

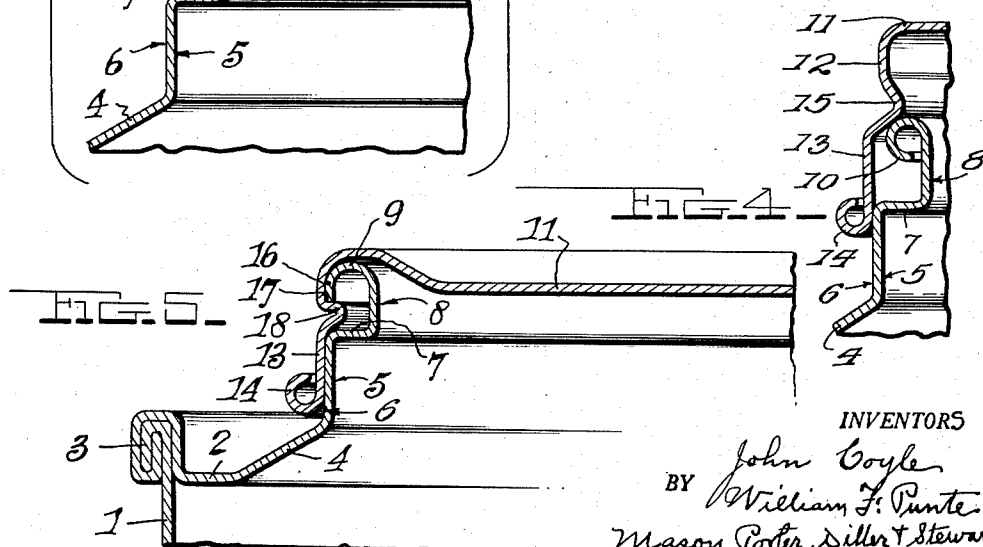
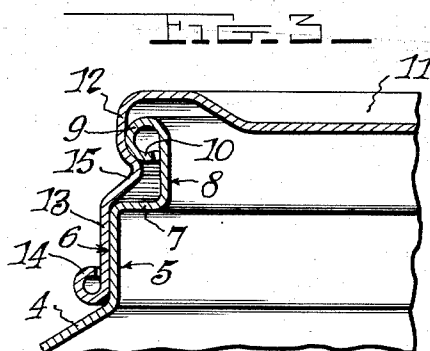
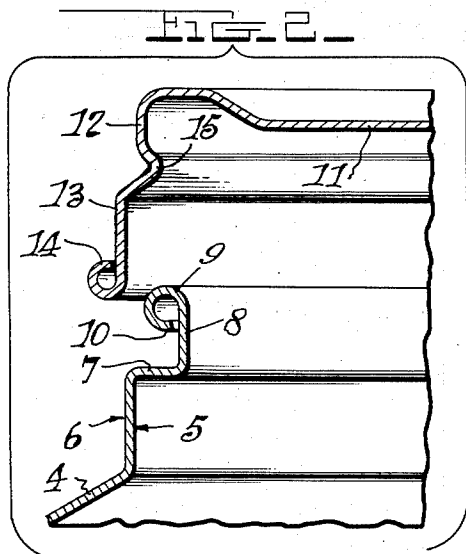
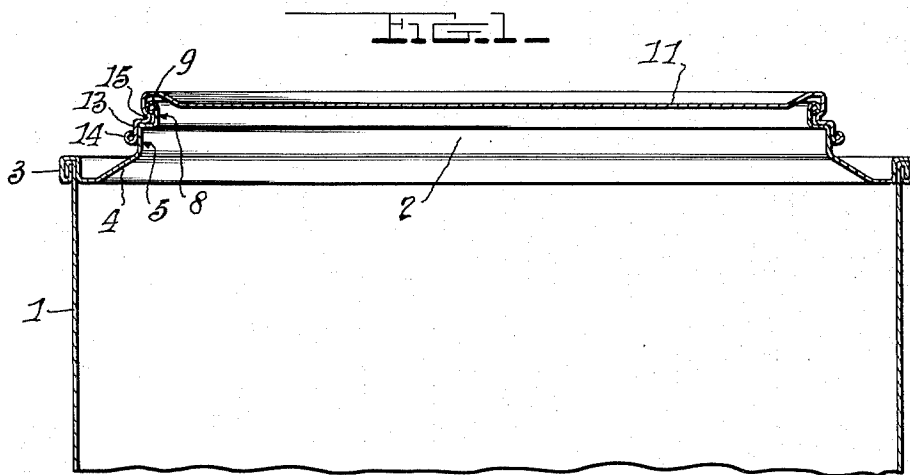
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2,535,840

CONTAINER TOP AND CLOSURE THEREFOR

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CONTAINER TOP AND CLOSURE THEREFOR

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2 Claims. (Cl. 220—42)

1

The invention relates to new and useful improvements in a sheet metal container and more particularly to a sheet metal container having a ring top seamed thereto with which ring top is associated a metal closure or cover.

An object of the invention is to provide a metal container of the above type wherein the cover and ring top are so constructed as to have frictional seating engagement and independent yielding snap lock engagement whereby the cover is firmly but removably secured to the ring top and the container tightly sealed.

A further object of the invention is to provide a metal container of the above type wherein the ring top is so shaped at the inside thereof as to permit free emptying of the entire contents of the container.

In the drawings:

Figure 1 is a vertical sectional view through the upper portion of a container embodying the improvements;

Figure 2 is an enlarged section through a portion of the cover and the ring top showing the cover separated from the ring top;

Figure 3 is a view similar to Figure 2 but showing the cover secured to the ring top; and

Figure 4 is a view showing the cover as it is applied to the container and before the locking lug thereon has been snapped underneath the bead on the container ring top; and

Figure 5 is a view in vertical section through a portion of the cover and container body showing a modified form of construction.

The invention has to do with a metal container which includes a body portion having a ring top seamed thereto. Said ring top from the region of the seam is tapered upwardly and inwardly and thence extends upwardly in a cylindrical portion the outer face of which forms a friction seat for a cover flange. This cylindrical portion of the ring top is offset inwardly and at its upper end is rolled outwardly in the preferred form into a substantially closed bead and in the modified form it is rolled outwardly into an open bead. This bead is spaced away from the inwardly set portion of the ring top. The cover includes a depending flange which at its lower end is rolled into a bead. Adjacent the bead is a cylindrical portion which is dimensioned so as to make frictional engagement with the outer face of the cylindrical portion on the can top. The cover is also bent inwardly so as to snap underneath the bead and thus the cover is not only frictionally held on the ring top but is also snap locked thereto.

2

Referring more in detail to the drawings, the invention is shown as applied to a metal container including a body portion 1 preferably cylindrical in form. A ring top 2 is secured to the upper end of said body portion by a seam 3 which may be the ordinary double seam. This ring top extends inwardly from the double seam for a very short distance, thence upwardly and inwardly, as indicated at 4. At the inner end of this tapered or cone-shaped portion, the ring top is provided with a cylindrical portion 5. The outer face 6 of this cylindrical portion serves as a friction seat for the cover. The cylindrical portion 5 is offset inwardly at 7 and thence extends upwardly as indicated at 8. The upper end of the portion 8 is rolled outwardly into a hollow bead 9. The lower portion 10 of the hollow bead is spaced away from the inwardly offset portion 7.

The cover 11 is provided with a depending flange 12. The lower portion 13 of this depending flange is cylindrical and is rolled into a strengthening bead 14 at the lower edge thereof. This cylindrical portion 13 is so dimensioned relative to the cylindrical portion 5 that the inner surface of the cylindrical portion 13 of the cover makes tight frictional engagement with the outer surface 6 of the cylindrical portion 5. The cover flange has an inwardly extending portion 15 which is so dimensioned that when the cover is forced onto the ring top, this inwardly extending portion will snap beneath the bead 9 at the upper end of the ring top.

It will be noted that the cover is secured in tight sealed engagement with the ring top by the engagement of the cylindrical portion 13 of the cover with the cylindrical portion of the can top. The cover is also secured by a snap lock engagement between the inwardly projecting portion 15 of the flange and the outwardly rolled bead 9. The cover can be readily applied by pressure and it can also be pried off for giving access to the interior of the container. When the cover is removed, it is not in any way destroyed or misshaped to prevent its again being applied and forced to sealed position.

It is noted that when the cover is being applied, the lug 15 contacts with the bead 9 on the ring top after the lower portion of the skirt 13 has made frictional contact with the wall 5 of said ring top (see Figure 5). This frictional grip of the cover skirt on the wall of the ring top prior to the locking of the cover to the ring top supports the ring top and makes a more tightly sealed package.

It is noted that the ring top at the inner face thereof extends upwardly and is substantially free from pockets which would in any way trap and prevent the free emptying of the entire contents of the can.

The modification shown in Figure 4 is very similar to that shown in the other figures and like reference numerals have been applied. The bead 9 instead of being rolled into a closed bead is in the form of an open bead with the outer portion 16 thereof substantially parallel with the portion 8 of the ring top. The extreme edge 17 of this outwardly rolled bead 9 faces downwardly.

The wall 16 of the ring top just above the edge 17 is substantially vertical and therefore when the projecting portion 18 which is substantially horizontal on its upper face springs underneath the edge 17, it will make a permanent lock so that the cover cannot be removed and the contents of the can tampered with. In the structure shown in Figures 1-4, the cover may be pried off which has its advantages in that access to the contents of the can may be had without destroying the cover and it can be replaced and the container resealed if desired. In the structure shown in Figure 5, it is intended that the cover shall be permanently secured to the container so that it cannot be pried off without destroying the shaping of the metal parts and thus reclosure is avoided and, as noted tampering is prevented.

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

We claim:

1. A metal container comprising a body and a top seamed thereto and having centrally thereof an upwardly projecting cylindrical wall, the outer surface of which forms a continuous friction seat for a cover, said cylindrical wall at the upper end thereof being offset inwardly and thence rolled outwardly; said outwardly rolled portion being spaced away from said inwardly offset portion, and a cover having a depending flange rolled outwardly at its lower end into a strengthening bead, said flange adjacent

said bead being cylindrical and dimensioned so as to make continuous frictional engagement with said friction seat on the top, said cover above the cylindrical portion thereof being bent inwardly so as to lock beneath the outwardly rolled portion on said top.

2. A metal container comprising a body and a top carried thereby and having centrally thereof a cylindrical wall, the outer surface of which forms a friction seat for a cover, said cylindrical wall at the upper end thereof being offset inwardly and thence rolled outwardly; said outwardly rolled portion being spaced away from said inwardly offset portion, and a cover having a depending flange rolled outwardly at its lower end into a strengthening bead, said flange adjacent said bead being cylindrical and dimensioned so as to make frictional engagement with said friction seat on the top, said cover above the cylindrical portion thereof being bent inwardly so as to lock beneath the outwardly rolled portion on said top; said cylindrical portion of the cover flange being of sufficient length so that during the placing of the cover on the top, said flange will make tight frictional contact with the cylindrical portion of the top before the inwardly bent portion of the cover flange passes the bead for securing the cover to the top.

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