Aug. 6, 1929. N. L. KIRKLAND 1,723,790

BOTTLE AND JAR CLOSURE

Filed July 31, 1928

Fig. 1.

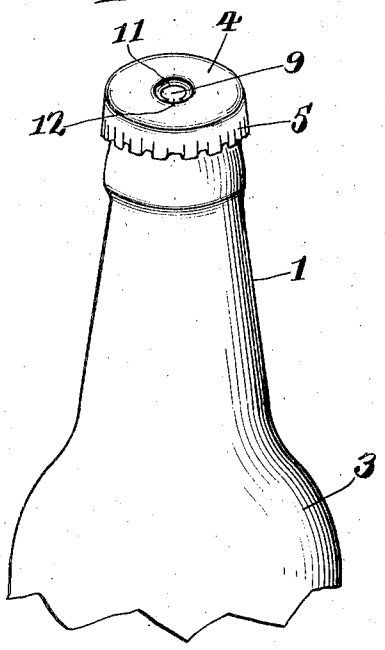


Fig. 2.

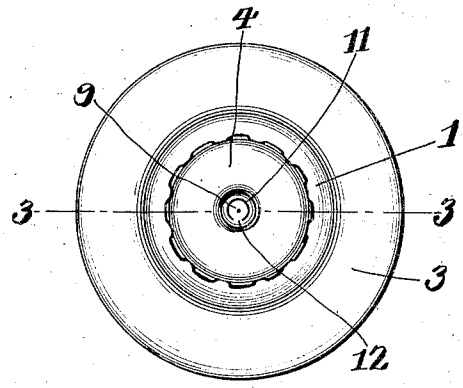


Fig. 4.

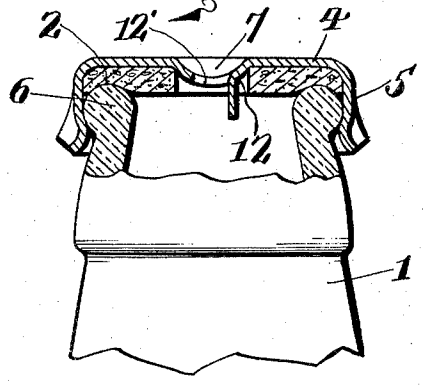


Fig. 3.

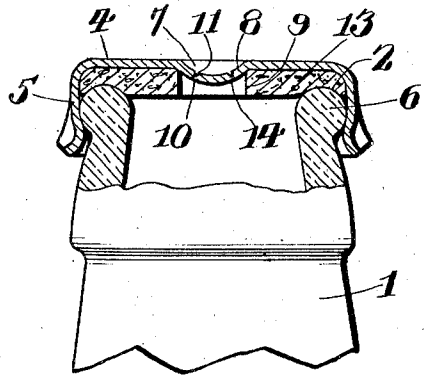


Fig. 5.

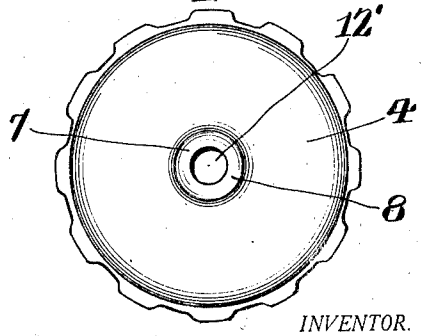
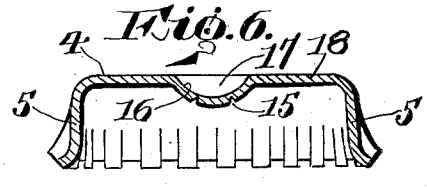


Fig. 6.



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UNITED STATES PATENT OFFICE.

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BOTTLE AND JAR CLOSURE.

Application filed July 31, 1928. Serial No. 296,440.

This invention relates to a closure for bottles or jars and has for its primary object to provide, in a manner as hereinafter set forth a closure cap so constructed and arranged whereby a carbonated beverage, when desired can be discharged in a small stream from a container such as a bottle or jar.

A further object of the invention is to provide, in a manner as hereinafter set forth a closure cap that will hold the contents of a bottle when under pressure, and further capable of being expeditiously and conveniently opened, without the removal thereof from the neck of the bottle to permit of the content of the latter being discharged in a small stream.

Further objects of the invention are to provide, in a manner as hereinafter set forth a bottle or jar closure which is simple in its construction and arrangement, strong, durable, compact, readily installed with respect to the bottle or jar, conveniently and quickly opened when occasion requires, and inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown an embodiment of the invention but it is to be understood that changes, variations and modifications can be resorted to which fall within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views:

Figure 1 is an elevation of a bottle neck showing the adaptation therewith of a closure or cap therefor in accordance with this invention.

Figure 2 is a top plan of the closure or cap upon an enlarged scale and prior to the opening thereof.

Figure 3 is a section on line 3—3, Figure 2 and with the closure or cap secured to the bottle neck.

Figure 4 is a view similar to Figure 3 but with the closure or cap in open position to permit of the contents of the bottle to be discharged in a small stream.

Figure 5 is a top plan view of Figure 4.

Figure 6 is a cross sectional view of a modified form.

Referring to the drawings in detail 1 denotes the neck, 2 the mouth edge and 3 the breast of a bottle, and with the latter illustrated for the purpose of showing the adaptation therewith of an embodiment of a closure or cap in accordance with this invention.

With reference to Figures 1 to 5 the closure or cap comprises a flat body 4 of circular form formed with a depending, crimped flange or rim 5 which engages under the peripheral bead 6 on the neck 1 to maintain the closure in position.

The body 4 is formed at any suitable point with a depressed portion 7 of concavo-convex cross section to provide a recess opening at the outer face of and which has its depth greater than the thickness of body 4. The portion 7 extends inwardly with respect to the inner face of body 4. Preferably the portion 7 is at the axis of the body 4, and with the depression of a diameter materially less than that of the body. The wall of the recess provided by the portion 7 is indicated at 8 and is formed with a depressible, severable part 9 of circular contour and which is provided by reducing the thickness of the wall 8 to form a weakened part, as at 10. The part of reduced thickness is provided by slitting the outer face of wall 8, as at 11. The slit does not extend entirely through wall 8, is of arcuate form and has its ends spaced from each other to provide a coupling part 12 between part 9 and the remaining portion of wall 8, when part 9 is depressed as shown in Figure 4. When part 9 is depressed it will form a small opening 12′ in the closure or cap to enable the contents of the bottle to be discharged in a small stream. The coupling part 12 prevents part 9 from falling into the bottle. Any suitable means may be employed to depress part 9 and which is expeditiously and conveniently depressed on slight application of pressure directly thereto by use of any object suitable for such purpose.

As the depressible, severable part 9 is inset with respect to the outer face of body 4 it is protected from accidental displacement, especially when stacking and handling crates or cases of bottles or jars provided with a closure, in accordance with this invention, or when handling the bottle or jar.

Arranged against the inner face of the body 4, is a sealing disk 13, of any suitable

material, preferably cork and which is formed with an opening 14 to provide a clearance for part 9 when depressed and the latter is arranged over and is of less size than that of the opening 14. The depressed portion 7 does not extend entirely through opening 14, but only in the outer part of such opening.

The form shown in Figure 6 is the same as that illustrated in Figure 3, with this exception the slit 15 in the wall 16 of the recess formed by the depressed portion 17 in the body 18, Figure 6, is formed in the inner face of wall 16.

It is thought that the many advantages of a closure or cap, in accordance with this invention and for the purpose set forth can be readily understood, and although the preferred embodiment of the invention is as illustrated and described yet it is to be understood that changes in the details of construction can be had which will fall within the scope of the invention as claimed.

What I claim is:

1. A bottle closure of the cap type comprising a flanged, flat body having an inwardly extending, depressed portion forming a recess opening at the outer face of the body, the wall of said recess between its center and point of joinder with said body having a part thereof of reduced thickness to form a central, severable part to provide when depressed a discharge opening having its wall spaced from the outer face of said body, said part of reduced thickness having ends arranged in proximity to each other, that part of the wall of the recess between said ends providing a coupling for said severable part and depressed whereby the latter will be suspended from the remaining portion of the wall of the recess, and a sealing disk positioned throughout and against the inner face of said body and formed with an opening to provide a clearance for said severable part when depresed, said depressed part extending into and terminating at a point outwardly with respect to the inner end of said opening.

2. A bottle closure of the cap type comprising a flanged, flat body having an inwardly extending, depressed portion forming a recess opening at the outer face of the body, the wall of said recess between its center and point of joinder with said body having a part thereof of reduced thickness to form a central, severable part to provide when depressed a discharge opening having its wall spaced from the outer face of said body, said part of reduced thickness having ends arranged in proximity to each other, that part of the wall of the recess between said ends providing a coupling for said severable part and depressed whereby the latter will be suspended from the remaining portion of the wall of the recess, and a sealing disk positioned throughout and against the inner face of said body and formed with an opening to provide a clearance for said severable part when depressed, said depressed part extending into and terminating at a point outwardly with respect to the inner end of said opening, said depressed part arranged at the axis of said body and providing said recess of concavo-convex cross section.

3. A bottle cap having at the axis thereof a circular depressed portion of concavo-convex cross section, said depressed portion forming a recess opening at the outer face of the cap, one face of the wall of said recess being slitted, the depth of the slit being less than the thickness of said wall, said slit being of arcuate form and greater than a half circle, the ends of said slit spaced a substantial distance from each other, said slit providing said wall with a circular depressible severable part for suspension from such wall, in combination with a sealing disk positioned within and abutting throughout the inner face of the cap and having an opening to provide a clearance for said severable part when depressed.

4. A bottle cap having at the axis thereof a circular depressed portion of concavo-convex cross section, said depressed portion forming a recess opening at the outer face of the cap, one face of the wall of said recess being slitted, the depth of the slit being less than the thickness of said wall, said slit being of arcuate form and greater than a half circle, the ends of said slit spaced a substantial distance from each other, said slit providing said wall with a circular depressible severable part for suspension from such wall, in combination with a sealing disk positioned within and abutting throughout the inner face of the cap and having an opening to provide a clearance for said severable part when depressed, and said depressed portion arranged within the opening and spaced outwardly with respect to the inner end of the latter.

In testimony whereof, I affix my signature hereto.

NEEDHAM L. KIRKLAND.