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H. SEBELL

2,263,446

CAN

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Fig.1.

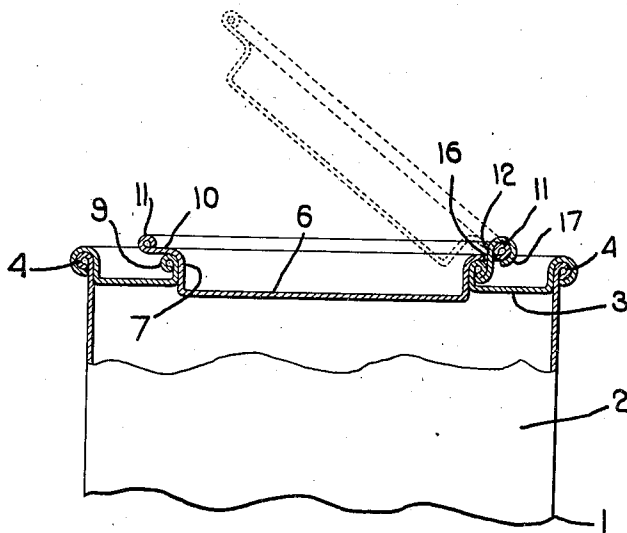


Fig.2.

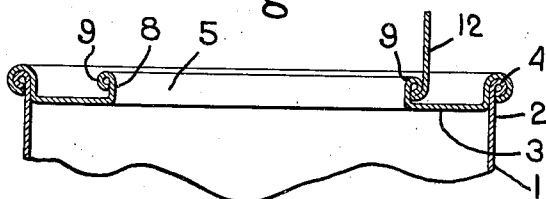


Fig.3.

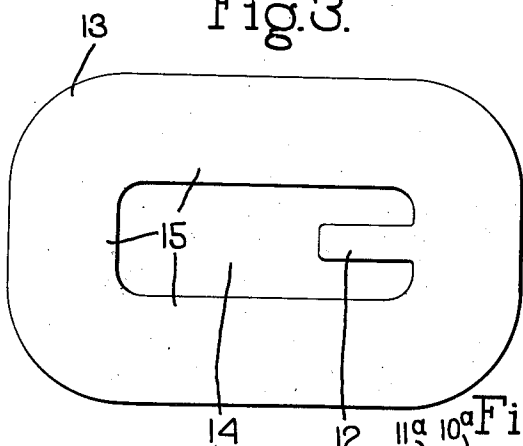


Fig.4.

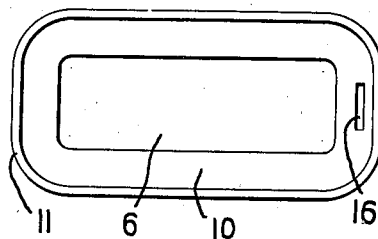
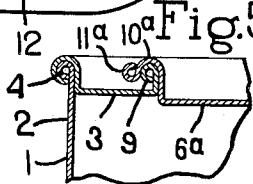


Fig.5.



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UNITED STATES PATENT OFFICE

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CAN

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Application May 19, 1939, Serial No. 274,508

2 Claims. (Cl. 220—31)

This invention relates to tin cans or tin containers and especially to cans presenting a body section, a closure-receiving ring seamed to the body section and having a closure-receiving opening and a hinged closure for the opening.

The invention relates particularly to the manner in which the hinge connection of the closure with the can is formed, and in accordance with my invention the closure-receiving ring is provided with a hinge-forming tab which extends through a slot in the closure and which forms the hinge connection for the closure.

In order to give an understanding of the invention, I have illustrated in the drawing a selected embodiment thereof which will now be described, after which the novel features will be pointed out in the claims.

In the drawing:

Fig. 1 is a fragmentary view, partly in section, of a tin container embodying my invention

Fig. 2 is a fragmentary sectional view showing the upper part of the body section and the closure-receiving ring with its hinge-forming tab;

Fig. 3 illustrates the blank from which the closure-receiving ring is formed.

Fig. 4 is a plan view of the closure.

Fig. 5 is a fragmentary sectional view showing a different form of closure from that illustrated in Fig. 1.

In the drawing, 1 indicates generally a can having a body section 2 and a closure-receiving ring 3 which is seamed to the body section 2 in any usual way, as shown at 4, and which is provided with a closure-receiving opening 5 adapted to receive the closure member 6.

The closure member herein shown is of the friction plug type, it having the vertical wall 7 which fits tightly within the closure-receiving opening 5. The closure-receiving ring 3 is formed with the upstanding wall or curb 8 which bounds the closure-receiving opening 5 and which has the tight friction fit with the wall 7 of the closure 6. The upper edge of the upstanding wall 8 of the ring 3 is shown as formed into a bead 9.

The closure member 6 is formed with a marginal portion outside of the upper edge of the vertical wall 7, the periphery of such marginal portion preferably being formed into a bead.

In Fig. 1, such marginal portion is indicated at 10 and it extends horizontally. In Fig. 5, such marginal portion is indicated at 10a and it is bent to fit around the bead 9, thus making a double tight fit between the closure and the ring.

In accordance with my present invention, the closure-receiving ring 3 is provided with a tab 12 which constitutes a hinge member for hingedly connecting the closure 6 to the ring, and in the illustrated embodiment of the invention, the tab 12 is made integral with the ring 3.

The ring 3 is formed from a blank of sheet metal such as shown at 13 in Fig. 3, which blank is provided with a central opening 14 and with a tab 12 projecting into the opening from a wall thereof. The can herein illustrated is of that type which is oblong in cross section and the closure-receiving opening 5 is also an oblong opening, in which case the closure member 6 will be oblong in shape to fit the opening 5.

In forming the closure-receiving ring from the blank 13, the material of the blank in the zone 15 immediately surrounding the opening 14 is bent upwardly to provide the wall 8 of the closure-receiving opening, and the material at the edge of the opening 14 is turned over to form the bead 9. During this operation, the tab 12, which projected into the opening 14 before the blank 13 was deformed into the shape of the closure-receiving ring, is turned upwardly into the vertical position shown in Fig. 2.

The closure member 6 is provided with a tab-receiving slot 16 through which the tab 12 is inserted when the closure is first applied to the can. This slot 16 may conveniently be formed in the marginal portion 10 or 10a of the closure.

In assembling the closure with the can after the can has been filled, said closure is forced into the closure-receiving opening 5 with the tab 12 extending through the slot 16. The end of the tab may then be bent down against the closure so as to lock the closure to the tab, and while the end of the tab may be bent either inwardly or outwardly yet I will prefer to bend it outwardly around the bead 11 of the closure, as shown at 17.

The tab thus forms a hinge connection between the closure member and the ring 3 so that when the can is opened by prying the closure out of its opening 5, said closure will remain hingedly connected to the ring so that it may be swung upwardly and outwardly into open position, as shown in dotted lines, Fig. 1. If a part only of the contents are to be discharged, and it is desired to close the can again, the closure member may be swung back into its closed position, shown in full lines, Fig. 1.

One advantage of my present invention is that the hinge-forming tab is formed from material

of the blank 13 which is located within its outlines, and the ring 3 with the tab 12 can be formed from a blank of the same size as that which would be used in forming the ring without the tab. In other words, the provision of the hinge-forming tab 12 does not involve the use of a larger blank than would be required if the ring had no hinge-forming tab. This is because of the fact that the tab 12 is formed from material which would normally be cut out of the blank to produce the opening 14 therein.

I claim:

1. A can having a body section, a closure-receiving ring of sheet metal secured to the end of the body section and having a closure-receiving opening surrounded by an upstanding wall, formed by bending upwardly an annular portion of the sheet metal constituting the ring, said upwardly bent portion having a tab integral therewith and extending from the edge thereof, a closure of the plug type fitting within said wall and closing said opening, the peripheral portion of the closure extending outwardly over

said wall and being provided with a slot, said tab extending through said slot and being bent around the periphery of the closure, thereby hingedly connecting the closure to said wall.

2. A can having a body section, a closure-receiving ring secured to the end of the body section and having a closure-receiving opening, said ring being formed from an integral blank having a central opening and a tab extending into said opening, the portion of the blank immediately circumjacent the opening therein being bent upwardly to form an upstanding wall surrounding said closure-receiving opening, which wall has the tab integral therewith and projecting therefrom, a closure member of the plug type fitting within said up-standing wall and closing said opening, the peripheral portion of said closure extending outwardly over said wall and being provided with a slot, said tab extending through the slot and being bent around the peripheral edge of the closure, thereby to hingedly connect the closure to said wall.

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