

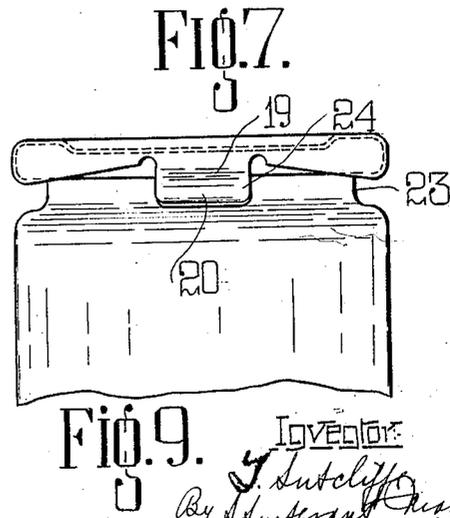
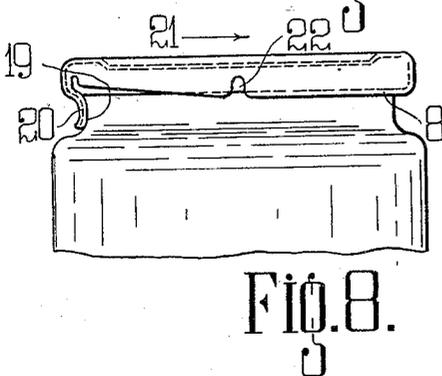
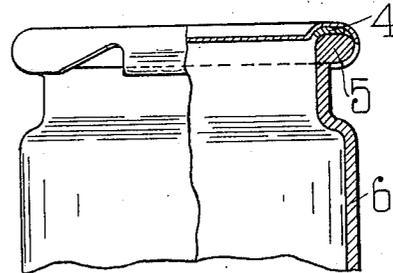
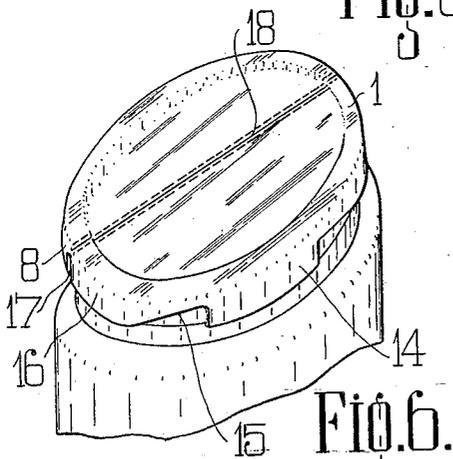
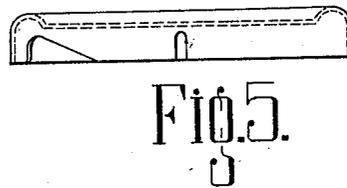
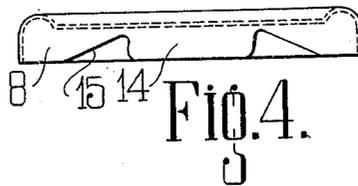
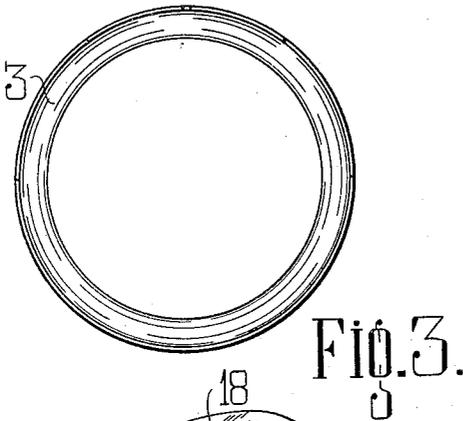
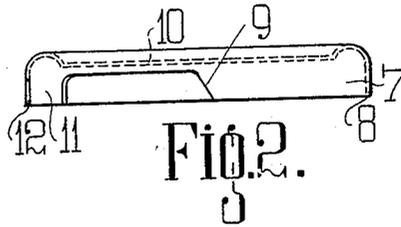
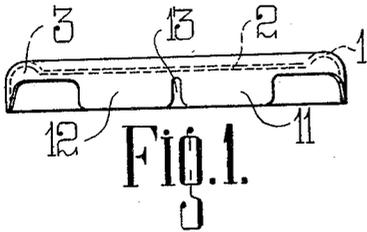
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T. SUTCLIFFE

CLOSURE FOR BOTTLES, JARS, AND THE LIKE RECEPTACLES

Filed Oct. 18, 1926



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# UNITED STATES PATENT OFFICE.

TOM SUTCLIFFE, OF LONDON, ENGLAND.

CLOSURE FOR BOTTLES, JARS, AND THE LIKE RECEPTACLES.

Application filed October 18, 1926, Serial No. 142,375, and in Great Britain October 30, 1925.

The present invention relates to an improved closure or sealing cap for bottles, jars, and the like enclosures.

It has been usual to cover jars with a parchment cover tied with string. Certain metal caps have also been suggested in which the cap is secured by corrugations on a crimped gripping edge engaging under an upper head or the neck of the vessel the said gripping edge being cut away at two parts to leave two smooth portions, directed obliquely outward, whilst one of the depending portions is provided with a tongue, also having one or more corrugations extending through the lower upwardly bent edge of the tongue. A closure cap is also known having three tongues with inturned reentrant edges and a fourth tongue with an inturned hump above its lower edge.

The closure of the present invention comprises a cap having in one half periphery a depending inturned flange, the edge of which is in a plane substantially parallel with the top surface of the cap and in the other half periphery a tongue or tongues with an inturned hump above its lower edge, the inturned flange gripping under a corresponding flange on the neck of the jar whilst the depending tongue lip or lips frictionally grips the flange of the jar.

The closure is preferably nicked or slotted from its lower edge towards its upper rim at points diametrically opposite to one another and limiting the ends of the fully underturned semicircular edge.

The invention is more particularly described with reference to the accompanying drawings in which:—

Figure 1 is a front elevation of one form of closure previous to its application to a jar.

Figure 2 is a corresponding side elevation.

Figure 3 is an underside plan view.

Figure 4 is a front elevation of a modification.

Figure 5 is a corresponding side view.

Figure 6 is a perspective view of a closure mounted on a jar.

Figure 7 is a corresponding partial sectional elevation of the closure on the jar.

Figure 8 is a side elevation of a modified form of closure mounted on the neck of a jar.

Figure 9 is a corresponding front view.

The closure comprises a flat top metal cap 1 such as can be stamped from sheet metal having preferably a depressed central portion 2 thereby forming an internal recess 3 for

the reception of an elastic rubber or the like washer 4, which contacting with the upper surface of the rim 5 on a jar 6 or the like enables a hermetic seal to be obtained.

The cap 1 has around substantially one half of its periphery a depending edge or flange 7, the lower edge 8 of which is adapted to be turned under the lower flanged edge of the rim 5 of the jar to lie in a plane substantially parallel to the plane of the top of the cap. The ends of this under-turned flange portion 7 are preferably curved away as shown at 9, to leave a shallow rim portion 10 which does not extend under the top rim of the jar.

In the other half periphery of the cap and on the opposite side to the depending underturned rim 8 are arranged a pair of tongues 11, 12 having an inturned hump, 19 forming a frictional grip engaging the rim 5 of the jar. These tongues 11, 12 may be separated by a narrow slot 13, or they may be in the form of one tongue 14 connected with the underturned edge 8 by a sloping surface 15, as shown for instance in Figures 4, 5 and 6. Previous to application of the closure to the jar, it would preferably be in the form shown in Figures 1 and 2, the depending rim 8 and the lips 11, 12 being turned under when this has been applied to the jar, but it will be obvious that the closure can have the form shown in Figures 6 to 9 previous to application to the jar.

In the modified construction of Figures 4, 5, 6 and 7, the cap 1 is provided with an underturned flanged edge 8 as before, but this is extended as shown at 16 for a short distance, but as the sloping surface 15 is passing upwards to meet the tongue 14 a notch or cut 17 is provided between the parts 8 and 16 so that a virtually elastic spring hinge is formed across the jar, as indicated in dotted lines 18.

In use after the jar has been sealed, and it is desired to obtain access to the contents, the tongue 14 due to its frictional engagement with the flange on the jar, can be lifted away from the under-cut rim 5 by the finger or by a blunt tool, such for instance, as the edge of a coin, when it will be found that the cap will hinge somewhat in two semicircular parts and the closure can be easily removed from the jar, whilst at the same time permitting it to be snapped back on the jar in view of the elasticity of the parts to obtain the resealing of the jar when desired.

In the modified form as shown in Figures

8 and 9, the closure has a rim 8 extending under the flange 5 of the jar as previously, and is provided with a single humped tongue 24 on the opposite side and depending lip 20 for facilitating its removal. In this form of closure it will be found that by turning up the lip 20, the closure can be readily removed by first lifting up one side of the closure by means of the tongue 24 and then sliding the closure away in the direction of the arrow 21, this being assisted by the virtual hinging of the two parts due to the notch 22.

The construction according to the present invention provides a cheap closure which will give a hermetic seal of the jar and yet also provide means whereby the jar can be resealed during use of the contents.

The closure of the present invention as will be seen, is directly applicable to the existing standard pattern of jam jars having a groove 23 at the neck.

I declare that what I claim is:—

1. A closure for receptacles comprising a pair of half caps united but elastically hinged together, a depending flange on one half cap, an inturned edge substantially parallel with the top surface of the cap on said depending flange, and a hump tongue on the other half cap.

2. A closure for receptacles comprising a cap adapted for flexure across a diameter, a depending flange on one half periphery of said cap the edge of which is under-turned to lie in a plane substantially parallel to the top of the cap and a depending tongue alone on the other half periphery having an inturned hump above its lower edge.

3. A closure for receptacles comprising a cap adapted for flexure across a diameter, a hooked flange on one half periphery of said cap adapted to engage over and under a flange on the neck of the receptacle and a frictionally engaging tongue on the other half periphery engaging the flange on the receptacle.

4. A closure for receptacles comprising a cap adapted for flexure across a diameter, a depending underturned flange on one half periphery of said cap forming a positive lock and a snap catch on the other half periphery forming a friction lock.

5. A closure for receptacles comprising a cap adapted for flexure across a diameter, a depending flange on one half periphery of said cap terminating at the ends of said diameter, an edge on said depending flange underturned to lie in a plane substantially parallel to the top of the cap and a depending tongue alone on the other half periphery having an inturned hump above its lower edge.

6. A closure for receptacles comprising a cap adapted for flexure across a diameter, a hooked flange on one half periphery of said cap terminating at the ends of said diameter and adapted to engage over and under a

flange on the neck of the receptacle and a frictionally engaging tongue on the other half periphery engaging the flange on the receptacle.

7. A closure for receptacles comprising a cap adapted for flexure across a diameter, a depending underturned flange on one half periphery of said cap terminating at the ends of said diameter forming a positive lock and a snap catch on the other half periphery forming a friction lock.

8. A closure for receptacles comprising a cap, a rim on said cap having up cut notches at substantially diametrically opposed points on its periphery whereby the cap is weakened and adapted for flexure across a diameter defined by these notches, a depending re-entrant underturned edge around substantially one half of the periphery of said cap between said notches and a tongue having an inturned hump above its lower edge within the other half periphery.

9. A closure for receptacles comprising a cap, a rim on said cap, a depending re-entrant underturned edge around substantially one-half of the periphery of said cap, a tongue having an inturned hump above its lower edge within the other half periphery and an operating upturned lip on the lower end of said tongue, the half peripheries being bounded by up cut notches in said rim which serve to weaken said cap whereby it is adapted for flexure across a diameter defined by said notches.

10. A closure for receptacles comprising a cap, a depending flange of uniform depth on one half periphery of said cap, an edge on said flange underturned to lie in a plane substantially parallel to the top of the cap, a depending flange on the other half periphery of depth varying inversely as the peripheral distance from the ends of said flange of uniform depth to leave upcut notches at the junctions of said flanges and a depending tongue located on said flange of varying depth equidistantly from said notches, said tongue having an inturned hump above its lower edge.

11. A closure for receptacles comprising a cap, a hooked flange on one half periphery of said cap adapted to engage over and under a flange on the neck of the receptacle, a depending flange on the other half periphery of depth varying inversely as the peripheral distance from the ends of said hooked flange to leave upcut notches at the junctions of said flanges and a frictionally engaging tongue on said depending flange located equidistantly from said notches, said tongue being adapted to engage the flange on the receptacle.

In witness whereof, I have hereunto signed my name this 6th day of October, 1926.

TOM SUTCLIFFE.