July 20, 1943. J. CEREGHINO 2,324,484

CONTAINER

Filed March 26, 1941

Fig. 1

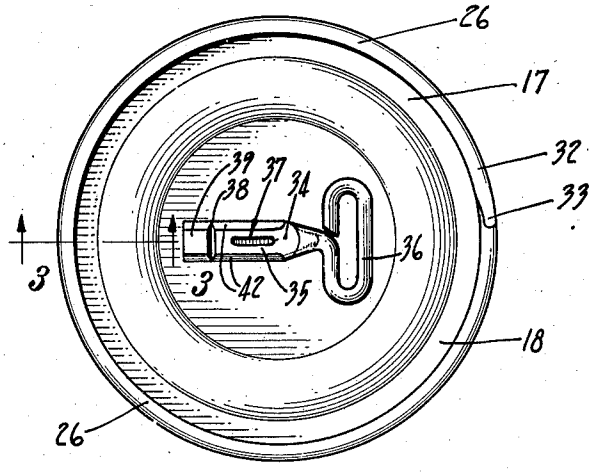



Fig. 2

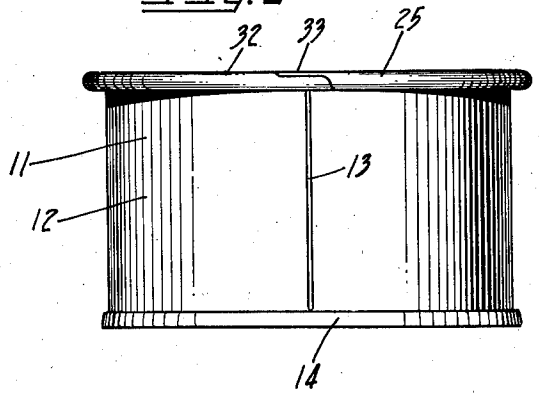
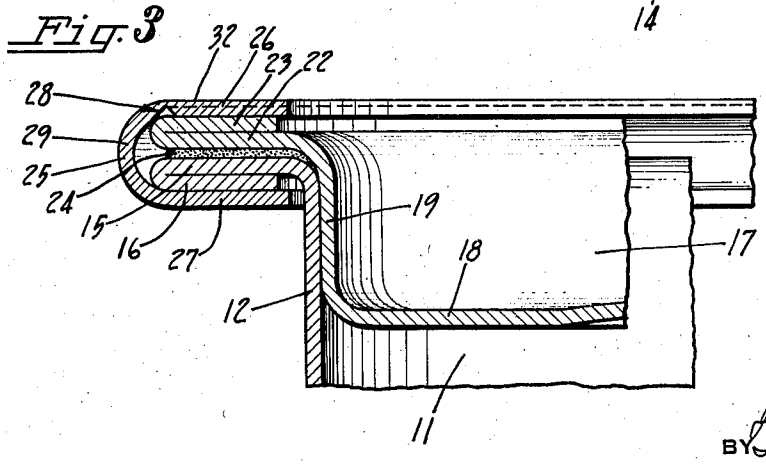



Fig. 3




INVENTOR
Joseph Cereghino
BY Swan O. Thornburgh
Chas. H. Lane
ATTORNEYS

Patented July 20, 1943

2,324,484

# UNITED STATES PATENT OFFICE

2,324,484

## CONTAINER

Joseph Cereghino, Los Angeles, Calif., assignor to American Can Company, New York, N. Y., a corporation of New Jersey

Application March 26, 1941, Serial No. 385,361

2 Claims. (Cl. 220—61)

This invention relates to band sealed sheet metal cans or containers of the key opening variety and has particular reference to a rip-strip set off by a score line in the wall of a sealing band used to hermetically seal lined hemmed cover and body edges in an end joint, which cover may be readily detached from the can by application of a suitable key adapted to pry and engage a projecting tongue end of such a strip and to sever the strip along the score line and after removal of the band the freed cover may be lifted from the container.

The invention contemplates the provision of a band sealed container of the type commonly employed in packing fish, meat and the like, which is adapted to be hermetically sealed by a U-shaped band or ring having circumferential upper and lower walls or flanges which embrace the peripheral mating edges of a lined cover and body, the edges of which are hemmed to make a solid seat and a rigid shoulder for the reception of a usual form of sealing gasket or compound disposed therebetween. The sealing band is preferably formed of thin malleable metal which is easily bent into shape such a band having a scored or weakened line cut in the inner or upper wall and setting off a rip-strip, such a rip-strip having the usual tongue projecting therefrom and overlapping the terminal edges of the sealing band.

The instant type container is also provided with a specially designed opening key which is attached to the cover of the container in a suitable manner, as by welding, and which is adapted to be broken off at a definite weakened section of the key. Such a key may have a flattened and slotted shank, the shank having angular or V-shaped edges for prying beneath the tearing tongue to raise it for engagement in the slot of the shank by means of which the rip-strip may be severed along the weakened line as it is wound around the key. The lower and remaining parts of the sealing band thereupon drop away from the hemmed edges of the cover and body and the uncovered edges then may be pried apart by inserting a V-shaped edge of the opening key therebetween after which can and cover are easily separated and the contents exposed, ready for use.

An object of the invention is the provision of a rip-strip contained in an upper wall of a U-shaped sealing band and set off by a scored or weakened line cut in a marginal edge of the wall, which band hermetically seals adjacent outwardly projecting flanges of a can body and a cover in a lined end seam joint, an extended tongue of the rip strip overlapping the sealing band and arranged to be readily pried or lifted by a suitable key having a slotted shank which is used to engage the tongue and wind off the rip strip by severing it along the score line thereby destroying the band seal and exposing the flanged edges of the body and cover.

Another object of the invention is the provision of a rip-strip formed by a scored wall in the sealing ring of a band sealed container wherein such a ring is adapted to embrace the outwardly hemmed edges on both a flanged body and a countersunk gasket or compound lined cover in a hermetically sealed end joint, such rip-strip upon being severed, permitting removal of the band seal and uncovering the smooth hemmed edges of the container and its cover.

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 plan view of a container sealed by a scored band in accordance with the present invention and showing a key for opening the same;

Fig. 2 is a side elevation of a band sealed container; and

Fig. 3 is an enlarged fragmentary detail in section as viewed along the line 3—3 (Fig. 1) showing the hemmed cover and body edges united by the scored band.

As a preferred embodiment of the invention there is shown in the drawing a band sealed container 11, having a tubular body 12 which is joined together with a usual form of side seam joint 13 (Fig. 2). The lower end of the body has a bottom end member attached thereto in any suitable manner as by a double seam 14.

The upper portion of the container body 12 is bent outwardly to provide a substantially horizontal flange or shoulder 15 (Fig. 3) which has its outer marginal terminal edge folded downwardly and inwardly into a hemmed edge 16. Such a hemmed edge flange, surrounding the open end of a container body, tends to maintain it in its cylindrical form and also provides a smooth and rigid sealing surface bordering upon the mouth of the container.

A cover 17 is arranged to close the mouth of the container and is formed with a countersunk section or panel 18, bordered by an annular upstanding wall 19 which is arranged to frictionally

engage the inner marginal edge portion or surface of the container body. This cover 17 may be drawn in any suitable manner to produce an outwardly extended flange 22 merging from the annular wall 19. The outer marginal terminal edge of the flange 22 is bent upwardly and inwardly upon the flange 22 in a hemmed edge as at 23 (Fig. 3).

When the container is to be closed the hemmed edge cover 17 is positioned upon the horizontal flange 15 of the body 12 with a suitable gasket or sealing compound 24 disposed therebetween. This gasket allows for the hermetic sealing of the container. Such a sealing material may be deposited upon the cover flange while in a liquid state in a conventional manner, prior to the cover being assembled with the container.

An annular U-shaped sealing band or ring 25 is formed with an outer or upper wall 26 and a substantially parallel inner or lower wall 27. The upper wall 26 has an annular scored or weakened section 28 cut on the inner surface which is preferably located at the outer margin of the wall where it merges into a curved connecting wall 29 of the sealing band. The weakened section 28 is adapted to set off a tearing or rip-strip 32 in the upper wall 26. The rip-strip has an extended tongue 33 (Figs. 1 and 2) which overlaps the terminal end of the sealing band 25 and which is arranged for engagement with an opening key for the removal of the rip-strip.

An opening key 34 (Fig. 1) preferably of the break-off type, may be attached to the cover 17 in any suitable manner as by welding. Such a key is made from a strip of round wire stock and is formed into a body or shank section 35 with a looped or handle section 36 at one end. The shank section 35 is flattened and an elongated slot or opening 37 is cut in the flattened section midway between the handle and the shank end of the key. Such a slot provides for engagement of the tearing tongue of the container in the usual manner for the removal of the tearing strip in opening the container.

The key 34 has a weakened section 38 and an adjacent tail part 39 welded to the cover and which remains secured to the cover after the key has been removed. The upper flattened wall of the key shank 35 (Fig. 1) has its opposite edges beveled as at 42 in V-shaped or angular edged parts.

Upon removal of the opening key 34 from the container cover of a sealed container, one of the V-shaped edges 42 is used to pry or raise the tearing tongue 33 so that the slot 37 in the flattened shank may be positioned over the tongue and the rip-strip 32 is then wound off as the key is turned in the usual manner, this action severing along the score line 28 and separating the upper wall 26 from the ring seal 25.

Upon the removal of the tearing strip 32, the remainder of the sealing band 25 drops from its sealing position and exposes the hemmed edges 15 and 22 of body and cover. One of the tapered edges 42 on the flattened shank of the key 34 may then be inserted between the hemmed body and cover edges or directly into the sealing material 24 to separate the parts. Where the container has been vacuumized this breaks the vacuum seal after which the cover may be separated easily. This opens the container and exposes its contents.

The hemmed edge of the opened container is smooth having no raw or rough edges exposed. The cover may be reinserted into the mouth of the container in a friction fit when desired to serve as a temporary 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 hermetically sealed sheet metal container, comprising a tubular body having a laterally extended flange at its outer end constituting a shoulder terminating in a hemmed edge, a cover for said body having a depressed countersunk section defined by an upstanding wall disposed in frictional engagement with the interior wall of said body, said wall merging into an outwardly extended flange terminating in a hemmed edge, a sealing gasket interposed between the body shoulder and the cover flange, and a sealing ring for sealing the container, said sealing ring having upper and lower substantially parallel annular spaced walls enclosing the hemmed body and cover edges in a hermetically sealed joint, the outer of said sealing band walls being set off by a score line from the remainder of said band to constitute a removable rip-strip, said rip-strip being severable from said sealing ring to break said sealed joint and permit removal of the cover when the sealing ring is thus removed.

2. A hermetically sealed sheet metal container, comprising a tubular body having a laterally extending flange at one end constituting a shoulder, a countersunk cover having an upstanding wall portion disposed in frictional engagement with the interior wall of said body and terminating in a laterally extending flange corresponding to and engaging the said body shoulder when the parts are assembled, and a sealing ring having annular spaced substantially parallel walls adapted to embrace the body shoulder and cover flange in a ring sealed joint, one of said parallel sealing ring walls being set off by a peripheral score line from the remainder of said ring to constitute a removable rip-strip for separating the spaced ring walls in opening the container.

JOSEPH CEREGHINO.