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MILK BOTTLE CAP

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Fig. 1.

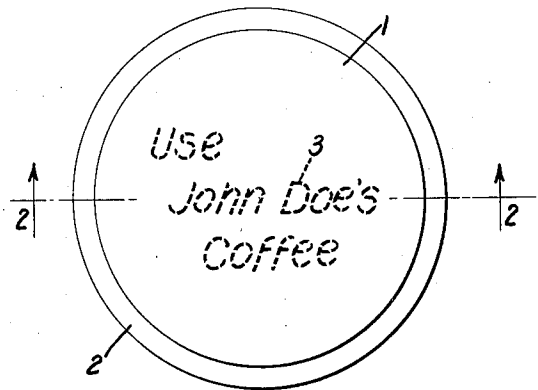


Fig. 2.

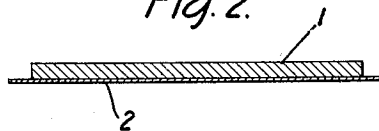
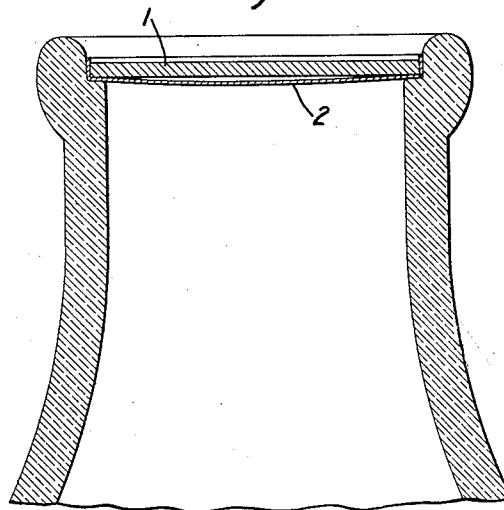


Fig. 3.



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MILK BOTTLE CAP

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1 Claim. (Cl. 215—51)

This invention relates to caps or other closures for bottles or other containers.

In the particular embodiment described herein it is concerned with a cap for a milk or cream bottle.

The caps now commonly employed for such bottles consist of cardboard impregnated with paraffin. The upper surface of such caps usually bears legends describing the contents of the bottle and the name of the company furnishing the product.

According to the present invention, provision is made for permitting these caps to bear advertising or similar legends on their lower surface. For this purpose the lower surface of the cap on which the legend is printed is covered with a membrane which is adhesively united to the cap and which has the property, when placed in contact with the liquid contained in the bottle, of absorbing a small quantity of such liquid and of expanding when thus moistened. As a result of this, the membrane will buckle and break the adhesive union between it and the cap. When the consumer removes the cap from the bottle, the membrane will remain in place, thus exposing to view the printed matter at the lower surface of the cap.

The membrane referred to is preferably a transparent member such as transparent regenerated cellulose, but it will be understood that any other suitable means may be employed. The adhesive union between the membrane and the cap is preferably effected by means of paraffin with which the regular commercial cap of the present day is impregnated, the adhesion being secured by the mere application of heat.

In the accompanying drawing,

Figure 1 shows a bottom plan view of the device of the present invention,

Figure 2 is a cross section of Figure 1 along lines 2—2, and

Figure 3 is a fragmentary view of the upper end of the milk bottle showing the cap in place.

Similar reference characters indicate similar parts in the several views.

In the drawing, reference character 1 designates a cap of the type now usually employed for bottles or other containers of milk or cream, made of pasteboard or other suitable sheet material. 2 designates a membrane of transparent regenerated cellulose, which disc is slightly larger in diameter than the cap 1 and which is adhesively united to said disc in any suitable manner, as by means of the paraffin with which the disc 1 is usually impregnated, adhesion between discs 1 and 2 being effected by the application of heat as, for example, by means of a hot iron. It will be understood that any other manner of securing a similar degree of adhesion between the two discs may be employed.

The lower surface of the disc 1 bears a legend, such as indicated at 3, which may be in the nature of an advertisement. If the cap 1 were used without the membrane 2, the printed matter of the lower surface of the cap might contaminate the contents of the bottle. In any event, it would be obscured to a large extent by reason of the adhesion of a portion of the milk or cream or other contents to the lower surface of the cap. By reason of the provision of the membrane, however, such contamination and obscuring is avoided. When the cap has been placed into position and, therefore, is in contact with the contents of the bottle, as indicated in Fig. 3, a slight amount of the moisture of the contents will be absorbed by the membrane which membrane will thereupon be caused to buckle and lose its adhesive connection to the cap. As a result, the membrane will remain in place when the cap is removed by the consumer. The under surface of the cap will then be exposed and this surface will be found clean and unobscured by the adhesion thereto of any portion of the contents of the bottle. After the consumer has thus removed the disc 1 he may readily remove the membrane 2 and discard the same. Moreover, if the consumer uses only part of the contents of the bottle he may replace the cap 1 without the membrane 2, as in such case the contents of the partly emptied bottle will not be in contact with the cap, so that there will be no contamination of the contents.

It will be understood that instead of transparent regenerated cellulose, other suitable materials may be used for said membrane. One of the products now widely sold on the market under the name "Cellophane" is suitable for use in connection with the present invention.

We have described what we believe to be the best embodiment of our invention. We do not wish, however, to be confined to the embodiment shown, but what we desire to cover by Letters Patent is set forth in the appended claim.

We claim:

A cap for milk bottles and the like, comprising a pasteboard disc impregnated with paraffin, a membrane of transparent regenerated cellulose having the property of expanding on prolonged contact with moisture, said membrane being adhesively united with said disc by the paraffin with which the disc is impregnated, said adhesive union having the property of loosening its hold when the membrane is expanded by prolonged contact with moisture, and said disc bearing a legend covered by said membrane.

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