Oct. 12, 1943. G. W. REESE 2,331,346

CONTAINER

Filed Nov. 15, 1940

Fig 1

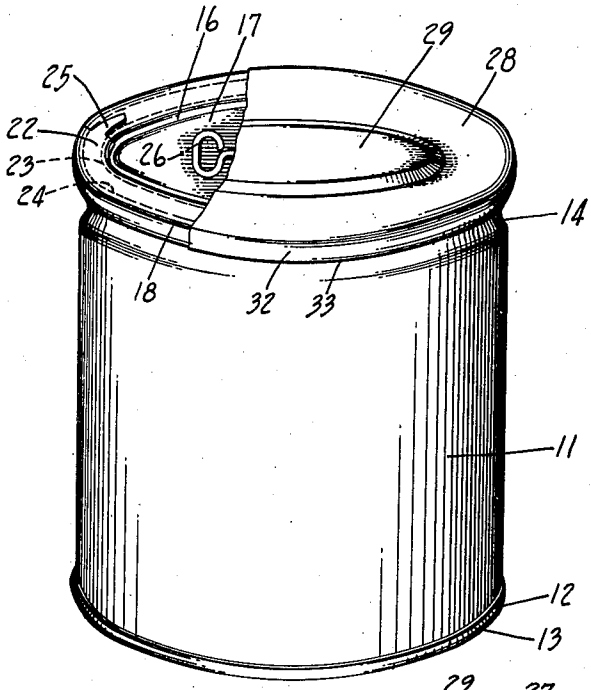
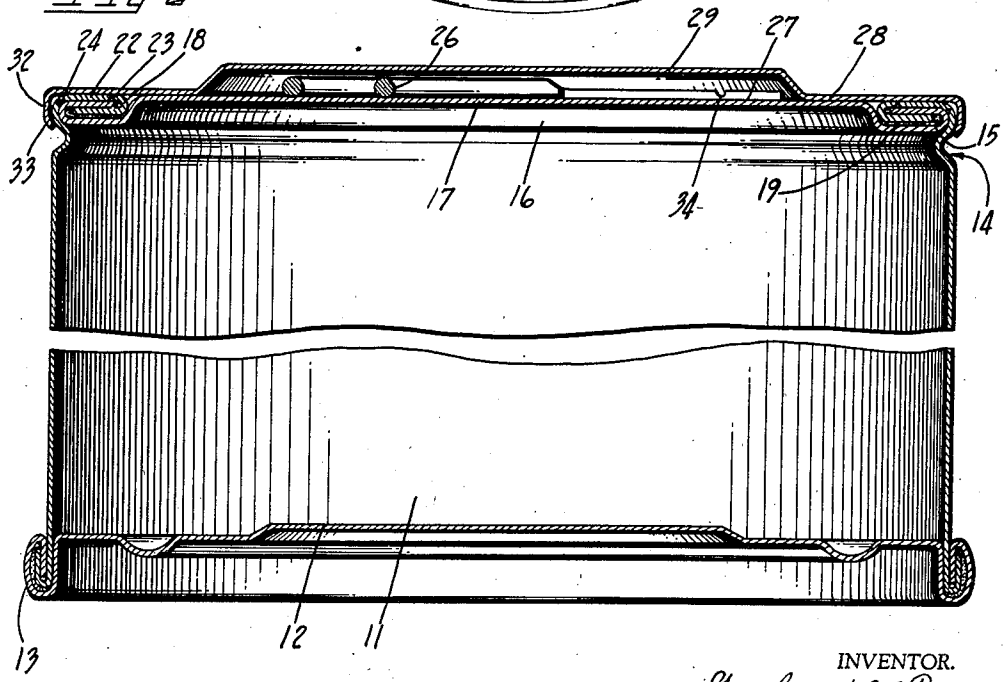


Fig 2



INVENTOR.
Garland W. Reese
BY Ivan D. Thornburgh
Chas. H. Erne
ATTORNEYS

Patented Oct. 12, 1943 2,331,346

UNITED STATES PATENT OFFICE

2,331,346

CONTAINER

Garland W. Reese, Chappaqua, N. Y., assignor to American Can Company, New York, N. Y., a corporation of New Jersey

Application November 15, 1940, Serial No. 365,832

3 Claims. (Cl. 220—54)

This invention relates to a sheet metal can or container which is adapted to be sealed by a horizontally disposed end seam joint and has particular reference to a tearing strip provided in the end joint, the removal of which detaches the cover and produces a substantially full opening in the top of the container.

The invention contemplates the provision of a tearing strip type metallic container for storing and preserving products in which the end closure is hermetically sealed to the body by means of a double seam end joint having a tearing strip formed in the outermost layer of the joint and arranged for convenient removal to open and separate the entire end wall from the container.

An object of the invention is the provision of a double seam in the top of a container for securing a top end member to a container body wherein the seam is disposed within the circumferential line of the can body, with the outer layer of the seam scored to provide a tearing strip which is easily removed to open and uncover the top of the container.

Another object of the invention is the provision of a horizontal type double seam formed by inwardly interfolded flanges of the end member and the body at the top of the container, the outer body fold at the top of the seam being scored to provide a removable tearing strip for opening the container and an auxiliary slip cover reclosure being also provided for temporarily reclosing the opened container.

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 preferred embodiment of the invention showing a closed container with an auxiliary cover partially broken away; and

Fig. 2 is an enlarged view in section taken along a vertical plane passed through the center of the closed container shown in Fig. 1.

As a preferred embodiment of the invention there is shown in the drawing a sheet metal can comprising a tubular body 11 closed at one end by a bottom 12 which is secured to the body by a double seam 13. The opposite end of the tubular body is beaded inwardly as at 14 to strengthen the upper end thereof and also to provide a shoulder 15 (Fig. 2) against which a top end 16 rests.

The top end 16 is paneled or pressed outwardly throughout most of its midsection as at 17, an amount equal to the thickness of a double seam 18. This provides a substantially flush upper surface on the container with the double seam 18 extending circumferentially thereof in a horizontal position.

The double seam 18 is formed by interfolding the marginal flanges of the body 11 and the top end 16 so as to produce the horizontally disposed end joint. A suitable compound or gasket lining 19 is preferably inserted between the flanges and this produces a hermetic seal.

A tearing strip 22 is disposed in the outer layer of the horizontal double seam 18. This strip is formed by concentric score lines 23, 24 cut in the body 11, adjacent the upper end thereof. These weakened score lines are preferably cut in the body blank prior to its being formed into tubular shape.

A tearing tongue 25 extends over the double seam 18 as a continuation of the tearing strip 22 and is adapted for engagement by a key when the tearing strip is removed in opening the container. For this purpose a slotted key 26 is used in winding off the tearing strip from the top or outer fold of the double seam 18. Such a key may be conveniently secured to the top end in any suitable manner as by spot welding at 27 (Fig. 2).

The top end 16 with the attached key 26 and the horizontal double seam 18 are protected during shipment and storage by an auxiliary overcap or snap-on cover 28. This cover is formed with a centrally disposed raised panel 29 of suitable size to encase the key 26 (Fig. 2).

An annular depending flange 32 on the cover 28 extends down over the double seam 18 when the cover is assembled on the container. The flange 32 terminates in an inwardly bent edge 33 which engages within the body bead 14 and retains the cover upon the container.

In order to open the closed container initially the auxiliary cover 28 (Figs. 1 and 2) is first removed. The key 26 is next broken along a weakened area 34 and is removed from its affixed position. The key is then applied to the tearing tongue 25 in the conventional manner, and the tearing strip is wound on the key as it breaks along the score lines 23 and 24. This opens the container.

The top end 16 with the remaining severed portion of the double seam 18 is lifted from its

nested position on the body shoulder 15 and may then be discarded. This construction provides a substantially full opening for the container and permits easy and convenient removal of the container contents. If all of the contents are not removed the auxiliary cover 28 is then replaced upon such opened container and thus serves as a container reclosure.

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 sheet metal container comprising a tubular body having an inwardly rolled bead formed with an external channeled portion adjacent one end thereof, a top end member conforming substantially to the internal transverse dimensions of said body and secured to said body superjacent said bead in a horizontally disposed end seam formed inwardly of the external transverse dimensions of said body, a tearing strip located in the top outer fold of said end seam and set off by parallel score lines formed in the body wall, the severance of said tearing strip from said body releasing said end member for removal from the body, an auxiliary cover for engaging over the upper end of the container, and a depending flange on said cover provided with an inwardly bent portion, said bead being engaged in its external channeled portion by said inwardly bent flange portion to releasably retain said cover on said container, said bead also forming an internal ledge for seating the peripheral margin of the severed end to prevent the same from falling into the container before being lifted therefrom.

2. A sheet metal container comprising a tubular body, a disk closure secured to an end of the body wall in a seam formed inwardly of the plane of said wall the several layers of said seam lying in planes substantially parallel to that of said disk the outermost layer being a portion of said body, a tearing strip set off by parallel score lines formed in said outer layer adjacent said end member, one of said score lines conforming substantially to the contour of the adjacent periphery of said end member, the severance of said tearing strip from said body releasing said end from said body, and an inwardly formed bead in said body disposed beneath the peripheral margin of said disk closure to constitute an internal ledge for engaging said margin thereby to restrain the severed closure from falling into the container prior to being lifted therefrom.

3. A sheet metal container comprising a tubular body having an end member secured thereto in a double seam formed inwardly of the external transverse dimensions of said body, the several layers of said seam lying in planes substantially parallel to that of said end member, the outermost of said layers being a portion of said body, and a tearing strip in said outermost layer set off by score lines cut in said layer, one of said score lines conforming substantially to the contour of the adjacent periphery of said end member, said tearing strip when severed along said score lines releasing said end member for removal from the container body.

GARLAND W. REESE.