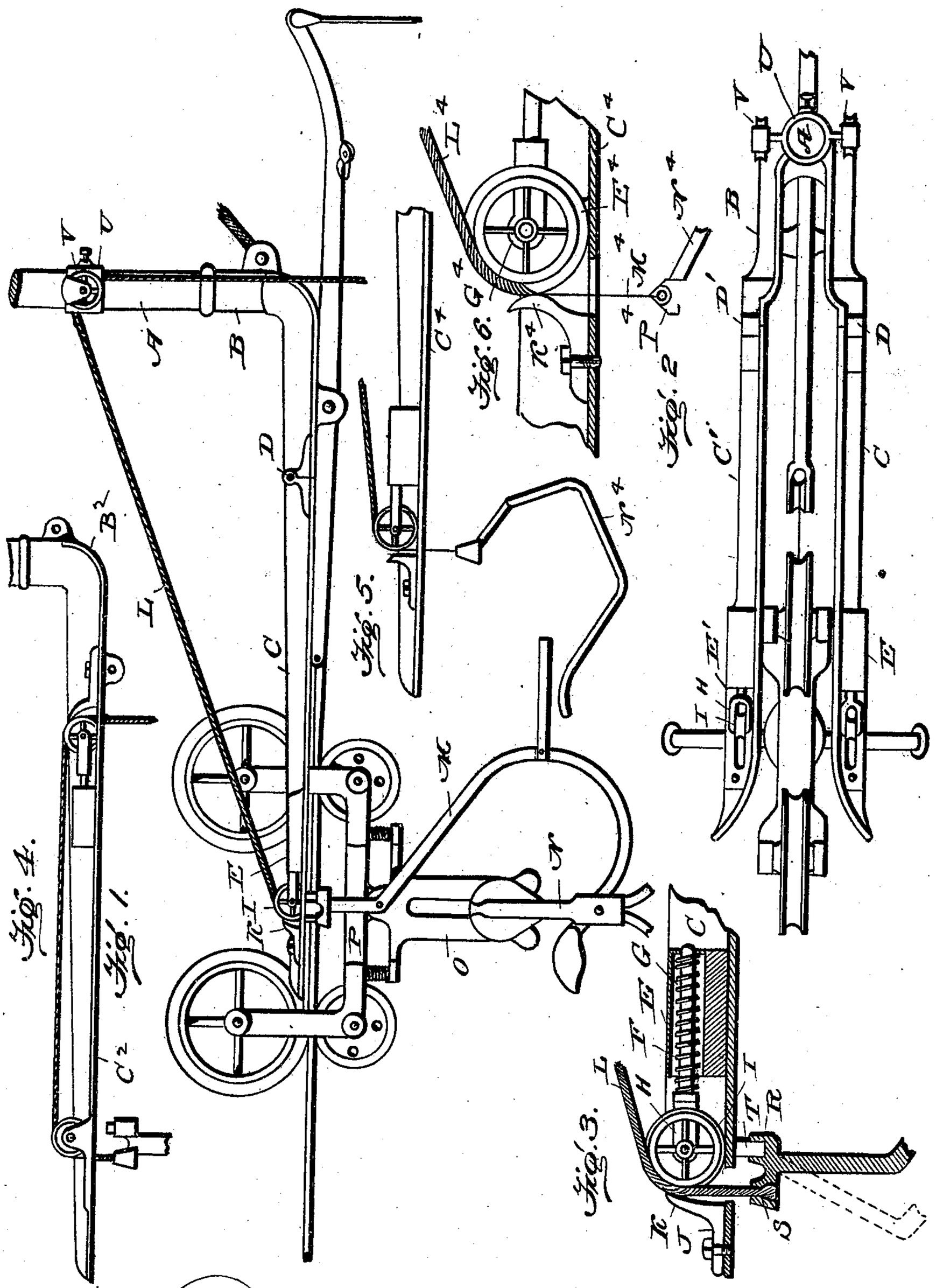
(No Model.)

J. R. POLLOCK.

STORE SERVICE APPARATUS.

No. 502,012. Patented July 25, 1893.



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UNITED STATES PATENT OFFICE.

JAMES R. POLLOCK, OF MANSFIELD, OHIO.

STORE-SERVICE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 502,012, dated July 25, 1893.

Application filed January 18, 1893. Serial No. 458,772. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. POLLOCK, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Store-Service Apparatus; and I do 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 improvements in store-service apparatus, of the class known as package-carriers and the objects of my invention are first, to provide a means whereby a basket can be attached to or detached from the car; second, to so construct the device that it will be impossible for the basket to fall from the hooks when attaching or detaching the same which is common in most of the devices now in general use; third, to obviate the necessity of using drop-weights for the purpose of lowering the hooks to a given point; fourth, to make a cheap, durable and efficient means for the purpose stated.

In the accompanying drawings Figure 1 is a side elevation of one station of a package-carrier system embodying my invention. Fig. 2 is a top view of same. Fig. 3 is an enlarged view of a portion of the hook and car guide showing the general construction of a cord-clamping device, which is for the purpose of holding the hooks in the position shown, without the use of weights at the opposite ends of the cord to balance the same. Fig. 4 is a side elevation of the outer station foot showing the cord-clamping device in a different position. Figs. 5 and 6 are modifications which will be fully described hereinafter.

Similar letters refer to similar parts throughout the several views.

In the accompanying drawings A indicates a standard or hanger. To its lower end is attached the foot B.

C and C′ indicate two parallel bars which are hinged to the foot B by the hinges D and D′. Near the outer ends of the parallel bars are the hollow cases or tubes E and E′ in each of which is placed a bar or rod F. The said bar is surrounded with the coil spring G. The outer end of each of said bars is bifurcated and in said ends is journaled the pulley I.

J indicates a friction device which may be attached to or form part of the parallel bars C. The said brake is constructed with the curved upwardly projecting arm K. This arm is curved at the upper end to conform to the circumference of the pulley.

L indicates the cord which is used for raising and lowering the basket when necessary.

M indicates the basket-hooks, for attaching or detaching the basket bail N from the catch O, pivoted or otherwise attached to the lower bar of the car frame P. The said hooks are constructed at their upper ends with the sockets R and S. The socket R is provided with the rubber plug T′. The socket S is for the purpose of holding the end of the cord.

Secured upon the standard A is the sleeve U which is provided upon each side with a pulley V over which passes the cord L.

It will be readily seen that when the operator pulls downward upon the cord L a forward tilting motion is given to the hooks N, as shown in dotted lines, Fig. 3. The cause of this movement of the hooks, is the rubber plugs which are in contact with the under side of the parallel bars C and C′. The inner end of cord L is secured in socket S and the part of the hook having said socket is somewhat shorter than the rubber stop and is in advance of the same. Hence, when a tension is put upon the cord a forward motion is given to the lower portion of the hook, forcing the same through the basket bail N. A farther downward motion upon the cord W raises the hook and parallel bars C and C′ until the lower portion of the hooks engages the under side of the basket-bail and disengages the same from the catch O. The weight of the basket suspended by the hooks and the tension upon the cord L pulls against the pulley I compresses the springs G removing all friction from the cord L. When the operator raises the basket and attaches the same within the catch O, and the operator releases the tension upon the cord L the parallel bars C and C′ return to their normal position. The expansion of the springs G forces the pulleys forward clamping the cord L between the pulleys and the upwardly projecting arm K holding the hooks in the position shown. This description I have fully illustrated in Figs. 1, 2 and 3 (Sheet 1).

The catch O referred to is substantially the

same as used in the patent of Barr, No. 490,533, and the propelling mechanism is also used in the Barr and other patents.

In Sheet 2 I have shown several modifications. The first one that I will describe is shown in Fig. 4. This device is to do away with the pulleys upon the hanger or support. They are placed in the parallel arms. In the place of the friction device placed in front as shown in Fig. 1 it is placed near the foot. In the front is secured the pulleys. In this device the parallel bars C^2 are not hinged as shown in Fig. 1 but form part of the foot B^2. The manipulation of the cord is the same as in Fig. 1.

Fig. 5 shows a mechanism similar in many respects to that shown in Fig. 1, and Fig. 6 is an enlarged view of same. The same tension pulley is used also the friction brake. All the difference between the two are the attachment M^4 or connection between the hooks N^4 and cord L^4 and the construction of the upper portion of the hook. In this device a thin cord of any suitable material is attached to each of the cords L^4. A single socket P^4 is formed upon the upper ends of each of the hooks. The said hooks when at rest, hang a certain distance below the arm C^4. The operation is similar to the one described in Fig. 1 except when the operator has released the cords L^4 after the basket is attached the hooks drop the proper distance required or until the large cord L^4 comes in contact with the friction arm K^4 which checks the downward motion of the hooks as shown.

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

1. In a store service apparatus, the combination of a hanger, a foot piece secured thereto, the parallel arms connected to the foot piece, the cases or tubes carried by the arms, the rods in said tubes carrying pulleys, springs coiled around the rods, the cords passing over the pulleys, the hooks connected to the cords, and the brakes for engaging the cord, as and for the purpose described.

2. In a store service apparatus, the combination of a hanger, a foot piece carried thereby, arms connected to the foot piece, a propelling device, spring actuated rods carried by the arms, pulleys carried by said rods, cords passing over the pulleys, hooks connected to the cords and having buffers or cushions at the upper end adjacent to the point of connection of the cords and a car and basket connected thereto and having a bail adapted to be engaged by the hooks, all adapted to serve as described.

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

JAMES R. POLLOCK.

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