This invention relates to new and useful improvements in cap removers and bottle openers for bottles and cans generally known as crown caps.

More particularly, the present invention proposes the construction of an improved combination container, cap remover and bottle opener which has a crown cap remover mounted in a recess in the bottom in an inexpensive and efficient construction, and in such a manner that it will not interfere with the stacking or storing of the container.

Still further, the present invention proposes constructing the container with a bottom recess having an adjustable two part crown cap remover slidable mounted therein so that different size caps can be removed and adjustments made to secure the best leverage for any particular cap.

As a further object, the present invention proposes arranging the crown cap opener as an integral part of the bottom of a can by forming a recess in the bottom of the can with a lip extending partially over the recess to form a hook.

The present invention further proposes forming a bottle with a bottom recess having an annular groove in the sides thereof and a metal crown cap remover having an annular peripheral flange adapted to seat in the annular groove and hold the crown cap remover in the bottom recess.

For further comprehension of the invention and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a side view of a bottle constructed and arranged in accordance with the present invention, with parts broken away to show the crown cap remover and a fragment of a bottle and cap indicated in dot-dash outline to illustrate the operation of the device.

Fig. 2 is a bottom view of the structure shown in Fig. 1. Fig. 3 is a sectional view taken on line 3–3 of Fig. 1. Fig. 4 is a view similar to Fig. 1 but illustrating a modification of the present invention.

Fig. 5 is a bottom view of the structure shown in Fig. 4. Fig. 6 is a view similar to Fig. 3 but illustrating a further modification of the present invention.

The combination container, cap remover and bottle opener, in accordance with the first form of the invention illustrated in Figs. 1, 2 and 3, comprises a bottle 15 preferably of glass or plastic having a neck 16, a body 17 and a bottom 18. Neck 16 of the bottle has a neck opening 19 which is closed by a crown cap 20 in the usual manner.

Bottom 18 of the bottle 15 has a recessed portion 21 centrally disposed so as not to interfere with the stacking or storing of the bottle. A bar 22 is integrally formed on the bottom 18 in the recessed portion 21 extending across the recessed portion. Preferably, the bar 22 is molded or formed at the same time the bottle is molded or otherwise formed, and of the bottom material.

Bar 22 has a lower portion 23 of dovetail shape in cross-section with sides 24 and 25 inclined oppositely. A crown cap remover 26 is mounted on the bar 22 and disposed completely inside the recessed portion.

Crown cap remover 26 comprises a hook 27 having a channel base 28 with sides 29 which are clamped to the sides 24 and 25 of the bar 22 and a cap top rest 30 with a channel base 31 having sides 32 which are also clamped to the sides 24 and 25 of bar 22. The cap top rest 30 is spaced from the hook 27 on bar 22 and both are slidable mounted on the bar so that different size caps can be removed and adjustments can be made to secure the proper lever in a particular cap.

The modification of the present invention illustrated in Figs. 4 and 5 is characterized by the provision of a container in the form of a metal can 33 having a neck 34, a body 35 and a bottom 36. The neck 34 has a neck opening 37 which is covered by a crown cap 38.

The bottom 36 of the can 33 is formed so as to contain a centrally disposed recessed portion 39. The recessed portion 39 has a circular base 40 and the bottom 36 has a straight lip portion 41 partially extending over the base of the recessed portion to form the hook of a crown cap remover.

In the modification of the invention illustrated in Fig. 6, the container is a bottle 42. The bottom 43 of the bottle 42 has a recessed portion 44 molded or otherwise formed in it. An annular groove 45 is provided in the sides 46 of the recessed portion 44.

A metal crown cap remover 47 has an annular peripheral flange 48 adapted to seat in the annular groove 45 to hold the cap remover 47 in the recessed portion 44. The cap remover 47 also has a circular base 49, annular sides 50 and a straight lip portion 51 partially extending over and spaced from the base 49 to form the hook of the crown cap remover 47.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

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

1. A combination container, cap remover and bottle opener comprising a fluid container having a neck with a neck opening adapted to be closed by a crown cap, a body portion and a bottom, said bottom having a recessed portion with a crown cap remover therein, said recessed portion of said bottom having a bar integrally formed therein extending thereacross, said crown cap remover being mounted on said bar and disposed completely inside the recessed portion, said bar having a lower portion of dovetail shape cross-section with oppositely inclined sides, said crown cap remover being a hook having a channel base portion with sides clamped to the sides of the bar and a cap top rest with a channel base portion with sides clamped to the sides of the bar and a cap top rest being slidable mounted on the bar.

2. A combination container, cap remover and bottle opener comprising a fluid container having a neck with a neck opening adapted to be closed by a crown cap, a body portion and a bottom, said bottom having a recessed portion with a crown cap remover therein, said recessed portion of said bottom having a bar integrally formed therein extending thereacross, said crown cap remover being mounted on said bar and disposed completely inside the recessed portion, said bar having a lower portion of dovetail shape cross-section with oppositely inclined sides, said crown cap remover being a hook having a channel base portion with sides clamped to the sides of the bar and a cap top rest being slidable mounted on the bar.
cap top rest with a channel base portion with sides clamped to the sides of the bar, said cap top rest being spaced from the hook on the bar, said hook and cap top rest being slidably mounted on the bar, said container being a bottle.

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<th>Inventor</th>
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