

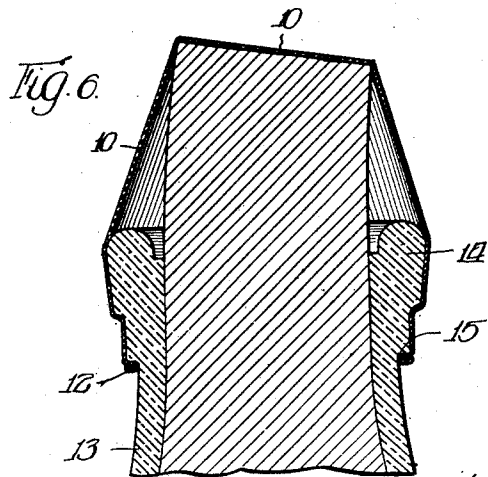
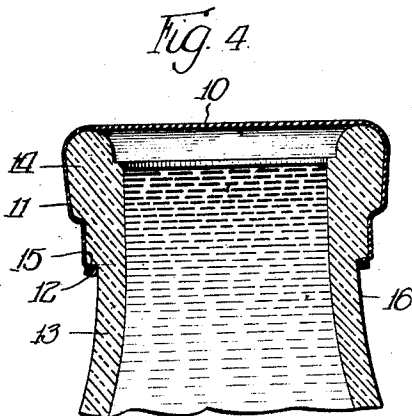
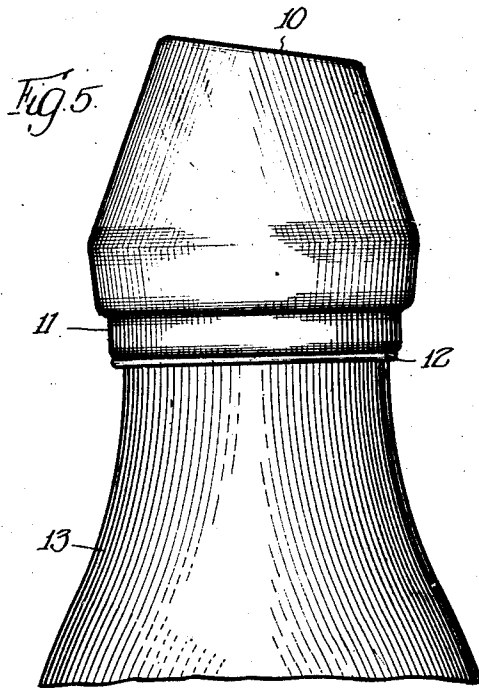
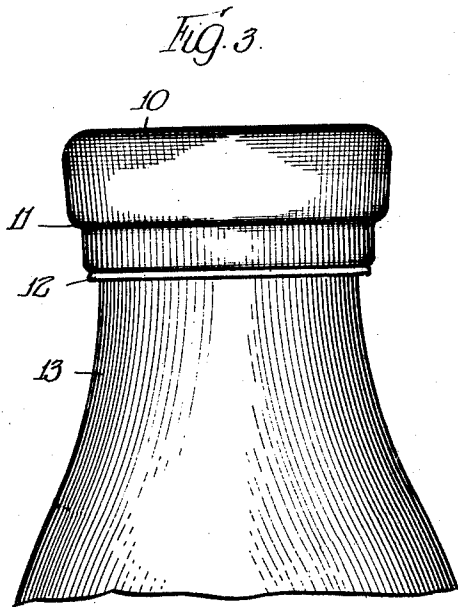
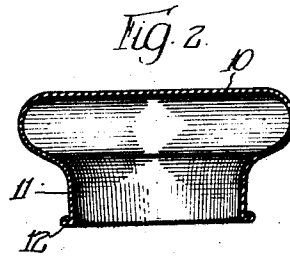
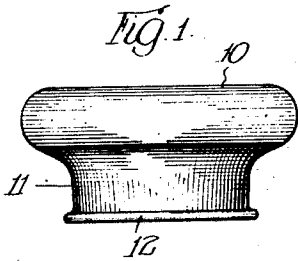
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O. EHMANN

MILK BOTTLE CAP

Filed Sept. 10, 1926



Witness:  
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# UNITED STATES PATENT OFFICE.

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## MILK-BOTTLE CAP.

Application filed September 10, 1926. Serial No. 134,605.

The object of this invention is to provide an improved milk bottle cap which is quite inexpensive to manufacture, is easy to apply to the bottle, effectively seals the contents of the bottle in a highly sanitary way, and maintains such seal even when the contents freeze and expand beyond the top of the same.

While the foregoing statement is indicative in a general way of the nature of the invention, other objects and advantages will be evident to those skilled in the art upon a full understanding of the improved cap.

A cap embodying one form of the invention is presented herein for the purpose of exemplification, but it will of course be understood that the invention is also susceptible of embodiment in other slightly modified forms coming equally within the scope of the appended claims.

In the drawing:

Fig. 1 is a side view of the cap before being applied to a milk bottle;

Fig. 2 is a vertical section through Fig. 1;

Fig. 3 is a fragmentary side view of a milk bottle with the cap applied thereto.

Fig. 4 is a vertical section through Fig. 3;

Fig. 5 is a fragmentary side view corresponding to Fig. 3 but showing the contents of the bottle frozen and the cap expanded; and

Fig. 6 is a vertical section through Fig. 5.

The cap of the invention is formed of soft elastic rubber, and, when in unstretched condition before being applied to a bottle, is of the shape shown in Figs. 1 and 2. The cap may be produced very economically by dipping a mold having the shape of the inside of the cap into a bath of rubber.

The cap is characterized by a substantially flat top portion 10, and an annular neck portion 11 which terminates in a bead 12. The top portion 10 is but slightly smaller in diameter than the top of the bottle 13 to which the cap is adapted to be applied, while the neck portion 11 of the cap is considerably smaller in diameter than the neck portion 14 of the bottle. As a result, when the cap is applied to the bottle, the neck portion 11 of the cap will be stretched tight-

ly about the neck portion 14 of the bottle and effectively seal the same, while the top portion 10 of the cap will be less tightly stretched across the top of the bottle, as shown in Fig. 4 by the difference in thickness between the top and neck portions 10 and 11 of the cap, which portions, when unstretched, are of the same thickness. The bead 12 on the cap fits beneath an annular shoulder 15 on the bottle below the neck portion 14 thereof.

When the milk 16 or other material within the bottle freezes, as shown in Figs. 5 and 6, the top portion 10 of the cap, being but slightly stretched when in position on the bottle before the freezing occurs, will stretch as far as necessary to compensate for the expansion of the frozen milk, without further stretching the neck portion 11 of the cap which is drawn about the neck portion 14 of the bottle, thus preventing the neck portion 11 of the cap from shifting on the bottle after having once been placed in proper position thereon.

While the cap of the invention is designed particularly for use on milk bottles of standard shape, it may also be used to advantage on other kinds of containers.

The paper disks ordinarily used as caps on milk bottles usually have printed thereon the name of the dairy or distributor and the date on which the milk was Pasteurized. When the cap of the invention is used, this data may be printed on the top portion 10 of the cap, or the cap may be made of transparent rubber and a printed paper disk may be applied to the bottle in the ordinary way beneath the rubber cap, the printing on the disk, of course, being easily readable through the top of the cap.

I claim:

1. A bottle cap which is formed of soft elastic rubber and is characterized by neck and top portions which when unstretched are proportioned in different size ratios relative to the neck and top portions of the bottle they are adapted to cover.

2. A cap for use on a milk bottle of standard shape, consisting of a soft elastic rubber dipping having a neck portion which is con-

siderably smaller than the neck portion of the bottle it is adapted to be stretched over and a top portion which is but slightly smaller than the top portion of the bottle it is adapted to span, whereby, when the cap is applied to the bottle; the neck portion of the cap will be stretched tightly about the neck portion of the bottle as a seal, while the top portion of the cap will be stretched less tightly across the top portion of the bottle and will permit expansion of the contents of the same without disturbing the seal.

In testimony whereof I have hereunto subscribed my name.

OTTO EHMANN.