

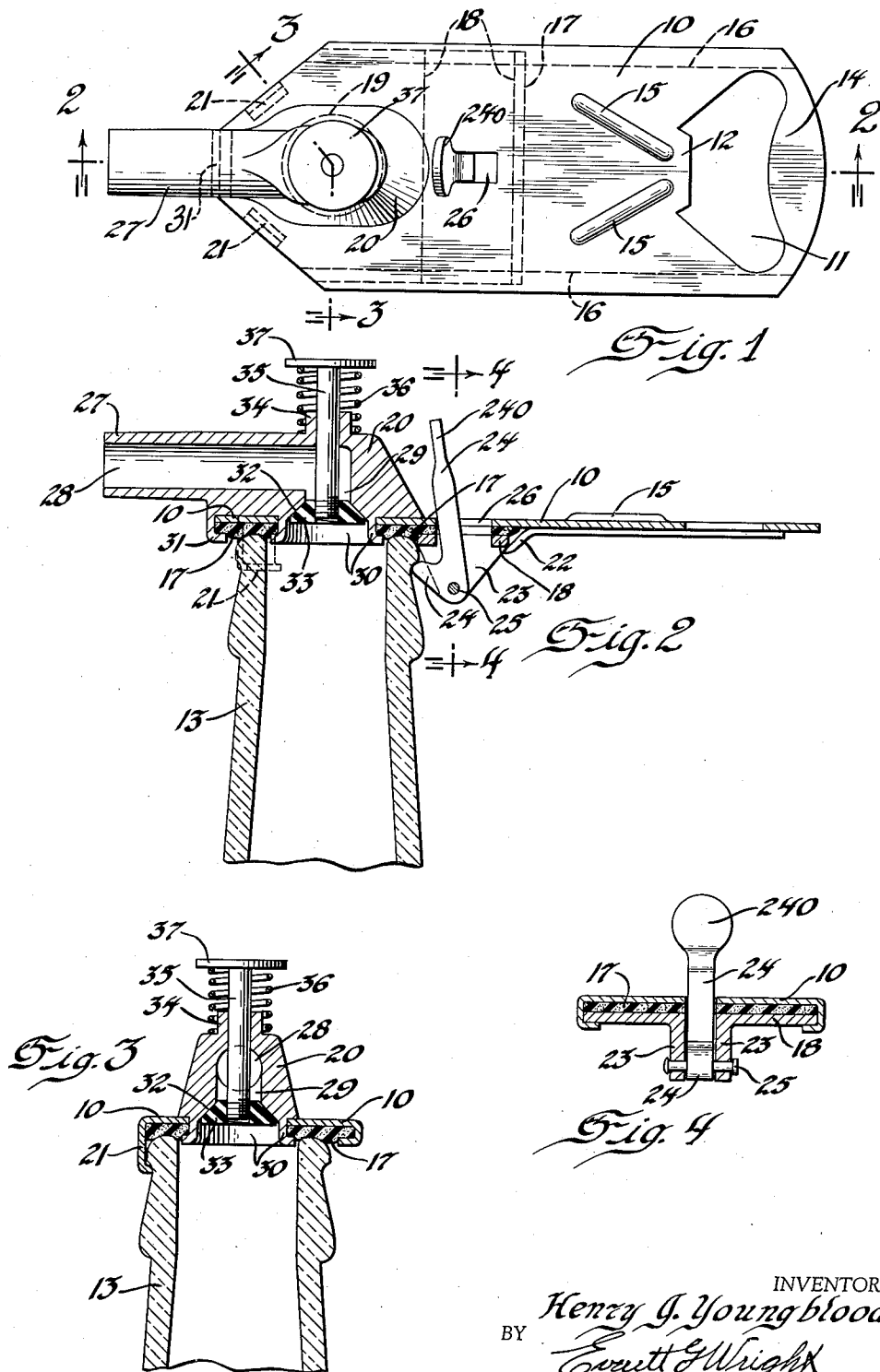
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BOTTLE OPENER, CAPPER, AND DISPENSER

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BOTTLE OPENER, CAPPER, AND DISPENSER

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7 Claims. (Cl. 215-73)

This invention relates to dispensers and in particular to dispensers adapted to be removably secured in an operating position on a bottle containing carbonated water or beverage, the said dispenser simultaneously serving as a bottle cap-
5 per.

When carbonated water or beverage is to be dispensed from bottles capped with the usual crown caps, it is desirable to remove the crown cap and
10 re-cap the bottle with a combined removable capper and dispenser which seals the bottle to prevent de-carbonization of its contents and permits a portion of the carbonated beverage to be dispensed and the remainder saved for future use.

15 In order to prevent effervescence, as little time as possible should elapse between the removal of a crown cap from a bottle of carbonated beverage and the re-capping of the same with a dispensing device. A bottle opener for removing the
20 crown cap from the bottle is combined with the improved capping and dispensing device herein disclosed so that the crown cap may be removed from a bottle and the bottle re-capped with the combined capper and dispensing device in the
25 shortest possible time and with a substantially continuous motion.

One object of this invention is to provide, in combination, means for opening a crown capped bottle, that is removing the cap therefrom, means
30 for re-capping the bottle, and means associated with said re-capping means for intermittently dispensing carbonated liquid from the bottle by the pressure created by the said contents.

Another object of this invention is to provide
35 a bottle capper and dispenser in combination with a bottle opener so arranged in relation to each other as to permit a crown cap to be removed from a bottle and the bottle to be re-capped by the bottle capper and dispenser with
40 a minimum of elapsed time between the opening of the bottle and the recapping of the same.

Another object of this invention is to provide a bottle opener, capper and dispenser having the capping means thereof reduced to a simple construction capable of being readily manipulated
45 after the use of the opener.

Still another object of this invention is to provide an inexpensive yet positive capping and dispensing device for capping crown type bottles and
50 intermittently dispensing the contents thereof after the removal of the crown cap therefrom.

Other objects of this invention will become apparent by reference to the following detailed description taken in connection with the accompanying drawing, in which:

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Fig. 1 is an enlarged plan view showing a bottle opener, capper and dispenser embodying this invention.

Fig. 2 is a longitudinal sectional view taken on the line 2-2 of Fig. 1.

Fig. 3 is a view part in diagonal section and part in cross section taken on the line 3-3 of Fig. 1 looking in the direction indicated by the arrows.

Fig. 4 is a cross sectional view taken substantially on the line 4-4 of Fig. 2 looking in the direction indicated by the arrows.

Referring particularly to the drawing wherein like numerals refer to like and corresponding parts throughout the several views, the embodiment of the invention shown in the drawing comprises, in general, a main body portion 10 having a suitably shaped aperture 11 therein forming a key 12 for prying a crown cap, not shown, from a standard crown cap bottle 13 prior to re-capping the same with the improved device herein described. The band of metal 14 at one end of the main body portion 10 serves as a fulcrum about which the key 12 is caused to rotate when removing the said crown cap from the bottle 13. The top surface of the main body portion 10 may be reinforced near the key 12 by any suitable means such as the diagonally disposed bosses 15. The longitudinal edges of the main body portion 10 are bent under as indicated by the dotted lines 16 in Fig. 1 for the purpose of reinforcing the said main body portion and to secure a resilient pad 17 and the locking lever bracket 18 to the said main body portion 10.

The main body portion 10 is provided with a suitably disposed round aperture 19 through which the dispensing head 20 is mounted thereon. The main body portion 10 extends under the dispensing head 20 to a point slightly short of the base thereof and is cut back from that point on a bevel of approximately 45 degrees except, however, for two bottle engaging hooks 21 which are formed integral with the main body portion 10 and bent as best shown in Fig. 3 to engage the neck bead of a standard crown cap bottle 13. The bottle engaging hooks 21 are so spaced in relation to the center of the aperture 19 that when a standard crown cap bottle is engaged thereby, the said bottle is centered under the said aperture 19.

The resilient pad 17, preferably of soft sponge rubber, is provided with an aperture which registers with the aperture 19 in the main body portion 10 when the said pad is cemented to the said main body portion 10 and further secured thereto

by the locking lever bracket 18 and the longitudinal edges of the said main body portion 10.

The locking lever bracket 18 is secured in its proper position by being gripped by the bent under longitudinal edges of the main body portion 10 and four crimps similar to the one designated by the numeral 22 in Fig. 2, the said crimps holding the locking lever bracket from longitudinal movement. The depending wedge shaped lever supports 23 and the complimentary wedge shaped curved lipped locking lever 24 pivotally mounted therein on the rivet 25 are so located in respect to the bottle engaging hooks 21 that when the hooks 21 are brought into engagement with the neck bead of a crown cap bottle 13 and the main body portion 10 is pushed down on the top of the bottle 13 that the bottle top is urged up into the resilient pad 17 thereby capping the bottle. When a bottle is so capped the main body portion 10 is maintained in sealed and capped relationship to the said bottle by urging the pivotally mounted locking lever 24 forward by pressing against the upper enlarged end 240 of the locking lever 24 extending through a slotted aperture 26 in the main body portion 10. The curved lip of the locking lever 24 thereby engages the neck bead of the said bottle 13 and is maintained in the engaged position best shown in Fig. 2 by the reaction of the resilient pad 17 against the top of the bottle 13.

The dispensing head 20 is provided with a preferably horizontally disposed nozzle 27 having a horizontal bore 28 connecting to a vertical bore 29 centered above the aperture 19 of the main body portion 10. The base of the dispensing head 20 sets on the top of the main body portion 10. An annular collar 30 depending from the base of the dispensing head 20 fits snugly through the aperture 19 in the main body portion 10 and through a corresponding aperture in the resilient pad 17 and is rolled or peaned over the said resilient pad 17 as best shown in Fig. 2 and thereby rivets and seals the said dispensing head 20 to the main body portion 10. The end of the base of the dispensing head 20 under the nozzle 27 is provided with a depending tab 31 which is preferably peaned over the edge of the main body portion 10 and the resilient pad 17 and thereby secures the said end of the base of the dispensing head 20 to the main body portion 10.

The base of the dispensing head 20 is beveled at the bottom of the vertical bore 29 to provide a valve seat 32 against which a valve 33 constructed of fiber, hard rubber or other suitable material is seated. The top of the dispensing head 20 is provided with an annular protuberance 34 having an aperture therein centered on the vertical bore 29 forming a guide for the valve stem 35 on the lower end of which the valve 33 is suitably secured. A spring 36 acting against the top of the dispensing head 20 and guided by the protuberance 34 constantly urges the valve 33 in its closed position shown in the drawing by engaging an operating button 37 suitably secured to the valve stem 35.

When using this improved bottle opener, capper and dispenser, the device is preferably placed in the right hand with the dispensing head 20 in the palm thereof and a bottle 13 having carbonated water or beverage therein capped with a crown cap, not shown, is preferably held in the left hand ready for opening. The crown cap is then pried off the bottle by means of the key 12, and, with a continuation of the forward motion of the right hand, the two bottle engag-

ing hooks 21 are brought into engagement with the neck bead of the said bottle 13 and the device is rotatably pressed into the horizontal position shown in Fig. 2 by a vertical rotation in which the bottle engaging hooks 21 and the near side of the neck bead of the bottle 13 serves as a fulcrum. When the main body portion 10 approaches the horizontal position shown in Fig. 2, the depending wedge shaped lever supports 23 engage the far side of the neck bead of the bottle 13 and guides the capping device into a capped and sealed position in relation to the bottle 13. The locking lever 24 is then moved into engagement with the neck bead of the bottle 13 preferably by pulling the locking lever 15 toward the dispensing head 20 by exerting pressure thereon with the index finger. Thus, the said bottle is opened and re-capped by means of this improved bottle opener, capper and dispenser in a minimum of time and with practically no loss of the carbonized beverage therein through effervescence between the opening and re-capping thereof.

It is obvious that the invention may be used otherwise than described and still obtain the advantage of quick re-capping after opening the bottle 13 by use of the bottle engaging hooks 21 and the quick-acting locking lever 24 together with the depending wedge shaped lever supports 23. Liquid in the bottle is either dispensed therefrom through the valve 33 by depressing the operating button 37 and by means of the pressure created by agitating the carbonated contents of the bottle, or the said liquid may be partly dispensed and the remainder kept in the bottle in good condition for future use.

The general shape of the combined bottle opener, capper and dispenser is such as to permit the same to be used as a hand grip when carrying the bottle 13 after the said bottle is capped thereby.

Although but one specific embodiment of this invention has been shown and described, it will be understood that various changes including the size, shape, arrangement and details of the various parts thereof may be made without departing from the spirit of my invention, and it is not intended to limit the scope thereof other than by the terms of the appended claims.

I claim:

1. In combination, a substantially flat plate having a bottle opener formed in one end thereof and bottle engaging hooks formed depending from the opposite end thereof, a resilient pad on the bottom of said plate, a locking device adapted to cooperate with said depending bottle engaging hooks and resilient pad for capping and sealing a crown type bottle, and a dispensing means on said flat plate adapted to release liquid from the said bottle.

2. In combination, a substantially flat plate having a bottle opener formed in one end thereof and bottle engaging hooks formed depending from the opposite end thereof, a resilient pad on the bottom of said plate, a locking device adapted to cooperate with said depending bottle engaging hooks and resilient pad for capping and sealing a crown type bottle, and a dispensing means having the nozzle thereof disposed opposite to the said bottle opener secured on said flat plate through an aperture in said flat plate and resilient pad adapted to release liquid from the said bottle.

3. In combination, a substantially flat plate having a bottle opener formed in one end there-

of, bottle engaging hooks formed at the opposite end of said plate integral therewith and depending therefrom, a wedge shaped locking lever pivotally mounted depending from said flat plate having the operating handle thereof extending through an aperture in said plate, a resilient pad secured to the bottom of said plate, the said plate, resilient pad, bottle engaging hooks and locking lever so spaced in relation to each other as to permit the same to engage the neck bead and seal the neck opening of a crown cap bottle, and a dispensing means on said plate having the nozzle thereof projecting opposite to the said bottle opener, the said dispensing means adapted to release liquid from said bottle.

4. A combined bottle opener, capper and dispenser comprising a main body portion having an aperture through one end thereof forming a bottle opening key, a resilient pad secured to the bottom of the main body portion at the opposite end thereof, dispensing means secured on said main body portion and through an aperture in said main body and resilient pad, and means for removably securing said main body portion in sealed relationship over the opening of a crown type bottle with the said dispensing means in operating registry therewith.

5. A combined bottle opener, capper and dispenser comprising a main body portion formed at one end to provide a bottle opener, a resilient pad secured to the bottom at the opposite end thereof, dispensing means secured on said main body portion and through an aperture in said main body portion and resilient pad, bottle engaging hooks integral with said main body portion depending therefrom, wedge shaped locking lever supports secured in depending relationship to the said main body portion and resilient pad, a curved lipped locking lever pivoted in said lever supports, the said main body portion having a slotted aperture therein through which an enlarged end of the said locking lever protrudes, the said bottle engaging hooks and locking lever being so located in respect to the dispensing means and each other as to permit the said main body portion and dispensing means to be removably secured thereby in sealed relationship over the opening of a crown type bottle.

6. A combined bottle opener, capper and dispenser comprising a main body portion having a bottle opener formed in one end thereof, integral bottle engaging hooks formed at the other end thereof and depending therefrom, a wedge

shaped locking lever pivoted in depending relationship to said main body portion and extending through an aperture therein, a resilient pad secured to the bottom of said main body portion, the said bottle engaging hooks and locking lever being so spaced in relation to each other as to permit the said main body portion to be removably secured thereby in sealed relationship on a crown type bottle over the opening thereof, the said main body portion and resilient pad having an aperture therethrough located to register with said bottle opening when the device is secured on said bottle, a dispensing means on said main body portion, a depending annular collar on said dispensing means extending through said aperture in the main body portion and resilient pad, and a depending tab on said dispensing means adjacent to one end of the main body portion and resilient pad, the said depending collar and tab being rolled or peaned into engagement with said main body portion and resilient pad for sealing and securing said dispensing means thereto.

7. A combined bottle opener, capper and dispenser comprising a main body portion having a bottle opener formed in one end thereof, integral bottle engaging hooks formed at the other end thereof and depending therefrom, a wedge shaped locking lever pivoted in depending relationship to said main body portion and extending through an aperture therein, a resilient pad secured to the bottom of said main body portion, the said bottle engaging hooks and locking lever being so spaced in relation to each other as to permit the said main body portion to be removably secured thereby in sealed relationship on a crown type bottle over the opening thereof, the said main body portion and resilient pad having an aperture therethrough located to register with said bottle opening when the device is secured on said bottle, a dispensing valve having a nozzle extending laterally therefrom on said main body portion, a depending annular collar on said dispensing valve extending through said apertures in the main body portion and resilient pad, and a depending tab on said dispensing valve adjacent to one end of the main body portion and resilient pad, the said depending collar and tab being bent into engagement with said main body portion and resilient pad for sealing and securing said dispensing valve thereto.

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