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POURING ATTACHMENT FOR BOTTLES

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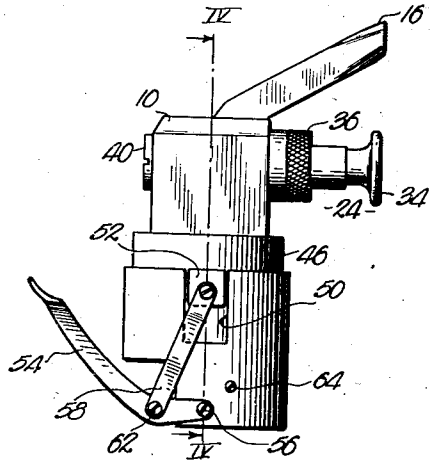


Fig. 1.

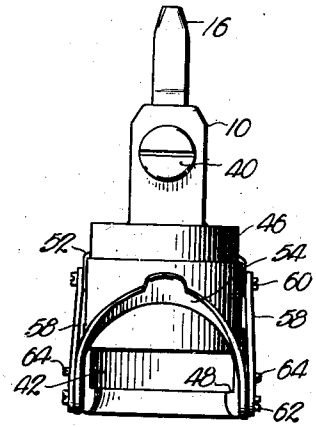


Fig. 2.

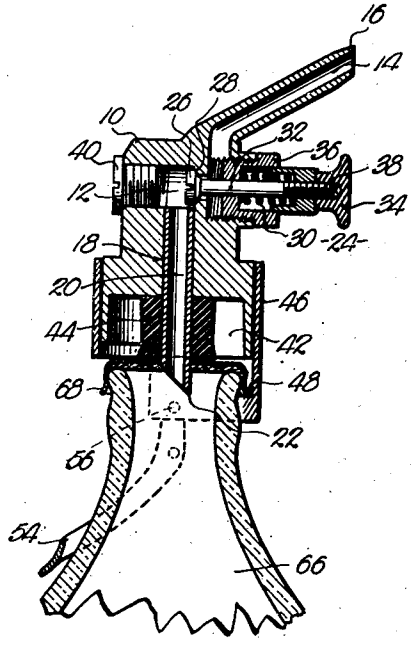


Fig. 3.

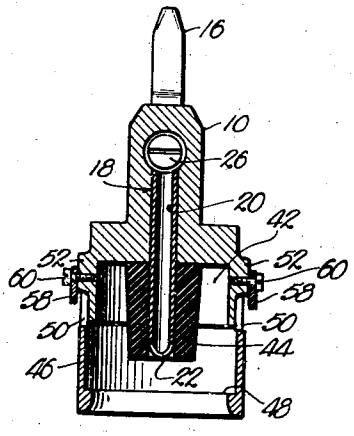


Fig. 4.

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POURING ATTACHMENT FOR BOTTLES

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3 Claims. (Cl. 222—88)

This invention relates to attachments for capped bottles of charged liquids, such as carbonated beverages and the like, and has for its primary aim to provide a pouring attachment capable of piercing the cap of the bottle as the same is moved to the operative position.

Another important aim of this invention is to provide a pouring attachment for capped bottles of carbonated liquid, having unique means for withdrawing the liquid from the bottle, by the employment of the pressure established through the medium of the charged liquid itself.

A yet further object of the instant invention is the provision of a pouring attachment for capped bottles of carbonated liquid, which attachment includes unique, novel and rugged parts for exerting the necessary force to pierce the bottle cap and to thereafter lock the attachment in the operative position where the contents of the bottle may be selectively withdrawn at will.

Other aims of the invention will appear during the course of the following specification, referring to the accompanying drawing, wherein:

Fig. 1 is a side elevational view of a pouring attachment, made in accordance with the present invention.

Fig. 2 is a front elevational view thereof.

Fig. 3 is a longitudinal vertical sectional view through the attachment and a portion of a supporting bottle; and

Fig. 4 is a longitudinal sectional view taken on line IV—IV of Fig. 1.

In the embodiment of the invention illustrated herewith, the body 10 is cast or otherwise provided with a passage therethrough that is composed of the cavity 12, bore 14 of pouring spout 16, and opening 18, into which is fitted perforating tube 20, having a sharpened pointed end 22. Flow of liquid through this passage which is composed of elements 12, 14 and 18, is manually controllable through the medium of the valve 24. A valve head 26 resting against seat 28 is yieldably held in that normal position by springs 30 coiled about stem 32, having head 34 thereon. Plug 36 slidably supports stem 32 and this said stem is connected to head 34 through the medium of screw threads 38 that permit dismantling valve 24. A plug 40 screwthreaded into cavity 12 is in longitudinal alignment with valve stem 32 and valve head 26 has a kerf therein to receive a tool.

The end of head or body 10 opposite spout 16, has a cavity 42 provided therein and tube 20 projects through this cavity and beyond the end of body 10, as shown in Figs. 3 and 4. A sealing sleeve 44 circumscribes that portion of tube 20 which projects beyond the bottom of cavity 42. In normal position sleeve 44 is coextensive with the projected portion of tube 20.

The means for securing the attachment in place comprises an anchoring collar 46 having an internal shoulder 48 coextensive with the substantially U-shaped section forming a portion of its length. The remaining portion of collar 46 is annular and circumscribes the part of body 10 having cavity 42 therein. This annular portion of collar 46 is provided with two diametrically opposite notches 50, each of which receives a boss 52 integral with body 10.

A U-shaped lever 54 has its free ends respectively pivotally attached as at 56 to the U-shaped section of collar 46. A pair of links 58 interconnect bosses 52 and lever 54 in a manner illustrated in Figs. 1 and 2. Each link 58 has its normally upper end pivotally attached as at 60 to the body 10, while the opposite end thereof is pivotally connected as at 62 to lever 54. The point of connection between links 58 and lever 54 is as shown in Fig. 1 and when the attachment is anchored in place, links 58 will lie against stops 64 to insure rigidity.

When attaching the above described device the capped bottle 66, which is provided with a crown cap 68, is brought into engagement with the U-shaped section of collar 46 by a lateral movement in order to carry shoulder 48 beneath the lip of cap 68. After so positioning the capped bottle and attachment, lever 54 is forced down from the position shown in Fig. 1 to the position illustrated in dotted lines in Fig. 3.

Such action will force the sharpened end 22 of tube 20 through cap 68 and into bottle 66. A perfect seal is established around tube 20 by sleeve 44. It is compressed longitudinally from the condition shown in Fig. 4 to that illustrated in Fig. 3.

When the attachment is so secured to bottle 66, liquid may be drawn merely by opening valve 24. The pressure of carbonated liquid within bottle 66 will force the liquid out through tube 20, cavity 12 and bore 14 of spout 16. When the pressure of gas within bottle 66 is reduced to a point where the liquid will not be so ejected, the attachment will serve as a pouring spout when the valve 24 is open and bottle 66 is tipped to an angle where the liquid may run by gravity from within the bottle.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A pouring attachment for capped bottles of carbonated liquid or similar material, said attachment comprising a body having a passage formed therethrough; a manually manipulable, normally closed valve for controlling the flow of liquid through the said passage; a tubular cap-perforating tube in communication with the passage and having a portion projecting from the body; a sealing sleeve surrounding the full length of the projected portion of the tube before the

attachment is in place on the capped bottle; an anchoring collar having means at one end for gripping the lip of the bottle cap, said collar being provided with notches at the opposite end thereof; bosses on the body disposed in said notches; and links interconnecting the body and collar for relatively moving the same.

2. A pouring attachment for capped bottles of carbonated liquid or similar material, said attachment comprising a body having a passage formed therethrough; a manually manipulable, normally closed valve for controlling the flow of liquid through the said passage; a tubular cap-perforating tube in communication with the passage and having a portion projecting from the body; a sealing sleeve surrounding the full length of the projected portion of the tube before the attachment is in place on the capped bottle; an anchoring collar, having an annular section circumscribing the body and a U-shaped section for embracing the cap of the bottle; an internal shoulder on the U-shaped section for underlying the lip of the bottle cap; and links interconnecting the body and the collar for moving the body longitudinally within the collar with sufficient force to pierce the cap with the tube when the shoulder is in engagement with the cap.

3. A pouring attachment for capped bottles as defined in claim 2, wherein the tube and the sealing sleeve project into the U-shaped section of the anchoring collar to a point spaced inwardly from the shoulder a distance at least equal to the thickness of the cap of the bottle.

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