

United States Patent

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[72] Inventors **Melvin A. Koboldt**
St. Louis;
Lester W. Uhles, Pacific, both of, Mo.
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 [73] Assignee **Container Corporation of America**
Chicago, Ill.

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Primary Examiner—Bernard Stickney
Attorney—Carpenter, Ostis & Lindberg

[54] **METHOD OF MAKING COMBINATION OF
 CONTAINER BODY AND CLOSURE THEREFOR**
 1 Claim, 3 Drawing Figs.

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220/54, 229/5.6
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 55.1; 53/40, 42, 341; 220/54; 229/5.6

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ABSTRACT: A method of making the combination of a container body and a closure therefor of the type where the closure and the can body are interconnected by a seaming flange, and wherein the closure is provided with a weakened score line of smaller transverse dimension than the transverse dimension of the resultant seaming flange so that the weakened score line is spaced a small distance from said seaming flange, comprising the simultaneous forming of such seaming flange and a rib in said container body having an inside transverse dimension which is slightly less than the transverse dimension of said weakened score line whereby upon removal of that part of the closure between said weakened score line, said rib will protect against injury occasioned by the remaining portion of said closure adjacent to said seaming flange.

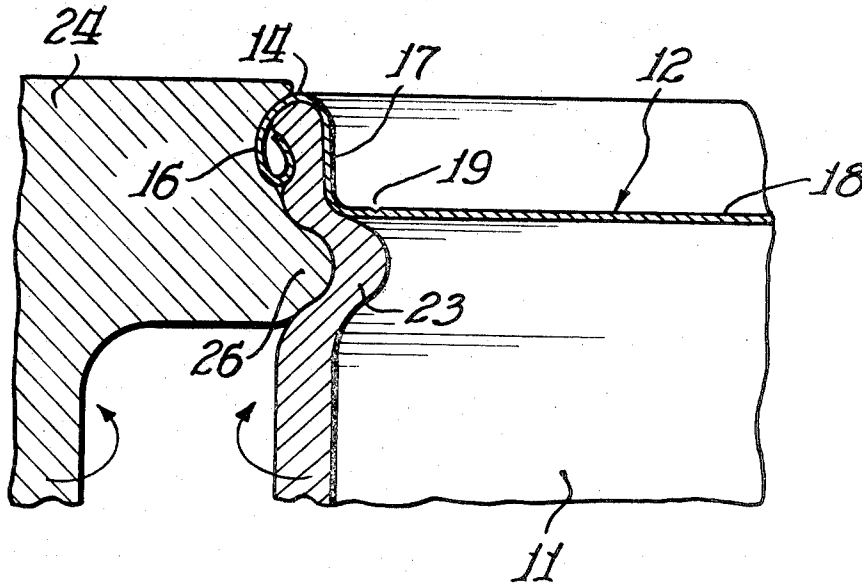


Fig. 1

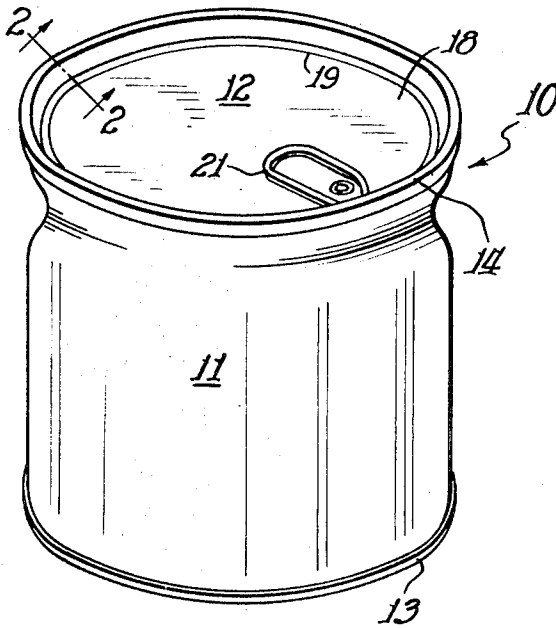


Fig. 3

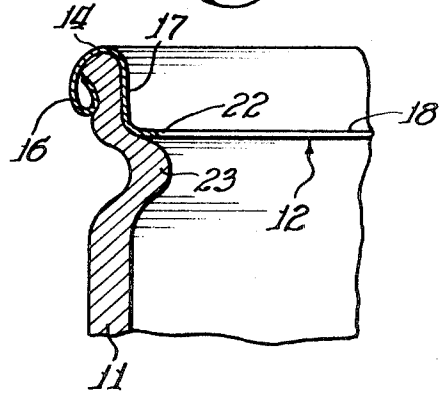
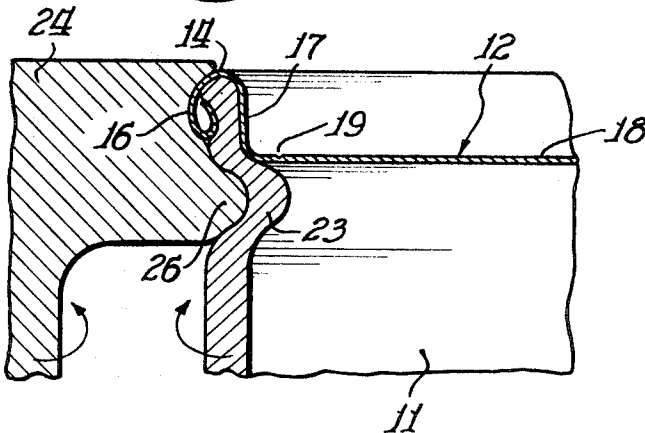


Fig. 2



Inventors:
Melvin A. Koboldt
and Lester W. Uhles

By: Carpenter, Ostis & Lindberg Attys.

METHOD OF MAKING COMBINATION OF CONTAINER BODY AND CLOSURE THEREFOR

SUMMARY OF THE INVENTION

The present invention has for its principal object the method of forming the combination of a container body and a closure of the weakened-score-line-type and seaming the two together in an operation which is simultaneous with the formation of an intumed rib of a transverse dimension less than the transverse dimension of the weakened score line, so that upon removal of the closure, the intumed rib will substantially prevent unintended contact with the unremoved portion of the closure.

THE DRAWINGS

FIG. 1 is a perspective view of a can body and closure formed by the method according to the invention;

FIG. 2 is a vertical sectional view taken along the line 2-2 of FIG. 1 looking in the direction of the arrows, and showing a forming roll for effecting connection of the can closure and the can body; and

FIG. 3 is a view similar to FIG. 2 showing the completed connection, but with the closure removed.

The method according to the present invention is described in the environment of a container body and closure combination referred to by the reference numeral 10 and consisting of a container body 11 and a closure 12 therefor. The former may be made of paperboard and is provided with a lower end wall 13.

Upper closure 12 consists of an outer portion 14 including a flange section 16 and a rim flange 17 extending from a flat portion 18 of closure 12.

Closure 12 is of the type having a continuous weakened score line 19 of a transverse dimension which is less than the

transverse dimension of the flange element 17. Closure 12 is provided with a pull tab 21 of any convenient kind whereby the closure 12 can be severed along the weakened score line 19 to leave a raw edge 22 which could cut the hand of the consumer but for the forming of a protective rib in the container body simultaneously with seaming of closure 12 to body 11. Closure 12 can be seamed to body 11 with the regular fiber can seam or the double seam, as desired.

Such simultaneous forming of the aforesaid protective rib which is denoted by the reference numeral 23 in FIG. 2 is achieved by a forming roll 24 rotatable in the direction shown, body 11 rotating as shown in a correlative direction. Forming roll 24 has a land 26 thereon for simultaneously forming the flange section 16 and rib 23.

It will be noted from FIG. 3 that the transverse dimension of protective rib 23 is less than the transverse dimension of raw edge 22, so that possible injury is avoided by preventing contact with raw edge 22 before rib 23.

We claim:

1. The method of making the combination of a can body and a closure of the type where both can body and closure have a flange bead interconnecting the two, and wherein said closure has a continuous weakened score line having a transverse dimension slightly less than the transverse dimension of said flange bead which comprises:
 - a. forming a can body from fibrous material;
 - b. placing a flanged closure on said can body;
 - c. forming a beaded flange seal between said closure and said can body, and
 - d. simultaneously forming from the exterior of said can body an intumed rib in said can body in proximity to said closure of an inside transverse dimension which is less than the transverse dimension of said weakened score line, to form a protective shoulder against possible injury occasioned by the remaining portion of said closure adjacent said sealing flange.

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