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3,079,022

BOTTLE CLOSURE

Filed May 8, 1961

FIG. 1.

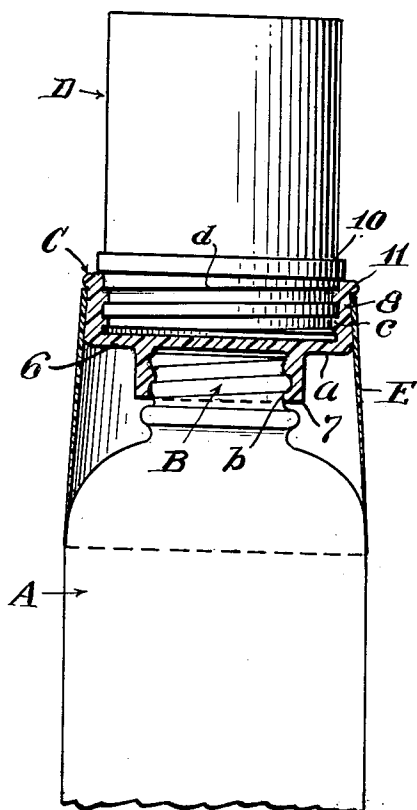


FIG. 2.

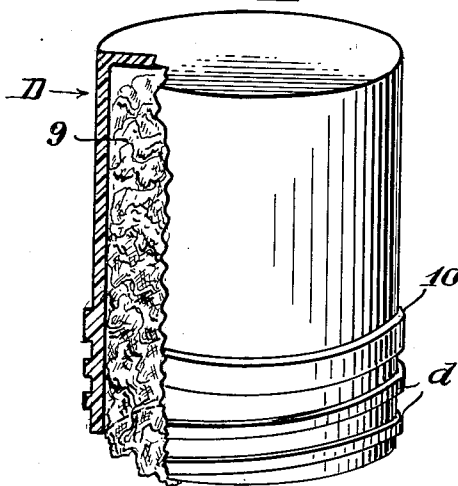


FIG. 3.

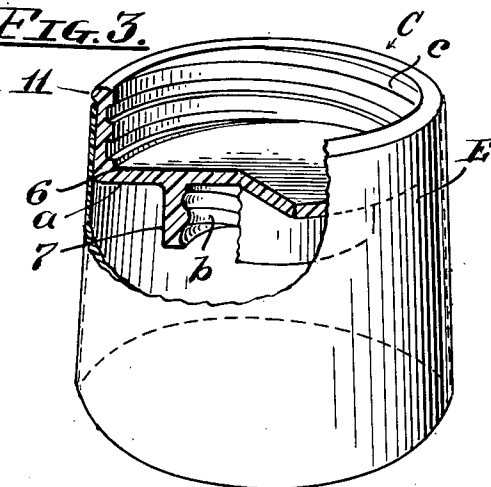


FIG. 4.

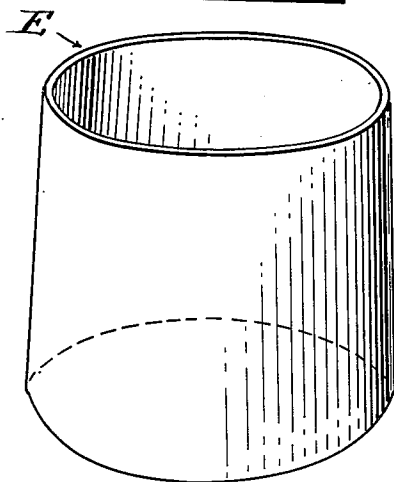
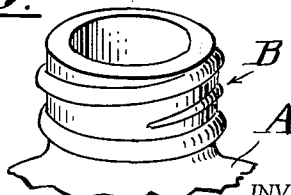


FIG. 5.



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BOTTLE CLOSURE

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4 Claims. (Cl. 215-6)

This invention relates to a closure for bottles of the screw-cap type employed as containers for liquids such as polishes intended to be applied to surfaces by an applicator and the coated surface subsequently rubbed by a sheet of polishing material such as cloth, sheep skin and the like.

The primary object of the invention is to provide a bottle closure having in association therewith a removable container for the reception and storage of an independent applicator, polishing sheet and the like.

Another object is to provide a combined bottle closure and storage receptacle in which means are provided for uniting the bottle and the receptacle at the perimeters thereof on application of the closure thereby closing the gap between the bottle and receptacle and rendering the assemblage symmetrical and at the same time affording a supplemental compartment between the storage receptacle and bottle around the bottle closure for the reception of a swab, sponge or other appropriate object.

A purpose of the invention is to provide a screw-cap bottle closure with a unitary connector adapted to serve as a closure for a storage receptacle and also adapted to serve as a mounting for an apron which may be utilized as a holder for a flexible material and then be employed as an applicator.

A particular advantage of the invention is that materials used in applying polishes and the like and in rubbing the applied polish may be housed in association with the polish container, and also that the container closure may be utilized apart from the container as a holder for applying material.

With the foregoing objects and advantages in view together with such other objects and advantages as may subsequently appear the invention resides in the parts and in the combination, construction and arrangement of parts hereinafter described and claimed, and illustrated by way of example in the accompanying drawing in which:

FIG. 1 is a view partly in section and partly in elevation illustrating the invention as applied to the upper portion of a bottle;

FIG. 2 is a perspective view with portions broken away of the storage receptacle showing it as detached;

FIG. 3 is a perspective view with portions broken away of the bottle closure cap and its associated connector as equipped with a container engaging apron;

FIG. 4 is a perspective view of the apron depicted in FIGS. 1 and 3 showing it as detached; and

FIG. 5 is a perspective view of an externally threaded bottle neck to which the closure shown in FIGS. 1 and 3 is adapted to be applied.

Referring to the drawings more specifically A indicates generally the upper end portion of a bottle or similar container here shown as cylindrical and as having an externally threaded neck B on the upper end thereof which neck is tubular and constitutes the mouth of the bottle A through which liquid materials may be delivered to the interior of the bottle or discharged therefrom in the usual manner.

In carrying out the invention a connector C is provided which connector is here shown as embodying a circular disk 6 which normally extends horizontal and has an under side *a* from which projects an annular concentric flange 7 having internal threads *b* adapted to engage and conform to the external threads on the bottle neck B; the

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disk 6 and internally threaded flange 7 constituting a removable closure cap for the bottle A.

The disk 6 has a diameter slightly less than the external diameter of the upper end of the bottle A and extending upwardly from the margin of the disk 6 is a continuous annular flange 8 having screw threads *c* on its inner periphery adapted to detachably receive and conform to complementary threads *d* on the exterior of the open end portion of a cylindrical jar D constituting a storage receptacle for the reception of applicator and polishing cloths 9 or the like as shown in FIG. 2. The jar D has a circumferentially extending rib 10 adapted to seat on the upper margin of the flange 8 when the jar D is attached to the connector as particularly shown in FIG. 1.

The outer face of the flange 8 inclines inwardly from its intersection with the under side *a* of the disk 6 and projecting laterally from the outer margin of the flange 8 is a shallow bead 11 which forms an abutment for a slightly tapered cylindrical apron E having its reduced end portion slidably conformable to the inclined outer face of the flange 8. The outer enlarged end of the apron E is slidably conformable to the cylindrical outer surface of the bottle A.

The connector C is formed of rigid material, while the bottle A and the jar D may be formed of either a rigid material such as glass or may be formed of a pliable material such as polyethylene. The apron E is formed of a slightly elastic material such that the reduced end thereof may be expanded to permit its being passed over the bead 11 in assembling the apron E on the connector C; the enlarged end of the apron E being initially passed over the upper end of the flange 8 with the inner face of the apron advancing over the bead 11. On the apron being thus positioned its upper end portion will contract into gripping engagement with the outer face of the flange 8 with the reduced end margin of the apron disposed clear of but abutting the underside of the bead 11 as indicated in FIGS. 1 and 3.

The apron E thus firmly grips the connector C and is held against longitudinal movement by the bead 11 serving as an end abutment for the apron holding it against movement in one direction while the diverging outer faces of the flange 8 serves to hold the apron against free movement in the opposite direction.

The outer end of the apron E may be of slightly less diameter than that of the bottle A encompassed thereby so as to be slightly expanded when applied to the bottle as shown in FIG. 1 whereby the end margin of the sleeve E will conform to the contiguous surface of the bottle A in slidable contact therewith.

The aforesaid mode of attachment of the apron E to connector C enables equipping the connector with aprons E of various colors or surface configurations.

The apron E serves to close the gap between the connector C and the contiguous end of the bottle A and thereby impart a symmetrical appearance to the assembled structure and also provide a space interiorly of the apron surrounding the neck B in which swabs, sponges or other objects may be housed.

From the foregoing it will be seen that the connector C constitutes a combined closure for the bottle A and the jar D as well as a support or mounting for the apron or shell E; the annular flange 7 constituting an internally threaded cylindrical bottle cap and the internally threaded flange 11 constituting a jar cap with said caps integrally united back to back in concentric relation to each other on the disk 6.

In the operation of the invention the connector C with the apron E thereon may be applied to the bottle A either before or after the jar E is connected thereto; the connector C manifestly being applied to the bottle neck B by

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screwing the internally threaded flange 7 thereon. When thus assembled the thin outer edge of the apron E will overlies and snugly conform to the upper portion of the bottle A. A sponge or swab may be placed inside the apron E around the flange 7 before applying the latter if so desired.

Obviously the polishing cloth 9 or other item to be stored is placed in the jar D before applying the latter to the connector C which is effected by screwing the threaded end of the jar into engagement with the internally threaded flange 8.

A feature of the invention is the utilization of the apron E on the connector C as a holder for the polishing cloth 9 which is tucked into the interior of the apron with a portion of the cloth protruding from its outer end. The apron is then employed as an applicator in polishing a surface, the cloth being retained in the apron and the latter manipulated with the exposed portion of the cloth abutting the surface to be polished.

While a specific form of the invention has been set forth, it is subject to modification particularly as to forming the apron and connector in two pieces whereas in some instances they may be produced in one piece, and accordingly this and other variations may be made within the meaning and scope of the appended claims.

I claim:

1. In a bottle closure, a disk, an internally threaded annular flange on one side of and concentric with said disk adapted for screw connection with a bottle neck, an

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internally threaded flange projecting from the margin of the other side of said disk adapted for screw engagement with a jar, and a cylindrical apron affixed to the outer face of said last named flange encircling said first named flange in spaced relation thereto.

2. The structure called for in claim 1 in which said cylindrical apron is elastic and is mounted on said jar engaging flange in gripping engagement therewith.

3. The structure called for in claim 1 in which said cylindrical apron is elastic and is mounted on said jar engaging flange in gripping engagement therewith, said jar engaging flange being inclined outwardly from its outer margin and the adjacent portion of said apron being inclined for conform thereto.

4. The structure called for in claim 1 in which said cylindrical apron is elastic and is mounted on said jar engaging flange in gripping engagement therewith, said jar engaging flange being inclined outwardly from its outer margin and the adjacent portion of said apron being inclined to conform thereto and an outwardly projecting bead on said jar engaging flange forming an abutment for the adjacent end of said apron.

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