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A. R. McCOMBS

2,229,217

CLOSURE

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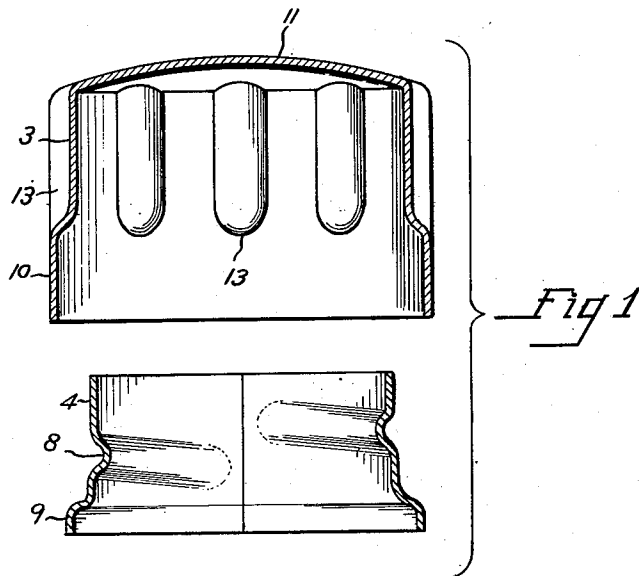


Fig 2

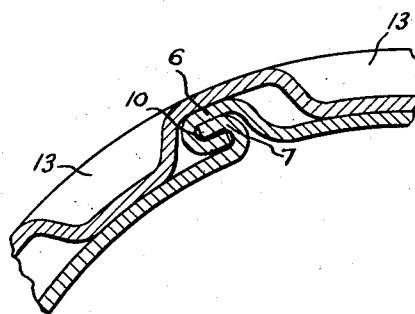
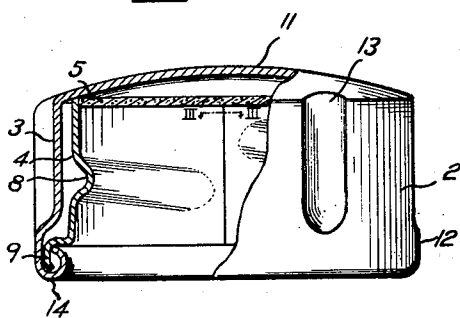


Fig 3

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UNITED STATES PATENT OFFICE

2,229,217

CLOSURE

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5 Claims. (Cl. 215—43)

This invention relates to metallic closures for receptacles and, more particularly, to metallic closures of the type having an annular band provided with means for attaching the closure to a receptacle, and an outer shell telescoped over the band and secured thereto and concealing the band from view when the closure is in sealing position. Closures of this type are generally designated as "double shell" or "two-part" closures.

The chief object of this invention is to provide an economical and attractive double shell closure. An object of this invention is to provide a double shell closure in which the shell is securely attached to the band to obviate relative rotation therebetween when the closure is applied to a receptacle. A further object is to provide a closure of this type which is free from conspicuous joints and sharp edges and which is satisfactory in use. A still further object is to provide a double shell closure in which the exterior of the closure is ornamented in an attractive manner and which ornamentation provides space in which the joint of the annular band may be concealed.

This invention relates to a closure for bottles or jars and like receptacles comprising an annular band provided with receptacle engaging means, one end of said band forming a pocket adapted to receive the opposite end of the band, the opposite end of the band being folded outwardly upon itself and having the outwardly folded portion nesting within said pocket thereby securely holding the band in annular form, an outer shell telescoped over said band, and means securing the band to the shell.

The accompanying drawing illustrates a preferred embodiment of the invention, in which—
Figure 1 is an exploded sectional view of the closure prior to assembly;

Figure 2 is a view partly in section and partly in elevation of the assembled closure; and

Figure 3 is a fragmentary sectional view taken along the line III—III of Figure 2.

Referring to the drawing, there is shown a closure 2 consisting of an outer shell 3, an annular band 4 and a conventional liner 5. The band 4 is rolled in the form of an annulus from a flat metallic strip terminating in tongues 6 and 7, the strip including the tongues being greater in length than the inner circumference of the shell 3. Receptacle engaging means 8, such as screw thread formations, are provided on the strip. The band 4 terminates in an outwardly and downwardly extending flange 9 for engagement with the shell 3, as will be explained hereafter. As illustrated in Figure 3, the tongue 6 of the band 4 is bent out-

wardly, downwardly, inwardly and upwardly to form a pocket 10. The tongue 7 is folded outwardly upon the band 4 and is nested within the pocket 10, thereby securely holding the band 4 in its annular form.

The outer shell 3 comprises a cover 11 and a skirt 12. Spaced flutings 13 are provided in the skirt 12 extending vertically from the cover 11 to that portion of the skirt adjacent the flange 9, as shown in Figure 2. Any desired number of flutings may, of course, be provided. The shell 3 is telescoped over the band 4 and the terminal portion of the skirt is curled inwardly in the form of a hollow bead 14 enclosing and securely engaging at least a portion of the flange 9 to prevent relative rotation between the band and the shell when the closure is applied to a receptacle, the edge of the skirt, preferably, engaging the outwardly extending portion of the flange 9. Other means may, of course, be used to secure the band to the shell. I have found, for example, the invention disclosed in United States Patent No. 2,133,298, granted October 18, 1938, in the name of Walter F. Kaufman, may be used to advantage.

Preferably, the tongues 6 and 7 are situated between the top of the band 4 and the flange 9 in order that they may nest within a space between adjacent flutings 13 in the skirt 12 when the shell is telescoped over the band, thereby preventing excessive relative rotation between the shell and the band if, accidentally, the engagement between the flange 9 and the terminal portion of the skirt be broken. It will be appreciated that, in some cases, it will not be necessary to securely engage the terminal portion of the shell and the flange since such arrangement prevents excessive relative rotation between the shell and the band. In such case, the terminal portion of the shell is curled inwardly over the flange merely to conceal the raw edges. Preferably, however, the terminal portion of the skirt securely engages the flange to prevent relative rotation since I have found even slight relative rotation between the parts to be generally undesirable.

My invention provides a metallic closure in which the amount of metal heretofore necessarily employed in such closures is substantially reduced. The band is so secured to the shell as to obviate any possibility of relative rotary movement between the band and the shell when the closure is applied to a receptacle. The closure is free from conspicuous joints and sharp edges. It is highly attractive in appearance, its ornamentation also serving a utilitarian function since it provides

space in which the joint of the annular band may be effectively concealed.

While I have described and illustrated a preferred embodiment of my invention, it will be understood my invention is not so limited but may be otherwise embodied within the scope of the following claims.

I claim:

1. A closure for bottles or jars and like receptacles comprising an annular band provided with thread formations, one end of said band forming a pocket adapted to receive the opposite end of the band, the opposite end of the band being folded outwardly upon itself and having the outwardly folded portion nesting within said pocket, thereby securely holding the band in annular form, an outer shell having a cover and a skirt telescoped over said band, spaced flutings in said skirt extending from the cover, said pocket nesting within a space between adjacent flutings, and means securing the band to the shell.

2. A closure for bottles or jars and like receptacles comprising an annular band provided with thread formations and terminating in tongues, one tongue forming a pocket adapted to receive the other tongue, the other tongue being folded outwardly upon the band and nesting within said pocket, thereby securely holding the band in annular form, an outwardly and downwardly extending flange on said band, and an outer shell having a cover and a skirt telescoped over said annular band, spaced flutings in said skirt, extending from the cover, said pocket nesting within the space between adjacent flutings, the terminal portion of said skirt being curled inwardly in the form of a bead engaging said flange.

3. A closure for bottles or jars and like receptacles comprising an annular band provided with thread formations and terminating in tongues, one tongue being bent outwardly, downwardly, inwardly and upwardly to form a pocket, the other

tongue being folded outwardly upon said band and nesting within said pocket, thereby securely holding the band in annular form, an outwardly and downwardly extending flange on said band, and an outer shell having a cover and a skirt telescoped over said band, spaced flutings in said skirt positioned above that portion of the skirt adjacent said flange, said tongues nesting within a space between adjacent flutings, the terminal portion of the skirt being curled inwardly in the form of a hollow bead engaging said flange.

4. A closure for bottles or jars and like receptacles comprising an annular band provided with receptacle engaging means, means securing said band in annular form, an outwardly and downwardly extending flange on said band, and an outer shell having a cover and a skirt telescoped over said annular band, spaced flutings in said skirt extending from the cover, said band securing means nesting within a space between adjacent flutings thereby preventing substantial relative rotation between the shell and the band, the terminal portion of said skirt being curled inwardly in the form of a bead engaging said flange.

5. A closure for bottles or jars and like receptacles comprising an annular band provided with receptacle engaging means, one end of said band forming a pocket adapted to receive the opposite end of the band, the opposite end of the band being folded outwardly upon itself and having the outwardly folded portion nesting within said pocket, thereby securely holding the band in annular form, and an outer shell having a cover and a skirt telescoped over said band, spaced flutings in said skirt extending from the cover, said pocket nesting within the space between adjacent flutings thereby preventing substantial relative rotation between the shell and the band.

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