May 20, 1930. I. W. SMITH 1,759,524

DEVICE FOR LIFTING GOODS FROM SHELVES

Filed Aug. 3, 1928

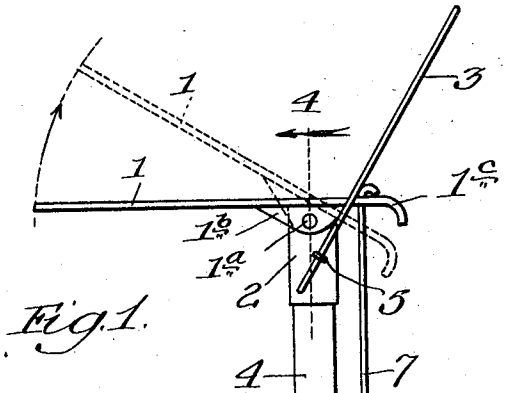


Fig. 1.

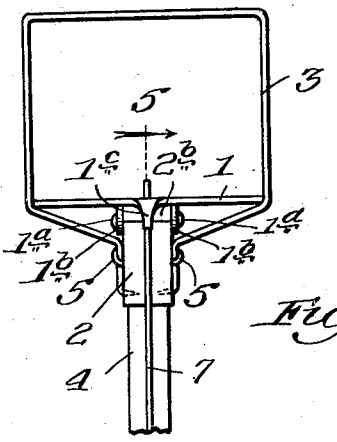


Fig. 2.

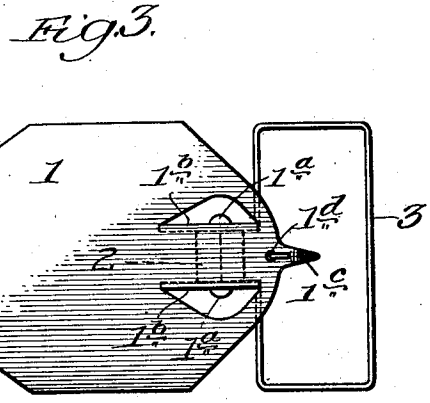


Fig. 3.

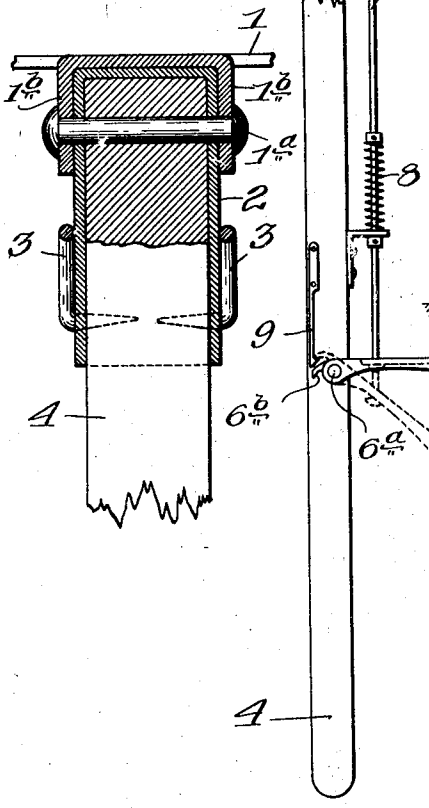
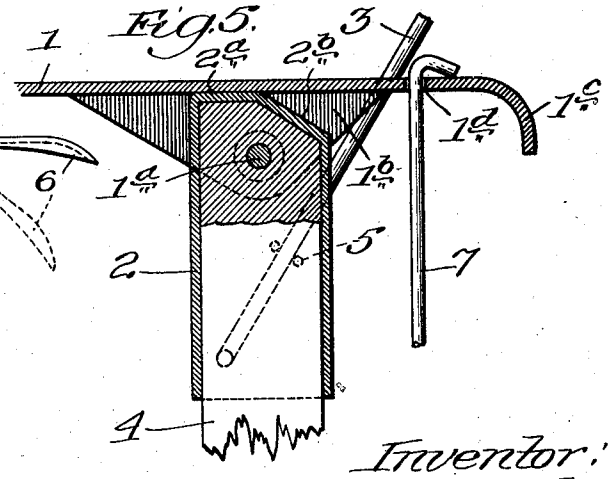


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE

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DEVICE FOR LIFTING GOODS FROM SHELVES

Application filed August 3, 1928. Serial No. 297,161.

This invention relates to a device for removing goods from shelves and may be conveniently used in grocery stores, and the like, where the goods are commonly piled upon shelves beyond the reach of the clerk. It consists of a device whereby the goods may be quickly and effectively removed without danger of dropping.

Other objects and advantages will appear as I proceed with my specification.

A convenient embodiment of the invention is shown in the accompanying drawings, in which—

Figure 1 represents a vertical elevational view of the device; Fig. 2, a rear elevational view of the upper portion of the device; Fig. 3, a horizontal plan view; Fig. 4, a vertical section, taken on the line 4 of Fig. 1; and Fig. 5, a vertical enlarged section, taken on the line 5 of Fig. 2.

Referring in detail to the drawings: 1 represents a horizontal shelf or platform mounted on a cap 2 secured to the upper end of a stock, or handle, 4 and adapted to pivot thereon through the medium of pivot 1^a. Platform 1 may be of any convenient outline, as may best suit the size of the goods being handled. The platform is secured to the pivot 1^a through the medium of lips 1^b, formed by stamping said portions out of the main portion of the platform and bending these downwardly at right angles to the plane of the platform. A hole for the receipt of the pivot 1^a may be conveniently cut in each lip at the time it is stamped out of the body of the platform.

A stationary back member 3, inclined at an offset angle to the vertical axis of the handle 4, is rigidly secured to the cap 2 and cooperates with the platform 1 to form an angular trough for the receipt of the goods. This back member may be conveniently formed, as shown in the drawings, by bending a rigid bar or wire into a rectangular form and bending the extremities thereof so as to engage the cap 2. Staples 5 may be used to fix the back more securely to the cap.

As shown in Figs. 1, 3 and 5, the horizontal platform 1 includes a tapered portion 1^c extending beyond its point of support and through the open back member 3. This tapered portion is bent into hook form at the extremity of the taper, thereby providing a hook for the support of the device while not in use.

The tilting of the platform 1 is effected by means of a lever 6, fulcrumed at 6^a on the lower portion of the handle 4 and connected to the platform through the medium of a rod 7 which extends through a hole 1^d in the platform 1. A spring 8, associated with rod 7, normally holds rod 7 and lever 6 in a raised position. The tilting is effected by merely depressing the handle 6 against the resistance of the spring 8 and securing it in a fixed position by any suitable means such as, for example, by the dog locking mechanism 6^b and 9. The operator merely shoves the flexible dog 9 forward and out of engagment with the tooth 6^b, whereupon the platform 1 swings back into its normal position.

The detail of the pivoting mechanism, shown in Fig. 5, illustrates the manner in which the platform 1 pivots upon the cap 2, it being noted that in its horizontal position the platform is rendered stable and firm by contact with the upper horizontal surface of the left-hand portion of the cap, as shown at 2^a. While in its tilted position, it is similarly held firm and stable by contact with the inclined surface 2^b.

The operation of the device will be readily understood from the foregoing description. When wishing to remove a package, the operator simply inserts the horizontal shelf or platform 1 under the package to be removed and then depresses the lever 6, whereby the platform is swung in a clockwise direction into a position at right angles to the supporting back 3. The package is thus brought to rest in the trough-like container thus formed in a manner similar to that in which bricks are held in a brickcarrier's hod. The package may then be lowered and removed without danger of dropping.

The foregoing detailed description has been given for clearness of understanding only and no unnecessary limitations should be understood therefrom, but the appended

claims should be construed as broadly as permissible, in view of the prior art.

What I claim as new, and desire to secure by Letters Patent, is:

1. A device for removing goods from shelves comprising, a stock, a shelf or platform pivotally mounted on said stock, a back member rigidly secured to said stock and offset at an angle from the vertical axis thereof, and means for tilting said platform into a position substantially at a right angle to said back member.

2. A device for removing goods from shelves comprising, a stock, a shelf or platform pivotally mounted on said stock and extending normally at a right angle to the vertical axis thereof, a supporting back rigidly mounted on said stock and inclined to the vertical axis thereof, and means for tilting and securing said platform in a position substantially at a right angle to said supporting back.

3. A device for removing goods from shelves comprising, a stock or mounting handle, a shelf or platform pivotally secured to said stock and extending normally at a right angle to the vertical axis thereof, a rigid back member affixed to the stock and offset at an angle to the vertical axis of said stock, said platform and back member cooperating to form a trough for the retention of the goods, and a lever-control secured to the lower portion of said handle and adapted to swing said platform into a position substantially at a right angle to said back member.

4. A device for removing goods from shelves comprising a stock, a shelf or platform pivotally mounted on said stock, a back member rigidly secured to said stock and offset at an angle to the vertical axis thereof, and means for tilting said paltform into a position substantially at a right angle to said back member, said shelf or platform having an edge portion projecting through said back member and bent into hooked form at its tapered extremity.

IRVING W. SMITH.