

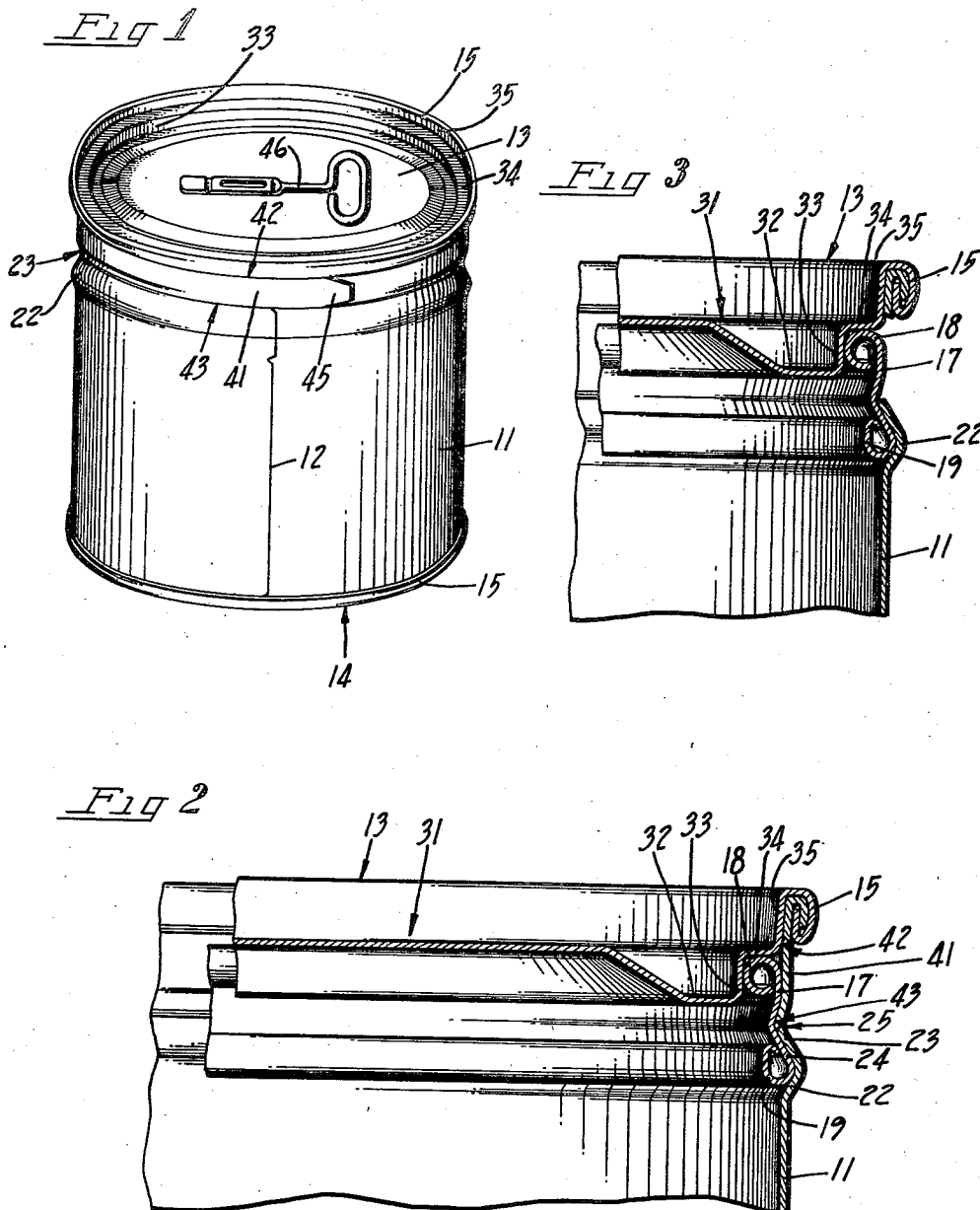
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CONTAINER

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CONTAINER

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The present invention relates to containers or cans of the character having removable tearing strips and has particular reference to shielding the raw edge which remains on the container body after the tearing strip is removed.

In tearing strip cans of usual construction the removal of the tearing strip opens the can and also produces a cover which is usually utilized as a reclosure for the can. Such a reclosure frequently is adapted to seat upon a collar which is provided in the can. Sometimes the collar is a separate member which is secured in the can body and sometimes the collar is formed as an integral folded portion of the can body. In either case the collar backs up the usual score lines in the can body which set off the tearing strip. If the score lines are not properly made the removal of the tearing strip often leaves a more or less jagged raw edge on the can body adjacent the collar and projecting outwardly from the collar. Such a raw edge is a cutting hazard to the hands of the user of such a can.

The present invention contemplates overcoming this difficulty by forming the can body and the collar adjacent the score lines so that the raw edges whether jagged or not which remain after removal of the tearing strip will be shielded so that the user of the can will be protected against injury.

An object therefore of the invention is the provision of a tearing strip can wherein the portions of the can body which contain the tearing strip score lines and the collar which backs up the score lines are formed so that any raw edge which remains on the can body or on the reclosure produced by removal of the tearing strip will be shielded so that the user of the can will be protected against injury by such raw edges.

Another object is the provision of such a can wherein the lower score line of the pair of score lines which sets off the tearing strip is located at the peak of an inwardly projecting bead in the can body and this bead interlocks with a similar bead in the collar so that removal of the tearing strip leaves the can body edge at the lower score line disposed in the collar bead where it is inwardly of the straight outer face of the collar and the can body, thereby preventing contact of the hand with the raw edge of the can.

Another object is the provision of a can of this character wherein the upper score line of the pair of score lines which set off the tearing strip is disposed at the base of the can cover end seam where it is backed up by a countersunk panel section of the cover so that removal

of the tearing strip leaves any raw edge of that portion of the can body which remains with the cover, in a shielded and protected location thereby preventing its engagement by the hand of a user of the can.

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 can embodying the instant invention; and

Figs. 2 and 3 are enlarged sectional views of one corner of the can, Fig. 2 showing the can before removal of its tearing strip and Fig. 3 showing the tearing strip removed, with parts broken away.

As a preferred embodiment of the instant invention the drawing discloses a cylindrical tubular sheet metal can which includes a body 11 having its longitudinal edges secured in a side seam 12 and having a top and a bottom closure 13, 14 secured to its ends in suitable end seams 15. Adjacent the top closure 13 the can is provided with an annular internal collar band 17 having top and bottom curled edges 18, 19.

The collar band 17 fits snugly within the body 11 with its outer surface in frictional engagement with the inside surface of the body. The bottom curled edge 19 of the collar is displaced outwardly and seats in an outwardly extending bead 22 formed in the can body. The bead extends entirely around the body and thus holds the collar permanently in place.

At the top the bead 22 of the body 11 merges into an inwardly projecting bead 23 which forms an annular recess in the can body and which extends into and seats within an inwardly projecting cooperating or clearance bead 24 formed in the collar band 17. The peak or innermost portion (marked with the numeral 25) of the bead 23 is thus disposed inwardly of the straight outside surface of the can body 11.

The cover or top closure 13 of the can is preferably of the character having a countersunk panel 31 which includes a bottom wall section 32 disposed within the can. The outer edge of the bottom wall section 32 merges into an upright annular friction wall section 33 which frictionally engages inside of the collar band upper curled edge 18. At its upper edge the cover friction wall 33 merges into an annular horizontal wall section 34 which extends outwardly over the curled edge

18 of the collar band and thus forms a stepped seat which rests on the curled edge 18. The outer edge of this stepped seat wall 34 merges into an upright annular wall section 35 which extends upwardly along the can body 11 and is incorporated in the cover end seam 15. Such a cover or top closure 13 seals the upper end of the can.

Opening of the can is preferably effected by removal of a tearing strip 41 which is formed in the can body 11 adjacent the collar band 17. This tearing strip is set off by a pair of spaced and parallel score lines 42, 43 which are formed in the can body. These score lines begin at the can side seam 12 and extend entirely around the can. Adjacent the side seam the tearing strip 41 is formed with an overhanging tongue 45 which is adapted to be engaged by a key 46 in the usual manner for tearing away the strip.

Removal of the tearing strip 41 separates the cover 13 from the can body 11 and leaves the upper portion of the collar band 17 exposed above the can body. The cover thus produced may be used as a friction plug reclosure having the cover friction wall 33 and step wall 34 engaging the collar band and serving as a seat for retaining the cover in position within the collar when so used.

Removal of the tearing strip from the can leaves raw edges where the metal of the can tears along the score lines. In order to protect the user of the can against probable injury by these raw edges, the upper score line 42 is located in the can body close to the base of the top end seam 15 where it is backed up by the lower portion of the cover upright wall 35. Hence when the tearing strip is removed the raw edge which remains along the score line 42 is well up under the protecting lower edge of the end seam 15 and is out of the way so that the hand of the user cannot strike against it and be cut.

For this purpose the lower score line 43 is located at the peak or innermost base portion 25 of the inturned bead 23 in the can body. Removal of the tearing strip 41 therefore leaves the raw edge of the body wall along the score line 43, seated deep in the collar bead 24 where it is well within the limits of the straight outside wall of the can body 11. The edge of the body thus protected is well out of the way and will not form a cutting hazard for the hand of the user of the can.

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 ad-

vantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. A tearing strip container, comprising a can body having an inwardly projecting bead forming a recess in the body and also having score lines setting off a tearing strip which upon removal opens the container, an end closure member secured to said body in a seamed joint, and a collar band located inside of said can body and having an inwardly projecting bead which fits over the bead of said body, one of said score lines being disposed in the bead in the body and located within the recess so that the raw edge produced by removal of the tearing strip is shielded within the inwardly projecting bead of the collar to prevent cutting hazards to the hand of the user of the can.

2. A tearing strip container, comprising a can body having an inwardly projecting bead forming a recess in the body and an adjacent outwardly projecting bead, said body also having score lines setting off tearing strip which upon removal opens the container, a friction plug end closure member secured to said body in a seamed joint, and a separate collar band located inside of said body and having an upper curled edge adapted to serve as a friction seat for said end closure when the strip is removed and having a lower curled edge engaging in the outwardly projecting bead for holding the collar in place in the body, said collar band also having an inwardly projecting bead which fits over the inwardly projecting bead of the body, one of said score lines being disposed at the peak of the inwardly projecting bead in the body so that the raw edge produced by removal of the tearing strip will be located in the bead recess of the collar and shielded to prevent cutting hazards to the hand of the user of the can.

3. A tearing strip container, comprising a can body having a relatively sharp inwardly projecting bead and also having score lines setting off a tearing strip which upon removal opens the container, an end closure member secured to said body in a double seamed joint, and a collar band located inside of said can body and having an inwardly projecting bead which fits over the bead of said body in a cooperating connection, said score lines being disposed in the body wall so that the raw edges produced by removal of the tearing strip are shielded to prevent cutting hazards to the hand of the user of the can, the raw edge left along the upper score line being at the base of the said seamed joint and that of the lower score line being in the peak of the bead of said collar band.

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