Feb. 20, 1934. L. A. VON TILL 1,947,667

APPLICATOR PACKAGE

Filed Jan. 7, 1932

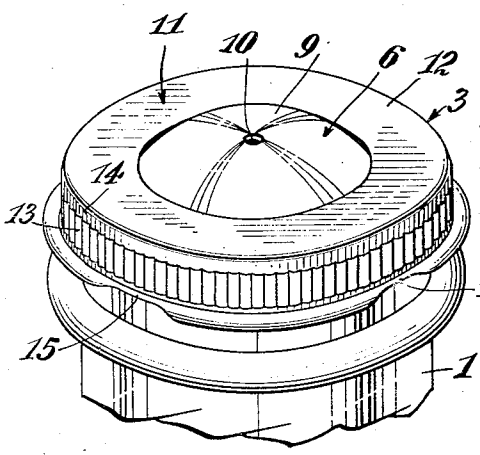


Fig. 1.

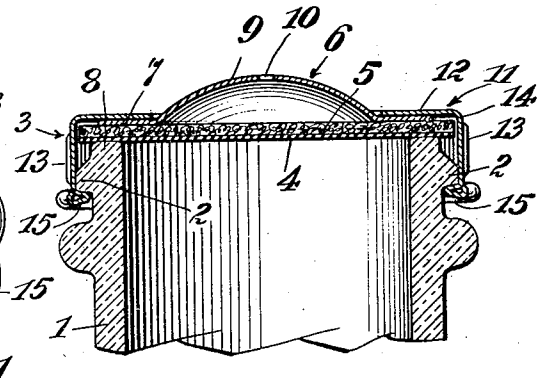


Fig. 2.

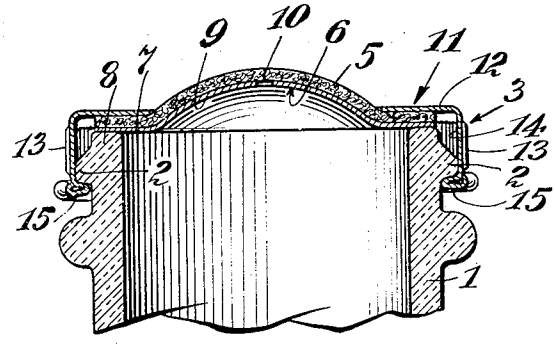


Fig. 3.

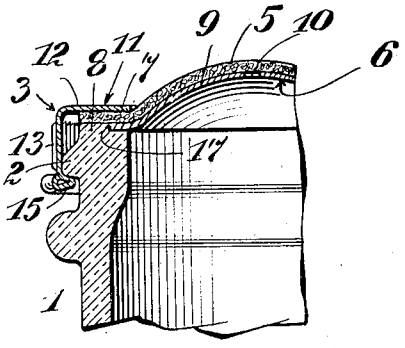


Fig. 4.

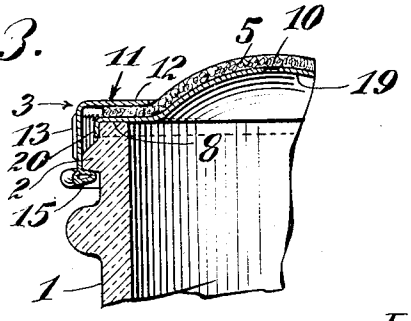


Fig. 5.

INVENTOR
Louis A. Von Till
BY
Norman R. Holland
his ATTORNEY

Patented Feb. 20, 1934 1,947,667

UNITED STATES PATENT OFFICE

1,947,667

APPLICATOR PACKAGE

Louis A. Von Till, Brooklyn, N. Y., assignor to Anchor Cap & Closure Corporation, Long Island City, N. Y., a corporation of New York

Application January 7, 1932. Serial No. 585,174

12 Claims. (Cl. 15—134)

The present invention relates to packages, and more particularly to a cap and container for dispensing cleaning or polishing solutions, and the like.

In packaging furniture polish, spot removers, cleaning fluids, liquid shoe polish and the like, it is customary to utilize a bottle or jar sealed by means of a cork or closure cap. Such packages usually do not provide means for properly dispensing the contents and a piece of cloth or the like must be utilized to apply the liquid in small portions upon the object to be cleaned. The use of pieces of cloth is unsanitary, as well as uneconomical, since they absorb an excessive amount of liquid, and waste a substantial part thereof. Devices, such as daubers have also been utilized, but, in addition to being unsatisfactory, they are expensive to manufacture and easily broken. Furthermore, daubers and other devices, which are suspended within the container absorb dirt very readily when used and contaminate the remaining contents of the package.

The present invention aims to overcome the above difficulties by providing a new and novel cap and container adapted to dispense liquids therefrom without the use of separate applicators such as cloths and the like. The present invention also expedites the cleaning or polishing operations, and minimizes the amount of material used.

An object of the present invention is to provide an improved cap and container for sealing cleaning solutions and the like.

Another object of the invention is to provide inexpensive means adapted to be utilized both as a container closure and a dispensing and polishing device.

Another object of the invention is to provide a closure cap, adapted to seal a package, which can be readily removed and arranged upon the container to provide a dispensing and applicating device.

Another object of the invention is to provide a container adapted to receive combined means for sealing the container and for dispensing a liquid therefrom.

Another object of the invention is to provide absorbent means adapted to improve the seal upon a container and to serve as a polishing means.

A further object of the invention is to eliminate the use of unsanitary means for applying cleaning solutions and the like, and to eliminate the waste and contamination of the contents of the package during application thereof.

Other and further objects of the invention will be obvious upon an understanding of the illustrative embodiment about to be described, or will be indicated in the appended claims, and various advantages not referred to herein will occur to one skilled in the art upon employment of the invention in practice.

A preferred embodiment of the invention has been chosen for purposes of illustration and description and is shown in the accompanying drawing, forming a part of the specification, wherein

Fig. 1 is a perspective view of the sealed container illustrating a preferred embodiment of the invention;

Fig. 2 is a sectional view of the package shown in Fig. 1;

Fig. 3 is a sectional view illustrating the parts of the closure assembled upon the container to provide dispensing and polishing means;

Fig. 4 is a fragmentary sectional view illustrating a slightly different container having a closure applied thereto; and

Fig. 5 is a fragmentary sectional view illustrating a slightly different means for dispensing a fluid, adapted to be sealed upon a container provided with a standard finish.

Generally described, the present invention comprises a container having an impervious liner and an absorbent disc sealed thereon by means of a suitable combination closure. The cap preferably comprises a cover member having an aperture therein and an annular band member provided with thread engaging means adapted to engage suitable threads on the container. When the package reaches the consumer, the parts thereof may be reassembled to provide fluid dispensing and applicating means by removing the impervious liner and interchanging the absorbent disc and the cover member so that the absorbent disc will be mounted above the cover disc and supported thereby. In this manner, when the container is inverted, portions of the contents thereof are adapted to flow through the aperture in the cover member and are absorbed by the absorbent disc, whereby the fluid may be applied without the aid of cloths or the like.

Referring again to the drawing and more particularly to Figs. 1 and 2, there is shown a container 1 provided with suitable cap engaging means 2 substantially adjacent to the mouth thereof for engaging and holding a closure cap 3 thereon. Preferably, the cap engaging means comprise lugs or interrupted threads, as illus-

trated herein, but a continuous thread also may be advantageously utilized.

To seal the container at the upper rim thereof, a suitable impervious liner 4, formed of oil paper or tin foil, is placed in the closure cap, and a compressible disc 5 is mounted above the liner 4. In the present instance, the disc 5 is preferably composed of felt or other absorbent material, so that it may serve as a cushion to form an effective seal, and to provide dispensing and applicating means when the parts of the closure are reassembled as described hereinafter.

The closure cap 3, illustrated herein, comprises a cover member 6 having a substantially flat outer flange portion 7 adapted to press the liners 4 and 5 downwardly against the mouth of the container. Preferably the cover member 6 is provided with a dome-shaped central portion 9 having a dispensing aperture 10 at the apex thereof. In order to secure the cover member 6 upon the container, there is provided a screw band 11 or other suitable holding member which may comprise an annular flange portion 12 adapted to engage the flange 7 of the cover member, the central part of the band member being cut away to permit the dome-shaped portion 9 of the cover member to project therethrough. The screw band is also provided with a downward depending skirt 14 having suitable thread engaging means 15 formed therein adapted to engage and cooperate with threads 2 provided on the container. If desired, the upper part of the skirt 14 may be corrugated or knurled as shown at 13 to facilitate removal of the closure and to hold the liners 4 and 5 within the band member 11.

When the package reaches the ultimate consumer, it is assembled as shown in Figs. 1 and 2 with the closure 3 securely sealed on the container 1 to prevent spilling or spoiling of the contents. In order to reassemble the parts to provide means for applying the contents, the band member 11 is unscrewed and the impervious disc 4 is removed and laid aside until it is desired to reseal the container. As shown in Fig. 3, the dome-shaped cover member 6 is placed on the container so that the flange 7 rests upon the rim 8 thereof. The absorbent disc 5 is mounted above the dome portion 9 and the screw band 11 is then applied to the container so that the top flange portion 12 engages and presses the peripheral portions of the disc 5 upon the flange 7 of the cover member to securely assemble the parts upon the container. When the closure is thus assembled, the container may be inverted to dispense the contents, whereby the fluid will seep through the aperture 10 and will be absorbed by the felt disc 5. The solution may then be applied by daubing or rubbing the article to be polished with the saturated disc member 5.

In Fig. 4, a slightly different type of container is shown which is provided with an annular recess or shelf portion 17 at the inner periphery of the rim. The recess 17 is of sufficient depth and diameter to seat the outer edges of the flange 7. In this manner, the cover member 6 and the dome shaped portion 9 thereof are always properly centered with respect to the mouth of the container and the screw band 11.

In Fig. 5, there is shown a dome-shaped cover member 19 adapted to center itself upon a container having a standard rim finish. This is accomplished by providing a short depending skirt 20 adapted to extend over the mouth of the container and engage the outer wall of the container below the rim. In this manner the cover member may be seated upon the container in its proper position and will not shift.

It has been found that the size of the aperture 10 may be varied depending upon the nature of the fluid to be dispensed. For example, certain types of furniture polish, having an oil base, will flow freely through a relatively small aperture and will be readily absorbed by the applicator disc 5. Other polishes, such as liquid shoe polish, are more consistent and, to be properly dispensed, require a larger aperture or several smaller ones. Likewise, it has been found that the thickness of the absorbent disc 5 may be varied to control the amount of fluid to be absorbed thereby, and the rate at which the fluid is to be dispensed. If desired, different grades of felt or other materials which are more or less absorbent, may be advantageously utilized.

In the manufacture and assembly of the closure cap illustrated herein, the screw band 11 may be formed by the usual manufacturing operations and the domed cover member 6 may be stamped from suitable metal and thereafter inserted into the screw band. The liner 4 and applicator disc 5 are usually cut from sheets of material and are assembled within the screw band and held in position by the lugs 15. After the closure has been assembled, it is applied upon filled containers by rotating the screw band so that the thread engaging means 15 engage the threads 2 of the container to provide the package shown in Figs. 1 and 2. It will, of course, be understood that these operations may be effected by hand or by suitable sealing machines.

When the package is to be unsealed, the band member 11 is unscrewed and the sealing liner 4 is removed, the felt disc 5 is mounted above the cover member, and the domed portion 9 is inserted through the band member which is then again screwed upon the container to provide the applicator package shown in Figs. 3, 4 or 5. In order to reseal the package, the parts are reassembled and the liner 4 is again placed across the mouth of the container.

It will be seen that the present invention provides a simple and inexpensive device adapted to be sealed upon containers to provide a tight seal and to dispense the contents thereof. The absorbent applicating disc eliminates the use of cloths. When the discs become dirty during use, they may be reversed to use the clean side thereof, or may be replaced by a new disc. The domed portion reinforces the disc during use to prevent excessive wear, while the aperture in the dome portion uniformly feeds the liquid to the applicating disc in desired quantities, thus effecting a substantial saving for the consumer. The package is attractive in appearance and is rugged in construction and fully capable of withstanding the rough usage to which it may be subjected.

As various changes may be made in the form, construction and arrangement of parts herein without departing from the spirit and scope of the invention and without sacrificing any of its advantages, it is to be understood that all matter herein is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim:

1. A package comprising a container having an annular groove at the mouth thereof, a substantially rigid member adapted to be seated in said groove, absorbent means adapted to be mounted above said member, and a member adapted to

hold said rigid member and absorbent means upon said container.

2. A package comprising a container provided with an annular recess at the mouth thereof, a dome-shaped member adapted to be seated in said recess, said member having an aperture therein for dispensing fluid from said container, a felt disc adapted to be mounted above said member for applying the fluid, and an annular member for attaching said disc and dome-shaped member to said container.

3. A package comprising a glass container having a recess adjacent the mouth thereof, a member adapted to fit in said recess having an aperture therein for dispensing the contents of the package, and a member adapted to secure said first member to said container.

4. A package comprising a container having an annular recess at the mouth thereof, a member having an aperture therein for dispensing the contents of the container, said member having an annular portion adapted to fit in said recess to mount said member upon said container, and means for securing said member upon said container.

5. In a device of the class described, the combination of a felt disc, a dome-shaped member mounted adjacent thereto adapted to support said disc, said member having an aperture therein for feeding a fluid to said disc and having a depending skirt adapted to fit over the mouth of a container, and an annular member having a top portion and a depending skirt provided with container engaging means for securing said disc and said first member upon the container.

6. A package comprising, in combination, a container provided with cap engaging means, a dome-shaped member having a smooth spherical portion at the apex thereof, said member having an aperture therein for dispensing the contents of the container, said member having a depending skirt adapted to fit and engage the upper end of the container, an absorbent member conforming to the contour of said dome-shaped member and fitting against the aperture therein, and a band member provided with means adapted to engage the means upon the container to seal said dome-shaped member and absorbent member upon said container.

7. As an article of manufacture, a closure comprising in combination a screw band, a cover member having a substantially smooth spherical portion provided with an aperture therein, an absorbent disc in said band beneath said cover member adapted to serve as a cushion to form an effective seal, and an impervious liner beneath said absorbent disc engaging the inner periphery of said screw band to hold said cover member and disc therein, whereby said closure may be shipped as a unit without accidental disarrangement of the parts thereof.

8. As an article of manufacture, a closure cap for a container comprising, in combination, a band member provided with interrupted thread engaging means to facilitate rapid application and removal of said closure, a cover member having a convex portion at the top thereof, provided with an aperture therein, an absorbent disc in said band beneath said cover member for forming an effective seal, and an impervious liner beneath said disc for sealing the rim of a container, said thread engaging means extending radially inwardly to prevent said liner from being accidentally removed from said screw band, whereby said closure may be shipped as a unit.

9. As an article of manufacture, a closure comprising in combination a screw band, a cover member having a spherical portion provided with an aperture, said spherical portion having a convex apex, a substantially flat absorbent disc beneath said cover member concealed within said band whereby said cover member will protect said disc against contamination, said disc being adapted to be placed over said cover member to act as applicator means, and an impervious liner in said band member for holding said cover member and absorbent disc therein.

10. A package sealed with a closure adapted to be re-arranged to facilitate dispensing of the contents, said package comprising in combination a container, a dome-shaped member provided with a convex top portion having an aperture therein, an absorbent disc normally beneath said dome-shaped member and adapted to be placed over said dome-shaped member to conform to the shape thereof and to fit against the aperture whereby applicator means are provided, and a screw band for securing said member and absorbent disc upon said container.

11. A package sealed with a closure adapted to be re-arranged to facilitate dispensing of the contents, said package comprising in combination a container, a dome-shaped member provided with a convex top portion having an aperture therein, an absorbent disc normally beneath said dome-shaped member to act as a cushion to provide an effective seal and adapted to be placed over said dome-shaped member to provide applicator means, an impervious disc normally placed across the mouth of the container to seal it at the rim thereof, said impervious disc being adapted to be removed to permit dispensing of the contents without destroying said impervious disc, and a band member for securing said dome-shaped member, absorbent disc and impervious disc upon said container.

12. A sealed package comprising a container, an impervious disc for sealing said container, absorbent means adjacent to said disc to provide a cushion for forming an effective seal, a spherical member having a convex portion at the apex thereof provided with an aperture adapted to dispense the contents of the container, and a screw band for sealing said disc, absorbent means and spherical member upon the mouth of said container, said absorbent means being adapted to be placed over the spherical member to provide applicator means.

LOUIS A. VON TILL.