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G. W. CURTIS
CONTAINER SEAL

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Fig. 1.

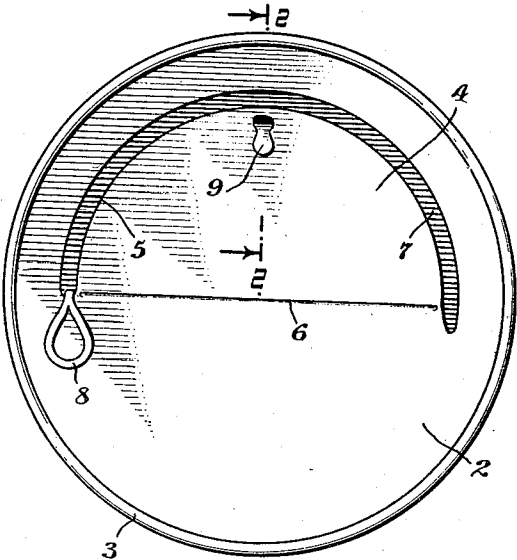


Fig. 3.

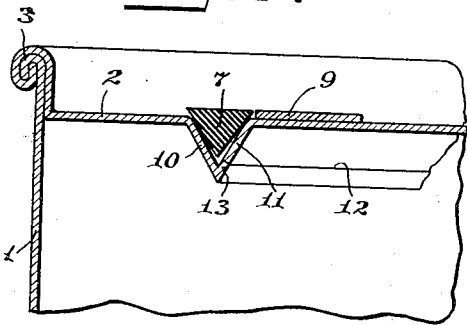


Fig. 2.

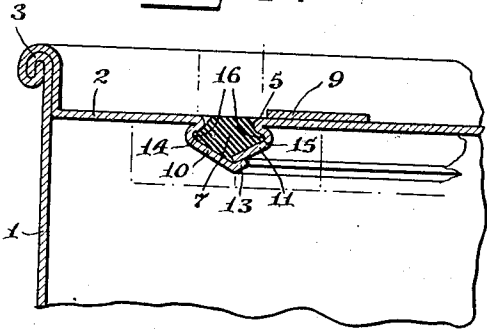
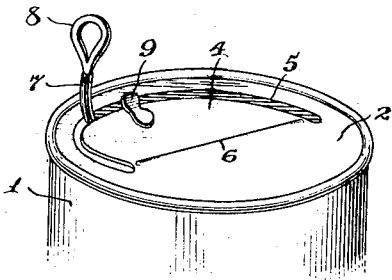


Fig. 4.



WITNESSES

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CONTAINER SEAL

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This invention relates to seals for containers and has for an object to provide an improved construction wherein different containers now in use may use their usual closure member and at the same time utilize a seal made according to the present invention.

Another object of the invention is to provide a seal which includes the closure plate of the container formed with a groove either straight or arc shaped and a sealing strip associated therewith.

A further object more specifically is to provide in a can or other container a lid having part thereof pressed downwardly and formed with facing shoulders co-acting with a sealing strip of fibre or other somewhat resilient material acting to seal the opening in the groove.

An additional object of the invention is to provide in a closure for tin cans or other containers a structure which will allow part of the closure to be swung to one side of the opening, but when closed formed to include a sealing strip of fibre or other material having the same characteristics, and interlocking shoulders for normally holding the fibre in place so as to make an airtight connection.

In the accompanying drawing—

Figure 1 is a plan view of a container seal disclosing an embodiment of the invention, the same being illustrated in connection with the lid of a tin can;

Figure 2 is a sectional view through Figure 1 approximately on the line 2—2; the same being somewhat on an enlarged scale;

Figure 3 is a view similar to Figure 2, but showing the parts before they are formed into their final shape;

Figure 4 is a fragmentary perspective view of one end of a can with a closure embodying the invention applied thereto, the closure being shown as partly opened.

Referring to the accompanying drawing by numerals, 1 indicates a container of any kind, and 2 a closure which acts as a closure member so as to seal the contents of the can or other container. In the drawing the closure member 2 is shown as a sheet metal covering for a sheet metal can, but it will be

understood that fibre, bakelite, or other material might be used without departing from the spirit of the invention, although sheet metal is preferable because it is cheaper and easier to work. It will, therefore, be understood that when the word "fibre" is used it is intended to cover any of the materials above specified or any others which will perform the same sealing and holding action.

As is usual in tin cans, the edge 3 is turned over so as to seal the same at this point. Heretofore the cover 2 was continuous throughout and to open the same it is necessary to cut the lid for all or part of its circumference in order to secure the contents of the can.

In the present invention means have been provided whereby the section 4 may be bent back and thereby present an opening through which the contents of the can will be readily discharged. In providing this structure a groove 5 is provided, which is shown as arc-shaped and really presenting a half circle or some other shape, or longer, or shorter. A groove or crease 6 connects the ends of the groove 5, said groove 6 being merely a weakened line so that the section 4 may be easily bent along this line. The groove 5 carries a sealing strip 7 which is preferably of fibre, although it could be of some other material having substantially the same toughness and resiliency.

A finger member 8 of metal has one end embedded in one end of the strip 7, so that when it is desired to open the container the finger member 8 is grasped and pulled to the position shown in Figure 4. By continually pulling on the finger member 8 the entire strip 7 may be removed and then the section 4 easily swung upwardly and back on the remaining part of the container by pulling on the tab 9.

When the cover 2 is first made it is a continuous sheet, and to form groove 5 a die is used which will press the sections or portions 10 and 11 downwardly as shown in Fig. 3. If desired, during this pressing action the metal or other material may be cut along the line 12 whereby a projection 13 is provided on section 10. After this has been done the sealing strip 7 is inserted, said sealing strip being substantially triangular in cross section.

After this has been done dies are used for pressing the sections 10 and 11 into the shape shown in Figure 2, whereby the shoulders 15 and 14 will be presented and the projection 13 moved beneath section 11 so as to act as a support therefor. Also, the sealing strip 7 will be pressed or, in a certain sense, molded into the groove 5 so that lateral beads or projections 16 will fit beneath the shoulders 14 and 15. It will be understood that these shoulders or projections are not very great, but are sufficiently large to lock the sealing strip in place and to present an airtight connection for ordinary purposes.

When the finger member 8 is pulled, the fibre or other substance of the strip 7 is sufficiently resilient or yielding to spring past the shoulders 14 and 15 so that the sealing strip 7 may be quickly removed. From Figure 2 it will be noted that the extension 13 is arranged beneath section 11 whereby when tab 9 is pulled section 11 with section 4 will spring upwardly and as far back as desired. In this way the container is normally contained sealed, but is always in condition to be quickly opened without the use of a cutter or tools of any kind.

It will be understood that the groove 5 is formed before the closure or lid 2 is placed on the container 1. Also, the complete sealing structure shown in Figure 2 is finished before the lid 2 is placed in position. During the manufacture of the lid the sealing structure is incorporated therein so that whenever a new lid is needed it is taken and placed on the container and the parts will then fit, as shown substantially in Figures 1 and 2.

What I claim is—

1. In a device of the character described a closure for a container, said closure being formed of sheet material having a depending section forming a groove with facing overhanging shoulders, and a removable sealing strip of resilient material tightly fitting into and filling said groove.

2. A container seal comprising a body adapted to act as a closure for the container, said body having a depressed portion formed with a pair of overhanging flanges, and a pair of facing shoulders, and a resilient removable sealing strip of fibre positioned to fill tightly said depression and interlock with said shoulders.

3. A container seal comprising a sheet metal body formed with a groove presenting part of a circle, a weakened line connecting the ends of said groove whereby the material in the space surrounded by the groove and the weakened line may be swung to one side of said weakened line, said groove having overhanging walls and facing shoulders, and a removable sealing strip of fibre fitted tightly into said groove and interlocking with said shoulders for normally sealing the groove.

4. A container including a sheet material body having a curved depression therein, the walls of the said depression being cut longitudinally with the depression, and formed so that one wall will overlap the other, each of said walls being bent to present a shoulder, said shoulders facing, and a fibre sealing strip snugly fitting into the groove and interlocked with said shoulders, said strip having a finger member extending from the groove whereby the strip may be removed by a pull on said finger member.

5. A seal for containers and the like including a sheet material body having an arc-shaped depression therein, the walls of the depression being formed with facing shoulders and with a cut extending longitudinally of the depression for the full length thereof for separating the walls of the depression, and a sealing strip positioned in said depression formed with shoulders interlocking with said facing shoulders for normally sealing the container, said strip being removable.

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