

1,124,207.

Fig.4

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# UNITED STATES PATENT OFFICE.

LOUIS BUJESE, OF NEW YORK, N. Y.

STORE-GOODS LIFTER.

1,124,207.

Specification of Letters Patent.

Patented Jan. 5, 1915.

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*To all whom it may concern:*

Be it known that I, LOUIS BUJESE, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Store-Goods Lifter, of which the following is a full, clear and exact description.

This invention relates to hoisting and has particular reference to lifters adapted more particularly for the manipulation of bottles or cans of commodities in stores or the like.

Among the objects of this invention is to so improve this class of devices as to make it easier and more reliable in use than those usually employed.

The foregoing and other objects of this invention will hereinafter be more fully described and claimed and illustrated in the drawings forming a part of this specification in which like characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a side elevation of a preferred embodiment of this invention; Fig. 2 is a rear elevation of the same; Fig. 3 is a plan view; and Fig. 4 is a detail showing the relation of the actuator to the gripping arms when the arms are locked open.

The several parts of the device may be made of any suitable materials, and the relative sizes and proportions, as well as the general design of the mechanism, may be varied to a considerable extent without departing from the spirit of the invention hereinafter more fully set forth and specifically claimed.

In carrying out this invention in a preferred embodiment I provide a pole or staff of any suitable length adapted to enable the operator to reach up to any high shelf for the purpose of removing cans or packages of goods therefrom or for similar purposes. To the upper end of said staff is connected a head 11 having a horizontal flat piece at the top to which are pivoted a pair of arms 12 and 13 by means of pivots 14, said arms being adapted to move toward and from each other simultaneously in the same horizontal plane. The front ends of the arms constitute fingers 15 which may be curved to conform to the parcels to be manipulated, and they may, if desired, be covered with rubber or other material indicated at 16 to prevent abrasion of the goods or slipping thereof while being carried.

Said arms are connected to a contractile spring 17 so arranged as to cause the fingers 15 to approach each other under normal conditions, the strength of the spring being sufficient to insure a reliable grip between the fingers and the article being carried thereby.

The rear ends of the arms terminate not far distant from the pivot screws 14 and cooperate with a disk-like actuator 18 journaled on a pivot pin 19 upon the rear portion of the head 11 and movable through substantially 90 degrees in a vertical plane at right angles to the plane of the arms 12 and 13. Said actuator is provided with a pair of spiral slots 20 into or through which the rear ends of the arms project. The said ends of the arms are preferably provided with antifriction rollers 21 whereby the friction between the edges of the slots 20 and said arms is reduced to a minimum during the operation of the device. The normal position of the parts is shown in Fig. 2 with the roller ends of the arms located at those ends of the slots 20 farthest from the pivot 19. Any suitable means may be used to forcibly rotate the actuator so as to cause the roller ends of the arms to approach the center of the actuator, as shown in Fig. 4, for the purpose of spreading the fingers 15 against the tension of the spring 17. To this end I provide a finger piece or lever 23 pivoted at one end at 24 to the lower end of the staff and having a wire or rod 25 extending thence into pivotal connection at 26 with a lug 27 constituting an extension or part of said actuator.

Upon depressing the finger piece 23 to a certain extent, the actuator will be rotated to a corresponding extent and the outer edges of the slots 20, acting upon the rollers 21, will cause the fingers 15 to be separated so as to grasp a package. Under normal conditions, especially if the lever 23 is not depressed to its full extent, the action of the spring will restore or tend to restore the parts to the normal position shown in Figs. 2 and 3. If desired, however, the extreme inner ends of the slots 20 may be formed substantially concentric with the pivot 19 as shown at 20', whereby, when the actuator is rotated to the maximum extent, as shown in Fig. 4, the force of the spring acting to cause the movement of the rollers 21 in radial directions with respect to the actuator, said rollers will bear directly

against the short concentric portions of the slots and hence will have no camming effect to restore the actuator to normal position. A slight upward touch or thrust, however, upon the finger piece 23 will start the rollers from and beyond said concentric portions of the slots. The purpose of this construction is to enable me to lock the arms apart temporarily so as to reach with the utmost facility to elevated places without being obliged to maintain a constant application of force upon the finger piece.

At 28 I show a shelf or platform pivotally connected to the staff 10 and adapted to swing laterally to one side or the other from the vertical plane of the aforesaid arms. The purpose of this shelf is to constitute a positive support for a heavy bottle or the like which is being manipulated by the lifter. By pivoting the shelf so as to swing around the axis of the shaft it is made possible to avoid obstructions, such as the main store shelves or the like, while in use. The shelf may be caused to assume any desired position with respect to the arms 12 and 13, by means of a hub 29 which surrounds the staff 10.

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

1. In a store goods lifter, the combination with a staff and a head secured at the upper end thereof, of a pair of arms pivoted to said head for movement in opposite directions in

the same plane, a spring acting upon said arms tending to force them in one direction, an actuator cooperating with said arms and serving to force said arms in the opposite direction, said actuator comprising a disk-like member having a pair of slots into which the arms extend, each slot being spiral at one end and concentric with the pivot of the actuator at the other end, and means extending from the lower end of the staff to said actuator.

2. In a store goods lifter, the combination of a staff, a head connected to the upper end thereof and having a horizontal upper face, a pair of arms pivoted on said face and movable simultaneously toward and from each other in the same plane, a spring serving to force said arms toward each other, an actuator comprising a disk journaled in a vertical plane at the rear portion of said head, said actuator having a pair of spiral slots into and through which the rear ends of said arms project, and means operable from the lower end of the staff to rotate said actuator so as to cause the movement of the arms against the tension of said spring.

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

LOUIS BUJESE.

Witnesses:

GEO. L. BEELER,  
GEO. H. EMSLIE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."