

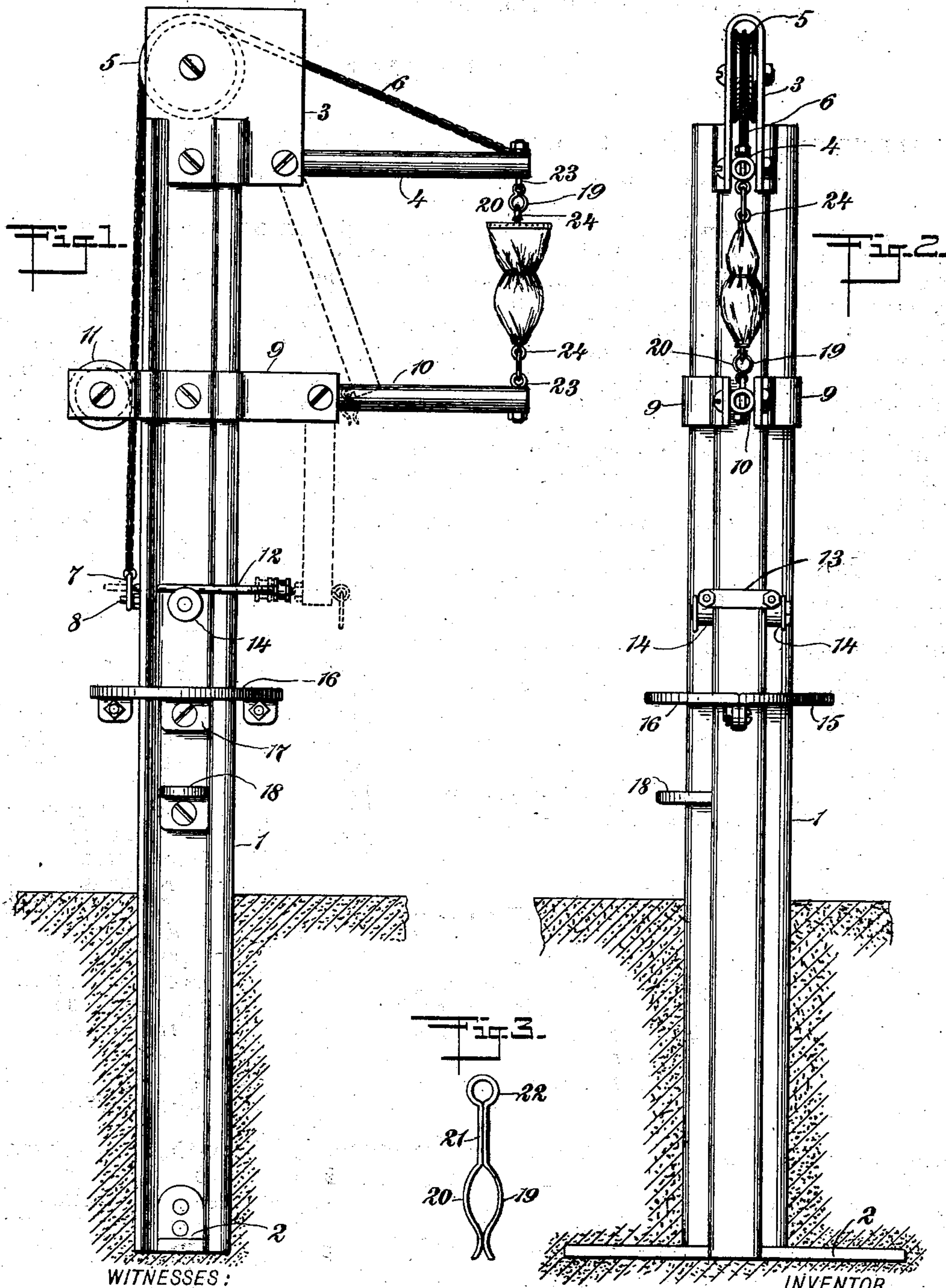
No. 696,257.

Patented Mar. 25, 1902.

C. J. NORDVALL.
MAIL BAG CRANE.

(Application filed Oct. 29, 1901.)

(No Model.)



WITNESSES:

A. Russell Bond
C. R. Ferguson

INVENTOR

Charles J. Nordvall

BY

Mumford
ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES J. NORDVALL, OF EVANSTON, ILLINOIS.

MAIL-BAG CRANE.

SPECIFICATION forming part of Letters Patent No. 696,257, dated March 25, 1902.

Application filed October 29, 1901. Serial No. 80,440. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. NORDVALL, a citizen of the United States, and a resident of Evanston, in the county of Cook and State of Illinois, have invented a new and Improved Mail-Bag Crane, of which the following is a full, clear, and exact description.

This invention relates to improvements in cranes for holding mail-bags to be taken up by a mail-catcher on a passing train; and the object is to provide a crane that shall be light yet strong and durable and in the construction of which old railway-rails may be utilized, thus making the cost comparatively small.

I will describe a mail-bag catcher embodying my invention and then point out the novel features in the appended claims.

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 figures.

Figure 1 is a side elevation of a mail-bag crane embodying my invention. Fig. 2 is a front elevation thereof, and Fig. 3 shows one of the bag-holding clips employed.

Referring to the drawings, 1 designates a post or standard, and preferably a railway-rail will be used for this standard, and when a steel rail is used the temper should be somewhat drawn, because by so doing the rail is less likely to be broken or checked by cold weather. To prevent swaying motion of the standard when seated in the ground, I may provide at its lower end anchor-plates 2.

Secured to the top of the standard is a boxing 3, in which is mounted to swing the upper bag-holding bar 4, and also arranged in this boxing is a pulley 5, over which a chain 6 passes, the said chain 6 being attached at one end to the free end of the bar 4, and the other end passes downward at the rear side of the standard and is provided with a ring 7 for engaging with a pin or lug 8 on the standard. Plates 9 are attached to the opposite sides of the standard below the boxing 3, and to the forwardly-extended portions of these plates 9 is pivoted the lower bag-holding bar 10, while between the portions extended rearward of the standard is arranged a pulley 11, against which the chain 6 engages, the chain of course passing between the two plates 9, as clearly indicated in the drawings. For the

sake of lightness and strength the bars 4 and 10 are made of tubular metal.

As a means for disengaging the ring 7 from the pin or lug 8, as will be hereinafter described, I employ a tripping device consisting of a rod 12, bent to substantially U form and having its opposite members engaging against opposite sides of the standard and passing through openings in the base-flanges of the standard. The forward ends of the members of the rod 12 are connected by a plate 13. Guide-rollers 14 for the tripping device are placed on opposite sides of the standard.

Below the tripping device is a platform, which for convenience in attaching it to the standard is made in two sections 15 and 16, these sections having at their meeting-points downwardly-extended lugs, through which fastening-bolts pass, and each section is provided with a downwardly-extended portion 17, through which a fastening-bolt may pass, the said bolt of course passing through the web of the standard. Below the platform a foot-rest 18 may be arranged.

Attached to each bar 4 10 is a bag-holding clip consisting of spring-yielding jaws 19 20, which are curved outward from the shank portion 21, and at their free ends are curved inward and then outward, as clearly shown in Fig. 3. These clips have ring portions 22 for engaging with eyes 23, attached to the bars. Rings 24, attached to the end of the mail-bag, are designed to be engaged in these clips, as shown in Figs. 1 and 2, and obviously when pressure is brought to bear on the bag by the catcher on the train engaging therewith the said rings 24 will be readily released or drawn out of the clips.

It will be noted that the members forming the shank 21 are closed together, so that the clips will be prevented from accidental disengagement from the rings on the arms; but said members may be spread sufficiently by pressure to pass the clips on or off the rings.

In operation the catcher on the mail-car of a train by engaging with the mail-bag will release it from the supporting-bars, permitting the lower bar 10 to fall and strike against the plate 13, thus moving the tripping device rearward to force the ring 7 off the pin or lug 8, and then the upper bar 4 will fall to its downward position, as indicated in dotted

lines in Fig. 1, offering no obstruction to other passing trains that might possibly strike against it should it remain in its horizontal position.

5 A mail-bag crane made in accordance with my invention is obviously superior in every respect to one made of wood, and it can be made at about the same cost, because of the fact that otherwise discarded rails may be
10 employed for the standard.

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

1. A mail-bag crane, comprising a stand-
15 ard consisting of a railway-rail, anchor-plates on the lower portion thereof, a boxing secured to the upper end of the standard, a bag-holding bar mounted to swing in said boxing, a pulley in the boxing, a chain ex-
20 tended from the free end of the bar over said pulley and down the rear side of the standard, a pin or lug on the standard with which the end of said chain is designed to engage, a tripping device movable on the standard,
25 and a lower bag-holding bar mounted to swing on the standard and to engage with said tripping device to operate the same, substantially as specified.

2. A mail-bag crane, comprising a stand-
30 ard, bag-holding bars mounted to swing on said standard, means for holding the upper bag-holding bar in its horizontal position, means for releasing said holding means, and a platform attached to the standard, the said

platform consisting of two sections bolted to- 35
gether around the standard, substantially as specified.

3. A bag-holding crane, comprising a standard, a boxing secured to the upper end thereof, a bag-holding bar mounted to swing 40
on said boxing, plates secured to the standard below said boxing, the said plates having forwardly-extended portions and rearwardly-extended portions, a bag-holding bar pivoted to said forwardly-extended portions, a pulley 45
arranged between the rear extended portions, a pulley in the boxing, a chain passing from the upper holding-bar over said pulley in the boxing and against the first-named pulley, a pin on the rear side of the standard with 50
which the lower end of the chain is designed to engage, a tripping-rod having members engaging at opposite sides of the standard and passing through openings in the rear por- 55
tion of the standard; a plate connecting the forward ends of said members and adapted to be engaged by the lower bag-holding bar, a platform below said tripping device, and a step below the platform, substantially as 60
specified.

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

CHARLES J. NORDVALL.

Witnesses:

THOMAS J. NEVINS,
ANDREW ANDERSEN.