F. A. CHENETTE.

BOTTLE COVER.

APPLICATION FILED JAN. 15, 1915.

1,154,973. Patented Sept. 28, 1915.

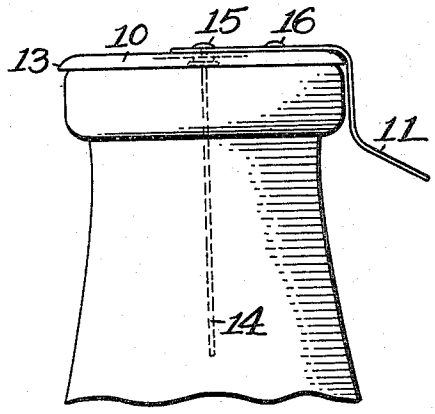

Fig. 1.

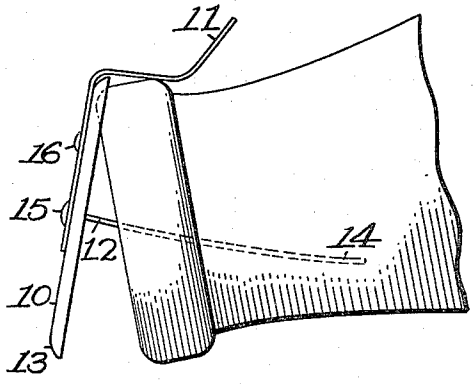

Fig. 2.

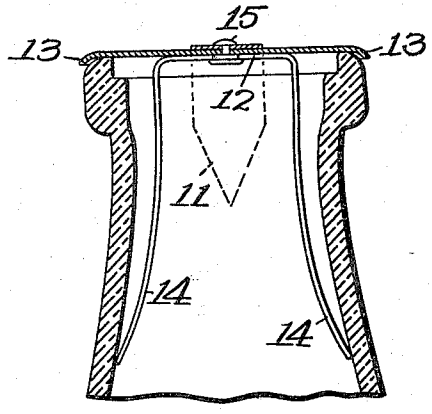

Fig. 3.

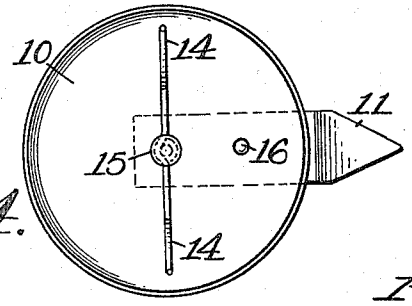

Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

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BOTTLE-COVER.

1,154,973. Specification of Letters Patent. Patented Sept. 28, 1915.

Application filed January 15, 1915. Serial No. 2,477.

To all whom it may concern:

Be it known that I, FRANK A. CHENETTE, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Bottle-Cover, of which the following is a specification.

This invention relates to a temporary bottle or jar cover and especially one for application to a milk bottle after the paper cap is removed for the purpose of protecting the top thereof against dirt and contamination of various kinds.

The principal objects of the invention are to provide a sanitary device for this purpose which shall be equally applicable to bottles and jars having different sized tops and different shapes within certain limits, and also to be equally applicable to large and small bottles having the tops of the same or nearly the same size and shape; also to provide a construction in which the cover can be tipped up easily for the purpose of permitting the discharge of the contents or part thereof, and which will automatically resume its normal closing position after its release; and further to provide a construction having these advantages which will be of extremely simple character and inexpensive to manufacture and sell, and especially of such a simple form that it can be cleaned readily and thoroughly without trouble and which will have no parts likely to become loose or broken in use.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a side elevation of a milk bottle of ordinary form provided with a preferred embodiment of this invention applied thereto; Fig. 2 is a similar view showing the bottle inverted and the cover raised for discharge of the milk; Fig. 3 is a front elevation of the device showing the bottle in section; and Fig. 4 is a bottom plan of the article detached from the bottle.

The device consists simply of a flat cover plate 10 having an arm 11 extending downwardly therefrom at one edge and curved outwardly at the end and provided with a wire spring 12 underneath. This spring in its preferred form consists of a single piece of wire secured to the bottom of the cover near the center thereof and having two curved diverging legs 14 extending down from it. The method of attaching the spring shown consists in providing a headed pin or stud 15 at the center of the cover and coiling the spring about it under the head. The projecting arm 11 can be made integral or separate from the cap, and I have shown it in the latter form, using the pin or stud 15 to assist in securing it in position and also applying a second one 16.

In the use of the device the pointed end of the arm 11 can be used to pull out the ordinary paper cap with which the bottle is provided as delivered. After this cap is removed and some of the milk poured out the spring arms 14 are pressed together enough to allow them to enter the neck of the bottle and the cover is pressed down or allowed to descend into contact with the top of the bottle.

It is to be observed especially from reference to Fig. 3 that these bottles are usually made with a neck flaring out toward the bottom and that the spring arms 14 are made flaring sufficiently to engage the said neck and to exert a pressure thereon. This has important results. In the first place after the ends of the springs are inserted far enough to reach the upper part of the flaring portion of the neck, they will naturally tend to spread apart and in doing so the neck will have a cam action on them, tending to bring the cover down on top of the bottle in proper position. This action continues until the cover reaches a position on the upper edge of the bottle. After that time the spring arms continue to exert a spring pressure on the diverging sides of the bottle and thus hold the cover in position by spring pressure. The cover, therefore, will not be dislodged either slightly or wholly by any ordinary handling of the bottle, but it remains in place as long as it may be desired to keep it there. Not only this, but it presses with a yielding pressure on the top surface of the bottle all around and thus prevents the entrance of flies and even dirt. Further, the cover being flat, it can be made of such an extent as to fully cover the top of any ordinary milk bottle and its edges 13 can be turned down slightly so as to further protect the convex edge of the top.

When it is desired to pour liquid from the bottle the only thing necessary is to turn the bottle so that the arm 11 is at the top and press on it with the thumb of the hand which holds the bottle. This obviously creates a rocking motion of the cover about the point at which the circular cover and

arm connect and engage the top of the bottle. This rocking motion is yieldingly resisted by the spring arms which are forced toward each other on account of the shape of the bottle neck and the shape of the springs. Therefore, when the arm 14 is released the springs immediately force the cover back into its proper position and hold it there. Furthermore the springs constitute a self-centering device for the cover and not only prevent it from getting out of position sidewise but force it into central position when carelessly inserted. The simplicity of the device, the cheapness with which it can be manufactured, the ease with which it can be thoroughly cleaned, and the impossibility of collection of dirt in any inaccessible place are matters that need not be enlarged upon as they are perfectly obvious from a consideration of the construction of the device.

Although I have illustrated and described only a single embodiment of the invention I am aware of the fact that many modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction herein shown and described, but

What I do claim is:—

1. As an article of manufacture, a temporary closure for a milk bottle or the like consisting of a substantially flat circular plate adapted to rest directly on the top of the bottle, having a projecting arm by which it can be tilted on the edge of the bottle top as a fulcrum, and provided with means extending downwardly therefrom into the bottle for yieldingly resisting the tilting of the plate and returning it to place.

2. As an article of manufacture a temporary closure for a bottle comprising a flat sheet metal top plate, a holding means therefor consisting of a piece of wire secured to the under side of the top plate near the center and extending down therefrom in the form of two arms in spaced relation to each other and diverging outwardly at their lower ends, and a radial lever arm rigid with the plate and located at right angles to the plane of the two wire arms.

3. As an article of manufacture a temporary closure for a bottle comprising a flat top plate having a plurality of wire arms secured to the underside thereof and extending down therefrom in spaced relation to each other and diverging outwardly at their lower ends, and an arm extending downwardly from one edge of the plate and outwardly by which the plate can be tipped on the upper edge of the bottle neck as a pivot, said wire arms constituting means for yieldingly resisting the tipping action and forcing the plate back into position when said extending arm is released.

4. As an article of manufacture a bottle closure consisting of a substantially circular flat cap having an arm projecting downwardly from one edge and then outwardly, whereby by downward pressure on the end of the arm the cap can be swung on the edge of the top of the bottle as a pivot when placed thereon, and yielding means connected with said bottle closure and extending inside the bottle in position to engage the inner surface of the neck for drawing the cap down on the bottle after it is tipped and released.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

FRANK A. CHENETTE.

Witnesses:
ALBERT E. FAY,
C. FORREST WESSON.