MOORE GASKETED SIDE CLOSURE FOR MILK BOTTLES, GLASS JARS, AND THE LIKE

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My invention relates to a gasketed side closure for milk bottles, glass jars and the like, and particularly to side gasketed closures mechanically held in place on the container, such mechanical holding means being relied on for putting the side gasket under compression and forming a side closure for the container.

In the drawings, Fig. 1 is a part side, part sectional view of a closure for a milk bottle. Fig. 2 is a part side, part sectional view of the closure of Fig. 1 about to be applied. Figs. 3 and 4 are views similar to Figs. 1 and 2 respectively, and showing a closure for a jar provided with closure holding lugs. Fig. 5 is a bottom plan view of the closure of Figs. 3 and 4. Figs. 6 and 7 are views similar to Figs. 3 and 4, and showing a closure for a screw-topped jar, and Fig. 8 is a bottom plan view of the closure of Figs. 6 and 7.

The closure in each case comprises a metallic shell and a side gasket of compressible material, such as rubber, gutta percha or the like, permanently assembled with the metallic shell so as to be applied and removed therewith, and in each case the shell is provided with holding means adapted to coact with the particular form of container, so as to retain the closure in place when applied, subject, however, to removal and replacement when desired.

In the case of the milk bottle of Figs. 1 and 2 the shell 10 is flanged at 12 and the inward extension 14 of flange 12 is formed as a plurality of fingers 16 extending inwardly at an angle from the body part of flange 12 and provided with the inwardly and reversely curled tips 18 to afford a resilient grip under the inwardly contracted neck portion 20 of the top 22 of milk bottle 24. Such preferably integral fingers 16 may be formed by making suitable cuts 25 in the material of the metallic shell, as will be understood.

The ring-shaped gasket 26 is received within the flange 12 and fills out the corner 28 between flange 12 and the cover portion 30 of shell 10. Said cover portion 30 is preferably provided with the annular groove 32, which may be stamped therein, thus providing an inwardly extending annular rib 34, which is adapted to make contact with the top edge 36 of the milk bottle, thus definitely locating the curled tips 18 at the proper portion of the bottle neck to secure the desired gripping action. In this way a recess 38 is left within the space between flange 12 and cover part 30 within which the upper part of gasket 26 may be received permitting this part of the gasket to extend to a substantial distance beyond the rounded outwardly projecting portion 40 of the bottle neck and also beyond the top edge 36 thereof.

When the closure is applied by being forced downwardly over the bottle neck, with possibly more or less rotation imparted thereto, the curled tips 18 of fingers 16 grip under the larger portion 40 of the bottle neck and hold the closure in place and the gasket 26 is compressed substantially as shown in shaded section in Fig. 1 affording an air tight hermetic side seal for the bottle. While the seal so obtained is tight and hermetic as described, it is readily possible to pull off the closure and replace same as may be desired and no separate manipulation of the gasket is involved, and further there is no necessity for crimping or other deformation of the shell or any part thereof to complete the seal which is completed by merely pushing the closure over the bottle neck.

The closure of Figs. 3, 4 and 5 operates on the same principle, but in this case, where the neck 50 of the jar is cylindrical, except for holding lugs 52, flange 54 of shell 56 is turned inwardly, as shown at 58, and such inwardly extending flange 58 is interrupted at 60, 60 sufficiently to permit the cut out portions 60, 60 to pass over lugs 52, 52, after which the shell is locked in place by a partial rotation in substantially the manner of a bayonet joint connection. The side seal secured by pushing the shell 56 in place and compressing the gasket 62 is in effect the same as in the case of Fig. 1, as shown in shaded dotted section in Fig. 3.

The closure of Figs. 6 and 7 also operates on the same principle, the only difference being that in this case the jar neck 70 is supplied with outwardly projecting screw threads, usually multiple threads 72, and the flange 74 of shell 76, which is in general curved outwardly at its lower edge, as shown at 76, has inwardly projecting lugs 78, formed therein at intervals as shown in Fig. 8 and upon pushing down the shell 78 and turning same the outwardly projecting screw threads 72 are engaged by the spaced inwardly projecting lugs 78 and the shell
held in place by such interengagement. Compression and side seal by means of gasket 80 are the same as in the other two cases described. The lugs 78 in addition to coating with screw threads 72 to hold the closure in place also serve to keep the gasket 80 in permanently assembled relation to shell 76.

The closures of Figs. 3 and 4, and 6 and 7 respectively are readily removable and replaceable as in the case of the milk bottle closure of Fig. 1, with the difference merely that in the case of the jars with lugs or screws the pulling off movement must be accompanied by a suitable rotation or partial rotation of the shell.

It will be understood that the described embodiments are intended only as illustrative of the principle of the invention and are not to impose limitations thereon, the scope of the invention being as set forth in my claim.

I claim:

A closure for containers having a mouth portion comprising a relatively bulged marginal outer wall part surmounting a relative-ly relieved part, said closure comprising a body part of diameter greater than that of the opening in the container end and adapted to set directly on the end of the container, a surrounding annular gasket receiving portion extending to a substantial distance beyond the body portion setting directly on the end of the container in a direction corresponding to elongation of the container axis and extending in reverse direction to encircle the mouth of the container, and an elastic compressible gasket in said gasket receiving portion and extending with the gasket receiving portion of the closure beyond the end of the container and on each side of the relatively bulged marginal portion of the container and locked in place by its expansion within the relatively relieved part of the container body, and elastic fingers clamping the closure on the body and making engagement with the relieved portion.

In testimony whereof, I have signed my name hereto.

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