

(No Model.)

D. D. BROWN.

DEVICE FOR HANDLING CANS AND BOTTLES.

No. 370,179.

Patented Sept. 20, 1887.

Fig. 1.

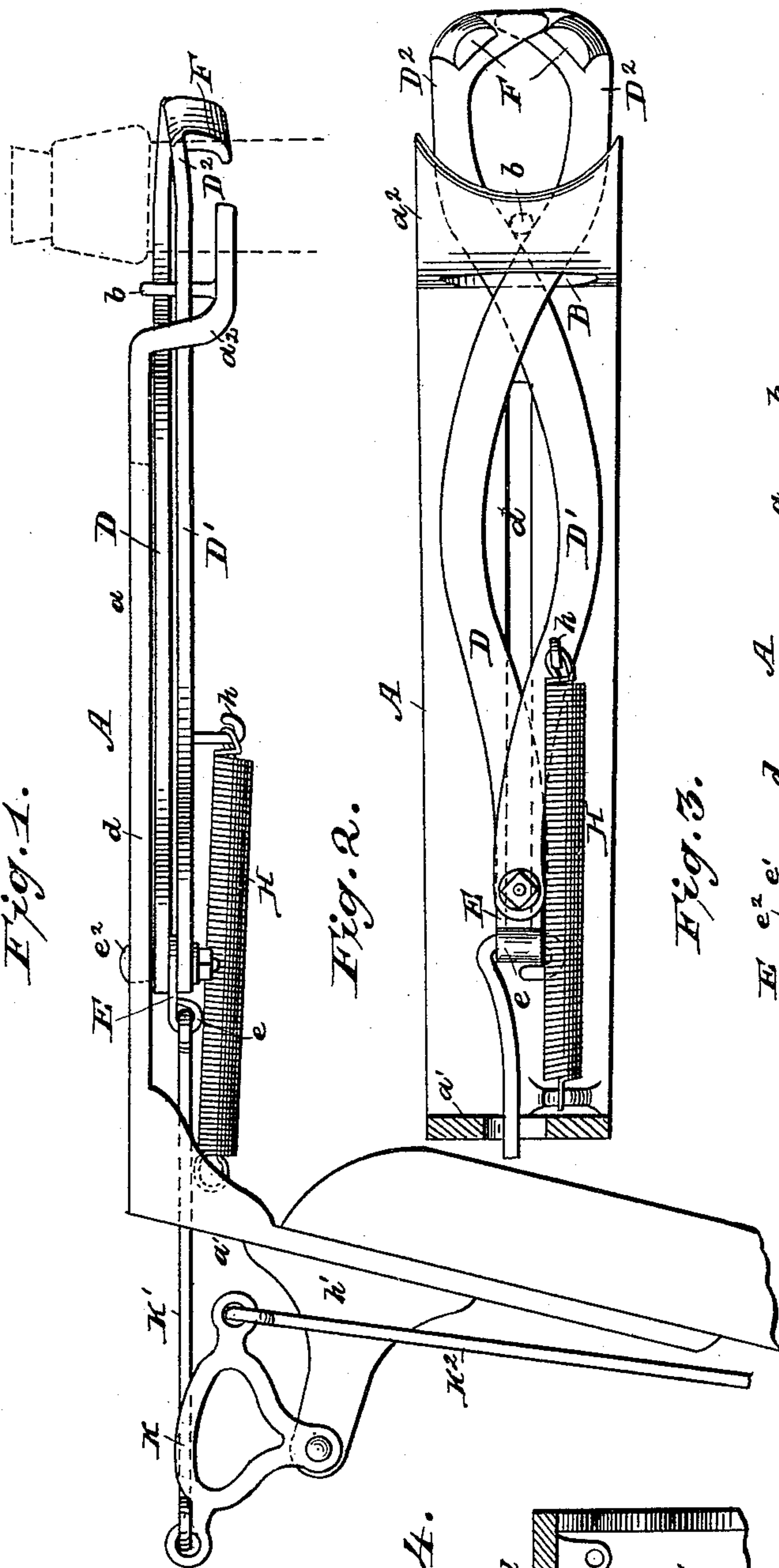


Fig. 2.

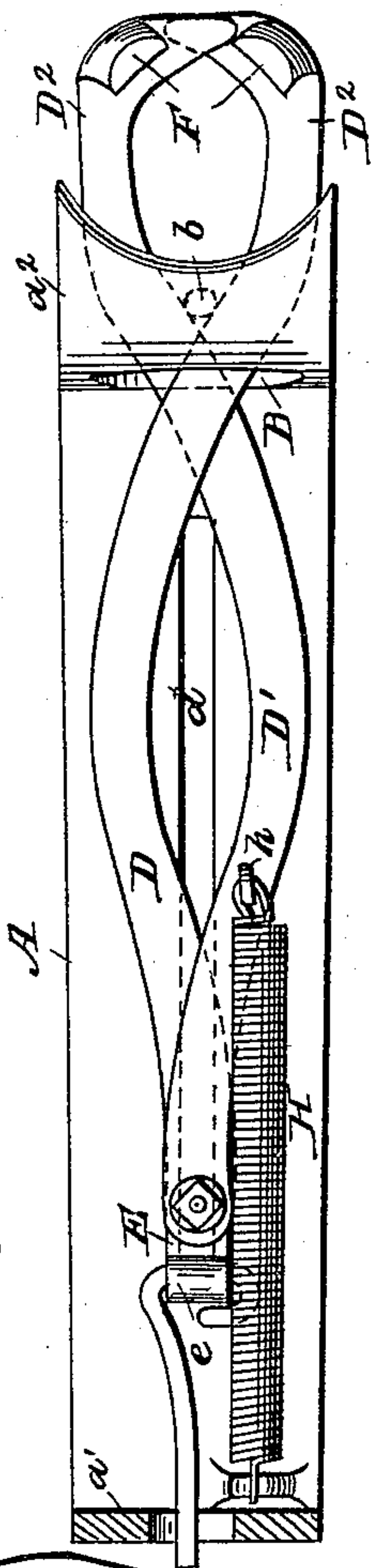


Fig. 3.

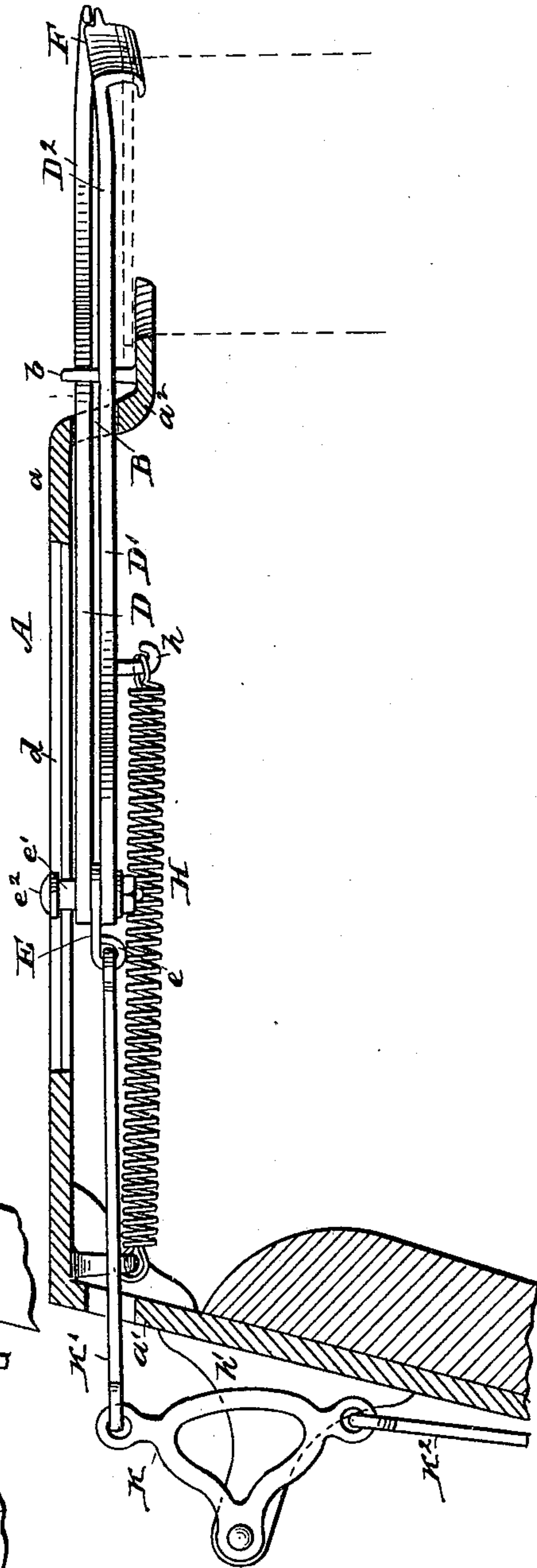
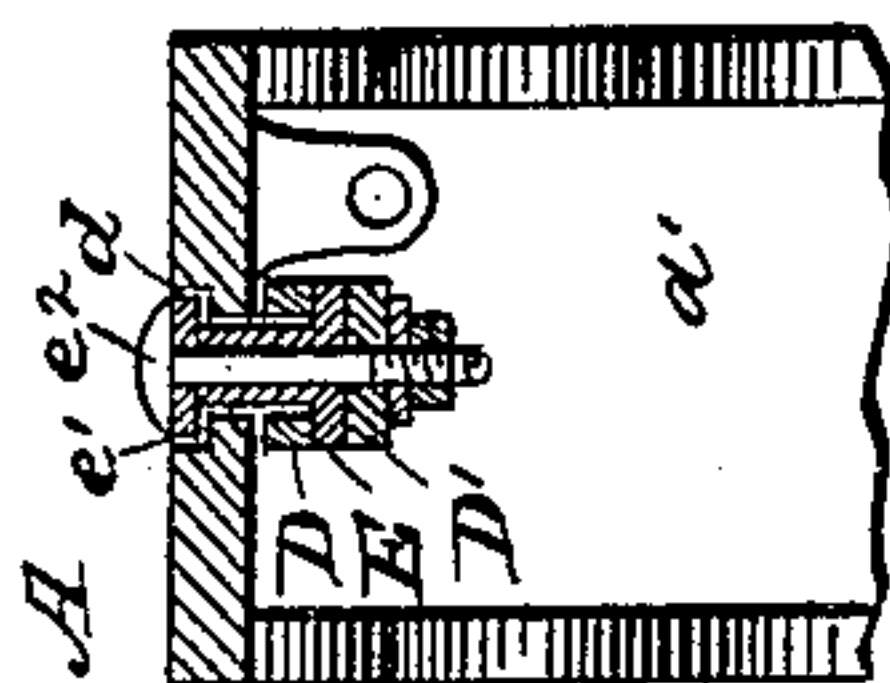


Fig. 4.



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DEVICE FOR HANDLING CANS AND BOTTLES.

SPECIFICATION forming part of Letters Patent No. 370,179, dated September 20, 1887.

Application filed April 14, 1887. Serial No. 234,776. (No model.)

To all whom it may concern:

Be it known that I, DAVID D. BROWN, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Device for Handling Cans and Bottles, of which the following is a full, clear, and exact description.

My invention relates to a device for handling cans and bottles, and has for its object to provide a device whereby cans, bottles, and similar goods may be readily and safely removed from shelves above the operator's head and as safely replaced or stacked thereon.

The invention consists in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the device, illustrated as grasping a bottle; and Fig. 2 is a bottom plan view thereof. Fig. 3 is a central vertical and longitudinal section illustrating the device as grasping a can, and Fig. 4 is a transverse vertical section through the device.

In carrying the invention into effect the frame A is preferably made of a single thin casting, and consists of the horizontal body *a*, the angular projection *a'*, integral with the rear end, adapted to extend downwardly and rearwardly, and the downwardly and forwardly curved lip *a''*, integral with the forward end of the body, the said lip *a''* being provided with an integral central and upwardly-projecting pin, *b*, and a rearwardly-beveled concave front surface.

At the intersection of the lip *a''* with the body a slot, B, is cast, through which project concavo-convex arms D D', pivoted at their inner ends, one above the other, in the rear of the said body, which body is provided with a central longitudinal slot, *d*, adapted to receive the pivotal connection of said arms.

Between the arms D D', at their pivotal point, a plate, E, is inserted, adapted to extend rearward and provided with an eye, *e*. The said plate is also provided upon its upper side with an integral lug, *e'*, adapted to pass up through the upper arms and travel in the

slot *d* of the frames, the arms and plate being held in engagement by a bolt, *e''*, extending through the lug *e* and the lower arms, as shown in Fig. 4.

Each arm D D' is provided with oppositely-curved extensions D² outside the frame at the front, the ends of which extensions are so beveled, as shown in Fig. 2, as that one will close upon the other. Inwardly-curved lugs F are made integral with the outer side extremities of the extensions, having their edges sharpened and in alignment with the sharpened concave edge of the lip *a''*, as shown in Fig. 3, the lugs and lip being adapted to grasp a can, as shown in Fig. 3, and the inner concave edges of the extensions D² to grasp the neck of a bottle, as illustrated in Fig. 1.

A coil-spring, H, is attached at one end to a lug, *h*, integral with the lower arm, D', and at the other to a staple or other device upon the under side of the body at the rear, which spring is adapted to control the action of the said arms.

To the rear of the angular projection *a'* a horizontal bracket, *h'*, is attached, having pivoted thereto a bell-crank, K, to the outer end of which crank a rod, K', is secured, the other end passing through the projection *a'*, being fastened in the eye *e* of the plate E, and to the inner end of the bell-crank another rod, K², is secured, adapted to pass down parallel with the handle, which is attached to the inner face of the projection *a'*, to a point near the end of said handle. A chain may be substituted for the rod K', if desired.

In operation, when the rod K² is pulled down, the crank K is turned, which, by means of the connecting-rod K', moves the arms D D' outward. As the said arms move forward, the pin *b*, engaging their convex edges, causes them to spread apart, and if a can is to be grasped the end thereof is brought in line with the lip *a''* and the lugs F, whereupon the crank is released, and the arms, being carried back by the spring, cause the said lip and lugs to engage and hold the can, as shown in Fig. 3. When a bottle is to be lifted up or down, the opposing curved edges of the arm-extensions D² are made to engage the neck, as shown in Fig. 1.

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

1. The combination, with the frame A, the concavo-convex arms D D', pivoted to slide in said frame and provided with oppositely-convex extensions D², having integral lugs F, and the guide-pin b, of the spring H, a crank, K, pivoted upon the outer side of the frame, a connection between said crank and arms, and means for operating said crank, substantially as shown and described.
2. The combination, with the frame A, provided with a lip, a², having a concave sharp forward edge, and a handle attached at the rear end of the said frame, convex-concavo arms D D', pivoted to slide in said frame, provided with oppositely-curved extensions D², having integral lugs F in the same plane with the concave surface of the lip a², and the guide-pin b, attached to said lip, of the plate E, the spring H, a crank, K, pivoted upon the outer side of said frame, a connecting-rod, K', uniting said crank and plate, and means for operating said crank, substantially as shown and described.

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Witnesses:

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