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H. C. HARVEY
PROTECTIVE CLOSURE
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2,298,480

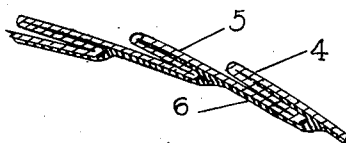
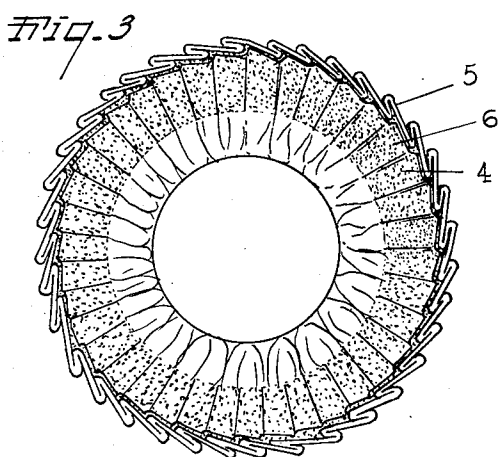
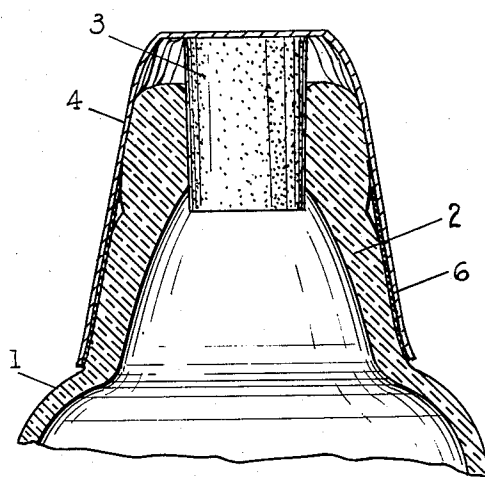
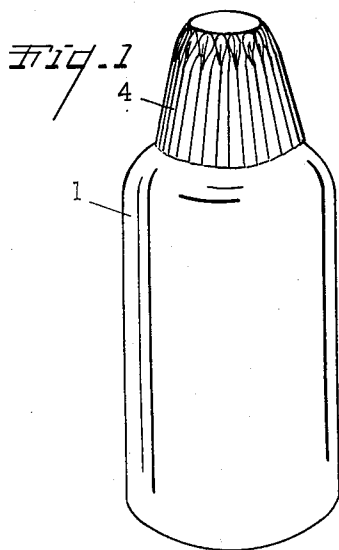


Fig. 4

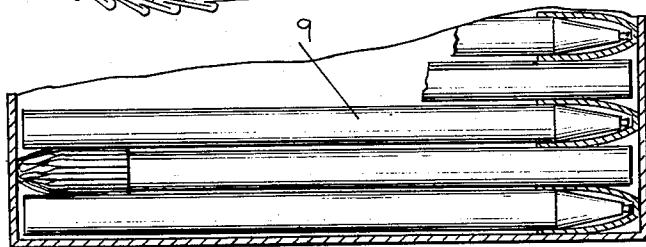


Fig. 5

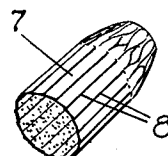


Fig. 6

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PROTECTIVE CLOSURE

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14 Claims. (Cl. 215—38)

This invention relates to improvements in protective closures.

The main objects of this invention are:

First, to provide a sealing and protective closure or cover member adapted to be removably mounted on a bottle, drinking glass, or other container to cover and protect the same.

Second, to provide a protective closure or cover of the type described which is highly effective for the purpose and capable of repeated use.

Third, to provide a protective member of cup-shaped form treated with an adhesive such as rubber latex or other adhesive having the characteristic or quality of adhering to itself but not become affixed to a dissimilar surface.

Fourth, to provide a cup-shaped member conformed and treated as stated which is well adapted for association with articles to be packaged such as candles, for example, to serve as a packing to prevent them from adhering to each other or being marred through contact, and at the same time can be removed without leaving marks on the articles packed.

Objects pertaining to details and economies of my invention will definitely appear from the description to follow. The invention is defined in the claims.

A structure which embodies the features of my invention is clearly illustrated in the accompanying drawing in which:

Fig. 1 is a perspective view of the bottle-like container having my protective closure or cover applied thereto.

Fig. 2 is an enlarged view mainly in vertical section of the structure shown in Fig. 1.

Fig. 3 is a bottom or inverted view illustrating the structural details of my closure or cover member, parts being conventionally shown.

Fig. 4 is a fragmentary enlarged horizontal section illustrating structural details.

Fig. 5 is a fragmentary view partially in section illustrating a package of candles with my protective member or cap used for packing and separating the candles.

Fig. 6 is a perspective view of the adaptation of my improvements shown in Fig. 5.

Referring to the drawing, the reference numeral 1 represents a bottle of substantial size such as is commonly used for the delivery of distilled water, spring water and the like. It will be understood, however, that the purpose for which the bottle or container is used is unimportant, but my closures or covers are now widely used on bottles for delivering water. The cork 3 is of conventional type.

In use such bottles as described are normally exposed during delivery and even in use, while the contents are being consumed, and are therefore usually free to accumulate dust and germs. This accumulation around the mouth of the bottle renders the same unsanitary. In order to shield the necks of the bottles, the rims of drinking glasses and various other containers, and protect the same against dirt, dust and foreign matter, I provide a seamless tapered cup-shaped closure or cover member 4 formed of paper and having pleated side walls, the pleatings being shown at 5 (see Figs. 3 and 4). These cover or closure members of a single size are adapted for a wide range of articles but, of course, may be made in varying sizes.

In the embodiment illustrated the cover or closure is adapted to fit quite snugly against the upper end of the projecting cork 3 and to be compressed against the sides of the neck 2. The cover member is provided with an inner circumferential zone or strip of adhesive indicated at 6 preferably extending to the lower edge or at least terminating near the lower edge of the side walls. In the illustration it extends to the lower edge of the side walls.

The adhesive coating extends into and between the pleats. For this purpose I provide a relatively tacky adhesive having the property or characteristic of repeatedly adhering to itself but, generally stated, being non-adherent to dissimilar surfaces; that is, while it may have a sealing or retaining engagement with the surface to which it is applied, it can be readily freed therefrom without the adhesive remaining or sticking to such surface. I have found a rubber compound such as latex which may be applied in liquid form very suitable for my purpose.

Having the adhesive applied as described, the cover member may be placed over the neck of a bottle, for example, and squeezed or compressed and fitted therearound, and the pleating will permit its being readily conformed to the particular size of the article to which it is applied. Of course, there are limits to which the closure or extending member may be extended or collapsed, but a single size is adaptable for quite a wide range. When it is desired to remove the member it may be readily pulled off, it is easily replaced, and is effectively retained. It will be observed that it does effectively protect the neck and rim of the bottle, for example, which is very desirable in the delivery of water, milk and various other materials. The cover member may also be used in hospitals for covering glasses

containing medicines and in numerous other relations.

The device is also adapted for use as a packing member or protecting member in packing candles as indicated at 9, Fig. 5. As shown in Fig. 6, the general shape of the protective member is cylindrical. It has the pleated wall indicated generally at 7, the pleats 8 being arranged parallel with the axis of a cylindrical body such as a candle 9. The protecting member is provided with an adhesive carrying sealing zone so that it may be snugly fitted around the candle, the adhesive acting as previously described. In packing, each candle is provided with a protecting member at one end and these being arranged in reversed relation the candles are held in separated relation and effective packings provided therefor. The candles being kept out of contact are not injured in appearance by rubbing of the surfaces thereof or by the surfaces becoming fused together under undue heat.

Other adaptations and embodiments of my invention will be apparent to those skilled in the art. I have illustrated and described the invention in embodiments which I have found very practical and have not attempted to disclose all the adaptations of which my invention is capable.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A protective closure or cover adapted for use on a container such as a bottle or the like to protect the rim thereof and exclude dirt and foreign substances therefrom comprising a tapered cup-shaped member formed of paper and having the side wall thereof pleated, the pleated side wall having an internal zone of adhesive coating adjacent the edge thereof and extending completely therearound and between the pleats, said adhesive being of rubber latex and adapted to adhere to itself and to removably adhere to the article to which the closure is applied, said closure being inverted for positioning over a container and when pressed into sealing relation therearound with the pleats mutually adhering to removably retain the closure in position on the container.

2. A protective closure or cover adapted for use on a container such as a bottle or the like to protect the rim thereof and exclude dirt and foreign substances therefrom, comprising a tapered cup-shaped member formed of paper and having the side wall thereof pleated, the pleated side wall having an internal zone of adhesive coating adjacent the edge thereof and extending completely therearound and between the pleats, said adhesive being of a character adapted to adhere to itself when dry and unheated, but not adherent to adhesively uncoated surfaces, said closure being inverted for positioning over a container and when pressed into sealing relation therearound with the pleats mutually adhering to removably retain the closure in position on the container.

3. As an article of manufacture, a protective closure adapted for use on a container rim comprising a seamless cup-shaped member having its side wall pleated, the pleated side wall having an internal circumferential zone of adhesive coating completely therearound and between the pleats, said adhesive being of the character of rubber latex and adapted to adhere to itself and to removably adhere to the article to which the closure is applied, said closure being adapted

to be inverted over a container and pressed into conformed relation therearound.

4. A protective sealing closure adapted to be associated with a container to prevent the access of dirt and foreign substances thereto comprising a cup-shaped member of paper adapted to be inverted over the container and having the wall thereof pleated and provided with an internal coating of adhesive extending between the pleats, said adhesive being of rubber latex adapted to adhere to itself but not to dissimilar surfaces, said member being positioned on the container with the pleats mutually adhering to secure the member in place.

5. A protective member of the type described comprising a seamless cup of flexible material having the side wall thereof pleated and internally coated with a circumferential strip of adhesive extending into and between the pleats, said adhesive being relatively tacky and of a type removably and repeatedly adherent to itself but non-adherent to dissimilar surfaces, said cup being adapted to be placed over the end of an article to be protected and squeezed thereagainst, whereby the coated pleats adhere through the coating and removably lock the cup to the article.

6. A protective device comprising a tapered cup-shaped member formed of paper and having the side wall thereof pleated, the pleated side wall having an internal zone of adhesive coating extending completely therearound and between the pleats, said adhesive being relatively tacky and characterized by the quality of being adapted to adhere to itself when dry and unheated, but not adhering to a surface of the article to which the closure is applied which is not adhesively coated.

7. A protective member comprising a seamless paper cup having the side walls thereof pleated and internally coated with an adhesive extending between the pleats, said adhesive being relatively tacky and of a type having retaining releasable engagement adapted for repeated removable and non-adherent engagement with dissimilar surfaces.

8. A protective member comprising a seamless paper cup having the side walls thereof pleated and coated with an adhesive extending between the pleats, the adhesive being relatively tacky and characterized by the quality of being adherent to itself when dry and unheated, but not to dissimilar adhesively uncoated surfaces.

9. A packing and shipping member for destructible or damageable objects, comprising a seamless paper cup having the side wall thereof pleated and an inner circumferential coating strip of latex extending therearound and into the pleats, said cup being assembled over an object and squeezed therearound whereby the pleats removably adhere to one another through said coating and hold the member in place, said member serving as a buffer member between adjacent objects packed in a container.

10. A packing and shipping member for destructible or damageable objects comprising a cup having the side wall thereof pleated and a coating of latex extending into the pleats, said cup being assembled over an object and squeezed therearound whereby the pleats removably adhere to one another through said coating and hold the member in place, said member serving as a buffer member between adjacent objects packed in a container.

11. A bottle cap for milk bottles or the like, having a central portion adapted to extend across

the mouth of the bottle and a skirt portion adapted to extend about the neck of the bottle, said skirt portion having complementary areas coated with an adhesive which when dry and cool is adapted to adhere to itself for securing together such coated areas upon contact thereof with each other, said adhesive being, when dry, substantially insoluble in water and practically incapable of adhering to uncoated portions of said cap.

12. A bottle cap for milk bottles or the like, having a central portion adapted to extend across the mouth of the bottle and a skirt portion adapted to extend about the neck of the bottle, said skirt portion being provided with spaced plaits adapted to be folded into contact with adjacent portions of the skirt during contracting of the skirt about the neck of the bottle, said plaits and said adjacent portions of the skirt having adjacent surfaces provided with complementary areas coated with an adhesive of a type adapted to adhere to itself upon application of pressure alone for securing together such coated areas upon contact thereof with each other, said adhesive being, when dry, substantially insoluble in water and practically incapable of adhering to uncoated portions of said cap.

13. A bottle cap for milk bottles or the like, having a central portion adapted to extend across the mouth of the bottle and a skirt portion

adapted to extend about the neck of the bottle, said skirt portion being scored from the central portion to the outer edge thereof to form a plurality of triangular shaped plaits arranged in spaced relation to each other circumferentially around the skirt and adapted to be folded into the overlapping engagement with the adjacent portions of the skirt extending intermediate said plaits as the skirt is contracted about the neck of the bottle, each of said plaits and intermediate portions of the skirt arranged for said overlapping engagement having adjacent areas coated with adhesive of a type adapted when dry and cool to adhere to itself upon the application of pressure alone, said adhesive being, when dry, substantially insoluble in water and practically incapable of adhering to uncoated portions of said cap.

14. A protective device comprising a cap-shaped member formed of paper and having the side wall thereof pleated, the pleated side wall having an internal zone of a coating of a relatively tacky adhesive, characterized by the quality of being adherent to itself, when dry and unheated, but not to adhesively uncoated surfaces, said coating extending into and between the pleats, said cap fitting over the end of an article to be protected with the coated pleats adhering to each other.

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