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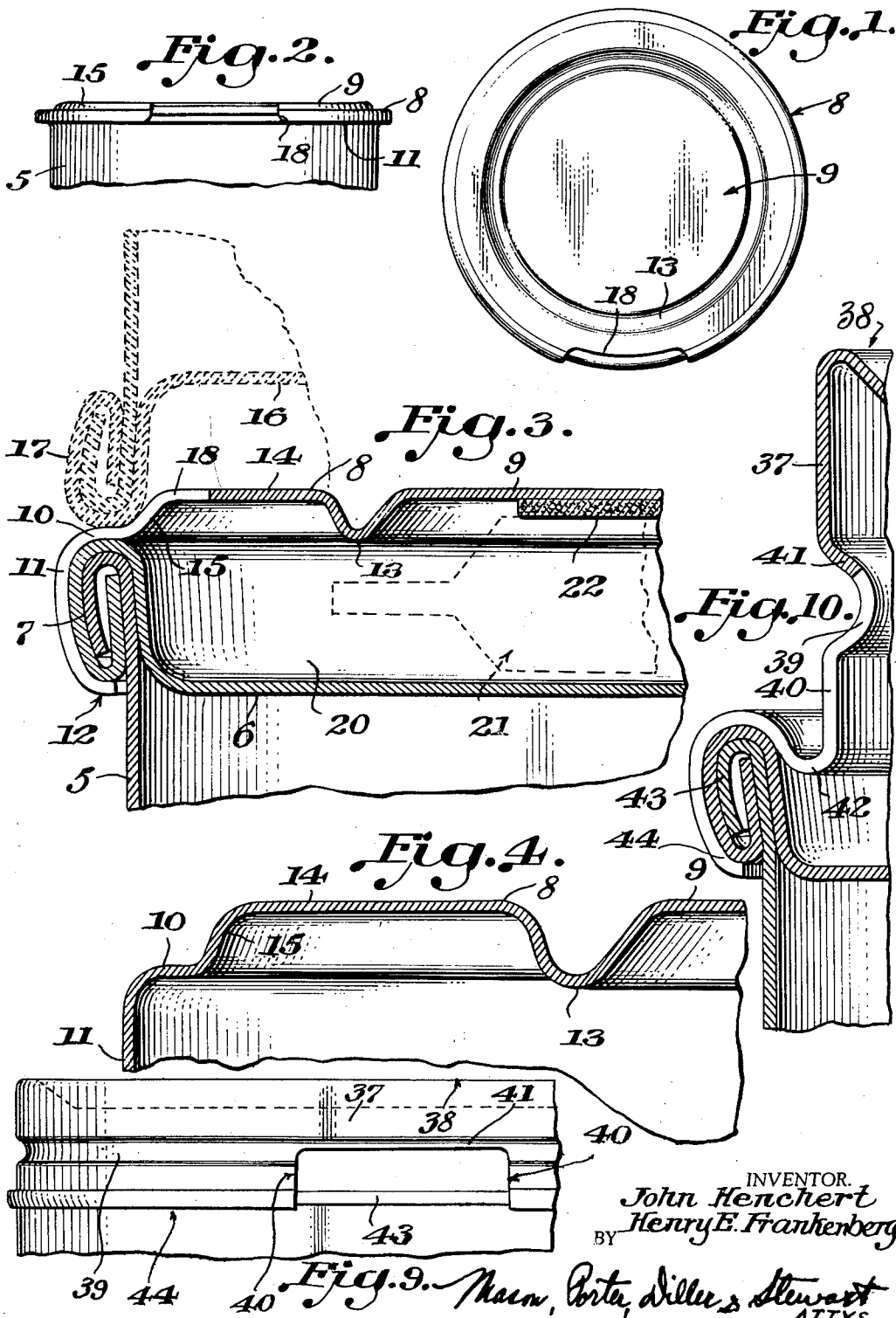
J. HENCHERT ET AL

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DUAL COMPARTMENT CONTAINER STRUCTURE

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2 Sheets-Sheet 1



INVENTOR.
John Henchert
Henry E. Frankenberg
BY

Fig. 9. Macm, Porta, Diller & Stewart
ATTYS.

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DUAL COMPARTMENT CONTAINER STRUCTURE

John Henchert, River Forest, and Henry E. Frankenberg, Berwyn, Ill., assignors to Continental Can Company, Inc., New York, N.Y., a corporation of New York

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5 Claims. (Cl. 220—4)

The invention relates generally to metallic receptacles and seeks to provide a novel form of dual compartment container structure and a novel method of forming the same.

The invention is particularly adapted for packer's cans intended for food to which the consumer may wish to add other substances after the can is opened, such as condiments or other ingredients. Another adaptation would be the employment of the main container compartment for a given fill and an auxiliary or added compartment in which to house a prize or premium article usable with said fill, such as a cookie cutter for use in cutting cookies being prepared from a mix embodying shortening comprising said fill, or comparable articles.

An object of the invention is to provide a container structure of the character stated wherein there are included a container of conventional form having a top closure seam secured thereon and an overcap removably secured to the top closure seam and spaced above the top closure so as to provide a compartment in which to receive an article or ingredient.

Another object of the invention is to provide a container structure of the character stated wherein the overcap is removably secured to the top closure seam by being crimped or curled under said seam and includes a pry tool receiving opening into which a pry tool can be inserted and engaged over the seam as a fulcrum to pry the overcap off its seam mounting.

Another object of the invention is to provide a container structure of the character stated wherein the overcap includes novel bead means engaging within the can end seam and reinforcing the connection of the overcap on said seam.

Another object of the invention is to provide a container structure of the character stated wherein the overcap includes an annular wall projecting upwardly above the level of the top closure seam and which is receivable in the countersink in the bottom closure of a like container to provide for stable stacking of such containers.

Another object of the invention is to provide a container structure of the character stated wherein the pry tool receiving opening is provided in the upwardly projecting wall of the overcap and has its edge portion defining the upper limit of said opening reinforced to prevent deformation by engagement of the pry tool.

A further object of the invention is to provide a container structure of the character described wherein the pry tool receiving opening edge reinforcement is in the form of upright corrugations extending down through the opening defining edge.

A further object of the invention is to provide a container structure of the character described wherein the overcap is equipped with a circumferential bead serving not only to reinforce the upright wall of the overcap but also the pry tool receiving opening therein.

A still further object of the invention is to provide a novel method of forming a container structure of the character stated which includes the steps of closing the

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container by seaming a closure thereon, then attaching a packet of food ingredient or the prize or premium article to the overcap interior, and then removably securing the overcap over the container seam to house said ingredient or article in the compartment thus provided between the container top closure and the overcap.

With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawings.

In the drawings:

Figure 1 is a plan view illustrating a container structure embodying the invention.

Figure 2 is a side elevation illustrating the top portion of the container structure, the condiment or other ingredient containing pouch or packet housed in the upper compartment of the container being shown in dotted lines.

Figure 3 is an enlarged fragmentary sectional view taken through one side of the container top chamber, a portion of the pouch or packet being shown attached to the overcap and the bottom portion of another similar container structure being shown in dotted lines as stacked upon the overcap.

Figure 4 is a fragmentary section taken through one side of the overcap before it is applied over and secured to the double roll seam of the conventional can.

Figure 5 is a fragmentary plan view showing a modified form of pry tool receiving opening.

Figure 6 is a fragmentary vertical cross section taken through one side of a modified form of container structure at the position of the pry tool receiving opening, the bottom portion of a similar container structure being shown as stacked on the upstanding overcap portion in dotted lines.

Figure 7 is a fragmentary side elevation looking into the pry tool receiving opening in the overcap.

Figure 8 is a horizontal section taken on the line 8—8 on Figure 7.

Figure 9 is a fragmentary side elevation showing a modified form of overcap, a modified form of reinforcement of the overcap and its pry tool receiving opening being illustrated.

Figure 10 is a fragmentary vertical cross section taken through the overcap of Figure 9 at the position of the pry tool receiving opening.

In the form of the invention shown in Figures 1 to 4, the improved container structure includes a conventional metal can body 5 having the usual bottom closure and a top closure 6 double roll seam secured thereon at 7. An overcap generally designated 8 is provided and may be formed of various shapes including a central body portion 9 and an annular seat portion 10 dimensioned to rest upon the double roll seam 7 in the manner illustrated in Figure 3. The seat portion 10 merges into a depending skirt or flange 11 of a size for slipping over and embracing the double roll seam 7. The overcap is shown in detail section in Figure 4 in its normal condition before attachment to the conventional can structure. The overcap is removably secured on the can by slipping the skirt 11 thereof over the double roll seam 7 and curling or crimping the lower terminal edge portion thereof under the seam in the manner indicated at 12 in Figure 3.

In the form of the overcap illustrated in Figures 1 through 4 the overcap has an annular downwardly extending reinforcing rib 13 and an upstanding annular portion 14 surrounding said rib and providing an upright peripheral stacking wall 15 to be receivable in the countersink of a bottom closure 16 on a similar can structure and which may be double roll seam secured on the can body as at 17.

The overcap is provided with a pry tool receiving opening 18 extending through the skirt or flange 11 and part of the stacking wall 15 and annular portion 14 as clearly illustrated in Figures 1 and 2 of the drawings.

In Figure 5 the overcap is shown as provided with a modified form of pry tool receiving opening 19.

It will be apparent that in the practical development of the invention, the parts are arranged so that an upper compartment or space 20 is provided between the top closure 6 of the conventional can and the overlying overcap central body portion 9, and a pouch or packet 21 containing a condiment or other food ingredient is mounted in said compartment or chamber and preferably is adhered to the overcap body portion 9 as at 22.

In the modified form of the invention illustrated in Figures 6 through 8, the overcap generally designated 23 has a central body portion 24 and a deep peripheral wall 25 serving as a stacking means as in the previously described arrangement. At its lower terminus the wall 25 merges into an outwardly extending annular seat portion 26 which in turn merges into a depending skirt or flange 27. As in the previously described form the skirt 27 is dimensioned to slip over and embrace the double roll seam 28 by which the top closure 29 is secured on the can body 30, the skirt being removably secured to the seam by being curled or crimped thereunder as at 31.

The deep wall 25 provides an upper chamber or compartment 32 of sufficient size to receive a relatively large article. For example, should the invention be applied to a conventional can intended for the packaging of shortening, the article might take the form of a cookie cutter 33.

A pry tool receiving opening 34 extends through the overcap skirt 27 and part way up the peripheral wall 25, the same being defined upwardly by a terminal edge 35 in the wall 25, said terminal edge being reinforced by upright corrugations as indicated at 36. See Figures 7 and 8. This reinforcing of the pry tool receiving opening defining edge will avoid objectionable deformation of said edge during engagement thereof by the prying tool.

It will be readily apparent that in each form of the invention it will be a simple matter to insert a fork or spoon handle or any other prying tool into the receiving opening 18 or 34, and by resting said tool on the double roll seam 7 or 28 and pressing downwardly on the portion of the tool projecting outwardly of said seam, the inserted end of the tool can be engaged upwardly against the overcap so as to pry the same off its seam mounting. In this prying off of the overcap the lower terminal edge of the respective skirt 11 or 27 will be readily stripped from under the double roll seam 7 or 28.

In the modification shown in Figures 9 and 10 the overcap is constructed and mounted in generally the same manner as in the form of Figures 6 to 8, there being modification in the prying tool receiving opening and the reinforcing of said opening and the deep wall of the overcap. The deep wall 37 of the overcap generally designated 38 is provided with an inwardly directed circumferential bead 39, in part terminating at the prying tool receiving opening or slot 40 as indicated in Figure 9. The opening 40 preferably is cut in the blank before the overcap is formed, being placed so that the upper limit of the opening will extend slightly above the centerline of the bead 39 after the bead is rolled in the overcap wall. The bead forming roller thereby provides an arcuate intumed flange 41 along the upper edge of the opening and in position to be engaged by the prying tool and which tends to prevent the edge from tearing, or the overcap wall above the opening from collapsing under the pressure of the tool during the overcap removing operation.

As in the case of the overcap of Figures 6 to 8, the overcap 38 has a depending circumferential bead 42 which terminates at the opposed edges of the opening 40 and engages the inner wall of the can end at the double seam 43 under which the skirt of the overcap is curled as at 44. This bead reinforces the connection to the can end seam by providing the channel for receiving the end-seam. The opposed circumferential flange and bead channel structure provides a connection of the overcap to the end-seam that is relatively rigid and non-yielding, and yet which permits the overcap to be easily removed manually by manipulation of the prying tool in the manner previously described.

In the formation of dual compartment container structures of the character described, the conventional container is first filled and closed by the seaming of the top closure thereon, then the packet of condiment or food ingredient is attached to the overcap interior, and then the overcap is removably secured to the top seam of the container to house the packet within the compartment thus provided between the container top closure and the overcap.

While example disclosures of the container structure parts and the arrangement thereof, and the method of assembling the container structures are described in detail herein, it will be understood that variations in the disclosed structures and steps may be provided without departing from the spirit and scope of the invention as defined in the appended claims.

We claim:

1. A container structure comprising a container body, a closure top secured to the body by a seam, an overcap, means removably securing the overcap to the top closure seam in spaced relation above the closure top to provide a compartment for receiving an article therein, said overcap including a skirt portion curled under the top closure seam and a pry tool receiving opening into which a pry tool can be inserted and engaged over the seam as a fulcrum to pry the overcap off its seam mounting; said overcap also including an annular wall and an outwardly projecting annular seat portion disposed to rest upon the top closure seam and merge into the seam embracing overcap skirt.

2. A container structure as defined in claim 1, wherein the edge portion of the opening defining the upper limit of the opening is reinforced to prevent deformation thereof by engagement of the pry tool.

3. A container structure as defined in claim 1, wherein the upper edge portion of the opening is corrugated to provide reinforcement effective to prevent deformation thereof by engagement of the pry tool.

4. A container structure as defined in claim 1, including a downwardly directed circumferential bead engaging within the seam opposite the curled under skirt portion.

5. A container structure as defined in claim 1 wherein said overcap has an upstanding wall in which the pry tool receiving opening is located, a circumferential bead reinforcing said wall and through which the tool receiving opening extends partially to provide a turned flange reinforcing and defining the upper limit of said opening; said upstanding wall terminating downwardly in a circumferential bead engaging within the seam opposite the curled under skirt portion.

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