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J. C. TALIAFERRO ET AL

METAL CONTAINER

Filed Nov. 7, 1923

FIG. 1.

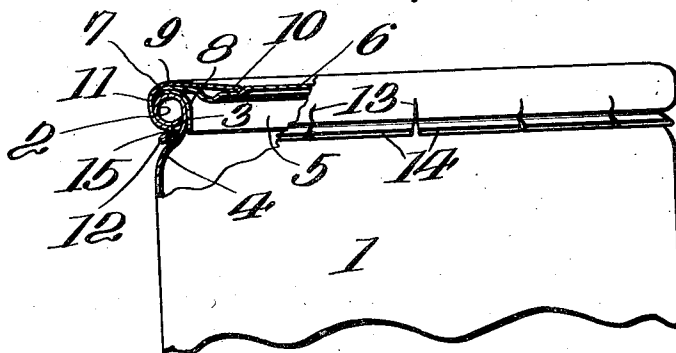


FIG. 2.

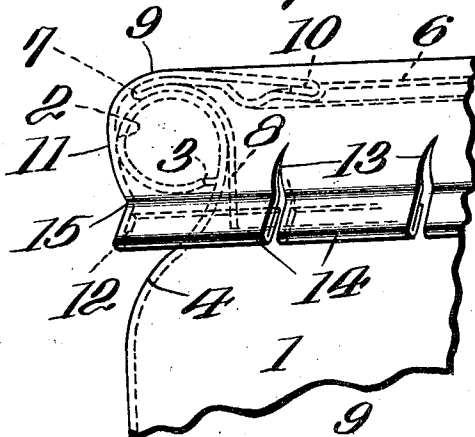


FIG. 3.

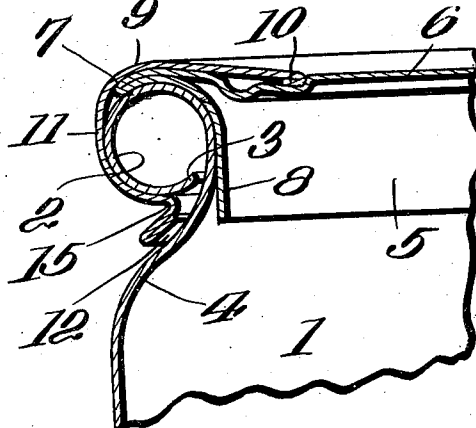
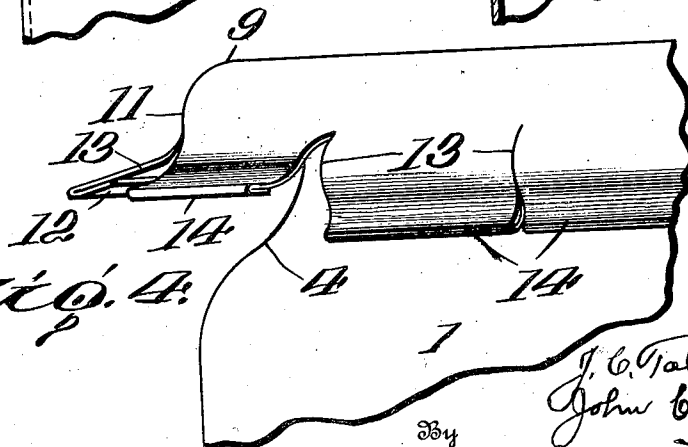


FIG. 4.



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JOHN C. TALIAFERRO AND JOHN COYLE, OF BALTIMORE, MARYLAND, ASSIGNORS TO
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METAL CONTAINER.

Application filed November 7, 1923. Serial No. 673,279.

To all whom it may concern:

Be it known that we, JOHN C. TALIAFERRO and JOHN COYLE, citizens of the United States, residing at Baltimore, State of Maryland, have invented certain new and useful Improvements in Metal Containers, of which the following is a description, reference being had to the accompanying drawing and to the figures of reference marked thereon.

The invention relates to new and useful improvements in metal containers, and more particularly to a metal container wherein one end is hermetically secured to the body portion of the container by a sealing member that can be easily removed.

An object of the invention is to provide a container of the above type wherein an integral sealing member holds the removable end in close sealed contact with the container body, and wherein said sealing member includes a depending flange formed with slits extending from the lower edge thereof upwardly into the flange, thus forming readily bendable sections lying side by side which may be turned underneath an external bead on the container body for drawing and holding the cover on the container body in tight sealed contact therewith, and which may be readily bent without the use of special tools for releasing the ring from the container.

A further object of the invention is to provide a container of the above type having a contracted neck portion adjacent its upper end so that the extreme diameter of the detachably closed end is substantially the same as the maximum diameter of the body of the container, and the lower ends of the bent portions of the sealing ring are housed in the space formed by the contracted portion.

These and other objects will in part be obvious and will in part be hereinafter more fully disclosed.

In the drawings—

Figure 1 is a view partly in side elevation and partly in transverse section showing a container embodying our improvements;

Fig. 2 is an enlarged view in side elevation of a portion of the container with the sealing ring secured thereto;

Fig. 3 is a sectional view of a portion of the container showing the closing end and

the sealing ring as well as the upper portion of the container body, and

Fig. 4 is a view similar to Fig. 2, but showing the bendable portions of the depending flange turned up for the purpose of releasing the sealing ring from the container body.

The container is preferably of a cylindrical type. One end of the container is secured thereto in the ordinary way by double-seaming and it has not been thought necessary to illustrate in the drawings, this end of the container. The other end of the container body is closed by a cover or end, and a sealing ring which hermetically secures the end to the container body. The sealed end is preferably put on by the manufacturer of the container, after which the contents are placed therein by the packer and the other end attached by the ordinary double-seaming. This end which has the sealing ring attached thereto is provided with an outwardly and downwardly rolled flange. The container body is contracted beneath the rolled flange so as to form a housing for the lower end of the flange of the sealing ring. The cover or end has a depending flange fitting within the container body, and a laterally projecting portion which overlies the rolled flange on the container body. The sealing ring overlies the projecting portion of the end and extends a slight distance inwardly toward the center of the can end. It also extends downwardly around the rolled flange to a point well underneath the same when the sealing ring is attached to the container body. Said depending flange is formed with slits extending from the lower edge thereof upwardly to a point opposite the maximum diameter of the rolled flange. These slits form bendable portions which may be raised so as to release the sealing ring from the container body.

Referring more in detail to the drawings, we have shown our improved container as consisting of a cylindrical container body 1 having a rolled flange 2 at one end thereof. This flange is rolled outwardly and downwardly and inwardly and its free edge 3 is slightly spaced from the wall of the container. The container is contracted at 4 so that the outer edge of the rolled flange is substantially over the wall of the body portion of the con-

tainer. The wall of the container is, however, free from shoulders that would in any way prevent the ready emptying of the contents thereof. The container body is closed

5 by a cover or can end 5. Said can end 5 includes a section 6 which extends across the mouth of the container body to a point 7 well over the rolled flange 2. Said end is then bent inwardly and thence downwardly as at 8.
10 This downwardly projecting portion conforms generally to the inner surface of the container body and is adapted to frictionally engage the same. The end is held on the container body by a sealing ring 9. Said
15 sealing ring is provided with a portion which overlies this laterally projecting part of the can end which in turn overlies the rolled flange 2, and extends inwardly to a point 10 which is well inside of the vertical wall of
20 the container body. The end is preferably recessed to provide a pocket to receive the inner edge 10 of the sealing ring and this inner edge is preferably bent back so as to conceal the raw edge of the metal as clearly
25 shown in Fig. 3 of the drawings. The sealing ring has a depending flange 11. Said depending flange at its extreme lower end is turned upwardly as at 12 so as to conceal the
30 raw edge of the metal and strengthen said lower edge of the flange. Said flange is provided with parallel slits 13, 13 which are comparatively close spaced, and these slits extend from the bottom edge of the flange to
35 a point opposite the maximum diameter of the rolled flange 2 when the sealing ring is secured to the container. These slits are so formed that when the flange is turned underneath the rolled flange 2 of the can body, the
40 edges of the slit will come together, thus making a continuous sealing contact between the lower portion of the flange and the rolled bead on the container body.

As clearly shown in Fig. 3, these bendable strips 14 formed by the slits 13 are adapted
45 to be bent underneath the rolled bead or flange of the container body, and to a point which permits the rolled flange to be slightly reduced during the placing of the sealing ring on the container body, and thus a very
50 resilient seal is produced wherein the expansion of the metal tends to draw the parts into tighter engagement, with the sealing material placed between the overlying portion of the can end and the rolled flange of
55 the can body. The extreme lower portions of the strips 14 are bent outwardly at 15 so as to lie at an angle to the wall of the body portion of the container. The contracting neck portion of the body of the container
60 forms a housing for the lower ends of these strips, and also enables access to be had to the strip for prying out the lower end thereof. It will readily be seen that if the strips
65 will release their hold on the rolled flange

up to the point of the maximum diameter of the flange, and thus the sealing ring can be readily lifted from the container body.

It will be noted from the above that there has been provided a sealing ring which 70 forcibly holds the end in engagement with the container body throughout its entire circumference. The sealing ring can be released from the container body without the use of any special tools, and when released, 75 it can be removed and will leave the container with a friction top closure.

It will be further noted that when these projecting strips are bent upwardly to release the ring from the container body, there 80 is no rupturing of the metal and therefore, said strips may be readily raised to their releasing position.

Then again, it will be noted that when desired, the sealing ring may be replaced on 85 the end of the container body and the bendable strips bent underneath the flange by hand, so that the end will be firmly held on the container body and in a measure, the package re-sealed by the bending under of 90 these portions.

It is obvious that minor changes in the details of construction may be made without departing from the spirit of the invention as set forth in the appended claims. 95

Having thus described the invention, what we claim as new and desire to secure by Letters-Patent, is—

1. A sealed metal container comprising a body portion having an outwardly rolled 100 flange, an end having a depending portion adapted to frictionally engage the inner wall of the body portion, and an outwardly extending flange overlying the flange on said body portion, said flange and depending 105 portion of the end being integral, a circular integral sealing ring having a portion adapted to overlie the flange on the end, said sealing ring also having a depending portion provided with slits extending from the 110 lower edge of the depending portion upwardly, and forming independently bendable sections which may be bent underneath the rolled flange on the can body for securing the sealing ring to the can body and 115 which may be bent outwardly to release the sealing ring from the container.

2. A sealed metal container comprising a body portion having an outwardly rolled flange, an end having a depending portion 120 adapted to frictionally engage the inner wall of the body portion, and an outwardly extending flange overlying the flange on said body portion, said flange and depending portion of the end being integral, a circular integral sealing ring having a portion 125 adapted to overlie the flange on the end, said sealing ring also having a depending portion provided with slits extending from the lower edge of the depending portion up- 130

wardly, and forming independently bendable sections which may be bent underneath the rolled flange on the can body for securing the sealing ring to the can body and which may be bent outwardly to release the sealing ring from the container, said bendable sections at the lower ends thereof being bent outwardly so as to provide means whereby said sections may be readily bent to release the sealing ring.

3. A sealed metal container comprising a body portion having an outwardly rolled flange, an end having a depending portion adapted to frictionally engage the inner wall of the body portion, and an outwardly extending flange overlying the flange on said body portion, said flange and depending portion of the end being integral, a circular integral sealing ring having a portion adapted to overlie the flange on the end, said sealing ring also having a depending portion provided with slits extending from the lower edge of the depending portion upwardly, and forming independently bendable sections which may be bent underneath the rolled flange on the can body for securing the sealing ring to the can body and which may be bent outwardly to release the sealing ring from the container, said bendable sections at the lower ends thereof being bent outwardly so as to provide means whereby said sections may be readily bent to release the sealing ring, said body portion adjacent the rolled flange being contracted so as to form a housing for the lower ends of the bendable sections of the sealing ring.

4. A sealed metal container comprising a body portion having an outwardly rolled flange, an end having a depending portion adapted to frictionally engage the inner wall of the body portion, and an outwardly extending flange overlying the flange on said body portion, said flange and depending portion of the end being integral, a circular integral sealing ring having a portion adapted to overlie the flange on the end, said seal-

ing ring having slits extending from the lower edge thereof upwardly in the depending flange of the sealing ring to a point opposite the maximum diameter of the rolled flange on the can body, said slits being relatively close together and forming bendable sections which may be turned underneath the rolled flange without overlapping, the lower ends of said depending portions being bent outwardly and thence back upon themselves so as to conceal the raw edge of metal and so as to provide means for bending the sections to release the sealing ring from the container body.

5. A sealed metal container comprising a body portion having an outwardly rolled flange, an end having a depending portion adapted to frictionally engage the inner wall of the body portion, and an outwardly extending flange overlying the flange on said body portion, said flange and depending portion of the end being integral, a circular integral sealing ring having a portion adapted to overlie the flange on the end, said sealing ring having slits extending from the lower edge thereof upwardly in the depending flange of the sealing ring to a point opposite the maximum diameter of the rolled flange on the can body, said slits being relatively close together and forming bendable sections which may be turned underneath the rolled flange without overlapping, the lower ends of said depending portions being bent outwardly and thence back upon themselves so as to conceal the raw edge of metal and so as to provide means for bending the sections to release the sealing ring from the container body, said container body having a contracted neck portion adjacent the rolled flange thereon so as to form a housing for the lower ends of the bendable sections.

In testimony whereof, we affix our signatures.

JOHN C. TALIAFERRO.
JOHN COYLE.