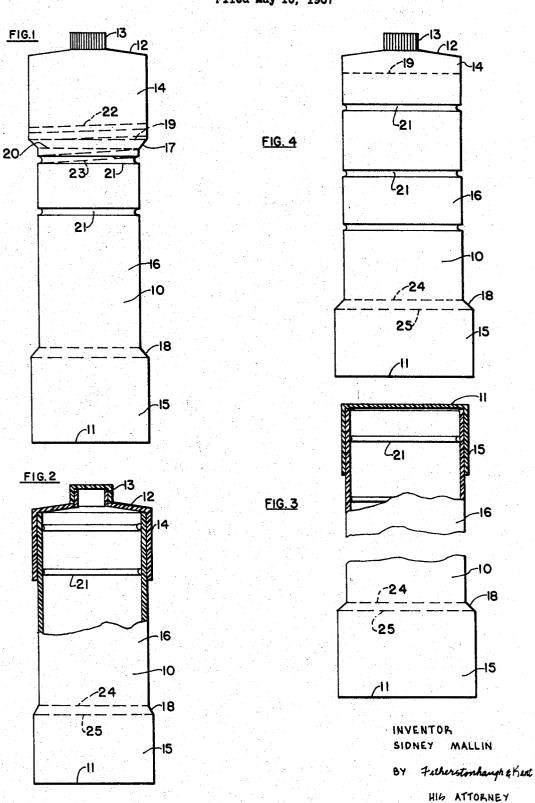
# May 28, 1968

S. MALLIN REUSABLE CONTAINER Filed May 10, 1967 3,385,461



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3,385,461 **REUSABLE CONTAINER** Sidney Mallin, 236 Kingston, Row, Winnipeg, Manitoba, Canada Filed May 10, 1967, Ser. No. 637,532 4 Claims. (Cl. 215-1)

#### ABSTRACT OF THE DISCLOSURE

10 This invention relates to reusable containers in which the central portion is reduced in dimensions from the upper and lower portions thereof. When desired to reuse the container, the upper portion is severed from the central portion and engaged thereover or, alternatively, the 15 lower portion of one of said containers is severed therefrom and then engaged over the central portion of another container which has had the upper portion removed.

This invention relates to new and useful improvements in reusable containers and although it is designed primarily for use with plastic containers, nevertheless it will be appreciated that it can be utilized with any suitable form of container or made of any suitable material.

Furthermore, although the present device relates to substantially cylindrical containers, nevertheless the same principle can be utilized with square, rectangular, elliptical or other shaped cross sectioned containers.

Containers of the class described are usually provided 30 with a screw cap for the dispensing of the original product. When these are empty, the container is usually thrown awav.

The present invention contemplates the reuse of the container but due to the relatively small dimensions of the cap, such reuse is limited. I have overcome the disadvantages of reusing conventional containers by providing a container with a reduced cross section center section thereby permitting the upper end of the container to be severed therefrom and either slidably engaged over the 40 center section or screw threadably engaged therewith.

A further embodiment of the invention contemplates the use of a pair of containers in which the center section has a reduced cross sectional dimension to the dimensions of the upper and lower portions thus enabling the 45 lower portion of one container to be severed therefrom and then engaged over the center portion of a further container which has had the upper section removed therefrom.

Another object of the invention is to provide a device 50 of the character herewithin described which is simple in construction, economical in manufacture, and otherwise well suited to the purpose for which it is designed.

With the foregoing in view, and such other objects, purposes or advantages as may become apparent from 55 consideration of this disclosure and specification, the present invention consists of the inventive concept in whatsoever way the same may be embodied having regard to the particular exemplification or exemplifications of same herein, with due regard in this connection being had to 60 the accompanying figures in which:

FIGURE 1 is a front elevation of the container in its original form.

FIGURE 2 shows a partially cross sectioned view of the container shown in FIGURE 1 but adapted for reuse. 65

FIGURE 3 is a partially cross sectioned elevation of a further embodiment of the invention.

FIGURE 4 is an elevation of an alternative construction of the container particularly when used for the embodiment shown in FIGURE 3.

In the drawings like characters of reference indicate corresponding parts in the different figures.

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Proceeding first to describe the embodiment illustrated in FIGURES 1 and 2, reference character 10 illustrates generally a cylindrical plastic container. Although a cylindrical plastic container is illustrated, nevertheless it should be noted that the container can be made of other materials and that the shape of such containers can be square, rectangular, elliptical or any shape that lends itself to this usage.

The container includes a base 11 formed integrally therewith and sloping upper shoulders 12 terminating in a conventional screw cap 13.

The container includes the upper portion 14, the lower portion 15, and an intermediate or central portion 16 and it will be noted that the cross sectional dimensions of the upper and lower portions are slightly greater than the cross sectional dimensions of the central portion 16.

A perimetrical dimension reducing band or circle 17 joins the upper portion to the central portion and a similar band 18 joins the central portion with the lower portion.

In operation, the contents are dispensed through the neck enclosed by cap 13 until the container is empty. The upper portion is then severed or cut from the remainder of the container by cutting along a line illustrated by the dotted line 19. A further cut along the dotted line 25 illustrated by dotted line 20 is then made to remove the perimetrical dimension reducing portion 17.

The upper portion may then be slidably engaged over the central portion thus acting as a cap and at the same time allowing access to the complete dimensions of the interior of the center section and base when the upper portion 14 is removed.

Perimetrical beads or depressions 21 are formed at intervals around the center section for stiffening purposes.

Alternatively, a screw thread 22 may be formed integrally with the upper portion and a corresponding screw thread 23 formed integrally upon the upper end of the central portion 16 so that the upper portion 14 may be screw threadably engageable with the center portion 16 after the band or circle 17 has been removed.

Alternatively, a pair of such container may be used in which the base 15 is severed from the center section 16 of one of the containers, by cutting along the dotted lines 24 and 25 thus removing the dimension reducing band or circle 18. The upper portion 14 is removed from

a further container once again by removing the band 17. The lower portion 15 severed from the first container may then be inverted and slidably or screw threadably engaged over the upper end 16 of the other container which has had the upper portion 14 removed therefrom.

If it is desired that this embodiment be used then, of course, the container may be manufactured as illustrated in FIGURE 4 with the dimensions of the upper portion 14 and the center portion 16 being similar.

The containers thus adapted may be used in workshops or for storing food in refrigerators and the like, the principal advantage being that the container is reusable and that the full dimensions are available for refitting purposes rather than utilizing the relatively narrow neck under the conventional cap 13.

Various modifications can be made within the scope of the inventive concept disclosed. Accordingly, it is intended that what is described herein should be regarded as illustrative of such concept and not for the purpose of limiting protection to any particular embodiment thereof, but that only such limitations should be placed upon the scope of protection to which the inventor hereof is entitled, as justice dictates.

What is claimed to be the present invention is:

1. A reusable container comprising a hollow body, a 70 base integral with said body, and closure means on the upper end of said body, said body including an upper portion, a lower portion, and a central portion between said upper and lower portions, the transverse dimensions of said central portion being less than the transverse dimensions of said lower portion, whereby the said lower portion of one of said containers when severed therefrom, 5 is engageable over the said central portion of another of said containers when said upper portion is severed therefrom.

2. The device according to claim 1 in which the upper end of said upper portion and the upper end of said lower 10portion are screw threaded for screw threadable engagement of the said lower portion of said one container with the central portion of said other container.

3. The device according to claim 1 which includes a perimetrical dimension reducing ring between said cen- 15 tral portion and said lower portion and between said central portion and said upper portion, said perimetrical dimensioning ring being removed when severing said lower portion and said upper portion.

4. A method of reusing containers having an upper 20

portion, a central portion, and a lower portion, the transverse dimensions of said central portion being less than the transverse dimensions of said lower portion, said method consisting of the steps of severing the lower portion of one of said containers, severing the upper portion of another of said containers, and then engaging said severed lower portion of said one container over the central portion of said other container.

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