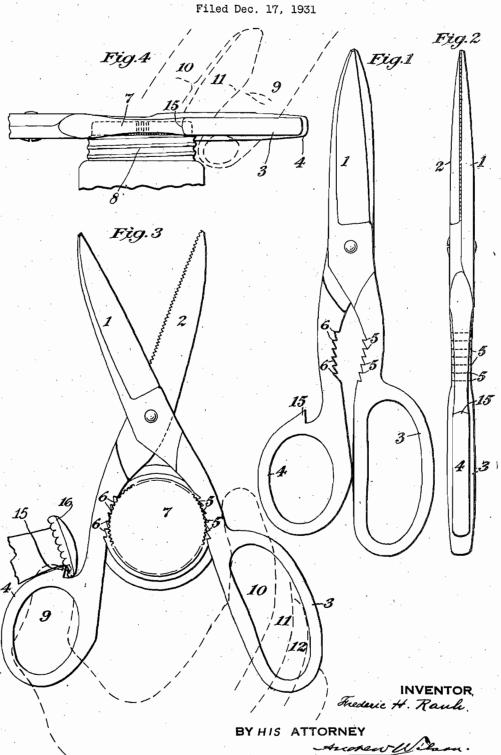
BOTTLE CAP REMOVER



UNITED STATES PATENT OFFICE

2,027,785

BOTTLE CAP REMOVER

Frederic H. Rauh, South Orange, N. J., assignor to J. Wiss & Sons Co., Newark, N. J., a corporation of New Jersey

Application December 17, 1931, Serial No. 581,549

1 Claim. (Cl. 65-46)

My invention relates to a tool adapted to facilitate the operation of a kitchen worker, or housekeeper in removing crimped bottle caps from bottles and the like.

Objects of my invention are to provide such a tool with means for engaging within the lower edge of the cap and pulling it away from the bottle neck, by movement in one direction, and for prying the cap up and off the bottle neck by 10 movement in a reversed direction.

Other advantages of my invention are herein-

after pointed out.

In the drawing Fig. 1 is a plan view of my improved tool; Fig. 2 is an edge view of the same; 15 Fig. 3 is a plan view showing the tool applied to the screw cap of a container; and Fig. 4 is a side elevation of the same, the blades of the shears being broken off to save space.

In all the figures the same parts are designated

20 by the same reference numerals.

My improvements are shown embodied with the elements 1, 2 of a conventional shears, the shank of the element I being provided with a two or more finger bow 3; while the shank of the 25 element 2 is provided with a thumb bow 4. By these bows the tool is normally grasped in the right hand by sliding the thumb through the bow \$ and the second and third or more fingers through the bow 3, the first finger usually lying 30 ahead of the bow 3, and the fourth finger usually lying behind it. This is the position in which such shears are designed to be gripped by the user for ordinary cutting operations; and it is, hence, the position in which a person picking up the 35 shears for any use will naturally grasp them.

A tool of this class is frequently required for removing crimped-on bottle caps. I have, therefore, provided it with means for gripping and prying off such a cap, which means is adapted to 49 fall into operative position when the grip of the right hand is changed from the bow and to the blade end of the tool, in the normal and natural movement of shifting such a hand grip. This I accomplish by providing the bow 4 with a hook 45 element 15 adapted to be inserted beneath the edge of the cap 16, so that the cap can be pried off by causing the outside of the shank 2 to rest against the top of the cap and then pressing the

free end of the tool downward. This position of 50 the hook places it where it will not interfere in any way with the normal gripping of the tool in the hand; and when the tool is held or picked up in the normal way by the right hand with the thumb naturally in the bow 4 and the fingers 55 associated with the bow 3, and it is desired to use the cap remover 15, the holder of the tool naturally places it flatwise in the palm of the left hand with the bow 3 lying to the right, swings it toward the right hand, the fingers of which pass over the closed blades while the thumb rests 5 under them, thus positioning the tool into the grip of the right hand with the bow 4 downward and the hook #5 presented in a normal position to be slipped under the edge of the cap 16 and forced upward by the downward rocking of the 10 shank over the top of the bottle.

It is sometimes desirable in removing crimped caps from bottles to pry the lower edge of the cap away from the bead around the bottle neck, instead of simply dragging the edge of the cap 15 bodily up from around the bead, the attempt to do which may result in clinching the cap edge

in below the head.

The configuration of my cap remover adapts it for both applications. For it may not only be 20 used to pry the cap up, as above described, but, by inserting the point under the edge of the cap with the bow resting against the bottle neck and swinging the upper end of the tool away from the bottle, the bow will act as a smooth, rolling 25 fulcrum against the bottle neck and permit the point to draw the crimped edge to the cap outward from the neck, when, by swinging the tool over the bottle cap with the plain part of the shank resting on top of the cap, the cap can be 30 readily pulled off the bottle top by rocking the free end of the tool downward as already described.

The placing of the gripping elements of the tool so that they will normally fall into proper 85 operative relation when the fingers of the hand are employed in the normal and natural way in connection with the tool much facilitates its use. saves waste motion and time and causes the elements to perform both prying operations without 40delay or uncertainty of the user in positioning and applying the tool, and therefore makes it a desirable appliance for kitchen use where simplicity, certainty and expedition are of considerable importance.

I desire it to be understood that the form in which I have illustrated the application of my improvements is a preferred form, which, however, may be modified as by the use of mechanical equivalents, without departing from the spirit of 50 my invention as claimed.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:

A unitary, integral tool for removing crimped 55

bottle-caps, provided with a sharp, angular, engaging point, an extension projecting in the same direction as the point and sufficiently far beyond the bottle-cap to be firmly gripped by the hand, said extension having a single, convex and smoothly curved portion adapted to rock over the top of a bottle-cap to draw the said point upward when the said extension is pushed downward, and a smoothly and continuously, convexly curved

element in the form of an arc of an ellipse, having its greater axis parallel to the said extension, extending backward from said engaging point, and adapted to rock smoothly and evenly against a bottle neck to act as a fulcrum when the said 5 point is engaged under the edge of the bottle cap and the said extension is swung upward and away from the cap.

FREDERIC H. RAUH