Feb. 21, 1939. P. SCHNEIDER ET AL 2,147,758

UNIVERSAL BOTTLE COVER DEVICE

Filed May 12, 1938

Fig. 1.

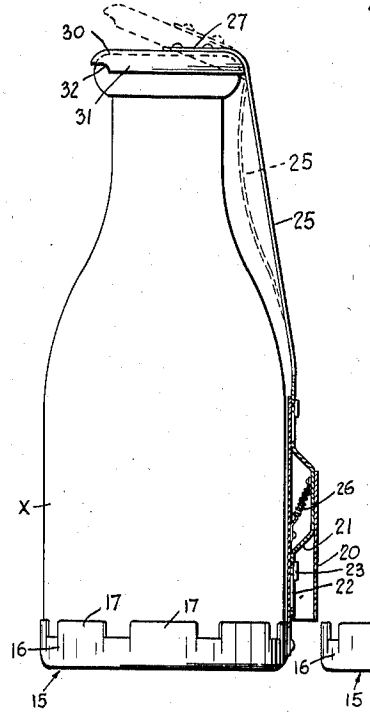


Fig. 2.

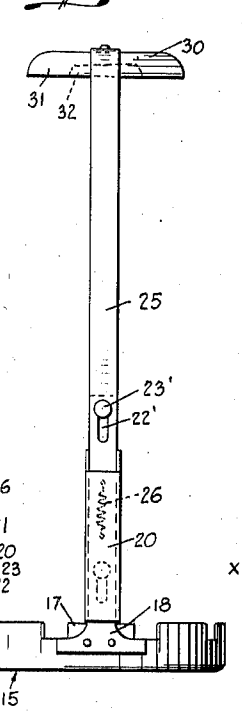


Fig. 3.

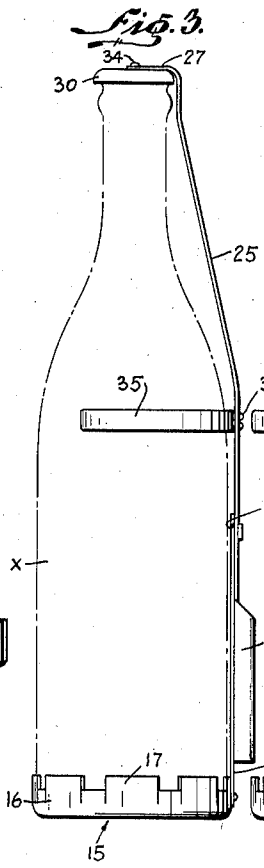
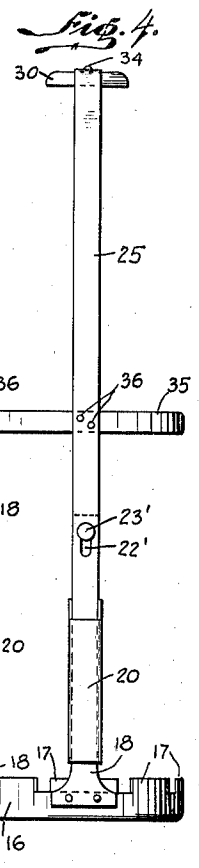


Fig. 4.



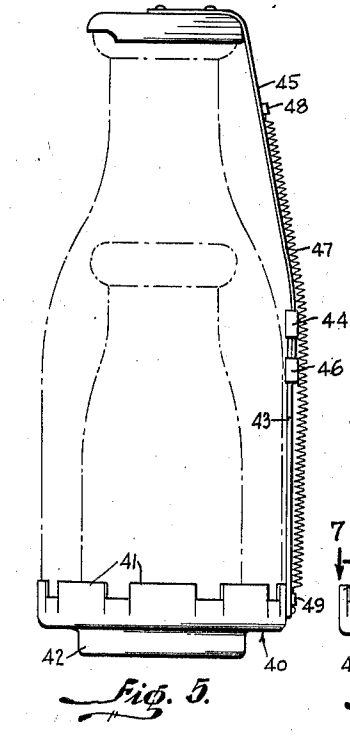


Fig. 5.

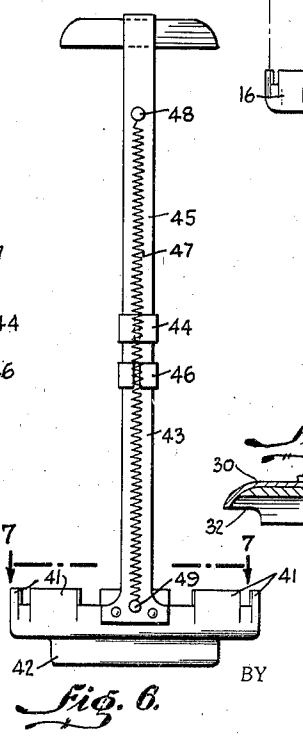


Fig. 6.

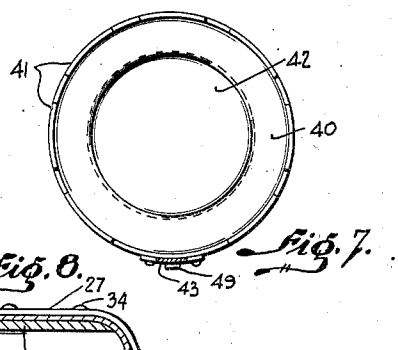


Fig. 7.

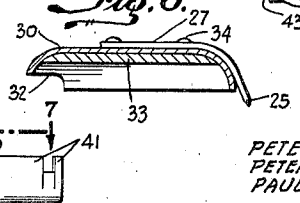


Fig. 8.

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UNIVERSAL BOTTLE COVER DEVICE

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Application May 12, 1938, Serial No. 207,452

5 Claims. (Cl. 215—71)

This invention relates to container closures and more particularly to caps as used for temporarily closing the mouths of bottles and the like.

An object of the invention is to provide a circular base having raised resilient flanges to clamp the bottom of a bottle thereon and a sectional, length adjustable, raised support carrying a cap suited to engage over the bottle mouth.

A further feature is in the provision of means for normally retaining the cap securely seated in operative position, effectually covering the mouth of the bottle, and for tilting the cap upwards automatically, upon pressing the upright towards the body of the bottle, thereby allowing its contents to be poured out.

Another purpose is to provide a lid closure device that is engageable with bottles varying considerably in shape, size and proportions.

These desirable objects are accomplished by the novel construction and combination of simple parts hereinafter described and shown in the accompanying drawing, constituting a material component of this disclosure, and in which—

Figure 1 is a side elevational view of a conventional type of milk bottle showing the application of one embodiment of the invention, parts being in section and indicating, in broken lines, the position of the cap when tilted upward.

Figure 2 is a front elevational view of the device as disengaged from the bottle.

Figure 3 is a view, similar to Figure 1 but showing a modification in construction adapted for a different type of bottle.

Figure 4 is a front elevational view of the modified form seen in Figure 3.

Figure 5 is a side elevational view of a further modified form of the bottle cover device.

Figure 6 is a front elevational view thereof.

Figure 7 is a transverse sectional view looking on line 7—7 of Figure 6.

Figure 8 is a cross sectional view of the cap.

As shown in the drawing, referring to Figures 1 to 4, the device consists of a cup-shaped, circular base 15 having a circumjacent raised flange 16, notched and sheared to produce a plurality of arcuate grips 17 adapted to resiliently engage the lower portion of a common bottle X.

Rigidly attached to the flange 16 is a narrow upright stand or support 18 on which is engaged a narrow casing 20 open at the bottom and having fixed in it a Z-shaped, offset strut 21, its inner end portion, slidably seated on the stand 18 and containing a slot 22 through which passes a headed stud 23 set in the stand.

The upper, inwardly inclined end of the strut 21 merges into a resilient strip 25, having in its lower portion a slot 22′ engaged by a headed stud 23′, the slots and studs maintaining the strip 25 erect as well as limiting the movement of the casing and strip, these elements being normally drawn downwardly to the limit by a tension spring 26 extending diagonally downward within the casing and secured at its respective ends to the casing and stand.

The main portion of the strip 25 is straight and directed angularly from the body of the bottle to the rim of its mouth, and thence turned inwardly, at a right angle to the axis of the bottle, constituting a clip 27.

A cap 30, preferably having a flat top and downwardly curved rim 31 fitting over the bottle mouth, is formed with a recess 32 in its front edge to facilitate pouring the contents of the bottle.

This cap is preferably provided on its inner surface with a pliable packing disc 33 and is secured by one or more rivets 34 to the spring strip clip 27, thereby being firmly pressed upon the bottle mouth, preventing leakage and also the entrance of germ laden air.

In order to tilt the cap so as to obtain access to the contents, the spring strip 25 is pressed inwardly towards, the bottle, whereupon the cap becomes automatically raised, as clearly indicated by the broken lines in Figure 1.

Figures 3 and 4 show substantially the same arrangement of similar parts proportioned in accordance with the shape and size of the bottle, which, if of considerable length, is grasped near the upper part of its cylindrical body portion by a pair of opposed spring arms 35 riveted, as at 36, to the strip 25.

In the modification shown in Figures 5, 6 and 7, the device is adapted to engage bottles of two different sizes, as quart and pint, the former resting on a base 40 having arcuate gripping flanges 41, while at its center is an annular depression 42 to receive the bottoms of smaller bottles.

An upright support stand 43 is securely riveted to the flange 41, the stand having fixed at its upper end a flattened loop 44, through which freely passes a spring strip 45, carrying a similar loop 46 at its lower end, slidably engaging the support 43, while its upper portion is fashioned in the foregoing manner.

A coiled tension spring 47 of considerable length is attached at its upper end, as at 48, to the strip 45, and at its bottom to the stand 43, as at 49.

From the foregoing it will be seen that the device is applicable to a wide range of bottles, which are easily and securely engaged therein, positively capped under spring pressure, and readily released when required.

From the foregoing it will be seen that a simple device for this purpose has been disclosed in the preferred forms of its embodiments, but it is not desired to restrict the details to the exact construction shown, it being obvious that changes may be made without departing from the scope of the appended claims.

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

1. A bottle closure comprising a base to receive a bottle bottom, a cap for the bottle mouth, a resilient strip fixed on said cap to extend downwardly, a spring fixed on said strip to extend downward alongside the bottle body, an upright stand carried by said base to which said strip is slidably attached, and a tension spring to draw said strip in the direction of said base.

2. A bottle closure comprising a base to receive a bottle bottom, a cap for the bottle mouth, a resilient strip fixed on said cap to extend downwardly adjacent the body of the bottle, a spring fixed on said strip to extend downward alongside the bottle body said strip capable of tilting the cap when pressed towards the bottle, a support stand fixed on said base in slidable contact with said strip, and means co-operating to guide said strip along the support stand, said means limiting the relative movement therebetween, said spring to urge the strip towards said base thereby to press the cap normally upon the bottle mouth.

3. A bottle closure comprising a base to receive a bottle bottom, a cap for the bottle mouth, a spring strip fixed on said cap to extend downward alongside the bottle body and capable of tilting the cap when pressed towards the bottle, a support stand fixed on said base in slidable contact with said strip, resilient arms on said strip to embrace the bottle body, and resilient means combined with said base and strip to seat said cap on the bottle mouth.

4. A bottle closure comprising a base to receive a bottle, resilient flanges on said base to engage the bottle, an upright support stand on said base, a resilient strip slidably engaged on said stand, a bottle cap carried by said strip, said cap having a pouring recess in its front portion and tiltable upon pressing said strip towards the bottle body, and means associated with said strip and stand to press said cap upon the bottle mouth.

5. A bottle closure comprising a base to receive bottles having different sized bottoms and retain them axially thereon, a cap recessed at the front to seat upon the bottle mouth, a resilient strip on which said cap is fixed, said strip extending alongside the bottle and capable upon application of pressure to tilt the cap, a support stand fixed to extend upwardly from said base, flattened loops engaging said strip and support stand, and a tension spring fixed at its respective ends to said strip and base.

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