March 27, 1951 H. R. BISHOP 2,546,848

CRUSHABLE CONTAINER

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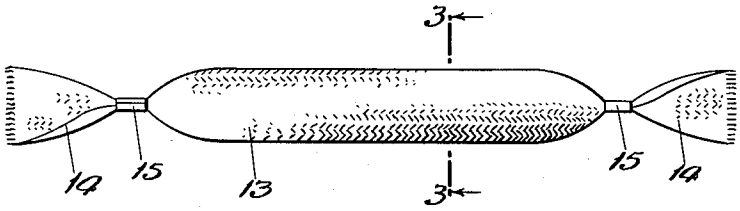


Fig. 1.

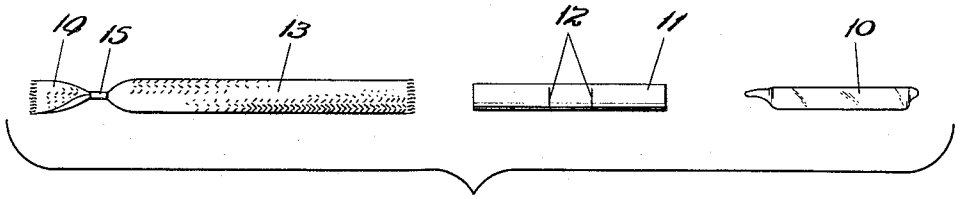


Fig. 2.

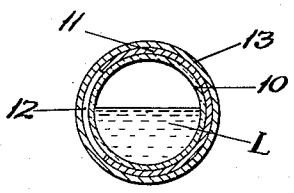


Fig. 3.

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CRUSHABLE CONTAINER

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3 Claims. (Cl. 128—272)

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This invention comprises improvements in crushable containers of the type used for various purposes such as ammonia inhalants, perfume dispensers and the like.

An object of this invention is to provide a construction for crushable containers which improves the appearance, utility and effectiveness of such devices.

Another object of the invention is to provide a construction which insures against injury to the user when the liquid container which is of glass is broken.

A still further object of the invention is to provide a construction in such a device which facilitates the release of the liquid.

Another object of the invention is to provide a construction which is adapted to reduce manufacturing costs.

Other and more detailed objects of the invention will be apparent from the following description of the embodiment thereof illustrated in the attached drawing.

In the accompanying drawing—

Figure 1 is an elevational view of a crushable container in accordance with this invention;

Figure 2 is an exploded elevational view thereof showing the parts comprising the same; and

Figure 3 is a cross sectional view taken on the line 3—3 of Figure 1.

As illustrated in Figure 2, the complete structure consists of a vial or ampule 10 of some suitable material such as glass sealed to retain the liquid content L, no matter what it be, against leakage and evaporation. The ampule is enclosed within a tube 11 of suitable material such as paper impregnated with a water repellent material, fiber, thin plastic or other non-absorbent material. As illustrated, the tube 11 is provided with one or more slits or perforations 12. The tube encased ampule is then slipped into a woven or braided tubular casing 13, itself made of any suitable material such as natural or synthetic fibers. The ends of the outer casing 13 are closed adjacent the ends of the tube 11 by any suitable fastening means 15 which may be of metal, plastic material or even a tightly wrapped binding thread. The terminal ends 14 are preferably caused, in any suitable manner, to be unravelled slightly to give tuft ends to the article, thereby improving its appearance.

The improvements resulting from this construction are, first, that the protective tubing 11 is sufficiently form sustaining so as to give the finished article an appearance of regularity not

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otherwise obtainable if the irregular shaped ampule 10 were inserted directly into the braided or woven casing 13 as is common in present practice. Furthermore, the protective tubing 11 serves to provide a uniform and semi-rigid surface which facilitates the application of a label to the exterior casing 13 or aids in printing or otherwise impressing on the surface thereof any identifying legend that may be desirable. Also, the tubing 11 protects the user against possible injury when the container is broken by crushing or otherwise at the time the fluid is to be released. In addition to preventing the glass fragments in the case of a glass ampule from cutting the user, it also serves to prevent the unsightly effect of having these fragments work through the outer casing 13 as is frequently true without the use of the sleeve 11. Also, the provision of the protective tube 11 facilitates the introduction of the ampule into the woven or braided outer tubular casing 13 by preventing the more or less pointed end of the ampule from entangling with the meshes of the outer tubing as is frequently the case when the ampule itself is forced endwise into the outer casing.

Also, the application of a label or printing to the outer casing may be effected by machine, thereby speeding up the process of manufacture by reason of the protection afforded the ampule. Likewise, the danger of fracture of the ampule at the ends in the machine application of the binding 15 is minimized by use of the sleeve 11. Finally, the slits 12 in the sleeve facilitate the escape of the liquid when the ampule is broken to the outer absorbent casing 13 which quickly absorbs it by capillary action.

Thus, it will be seen by the simple structural improvement herein disclosed that a wide variety of advantages are obtained which simplify and facilitate manufacture of the devices and increase the usefulness thereof by preventing possibility of injury to the user.

It will be apparent to those skilled in the art that the subject matter of this invention is capable of some variation and I do not desire therefore to be limited except as required by the appended claims.

What is claimed is:

1. An article of the type described comprising a crushable vial, a perforate sleeve enclosing said vial, an absorbent covering overlying said sleeve, and means for closing the ends of said covering, said sleeve comprising a fluid repellent tube having one or more openings.

2. An article of the type described comprising

a crushable vial, a perforate sleeve enclosing said vial, an absorbent covering overlying said sleeve, and means for closing the ends of said covering, said sleeve comprising a fluid repellent tube having one or more openings in the form of slits.

3. An article of the type described comprising a crushable vial, a perforate sleeve enclosing said vial, an absorbent covering overlying said sleeve, and means for closing the ends of said covering, said sleeve comprising a fibrous material impregnated with a liquid repellent.

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