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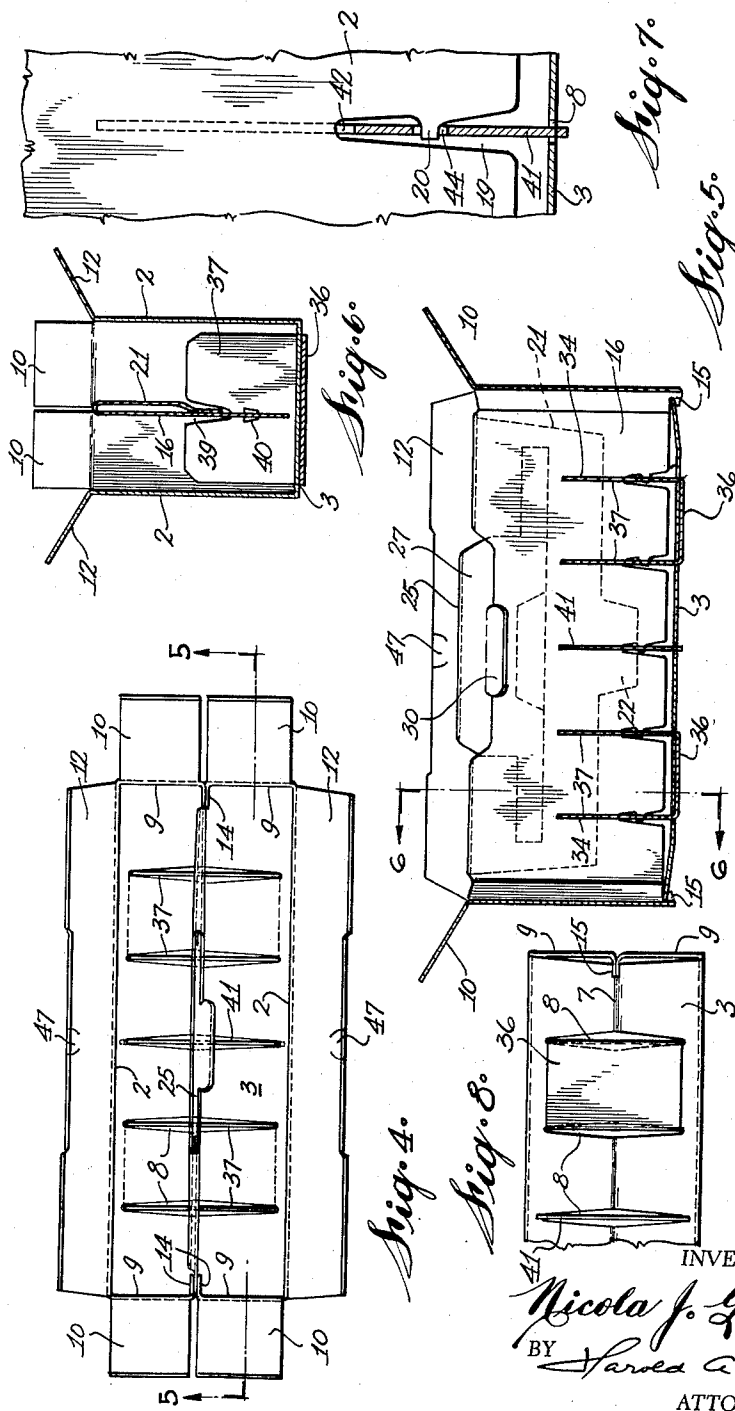
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BEVERAGE CONTAINER PACKAGING CARTON

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BEVERAGE CONTAINER PACKAGING CARTON
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1 Claim. (Cl. 229-28)

This invention relates to cartons for beverage containers.

The packaging of bottled and like beverages for distribution purposes is one of the more costly items involved in the manufacture and sale of beverages and the provision of a carton which will reduce the overall packaging cost while providing a fully satisfactory carton is a major problem in this field.

It is an object of this invention to provide a beverage carton which can be manufactured in a simple and inexpensive manner, which can be erected into container packing position with a reduced amount of time, effort, and inconvenience, which facilitates the packing of beverage containers therein, and which provides increased support and protection for the beverage containers.

The invention will be described with reference to the accompanying drawings, in which:

FIGURES 1, 2 and 3 are plan views of blanks employed in the construction of a carton in accordance with the invention.

FIGURE 4 is a plan view of the carton in erected, open, condition,

FIGURE 5 is a sectional side elevation on line 5-5 of FIGURE 4,

FIGURE 6 is a sectional end elevation on line 6-6 of FIGURE 5,

FIGURE 7 is an enlarged sectional side elevation of a transverse partition detail, and

FIGURE 8 is a partial bottom plan view.

The structure illustrated in the drawings is adapted to be used as a twelve bottle carton but it will be understood that obvious variations may be made therein to provide a six bottle carton.

Referring to FIGURE 1, 1 is a one-piece blank of cardboard, paperboard or the like and comprises two side wall panels 2 connected to each other by a bottom wall panel 3, score lines 4 defining the lines of juncture between the panels and the bottom edges of the side wall panels. The end edges 5 of the bottom wall panel are free and extend from score lines 6 defining the end edges of the side wall panels. Preferably, each end edge 5 is tapered slightly inwardly, as shown, whereby the length of panel 3 at its central axis, as indicated by score line 7, is slightly reduced.

Bottom wall panel 3 is provided with a plurality of uniformly spaced, transversely extending slots 8.

Each side wall panel 2 has at each end thereof an end wall panel portion 9. Each end wall panel portion has a closure flap 10 defined by a score line 11 representing the top edge of such panel portions. Each side wall panel 2 has a closure flap 12 defined by a score line 13 representing the top edge of the side wall panel.

Each of three of the end wall panel portions 9 has a narrow tab 14 extending along its outer edge, each such tab having an inwardly offset shoulder 15 adjacent the bottom edge thereof.

The other end wall panel portion 9 has extending therefrom a longitudinal partition panel 16 having a bottom edge 17 and a top edge 18. Panel 16 is but slightly narrower than and of approximately equal length to each side wall panel 2. Panel 16, as shown, has a shoulder 15 adjoining its bottom edge adjacent panel 9 and corresponding to the aforementioned shoulders 15.

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Panel 16 has a plurality of generally parallel uniformly spaced recesses 19 extending from its bottom edge 17. The edges of each recess preferably flare slightly towards the mouth thereof and on one of such edges there is formed a projecting shoulder 20 which engages or closely approaches the other of such edges.

Panel 16 also has a handle supporting flap 21 extending from its top edge 18. Flap 21 has a centrally disposed tab 22 on its outer edge, such tab being notched at 23. An elongated opening 24 is provided along a score line of juncture 21a between panel 16 and flap 21.

A handle member 25 is shown as formed from the one-piece blank 1. However, it will be apparent that it could be separately formed. As shown, it is joined to the flap 21 along partially severed lines 26 for ready detachment therefrom.

The handle member 25 shown comprises a pair of substantially identical portions 27 joined along a fold line 28 and each having a hand hole 29 therein. A foldable tab 30 extends along a longitudinal edge of each hand hole. One portion 27 has a spaced longitudinally projecting strips 31 extending along the severance lines 26. The other portion 27 has longitudinally projecting strips 32 at the base thereof and an adjoining strip 33. In assembling the handle member, portions 27 are doubled upon each other along fold line 28 with strips 31 overlying strips 32 and adhesively attached to each other. Strip 33 is severed from strips 32 and placed in overlying relation to the latter for reinforcement thereof or strip 33 may be simply doubled upon the strips 32. Strip 33 is adhesively secured to strips 32. Strips 31 may be somewhat longer than strips 32 whereby the end portions thereof project slightly beyond the ends of strips 32 and 33. It will be observed that the tabs 30 will be in engagement with each other and are simultaneously foldable to provide a broadened hand engaging area.

Referring to FIGURE 2, the rectangular blank shown has two substantially identical partition members 34 severable from each other along a partially severed line 35. Each member 34 has a bottom centrally disposed section 36 and two partition sections 37 extending therefrom and defined by score lines 38. Each section 37 has a recess 39, which may be of narrow V-shaped form as shown, extending inwardly from the outer edge thereof. Each section 37 also has an aperture 40, which may be of trapezoidal shape as shown, located directly between the termination of a recess 39 and the score line 38 and in spaced relation to the recess and score line.

Referring to FIGURE 3, the blank shown comprises a generally rectangular partition member 41 having a recess 42 (generally V-shaped as shown) extending from top edge 43 thereof and an aperture 44 (generally trapezoidal in outline as shown) located directly between the termination of recess 42 and the opposite or bottom edge 45 thereof. Member 41 also has a shoulder 46 projecting from each side edge thereof adjoining the bottom edge 45.

In assembling the carton described and referring more particularly to FIGURES 4, 5, 6, 7 and 8, the handle supporting flap 21 is folded along line 21a into overlying relation with panel 16 and the assembled handle member 25 disposed therebetween with the portions 27 projecting through the opening 24 and the strips 31 and 32 underlying the line of juncture 21a. Tab 22 is then adhesively or otherwise secured to panel 16 to retain the handle member in associated relation with the panel 16. It will be apparent that the handle member 25 has a limited range of movement with respect to panel 16 in a direction towards and away from the line of juncture 21a. Thus, in one position, the member 25 may be located entirely between panel 16 and supporting flap 21 with

the outer edge of handle portions 27 disposed below the line of juncture 21a. However, by grasping handle portions 27 through opening 24, the handle member may be pulled outwardly until the strips 31 and 32 engage the fold line 21a, in which position the hand holes 29 are exposed for reception of the hand. FIGURE 5 illustrates the handle member in partially withdrawn position.

The side wall panels 2 then are folded along score lines 4 in parallel relation to each other and perpendicular relation to bottom wall panel 3. The end wall panel portions 9 are folded into coplanar relation and longitudinal partition panel 16 disposed between and in parallel relation to side wall panels 2. The transversely opposed pair of tabs 14 are folded into overlying relation with the adjacent end portion of panel 16, whereby the latter is sandwiched therebetween, and adhesively secured thereto. The other tab 14 is folded into overlying relation with the other end portion of panel 16 and adhesively secured thereto.

It will be apparent that the carton structure thus far described may be fully collapsed, for storage, transportation and handling purposes, in conventional manner, the bottom panel 3 folding upon itself along score line 7 to permit such collapsing.

As previously indicated, the carton particularly illustrated is for reception of twelve containers. Thus, it is necessary to provide five transverse partitions in addition to the longitudinal partition 16 to produce twelve container receiving cells. For this purpose, there is employed a single partition member 41 and two double partition members 34. There are, as shown, five slots 8 in the bottom wall panel 3 for reception of these partition members.

It is contemplated that the carton structure as described, together with the requisite partition members 34 and 41, will be supplied in collapsed condition to the distributor for erection and packaging of the bottled or like beverages.

To facilitate placing of the transverse partition members in position, it is desirable that means be provided for holding the carton structure in erected form. To this end, the shoulders 15 are provided at at least one end of the carton. As shown most clearly in FIGURE 5, when the carton is placed in erected position from collapsed condition (simply by pressing the outer corners towards each other) it may be retained in such position by snapping the end of the bottom wall panel over the shoulders 15. It will be apparent that such retaining means will be effective if provided at only one end of the structure, but that if provided at both ends additional retaining effect results.

Thus, when the actual packaging of the beverage containers is to be performed, the carton structure is placed in erected position and the retaining means actuated to hold it in such position.

The single partition member 41 is then placed in position by inserting it with the top edge 43 in leading relation through the central slot 8. It will be apparent that the recess 42 in member 41 and the corresponding recess 19 in the partition member 16 will permit intermeshing of such members 41 and 16. Engagement of the shoulders 46 with the outer surface of the bottom wall panel 3 defines the mounted position of the member 41. In this position, the shoulder 20 of the corresponding recess enters the aperture 44 to hold the partition in place, as shown in FIGURE 7.

The partition members 34 are now placed in position. Each member 34 is erected by folding the sections 37 along the lines 38 to provide two opposed partitions extending perpendicularly from the bottom section 36. These sections 37 are inserted into two adjacent slots 8 and pushed into mounted position until the section 36

engages the outer surface of bottom panel 3, in which position the respective shoulders 20 enter the corresponding apertures 40 to hold the member 34 in place.

The completed carton is now ready to receive the beverage containers, following which the closure flaps 10 and 12 are folded into closure relation and pasted to each other to complete the packaging step.

The closure flaps 12 are preferably provided with depressable tab portions 47. Thus, when the purchaser receives the filled carton, he inserts his fingers into the carton by depressing the tabs 47 and grasps the edge of the handle member 25 to raise it into an elevated position wherein the handle portions 27 protrude from the top of the carton. The handle may then be employed to carry the carton. Engagement of the projecting strips 31, 32 with the fold line 21a suspends the carton from the handle with sufficient strength to permit safe handling thereof.

It will be observed that an inexpensive carton has been provided which may be employed to package the contents therein in a rapid, convenient manner with a minimum of packaging steps to thus reduce the cost of packaging.

Since the bottom of the carton is constituted by a solid one-piece member fixed to the side wall panels, the strength of the carton is augmented and there is no necessity to bottom seal the carton, thus speeding up the operation of sealing equipment and the bottling lines of the distributor.

The longitudinal partition 16 is held rigidly in position because it is secured to the end wall panels at both ends.

The transverse partition members 34 and 41 require no adhesive attachment and thus can be placed in position quickly and easily.

The separate insertion of the transverse partitions makes it possible to increase the height of such partitions whereby such partitions may extend upwardly to shoulder height with respect to the bottles of beverages thus increasing the protection afforded to the bottles.

I claim:

A beverage container carton structure comprising a one-piece blank having a single rectangular bottom wall panel, a side wall panel extending from each side of said bottom wall panel, a pair of end wall panel portions extending from each end of said side wall panels, and a longitudinal partition member extending from one of said end wall panel portions, each of the other of said end wall panel portions having a tab attachable to said partition member, said bottom wall panel having at least three transversely extending slots therein, and at least three transverse partition members each insertable into one of said slots, each said transverse partition member having a recess for reception of said longitudinal partition member, said longitudinal partition member having a plurality of recesses corresponding in number to said transverse partition members and each for reception of one of said transverse partition members, one of said transverse partition members having shoulders engageable with the outer surface of said bottom wall panel, and at least one pair of said transverse partition members having a common bottom section engageable with the outer surface of said bottom wall panel, said longitudinal partition member having a horizontally directed shoulder projecting into each said recess thereof from one edge of said recess and closely approaching the other edge of said recess, and each said transverse partition member having an aperture for reception of one of said shoulders.

References Cited in the file of this patent

UNITED STATES PATENTS

2,384,076	Cox	Sept. 4, 1945
2,700,486	Arneson	Jan. 25, 1955
2,811,279	Arneson	Oct. 29, 1957
2,850,206	Pasjack	Sept. 2, 1958
2,983,406	Arneson	May 9, 1961