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3,051,351

CLOSURE NECK FOR DISPENSING CONTAINERS

Filed March 22, 1961

FIG. 1

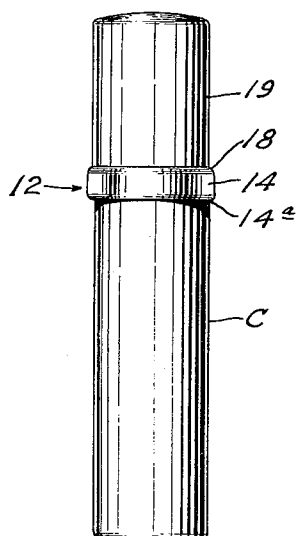


FIG. 2

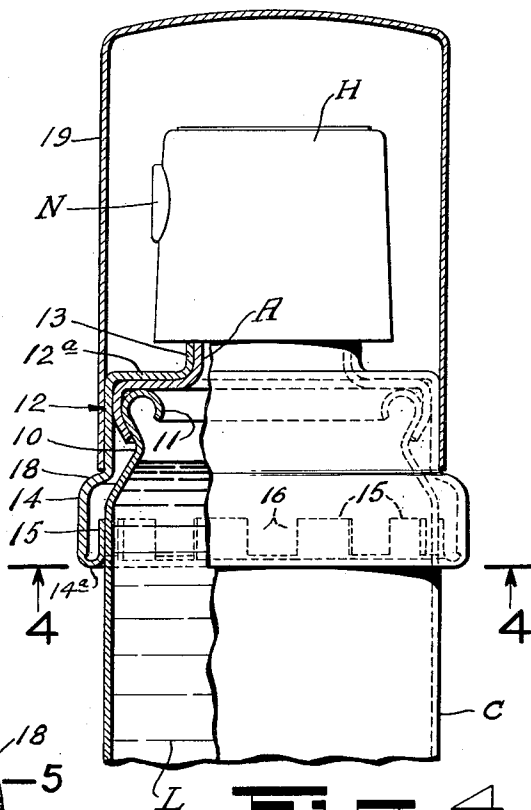


FIG. 3

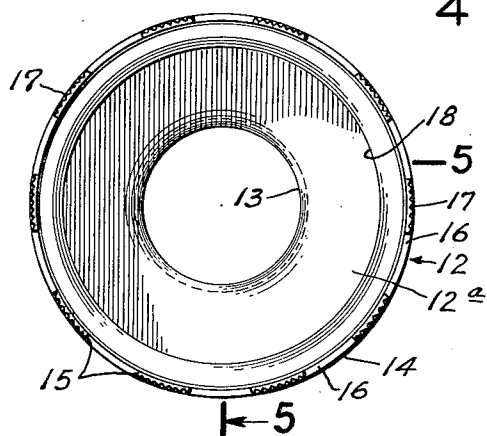


FIG. 4

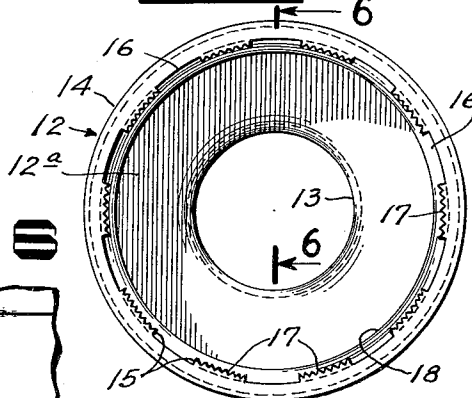


FIG. 5

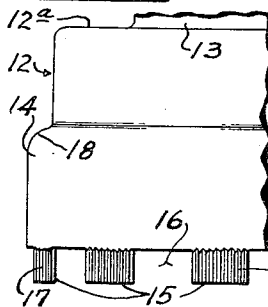
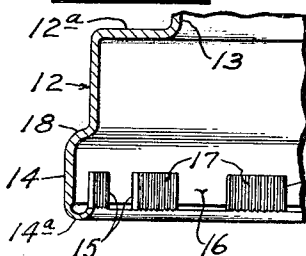


FIG. 6



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CLOSURE NECK FOR DISPENSING CONTAINERS

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2 Claims. (Cl. 220-67)

This invention relates to containers and more particularly to a closure neck for permanent attachment to a dispensing container for liquid or solid materials.

One object of the present invention is to provide a device of the above nature which will be inexpensive to manufacture, so that the container may be disposable after use.

A further object is to provide a device of the above nature which will be simple in construction, easy to install and manipulate, compact, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, there has been illustrated on the accompanying drawing, one form in which the invention may conveniently be embodied in practice.

In the drawing:

FIG. 1 represents a side view in elevation of a perfume dispensing container having the improved closure neck assembled thereto and covered by the usual protective cap.

FIG. 2 is a vertical cross-sectional view, on an enlarged scale, of the upper part of said container and closure neck and protective cap shown partly in section.

FIG. 3 is a bottom plan view of the closure neck, showing the appearance of the ears in their original condition before they have been curled inwardly and bent upwardly.

FIG. 4 is a bottom plan view of the closure neck, taken from line 4-4 of FIG. 2, looking upwardly, after the thinned ears have been curled inwardly and bent upwardly into their final position for permanent frictional engagement with the exterior of the container.

FIG. 5 is a fragmentary side view of the same, taken along the broken line 5-5 of FIG. 3, showing the appearance of the ears before they have been curled inwardly and bent upwardly.

FIG. 6 is a cross-sectional fragmentary view of the same, taken along the line 6-6 of FIG. 4, showing the appearance of the ears in their final condition after they have curled inwardly and bent upwardly.

Referring now to the drawing, in which like reference characters denote corresponding parts throughout the several views, the letter C indicates a hollow container having a liquid perfume L located therewithin. The container C, which is herein shown as an aerosol perfume dispenser, has a concave upper annular groove 10, and a cylindrical intumed open bead 11 at the upper end thereof. The exterior diameter of the bead 11 is smaller than the diameter of the container C. The upper end of the container C is covered and sealed by a valve assembly A.

The numeral 12 indicates a closure neck which comprises a horizontal section 12a having a central upwardly extending tube 13 located within a tapered depressible actuator head H provided with a side spray nozzle N, as clearly shown in FIG. 2.

The closure neck 12 is also provided with an enlarged bottom cylindrical flange 14 from which extends a plurality of integral ears 15 located around the periphery thereof and separated by spaces 16, the thickness of said ears being about one-half that of the remainder of the closure neck 12. Each of the ears 15 is provided with exterior knurled V-ribs 17, as clearly shown in FIGS. 3, 4, 5, and 6 of the drawing.

The upper part of the flange 14 is provided with an intumed shoulder 18, against which a dust excluding

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cylindrical cap 19 is adapted to seat when the device is not in use.

The purpose of thinning the ears 15 is to facilitate the operation of curling them inwardly and bending them upwardly into their final positions as shown in FIGS. 2, 4, and 6 of the drawing.

Operation

In use, the closure neck 12 is assembled by pushing it downwardly over the open upper end of the container C until the horizontal portion 12a abuts the valve assembly A. The closure neck 12 will then have a permanent force fit over the hollow container C by reason of the strong frictional engagement of the knurled ears 15 upon the exterior of said container. The liquid perfume L may then be dispensed laterally through the spray nozzle N by pushing downwardly on the top of the actuator head H.

One advantage of the present invention is that the closure neck will be permanently secured upon the exterior of the container.

A further advantage is that breakable glass bottles formerly used within the spray container are eliminated, as the container itself serves to receive the liquid of the aerosol bomb, and after the liquid has been depleted, the entire container may be discarded, as it is made of inexpensive material and is dispensable.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not limited to the specific disclosure, but may be modified and embodied in various other equivalent forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent is:

1. The combination of a cylindrical container having an open end provided with an intumed annular bead at its upper end of smaller diameter than said container, with a closure neck having a reduced upper section at the top of said container and provided with a depending cylindrical section having an enlarged bottom flange, a plurality of spaced ears integral with said flange, said ears being curled inwardly and bent upwardly from said flange in spaced relation therefrom and arranged in a circle having a diameter smaller than the diameter of said container to provide a strong resilient frictional engagement with the exterior of said container when assembled thereon, the thickness of said ears being smaller than the thickness of the depending cylindrical section of said closure neck to facilitate the inward curling and upward bending of said ears.

2. The combination of a cylindrical container having an open end, with a closure neck at the top of said container provided with a depending cylindrical section having a plurality of spaced ears, the thickness of said ears being smaller than the thickness of said cylindrical section, said ears being bent inwardly and upwardly in spaced relation from said cylindrical section and arranged in a circle having a diameter smaller than the diameter of said container to provide a strong resilient frictional gripping engagement with the exterior of said container when assembled thereon.

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