Oct. 31, 1961 E. G. MITTELBERGER 3,006,165

CONTAINERS

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Fig. 1.

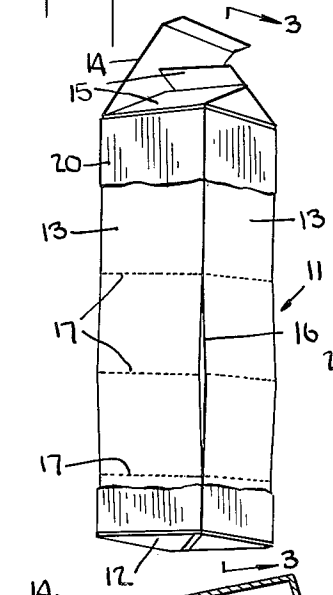
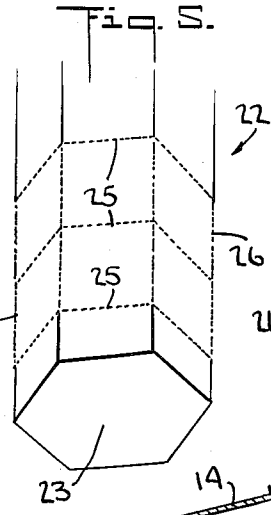


Fig. 5.



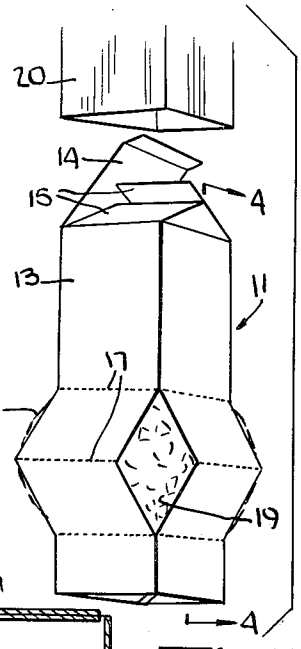


Fig. 2.

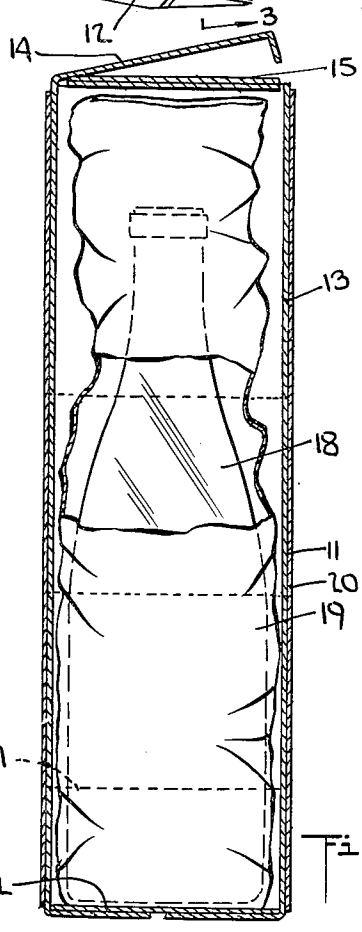


Fig. 3.

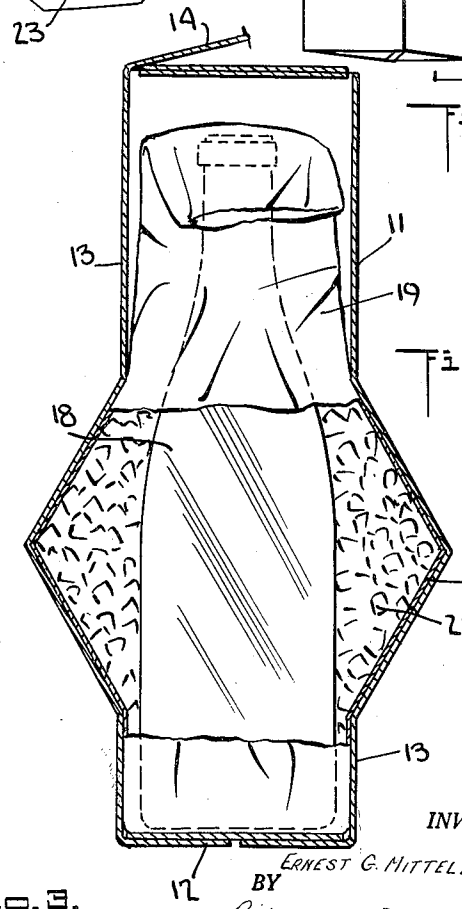


Fig. 4.

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CONTAINERS

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1 Claim. (Cl. 62—371)

The present invention relates to a novel package for a vessel and to the container which houses said vessel. More particularly, it relates to a novel package for a champagne bottle.

Vessels such as wine bottles, champagne bottles, and the like, generally must be chilled before use. As purchased these vessels are either wrapped in paper bags or are placed in cardboard-like cartons to be carried home. At home, it is necessary either to refrigerate the vessel for a considerable length of time before using or the vessel may be placed in a bucket filled with a coolant such as ice and left there until the contents are chilled. This requires a special bucket and is somewhat time consuming.

It is accordingly an object of the present invention to provide a container for vessels of the character described which can be packed with a coolant so that the vessel will be chilled during transit from the store to the home.

A further object of the invention is to provide a container for bottles, which container can be expanded to accommodate a coolant.

Another object of the invention is to provide a package including a vessel to be cooled and an expandable container therefor.

Still another object of the invention is to provide a package including a vessel to be cooled, a bag for receiving ice, and an expandable container for storing said ice in a location where it will exercise the maximum cooling effect.

These and other objects are realized in accordance with the present invention wherein there is provided a substantially water-proof bag for a bottle, the bag being surrounded by a container made of a material such as cardboard. The wall of the container is provided with a plurality of longitudinal lines extending from adjacent the bottom and terminating short of the top, the lines either being partially severed to constitute perforations or being wholly severed so as to constitute slots. Preferably, the wall is also provided with one or more circumferential weakened or perforated lines which cross all of the slots. By pressing the top of the container toward the bottom, the container wall bulges outwardly and ice previously placed in the bag will accumulate in the bulge so as to surround the bulk of the bottle. The contents of the bottle can thus be cooled directly in the package in which it was purchased.

The invention will now be described more fully with reference to the accompanying drawing, wherein:

FIG. 1 is a perspective view of a novel container in accordance with the present invention, in its unexpanded state and with an outer sleeve partially broken away;

FIG. 2 is a perspective view of the container of FIG. 1 containing ice in an internal bag, with the sleeve removed and the container expanded as during chilling;

FIG. 3 is a sectional view taken along line 3—3 of FIG. 1;

FIG. 4 is a sectional view taken along line 4—4 of FIG. 2 with the top of the bag shown in full; and

FIG. 5 is a perspective view of a portion of a modified container.

Referring now more particularly to the drawing, in FIG. 1 there is shown a container **11** including a square bottom **12**, each side of which is connected to a wall **13**. The walls **13** are connected at their tops to form a conventional opening with a cover flap **14** on one of the walls and sealing flaps **15** on two other walls, for conventional closing. The lines of joinder between the walls **13** are slotted at **16** for a distance corresponding to about one-half the height of the walls, the slots starting adjacent the bottom of the container **11** and terminating well below the top.

The container is further provided with three circumferential weakened or perforated score lines **17** which respectively intersect all of the slots **16** at their tops, bottoms and middle. A sleeve **20** surrounds the container walls and, upon removal of the sleeve, application of force to the top of the container **11**, causes the walls **13** to bulge outwardly as shown in FIG. 2 with the score lines **17** facilitating the deformation. The container of course is simultaneously reduced in height.

FIG. 3 shows this container incorporated into a package as actually kept in the store. A vessel such as a bottle **18** is placed in a bag **19** such as a water-proof plastic bag and the bag is placed inside the container **11**. The container is somewhat taller than the bottle **18** and preferably the bag **19** is also taller, for a reason hereinafter explained. The outer sleeve **20** may be fitted around the container **11** so as to strengthen it and to prevent accidental bulging or to limit bulging, depending upon the snugness with which the sleeve embraces the container.

If it is desired to chill the contents of the bottle **18**, the sleeve **20** is first removed if it is too snug. Crushed ice **21**, such as cubed ice, is then dropped into the open mouth of bag **19** and falls about the sides of the bottle **18**. The top of the container **11** is then pressed downwardly and the walls **13** bulge so as to permit the ice **21** to accumulate in the bulges, the bag **19** also deforming to fit the bulges. The top of the bag **19** can then be folded over as shown in FIG. 4 and the top of the container **11** can be closed if desired.

In this manner, the contents of bottle **18** can be chilled while the bottle is being carried from the store to the home. Alternatively, the chilling can be effected in the home and no additional implements such as ice bucket will be required.

The container **22** shown in FIG. 5 includes a hexagonal bottom **23** with vertical walls **24** and three parallel circumferential perforated lines **25**. The lines of joinder between the walls are perforated at **26** between the uppermost and lowermost perforated lines **25**. This container initially is somewhat stronger than that of FIGS. 1 to 4 but, in order to expand the container through bulging, it is first necessary to cut the walls along perforated lines **26**. After cutting, it can be filled and expanded in the same manner previously described.

The package can of course be used for any vessel which is to be treated regardless of the exact nature of the contents. In place of ice, Dry Ice can similarly be used as a coolant and it is even possible to use liquids either for heating or cooling. Preferably, the bag is waterproof so that the liquid initially present or formed by melting of the ice can be retained and will not wet and weaken the container. Plastic bags made of materials such as polyethylene are accordingly preferred but cellophane, aluminum foil, resistant paper, and the like can be used with equal success.

The container itself may also be made of a variety of materials such as ordinary cardboard, but other cardboard-like materials can also be employed, such as sheet metal, coated cardboard, resilient plastic sheeting, and the like.

The outer sleeve **20** may be made of any tubular material or of any flat material formed into a tube or bag. Paper or cellophane is preferred but sheet metal, plastics, fabrics, and the like, are also suitable.

The shape of the container and the vessel or bottle are of course immaterial and are capable of variation so as to include round or other polygonal shapes.

Various changes and modifications may be made without departing from the spirit and scope of the present invention and it is intended that such obvious changes and modifications be embraced by the annexed claim.

What I claim is:

A receptacle comprising, in combination: an elongated outer container of polygonal transverse cross-section, said container having lateral walls formed of flat sheet material, said walls being joined together along contiguous edges thereof and being foldably interconnected along said edges whereby said walls may be selectively flattened for shipment or brought into an expanded upright condition for use; integrally formed foldable cover members connected to opposite end portions of said lateral walls as extensions thereof, said cover members forming top and bottom closures for said container with said lateral walls in said upright condition, the foldable interconnection of said lateral walls along said contiguous edges being at least weakened intermediate the ends of each edge whereby said container may be laterally expanded intermediate its ends by spreading the edges of said lateral walls apart at said weakened interconnections, said spreading being accompanied by a decrease in the distance between said top and bottom closures, said interconnection between said lateral wall being maintained adjacent to said top and bottom closures; a flexible and laterally expansible watertight bag disposed in said container, said bag being dimensioned to fill said container with said lateral edges spread apart, said bag being adapted to receive a bottle therein having a height less than the decreased distance between said top and bottom closures and transverse dimensions receivable within said container, with said lateral edges positioned together, the increased central cross-sectional area of said container which is provided by the spreading apart of said edges defining a space enclosed within said bag and adapted to receive ice therein, said ice being disposed within said bag and laterally engaging said bottle in direct contact therewith.

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