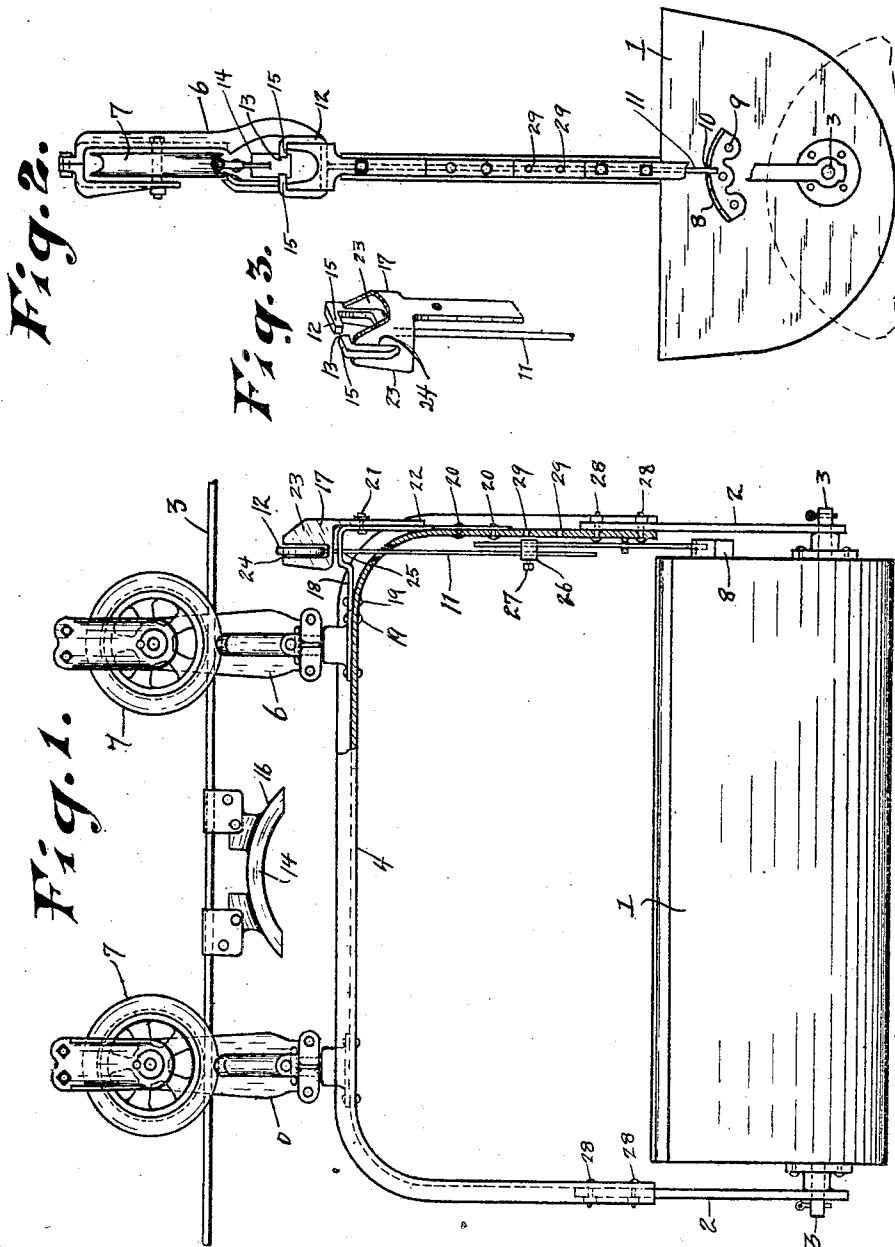


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DIRECT MOVEMENT LOCK AND TRIP MECHANISM FOR CARRIERS.
APPLICATION FILED MAR. 1, 1909.

931,859.

Patented Aug. 24, 1909.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM GUTENKUNST, OF MILWAUKEE, WISCONSIN.

DIRECT-MOVEMENT LOCK AND TRIP MECHANISM FOR CARRIERS.

931,859.

Specification of Letters Patent. Patented Aug. 24, 1909.

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To all whom it may concern:

Be it known that I, WILLIAM GUTENKUNST, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Direct-Movement Lock and Trip Mechanism for Carriers, of which the following is a specification.

My invention relates to improvements in that class of carriers in which a pivotally supported receptacle is suspended by a bail, rollers and roller supporting yokes from a cable or track, and it pertains more especially, among other things, to the locking and releasing mechanism by which the receptacle is normally retained in its upright position, while being filled and conveyed with its contents to a place of deposit, and whereby it is automatically released and inverted and its contents discharged.

The construction of my invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view. Fig. 2 is an end view of a carrier provided with my locking and releasing mechanism; and Fig. 3 is a detail of the mechanism for supporting the locking bar.

Like parts are identified by the same reference figures throughout the several views.

While my invention pertains more especially, as stated, to the locking and releasing mechanism, it is necessary to show and describe the same in connection with the other coöperating parts of the carrier, in which—

1 is the receptacle which is pivotally supported at its respective ends from the sides 2, 2, of the bail by and upon the trunnions 3, 3, which trunnions are rigidly affixed to the ends of the receptacle 1 and have loosely fitting bearings in the arms 2.

4 is the bail proper, which is connected with the track 5 by the hangers or yokes 6, 6, and rollers 7, 7, in the ordinary manner.

One end of the receptacle 1 is provided with a locking cam 8, which is rigidly secured thereto by bolts or rivets 9. The upper edge of the locking cam is made convex and is provided with a retaining notch or recess 10 for the reception of the lower end of the locking bar 11. The locking bar 11 is slidably supported from the sides of the bail as hereinafter described, and is provided at its upper end with a lifting link

12, which has a central opening 13 on its upper side for the reception of the circular releasing stop 14, which stop 14 is suspended from the track 3 by bolts or rivets in the ordinary manner. The position of the releasing stop 14 is such that as the carrier passes beneath it, the respective arms 15, 15, of the loop will be brought in contact with the respective sides of the convex surface 16 of the stop, whereby said loop and the locking bar suspended therefrom will be raised and the lower end of said bar disengaged from the retaining recess 10 of the locking cam, thereby releasing the receptacle 1 and permitting it to be inverted of its own gravity. To prevent the link from turning, and to retain it in its proper relative position to the stop, I provide a bracket 17, which bracket is in turn supported from the bail through the angular bar 18, one arm of said bar 18 being connected with the top of the bail by the rivets 19 and the other arm with the side of the bail by rivets 20, while the bracket 17 is connected with said angular bar by the bolt 21. The bracket 17 comprises the fastening plate 22, lugs 23, 23, provided with a vertical recess 24, for the reception of the respective sides of the link, in which such link is slidably suspended. The bar 18 is provided with an aperture 25 for the reception of the upper end of the locking bar. The locking bar 11 is preferably formed in two overlapping parts, which are slidably connected together by the clamping collar 26 and clamping bolt 27, whereby said locking bar may be extended or contracted to correspond with the position of the receptacle 1.

It will be understood that the respective side arms 2 of the bail are adjustably connected with the upper member of the bail by bolts 28 and that the upper member of the bail is provided with a plurality of apertures 29 for the reception of said bolts, whereby the receptacle 1 may be adjusted nearer to or farther from the cable from which it is suspended and whereby the locking bar 11 may be adjusted to conform thereto.

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

1. In a carrier of the class described, the combination with one side of the receptacle supporting bail, of a vertically moving locking bar adapted to engage at its lower end

with the locking cam affixed to one end of said receptacle and provided at its upper end with the lifting link adapted as the carrier is moved beneath its supporting track 5 to engage the convex surface of a releasing stop, whereby said link and locking bar are raised and said locking bar disengaged from said locking cam.

2. In a carrier, comprising a track, a releasing stop affixed to said track, rollers supported on said track, yokes suspended from said rollers, a bail suspended near its respective sides from said yoke, a receptacle pivotally supported from said bail, a locking cam provided with a recess affixed to one end of said receptacle, in combination with a locking bar slidably supported from said bail and adapted to engage at its lower end in the recess of said locking cam, a link 20 affixed to the upper end of said locking bar provided with carrying arms adapted to engage the convex surface of said releasing stop, whereby said locking bar is raised and disengaged from said locking cam, whereby 25 said receptacle is released and inverted.

3. In a carrier, comprising a track, a releasing stop affixed to said track, rollers supported on said track, yokes suspended from

said rollers, a bail suspended near its respective sides from said yoke, a receptacle 30 pivotally supported from said bail, a locking cam provided with a recess affixed to one end of said receptacle, in combination with a locking bar slidably supported from said bail and adapted to engage at its lower end 35 in the recess of said locking cam, a link affixed to the upper end of said locking bar provided with carrying arms adapted to engage the convex surface of said releasing stop, whereby said locking bar is raised and 40 disengaged from said locking cam, a guiding bracket supported from said bail and provided with two parallel recessed lugs for the reception of the respective sides of said link, said bracket being adapted to guide and 45 slidably hold said link as the same is raised by contact of the convex surface of said stop, all substantially as and for the purpose specified.

In testimony whereof I affix my signature 50 in the presence of two witnesses.

WILLIAM GUTENKUNST.

Witnesses:

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JAS. B. ERWIN.