J. M. ALLEN.

TOP OR CAP FOR LIQUID CONTAINERS.

APPLICATION FILED MAY 1, 1916.

1,194,347. Patented Aug. 15, 1916.

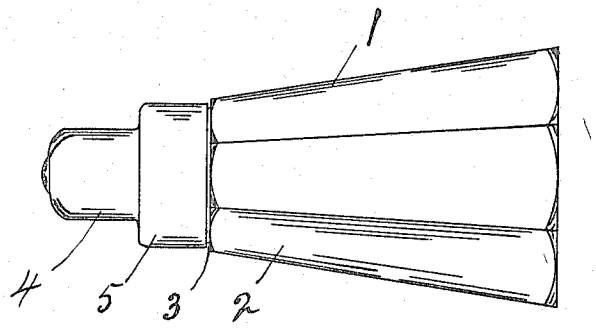


FIG. 1

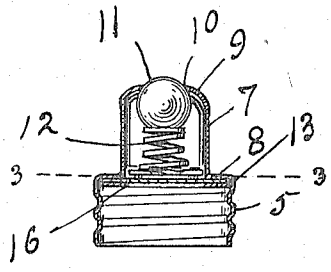


FIG. 2

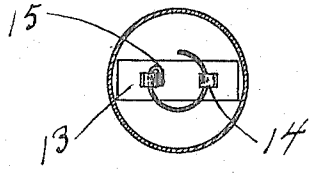


FIG. 3

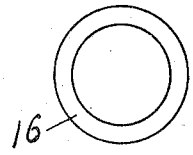


FIG. 4

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TOP OR CAP FOR LIQUID-CONTAINERS.

1,194,347. Specification of Letters Patent. Patented Aug. 15, 1916.

Application filed May 1, 1916. Serial No. 94,543.

To all whom it may concern:

Be it known that I, JAY M. ALLEN, a resident of Decatur, county of Macon, and State of Illinois, have invented certain new and useful Improvements in Tops or Caps for Liquid-Containers, of which the following is a specification.

My invention relates to improvements in tops or caps for liquid containers, and is designed to provide a combined closure and spreader for receptacles containing mucilage, paste, glue and other viscous fluids used for pasting and sealing.

The principal object of this invention is the provision of such a device which forms a secure closure for the liquid container when not in use and with which the fluid may be spread upon the article to be treated quickly and efficiently.

A further object resides in the provision of such a device which is applicable to various standard forms of liquid containers, such as bottles and the like, which will prevent the leakage and waste of the fluid and permit the ready application of the liquid in use.

To the accomplishment of the foregoing and such other objects as may hereinafter appear, my invention consists in the construction, combination and arrangement of parts hereinafter described, and then sought to be defined in the claims, reference being had to the accompanying drawing forming a part hereof, and which shows for the purpose of illustrative disclosure a preferred embodiment of my invention it being understood that various changes may be made in practice within the scope of the claims without digressing from my inventive idea.

In the drawing, Figure 1 represents a perspective view of a particular form of liquid container with a device constructed according to my invention applied thereto; Fig. 2 represents a vertical section through a top or cap constructed according to my invention; Fig. 3 is a section through the top or cap taken on line 3—3 of Fig. 2; Fig. 4 is a plan view of the washer used in the top.

Referring to Fig. 1, the numeral 1 designates a particular form of container, being a bottle having the inclined and flat sides 2 and having the usual neck 3 to which a cap or top constructed according to my invention is adapted to be secured. This neck may be plain so that the top or cap fits frictionally thereon or it may be threaded to receive a correspondingly threaded cap or top.

The cap or top is designated by the reference character 4 and is formed to provide the neck portion 5 which is preferably screw threaded to fit the neck of the container and the upper portion 7 of which is reduced providing the annular shoulder 8. The upper portion 7 is cylindrical, having its outer end rounded as at 9 and provided with the opening or aperture 10 to receive the valve and spreading member which preferably takes the form of the ball 11. This valve and spreading member is positioned within the cylindrical upper portion 7 and normally held against the edges of the opening or aperture 10 by means of the coil spring 12, resting in the upper convolution thereof. This coil spring is supported on the flat bar member 13 which extends across the neck portion 5 of the cap or top. It has the lugs or tongues 14 struck up therefrom and bent over to receive and lock the lowest convolution of the spring, the end of which is hooked or bent around one of the lugs or tongues 14, as at 15. The spring is therefore securely held on the bar member 13 and acts to support the valve and spreading member 11 in a yielding manner.

When the top or cap is applied to the container, the bar member 13 is securely held in position between the washer 16, which rests on the upper edge of the container and the annular shoulder 8, in the position shown in Fig. 2.

As is obvious this construction provides a simple and effective means for keeping the container closed and unexposed to the air to prevent waste and evaporation, as the ball is of larger diameter than the aperture, and at the same time provides a convenient and reliable means of applying the liquid to the surface to be treated and spreading the same thereon. By the application of the tip of the top or cap to the surface to be treated and the exertion of slight pressure, the valve member 11 may be readily forced from off its seat permitting the flow or discharge of the liquid, and the movement of the device spreads the liquid quickly and conveniently.

Devices constructed according to this embodiment of my invention are very useful for business and home uses and in fact any place where it is necessary to use and apply

mucilage, paste, glue or other viscous liquids, which should be kept from exposure to the air. The closure of the aperture is completed as soon as the pressure is removed from the valve and spreader member, so that there is no undue waste or evaporation of the contents of the container.

Another material advantage resides in the capability of the application of such devices to standard forms of liquid bottles or other containers.

The construction is simple and the operation efficient.

This application is filed as a continuation of my co-pending application filed March 1, 1915, bearing Serial Number 11,141, in so far as the subject-matter is common.

What I claim is:—

1. An article of manufacture in the form of a cap having a neck portion adapted for attachment to a liquid container, said cap having a nozzle portion provided with an aperture therethrough, a combined valve and spreader member having a rounded portion extending through said aperture, an annular shoulder provided in said cap, a supporting bar resting against said shoulder, said bar having a plurailty of cut-out tongues, and a spring resting on said bar and engaging under said tongues and yieldingly holding said combined valve and spreader member in said aperture.

2. An article of manufacture in the form of a cap having a neck portion adapted for attachment to a liquid container, said cap having a nozzle portion provided with an aperture therethrough, said nozzle portion being reduced from the neck portion to provide an annular shoulder, a bar resting against said shoulder and having tongues cut out and extending above the surface thereof, a combined valve and spreader member positioned in the top of the nozzle portion and having a rounded portion extending through said aperture, a spring resting on top of said bar and engaging under said tongues and supporting said combined valve and spreader member in said aperture.

JAY M. ALLEN.