A. D. RAY & C. N. RUSSELL.

SANITARY BOTTLE CLOSURE.

APPLICATION FILED APR. 12, 1911.

1,038,651. Patented Sept. 17, 1912.

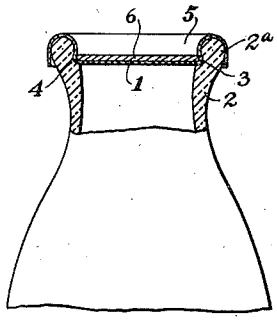

Fig. 1

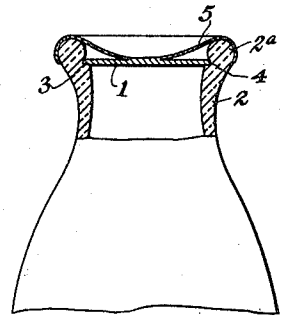

Fig. 2

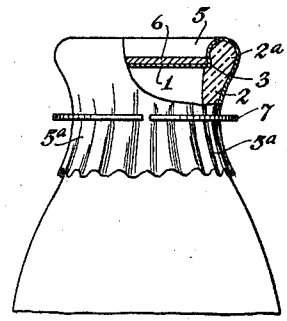

Fig. 3

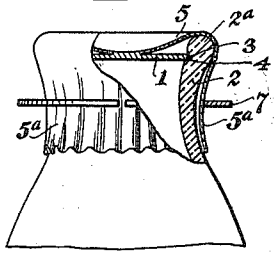

Fig. 4

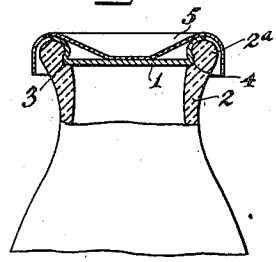

Fig. 5

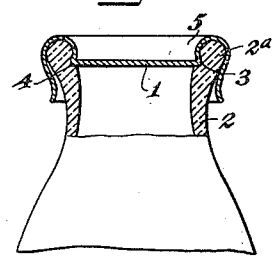

Fig. 6

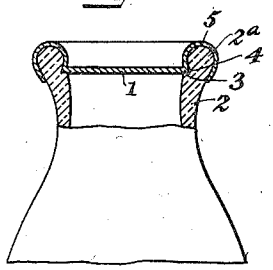

Fig. 7

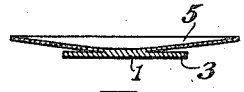

Fig. 8

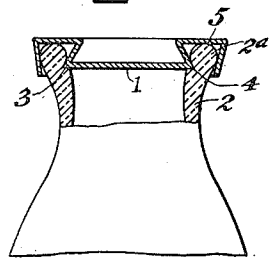

Fig. 9

Fig. 10

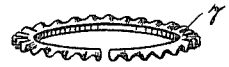

Fig. 11

Fig. 12

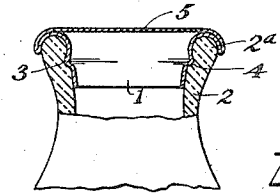

Fig. 13

Witnesses:
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UNITED STATES PATENT OFFICE.

ALBERT D. RAY AND CHARLES N. RUSSELL, OF CLEVELAND, OHIO.

SANITARY BOTTLE-CLOSURE.

1,038,651. Specification of Letters Patent. Patented Sept. 17, 1912.

Application filed April 12, 1911. Serial No. 620,595.

To all whom it may concern:

Be it known that we, ALBERT D. RAY and CHARLES N. RUSSELL, citizens of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sanitary Bottle-Closures, of which the following is a specification.

Our invention relates to improvements in sanitary bottle closures, the invention being particularly designed and adapted for use as a sanitary closure or cover for milk bottles.

The primary object of the invention is to provide a more sanitary closure for the mouths of milk bottles by the provision of a beaded covering or hood adapted to receive and take over the bottle beading at the mouth of the bottle thus protecting the same from contamination by germs, dirt, and the like.

A further object is to prevent dirt, dust, etc., which may settle on the main body or disk portion of the closure or cap from falling into the bottle when the cap is removed as now occurs with the ordinary internally arranged disk closure or cap.

With the above mentioned and other ends in view, the invention consists in the novel construction, arrangement, and combination of parts, hereinafter described, illustrated in some of its embodiments in the accompanying drawings, and particularly pointed out in the appended claim.

Referring to the drawings, forming a part of this specification, Figure 1, is a view partly in plan and partly in section of a form of bottle closure applied to the mouth of a milk bottle. Fig. 2, a similar view of a modified form of same. Fig. 3, a similar view of a further modification of the form shown in Fig. 1, the beaded covering being provided with a plaited skirt depending therefrom and surrounded by a split retaining ring. Fig. 4, a similar modification of the form shown in Fig. 2. Fig. 5, a further modification, the beaded hood or covering being separately formed and attached to the central portion of the main body or disk portion of the improved closure. Fig. 6, a view of a further modified form of same. Fig. 7, a view of a modified form of the form shown in Fig. 6. Fig. 8, a sectional view of the disk blanks used in the form shown in Fig. 2. Fig. 9, a view of a still further modified form. Figs. 10, 11, and 12, are perspective views of various forms of split skirt retaining rings. Fig. 13, a further modified form of the improved bottle closure.

Similar numerals of reference designate like parts throughout all of the figures of the drawings.

The improved bottle closure comprises a main body or disk portion 1, adapted to be seated within the mouth of the bottle 2, in the usual manner, said main body portion having a peripheral locking projection or annular flange 3, adapted to rest within and engage an annular recess or groove 4, within the mouth or neck of the bottle.

The main body portion 1, is provided with a beaded hood or covering 5, adapted to receive and take over the bottle beading 2^a, at the mouth of the bottle, said beaded hood or covering extending upwardly and outwardly and conforming to the contour of the beading 2^a, so as to protect the latter as a sanitary covering.

If desired, the hood or covering 5, may be used in connection with an ordinary disk closure 6, as illustrated in Figs. 1, and 3, or the same may be formed as in integral part of such form of closure as illustrated in Figs. 2, 4, and 8, of the drawings. In the last named form, the improved bottle closure comprises two disks of different diameter concentrically arranged, the upper or larger disk member or hood being adapted to project over and cover the bottle beading 2^a, of the mouth of the bottle. In the form shown in Fig. 5, the hood or covering 5, is separately formed and secured to the central portion of the disk portion 1, while in the forms shown in Figs. 3, and 4, the covering 5, is extended in the form of a plaited skirt 5^a, adapted to surround the bottle neck and to be retained thereon by means of a split skirt retaining ring 7, of any suitable and convenient form, such for example,—as shown in Figs. 10, 11, and 12.

It will be observed that when the improved bottle closure is made in the forms shown in Figs. 3, 4, 6, 7, and 9, that the outer depending portions of the beaded hood or covering are slightly less in diameter than the largest diameter of the bottle beading 2^a, thus forming an outer bead engaging portion adapted to slip over and engage with the bottle beading and coöperating with the peripheral locking projection or flange 3, on the inner side, in securely maintaining the

improved bottle closure in place. The improved hood or covering also affords a convenient means by which the improved bottle closure may be removed from the mouth of the bottle.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of our invention will be readily understood.

Having thus described some of the embodiments of our invention, what we claim and desire to secure by Letters Patent is,—

A bottle closure, consisting of a single blank of nonmetallic material comprising a disk member and an integral angular shaped bottle bead engaging and covering rim, said disk member having a peripheral locking projection engaging within the groove of the mouth of the bottle and said rim member consisting of an upwardly projecting inwardly inclined annular wall, terminating in a flat horizontally extending portion and an inwardly inclined depending portion forming a constricted exterior bottle bead engaging member.

In testimony whereof we have affixed our signatures in presence of two witnesses.

ALBERT D. RAY.
CHARLES N. RUSSELL.

Witnesses:
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