Dec. 2, 1969 M. A. BOOTH ETAL 3,481,515

CONTAINER WITH POURING SPOUT

Original Filed Feb. 7, 1967 2 Sheets-Sheet 1

FIG. 1

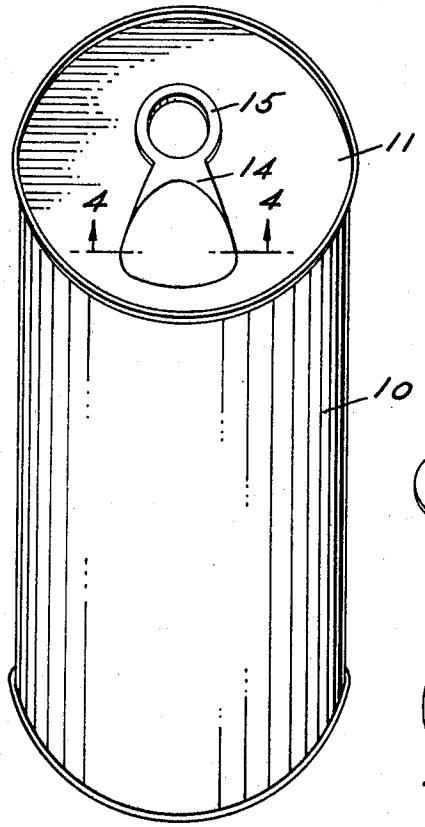
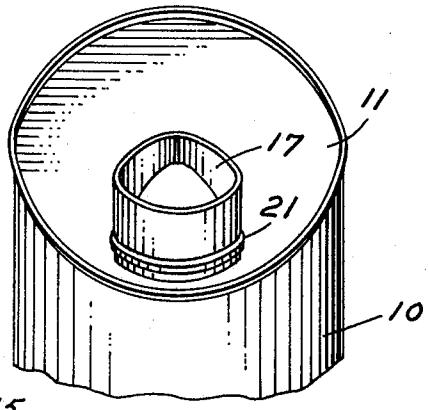



FIG. 2



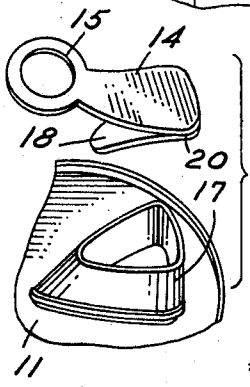




FIG. 3

FIG. 5

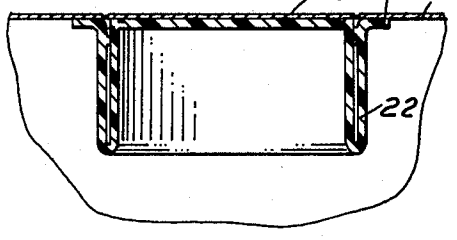



FIG. 4

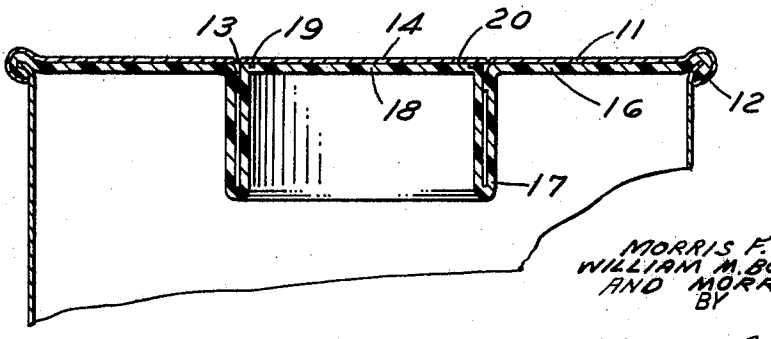



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FIG. 6

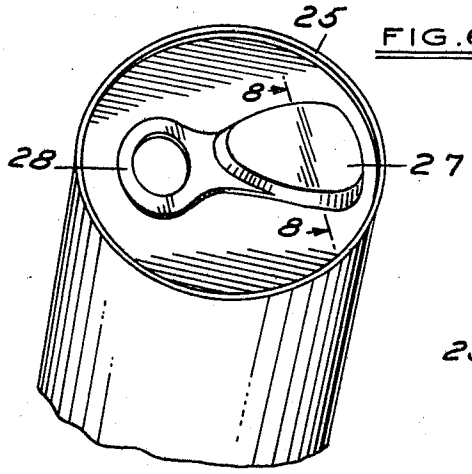



FIG. 7

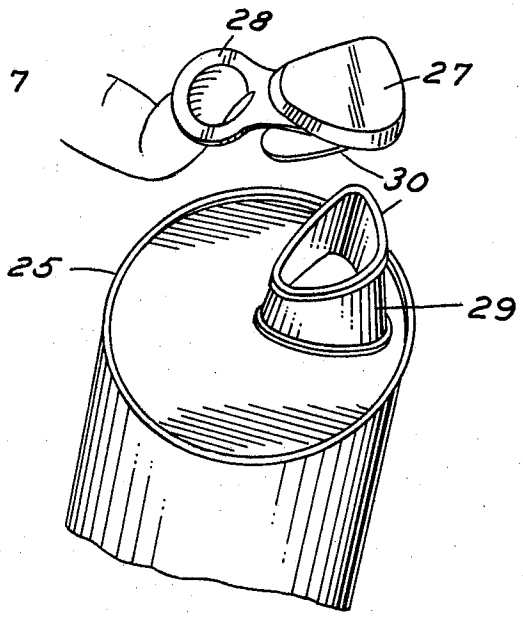
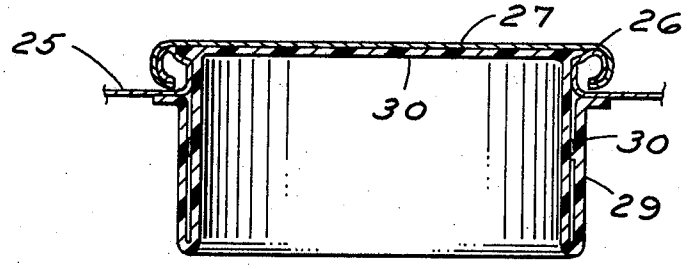



FIG. 8

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# CONTAINER WITH POURING SPOUT

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Continuation of application Ser. No. 614,516, Feb. 7, 1967. This application Dec. 4, 1968, Ser. No. 781,714
Int. Cl. B65d *47/06, 47/10;* B67b *7/26*
U.S. Cl. 222—529 5 Claims

## ABSTRACT OF THE DISCLOSURE

A container having a rigid top wall and a removable closure on the top wall which upon removal exposes an opening in the top wall. A flexible plastic spout is affixed at one end to the interior of the container and is adapted to extend through the opening in the unflexed condition. The closure is fixed to the spout so that when the closure is removed, the spout is drawn upwardly through the opening.

This is a continuation of Ser. No. 614,516 filed Feb. 7, 1967, now abandoned.

This invention relates to a container construction and particularly to a construction which includes a removable cap which exposes a pouring spout.

Among the objects of the invention are to provide a container having a removable cap which upon removal of the cap exposes a sanitary drinking and pouring spout; which is operable preferably to expose and open the spout on a single removing movement of the cap or closure and which is relatively simple and inexpensive.

In the drawings:

FIG. 1 is a perspective view of a container with a spout embodying the invention.

FIG. 2 is a fragmentary perspective view of the container shown in FIG. 1 with the closure removed.

FIG. 3 is a fragmentary exploded view of the container shown in FIG. 1 showing the closure removed.

FIG. 4 is a fragmentary perspective view taken along the line 4—4 in FIG. 1.

FIG. 5 is a view similar to FIG. 4 showing a modified form of closure.

FIG. 6 is a fragmentary perspective view of a further modified form of container.

FIG. 7 is a fragmentary exploded perspective view of the container shown in FIG. 6.

FIG. 8 is a fragmentary sectional view taken along the line 8—8 in FIG. 6.

Referring to FIG. 1, the container **10** embodying the invention is herein shown made of metal and includes a rigid top wall **11** that is crimped along its edge **12** in accordance with conventional practice to close the metal container. The rigid wall **11** is formed with an annular weakened line **13** which defines a removable cap **14** that has a tab **15** connected thereto whereby it can be pulled upwardly to open the container. A flexible plastic member **16** extends along the inner surface of the wall **11** and is connected to the container by the crimped edge **12**. In underlying relation to the opening formed by the cap **14**, the flexible member **16** includes a spout **17** which is flexed inwardly as shown in FIG. 4 and has an integral top **18** connected to the upper end of the spout along a weakened line **19**. When the cap **14** is removed, the spout



**17** flexes upwardly into the position shown in FIGS. 2 and 3. Further in accordance with the invention, the top panel **18** is adhered to the underside of the cap **14** as at **20** so that when the tab **15** is lifted to remove the cap, continued lifting movement of the cap **14** severs the top panel **18** from the spout **17** along the weakened line **19** thereby exposing the inner end of the spout. As shown in FIGS. 3 and 4, the cap **14** is generally triangular and the area **20** of adherence of the top panel **18** to the cap **14** is along the base of the triangle remote from the apex to which the tab **15** is connected. The strength of the bond **20** is greater than the force required to sever the top panel **18** from the spout **17**.

A reinforcing rib **21** is provided on the spout adjacent the lower end thereof above the rigid wall **11**. The rib **21** also functions as a locking rib to prevent the spout from being inadvertently pushed back into the container.

In the form of the invention shown in FIG. 5, the spout **22** is connected to top wall **11** by a flange **23** which is adhered to the top wall **11** along an area adjacent the opening or cap **14**.

In the form of the invention shown in FIGS. 6–8, the top panel **25** is formed with an annular crown or flange **26** and the metal cap **27** is crimped over the flange **26**. The cap is formed with a tab **28** so that it can be removed. In this form of the invention, the flexible spout **29** has the integral top panel **30** thereof adhered to the underside of the cap **27** in the same manner as the previous form of the invention.

In each form of the container, the contents may be pressurized so that the pressure assists in extending of the spout.

In each of the forms of the invention, the flexing of the spout upwardly out of the container provides a sanitary pouring or drinking spout.

In each of the forms of the invention, a thin metallized layer can be provided by vacuum deposition or otherwise in the event that the contents of the container tend to permeate the plastic. This increases the shelf life of the container.

We claim:

**1.** The combination comprising

a container having a rigid top wall,

a closure portion of said top wall being connected to the remainder of the top wall by a weakened line and forming a removable closure which upon removal exposes an opening in the top wall,

a flexible plastic spout,

means for affixing said spout at one end to the interior of the container and adapted in the unflexed condition to extend through said opening,

said spout having an integral portion closing the other portion thereof,

means adhering said portion of said spout to said closure portion of said top wall whereby when said closure portion is removed said integral portion is drawn upwardly through said opening,

said integral portion being connected to the remainder of the spout along a second weakened line which is weaker than the spout itself or the means for affixing the spout to the interior of the container, so that in one motion the closure portion of the top wall may be torn along the first mentioned weakened line, the spout drawn upwardly and the integral portion of the spout torn along the weaker second mentioned weakened line.

2. The combination set forth in claim 1 wherein said rigid top wall is made of metal.

3. The combination set forth in claim 1 wherein said integral portion of said spout comprises

an integral member which is generally triangular in shape and is connected to the upper end of said spout along said second mentioned weakened line,

said closure having a corresponding cross-sectional configuration,

said means affixing said closure to said spout being connected such that the integral member is affixed to said closure member substantially along the base of said triangle.

4. The combination set forth in claim 1 including

an annular rib surrounding said spout intermediate its ends.



5. The combination set forth in claim 1 including material under pressure sealed within said container.

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U.S. Cl. X.R.

222—530, 541