No. 771,850. PATENTED OCT. 11, 1904.

H. M. WEAVER.

PACKAGE CARRIER.

APPLICATION FILED MAY 19, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

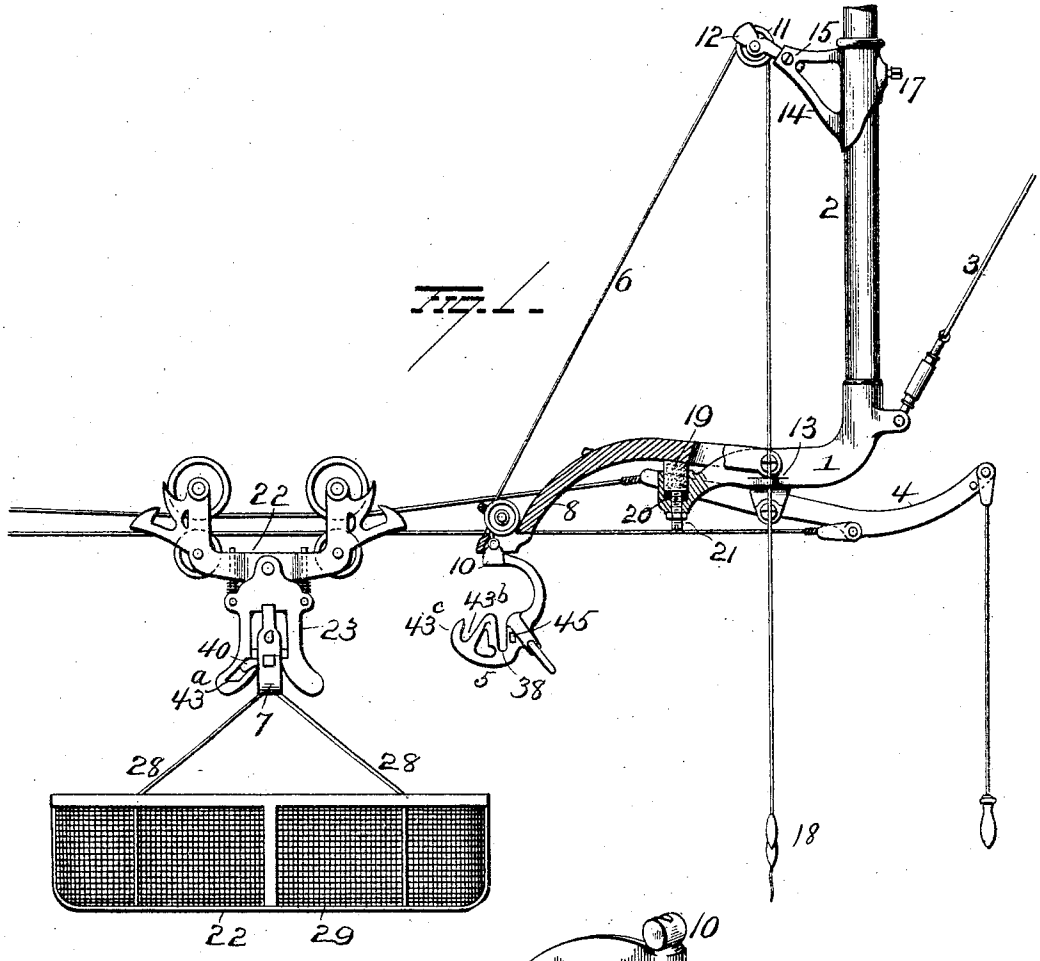


Fig. 1.

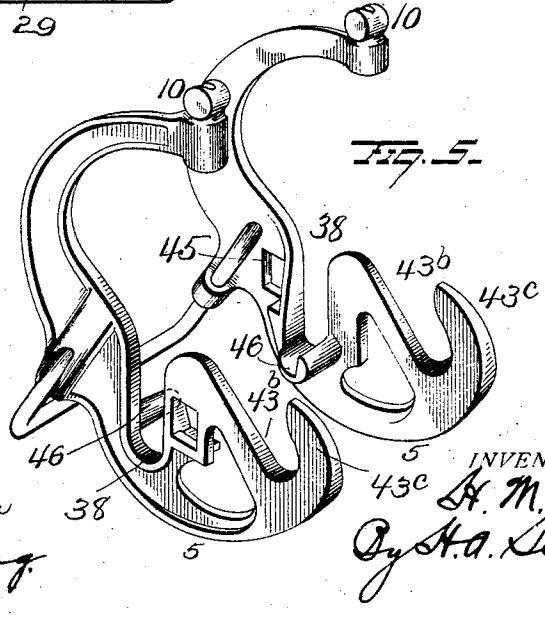


Fig. 5.

WITNESSES

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

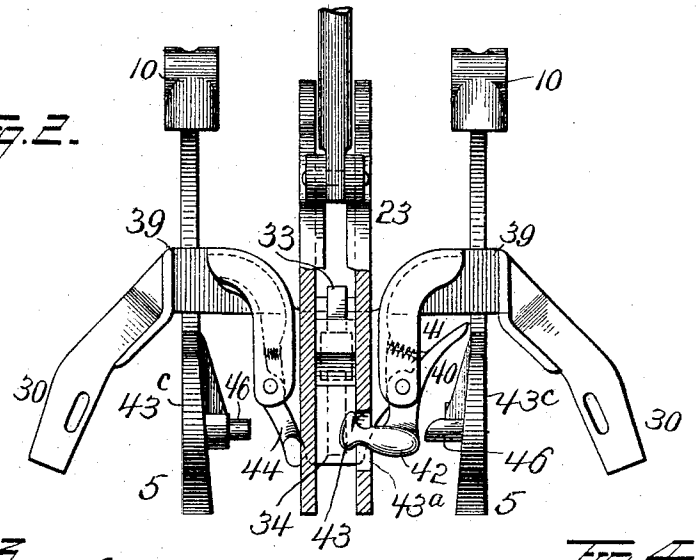


Fig. 3.

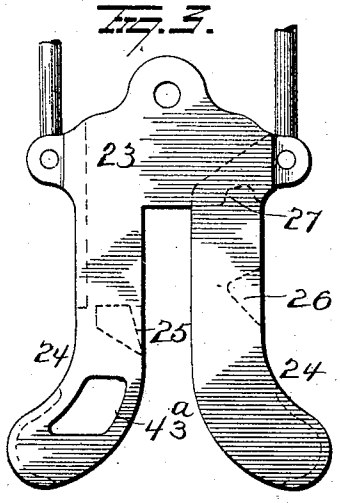


Fig. 4.

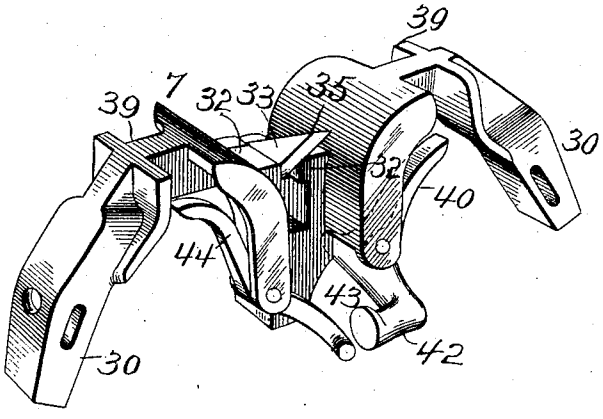
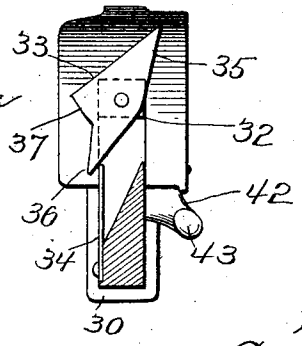


Fig. 4a.



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UNITED STATES PATENT OFFICE.

HENRY MATHIAS WEAVER, OF MANSFIELD, OHIO.

PACKAGE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 771,850, dated October 11, 1904.

Application filed May 19, 1904. Serial No. 208,682. (No model.)

To all whom it may concern:

Be it known that I, HENRY MATHIAS WEAVER, a resident of Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Package-Carriers; 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 appertains to make and use the same.

My invention relates to an improved package-carrier, the object of the invention being to provide a device of this character with improved means for preventing any possibility of accidental disconnection of the basket-bail and car-fork, which means will be entirely automatic in its operation and extremely simple in construction.

A further object is to provide improved means for preventing the separation of the bail and hooks when the former is disconnected from the fork.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in elevation illustrating my improvements. Fig. 2 is a view in section. Fig. 3 is a view of the fork. Figs. 4 and 4ª are views of the basket-bail, and Fig. 5 is a view of the hooks.

1 represents the main casting or foot at the salesman's station supported from the ceiling by hanger-rod 2 and suitably braced by brace-rod 3. The propelling track-wire-spreading lever 4 is pivoted to this foot 1 in the usual manner, and the lever has the track-wires connected with it and is provided with a handle at its outer end or with a pull-rod, as shown.

5 5 are a pair of basket-hooks normally suspended by means of cords 6 6 in position to receive the basket-bail 7 when the car arrives at the station. A pair of cord-weights 8 8 are hinged to the foot 1, their weight being sufficient to lower the hooks into position to receive the basket and they being constructed to hold the hooks at the desired point. Sockets are formed in the outer ends of these cord-weights, which form bearings for the knuckles 10 10, formed on the upper ends of the hooks and permit the latter to swing backwardly to a limited extent as the hooks are struck by the basket-bail. The cords 6 6 pass upwardly from these knuckles through the outer ends of the cord-weights over pulleys 11 11 in the yoke 12 and then downwardly through the eyes 13 13 on the sides of the foot 1. The yoke 12 is removably and adjustably supported on the bracket 14 by means of set-screws 15, and the bracket 14 is adjustably held on the hanger-rod 2 by a set-screw 17. The cord 6 has a weighted handle 18 on its lower end which is sufficiently heavy to counterbalance the weight of the hooks, and thereby keep the knuckles of the hooks normally in the sockets in the cord-weights 8. Adjustable cushions 19 19 are located at the outer ends of the foot 1 to receive the cord-weights as they are dropped to deaden the sound and prevent jar. A screw-follower 20 in the sockets in which these cushions are placed is adapted to raise them when turned in one direction, and nuts 21 on the screws lock them.

22 represents the car of ordinary construction and to which and depending therefrom is pivotally connected a fork 23, which comprises two depending arms 24 24, at their lower ends curved outwardly, as shown. Each arm 24 of the fork 23 is recessed, and in the recess of one of the arms 24 and in proximity to the lower end thereof is a block or rest 25. In the recess of the other arm 24 at a point more elevated than the rest 25 is a rest or block 26, preferably having an inclined inner edge. Above the block or rest 26 is located an angular block or plate 27, and the purpose of these blocks will presently appear. The rods 28, carrying the free ends of the basket 29, are inserted in sockets in the free ends of the curved arms 30 of a basket-bail 7 and retained therein by means of set-screws. The bail 7 is provided centrally between its ends with oppositely-disposed lugs 32, between which a dog or toggle 33 is pivotally supported and held normally at an angle of about forty-five degrees by a flat spring 34, secured to the bail. The dog or toggle 33 is made with a pointed end 35, a heel 36,

and a hook 37 to engage the blocks 25, 26, and 27 and lock the bail and fork together and permit their separation when desired, as is readily understood.

The lifting-hooks 5 are provided with alined notches 38 to receive contracted portions 39 of the bail 7, and the latter is provided on one side with a catch or safety-bolt 40, (which I term the "car-fork" safety-bolt,) pivoted between its ends and provided with a coiled spring 41 to normally press the upper end of the bolt outward and the lower end thereof inward. The lower end of the bolt 40 projects to one side out of the plane of the bail and is provided with a lug 42, having an enlarged free end 43 thereon to spring into an opening 43^a in one side of one arm 24 of the fork 23 when the bail is locked to the fork by the dog or toggle 33 and be released from the forks, as will more fully hereinafter appear. On the opposite side of bail 7 another catch or safety-bolt 44, (which I term the "basket-hook" safety-bolt,) is pivoted between its ends and provided above its pivotal point with a coiled spring to press the upper end thereof outward. The lower end of the bolt 44 is disposed against the fork when the bail is locked thereto and holds the upper end of said bolt 44 out of the path of the hooks 5 to permit the release of the bail therefrom; but when the bail is released from the fork the upper end of the bolt 44 will spring into an opening 45 in the hook 5 and lock the bail and hook together, each hook being provided with an opening 45, so as to receive the bolt 44 whichever way the bail is turned. The hooks 5 are also provided on their inner faces with lugs 46 to engage the upper end of bolt 40 and force the same out of the opening 43^a in the fork when the bail is engaged by the hooks. The outer ends of the hooks 5 are recessed, as shown at 43^b, forming, in effect, hooks 43^c at the ends. This shape of hook is a great improvement over the form of hooks heretofore used for the following reason: The operator in jerking up the hooks is ordinarily in a hurry, which with other forms of hook would jerk the same too high. As a consequence very often with the old style of hook the end would strike upon the bail, rebound, and fall on top of the bail. To remedy this, the hook shown was devised. With this improvement in jerking the handle he catches the bail in the recess 43^b and retards the further movement of the hook, which falls back and takes its position so the bail can enter its proper recess 38.

It will be seen that when the bail is in position in the fork the bolt 40 does not bear upon any portion of the fork, but simply stands in the opening 43^a ready to support the bail in the fork should the dog or toggle 33 give way or refuse to perform its function.

The operation of the apparatus is as follows: Assuming the basket to have been lowered on the hooks 5 and that it is desired to raise the basket and connect it with the car, the operator will raise the basket by pulling down the handle 18, the safety-bolt being at this time so disposed that its lower end will be out of the way, and thus permit the bail 7 to readily enter the fork. The bail having entered the fork, the dog 33 then holds it in position, preventing the basket from returning when the hooks are lowered. The lowering of the hooks 5 (when the car and basket are to be discharged therefrom) releases safety-bolt 40, which enters the opening 43^a in the car-fork and stands in position to prevent the falling of the basket should any accident happen the toggle or dog 33. The hooks 5 now stand in position, so that the car, with basket attached, can be sent out from the station. We will now suppose the basket has returned to the station and is to be lowered. The operator draws upon the handle 18, causing the hooks 5 to rise, and in so doing the safety-bolt 40 is thrown out of its position in the opening 43^a by engagement with the lug 46. The toggle or dog 33 turns, and the basket hanging in the hooks 5 descends; but the safety-bolt 44 is now released and is in position to act should any one attempt to lift the basket from the hooks. In event of danger of the basket being thrown from the hooks, as before described, the safety-bolt 44 enters the hole 45 in the hook 5 and prevents it from leaving the hooks.

Various slight changes might be resorted to in the general form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not wish to limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. The combination with a car, a basket-bail and hooks for supporting the latter, of means for locking the hooks and bail together when the latter is disconnected from the car, and means for preventing the hook from being raised out of operative position.

2. The combination with a car, a basket-bail, means removably connecting the car and basket-bail together, and hooks as described for supporting said bail, of a safety-bolt for locking the car and bail together when the connecting means fails to act and a safety-bolt for locking the hooks and bail together when the latter is disconnected from the car.

3. In a package-carrier, the combination with a fork having an opening therein, a basket-bail, means for connecting the bail and fork together and hooks for supporting said bail when released from the fork and con-

structed to prevent them being lifted to a position to prevent proper assembling of parts, of a spring-pressed safety-bolt carried by the bail and normally in position in the opening in the fork and in position to lock the bail and fork together independent of said first-mentioned locking means, and lugs on the hooks in position to engage the safety-bolt for removing it from the opening in the fork when the bail is supported by the hooks.

4. In a package-carrier, the combination with a fork, a basket-bail, means for connecting said bail and fork together, and hooks substantially as described for supporting said bail, of a safety-bolt carried by the bail and normally locking the same and fork together independent of the first-mentioned connecting means, another safety-bolt carried by the bail and adapted to lock the hooks and bail together when the latter is released from the fork but held out of engagement with the hooks by the fork, and means on the hooks for disconnecting said first-mentioned safety-bolt from the fork.

5. In a package-carrier, the combination with a car-fork, a basket-bail and means connecting the bail and fork together, of hooks substantially as described having recesses therein to receive the bail, a safety-bolt carried by the bail and adapted to lock the bail and fork together upon failure to act of said first-mentioned connecting means, and a lug on one or both of said hooks for holding the safety-bolt out of engagement with the fork.

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

HENRY MATHIAS WEAVER.

Witnesses:
WM. MCE. WELDON,
N. P. BIGELOW.