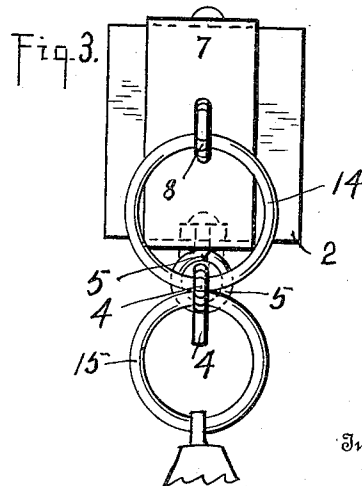
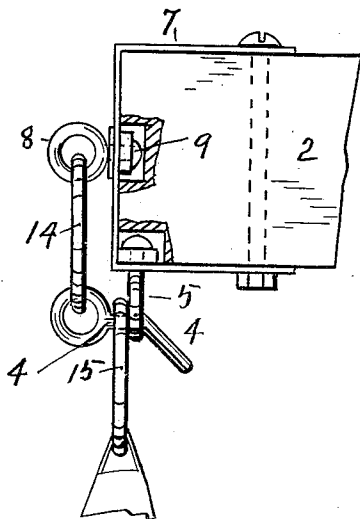
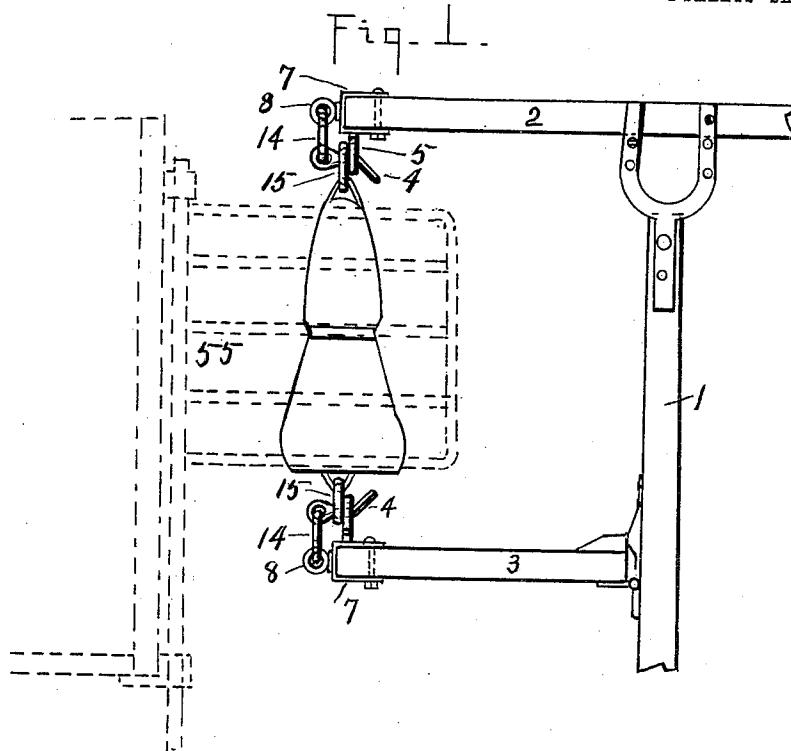


W. M. CORTHELL.
MAIL BAG HANGER.
APPLICATION FILED APR. 1, 1909.

935,894.

Patented Oct. 5, 1909.

2 SHEETS—SHEET 1.



Witnesses

C. M. Catlin,
G. F. Baker

Inventor

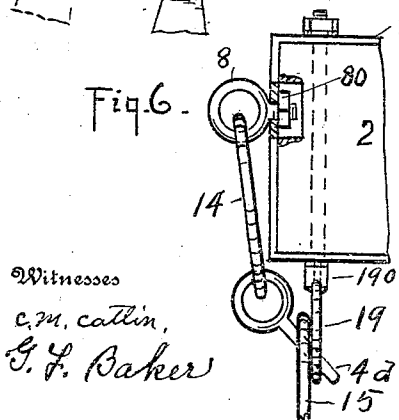
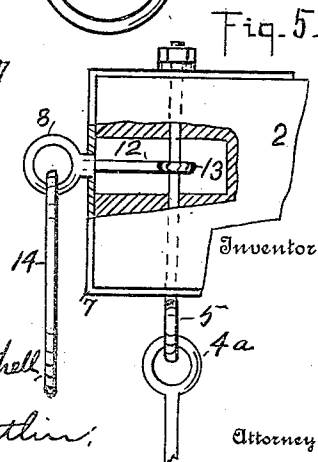
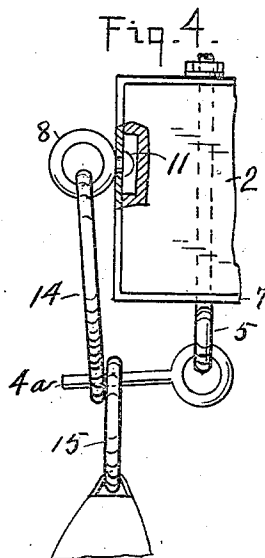
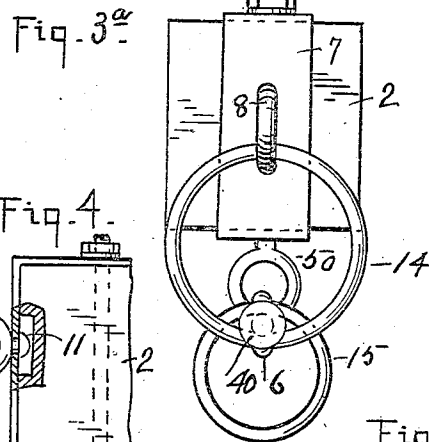
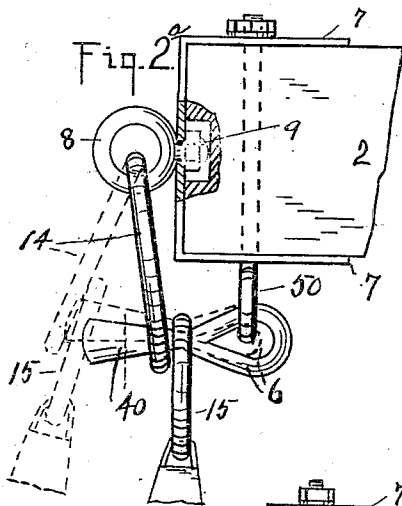
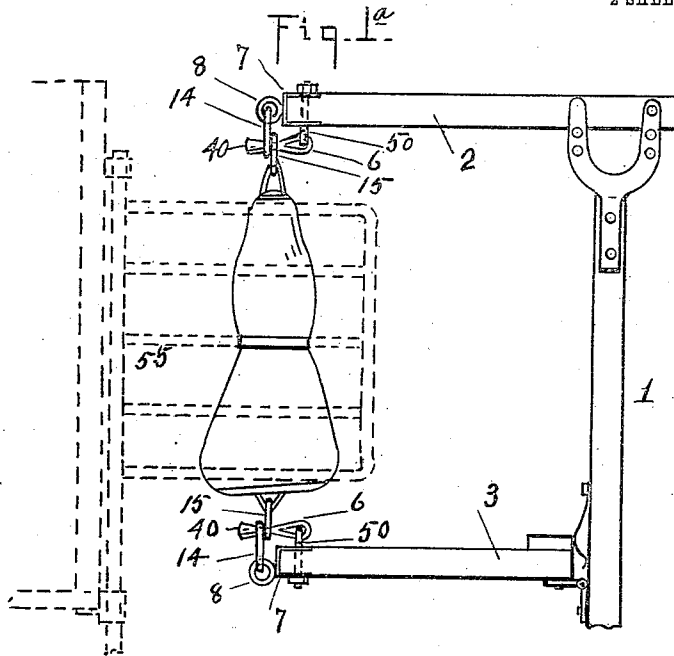
W. M. Corthell,
By Ben. R. Catlin,

Attorney

W. M. CORTHELL.
MAIL BAG HANGER.
APPLICATION FILED APR. 1, 1909.

935,894.

Patented Oct. 5, 1909.
2 SHEETS—SHEET 2.



Witnesses
C. M. Catlin,
G. F. Baker

W. M. Corthell,
Benj. R. Catlin,

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM M. CORTHELL, OF CHICAGO, ILLINOIS.

MAIL-BAG HANGER.

935,894.

Specification of Letters Patent.

Patented Oct. 5, 1909.

Application filed April 1, 1909. Serial No. 487,357.

To all whom it may concern:

Be it known that I, WILLIAM M. CORTHELL, a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Mail-Bag Hangers; and I do hereby 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 pertains to make and use the same.

This invention relates to devices designed to support mail bags or other packages beside a track to be collected by a passing car.

The object of the invention is to provide simple, safe and efficient means for holding such bag against accidental displacement, but allowing it to be pulled or pushed therefrom by mere movement of the bag, and without complicated locking and releasing catches, bolts, or the like, of a nature rendering them liable to breakage or to failure to properly operate.

The invention consists in the constructions hereinafter described and particularly pointed out.

In the accompanying drawings which illustrate the invention and form a part of the specification,—Figure 1 is a partial side view of a crane with the improved device attached, a supported bag and means to remove it from the crane also being indicated; Fig. 2 is a side view (on a larger scale) of the hanger in operative situation on the end of an upper crane arm; Fig. 3 is a view of the same at right angles to Fig. 2; Figs. 1^a, 2^a, and 3^a are, respectively, like views of a modified construction; Figs. 4, 5 and 6 are side views showing other modifications of the hanger.

For the collection of mail and the like by moving cars, it is usual to support bags from cranes, such as denoted by 1, near enough a car track to be in the path of a catching or collecting device on a passing car. Such bag is supported by its upper end from one crane arm, 2, and is steadied and held by a connection from its lower end to a lower end, 3, of the crane. Various devices have been suggested for thus holding bags.

My device in its preferred form comprises a bag-supporting arm 4 loosely supported below the outer end of the crane arm. The support of arm 4 may be effected by an eye 5

adapted to loosely receive the free end of said arm 4 to temporarily support it in position shown. The opposite end of said arm is provided with an eye through which loosely passes, so as to be free to move in various directions, a ring or link 14, which is likewise supported in an eye 8 secured to the end of arm 2, preferably by a swivel 9 connecting the eye to plate 7 which is suitably secured to arm 2, as by a bolt. The eye 5 is also connected to plate 7 and arm 2 by a swivel connection. Numeral 15 denotes a ring or handle of a mail bag. Arm 4 comprises a central straight portion about as long as the combined thickness of eye 5 and ring 15 whereby both parts 5 and 15 may bear on said straight part, and an end portion bent in a direction away from its supporting arm 2, preferably at an angle of forty-five degrees. The described bent end, when the weight of a bag is on the arm, renders accidental disconnection practically impossible. Arm 4 when released can swing to vertical position, and is free on application of sufficient force to swing in various directions with respect to its support. At the lower end of the bag the holding devices connected to crane-arm 3 are the same as above described but inverted. Arm 3 is hinged to the post, and a spring acts on the arm to give tension to the bag and connections.

Referring now to Figs. 1^a, 2^a, and 3^a, eye 50 is an end of the bolt which secures plate 7 to arm 2; this eye loosely engages and holds the large eye 6 of the bag-supporting arm 40. The bolt of eye 50 extends through the crane arm and secures to the arm the U-shape plate 7. To said plate is secured an eye 8 by suitable means, as by a swivel connection 9. Or the eye may be secured to plate 7 by being upset or riveted as at 11, Fig. 4; or said eye may be secured by an extension 12 terminating in an eye 13, through which the vertical bolt passes, as shown in Fig. 5; or by a nut 80, as shown in Fig. 6.

Supported loosely in eye 8 so as to be freely movable in various directions is a swinging link of suitable form, preferably a circular ring, 14, and of such size as to be readily engaged with the free end of arm 40, and to hold said arm in an approximately horizontal position. Said arm 40 is shown

increasing in size from about its center to its free end, and expanded to form eye 6 at the opposite end.

In use the bag-ring or handle 15 is passed over the free end of arm 40 before link 14 is engaged therewith. Owing to the shape of said arm, especially to the taper toward the center, the ring 15 will naturally hang from the center of the arm, and link 14 will have a tendency to work toward ring 15, rather than toward the end of the arm, thus serving a like purpose to the bent end of arm 4. The several parts are so proportioned that link 14 when engaged with arm 40 inclines inward a trifle as shown. The hanger at the bottom of the bag is like that at the top but inverted.

In Fig. 4 the bag-supporting arm 4^a is a straight rod having an eye at one end, and the parts are so proportioned and arranged that when the arm is engaged by link 14, said arm inclines downwardly from its point of support. The effect of this inclination is, like the bent end of arm 4, and the tapering end of arm 40, to cause link 14 to work away from the free end of the arm and adding to the safety of the hanger.

In the modification of Fig. 6 the bag-supporting arm 4^a is permanently connected by a loose connection to the link 14, and the arm is inclined at a considerable angle, and its free end is engaged and supported by a loop 19, which is supported from the crane arm by a swivel joint 190. The bag is released by the outward swing of link 14, but in this case, as in the form of Fig. 1, the inner end of the bag-supporting arm, instead of the outer end, as in the other forms is allowed to drop.

A bag held as hereinbefore described may be removed by any suitable catcher, such as the hook catcher now in use, but the hanger has been designed more particularly for use in connection with the cam-rail-operated delivering and collecting device described in my application No. 464,963, filed Nov. 28, 1908, in which is described a gate-like mail-handling body which, when automatically swung out on its vertical shaft from the doorway of a car, delivers mail, and when swinging back to the car sweeps the crane-supported bag into the car doorway. Numeral 55 denotes such a mail-handling body, and is merely indicated in outline in the position occupied just before striking and catching the bag. The described hanger, when a bag is thus caught, permits the bag-rings 15, to readily push links 14 in the direction to release the free end of arm 4 (or 40, 4^a, etc.) without any preliminary unlocking or releasing, and this whether the force of the catcher on the bag acts in a direction parallel to the arms, or at an angle thereto in either transverse direction.

In Fig. 2^a, in broken lines is shown the position assumed by the several parts at the instant when the bag-supporting arm becomes free to fall to release the bag.

Having thus described the invention what I claim is,—

1. In a device of the character described, a bag-supporting arm, a permanent support for one end of said arm, and a temporary support for the other end of said arm, one of said supports comprising a link free to swing both longitudinally of the arm and transversely thereto, movement of which causes the release of the free end of the arm.

2. In a device of the character described, a bag-supporting arm, a permanent support for one end of said arm, and a temporary support for the other end of said arm, one of said supports comprising a link supported so as to be movable in various directions, said bag-supporting arm also being free to move in various directions.

3. The combination with each of two crane-arm or like supports, of a bag-supporting arm, a permanent support at one end of the bag-supporting arm, a temporary support for said arm at its other end, one of the supports for each of the bag-supporting arms comprising a swinging link adapted to cause release of the free end of the arm by a pull on the supported bag.

4. The combination of a bag-supporting arm longitudinally movable, a permanent support therefor at one end, a temporary support at the other end comprising an eye from which the arm can be readily withdrawn by such longitudinal movement.

5. The combination with a crane arm, of an eye secured to the bottom of such arm, an eye secured to the end of the arm, a link supported by the latter eye, and a bag-supporting arm supported by said bottom eye and said link.

6. The combination with a crane or like arm, of a U-shape metal plate secured to the end of such arm, a bag-supporting arm, and means for supporting and releasing the bag-supporting arm secured to said plate.

7. The combination with a body adapted to force a suspended bag onto a moving car, of a crane having an arm, a swinging bag-supporting arm, a permanent support for one end of the latter arm, a temporary support for the other end, one of the supports for said bag-supporting arm comprising a swinging link, movement of which may cause the release of the bag-supporting arm.

8. A bag-supporting arm movable longitudinally, a permanent swinging support, and a temporary support for said arm, the free end of said arm extending beyond the temporary support at an angle, whereby a ring or the like hung on the arm will be securely held, as set forth.

9. A bag-supporting arm having an eye, a straight portion, and an end bent at an angle to said straight portion, an arm-supporting link, and a temporary support for the said bent end of the arm.

10. A crane or like arm, two eyes connected to said arm by universal connections, a bag-supporting arm, a link connected to one of said eyes and adapted to support one end of the bag-supporting arm, the other

eye being adapted to support the other end, as set forth.

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

WILLIAM M. CORTHELL.

Witnesses:

N. W. HAYNES,
D. W. HEATH.