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CHIMED BOTTLE

Filed Sept. 9, 1965

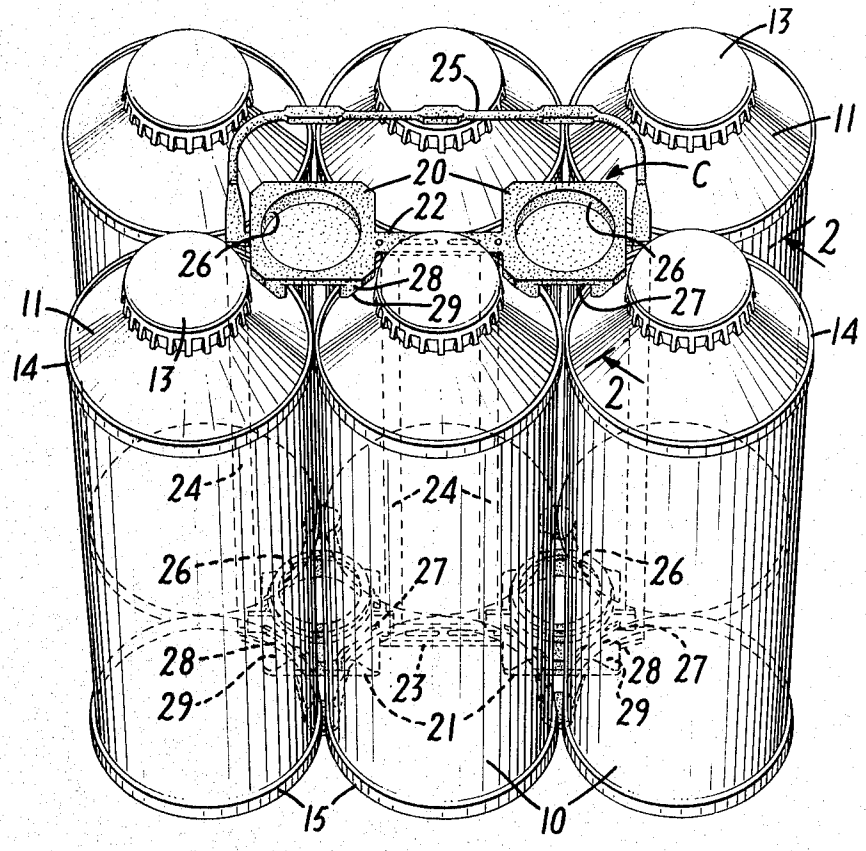


FIG. 1

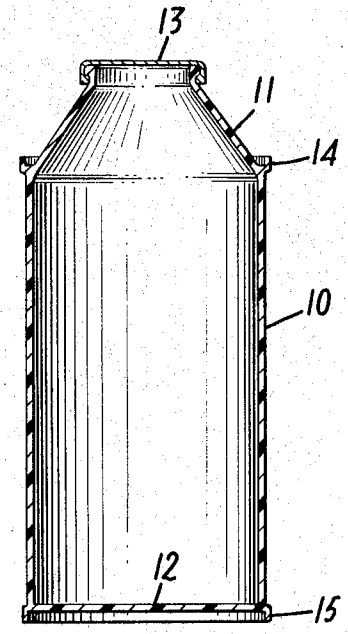


FIG. 2

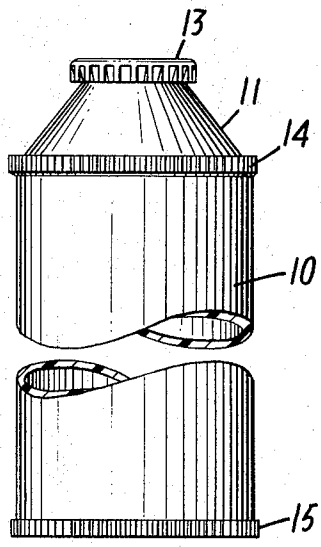


FIG. 3

INVENTOR.
GERALD ERICKSON

BY

Brumbaugh, Free, Graves & Donohue

his ATTORNEYS

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CHIMED BOTTLE

Gerald Erickson, Huntington, N.Y. (P.O. Box 687, Grand Central Post Office, 45th St. and Lexington Ave., New York, N.Y. 10017)

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This invention relates to a novel, integrally formed bottle made of glass, plastic or other suitable material, and having cylindrical chimes at both ends and to a novel package in which a cluster of the bottles are held together by a container carrier.

A container carrier, shown and described in the copending application of Richard W. Erickson, Serial No. 139,262, filed September 19, 1961, has been proposed for carrying, in nested relationship, a plurality of containers having cylindrical chimes. This container carrier includes a pair of connected channeled elements which interlock with the chimes at opposite ends of a cluster of containers and lock them together in side-by-side nested relationship. The container carrier does not require cardboard or other wrapping material around the containers and leaves the walls of the containers exposed to view.

The only containers currently available for packaging in this container carrier are metal cans. The conventional bottles which are in wide use today do not have the requisite chimes at both ends which are necessary to permit them to be packaged in a container carrier of this type.

The novel chimed bottle of the present invention can be readily packaged in this type of container carrier and a cluster of bottles locked together by a container carrier of this type produces a unique package.

For a more complete understanding of the present invention, reference can be made to the detailed description which follows and to the accompanying drawings, in which:

FIGURE 1 is a perspective view of the novel package of the present invention showing a six-pack embodiment;

FIGURE 2 is a cross-sectional view of the novel bottle of the present invention taken along the line 2—2 of FIGURE 1, looking in the direction of the arrows; and

FIGURE 3 is an elevational view of the novel bottle with the middle portion broken away.

The novel bottle of the present invention includes a cylindrical, substantially vertically disposed wall **10** having an upper tapered neck **11** and a bottom wall **12**. The neck is adapted to be closed by a conventional bottle cap **13**. The bottle is formed integrally in one piece and made of any suitable material such as glass or plastic. In these respects the bottle is similar to and resembles conventional bottles.

An upstanding rim or chime **14** is formed integrally with the bottle at the upper end of the cylindrical wall, and another downwardly depending rim or chime **15** is formed integrally with the bottle at the extreme lower end of the cylindrical wall. Both chimes **14** and **15** are essentially thin, circular walls, the main purpose of which is to provide a gripping chime which can be received within a channel formation in the container carrier. The upper chime **14** extends upwardly and is spaced apart from the outer surface of the neck of the bottle sufficiently so that both sides of the chime are accessible to the spaced-apart walls of the container carrier which define the channel in which the chime is adapted to be received. Similarly, the lower chime **15** extends downwardly from the bottom wall of the bottle so that both sides of the chime are accessible to the spaced-apart walls forming the chime of the container carrier in which the lower chime is to be received.

The container carrier C which locks a cluster of the bottles together, as shown in FIGURE 1, comprises a pair of upper channeled elements **20**, a pair of lower channeled elements **21**, a horizontally disposed strip **22** which connects the upper channeled elements **20** in predetermined spaced relationship, a horizontally disposed strip **23** which connects the lower channeled elements **21** in predetermined spaced relationship, and a plurality of vertically extending connecting bands or strips **24** which connect the upper channeled elements **20** and the lower channeled elements **21** in predetermined spaced relationship. A handle **25** is formed integrally with the upper channeled element **20** to facilitate carrying the cluster of bottles held together by the container carrier.

The channeled elements **20** and **21** are each three-dimensional squares comprising a centrally located circular gripping wall **26** accessible from the side of the respective channeled element opposite the bottle-engaging side thereof. The circular gripping wall **26** is engageable by gripping elements which set up the container carrier in condition to receive the bottles. The bottle-engaging sides of the channeled elements **20** and **21** have at each corner thereof a pair of parallel spaced-apart curved inner and outer formations **27** and **28**, respectively, defining between them a curved channel to receive the chime of a bottle to be held by the container carrier. The outer curved formation **28** has a sloped surface **29** which provides an incline from the corner of the respective channeled element so that as the chimes of the bottles are pushed toward their respective channels they will force apart the upper and lower channeled elements **20** and **21** until the chimes enter the channels at which time the inherent resiliency of the channeled elements and the connecting strips **24** will cause the channeled elements to snap together and lock the bottles in place.

In the embodiment illustrated in the drawings, the diameter of the upper and lower chimes **14** and **15**, respectively, is shown as being slightly larger than the diameter of the side wall of the container. Although it is not essential that the chimes be laterally offset outwardly of the side wall of the container in this manner, nevertheless, this particular structure has the advantage in that it maintains the side walls of the bottles in spaced-apart relationship in the container carrier and prevents abrasion or scratching of the bottles and, if the bottles contain labels, damage to the labels thereof. On the other hand, if the chimes **14** and **15** are flush with the ends of the side wall of the bottle or if the side wall of the bottle bulges in jug-shaped fashion, it is still possible to keep the bottle in spaced-apart relation in the container carrier by proper design of the container carrier in respect to the spacing between the individual channels thereof.

The inner and outer walls of the chimes **14** and **15** may be stippled to provide outer roughened walls. The stippling tends to prevent chipping, and it also provides increased friction between the walls of the chimes and the walls of the container carrier which define the channels.

The chimes **14** and **15** are shown each extending continuously in circular fashion, but it is understood that they need be provided for purposes of packaging only along those portions of the bottle which would be engaged by the channeled elements of the container carrier. If the chimes are of limited length, they could be useful in helping to orient the bottle relative to the container carrier, first, to insure that the chimes are properly disposed relatively to the container carrier and, secondly, to insure that a label or design carried by the

bottle is facing in the desired direction. Continuous chimes may be preferred because they tend to strengthen the bottle.

The multiple-bottle package is readily carried by the handle 25 with the container carrier virtually invisible. When the package is displayed on a shelf or carried by the consumer the product can be readily identified by the walls of the bottles or the labels on the bottles rather than by printing on a cardboard package. Thus, the appearance of the product itself rather than a container for the product provides the eye-catching appeal which causes the consumer to select the product over another competitive product.

The invention has been shown in a single preferred form and by way of example only, and obviously, many modifications and variations are possible within the spirit and scope of the invention. The invention, therefore, is not to be limited to any particular form or embodiment except insofar as such limitations are expressly set forth in the claims.

I claim:

1. A one-piece bottle adapted to be locked in a one piece carrier having channels therein for receiving the upper and lower chimes of metal cans to interlock a group of the cans in a unitary package, said bottle comprising means defining a side wall around a liquid holding interior, a bottom wall formed integrally with the lower end of the side wall, a neck portion formed integrally with the upper end of the side wall and defining an opening, upstanding channel-insertable means formed integrally with the upper end of the side wall and spaced apart and outwardly of said opening so as to leave a space between said opening and said upstanding channel-insertable means, and a downwardly depending channel-insertable means formed integrally with the lower end of the side wall, the upstanding and downwardly depending channel-insertable means being engageable with the chime receiving channels of the can carrier.

2. A bottle adapted to be packaged in nested relationship with a plurality of similar bottles comprising a substantially vertically disposed side wall, an upper tapered neck formed integrally with the vertically disposed side wall and having an opening therein through which the contents of the bottle are discharged, a bottom wall formed integrally with the vertically disposed side wall, a chime formed integrally with the vertically disposed side wall and projecting upwardly therefrom, the said upstanding chime being spaced apart from the tapered neck, and a downwardly depending chime formed integrally with the vertically disposed wall and projecting downwardly therefrom, both sides of each chime being accessible so as to be engaged by means formed on a can carrier for locking the bottles together.

3. A cluster of bottles locked together in side-by-side relationship to form a package comprising a plurality of bottles each having an upstanding grippable channel-insertable chime at the upper end of the bottle and a depending grippable channel-insertable chime at the lower end of the bottle, an upper channeled element having a plurality of curved channels formed therein and engaging the upstanding chimes of a plurality of the bottles to hold them together, a lower channeled element having a plurality of curved channels formed therein and engaging the depending chimes of a plurality of the bottles to hold them together, and a resilient connection between the upper and lower channeled elements to hold them in interlocking engagement with the respective chimes of the bottles.

4. A one-piece bottle adapted to be locked in a can carrier having channels therein for receiving the upper and lower chimes of cans to interlock a group of cans in a unitary package comprising a side wall defining a liquid holding interior, an upwardly tapered neck formed integrally with the upper end of the side wall and terminating in a pouring spout, a bottom wall formed integrally with the lower end of the side wall, an upwardly extending grippable channel-insertable chime formed integrally with the side wall and defining an angle with the neck portion of the bottle, and a downwardly depending grippable channel-insertable chime formed integrally with the side wall and projecting downwardly therefrom below the bottom wall.

5. A bottle as set forth in claim 4 in which the upper and lower chimes are continuous and define circles.

6. A bottle as set forth in claim 4 in which the upper and lower chimes are a plurality of circular arcs, each of limited length.

7. A bottle as set forth in claim 4 in which the inner and outer walls of the chimes are stippled.

8. A bottle as set forth in claim 4 in which the upper and lower chimes are laterally offset outwardly from the upper and lower ends, respectively, of the side wall of the bottle to insure spacing apart of the side walls of a plurality of bottles locked together in a package.

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LOUIS G. MANCENE, *Primary Examiner.*

THERON E. CONDON, JAMES B. MARBERT,
Examiners.