W. GUTENKUNST.

SINGLE LEVER LOCK AND TRIP MECHANISM FOR LITTER CARRIERS.

APPLICATION FILED MAR. 1, 1909.

961,493. Patented June 14, 1910.

Fig. 2.

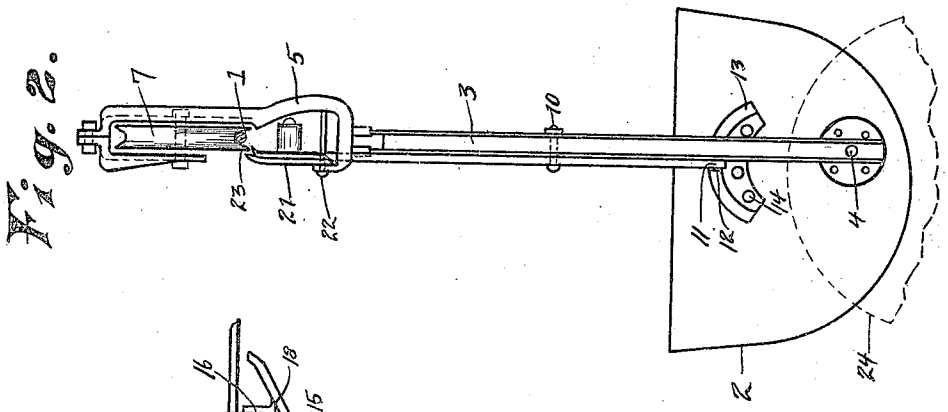
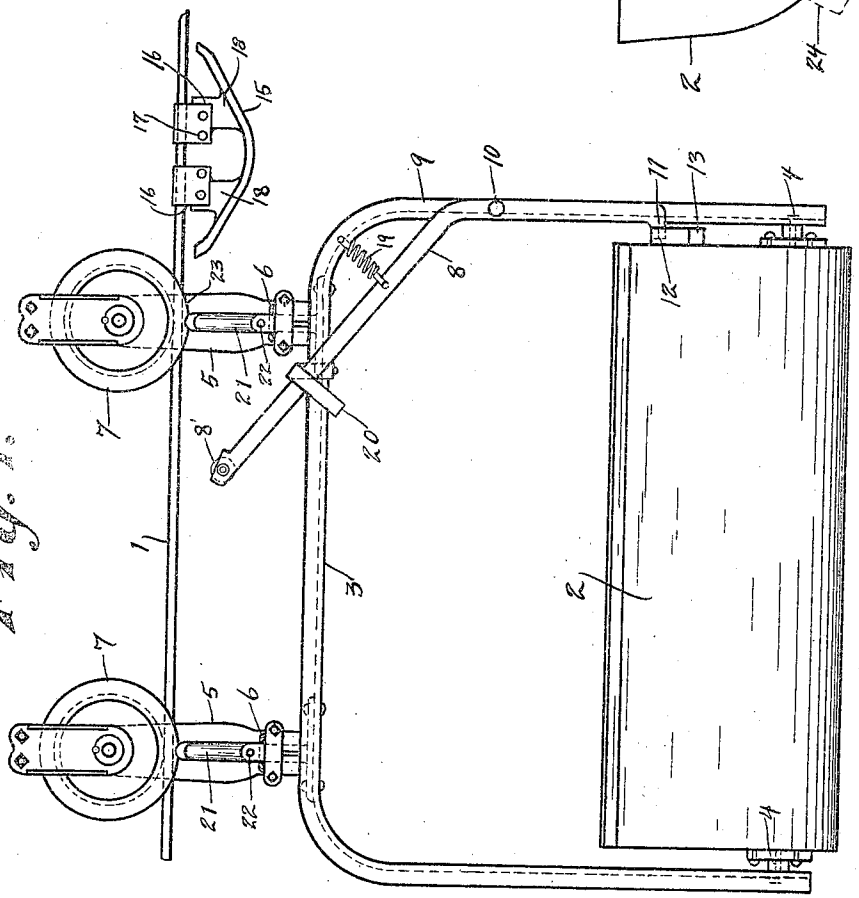


Fig. 1.



WITNESSES:

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SINGLE-LEVER LOCK AND TRIP MECHANISM FOR LITTER-CARRIERS.

961,493. Specification of Letters Patent. Patented June 14, 1910.

Application filed March 1, 1909. Serial No. 480,533.

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 Single-Lever Lock and Trip Mechanism for Litter-Carriers, of which the following is a specification.

My invention relates to improvements in that class of litter carriers in which a receptacle is adapted to be suspended from a track or cable, conveyed to a place of deposit, automatically inverted and its contents discharged, and my improvement pertains more especially, among other things, to the trip mechanism by which the receptacle is retained in its upright position when being filled and moved, and by which it is automatically released and inverted when it reaches the place of deposit.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view, and Fig. 2 is an end view thereof.

Like parts are identified by the same reference figures in both views.

1 is a track or cable, from which the carrier is suspended.

2 is a pivotally supported receptacle. 3 is a supporting bail having pivotal connections 4, 4, with the respective ends of said receptacle. 5, 5, are yokes having swiveled connections 6, 6, with said bail and 7, 7, are supporting rollers.

The trip mechanism comprises the two armed locking lever 8, which is pivotally connected with one of the arms 9 of the bail by a pivotal bolt 10 and its lower arm is provided with a lateral bend 11, which is adapted, when the receptacle is in its upright position to engage in a retaining recess 12 formed in the edge of the semi-circular locking cam 13, whereby said receptacle 2 is locked in its upright position as shown.

It will be understood that the cam 13 is rigidly secured to the end of the receptacle 2 by a plurality of bolts 14. The supporting pivots 4 are connected to the receptacle 2 slightly below and at one side of its center of gravity, whereby, when said receptacle is released from said locking lever, it will be automatically inverted of its own gravity. The upper end of the locking lever 8 is inclined toward the center of the bail, terminating at an angle to the vertical slightly below the supporting cable 1 and provided with a roller 8′, located in such a position as to be brought into contact with the stationary stop 15 as the carrier approaches the place of discharge. The stop 15 is rigidly secured to the track or cable by the clamping members 16, bolts 17, and lugs 18. Said stop 15 curves upwardly at its respective ends, whereby, as the front end of the receptacle passes beneath it, the roller 8′ of the locking lever will be caused to contact with the lower convex side of said stop, whereby said arm will be thrown downwardly thereby causing the lower arm of the lever to be thrown out of engagement with the retaining recess 12 of said cam, when the receptacle 2 will, as stated, be inverted of its own gravity and its contents discharged. 19 is a spring by which the upper arm of the lever 8 is drawn to the upper end of the retaining keeper 20, whereby the lower end 11 of the lever is retained in locking engagement with said cam and the receptacle locked in its upright position.

To prevent the rollers 7 from being accidentally disengaged from the supporting cable, I provide the front side of the yoke 5 with a retaining keeper 21, which keeper is pivotally supported at its lower end from the yoke by the bolt 22, while the upper end of said keeper terminates in close proximity to the front retaining flange 23 of the roller. It will be understood that as the receptacle 2 is brought from the inverted position indicated by dotted lines 24 to its upright position shown, the convex side of the cam 13 is brought in contact with the lower end 11 of the arm, whereby said arm is thrown out or away from said cam until the receptacle is brought to the upright position shown in said figures, when the recess 12 formed in said cam is caused to register with the lower end of said lever, when such lower end will be thrown into said recess by the recoil of the spring 19, whereby the receptacle is locked, as stated, in its upright position until the same is released by contact of the upper arm of said lever with said bracket, as previously described.

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

1. In a track supported carrier of the described class, the combination with one arm of the receptacle supporting bail of a rigid angular two armed lever pivotally sup-

ported near its center from one of the arms of said bail, a spring attached at one end to said bail and at its opposite end to the upper end of said two-armed lever and adapted by its recoil to yieldingly retain the lower arm of said lever between the retaining bearings of said receptacle, a retaining keeper supported from said bail and adapted to limit the upward movement of said upper arm the upper arm of said lever being adapted to be moved downwardly by contact with a stop supported from said track, whereby the lower arm of said lever is moved laterally and disengaged from a cam affixed to one end of said receptacle.

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 yokes, a receptacle pivotally supported from said bail, a locking cam provided with a recess affixed to one end of said receptacle, in combination with an angular two armed locking lever pivoted to one of the arms of said bail a spring attached at one end to said bail and at its opposite end to the upper arm of said two armed lever, whereby its lower arm is caused to engage in the recess of said locking cam, the upper arm of said lever being adapted as the carrier is moved on said track, to be forced downward by contact with said stop and thereby disengage its opposite end from said locking cam.

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

WILLIAM GUTENKUNST.

Witnesses:

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JAS. B. ERWIN.