes or loops of the mail-bags upon the ends of the rods 17 until the moving train catches the bag. The spring upon the upper arm is disposed above the cross-bar 17, while the one upon the lower arm is disposed beneath its cross-bar.

The lower arm 7 simply steadies the lower end of the mail-bag, while the upper arm 6 supports it, as shown in full lines in Fig. 1 of the drawings, and in order to hold the arm 6 in its horizontal position I provide a catch 23 upon a chain or other flexible connection 24, which has its upper end attached to the short end 12 of the arm 6, the lower end of the chain 24 being attached to a staple or the like upon the lower portion of the upright 2, as shown. The catch 23 is preferably formed from a strip of metal which has the two sections of the train attached to its ends and its central portion bent to form a hook which is adapted to engage a keeper 25, provided upon the rear face of the upright 2 and, as shown, is in the form of a staple or U-shaped bail. When the hook of the catch 23 is engaged with the keeper 25, the parts will be supported in their full-line position shown in Fig. 1; but

when said catch is disengaged from its keeper the two arms 6 7 will drop by gravity to their dotted-line position in said figure. The parts are adapted to be thus folded automatically as soon as the mail-bag is taken from between the arms by a releasing device 26, which is mounted upon the upright 2 and adapted to be actuated by the lower arm 7 as it swings downwardly. This device comprises a block or head 27, disposed upon the outer face of the upright and in the path of the arm 7 and carried by a sliding element 28, which projects through and slides in the upright 2 and, as shown in Fig. 4, is in the form of a U-shaped bail or rod. The disposition of the sliding element 28 is such that its rear end is adapted to push the catch 23 off of its keeper whenever the arm 7 swings downwardly and moves the block or head 27 toward the upright 2. If desired, I may provide in the chain 24 a hook 29, which may be engaged with the keeper 25 when it is desired to support the upper arm 6 in a partially-elevated position while applying the mail-bag to the supporting device upon its end.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined by the appended claims.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described mail-bag crane comprising an upright, a pair of guide-plates projecting from the upper end thereof, the upper supporting-arm pivoted at a point between its ends between said guide-plates, a flexible connection between the inner end of said upper arm and the upright and including a hook-catch, a sliding rod in said upright to engage said catch and having a head at its outer end, a pair of plates projecting from the upright below the first-mentioned plates, a lower supporting-arm having its inner end pivoted between the lower plates, and bag holding and releasing devices at the outer ends of the upper and lower arms, substantially as set forth.

2. In a device of the character described, the combination with a bag-supporting arm, of a strap or bracket secured thereon and having a folded or doubled portion, a cross-bar having a flattened portion in the folded portion of said strap, a spring engaged with the folded portion of said strap and having its bent releasing ends projecting in longitudinal alinement with the outer ends of said rod, and a fastening device passed through said spring, said rod and said strip, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

OLE HANSEN.

Witnesses:

C. J. CARLSON,

LARS SADERLUND.