M. P. JANISCH.

BOTTLE CLOSURE.

APPLICATION FILED SEPT. 30, 1911.

1,150,823. Patented Aug. 17, 1915.

Fig. 1.

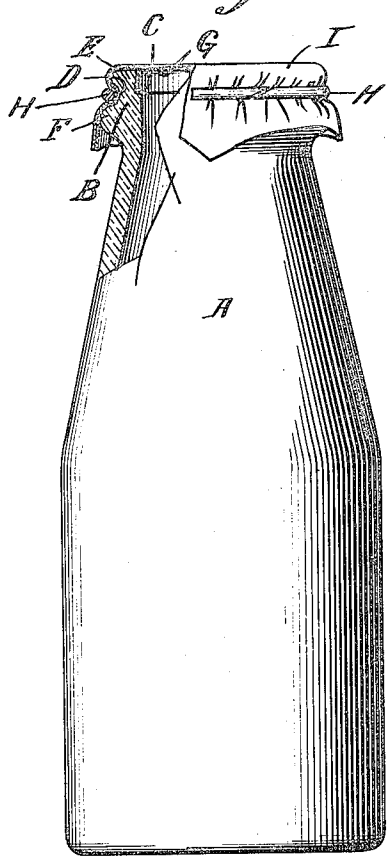


Fig. 2.

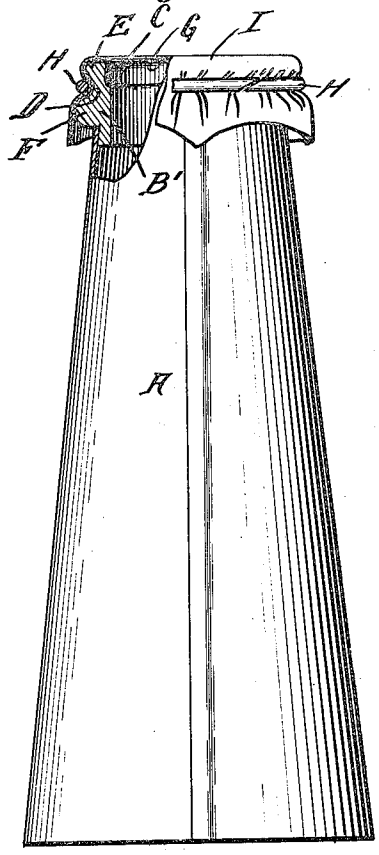
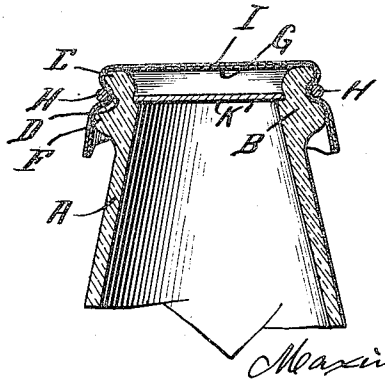


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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BOTTLE-CLOSURE.

1,150,823. Specification of Letters Patent. Patented Aug. 17, 1915.

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To all whom it may concern:

Be it known that I, MAXIMILLIAN P. JANISCH, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Bottle-Closures, of which the following is a specification.

My invention relates to improvements in bottle closures.

The object of my invention is to provide a bottle closure which will be perfectly sanitary, inexpensive in construction, and capable of being readily applied and easily detached.

The ordinary milk containing bottles are formed with a mouthpiece having an interior shoulder which receives a circular disk or cap of flexible material. But this disk is necessarily set into the mouth of the bottle, and dust collects above and upon it. Also the top of the bottle is exposed and both the bottle and the cap frequently become sticky from the escape of a few drops of milk, and infected by contact with the hands of the vender who usually grasps the bottle at its upper end. Under such conditions, it is almost impossible to remove the cap and pour out the contents without infecting the milk, and a special object of my invention is therefore to provide a form of cap which will completely cover the upper end of the bottle, providing no lodging place for dust, and protecting all parts of the bottle touched by the milk while contained in it, or while being poured from it, against contamination.

In the drawings:—Figure 1 is a side elevation of a glass milk bottle and its closure, part in section, embodying my invention. Fig. 2 is a similar view, showing my invention applied to the mouthpiece of a paper bottle. Fig. 3 is a detail sectional view of a bottle mouthpiece, provided with a cap of ordinary type, with a supplemental cup also applied thereto and embodying my invention.

Like parts are identified by the same reference characters throughout the several views.

The bottle A, (Fig. 1), is provided with a mouthpiece B which, in a glass bottle, may be formed integrally with the other portions of the bottle. The mouthpiece is provided with an interior shoulder C of ordinary type, adapted to receive an inset cap. But I also provide the mouthpiece with an annular external groove D, near its upper margin. This groove should be located as close to the margin of the mouthpiece as is practical to have it while leaving also a rounded rib E above the groove of sufficient dimensions to permit a sheet of suitable covering paper to be folded smoothly over it without cutting or tearing. A similar rib F of somewhat larger size, is formed below the groove D. A strip of paper G, coated on its under surface at least, with paraffin or other suitable waterproofing material, is adjusted over the mouthpiece of the bottle, and its margins folded downwardly about said mouthpiece, and held in position by a spring wire split ring H, which engages the paper and binds it in position by pressing into the groove D, as illustrated. The ends of the ring G are beveled, thus permitting them to lap upon or past each other if desired, or in case it is applied to a mouthpiece of less than normal size. The strip or piece of paper G may be covered by another piece of paper I, if desired, the latter being applied preparatory to the adjustment of the ring and also clamped in position by the ring.

It will be observed that the piece or pieces of paper G, (or G and I) form a cap for the bottle, which fits smoothly over its top, and not only retains the contents, but protects the entire mouthpiece from contamination and provides no dust retaining pockets above the mouthpiece. The ring being of resilient material, and split, it is obvious that it will expand sufficiently to allow it to be forced by machinery over the rib E, and this draws the paper forcibly down over the top of the mouthpiece as the ring moves to its position in registry with the groove D. The lower rib F, being larger, obstructs the downward movement of the ring and holds it in registry with the groove, until it moves to clamping position therein. If desired, the ring may be first heated and adjusted in position, while hot enough to melt or partially melt the paraffin against the base of the channel D, thus hermetically sealing the bottle. It will be found, however, that even without heating or melting the paraffin, an air tight closure will be provided.

Referring to Fig. 2, it will be observed that my invention is adapted to be applied

to a mouthpiece B′ similar in form to that shown and described in Letters Patent of the United States, granted to me for a milk receptacle, and in which a non-metallic or wooden mouthpiece is shown as applied to a paper bottle. In either case, it is desirable to retain an interior shoulder as shown at C, thus permitting the insertion of a disk cap K′, (Fig. 3), whereby the contents may be kept from contact with the paper cap or caps G or G and I.

I claim:—

1. A bottle provided near its upper end with an outwardly projecting annular rib and an inwardly extending annular groove immediately above said rib and in close proximity to the mouth of the bottle, a flexible cap covering said bottle and extending downwardly across said groove, and a split ring substantially filling the groove and binding the cap therein, said ring being adapted to prevent either an upward or downward slipping movement of the cap with reference to the bottle.

2. The combination with a bottle having a mouth piece projecting outwardly beyond the wall of the bottle immediately above such wall, said outwardly projecting portion being provided with an annular groove adapted to receive a cap holding wire ring, a flexible impervious covering for the mouth piece, having marginal portions down turned to cover said groove, and a resilient split ring binding said covering in the groove and substantially filling the groove, said ring having beveled ends abutting each other in said groove, substantially as described.

3. The combination with a bottle having a mouth piece provided with an annular groove adjacent to its upper margin, the portion of said mouth piece below said groove being larger in diameter than the portion above said groove, a flexible cap adapted to cover said mouth piece, and a split ring of resilient material engaged in said groove and substantially filling the same with the ends of said rings alined and in substantially abutting contact.

4. A bottle provided near its upper end with an outwardly projecting annular rib and an inwardly extending annular groove immediately above said rib and in close proximity to the mouth of the bottle, a flexible cap covering said bottle and extending downwardly across said groove, and a split ring substantially filling the groove and binding the cap therein, said ring being adapted to prevent either an upward or downward slipping movement of the cap with reference to the bottle, said cap including an impervious layer connected with the walls of the groove by adhesive material hermetically sealing said bottle.

In testimony whereof I affix my signature in the presence of two witnesses.

MAXIMILLIAN P. JANISCH.

Witnesses:
LEVERETT C. WHEELER,
HELEN C. VAN RYN.