Aug. 7, 1928. 1,679,621

W. C. MYERS

CONTAINER

Filed Jan. 6, 1927

Fig. 1.

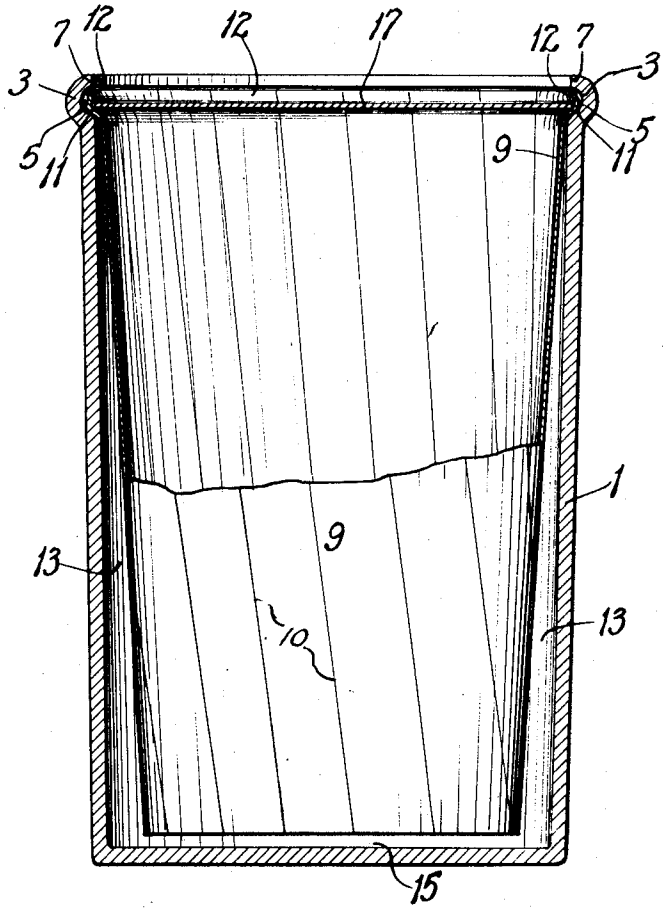
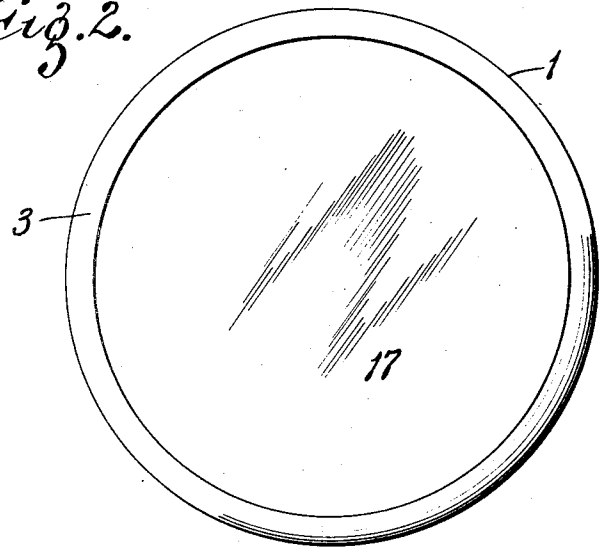


Fig. 2.



William C. Myers,
Inventor,
Odoe G. Haynes,
Attorney

Patented Aug. 7, 1928. 1,679,621

UNITED STATES PATENT OFFICE.

WILLIAM C. MYERS, OF EAST ST. LOUIS, ILLINOIS.

CONTAINER.

Application filed January 6, 1927. Serial No. 159,376.

This invention relates to containers and with regard to certain more specific features, to a sanitary container or bottle for milk and the like.

Among the several objects of the invention may be noted the provision of a lighter, less expensive bottle than has heretofore been provided; the provision of a bottle of the class described which better preserves its contents under extreme variations of temperature; and the provision of a bottle of the class described which reduces the production of bacteria in its contents such as milk, by obviating certain unsanitary conditions attendant upon delivery. Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly comprises the elements and combination of elements, features of construction, and arrangements of parts which will be exemplified in the structure hereinafter described; and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings. in which is illustrated one of various possible embodiments of the invention,

Fig. 1 is a vertical section of the container showing certain parts in full; and

Fig. 2 is a plan view thereof.

Corresponding reference characters indicate corresponding parts throughout the several views of the drawings.

Referring now more particularly to Fig. 1 there is illustrated at numeral 1 an outside, preferably nonresilient cup, made of iron, steel, aluminum, brass; or other materials such as fiber or bakelite. The materials set forth are cited only by way of example, as others might be used.

The jacket or cup or support is tapered downwardly and is provided at its upper edge with a rolled-out or otherwise formed hollow bead 3. The construction of the bead 3 is such that an internal annular recess or grove 5 is formed just below an upper inwardly formed lip 7, that is, it is contiguous.

The tapered jacket or cup 1 is so formed as to receive therein a preferably somewhat resilient but stout sanitary paper cup or container 9, also tapered downwardly and provided near its upper edge with an outwardly formed hollow shoulder or bead 11 and a flaring flange 12. The material of the container 9 is waxed or otherwise treated to resist moisture. The inner cup material may comprise other suitable substances besides paper. The tapering construction of the inner cup or container 9 is more accentuated than that of the outer cup 1, that is, the taper is greater, whereby a thermal insulating air space 13 is provided between the paper and metallic or other walls of the inner and outer caps.

A similar space 15 is provided below the container 9 by having its length less than that of the cap 1.

The shoulder 11 is adapted to spring into the groove or recess 5 with the flange 12 when the container 9 is pressed into the jacket 1 from the top. No extraneous parts are required to support the inner container. This springing action of the shoulder 11 and flange 12 into the recess 5 also makes necessary the destruction of the inside container before it can be removed, as no grip can be obtained on the paper member 9 without gouging into its interior surface, thereby puncturing it.

In order to cap the container, there is provided a cardboard or like resilient disc or cover 17, of diameter or size slightly greater than the inside diameter of the lip 7. This disc is sprung into the recess 5 in which is already positioned the hollow shoulder 11 of the filled container 9. The result is that the disc springs into the inside hollow portion of the shoulder 11, thereby pressing it more positively into the recess 5 and thereby also positively sealing the container 9 against leakage of material from the mouth thereof. The pressure of the disc in the shoulder 11 causes a toggle-like action of the flange 12 in the recess 5.

This assembled container or bottle may be used in various sizes and for various purposes such as delivering milk, ice cream or hot substances. Its heat insulating qualities adapt it particularly well to prevent spoilage of hot or cold contents. It is to be understood that the stoutness of the inner resilient container 9 is always made such that for the given size, and character and weight of contained material, the said container 9 will not sag or deform so as to touch the sides of the outer container. Stoutness may be increased in the usual manner by increasing the thickness of the paper or cardboard or by using overlaid pressed folds or ribs such as indicated at numeral 10 but in so far as these features form no part of this invention per se, they

are not specifically described in detail herein.

It is intended and necessary that the inside container 9 be destroyed after each emptying of the bottle; and intended that the metal jacket, cup or shield 1 be returned to its owner, thereby permitting the outside receptacle to have another sanitary container replaced therein.

It will be seen that it is necessary to tear or deform the inner container 9 in order to remove it from the outer receptacle and hence this inner container cannot be replaced for use in the same or another outer receptacle.

The wide-mouthed construction in this class of bottle is of advantage where such heavy substances as lactase and ice cream are packed.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As many changes could be made in carrying out the above constructions without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompany drawings shall be interpreted as illustrative and not in a limiting sense.

I claim:

1. A container comprising an outer non-resilient and substantially indestructible cup having an internal lip near its upper edge and an internal contiguous recess below said lip, an inner resilient and destructible cup having an outwardly formed hollow shoulder near its upper edge, means permitting springing of said shoulder into said recess and a resilient disc adapted to be sprung into said recess containing said shoulder to hold the shoulder therein between said disc and the outer cup, the edge of the inner cup being then located above the periphery of said disc.

2. A container comprising an outer non-resilient cup having an internal lip near its upper edge and an internal contiguous recess below said lip, an inner resilient cup having an outwardly formed hollow shoulder near its upper edge and a flaring flange above said shoulder, means permitting springing of said shoulder and flange into said recess and a resilient disc adapted to pass through and be guided by said flaring flange and sprung into said recess containing said shoulder to hold the shoulder therein, said flange being then positioned above said disc.

3. A container comprising an outer non-resilient cup having an internal lip near its upper edge and an internal contiguous recess below said lip, an inner spaced resilient cup having an outwardly formed hollow shoulder and a flaring flange above said shoulder, said shoulder being adapted to spring into said recess and a resilient disc adapted to pass through said flange and to be sprung into said recess containing said shoulder to hold the shoulder therein, said flange being then positioned above said disc but within said recess.

In testimony whereof, I have signed my name to this specification this 31st day of December, 1926.

WILLIAM C. MYERS