O. WESTOVER.
SANITARY BOTTLE CAP.
APPLICATION FILED APR. 3, 1916.


INVENTOR

WITNESSES:

INVENTOR.

ATTORNEYS
To all whom it may concern:

Be it known that I, Oscar Westover, an officer of the United States Army, at present stationed at Fort Gibbon, at the town of Tanana, Alaska, have invented a new and Improved Sanitary Bottle-Cap, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved sanitary bottle cap, more especially designed for use on babies' milk bottles of the Hygeia type, to exclude dirt or germs, and at the same time to permit the entrance of air; but also for use on any glass bottle or jar whose contents after preparation or first opening require such protection.

The invention consists of simple features and parts and combinations of the same, as will be fully described hereinafter and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the neck of a bottle provided with the improved cap.

Fig. 2 is a top plan view of the cap.

Fig. 3 is a bottom plan view.

Fig. 4 is a transverse vertical section.

Fig. 5 is a front view of the base of the cap.

Figs. 6, 7 and 8 are sections on the lines 6—6, 7—7, and 8—8, respectively, of Fig. 5.

Fig. 9 is a plan view of the non-absorbent cotton wad.

Fig. 10 is a side view of the same.

Fig. 11 is a plan view of the reinforcing ring.

Fig. 12 is a side view of the same.

The improved bottle cap provided with a base "A", made of clear glass of the ordinary commercial pressed and annealed glass variety now in use for domestic purposes; and a non-absorbent cotton wad "B" which is reinforced by and is attached to a paper cap ring "C".

The base "A" has, at the bottom, a cylindrical opening a which extends upward for a distance equal to half the thickness of the bottle cap, where the opening then becomes enlarged, as at a', in diameter by at least half an inch, thus affording a supporting rim of glass for the non-absorbent cotton wad "B".

The base "A" is also provided with four lugs a projecting downward at the extremities of the axial diameters of the base, and of such thickness and length as will insure a snug fit over the sides of the bottle or jar on which the cap is to be used,—thus permitting the base "A" to rest evenly on the top of the bottle D but preventing it from slipping off.

The non-absorbent cotton wad "B" is a disk wad cut out of the ordinary white, non-absorbent cotton padding which is now commercially handled in sheet form, or manufactured of similar material. Its thickness should be not less than one-sixteenth of an inch, ordinarily, and its diameter the same as that of the upper cylindrical portion of the opening in the base "A", thus affording a snug fit. Its use in connection with the paper cap ring "C", will be as hereinafter described.

The paper cap ring "C" is cut out of ordinary white sheet paper of about medium weight. Its inner diameter corresponds to the shorter diameter of the cylindrical opening in the base "A", and its outer diameter should be about 3/8 of an inch less than the longer diameter of that opening.

The paper cap ring "C", in manufacture, is gummed or glued on the under side, as shown in Fig. 12, thus permitting secure attachment to the cotton wad "B".

In manufacture, also, the non-absorbent cotton wad "B", and the paper cap ring "C", are actually gummed or glued together, as provided for above, and in such manner that the wad with cap ring will give a snug fit when placed in proper position in the upper cylindrical portion of the opening in the base "A". When so placed, and the bottle cap is fitted to the bottle, it will readily be seen that the contents of the bottle are effectively protected from dust and germs, and at the same time, are afforded air through the medium of the cotton wad "B".

In order to more effectively provide against germs, it is intended that a large number of the wads with cap ring be provided for use with each bottle cap, in order that a new one may be inserted whenever it is considered necessary to do so. Before inserting a new wad, however, it is essential that the glass base be sterilized in hot water. To this end, also, it is intended that the wads with cap ring should be thoroughly
sterilized and wrapped in protective paper before being placed on the market.

It will be seen that the device is a very simple one, durable in construction where needed, and sufficiently durable and protective in other parts, and that it can be readily applied to bottles or jars, for the purpose mentioned.

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

1. A sanitary bottle cap comprising a body having a central opening enlarged at the top of the base to form an annular shoulder, and a disk of non-absorbent porous material held in the opening and seated on the shoulder, and a reinforcing ring secured to the outer face of the disk at the edge thereof, said body having depending lugs for engaging outside of the neck of the bottle.

2. In a sanitary bottle cap, interchangeable disks of non-absorbent porous material, and a base or body having an opening for receiving the disks and having means for engaging the bottle neck to hold the disk in place, each disk having a reinforcing ring on one face at the edge thereof.

3. A bottle cap comprising a body having a central opening enlarged at the top to form an annular shoulder intermediate the ends of the opening, and a disk of non-absorbent porous material seated on the shoulder and fitting closely within the opening, and having a reinforcing and friction ring on its upper surface.

Witnesses:

Harry L. Twaddle,
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William B. Badman.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D.C."