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B. CUTLER

2,535,671

HOLDER FOR TOOTHPASTE OR THE LIKE

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Fig. 1.

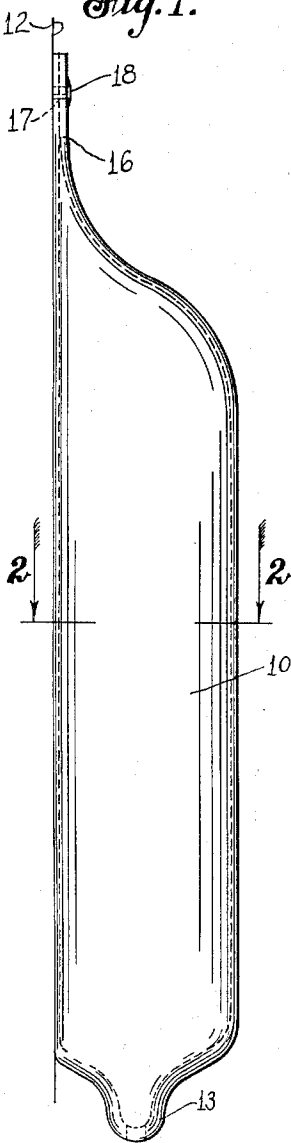


Fig. 2.

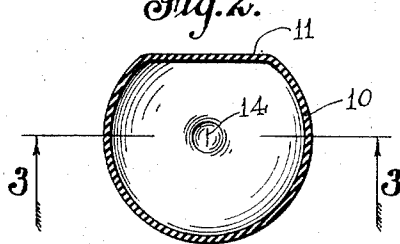


Fig. 3.

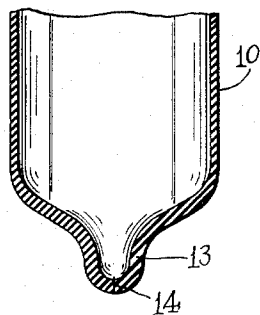


Fig. 4.

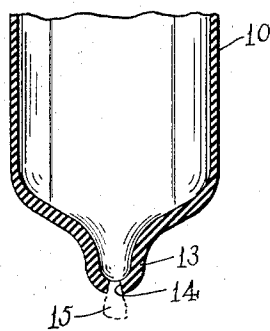
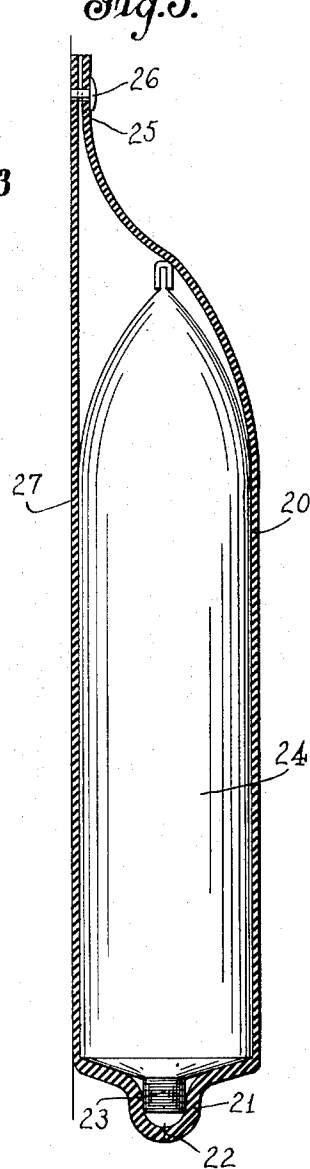


Fig. 5.



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UNITED STATES PATENT OFFICE

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HOLDER FOR TOOTHPASTE OR THE LIKE

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1 Claim. (Cl. 222-105)

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This invention relates to containers for paste or similar material, such, for example, as toothpaste.

Toothpaste is ordinarily dispensed at the present time in metallic collapsible tubes having a screw cap, and it is necessary, after the required quantity of paste has been expelled from the tube, to screw the cap back in place. Sometimes this operation is omitted, with the result that the paste exudes from the tube, making an untidy condition. Moreover, even though the cap is screwed back upon the tube, it is often found that, between the time the paste is dispensed and the replacement of the cap, an additional quantity of paste has exuded from the tube and interferes with the replacement of the cap.

It is contemplated by the present invention to make a container for paste material from a flexible plastic material such as natural or synthetic rubber, for example, so that the walls of the container, which will be in tubular form, are elastic and may be compressed to expel the contents of the container, and to provide the container with a neck portion having thickened walls, the extreme end of the neck portion being in turn provided with a slit or opening which will be self-closing. With such a structure it will be unnecessary to provide any closing cap, and thus the work of screwing a cap upon the container after a quantity of paste has been dispensed will be eliminated. Moreover, after a portion of the tube has been pressed or partially collapsed in order to expel the contents, and the pressure has been released, the elastic wall of the container will tend to assume its original shape, and thereby tend to create a vacuum in the tube which will tend to retract any paste within the slit or opening in the end of the neck back into the tube, so that the opening will close effectively due to its inherent resilience.

I also contemplate by the present invention to make the container generally circular in cross section, but flattened along one side, so that this flattened area extends from one end of the tube to the other to enable the tube to be supported or suspended against a flat surface such as a wall, for example. With this construction the tube will lie flatly against the wall so as to be easily subjected to pressure to expel the contents, and the shape will add to its stability during the application of such pressure.

One object of the present invention is to provide a novel container for paste or like material.

A further object of the invention is to provide a container for a paste or like substance,

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which container will be formed of elastic material such as natural or synthetic rubber, so as to be readily collapsed to expel the material therefrom, and which will be provided with a self-closing opening so that, upon removal of pressure from the walls of the container, any material within the opening will be retracted into the container and the opening will be self-closing so that the contents will be kept in sterile condition.

A still further object of the invention is to provide a container of the character described, which container will be generally circular in cross-sectional form, but which will be flattened along one side in order that the container may be supported in a relatively stable position against a backing surface such as a wall or the like.

To these and other ends the invention consists in the novel features and combinations of parts to be hereinafter described and claimed.

In the accompanying drawing:

Fig. 1 is a side elevational view of a container embodying my invention;

Fig. 2 is a sectional view on line 2-2 of Fig. 1;

Fig. 3 is a fragmentary vertical sectional view on line 3-3 of Fig. 2, showing the tube with the opening in closed position;

Fig. 4 is a view similar to Fig. 3, showing the contents of the tube being expelled therefrom;

Fig. 5 is a vertical sectional view of a modified form of my invention.

To illustrate a preferred embodiment of my invention, I have shown in the drawings a container comprising a tubular body portion 10 formed of elastic material such as natural or synthetic rubber, or a soft plastic, for example. As shown in Fig. 2, the wall of the container may be relatively thin, and the container is generally circular in cross-sectional shape. This circular shape is departed from, however, at the back of the tube, where there is provided a flattened surface 11 extending from one end of the tube to the other. As shown in Fig. 1, this flattened surface is designed to lie against a wall or other support 12, so that the tube will be relatively stable when so supported, and will not tend to oscillate or rock as it would if it were entirely round in cross section.

At one end the container is provided with a depending neck 13. This neck, as shown, is formed integrally with the body portion of the container, but is of smaller diameter than the body portion. The walls of the neck are relatively thick as compared to those of the body

portion, and merge into the latter, as shown in Figs. 3 and 4.

At the extreme outer end of the neck the wall thereof is slit, as shown at 14, to form a discharge opening. Due to the resilience of the material, this opening will ordinarily remain in closed position, but will open up under pressure to allow discharge of the material therefrom, as shown, for example, at 15 in Fig. 4. However, when the pressure is removed the walls of the tube will tend to assume their original form, and thus tend to draw any material within the slit 14 back into the tube so as to allow the opening to close and thus keep the contents in sterile condition, and particularly prevent air from entering the tube.

At its upper end the forward portion of the wall of the tube is flattened against the rear portion thereof so as to provide a flat tab 16 to enable the tube to be secured in a depending position. This tab may be provided with an opening 17 adapted to receive a nail or pin 18 from which the container may be suspended. The walls of the tube adjacent the flattened tab 16 may be effectively closed by being vulcanized together so that this end of the tube will also be sealed.

In Fig. 5 of the drawings I have shown a modified form of my invention, wherein the container 20 of elastic material is adapted to receive the usual collapsible metallic tube in which material in paste form is contained. The container 20 is of substantially the same shape as the container 10, previously described, and may be made of the same material. It is provided with a depending thickened neck 21 formed integrally with the body of the container, which neck is provided with a self-closing slit-like opening 22. It will be noted that the walls of the neck 21 are relatively thick, and are shaped to snugly and tightly receive the threaded neck 23 of a collapsible tube 24, the walls of the neck 21 making tight contact with the neck of the tube.

At its upper end the container 20 is flattened, as shown at 25, but the container is left open and not sealed at its upper end in order to permit the collapsible tube 24 to be inserted therein. In this case also the container 20 may be supported against a vertical wall by a nail or pin 26 passing through the walls of the flattened portion 25. It will also be understood that there is a flattened area 27 provided at the rear face of the container 20, this area being similar to

the area 11 shown in connection with the form of my invention illustrated in Figs. 1 to 4.

While I have shown and described some preferred embodiments of my invention, it will be understood that it is not to be limited to all of the details shown, but is capable of modification and variation within the spirit of the invention and within the scope of the claim.

What I claim is:

10 A container for a collapsible tube having a projecting neck through which is discharged the material contained in the tube, said container comprising a tubular body portion of relatively soft elastic material having an integrally formed depending reduced portion at one end snugly receiving the neck of the collapsible tube, the wall of said reduced portion being thickened as compared with the body portion, and said reduced portion having a self-closed opening therein to permit expulsion of the contents of the tube under pressure and to seal the container when the pressure is relieved, said container having a flattened area extending from the reduced portion to the open end thereof to enable the container to lie flatly against a backing surface, the other end of the container being open for the reception of the tube therein, the neck of the tube fitting snugly in the depending reduced portion of the container and means for securing the container to a substantially vertical surface in a pendent position.

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