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2,141,184

CONTAINER

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Fig. 1

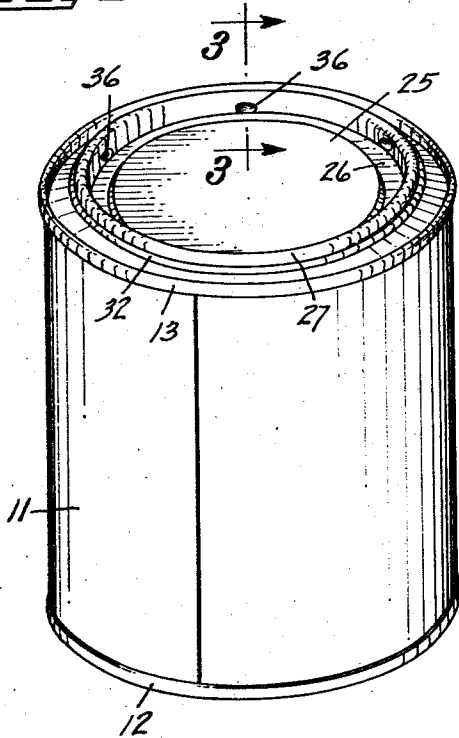


Fig. 2

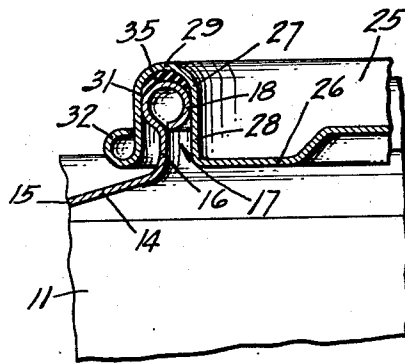


Fig. 3

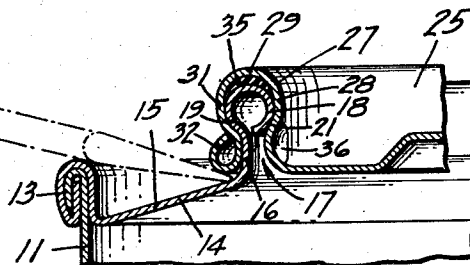
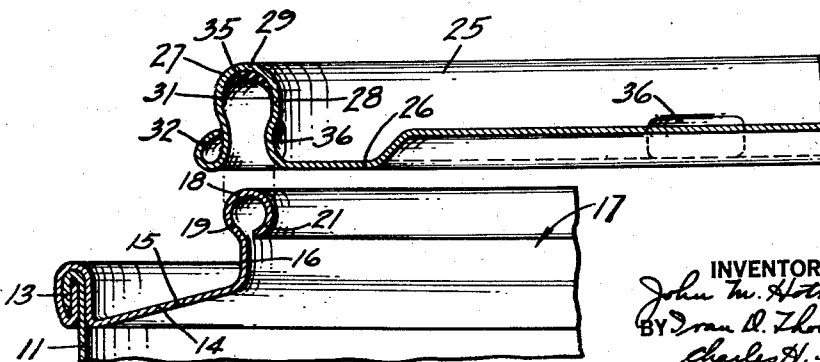


Fig. 4



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CONTAINER

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6 Claims. (Cl. 220—59)

The present invention relates to sheet metal cans or containers and has particular reference to a closure for such a container, which embodies a cover member adapted when in closure position to grip on opposite sides and under a wall of an annular bead formed on the container adjacent an open mouth thereof.

An object of the invention is the provision of a sheet metal container having a gasket lined cover which fits an annular curled bead by tightly engaging the bead on opposite sides and by also engaging under the bead on both sides to form a tight closure for shipping purposes, this cover being readily removable and being easily snapped back in place for use as a reclosure without impairing its holding qualities on the bead.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description, which, taken in connection with the accompanying drawing, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view of a container embodying the instant invention showing the same closed at its upper end by a special form of cover;

Fig. 2 is an enlarged fragmentary sectional view taken through the container and cover and showing the latter on the container but prior to sealing;

Fig. 3 is an enlarged fragmentary section similar in part to Fig. 2, the view being taken substantially along the line 3—3 in Fig. 1 and showing the cover after sealing on the container and also showing graphically part of an opening tool in position for prying the cover loose; and

Fig. 4 is an enlarged fragmentary section of container and cover in separated or spaced relation as they might appear after opening.

A preferred embodiment of the invention is disclosed in the drawing and is incorporated in a container which comprises a cylindrical or other form of tubular body 11 (Fig. 1) having a closed bottom 12. The upper part of the body wall is connected, by a suitable seam 13 (see also Figs. 3 and 4), to a ring or end member 14 having an upwardly and inwardly inclined top wall section 15 which merges at its inner edge into a vertical annular short wall section 16. This latter wall section surrounds and defines an open mouth 17 for dispensing contents from the container.

The upper edge of the wall section 16 terminates in a smooth annular curl or enlarged bead 18 which surrounds the open mouth of the container. This open curl or bead emerges from

the wall 16 and extends outwardly and upwardly in an outer curved wall section or outer lateral shoulder 19, thence inwardly and downwardly in an inner curved wall section or inner lateral shoulder 21 which terminates just short of or adjacent the base of the curved wall 19 thus forming a tubular cross-section. In the particular form shown in the drawing the inner and outer walls 19, 21 project substantially equal distances on either side of the connecting wall 16. This curl or bead 18 is utilized as a seat for a cover 25 which when in position on the container closes off its mouth 17.

The cover 25 comprises a central paneled top wall 26 which at its outer or marginal edge portion is formed with an inverted U-shaped annular channel 27 adapted to fit over the container bead 18. The channel is defined by an inner vertical wall section 28 (Fig. 2) which is contiguous with the cover top wall 26. The wall 28 also merges into an intermediate or curved wall section 29 which joins into a vertically depending wall section 31. This latter is substantially parallel with the wall 28, is preferably of substantially the same length and terminates in an outwardly turned reinforcing curl 32.

The cover channel 27 is adapted to hold an annular gasket 35 which may be of suitable soft resilient material such as rubber and the like and which is seated in the trough of the channel against the curved intermediate wall 29. When the cover is positioned on the container prior to sealing as shown in Fig. 2 its channel 27 contains the bead 18 and the gasket is preferably tightly compressed against the top of the bead with the channel walls 28, 31 frictionally engaging the curved walls or shoulders 19, 21.

While in this position the cover is secured in sealing place by the bending of its outer annular channel wall 31 and its curl 32 inwardly and under the bead shoulder 19. Portions of its inner channel wall 28 are also pressed outwardly and under the bead shoulder 21 this being at spaced intervals around the cover channel and providing a plurality of permanent spaced cover holding indentations 36.

The continuous outer holding ring which is thus formed by bending the curl 32 inwardly and the spaced inner indentations 36 cooperate to provide permanent deformations of the cover channel 27. In this construction the bead 18 is thus gripped on both sides of the vertical connecting wall 16. This tightly holds the cover in sealed position for shipping and storage.

To remove the cover, as when opening the con-

tainer, it is merely necessary to apply a stiff tool of any suitable character, one satisfactory form being shown in Fig. 3. One end of the tool is inserted under the annular curl 32 and a downward pressure is applied on the other end, using the container seam 13 as a fulcrum. In this manner the cover is easily pried loose from its bead 12, the deformations 32, 36 spreading apart as the resistance or natural spring in the metal, acting through the deformations, is overcome.

This springiness is retained in the cover deformations, however, after its removal and hence provides the added feature of adapting the cover for use as a snap reclosure. Thus the cover may be tightly replaced by snapping the deformations over the top of the bead 12. The result is the provision of a cover for a container which when sealed in place for shipping provides a tight leak-proof closure and one which may be easily removed and again replaced and used as a reclosure and one which will tightly fit in place and will hold against accidental removal when so used.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing all of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. A container having a wall terminating in an upstanding bead constituting oppositely disposed continuous lateral shoulders overhanging said wall, and a cover adapted for sealing engagement with said container and formed with a marginal portion which provides a seat for said bead and which engages beneath both of said oppositely disposed lateral shoulders for holding the cover in position when container and cover are assembled.

2. A container having a wall part terminating in an upstanding bead which is enlarged and extended on each side of the wall to provide continuous lateral shoulders overhanging said wall, and a detachable cover having a marginal portion which provides a seat adapted to fit over said bead, said seat terminating in spaced depending friction walls bent into locking engagement beneath said lateral shoulders for holding the cover in sealed position when container and cover are assembled.

3. A container having a wall terminating in an upstanding bead of continuous uniform

peripheral contour, said bead overhanging each side of said wall to provide inner and outer lateral shoulders, and a detachable cover for said container having an inverted U-shaped marginal channel defined by inner and outer depending walls which provides a seat for said bead when the cover is in assembled position on the container, the outer of said channel walls being bent under said bead and in engagement beneath the outer of said lateral shoulders, the inner of said channel walls being formed with circumferentially spaced indentations which engage beneath the other of said lateral shoulders for holding the cover in sealed position.

4. A container having a wall part terminating at its upper end in an upstanding bead which is laterally enlarged to provide continuous uniform peripheral shoulders, one overhanging each side of said wall part, and a detachable cover for said container having an inverted U-shaped marginal channel which is adapted to provide a seat for said bead when container and cover are assembled, the outer side walls of said cover channel being curled into close engagement beneath said bead, the inner side wall of said marginal channel being formed with spaced indentations bent into engagement beneath the inside of said bead for holding the cover in sealing engagement on the container and against inadvertent vertical displacement relative thereto, said curl and said indentations being yieldable to permit release of said cover and to permit its reapplication as a friction reclosure.

5. A container having a wall terminating in an upstanding bead which extends on each side of said wall as a continuous lateral shoulder overhanging said wall, and a cover adapted for sealing engagement with said container and formed with a channel which provides a seat for said bead, said cover channel terminating in depending side walls bent into engagement beneath said lateral shoulders for holding the cover in position when container and cover are assembled.

6. A container having a wall terminating in an upstanding bead constituting lateral shoulders continuously overhanging opposite sides of said wall, and a detachable cover for said container having a walled channel which provides a seat for said bead and which confines a sealing gasket for engagement with said bead, the walls of said channel being bent into engagement beneath said oppositely disposed lateral shoulders to embed said bead in the said gasket for hermetically sealing said cover in position when container and cover are assembled.

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