

# United States Patent

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[54] **CONTAINER MEANS AND BLANK FOR MAKING**  
**27 Claims, 21 Drawing Figs.**

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[51] Int. Cl..... **B65d 5/00,**  
**B65d 5/64**

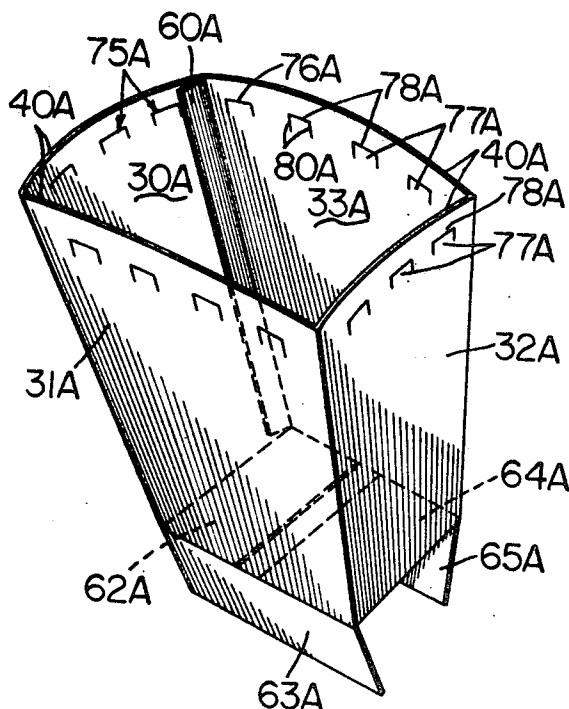
[50] Field of Search..... 229/16, 24,  
 25, 37, 43, 41; 220/21, 42A, 42B

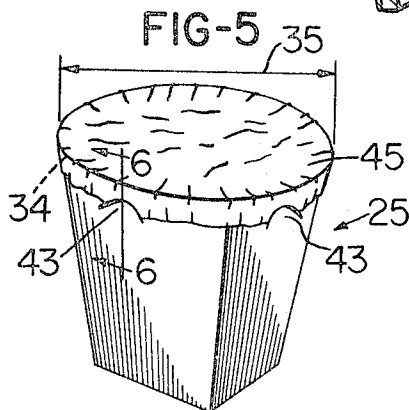
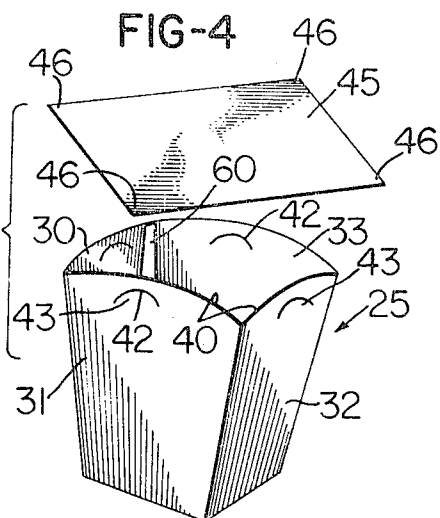
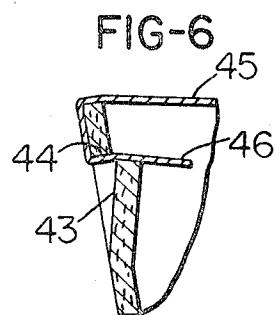
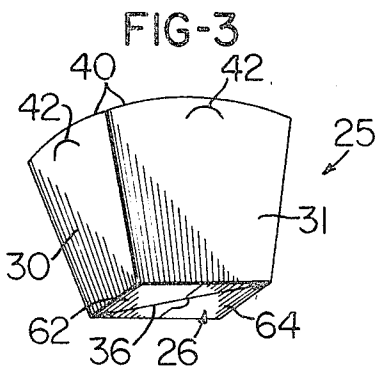
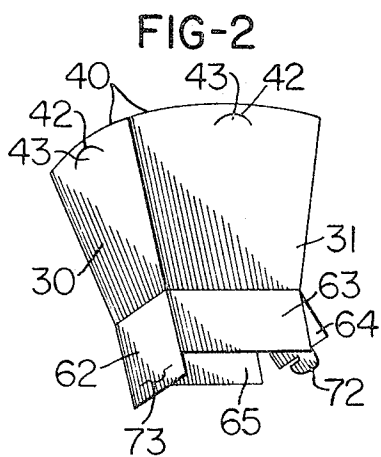
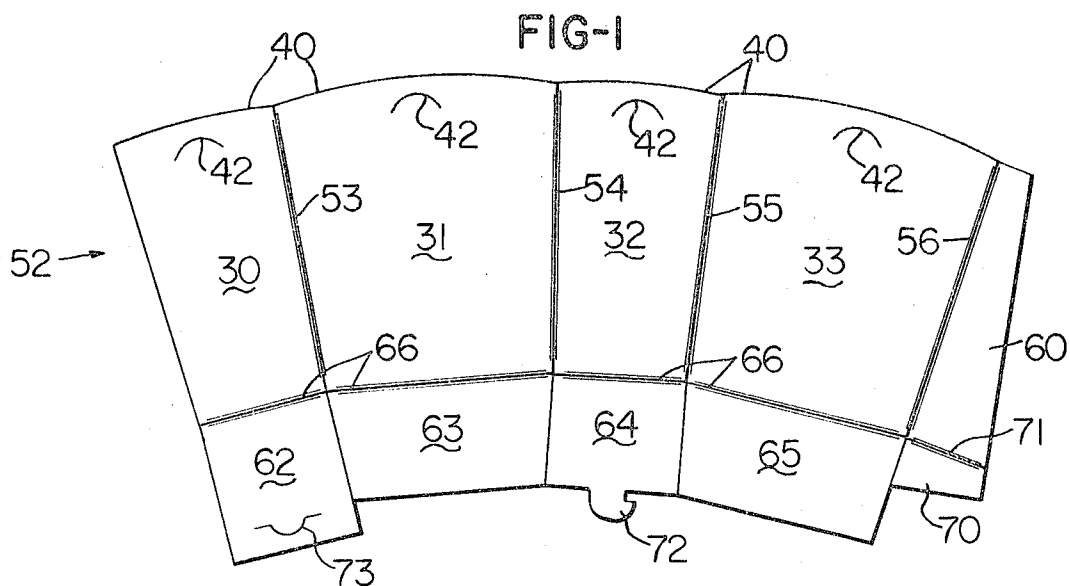
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**ABSTRACT:** This disclosure relates to an open-top paper-board carton and a blank for making same wherein such carton has a rectangular bottom wall and a plurality of upwardly and outwardly diverging sidewalls which are easily flexed outwardly upon placing a product within such carton and the top portions of the sidewalls define a substantially circular opening at the top of the carton which has a diameter which is larger than a diagonal across the rectangular bottom wall; and, a high-strength top closure capable of being used with such carton wherein such top closure has sealing bead means of roughly sinusoidal configuration and capable of providing a fluidtight seal with minimum likelihood of tearing such carton.





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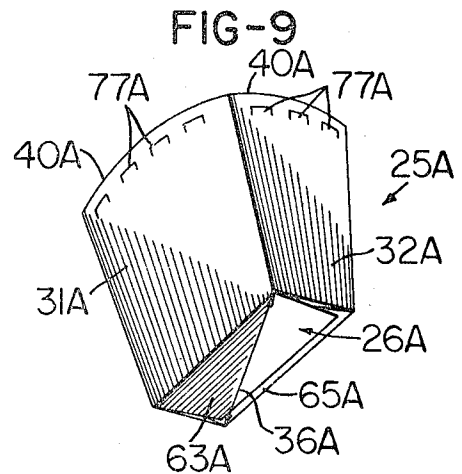
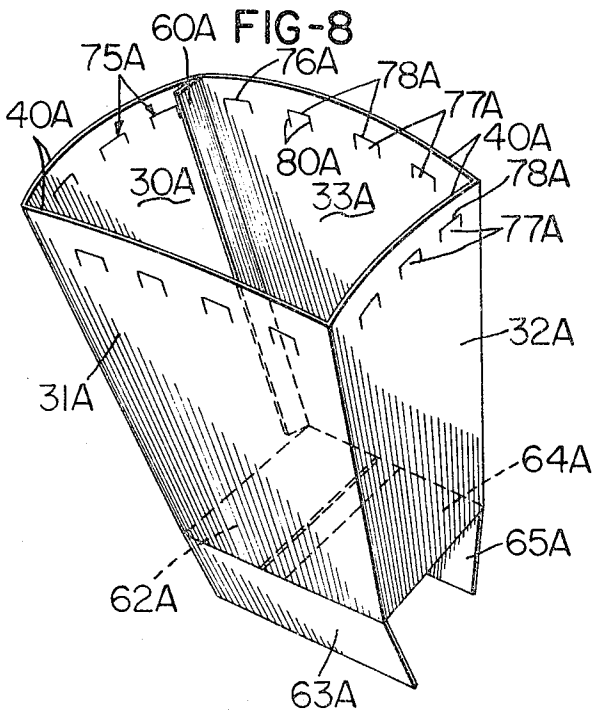
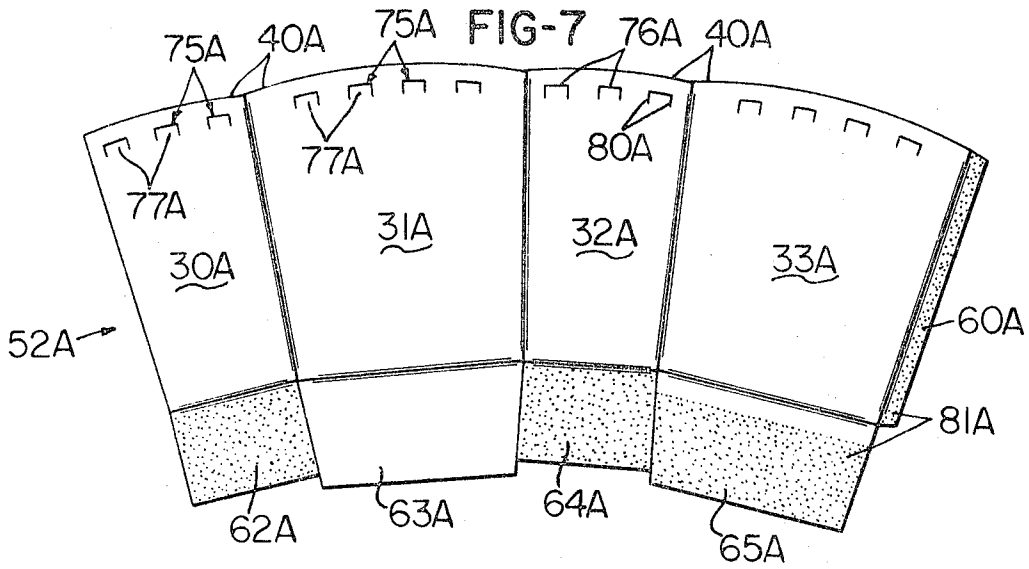
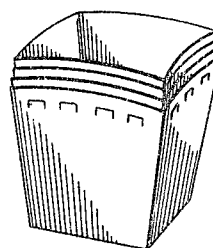


**FIG-10**



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FIG-11

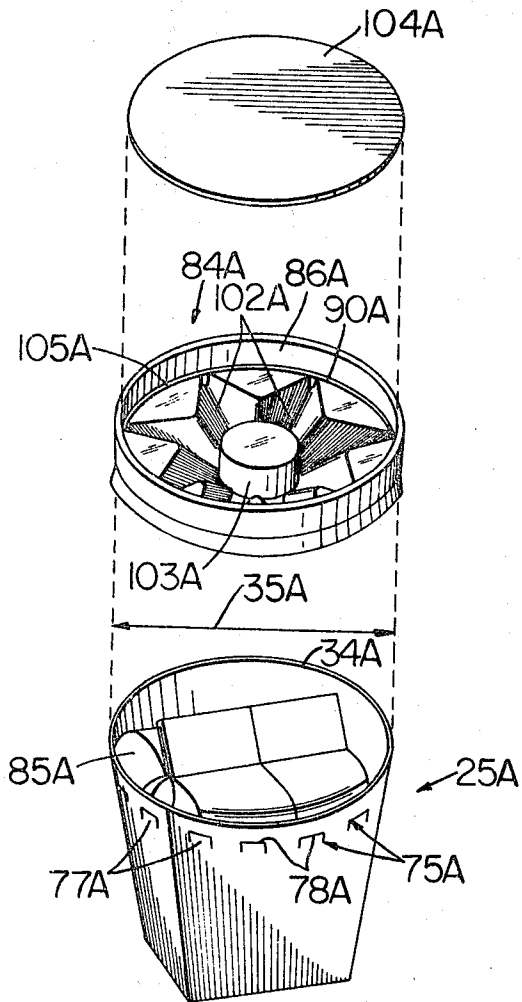


FIG-12

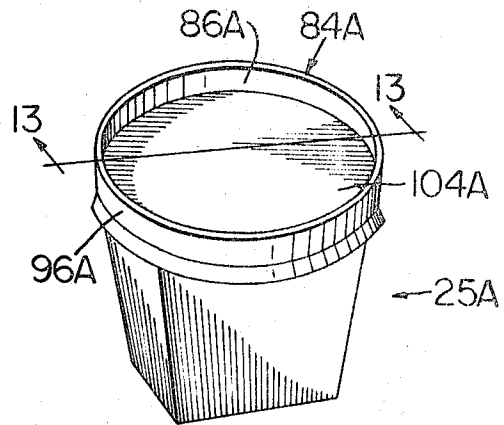
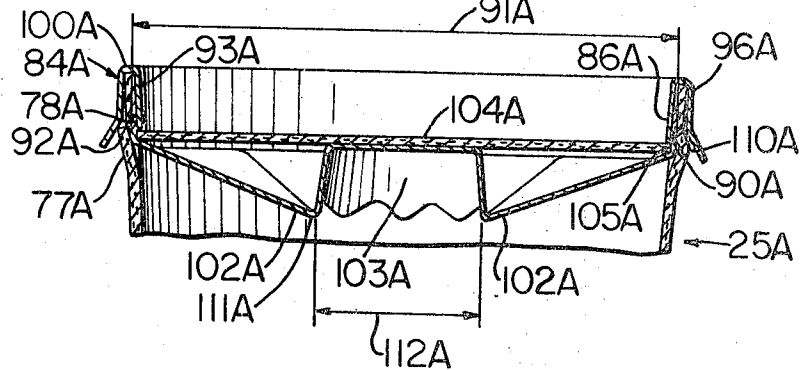


FIG-13



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FIG-14

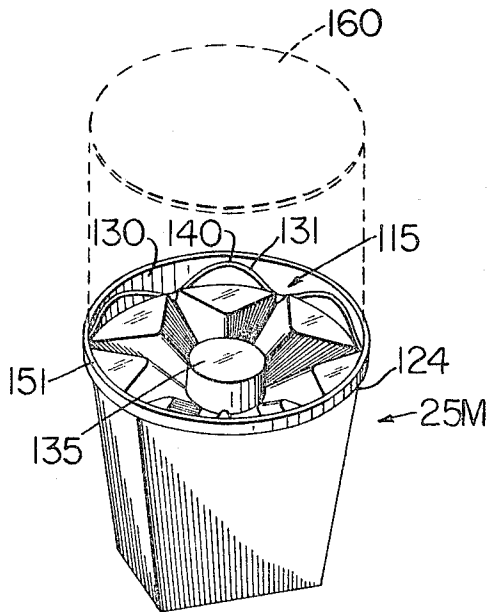


FIG-15

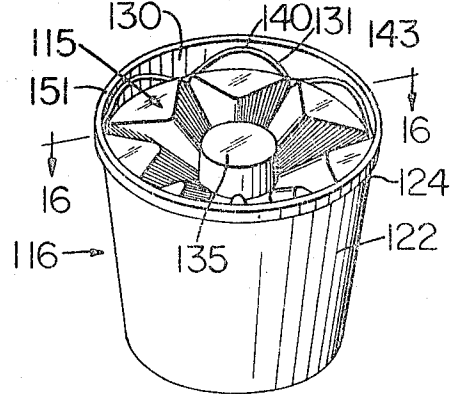


FIG-16

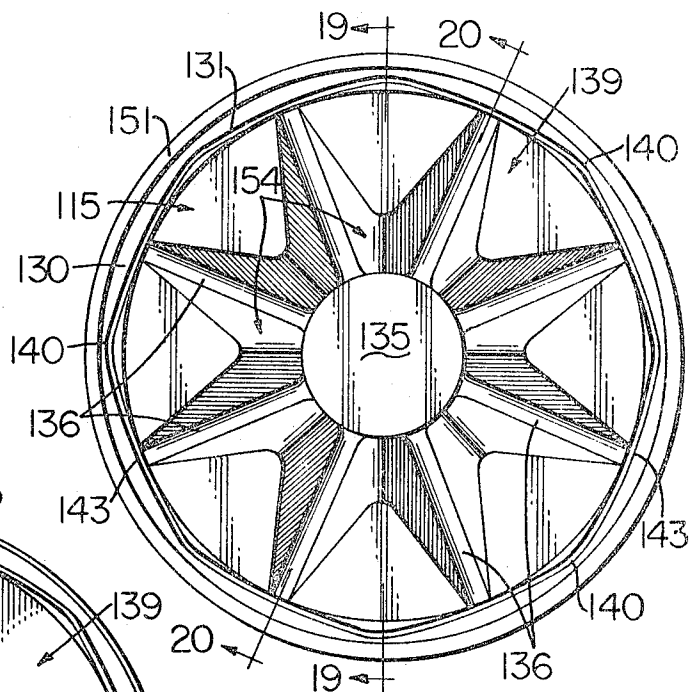
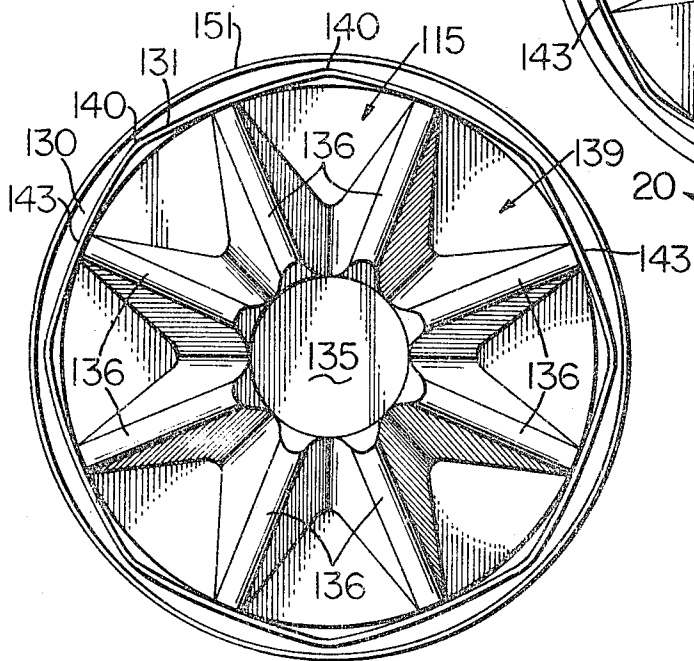


FIG-17



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FIG-18

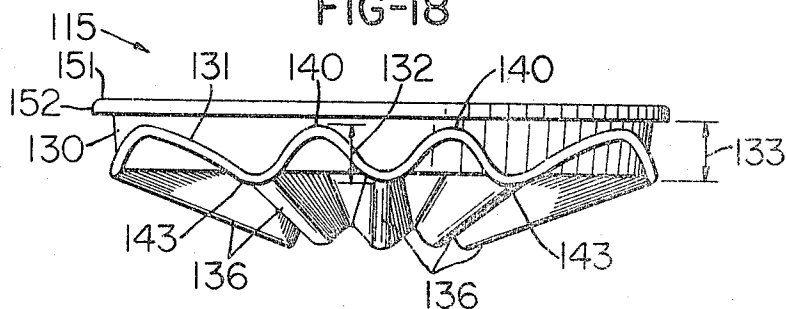


FIG-19

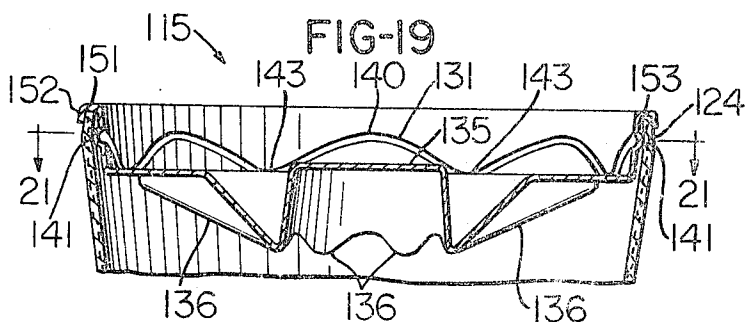


FIG-20

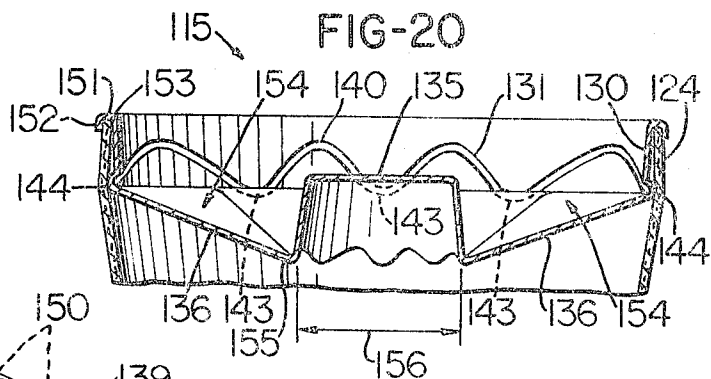
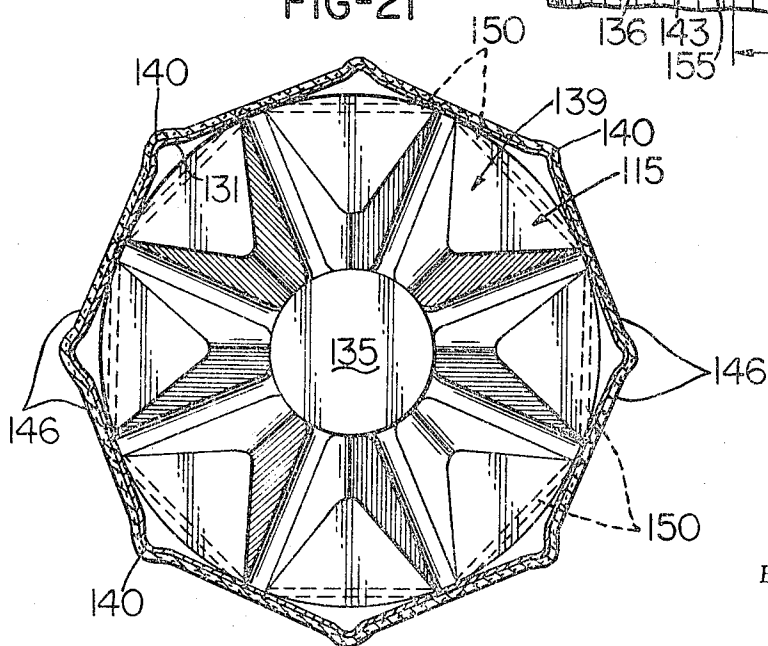


FIG-21



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## CONTAINER MEANS AND BLANK FOR MAKING

## BACKGROUND OF THE INVENTION

Food products such as fried chicken, pastry products, popcorn, and the like are often packaged in paperboard cartons wherein each carton may be used as a serving dish from which the associated food product is eaten. Many of the previously proposed cartons used in this manner are difficult to set up, comparatively expensive, and utilize an excessive amount of material which increases the operating costs to the food retailer. In addition, the top closures provided for many currently used containers do not provide a tight seal and in instances where the closure is forced in position in an effort to provide such a tight seal either the container or the closure may be damaged.

## SUMMARY

This invention provides an open-top paperboard carton and blanks for making same wherein such carton has a rectangular bottom wall and a plurality of upwardly and outwardly diverging sidewalls which are easily flexed outwardly upon placing a product, such as a food product, therewithin. The flexible sidewalls are flexed outwardly to define a substantially circular opening at the top of the carton which has a diameter which is larger than a diagonal across the rectangular bottom wall thereof whereby easy access is provided to the contents of the carton and closed cartons are easier to stack and have greater stability. In addition, this invention provides a top closure which may be utilized with such carton and such top closure has sealing bead means of sinusoidal configuration capable of providing a seal of optimum fluid tightness.

Other details, uses, and advantages of this invention will become apparent as the following description of the exemplary embodiments thereof presented in the accompanying drawings proceeds.

## BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings show present exemplary embodiments of this invention, in which:

FIG. 1 is a plan view of an exemplary blank utilized to make one exemplary embodiment of the carton of this invention;

FIG. 2 is a perspective view illustrating opposite ends of the blank of FIG. 1 fastened together to define a tubular structure having four sidewalls and prior to fastening together bottom extension flaps extending from each of the sidewalls to define a rectangular bottom wall for the resulting carton;

FIG. 3 is a perspective view similar to FIG. 2 and illustrating the extension flaps fastened together into a common plane;

FIG. 4 illustrates the completed carton of FIG. 3 and an associated top closure in the form of a sheetlike cover which may be fastened in position over the completed carton;

FIG. 5 is a perspective view illustrating the completed carton of FIG. 3 with a product contained therewithin so that the outwardly diverging sidewalls thereof are flexed to define a circular opening at the top of the carton over which the sheetlike cover is fastened in position utilizing arcuate cuts provided in the sidewalls;

FIG. 6 is an enlarged fragmentary cross-sectional view taken essentially on the line 6-6 of FIG. 5;

FIG. 7 is a plan view of another blank utilized to make another exemplary carton of this invention;

FIG. 8 is a view similar to FIG. 2 illustrating the blank of FIG. 7 partially assembled;

FIG. 9 is a view similar to FIG. 3 illustrating the carton formed from the blank of FIG. 7 completely assembled with its bottom extension flaps adhesively fastened together;

FIG. 10 is a perspective view illustrating a plurality of assembled cartons of FIG. 9 stacked together in nested relation ready for use;

FIG. 11 is an exploded perspective view of the completed carton of FIG. 9 with a sealed bag within the completed carton and illustrating a top closure for such carton with an associated dislike insert arranged thereabove which is adapted to be snap fitted within the top closure;

FIG. 12 is a perspective view illustrating the top closure and its dislike insert fastened in position on the carton of FIG. 11 and its contents;

FIG. 13 is an enlarged fragmentary cross-sectional view taken essentially on the line 13-13 of FIG. 12;

FIG. 14 is a perspective view illustrating a carton having a unique top closure fastened in position thereon and showing a dislike insert arranged in position above such carton;

FIG. 15 is a perspective view illustrating the top closure of FIG. 14 fastened in position on a carton having a circular bottom wall and a frustoconical sidewall;

FIG. 16 is an enlarged view taken essentially on the line 16-16 of FIG. 15;

FIG. 17 is an enlarged view looking upwardly toward the bottom of the closure of FIG. 15;

FIG. 18 is a side elevation of the closure of FIG. 13;

FIG. 19 is a cross-sectional view with parts broken away taken essentially on the line 19-19 of FIG. 16;

FIG. 20 is a view similar to FIG. 19 taken essentially on the line 20-20 of FIG. 16; and

FIG. 21 is a cross-sectional view taken on the line 21-21 of FIG. 19.

## DESCRIPTION OF ILLUSTRATED EMBODIMENTS

Reference is now made to FIGS. 3-5 of the drawings wherein an exemplary carton of this invention is illustrated and designated generally by the reference numeral 25. The carton 25 comprises a rectangular bottom wall 26 and a plurality of four flexible upwardly and outwardly diverging sidewalls 30, 31, 32, and 33 each having its lower edge portion fastened to the peripheral edge of the bottom wall 26. Each sidewall 30-33 is easily flexed outwardly upon placing a product within the carton 25 to define a substantially circular opening 34 at the top of the carton 25 and the opening 34 has a diameter, indicated at 35, which is larger than a diagonal 36 across the rectangular bottom wall 26.

Each of the sidewalls 30-33 has a top edge which in each instance is designated by the reference numeral 40 for convenience and ease of description and each top edge 40 is arranged in an arcuate path. Upon placing a product within the carton 25 the sidewalls 30-33 flex or bulge outwardly to define the previously mentioned circular opening 34 and the top edges 40 are arranged in a common plane which in this example of the invention is arranged substantially horizontally.

The carton 25 has a plurality of substantially downwardly concave cuts in its sidewalls 30-33 and a single cut 42 is provided and arranged substantially centrally adjacent the top arcuate edge 40 of each side wall. Each cut 42 defines a hinged flap 43 and a retaining ledge 44, see FIG. 6, in its associated sidewall whereby each ledge 44 is provided immediately adjacent the swinging end of its hinged flap 43.

The carton 25 has a top closure in the form of a sheetlike cover 45 made of a dead fold material, such as metallic foil containing aluminum. The cover sheet 45 is of square outline and is adapted to be blanketed over the top open end of the carton 25 once a product has been placed within such carton and as seen in FIGS. 5 and 6 corner portions 46 of the cover sheet 45 are pushed beneath associated retaining ledges 44 upon pushing the hinged flaps 43 inwardly whereupon the cover sheet 45 is firmly fastened in position at four locations corresponding to the four locations of the hinged flaps 43. The cover sheet 45 provides a sufficiently taut top surface to enable a plurality of filled cartons 25 with their cover sheets 45 fastened in position to be vertically stacked so that the rectangular bottom wall 26 in each instance rests upon the top surface of a cover sheet 45 of a lower carton 25.

The cover sheet 45 may be made of any suitable material and may be fastened in position in the manner described above. Further, by making the cover sheet of square peripheral outline and pushing the corner portions within the carton as shown in FIG. 6 an adequate cover is provided and the sheet material is utilized with minimum waste.

The carton 25 may be made in any suitable manner and utilizing any suitable foldable material such as paperboard, or the like. In this example of the invention the carton 25 is made from the blank 52 illustrated in FIG. 1 of the drawings. The blank 52 may have one or both of its exposed surfaces laminated with a suitable moisture impervious material such as metallic foil and is suitably cut and scored and adapted to be assembled to define the resulting carton 25. The blank 52 comprises a plurality of spaced score lines 53, 54, 55, and 56 defining sidewalls 30 outwardly of score line 53, sidewall 31 between score lines 53 and 54, sidewall 32 between score lines 54 and 55, sidewall 33 between score lines 55 and 56, and a fastening flap 60 extending outwardly of score line 56. The fastening flap 60 is adapted to be suitably fastened to the outer end portion of sidewall 30, as by adhesive means, for example, to define an open ended tubular structure as illustrated in FIG. 2 of the drawings.

Each sidewall 30—33 has a bottom end which is smaller in width than its top end portion and each top end portion of the sidewalls 30—33 terminates in an arcuate edge 40 as previously described. Each sidewall 30, 31, 32, and 33 has an extension flap 62, 63, 64, and 65 respectively extending outwardly beyond an associated score line which for convenience and ease of description will be designated by the same reference numeral 66 for each sidewall 30—33. The fastening flap 60 also has an extension flap 70 extending outwardly of a score line 71 defining the bottom edge of the fastening flap 60 and the base of the extension flap 70. The extension flaps 62—65 and flap 70 are folded into a common plane to define the rectangular bottom wall 26.

The extension flap 64 has a locking tab 72 comprising its terminal end portion and a cooperating locking slit 73 is provided in the extension flap 62. Upon assembling the blank 52 to define the open ended configuration illustrated in FIG. 2 it will be seen that the extension flaps 62 and 64 extend from oppositely arranged sidewalls 30 and 32. The extension flaps 63, 65, and 70 are folded into a common plane whereupon flap 62 is folded in position with flap 64 and its locking tab 72 folded outwardly thereof to fasten all of the extension flaps together in a common plane whereby an easily erected carton 25 is provided which uses a simple mechanical attachment and does not require the use of adhesive means or separate fasteners to hold the bottom wall 26 together.

Another exemplary embodiment of this invention is illustrated in FIG. 7—13 of the drawings. The carton illustrated in FIGS. 8—13 is very similar to the carton 25; therefore, such carton will be designated by the reference numeral 25A and parts of the carton 25A which are very similar to corresponding parts of the carton 20 will be designated by the same reference numeral as the carton 20 also followed by the letter designation "A" and not described again in detail. Only those component parts of the carton 25A which are substantially different from corresponding parts of the carton 25 will be designated by a new reference numeral also followed by the letter designation "A" and described in detail.

The carton 25A has a plurality of substantially downwardly concave U-shaped cuts 75A in each of its sidewalls 30A, 31A, 32A, and 33A and each cut 75A is arranged adjacent the top arcuate edge 40A of its sidewall and hence adjacent the top of the carton 25A. Each cut 75A has a bight 76A and a pair of downwardly extending legs each designated by the same reference numeral 80A and each U-shaped cut defines a hinged flap 77A and an associated retaining ledge 78A in the associated sidewall of the carton 25A whereby each retaining ledge 78A in essence adjoins the swinging end of its flap 77A.

The carton 25A has a fastening flap 60A and extension flaps 62A, 63A, 64A, and 65A extending respectively from the lower end of sidewalls 30A, 31A, 32A, and 33A. The fastening flap 60A and selected ones of the flaps 62A, 63A, 64A, and 65A have adhesive means thereon which may be in the form of a moisture impervious adhesive material shown by a granular representation and designated by the reference numeral 81A at a pair of representative locations in flaps 65A and 60A,

see FIG. 7. The blank 52A utilized to make the carton 25A is initially fastened together to define an open ended tubular structure by fastening the flap 60A against the outer edge portion of the sidewall 30A whereupon flaps 62A and 64A are first folded in position followed by flaps 65A and 63A with flap 63A being folded in position last. The adhesive material 81A holds the flaps together in a substantially fluidtight manner.

The sidewalls 30A—33A of the carton 25A are also made of a flexible material and upon placing a product within the carton 25A, see FIG. 11, the sidewalls are expanded outwardly so that the retaining ledges 78A are arranged in a substantially horizontal plane with the top edges 40A of each sidewall 30A—33A being arranged in a horizontal plane positioned above the plane of the retaining ledges 78A.

As described above, each carton 25A is easily assembled from its blank 52A and held together by suitable adhesive means and the upwardly and outwardly flaring configuration of each carton 25A is such that a plurality of such cartons may be easily stacked in nested relation as illustrated in FIG. 10. In some applications of this invention where the blank 52A has a moisture impervious material such as metallic foil suitably laminated in position to define its inside surface a liner membrane also made of moisture impervious material may be sealed in position against the bottom wall utilizing any suitable known technique whereby a liquid product may be packaged and sold in the carton 25A. It will also be appreciated that the sidewalls 30A—33A may be easily flexed outwardly by a product within the carton 25A causing the top arcuate edges 40A thereof to be arranged in a circular path in a substantially horizontal plane whereby a top closure 84A may be easily fastened on the carton 25A.

As illustrated in FIG. 11, the exemplary carton 25A has a sealed bag 85A made of a moisture impervious material inserted therein and such bag may be filled with a product, such as cottage cheese, for example, whereby upon placing the bag 85A within the carton 25A the cottage cheese will cause the sides of the bag 85A to expand outwardly against the sidewalls 30A—33A to define a top circular opening 34A in the carton 25A having a diameter 35A which is greater than a diagonal 36A across the rectangular bottom wall 26A, see FIG. 9. The top closure 84A for the carton 25A comprises a lid having a substantially cylindrical wall 86A adapted to be received within the top portion of carton 25A and against the inside surface of its sidewalls 30A—33A.

The cylindrical wall 86A has an annular bead 90A adjacent the lower portion thereof and the bead 90A has a diameter as indicated at 91A which is larger than the inside diameter of the carton 25A measured at the positions of the retaining ledges 78A. The bead 90A is particularly adapted to engage each of the hinged flaps 77A causing each flap 77A to move outwardly as seen at 92A in FIG. 13 so that the top edge of the bead 90A is locked beneath the retaining ledges 78A defined in the sidewalls of the carton 25A. The bead 90A may be defined by bulging an annular portion of the cylindrical wall 86A outwardly to define an outwardly convex projection as viewed in cross section.

The cylindrical wall 86A also has a substantially cylindrical extension 93A arranged above the annular bead 90A and over the top edge, also designated by the numeral 40A, of the carton 25A and has a downwardly extending skirt portion 96A the bottom edge of which is arranged beneath the retaining ledges 78A. The lid 84A is easily fastened in position by relatively moving such lid and filled carton 25A toward each other and the inward movement is limited by an integral downwardly opening arcuate transition section 100A, as viewed in cross section, arranged between a top portion 93A of the cylindrical wall 86A and the depending skirt portion 96A of lid 84A which is normally arranged outwardly of the carton 25A with the lid inserted in position.

The lid 84A has a plurality of strengthening ribs 102A provided as an integral part thereof and each extending radially outwardly from a central integral hub portion 103A. The ribs

102A provide added strength and rigidity for the lid 84A and hence for the top of the carton 25A upon placing a product within such carton. The top closure 84A may also be provided with a sheetlike insert 104A of circular peripheral outline which is adapted to be snap fitted in position on the lid 84A.

As previously indicated, the annular bead 90A is arranged so that it extends in a single plane and the outwardly convex configuration thereof is defined by forming or bulging cylindrical wall 86A radially outwardly. During the forming process an inwardly concave annular surface 105A of circular peripheral outline is also formed in the wall 86A. The sheetlike insert 104A is particularly adapted to be snap fitted within the annular surface 105A to hold such insert in position and the insert may be easily pried off by wedging an object between the outer edge of the insert 104A and the lid 84A. The insert 104A provides greater rigidity for the top closure 84A, enables vertical stacking of a plurality of filled and closed cartons 25A, and provides an expendable member which may have identification means such as identification for the contents of the carton 25A and price information contained thereon.

As will be apparent from FIG. 13 of the drawings, the integral annular bead 90A of lid 84A causes portions of the sidewalls of the carton 25A arranged between each pair of U-shaped cut 75A to bulge slightly outwardly as illustrated at 110A. However, such bulging is not sufficient to cause tearing of the paperboard material from which the carton 25A may be made and it will also be appreciated that the outside diameter of the annular bead 90A is closely correlated with the inside diameter of the carton 25A immediately beneath the retaining ledges 78A to assure the carton will not be torn.

The lid 84A may be made of any suitable material, such as metallic foil containing aluminum, and its central hub 103A and ribs 102A may be provided as an integral part thereof. Once the lid 84A has completed its usefulness as a top closure for the carton 25A it may be used as a coaster for supporting a beverage glass, for example, inasmuch as once the insert 104A has been removed the top surfaces of the ribs 102A and the top surface of the hub 103A are arranged in a horizontal plane. The areas between ribs 102A define normal reservoirs that may contain condensation from a beverage container or may contain spilled beverage; and the lower edges 111A of the ribs 102A are also arranged in a horizontal plane and are of a sufficient diameter 112A to provide a stable support for articles placed on the member 84A.

It may be desired to utilize a carton similar to the cartons 25 and 25A without providing any cuts in the upper portion of such carton. Further, it may be desired to provide such similar carton, designated by the reference numeral 25M, with a top closure capable of being fastened in position in a fluidtight manner and such a top closure is illustrated in FIGS. 14 through 21 of the drawings and designated by the reference numeral 115. The closure 115 may also be used with a container 116 which has a circular bottom wall and a frustoconical sidewall 122.

With a product within the carton 25M, the upper top portions of its flexible sidewalls bulge outwardly and cooperate to define a substantially frustoconical portion which will be designated by the reference numeral 124. Similarly, inasmuch as the carton 116 has a frustoconical sidewall 122 the upper portion of sidewall 122 is also of a frustoconical configuration and for convenience will also be designated by the reference numeral 124.

The closure 115 comprises a continuous wall 130 of circular cross-sectional outline which in this example of the invention has a substantially frustoconical outer configuration and is adapted to be inserted within a cooperating tubular wall means such as the frustoconical wall portion 124 of either carton 25M or 116.

The frustoconical wall 130 has bead means 131 of roughly sinusoidal or undulating configuration extending outwardly from its outer surface and the sinusoidal bead means provides a continuous fluidtight seal with an associated frustoconical

wall portion 124. The sinusoidal bead means 131 may have any desired total displacement, as indicated at 132, and in this example of the invention such displacement corresponds roughly to the height indicated at 133 of the wall 130.

The top closure 115 may be made of any suitable material and in this example of the invention such top closure is preferably made of metallic foil containing aluminum and hence is made of a material which is yieldable compared to the rigidity of wall portion 124 which assures the provision of a fluidtight seal once it is inserted within the upper portion of an associated carton. The yielding character of the sinusoidal bead 131 is also such that when the closure is made of plastic it may be inserted within a substantially rigid container such as a glass or metallic container to provide a fluidtight seal without the likelihood of damage to the rigid container.

The top closure 115 has a plurality of integral ridge means shown as a central upwardly projecting hublike ridge 135 and a plurality of radially outwardly extending ridges 136 arranged to define a substantially star-shaped pattern as viewed either downwardly toward the top of the closure 116 as seen in FIG. 16 or as viewed upwardly as seen in FIG. 17 and such star-shaped pattern is designated generally by the reference numeral 139 in FIG. 16. The surfaces defining the star-shaped pattern provide a maximum number of light-reflecting surfaces for optimum aesthetic appeal and also assure that a potential viewer approaching the closure 115 with such closure arranged either at eye level or below eye level will be attracted by light reflecting from such light-reflecting surfaces. The closure 115 also cooperates with reflective surfaces of adjacent cartons to attract a potential viewer to the closure, and hence the carton and the product within the carton. The integral ridges 135 and 136 also provide added strength and rigidity for the closure 115 and hence added strength and rigidity for the carton on which it is used. Furthermore, the terminal ends of the ridges 136 are designed to blend smoothly with the sinusoidal bead 131 to provide a sliding track function to guide the lid into centered position and expand the wall portion 124 of the carton to its maximum area.

The closure 115 is particularly useful in providing a fluidtight seal for a container made of a tearable material such as paperboard or the like. This result is achieved because sealing contact between the bead 131 and the inside surface of the associated carton is made in an undulating path which is defined by the sinusoidal configuration of the bead means.

The sinusoidal bead 131 engages different portions of its associated carton and causes the frustoconical portion 124 of its carton to bulge outwardly at locations which are arranged in an infinite number of horizontal planes. In particular, it will be seen from FIG. 19 of the drawings that each top portion 140 of the sinusoidal bead 131 engages the associated frustoconical portion 124 at a location indicated at 141. Similarly, as seen in FIG. 20, each bottom portion 143 of the sinusoidal bead 131 engages the lower portion of the frustoconical portion 124, as indicated at 144. Thus it is seen that the top portions 140 of the sinusoidal bead 131 are arranged in a substantially horizontal plane and engage the associated wall portion 124 in a corresponding horizontal plane. Similarly, the bottom portions 143 are also arranged in a substantially horizontal plane and engage the associated wall portion in a corresponding horizontal plane.

Each portion of the sinusoidal bead 131 arranged intermediate points 140 and 143 engages associated portions of the tubular wall 124 in an inclined path whereby the tubular wall portion 124 cannot be extended outwardly in a continuous circle arranged in a given plane. The sealing contact as described above results in the formation of substantially straight sections or facets in the wall portion 124 between immediately adjacent portions of the bead 131 and typical facets are illustrated at 146 and 150 in FIG. 21. From the above description, it will be appreciated that the sinusoidal configuration of the bead means 131 assures the provision of optimum sealing contact in a continuous uninterrupted path yet without providing undue stress concentration in any given horizontal plane.

The closure 115 has an annular ledge 151 extending peripherally therearound which is particularly adapted to prevent such closure from being pushed too far into its associated carton. The ledge 151 may extend substantially horizontally outwardly from the top edge of the frustoconical wall 130 or may have a downwardly hooking end 152 so as to define an annular recess 153 extending peripherally around such wall. The recess 153 is particularly adapted to receive the upper end edge of a tubular wall portion 124 of an associated carton and thereby facilitate crimping the closure in position to assure tightness and a tamper-proof condition.

The closure 115 may be simply and economically formed using a dead fold material such as aluminum foil and utilizing cooperating male and female die means wherein a sheetlike blank of the metallic foil is inserted between the cooperating die means and a controlled pressure applied thereagainst to define the closure 115.

The closure 115 may be used as a coaster inasmuch as the top surfaces of the radial projections 136 and the top surface of the central hub 135 are arranged in a common plane with the areas indicated at 154 between projections 135 and 136 defining reservoirs which are capable of collecting condensation or spilled fluid from an associated beverage container, or the like. In using the closure 115 as a coaster the lower portions 155 of the projections 136 define a stable supporting base having a diameter 156.

If desired, the closure 115 may also be provided with a sheetlike insert 160 shown by dotted lines in FIG. 14 of the drawings and such sheetlike insert may be initially utilized to provide added strength and rigidity for the top closure 115 and may also serve as a detachable insert which may contain identification means such as advertising, pricing, and the like.

While present exemplary embodiments of this invention, and methods of practicing the same, have been illustrated and described, it will be recognized that this invention may be otherwise variously embodied and practiced within the scope of the following claims.

**I claim:**

1. A carton comprising, a rectangular bottom wall, a plurality of flexible upwardly and outwardly diverging sidewalls foldably connected to said bottom wall, a fastening flap extending outwardly from one of said sidewalls and fastening said one sidewall to an associated adjoining sidewall, and an extension flap extending from each of said sidewalls, said extension flaps being foldably fastened into a common plane to define said bottom wall, said sidewalls having lower edge portions fastened to the peripheral edge of said bottom wall and having cooperating arcuate top edges, said sidewalls being easily flexed outwardly upon placing a product within said carton to define a substantially circular opening at the top of said carton having a diameter which is larger than a diagonal across said rectangular bottom wall, said outwardly flexed sidewalls causing said cooperating arcuate top edges to be moved into a common plane to enable better sealing of a top closure thereagainst.

2. A carton as set forth in claim 1 and further comprising a plurality of substantially downwardly concave cuts in said sidewalls adjacent the top edge of said carton, said cuts being adapted to fasten an associated cover means on said carton.

3. A carton as set forth in claim 1 and further comprising a plurality of substantially downwardly concave U-shaped cuts in said sidewalls adjacent the top edge of said carton, each of said U-shaped cuts defining a hinged flap which is adapted to be pushed outwardly to receive a peripheral projection comprising a top closure for said carton to thereby hold said top closure in a closed position.

4. In combination: a carton and a top closure for said carton, said carton comprising a bottom wall and a plurality of flexible upwardly and outwardly diverging sidewalls having lower edge portions fastened to the peripheral edge of said bottom wall and having cooperating arcuate top edges, said sidewalls being easily flexed outwardly upon placing a product within said carton or forced out by portions of said top closure

causing said cooperating arcuate top edges to be moved into a common plane to define a substantially circular opening at the top of said carton having a diameter which is larger than a diagonal across said rectangular bottom wall, and said top closure being fastened over said circular opening and in substantially sealed relation against the coplanar top edges.

5. A combination as set forth in claim 4 in which said plurality of flexible sidewalls comprise a plurality of four flexible sidewalls with one of said sidewalls having a fastening flap extending outwardly therefrom and fastening said one sidewall to an associated adjoining sidewall and said carton further comprising extension flaps extending from said sidewalls and being foldably fastened into a common plane to define said bottom wall.

6. A combination as set forth in claim 4 in which said carton further comprises a plurality of substantially downwardly concave cuts in said sidewalls adjacent the top edge of said carton with each cut defining a hinged flap, and said top closure comprises a cover sheet made of a dead fold material adapted to be blanketed over said carton with portions thereof pushed beneath associated edge portions of each associated sidewall exposed by pushing each associated hinged flap inwardly.

7. A combination as set forth in claim 6 in which said cover sheet comprises metallic foil which is easily folded and fastened in position yet provides adequate strength enabling vertical stacking thereon of a plurality of similar cartons each containing an associated product.

8. A combination as set forth in claim 4 in which said carton further comprises a plurality of substantially downwardly concave cuts in said sidewalls adjacent the top edge of said carton with each cut defining a hinged flap and a retaining ledge in the associated sidewall at the swinging end of each flap, said top closure comprises a lid having a substantially cylindrical male wall adapted to be inserted within the top portion of said carton, said cylindrical wall having an annular sealing bead means thereon which increases the outside diameter of said cylindrical wall so that it is larger in diameter than the inside diameter of said carton measured adjoining said retaining ledges, and said bead means causing each of said hinged flaps to be moved outwardly so that the top edge of said bead means is locked beneath the retaining ledges in said sidewalls.

9. A combination as set forth in claim 8 in which said downwardly concave cuts comprise a plurality of downwardly concave substantially U-shaped cuts each having a bight and a pair of downwardly extending legs and upon expanding said sidewalls outwardly the bights of said U-shaped cuts and the retaining ledges are arranged in a substantially horizontal plane causing said annular bead means to be fastened in position in said horizontal plane.

10. A combination as set forth in claim 8 in which said bead means is defined by bulging an annular portion of said cylindrical wall outwardly to define an outwardly convex projection as viewed in cross section.

11. A combination as set forth in claim 8 in which said cylindrical wall has a cylindrical extension which extends above said bead means, over the top edge of said carton, and downwardly around the outer top edge portion of said carton to define a skirt having a bottom edge arranged beneath said retaining ledges.

12. A combination as set forth in claim 8 in which said bead means is defined by bulging an annular portion of said cylindrical wall outwardly to define an outwardly convex projection as viewed in cross section, said annular portion having an inwardly concave annular surface defined therein upon forming said bead means, said lid having strengthening ribs extending radially inwardly from said cylindrical wall, and further comprising a circular sheetlike insert snap fitted in said inwardly concave annular surface, said ribs providing added strength and rigidity for said carton and said insert enabling easier vertical stacking of a plurality of closed cartons.

13. A combination as set forth in claim 4 in which said top closure comprises a lid having a continuous wall of circular cross-sectional outline adapted to be inserted within the inside

surface of said sidewalls said wall having bead means of roughly sinusoidal configuration extending outwardly from its outer surface, and said sinusoidal configuration enabling a tight seal between the top of said carton and said lid with minimum likelihood of tearing due to sealing contact being made in an undulating path defined by said sinusoidal configuration of said bead means.

14. A combination as set forth in claim 13 in which said continuous wall has an annular ledge which includes a downwardly hooking end, said ledge being adapted to engage the top edge of said carton to prevent said lid from being pushed too far within said carton and said downwardly hooking end enabling said closure to be crimped in position.

15. A combination as set forth in claim 13 in which said lid has a plurality of integral ridge means which provide added strength and rigidity therefor and facilitate attachment thereof.

16. A combination as set forth in claim 13 in which said lid has a top surface made of metallic foil containing aluminum and has a plurality of integral ridge means comprising said top surface, said ridge means serving the dual purpose of providing added strength and rigidity for said lid while defining a plurality of integral light-reflecting surfaces which serve to attract a viewer's attention to said carton.

17. A combination as set forth in claim 13 in which said continuous wall has an annular ledge adapted to engage the top edge of said carton to prevent said lid from being pushed too far within said carton and further comprising a removable disclike insert fastened against inside surface means of said continuous wall beneath said annular ledge, said insert providing greater strength and rigidity for said lid and providing removable identification means for the contents of said carton.

18. A closure for tubular substantially smooth inside wall means, said closure comprising, a substantially continuous male wall adapted to be received within said tubular wall means, said continuous wall having bead means of roughly sinusoidal configuration extending outwardly from its outer surface, and said sinusoidal bead means providing a continuous seal which extends in an undulating path defined by its sinusoidal configuration.

19. A closure as set forth in claim 18 in which said bead means is made of a yieldable material assuring the provision of a fluidtight seal.

20. A closure as set forth in claim 18 in which said tubular wall means comprises a substantially frustoconical wall means made of a tearable material and said continuous wall comprises a cooperating frustoconical wall having said sinusoidal bead means extending outwardly therefrom assuring a tight seal with minimum likelihood of tearing of said tubular wall means due to sealing contact being made in said undulating path.

21. A closure as set forth in claim 18 and further comprising a plurality of integral ridge means on said closure, said ridge means extending substantially completely across said closure

to provide added strength and rigidity therefor and facilitate attachment thereof.

22. A closure as set forth in claim 21 made of metallic foil containing aluminum with said ridge means defining a plurality of integral light-reflecting surfaces capable of reflecting light in a plurality of directions.

23. A closure as set forth in claim 22 in which said ridge means define a substantially star-shaped pattern having an optimum number of light-reflecting surfaces.

24. A closure as set forth in claim 21 in which said continuous wall has an annular ledge which includes a downwardly hooking end, said ledge being adapted to engage the top edge of said carton to prevent said closure from being pushed too far within said tubular wall means and said downwardly hooking end enabling said closure to be fastened tightly in position.

25. A blank being suitably cut and scored and adapted to be assembled to define a resulting carton, said blank being made of a flexible material and comprising, a plurality of sidewalls foldably interconnected along associated side edges thereof, each of said sidewalls having a bottom end which is smaller in width than its top end portion, with each top end portion terminating in an arcuate edge, a plurality of extension flaps each extending from a bottom end of an associated sidewall, said extension flaps being adapted to be fastened together in a common plane to define a rectangular bottom wall for said resulting carton with said resulting carton having its sidewalls arranged in an upwardly and outwardly diverging manner so that upon placing a product within said resulting carton said sidewalls are easily flexed outwardly by said product or an associated top closure causing said arcuate edges to be moved into a common plane to define a substantially circular opening at the top of said resulting carton having a diameter which is larger than a diagonal across the rectangular bottom wall of said carton, and a plurality of substantially U-shaped slits in each of said sidewalls, each of said slits being arranged adjacent an associated arcuate edge and each U-shaped slit opening toward an associated extension flap and defining a hinged flap which is adapted to be moved in a hinged manner to define supporting ledge means capable of locking in position the top closure for said resulting carton.

26. A closure as set forth in claim 18 having a plurality of integral ridge means comprised of a central hublike ridge and a plurality of adjoining radially outwardly extending ridges arranged to define a star-shaped pattern, said ridges providing added strength and rigidity for said closure and facilitating attachment thereof.

27. A closure as set forth in claim 26 wherein said central ridge and said radially extending ridges have top surfaces arranged in a common plane, said radially extending ridges having lower portions providing a stable supporting base upon resting said closure thereon, and said central ridges and radial ridges defining reservoirs therebetween capable of collecting liquid therein, whereby said closure may also be used as a coaster for a beverage glass.