

H. L. VAUGHAN.
BOTTLE OPENER.
APPLICATION FILED APR. 24, 1909.

943,759.

Patented Dec. 21, 1909.

Fig. 1.

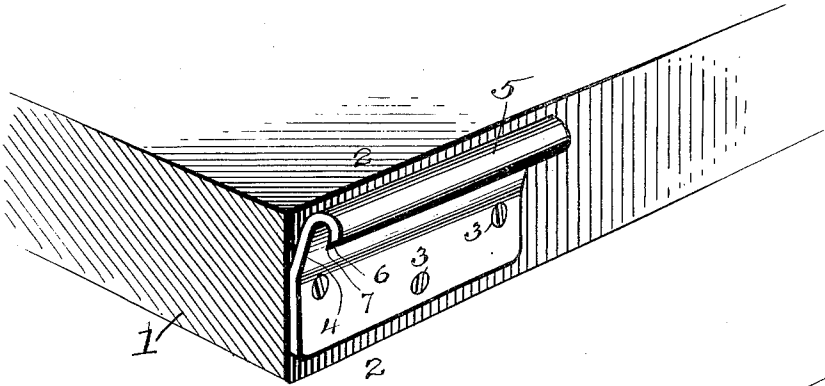


Fig. 3.

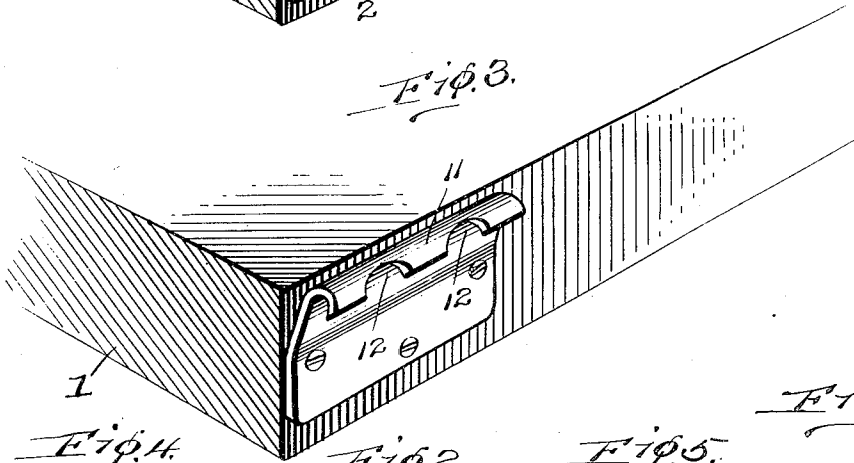


Fig. 4.

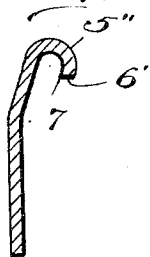


Fig. 2.

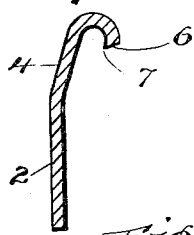


Fig. 5.

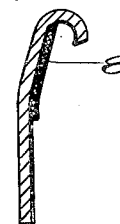


Fig. 6.

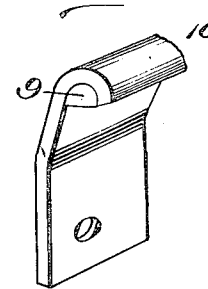
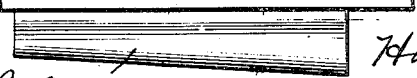


Fig. 7.



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UNITED STATES PATENT OFFICE.

HARRY LOCKWOOD VAUGHAN, OF CHICAGO, ILLINOIS.

BOTTLE-OPENER.

943,759.

Specification of Letters Patent.

Patented Dec. 21, 1909.

Application filed April 24, 1909. Serial No. 492,015.

To all whom it may concern:

Be it known that I, HARRY LOCKWOOD VAUGHAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bottle-Openers; and I do hereby 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.

This invention relates to improvements in bottle openers, and particularly to means for removing crown seal closures or crimped caps from bottles.

The object in view is the arrangement of a cap or closure opener that is permanently connected to a stationary support for receiving the end of the bottle upon which the cap is located preparatory to removing the cap.

A further object of the invention is the arrangement of an opener with an over-hanging edge beneath which the cap is placed, and beneath the edge of which the edge of the cap projects preparatory to removing the same by a pivotal movement of the bottle upon which the cap is positioned.

A still further object of the invention is the arrangement of a cap remover having an over-hanging edge with a plurality of notches or openings therein for receiving the neck of a bottle, and for engaging the cap thereof for removing the same upon a pivotal movement of the bottle.

Another object of the invention is the arrangement of an opener or cap remover with an over-hanging portion for engaging the cap of a bottle, and a cushioning member for engaging the top of the cap for preventing any injury to the bottle.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangement of parts as will be hereinafter more fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of an opener embodying the invention, secured to a support. Fig. 2 is a section through the opener shown in Fig. 1, approximately on line 2—2. Fig. 3 is a perspective view of a slightly modified form of opener to that shown in Fig. 1. Fig. 4 is a section through a slightly modified form of opener. Fig. 5 is a section through another slightly modified form of

opener having a cushioning member secured thereto. Fig. 6 is a further modified form of opener having a bracing member for holding the turned over portion firmly in position. Fig. 7 is another modified form of the invention in which the turned over portion is tapering for use with various sized caps.

Referring to the drawing by numerals, 1 indicates a support, as for instance a bar, to which is rigidly secured the cap remover. The cap remover is formed preferably out of a single piece of sheet metal, though if desired the same may be cast or otherwise formed. In constructing the cap remover a base or body portion 2 is provided through which securing means, as screws 3, are passed. An inclined or bent portion 4 extends at a slight angle from body portion 3 and is bent over and forms a substantially semi-cylindrical member 5. The edge of the semi-cylindrical member 5 is beveled to any desired extent at 6 for forming an edge 7 which extends the full length of the opener.

The opener is designed particularly to remove metallic caps of the crimped variety from various kinds of bottles. When it is desired to remove a cap of this character the end of the bottle is placed beneath edge 7 and against the bent over or angle portion 4. The bottle is then moved pivotally downward and the edge of the cap engages edge 7. As the bottle continues to move downward the movement of the cap is arrested by edge 7 and the cap is pulled or removed from the bottle and when removed the bottle is in substantially a vertical position so that none of the contents will be lost. The opener may be made of any desired length for removing any desired number of caps at the same time. Also if desired the opener may be made beveled as shown in Fig. 7, wherein the cylindrical portion 5' is beveled from one end of the opener to the other. This will permit the removal of various sized caps without difficulty.

In Fig. 4 will be seen a slightly modified form of the cap opener or remover, wherein semi-cylindrical portion 5'' is provided with an edge 7' which is formed by the juncture of edge 6' and the interior of the cylindrical member 5'', the two surfaces being preferably at a substantial right angle to each other. In this structure the metal is preferably merely stamped out with an ordinary straight cut through the metal at right

angles to the surface, and then bent over and formed into the structure shown, without any additional work, which will cause the edge 7' to be formed by a substantially right angle juncture of the surface of edge 6' and the interior of semi-cylindrical member 5'.

In Fig. 5 a slightly modified form of the invention is shown in which the cushioning member 8 is provided for preventing any possible injury to the end of the bottle. The cushioning member 8 may be made from canvas, rubber, composition matter, or any desired material that will protect the bottle. The cushioning means 8 may be used with any of the forms of the invention if desired.

In Fig. 6 a further slightly modified form of the invention is shown in which a bracing block 9 is provided in the end of the semi-cylindrical portion 10. A bracing block 9, if desired, may be placed in each end of the semi-cylindrical portion 10, and if the semi-cylindrical portion 10 is of a suitable length a bracing block as 9 may be positioned intermediate the length.

In Fig. 3 a still further modified form of the invention is disclosed, in which the semi-cylindrical portion 11 is formed with a plurality of openings 12 that are adapted to receive the ends of bottles for engaging the cap thereof for a considerable distance around the periphery. This will positively prevent any chipping of the bottle or slipping of the cap during removal. Two openings 12 are shown, but it will be evident that any desired number of openings may be provided as occasion may require.

By thus forming an opener or cap remover permanently or firmly in position, means are presented that will effectually open or remove the caps from bottles whenever desired. By the arrangement of the turned over or semi-cylindrical portion 5 of the preferred structure means are provided that will open a bottle at any desired point along the counter, the opener being arranged to extend for some considerable distance for accomplishing such object. Also by arranging the opener with the semi-cylindrical portion 5' as shown in Fig. 7 tapering all sizes of bottles may have their caps removed as readily as a standard size.

The taper in the semi-cylindrical portion 5' may be either from right to left or left to right as preferred.

What I claim is.

1. In a bottle opener, means for removing a cap from a bottle, comprising a base, a semi-cylindrical portion formed with an edge for engaging the under surface of a cap, an inclined portion connecting the semi-cylindrical portion with the base, and a cushioning member positioned on said inclined portion.

2. In a bottle opener, means for removing a cap from a bottle comprising a base, a semi-cylindrical portion formed with an edge for engaging the under surface of a cap, and an inclined portion connecting the semi-cylindrical portion with the base.

3. In a bottle opener, means for removing a cap from a bottle, comprising a base, means for securing the base to a support, a member extending at an angle to said base, and a semi-cylindrical member extending from said first mentioned member, said semi-cylindrical member being formed with a beveled edge for engaging the under surface of a cap for removing the cap when the bottle is moved pivotally.

4. In a bottle opener, means for removing a cap from a bottle comprising a base, and a turned over portion forming a semi-cylindrical edge, and a cushioning member positioned so as to extend beneath said edge.

5. In a bottle opener, means for removing a cap from a bottle, comprising a base, and a turned over semi-cylindrical portion formed with notches for receiving the neck of a bottle.

6. In a bottle opener, means for removing a cap from a bottle comprising a base, and a turned over hooked shaped portion formed with a plurality of notches for receiving the neck of a bottle, and a cushioning member extending beneath said turned over hooked shaped portion.

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

HARRY LOCKWOOD VAUGHAN.

Witnesses:

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