Nov. 6, 1951 T. LEWIS 2,574,338

MILK CAN DISPENSER CLOSURE

Filed Jan. 5, 1950

Fig. 1.

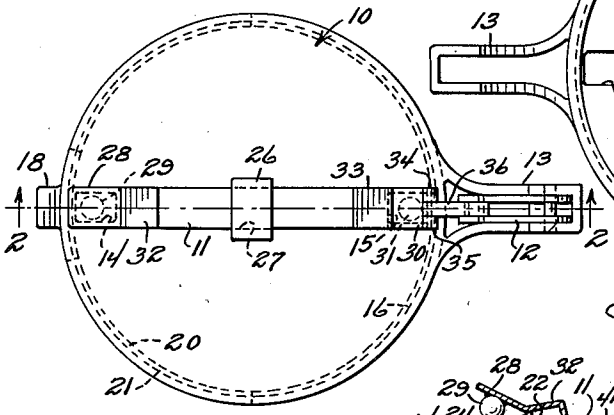


Fig. 4.

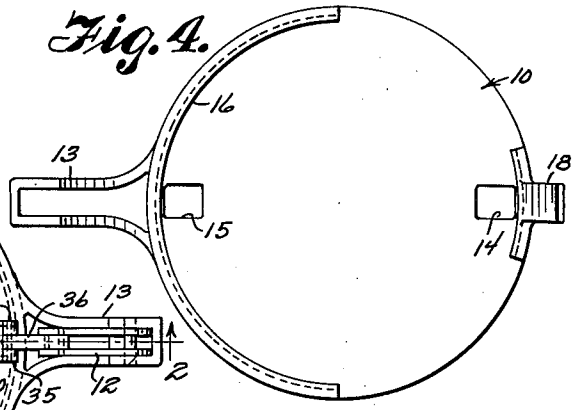


Fig. 3.

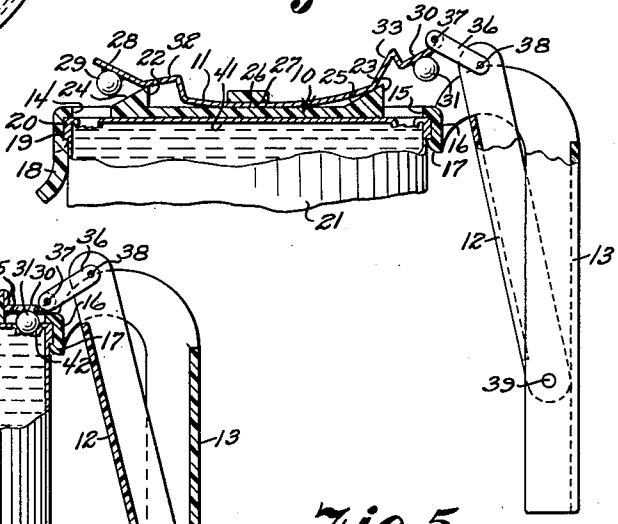


Fig. 2.

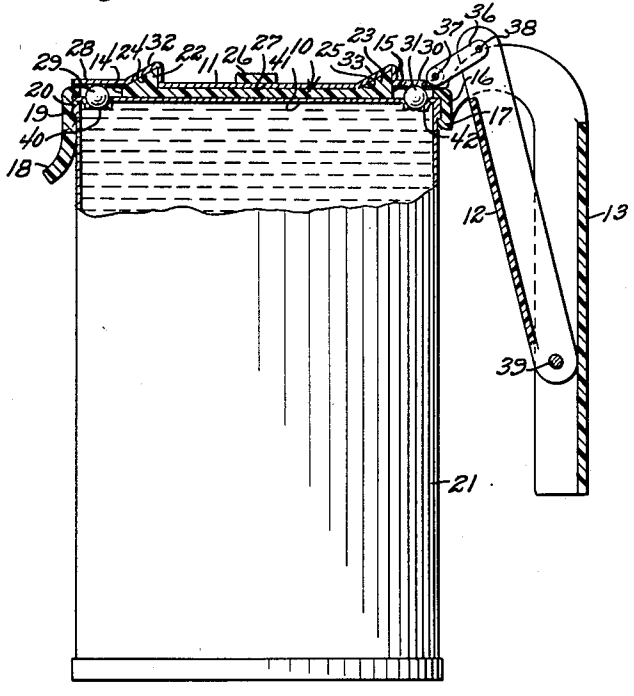
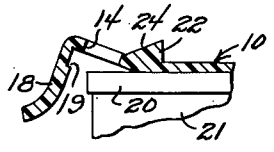


Fig. 5.



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MILK CAN DISPENSER CLOSURE

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3 Claims. (Cl. 65—31)

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This invention relates to devices for providing closures for pouring and venting openings in evaporated and condensed milk cans, and in particular a cap adapted to be snapped over a bead at the end of a can with valves for closing openings in opposite sides of the end of the can and means for readily opening and closing the valves.

The purpose of this invention is to provide sealing means for openings usually punched in the ends of evaporated and condensed milk cans whereby the openings are sealed to prevent contamination of milk in the cans when some of the milk has been removed for use.

Various types of closures have been provided for pouring and vent openings of evaporated and condensed milk cans, however, owing to the gummy characteristics of the film of milk remaining around openings of a can of this type it is difficult to seal the openings. With this thought in mind this invention contemplates a flat spring element slidably mounted on the end of a can with ball valve elements positioned to snap into openings in the can, and means for actuating the spring element to withdraw the balls from the openings and reinsert the balls in the openings after milk is poured from the can.

The object of this invention is, therefore, to provide means for constructing a closure cap for evaporated and condensed milk cans wherein the openings are open as the can is gripped for use and closed when the can handle is released.

Another object of the invention is to provide a lever actuated valve closure for sealing openings of milk cans that may be used without changing the structure of the can.

A further object of the invention is to provide a valve actuated closure for an evaporated and condensed milk can which is of a simple and economical construction.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings wherein:

Figure 1 is a plan view of a milk can showing the closure thereon.

Figure 2 is a side elevational view of the can with part broken away showing the upper end of the can and the closure elements in section, said sectional part of the figure being taken on line 2—2 of Figure 1.

Figure 3 is a similar section showing the valve closure elements in the open position.

Figure 4 is a view looking upwardly toward the under side of the closure cap.

Figure 5 is a detail illustrating a latch for securing the closure cap to the end of a can with the latch illustrated in an exaggerated position.

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Referring now to the drawings wherein like reference characters denote corresponding parts the evaporated and condensed milk can closure of this invention includes a cap 10, a spring valve bar 11, an operating lever 12 and a handle 13.

The closure cap 10 may be formed of plastic or any suitable material and the upper surface is provided with a pouring opening 14 and an opening 15 for a vent. A substantially semi-circular flange 16 is provided around the rear portion of the cap and the lower edge of the flange is provided with a bead 17. The opposite side of the cap is provided with a clip 18 with a shoulder 19 positioned to grip the under side of a bead 20 of a can 21 and the lower end of the clip is flared outwardly, as shown. The clip 18 is illustrated in an exaggerated position in Figure 5 as obviously it is only necessary to spring the shoulder or jaw 19 outward sufficiently to clear the bead 20.

The upper surface of the cap 10 is provided with projections 22 and 23 having sloping surfaces 24 and 25, respectively, and also a projection 26 which is formed with a slot 27 through which the spring bar 11 passes. The handle 13, which is channel shaped in cross section extends from one side of the cap 10, being in line with the openings 14 and 15 and substantially midway of the semi-circular flange 16.

The spring bar 11 is formed with an outer end 28 on the lower surface of which a ball 29 is carried, and an inner end 30 on the lower surface of which a ball 31 is carried. The bar 11 is also provided with wedge shaped sections 32 and 33 which are shaped to fit snugly upon the upper surfaces of the projections 22 and 23, respectively.

The inner end of the spring bar 11 is provided with spaced lugs 34 and 35 between which a link 36 is pivotally mounted by a pin 37. The opposite end of the link 36 is pivotally connected to the upper end of the lever 12 by a pin 38 and the lower end of the lever is pivotally mounted in the handle 13 by a pin 39.

With the parts arranged in this manner the lever 12 will fold into the handle 13 when the balls 29 and 31 are actuated through the open positions as illustrated in Figure 3 and when the lever is released the spring in the bar 11 returns the balls to the position shown in Figure 2 for closing a spout opening 40 in one side of the end 41 of the can 21 and a vent 42 in the opposite side.

When it is desired to use milk from the can

the handle **13** is gripped by hand and the lever **12** is drawn into the handle, to the position shown in Figure 3, whereby the spring bar **11** is drawn across the upper end of the cap with the sloping surfaces **32** and **33** sliding upwardly on the surfaces **24** and **25**, respectively whereby the balls **29** and **31** are withdrawn from the openings, so that milk may be poured through the spout **40** with the opening **42** providing a vent.

It will be understood that modifications may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

1. A can closure comprising a cap positioned over pouring and vent openings in the end of a can, said cap having a handle extended therefrom and having openings therethrough corresponding with the said pouring and vent openings of the can, a spring bar slidably mounted on the outer surface of the cap, valve elements carried by the said spring bar positioned to close the said pouring and vent openings of the can, a lever pivotally mounted in the handle, means connecting the lever to the said spring bar, and projections with sloping surfaces positioned on the outer surface of the cap for elevating parts of the spring bar to remove the valve elements from the pouring and vent openings as the spring bar is actuated by the lever pivotally mounted in the handle.

2. A can closure comprising a cap adapted to be positioned over pouring and vent openings in the end of a can, said cap having a handle extended therefrom and having openings through the cap top corresponding with the said pouring and vent openings of the can, a spring bar slidably mounted on the outer surface of the cap, valve elements carried by the said spring bar positioned to close the said pouring and vent openings of the can, a lever pivotally mounted in the handle, a link pivotally connecting one end of the lever to the said spring bar, projections with sloping surfaces on the outer surface of the cap positioned under the said spring bar, whereby as the spring bar is actuated by the lever

in the handle, parts thereof slide upwardly on the projections thereby removing the valve elements from the openings, and means securing the cap over a bead on the end of a can.

3. In a milk can closure, the combination which comprises a cap having a depending flange adapted to be positioned over the end of the can, said cap having openings therethrough positioned to register with pouring and vent openings in the end of the can, a handle extended from one side of the cap, a spring clip positioned on the opposite side of the cap for retaining the cap over a bead on the end of a can, said cap having projections with sloping surfaces on the upper surface, a spring bar slidably mounted on the cap and having sloping surfaces coacting with the sloping surfaces of the projections of the cap, balls carried by the said spring bar for positioning in the pouring and vent openings of the can, a lever pivotally mounted in the handle, and a link with one end pivotally connected to the lever and the other pivotally connected to the said spring bar slidably mounted on the cap.

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