G. G. DAVIS.

BOTTLE CLOSURE.

APPLICATION FILED MAY 17, 1918.

1,294,057. Patented Feb. 11, 1919.

Fig. 1.

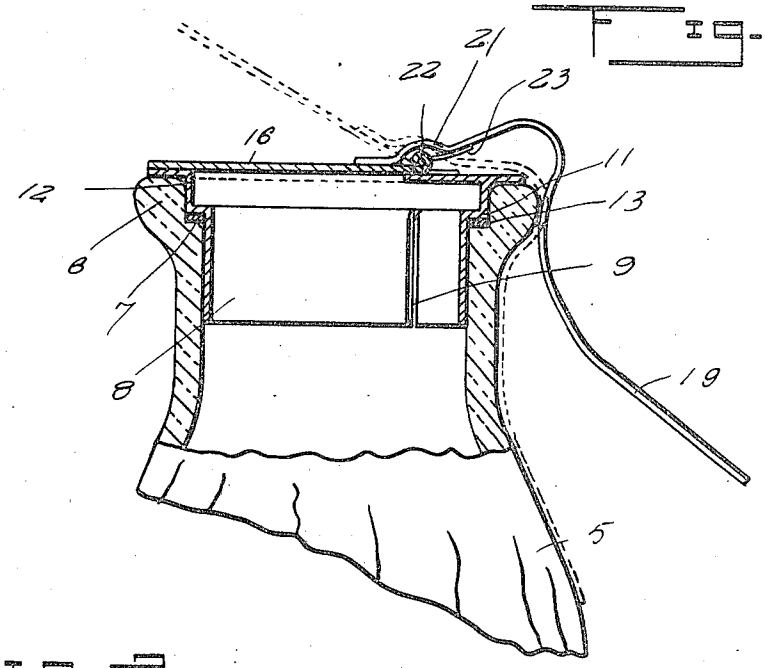


Fig. 2.

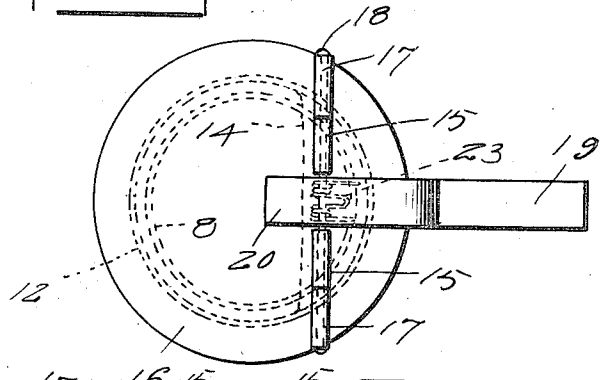


Fig. 3.

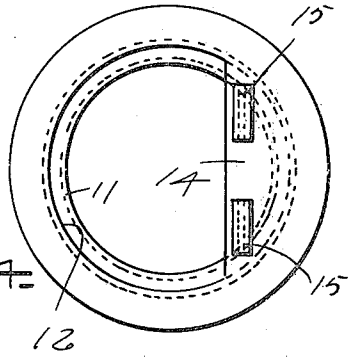
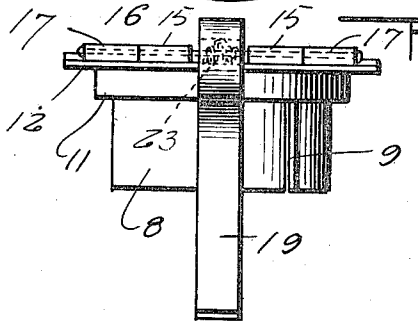


Fig. 4.



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BOTTLE-CLOSURE.

1,294,057. Specification of Letters Patent. Patented Feb. 11, 1919.

Application filed May 17, 1918. Serial No. 235,097.

To all whom it may concern:

Be it known that I, GEORGE G. DAVIS, a citizen of the United States, residing at Burke, in the county of Shoshone and State of Idaho, have invented certain new and useful Improvements in Bottle-Closures; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in bottle closures, especially adapted for attachment to milk bottles.

An important object of this invention is to provide a bottle closure of the character described adapted for insertion within the neck of the bottle for a substantial distance, thus preventing the milk when being dispensed from the bottle, from coming in contact with the lip of the bottle.

A further object of the invention is to provide a bottle closure of the character described, which is provided with a pivoted cover, which is normally closed, and provided with means for quickly and conveniently opening the same.

A further object of the invention is to provide a bottle closure of the character described which is neat in appearance, of highly simplified construction, convenient in use and cheap to manufacture.

A further object of the invention is to provide a bottle closure, which by virtue of its extreme simplicity of construction and cheapness of manufacture, will successfully compete with numerous other devices in a highly crowded art.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a vertical central sectional view through my improved bottle closure, showing the same applied to a bottle,

Fig. 2 is a plan view of my improved bottle closure,

Fig. 3 is a plan view of the same, the pivoted top thereof being removed, and,

Fig. 4 is a rear elevation of the closure, showing the operating lever.

In the drawings, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 5 designates a milk bottle having the usual bead 6 arranged outwardly of an annular recess within the neck of the bottle, forming an annular shoulder 7. My improved bottle closure comprises a cylindrical member 8 adapted to be arranged within the neck of the bottle and provided with a longitudinal slot 9. In the manufacture of the closure, the cylindrical member 8 will have its circumference slightly greater than the interior of the neck of the bottle, thus in inserting the device in the neck of the bottle the diameter of the member 8 will be lessened by the presence of the slot 9. An annular shoulder 11 formed on the upper end of the cylindrical member or collar 8 carries a flange 12, said flange being substantially L-shaped in cross section and extending over the top of the bead 6. An annular washer or gasket 13 is interposed between the annular shoulder and the annular shoulder 11 for the purpose of effecting a liquid tight joint.

Formed integral with the annular flange 12 and extending over a portion of the opening in the collar 8 is a plate 14 carrying alining sleeves 15. A cap 16 extending over the opening in the bottle is provided with alining sleeves 17 along its straight edge. As shown in Fig. 2, the sleeves 15 and 17 are adapted to be arranged in longitudinal alinement for the reception of a pivot 18 extending therethrough. An operating lever 19 is secured to the cap 16, as at 20, by solder or any other suitable means. As shown in Fig. 1, the lever 19 is provided with a slight transverse curve 21 near the upper end thereof to permit of a coil spring 22 being arranged on the pivot 18 between the sleeves 15. One end 23 of the coil spring 22 contacts with the inner portion of the lever 19, while the other end of the coil spring 22 contacts with the plate 14. It is thus apparent that this specific spring arrangement adds greatly to the utility and appearance of the closure, since the milk at no time contacts with the spring, which is apt to collect dirt, and it is excluded from view thus adding to the neatness of the closure. As shown in Fig. 1, the lever 19 is bent to conform to the shape of the bottle when the cap is in an open position.

In applying my improved bottle cap to the neck of a bottle, it is apparent that the cylindrical member 8 is pressed within the

neck of the bottle and the device is immediately ready for use. It will be noted that in dispensing the milk, it at no time comes in contact with the lip of the bottle which has been previously exposed and free to collect, dirt, dust, germs, and so forth.

Having thus described my invention, what I claim is:

1. A bottle cap comprising, a cylindrical member adapted to extend into the neck of a bottle; an annular shoulder formed on one end of the cylindrical member; an annular flange extending from the annular shoulder, said annular flange being L-shaped in cross section and adapted to extend over the lip of the bottle; a plate extending over a portion of the opening in the bottle; a cap pivotally secured to the plate, a lever attached to the cap and extending over the side of the bottle; and a spring arranged between the lever and said plate and adapted to normally hold the cap closed.

2. A bottle cap comprising a cylindrical member adapted to be arranged in the neck of a bottle; an annular flange extending from said cylindrical member and extending over the lip of the bottle, said annular flange being L-shaped in cross section, a plate formed integral with said annular flange and extending over a portion of the opening in the bottle; spaced alining sleeves formed on the plate and adjacent one edge thereof; a cap arranged over the opening in the bottle; spaced alining sleeves formed along one edge of said cap and adapted to aline with the sleeves of said plate; a pin adapted to extend through the sleeves of said cap and said plate to permit of the cap partaking of a pivotal movement; a lever attached to the cap and extending over the side of the bottle; and a coil spring arranged on said pin between the spaced sleeves of said plate and having its ends engaging the plate and said lever, said spring being adapted to normally hold the cap closed.

3. A bottle cap comprising a cylindrical member adapted to extend into the neck of a bottle; an annular shoulder formed on one end of the cylindrical member; an annular flange extending from the annular shoulder, said annular flange being L-shaped in cross-section and adapted to extend over the lip of the bottle; a plate extending over a portion of the opening in the bottle and having one edge thereof straight; a cap adapted to be arranged over the remaining opening in the bottle and having one edge straight, said straight edge being adapted to be arranged parallel to the straight edge of said plate; alining sleeves carried by the straight edges of said cap and said plate; a pin extending through the alining sleeves; a lever secured to the cap and extending over the side of the bottle; and a coil spring arranged on the pin and disposed between the lever and said plate and adapted to normally hold the cap closed.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE G. DAVIS.

Witnesses:

EMILY A. DAVIS,

ANDREW N. LUND.