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W. E. TAYLOR
EASY OPENING CONTAINER

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Fig. 1

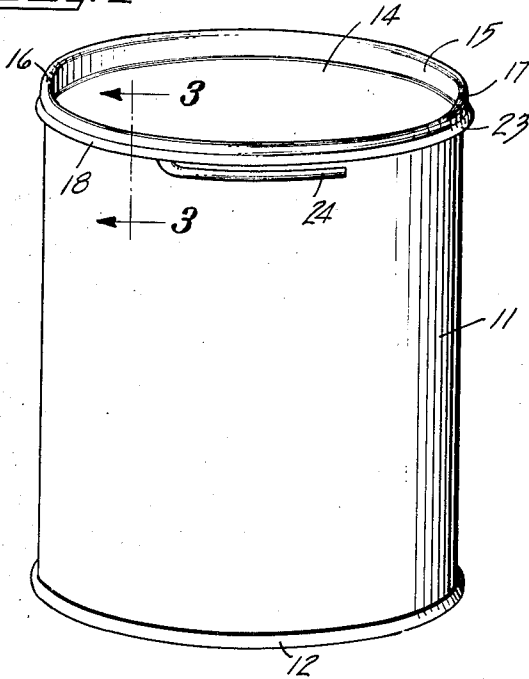


Fig. 3

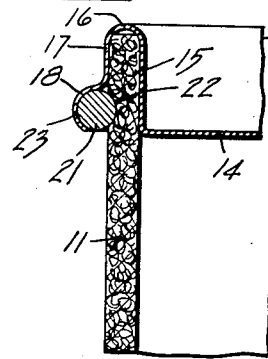


Fig. 2

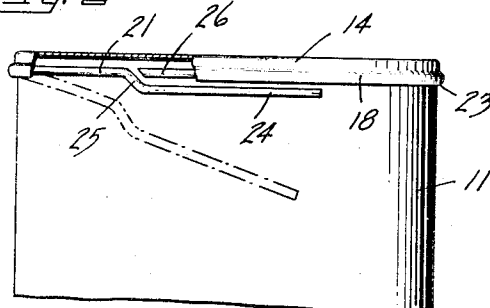
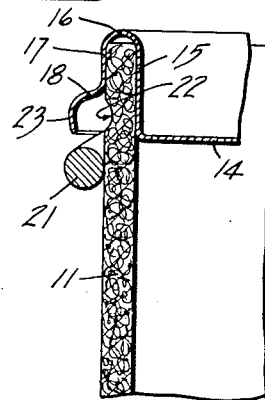


Fig. 4



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EASY OPENING CONTAINER

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4 Claims. (Cl. 229—51)

The present invention relates to fibre containers having metal cover members and has more particular reference to improved closures therefor in which are embodied certain elements to effect easy opening of the containers.

An important object of the invention is the provision of a retaining ring or wire for a fibre container which is sealed or closed with a cover member, the retaining ring being partially embedded into the body wall of the container and which, when removed to open the container, leaves the cover member free for removal and for subsequent frictional engagement as a reclosure.

A further important object of the invention is the provision of a container closure of the character described in which the retaining ring is pressed into the fibre body wall during the application of the cover member to effect a closure and which unbends portions of the cover member during the opening of the container so that the cover is freed from the ring as well as from the body and in such reshaped form is adapted for frictional engagement as a reclosure.

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 the container embodying the present invention;

Fig. 2 is a fragmentary front elevation, partly broken away, of the upper part of the container illustrated in Fig. 1;

Fig. 3 is an enlarged fragmentary sectional view taken substantially along the line 3—3 in Fig. 1, and illustrating the sealed container parts; and

Fig. 4 is a view similar to Fig. 3 illustrating a step in the removal of the retaining ring and in the opening of the container.

The present invention is particularly directed to an improved closure for a fibre container having a metal cover member and a retaining ring which has a dual function of assisting in forming a closure for the container and in reshaping certain parts of the closing elements in the opening of the container to permit its initial opening and to permit subsequent reclosing thereof.

For the purpose of illustrating the invention the drawing discloses a fibre container body 11 having a bottom end 12 secured thereto in any suitable manner as by a crimped or other kind of seam. The upper end of the fibre body 11

(Figs. 3 and 4) is practically straight without any projecting parts.

A metal cover member 14 is provided, having a cylindrical vertical wall 15 adapted to frictionally engage within the top or open end of the body 11. This inner wall 15 is bent outwardly at its top into an annular curled rim 16 which is semi-circular in cross section. This rim merges into a downwardly extending wall 17 substantially parallel to the wall 15 which terminates in a flange 18.

A retaining ring or wire 21, preferably of circular cross section, is used as one element in the container closure and at the same time provides an opening device for breaking the closure seal when the container is opened. This ring encircles the can body adjacent its top and is adapted to be partially enclosed within the flange 18 of the cover member 14 when the latter is positioned on the body and the parts are brought into the closed position illustrated in Figs. 1, 2 and 3.

Such closing of the container is effected in any suitable manner by means of which the cover flange 17 is crimped or otherwise forced inwardly against the ring 21 so that the latter is pressed into the wall of the fibre body 11, making its own seat 22. This forms a curled flanged section 23 and seals the container.

The bending of the flanged edge 23 practically encloses the outer wall of the ring but leaves a handle part 24 which is joined to one end of the ring in an inclined section 25. This handle part projects below the opposite end 26 of the ring (Fig. 2) and extends entirely free of the enclosed sealing flange parts 23.

When the container is to be opened the handle part 24 of the retaining ring 21 is forced downwardly to the position indicated by dotted lines in Fig. 2, the rest of the wire ring moving downward and away from the cover flange. In this movement the edge 23 of the cover flange is bent outwardly (as shown in Fig. 4) as the ring 21 rides out of its seat 22 and presses against the flange edge. This edge springs back a short distance as shown in this figure but is clear of the ring and clear also of the body wall.

The cover member 14 is now free to be lifted off of the container body 11. After the container has thus been opened the cover may again be resealed as a reclosure, the walls 15, 17 of the cover giving sufficient fit on the body to form a removable closure. The retaining ring 21 is discarded as no longer necessary.

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.

10 I claim:

1. A container, comprising a tubular fibre body having a straight uncurled upper edge, a metal retaining ring adapted to be positioned on said body below its said upper edge and embedded by its own pressure into the otherwise straight wall of the body, and a metal cover member having an inner supporting wall extending downwardly within said container sufficiently to withstand the pressure exerted by said ring against the container body, said cover member having an outwardly and downwardly extending flange enclosing said body edge and partially enclosing said retaining ring and being clamped against said ring sufficiently tight to cause the ring to form a seat within the body wall whereby to effect a closure for said container, said retaining ring being also adapted upon removal from its embedded and enclosed position within the body wall to be forced outward by the lower part of said seat and outwardly bend said metal cover flange to free said ring and permit unrestricted removal of said cover member from said body.

2. A container, comprising a tubular fibre body of uniform cylindrical contour having a straight uncurled upper edge, a metal retaining ring adapted to be positioned on said body below its said upper edge, and a metal cover member having a supporting wall within the end of said body extending down to opposite said ring, said cover member having an outwardly and downwardly extending flange enclosing said body edge and partially enclosing said retaining ring and being clamped against said ring sufficiently tight to press the latter into said body wall against the resistance afforded by said supporting wall, whereby to effect a closure for said

container and to prevent relative movement between the same and the cover member.

3. A container, comprising a tubular fibre body of uniform cylindrical contour having a straight uncurled upper edge, a metal retaining ring adapted to be positioned on said body below its said upper edge, and a metal cover member having a supporting wall within the end of said body extending down to opposite said ring, said cover member having an outwardly and downwardly extending flange enclosing said body edge and partially enclosing said retaining ring and being clamped against said ring sufficiently tight to press the latter into said body wall against the resistance afforded by said supporting wall to prevent relative movement therebetween, said retaining ring being also adapted upon removal from its embedded and enclosed position to outwardly bend said metal cover flange to free said ring and permit unrestricted removal of said cover member from said body.

4. A container, comprising a tubular fibre body of uniform cylindrical contour having a straight uncurled upper edge, a metal retaining ring adapted to be clamped into position on said body below its upper edge to form a depressed seat in said body wall, and having a projecting handle located beneath an end thereof, and a metal cover member having a supporting wall within the end of said body extending down to opposite said ring and also having an outwardly and downwardly extending flange enclosing said body edge and partially enclosing said retaining ring to effect a closure for said container, said ring being pressed into the container body wall against the resistance afforded by said supporting wall, said depressed seat cooperating with the cover flange to prevent relative movement between the body and cover, said retaining ring being also adapted upon removal from its enclosed position within the body wall seat by pressure on its said projecting handle to outwardly bend said metal cover flange to permit unrestricted removal of said cover member from said body and adapt the former as a reclosure for said body.

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