Oct. 7, 1947. J. E. SOCKE 2,428,393

END CLOSURE FOR TEARING STRIP CANS

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Fig. 1

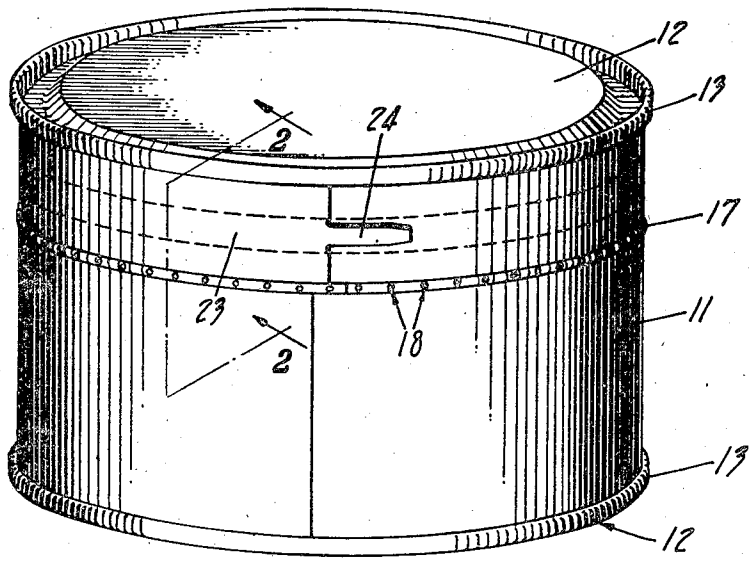


Fig. 2

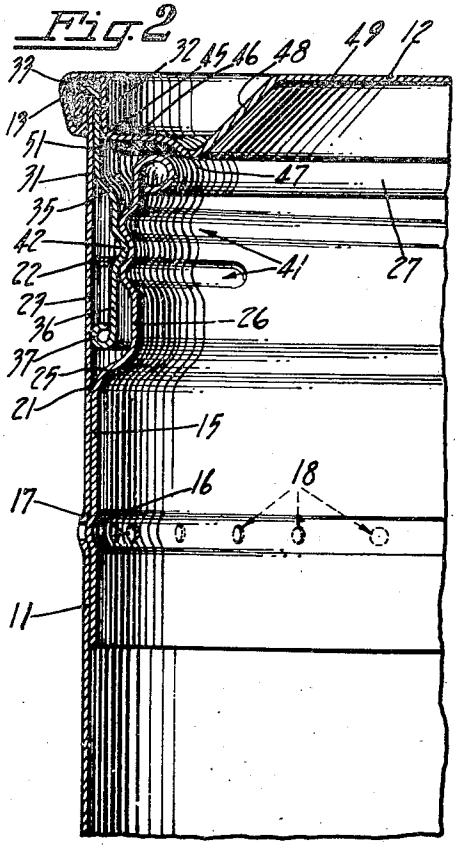
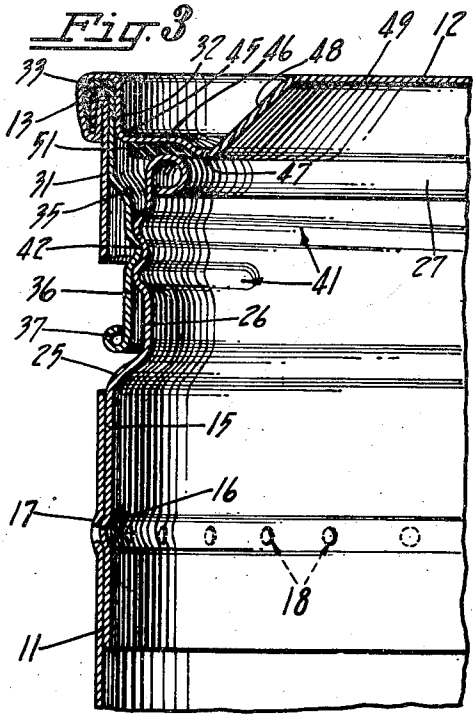


Fig. 3



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END CLOSURE FOR TEARING STRIP CANS

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3 Claims. (Cl. 220—54)

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The present invention relates to a metal tearing strip container or can having an interior collar arranged inside of the tearing strip and has particular reference to a container of this type which has a supplemental upper collar member connected with the cover and which can be reclosed with an air-tight seal after the container is opened by removal of the tearing strip, by engagement of the body and supplemental collar members in a reclosure position.

An object of the present invention is the provision of a novel construction of cover for an interior collar tearing strip can wherein an upper collar connected with the cover is adapted for locking engagement with the collar when the tearing strip has been removed in opening the container.

A further object of the invention is the provision of such a tearing strip can having two collar members, one secured to the body of the can and the other secured to the can cover, these collar members being threadedly cooperative and made effective for reclosing the opened container by the removal of the tearing strip in opening the container.

Another object of the invention is the provision in a tearing strip container of the character described of two collar members respectively connected with the can body and with the can cover in hermetic joints.

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 drawings, discloses a preferred embodiment thereof.

Referring to the drawing:

Figure 1 is a perspective view of a tearing strip container embodying the present invention;

Fig. 2 is an enlarged sectional view taken substantially along section lines 2—2 in Fig. 1 and illustrating the container parts in their initial position as when the cover is secured to the can body; and

Fig. 3 is a view similar to Fig. 2 showing an opened can with the tearing strip removed and with the cover in its air-tight reclosing position.

The present invention embodies a container having a body 11 and end closures 12 secured thereto in double seams 13. The novelty of the container of the present invention is directed to the upper or top end closure or cover while the usual conventional bottom end may be used.

An interior collar 15 is located inside of the body 11 adjacent the upper end of the body. Collar 15 and the adjoining can body wall may be beaded together by interfitting collar and body beads 16, 17 (Fig. 2). Provision is made for securing the collar and the body in an air-tight joint and for this purpose the body wall may be perforated. A row of perforations 18 extend around the entire circumference of the body and preferably are aligned centrally of the body bead 17. Solder is afterwards sweated in to form an encircling seal by applying the molten solder from the exterior and flowing it through the perforations.

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Above the bead connection 16, 17, the body wall 11 is cut into with a pair of parallel score lines which include a lower score line 21 and an upper score line 22 the score lines setting off a tearing strip 23. At the side seam of the container, the tearing strip terminates in a tongue 24 which provides for engagement of the usual opening key. The two score lines 21, 22 preferably are cut on the interior wall of the body in the usual manner.

The collar 15 at the lower score line 21 is formed with an inwardly extending double rounded corner 25 which merges into a vertical cylindrical wall 26 spaced inwardly from the body wall 11 and of a smaller diameter. At the top, the interior wall 26 terminates in an inwardly extending curl 27 which provides a smooth mouth for the container.

The body wall 11 above the upper score line extends into the upper double seam 13, this portion of the body wall being designated by the numeral 31. In the assembled form of can and cover an upper collar member 32 also extends into the upper double seam 13. This double seam includes a sealing gasket or compound 33 which provides an air-tight hermetically sealed can in this region, there being such a seal between the body wall part 31 and the collar 32, as well as between the cover 12 and the collar 32.

Collar 32 below the double seam 13 is bent inwardly at 35 and thence merges into a vertical cylindrical wall 36 terminating at the bottom in an edge curl 37. Wall 36 is slightly larger in diameter than the cylindrical wall 26 of the body collar 15 and provision is made for threaded engagement between these parts. For this purpose a body collar thread 41 is adapted to cooperate with a corresponding cover collar thread 42 for reclosure purposes as will be hereinafter more fully described.

The upper can cover or end 12 extends downwardly inside the body wall 31 at the double seam 13 substantially the depth of the seam. This is

the usual chuck countersink of the cover. The bottom of this cover wall merges into an annular curved edge 45, which in turn passes into an annular horizontal wall 46. Wall 46 at the inside merges into an annular curved depression 47, which in turn joins with a conical wall 48 which preferably extends up to substantially level with the top edge of the double seam and merges into a central panel 49.

A sealing gasket 51 is disposed on the under side of the wall 46 just outside of the depression 47 of the cover. This gasket, together with the double seam gasket 33, constitutes a dual gasket sealing feature for the can cover. At the time the can is first closed and the parts assembled, this gasket 51 preferably just lightly engages the curl 27 of the body collar as shown in Fig. 2. The gasket 51 primarily is used in the reclosing of the opened container.

Upon removal of the tearing strip 23 the threaded connection 41, 42 becomes effective, the container thereupon being opened by unscrewing the thus detached cover parts. The removal of the tearing strip provides a reclosure cover which consists of the top cover 12, the cover collar 32 and the body wall 31. In reclosing the opened container, this reclosure cover unit is brought into proper position for threadedly engaging the cover collar threads 42 and the body collar threads 41, whereupon by rotating the cover unit relative to the opened can, the gasket 51 is pressed down against the collar curl 27 to embed the curl in the gasket.

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. In an air-tight sheet metal container capable of air-tight reclosure, a container body having score lines defining a removable tearing strip for opening the container, a top cover and a bottom end closure for sealing said container body, an interior collar located inside of said body adjacent said tearing strip and having a hermetically beaded connection with said body, said collar extending inwardly and upwardly in a cylindrical wall spaced inwardly from said tearing strip and terminating in a reclosure curl, a depending upper collar member located inside of said body and secured to said cover in a hermetic joint, said upper collar member extending down outside of the cylindrical wall of said interior collar, said cover having a reclosure gasket channel spaced inwardly to position it in alignment with said reclosure curl, a sealing gasket in said reclosure channel, and means in said collars for forming an air-tight joint between the cover and said reclosure curl by drawing down on the detached cover after opening of the container by removal of said tearing strip so that said reclosure gasket is forced upwardly over said reclosure curl in an air-tight reclosing position.

2. In an air-tight sheet metal container capable of air-tight reclosure, a container body having score lines defining a removable tearing strip for opening the container, a top cover and a bottom end closure for sealing said container body, an interior collar located inside of said body having an hermetically sealed beaded connection therewith, the upper part of said collar being disposed inside of said tearing strip and terminating at the top in a reclosure curl, an upper collar member located inside of said body and secured to said cover in a hermetic joint, said upper collar member extending downwardly and surrounding the upper part of said interior collar, a sealing gasket carried in said cover in alignment with said reclosure curl, and cooperating threads formed in said collars and made effective by removal of said tearing strip in opening the container for drawing down said cover to embed said reclosure curl in said cover gasket for reclosing the container in an air-tight joint.

3. A hermetically sealed reclosure container comprising a body having a tearing strip and a closure member seamed to the body in a hermetic end joint including a sealing compound, a collar member hermetically beaded to said body, the upper portion of said collar member being spaced inwardly from the body and terminating in a curled seat for said closure member, a depending collar member having its upper end hermetically incorporated in the sealing compound of said end joint, said depending collar being spaced inwardly from the container body and threadedly engaged with said body collar, and a sealing gasket on said closure member adjacent the curled seat of said body collar, whereby removal of the tearing strip permits the closure member including the depending collar being screwed down on said body collar to embed the curled seat of the latter in said gasket to constitute a hermetically sealed reclosure for the container.

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