Aug. 3, 1965 M. T. FARQUHAR 3,198,378

BOTTLE CARRIER AND BLANK THEREFOR OR THE LIKE

Filed Oct. 8, 1962 3 Sheets-Sheet 1

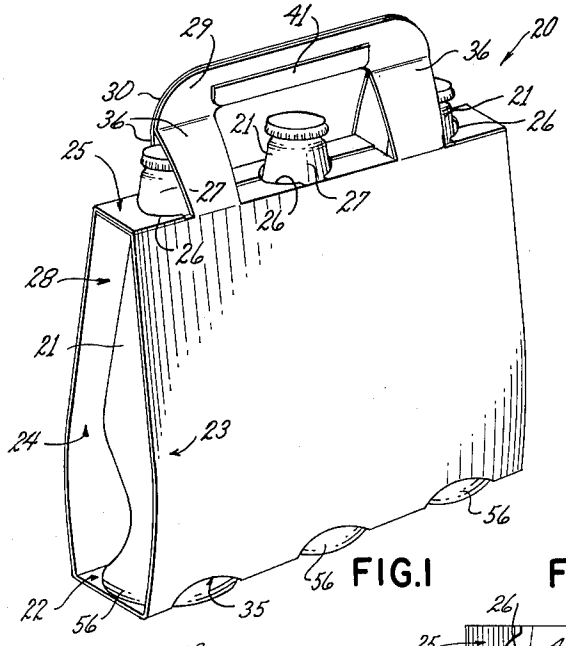


FIG.1

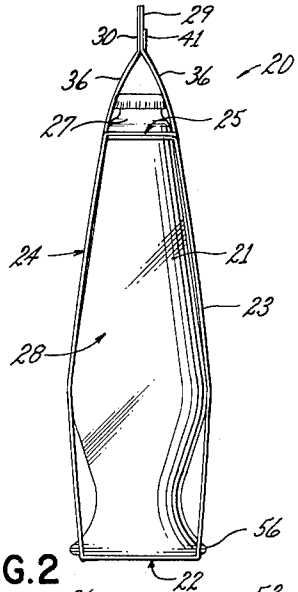


FIG.2

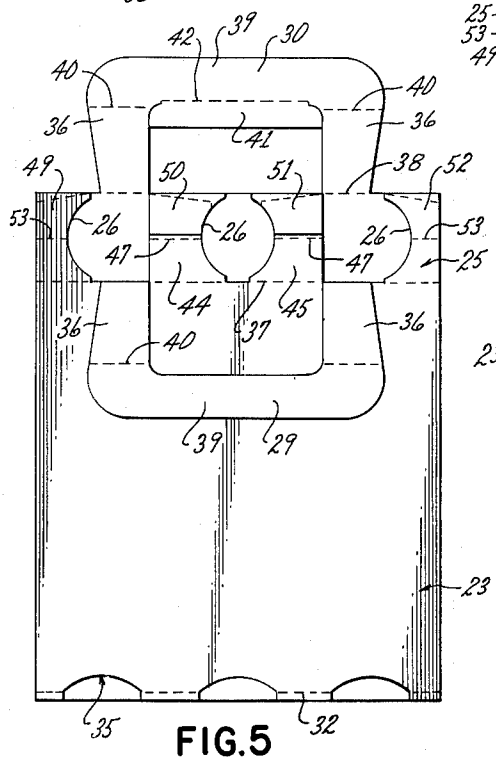


FIG.5

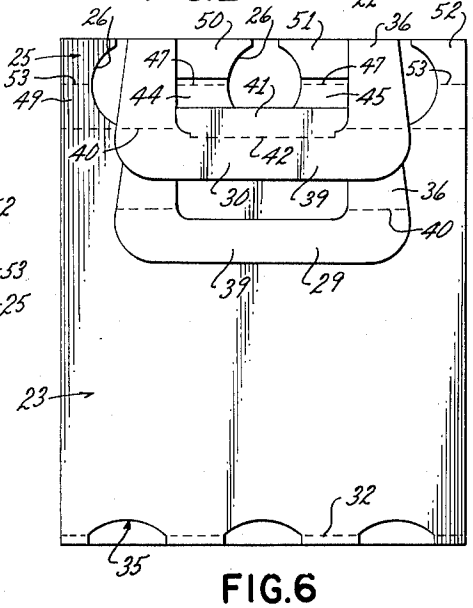


FIG.6

INVENTOR
MELVILLE T. FARQUHAR

BY Glenn, Palmer & Matthews

HIS ATTORNEYS

Aug. 3, 1965 M. T. FARQUHAR 3,198,378

BOTTLE CARRIER AND BLANK THEREFOR OR THE LIKE

Filed Oct. 8, 1962 3 Sheets-Sheet 2

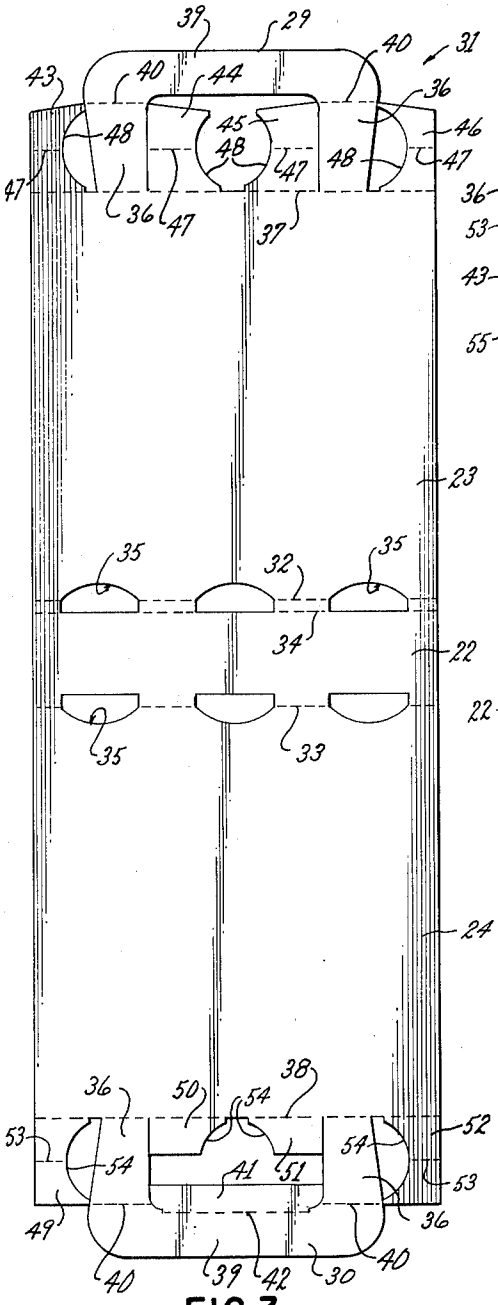


FIG.3

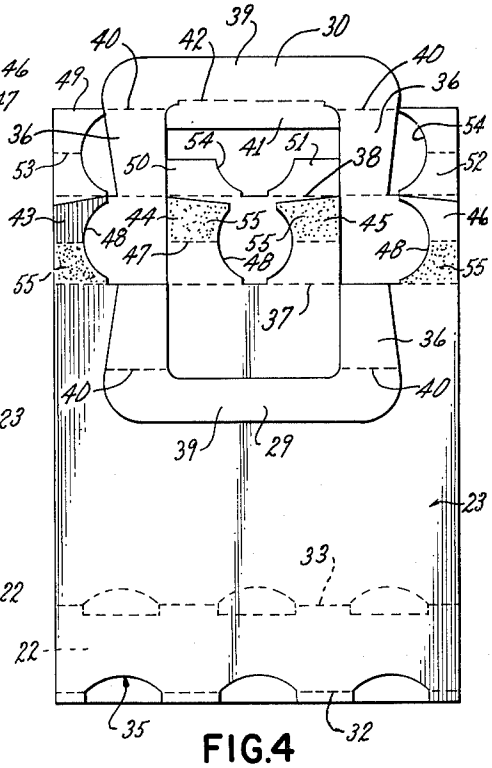


FIG.4

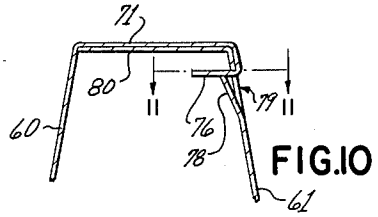


FIG.10

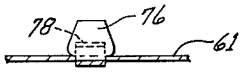


FIG.11

INVENTOR
MELVILLE T. FARQUHAR

BY Glenn, Palmer & Matthews

HIS ATTORNEYS

Aug. 3, 1965 M. T. FARQUHAR 3,198,378

BOTTLE CARRIER AND BLANK THEREFOR OR THE LIKE

Filed Oct. 8, 1962 3 Sheets-Sheet 3

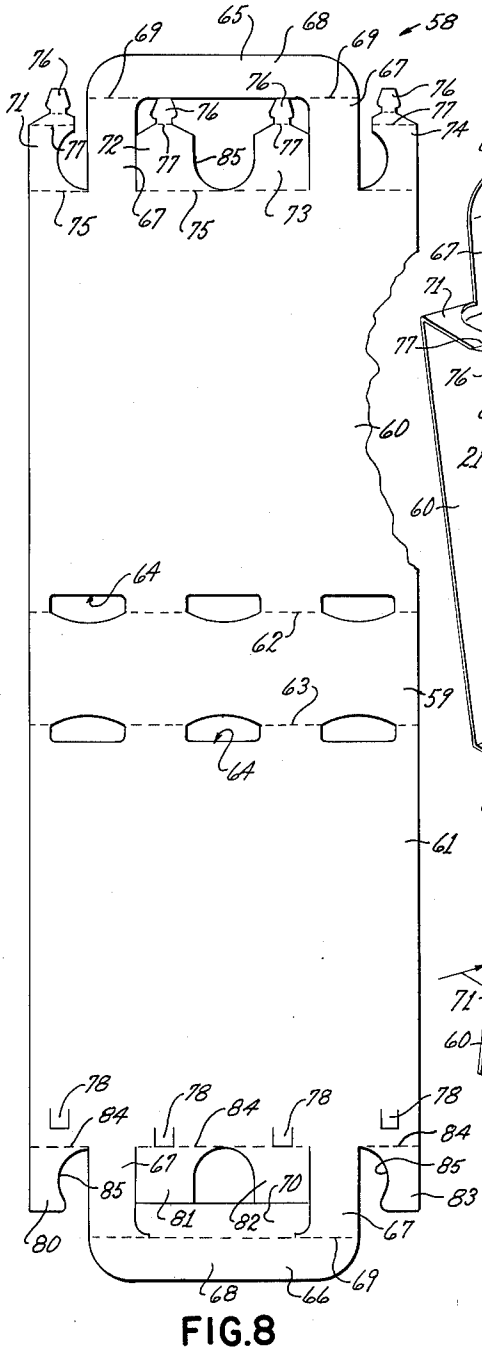


FIG.8

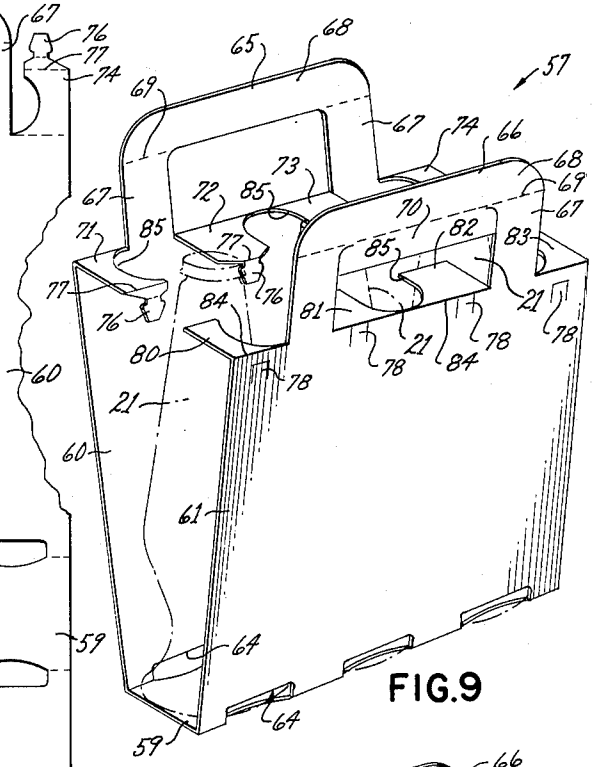


FIG.9

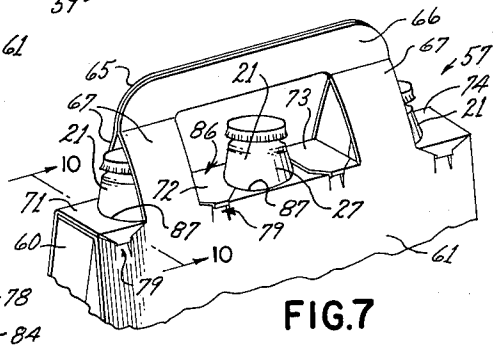


FIG.7

INVENTOR
MELVILLE T. FARQUHAR

BY Glenn, Palmer & Matthews

HIS ATTORNEYS

United States Patent Office 3,198,378 Patented Aug. 3, 1965

3,198,378

BOTTLE CARRIER AND BLANK THEREFOR OR THE LIKE

Melville T. Farquhar, Bon Air, Va., assignor to Reynolds Metals Company, Richmond, Va., a corporation of Delaware

Filed Oct. 8, 1962, Ser. No. 228,877
2 Claims. (Cl. 220—108)

This invention relates to an improved container or the like for carrying beverage bottles or the like as well as to an improved blank for forming such a container or the like.

It is well known that various cardboard containers and the like have been provided for carrying various sized beverage bottles, such as beer bottles or the like.

However, since such beverage containers are normally manufactured by one manufacturer and are sent to the bottling plant to have the bottles placed therein, it is highly desirable that the bottler perform a minimum number of operations on the containers to reduce his handling costs thereof.

Further, it is desirable that the bottler utilize such beverage containers without requiring expensive gluing apparatus and the like at the bottling plant.

One of the features of this invention is to provide such a beverage container wherein the bottler need perform only a minimum of operations thereon and wherein gluing apparatus can be eliminated at the bottling plant.

Another feature of this invention is to provide an improved beverage container which not only permits the same to carry the desired beverage bottles or the like but which is also attractive in design to enhance the sales appeal of the packaged beverage bottles.

Accordingly, it is an object of this invention to provide an improved container having one or more of the novel features set forth above or hereinafter shown or described.

Another object of this invention is to provide an improved blank for forming such a container or the like.

Other objects, uses and advantages of this invention are apparent from a reading of this description, which proceeds with reference to the accompanying drawings forming a part thereof and wherein:

FIGURE 1 is a perspective view of one of the improved containers of this invention.

FIGURE 2 is an end view of the container illustrated in FIGURE 1.

FIGURE 3 is a plan view of an improved container blank for forming a container of FIGURE 1 of this invention.

FIGURE 4 is a view similar to FIGURE 3 and illustrates one of the assembly steps in forming the blank of FIGURE 3 into the container of FIGURE 1.

FIGURE 5 is a view similar to FIGURE 4 and illustrates another assembly step.

FIGURE 6 is a view similar to FIGURE 4 and illustrates the final assembly step wherein the container of FIGURE 1 is disposed in a flat compact shipping and storing condition.

FIGURE 7 is a fragmentary perspective view illustrating another container of this invention.

FIGURE 8 is a plan view illustrating a container blank of this invention for forming the container of FIGURE 7.

FIGURE 9 is a perspective view illustrating one of the assembly steps in forming the container of FIGURE 7 from the blank of FIGURE 8.

FIGURE 10 is an enlarged, fragmentary, cross-sectional view taken on line 10—10 of FIGURE 7.

FIGURE 11 is an enlarged, fragmentary, cross-sectional view taken on line 11—11 of FIGURE 10.

While the various features of this invention are hereinafter described and illustrated as being particularly adaptable for carrying beverage bottles or the like, it is to be understood that the various features of this invention can be utilized singly or in any combination thereof to provide containers for other articles as desired.

Therefore, this invention is not to be limited to only the embodiments illustrated in the drawings, because the drawings are merely utilized to illustrate one of the wide variety of uses of this invention.

Referring now to FIGURE 1, an improved container of this invention is generally indicated by the reference numeral 20 and is adapted to carry a plurality of beverage bottles 21.

The container 20 generally comprises a bottom wall means 22, a pair of opposed side wall means 23 and 24 respectively hingedly secured to the bottom wall means 22 and a top wall means 25 interconnected to the opposed side wall means 23 and 24 having a plurality of openings 26 passing therethrough and respectively receiving neck portions 27 of the bottles 21 disposed in a bottle-receiving compartment 28 defined by the wall means 22, 23, 24 and 25.

A pair of substantially U-shaped handles 29 and 30 are respectively hingedly secured to the side wall means 23 and 24 and extend upwardly from the top wall means 25 to provide means for readily grasping and carrying the container 20.

As illustrated in FIGURES 1 and 2, it can be seen that the bottom wall means 22 of the container 20 is substantially wider than the top wall means 25 thereof, whereby the side wall means 23 and 24 thereof substantially conform to the configuration of the bottles 21 to give a "pocketbook" effect to the completed container construction 20 of this invention.

In this manner, the container 20 of this invention not only serves the useful purpose of carrying and storing the beverage bottles 21, but also the container construction 20 of this invention readily permits the bottles 21 to be viewed from the ends thereof and attractively displays the bottles 21 to enhance the eye appeal and merchantability of the bottles 21.

While the container construction 20 of this invention can be formed in any suitable manner and of any suitable material, the embodiment thereof illustrated in the drawings is formed from a substantially rectangular blank 31, FIGURE 3, formed of cardboard or the like and having the exterior surface thereof suitably decorated, such as being covered by a sheet of aluminum-containing metallic foil or the like.

As illustrated in FIGURE 3, the container blank 31 is suitably cut and scored to define the bottom wall means 22 hingedly secured to the side wall means 23 and 24 at score or fold lines 32 and 33.

The bottom wall means 22 of the blank 31 is provided with another longitudinally disposed score or fold line 34 for a purpose hereinafter described, the fold line 34 being disposed a distance from the fold line 33 substantially equal to the width of the top wall means 25.

The junctures of the side wall means 23 and 24 with the bottom wall means 22 are respectively provided with die cut slot means 35 for a purpose hereinafter described.

The U-shaped handles 29 and 30 respectively have the legs 36 thereof foldedly connected to the outer free edges of the side wall means 23 and 24 at score or fold lines 37 and 38.

The legs 36 of the handles 29 and 30 are respectively foldedly connected to the cross members 39 thereof at fold or score lines 40.

An interlocking handle flap 41 is foldedly connected to the cross member 39 of the handle 30 at a score or fold line 42 for a purpose hereinafter described.

A plurality of lower flap means 43, 44, 45 and 46 are foldedly connected to the outer free edge of the side wall means 23 at the score or fold line 37, the flap means 43 and 46 being identical while the flap means 44 and 45 are identical and are respectively carved from the handle 29.

The lower flap means 43–46 are respectively medially foldable on score or fold lines 47 for a purpose hereinafter described and respectively have arcuate die cuts 48 for a purpose hereinafter described.

A plurality of upper flap means 49, 50, 51 and 52 are respectively foldably connected to the outer free edge of the side wall means 24 at the score or fold line 38, the flap means 49 and 52 being substantially identical, while the flap means 50 and 51 are substantially identical and are respectively carved from the handle 30.

The upper flap means 49 and 52 are respectively medially foldable along score or fold lines 53 and the flap means 49–52 respectively have arcuate die cuts 54 for a purpose hereinafter described.

Therefore, it can be seen that the container blank 31 of this invention can be formed by a simple die cutting and die scoring operation or the like.

When it is desired to form the container construction 20 from a container blank 31 of this invention, the lower half of the container blank 31 illustrated in FIGURE 3 can be folded behind the upper half thereof in the manner illustrated in FIGURE 4 by folding the blank 31 on the score or fold line 34, whereby the score or fold line 38 of the side wall means 24 is placed adjacent the upper free edges of the flap means 43–46.

After the blank 31 has been disposed in the position illustrated in FIGURE 4, the handle 29 is folded back against the side wall means 23 and glue or any other suitable adhesive 55 is placed on the lower flap means 43–46 in the areas indicated in FIGURE 4.

Subsequently, the upper flap means 49–52 are folded over the lower flap means 43–46 in the manner illustrated in FIGURE 5 to interconnect the set of flap means 43–46 and 49–52 together to form the top wall means 25 of the container 20.

Thereafter, the handle 30 can be folded downwardly against the folded blank 31 in the manner illustrated in FIGURE 6, whereby the completed and collapsed container construction 20 forms a substantially rectangular configuration which can be readily shipped and stored in its compact flat collapsed condition.

When the bottler receives the collapsed container 20 as illustrated in FIGURE 6, the bottler can erect the container construction 20 by refolding the bottom wall means 22 on the score or fold line 32 to form the bottom wall means 22 having a width greater than the width of the top wall means 25 thereof.

Thereafter, the bottler can insert the bottles 21 in the bottle receiving compartment 28 of the erected container construction 20 and cause the neck portions 27 of the bottles 21 to project outwardly through the substantially circular openings 26 thereof defined between the interconnected flap means 43–46 and 53, 49–52, the flap means 43–46, 49 and 52 readily folding at the score lines 47 and 52 to facilitate insertion of the bottles 21 into the compartment 28.

The handle portions 29 and 30 can be interconnected together by folding the interlocking flap 41 of the handle 30 around the handle 29 in the manner illustrated in FIGURES 1 and 2, whereby the filled container construction 20 is now completed and can be merchandised in the conventional manner.

As illustrated in FIGURES 1 and 2, the bottles 21 have lower rims 56 resting on the bottom wall means 22 and respectively projecting out through the slot means 35 in the container construction 20, whereby the bottles 21 are locked from relative movement in the container 20.

However, it is a relatively simple matter for the ultimate consumer to remove the bottles 21 from the container construction 20.

For example, the ultimate consumer can grasp an end bottle 21 and, by forcing the side wall means 24 and 25 thereof outwardly at the bottom wall means 22 thereof, can slip the rim 56 of the particular bottle 21 out of the slot means 35 to draw the bottle from the compartment 28 as the neck portion 27 thereof is drawn from its respective opening 26.

Therefore, it can be seen that this invention provides an improved container construction 20 for carrying and transporting beverage bottles 21, the container construction 20 being pre-formed by the container manufacturer and the bottler needs no gluing apparatus or the like to utilize the container construction at the bottling plant.

Another container construction of this invention is generally indicated by the reference numeral 57 in FIGURE 7 and is adapted to carry the beverage bottles 21 in a manner similar to the container construction 20 previously described.

The container construction 57 of this invention is adapted to be formed from a substantially rectangular blank 58 illustrated in FIGURE 8 and formed of suitable cardboard or the like having the exterior surface thereof covered with a sheet of aluminum-containing metallic foil or the like.

As illustrated in FIGURE 8, the container blank 58 is suitably cut and scored to define a bottom wall means 59 hingedly secured to a pair of opposed side wall means 60 and 61 at score or fold lines 62 and 63. The junctures of the side wall means 60 and 61 with the bottom wall means 59 are provided with a plurality of slot means 64 for the same purpose as the slot means 35 previously described.

A pair of U-shaped handles 65 and 66 respectively have the legs 67 thereof interconnected to the outer free edges of the side wall means 60 and 61.

The legs 67 of the handles 65 and 66 are respectively interconnected to the cross members 68 at fold or score lines 69, the score line 69 of the handle 66 foldably interconnecting an interlocking flap to the cross member 68 thereof.

A plurality of upper flap means 71, 72, 73 and 74 are respectively foldably connected to the outer free edge of the side wall means 60 at score or fold lines 75.

The flap means 71 and 74 are substantially identical while the flap means 72 and 73 are substantially identical and are carved from the handle 65.

Each of the flap means 71–74 has an interlocking tab 76 foldably connected thereto at a score or fold line 77, the interlocking tab 76 of the flap means 71 and 74 being longer than the interlocking tab 76 of the flap means 72 and 73 for a purpose which will be apparent hereinafter.

The side wall means 61 of the blank 58 has a plurality of rectangular flaps 78 die cut on three sides thereof to define slot means 79 in the side wall means 61 for a purpose hereinafter described, the outer two flap means 78 being disposed inward of the outer free edge of the side wall means 61 while the inner two flap means 78 are disposed adjacent the outer free edge of the side wall means 61 for a purpose that will be apparent hereinafter.

A plurality of lower flap means 80, 81, 82 and 83 are respectively foldably connected to the outer free edge of the side wall means 61 at fold or score lines 84.

The flap means 80 and 83 are substantially identical, while the flap means 81 and 82 are substantially identical and are respectively carved from the handle 66.

Each flap means 71–74 and 80–83 has an arcuate die cut 85 for a purpose hereinafter described.

Therefore, it can be seen that the container blank 58 of this invention can be formed by a simple die cutting and die scoring operation whereby the completed flap blank 58 can be shipped in the flat condition illustrated in FIGURE 8 to the desired bottling plant.

The container blank 58 of this invention is adapted to be erected to form the container construction 57 illustrated in FIGURE 7 at the bottling plant by a relatively simple operation without requiring expensive gluing machines and the like.

In particular, reference is made to FIGURE 9 wherein the bottles 21 are placed on the bottom wall means 59 and the side wall means 60 and 61 are bent at right angles relative thereto, whereby the lower rims 56 of the bottles 21 project outwardly through the slot means 64 to interlock the bottles 21 to the container blank 58.

The lower flap means 80–83 are bent at right angles relative to the side wall means 61, while the upper flap means 71–74 are bent at right angles relative to the side wall means 60 as illustrated in FIGURE 9.

Thereafter, the side wall means 60 and 61 are brought towards each other with the set of flap means 80–83 being disposed under the set of flap means 71–74 in the manner illustrated in FIGURE 7, whereby the interlocking tabs 76 of the flap means 71–74 can be respectively bent on the score lines 77 and forced into the slot means 79 defined by the tabs 78 in the side wall means 61 in the manner illustrated in FIGURES 7, 10 and 11.

In this manner, the upper flap means 71–74 can be detachably interlocked to the side wall means 61 and cooperate with the lower flap means 80–83 to define top wall means 86 of the container construction 57 having substantially circular openings 87 through which the neck portions 27 of the bottles 21 project.

Thereafter, the handles 65 and 66 can be interlocked together by the interlocking flap 70 in the manner previously described for the container construction 20.

Therefore, it can be seen that the container construction 57 can be formed in a relatively simple and rapid manner to permit the bottles 21 to be packaged therein without requiring gluing apparatus and the like at either the container manufacturing plant or the bottling plant.

The ultimate consumer can readily remove the bottles 21 from the container construction 57 in the manner previously described for the container construction 20, or the ultimate consumer can release the upper flaps 71–74 thereof from the side wall means 61 to open the container construction 57 in the manner illustrated in FIGURE 9 to readily remove the bottles 21 therefrom.

While the container construction 57 has been described as being formed from the blank 58 at the same time that the bottles 21 are inserted therein, it is to be understood that the container construction 57 could be first formed and the bottles 21, thereafter, inserted therein, if desired.

Therefore, it can be seen that this invention provides improved container constructions which enhance the eye appeal and merchantability of beverage bottles or the like, as well as providing means for transporting, storing and carrying the same.

Further, this invention provides improved blanks for forming such container constructions or the like.

While the form of the invention now preferred has been disclosed as required by the statutes, other forms may be used, all coming within the scope of the claims which follow.

What is claimed is:

1. A container blank having a bottom wall means, a pair of opposed side wall means respectively hingedly secured to said bottom wall means, a pair of handle means integrally secured to said side wall means, and top wall means hingedly secured to one of said side wall means to be disposed between said handle means, said top wall means being adapted to cooperate with said other wall means to define a bottle-receiving compartment, said top wall means including a plurality of flap means defining openings therebetween to receive neck portions of bottles or the like disposed in said compartment whereby said handle means will extend over said bottles, each said handle means including a U-shaped handle having the legs thereof integrally secured to said one side wall means and having at least one of said flap means carved from said handle.

2. A container blank having a bottom wall means, a pair of opposed side wall means respectively hingedly secured to said bottom wall means, a first set of top flaps hingedly secured to one of said side wall means, and a second set of top flaps hingedly secured to the other of said side wall means, said sets of top flaps being adapted to be secured together to define a rigid top wall means that cooperates with the other wall means to define a bottle-receiving compartment, said top flaps defining a plurality of openings in said top wall means to receive neck portions of bottles or the like disposed in said compartment, and a pair of U-shaped handles respectively having the legs thereof hingedly secured to said side wall means and having some of said flap means carved from said handles.

References Cited in the file of this patent

UNITED STATES PATENTS

1,965,886	7/34	Everhart	220—108
1,995,280	3/35	Everhart	220—108
2,074,477	3/37	Kondolf	229—28
2,112,535	3/38	Kondolf	220—115
2,281,592	5/42	O'Brien	229—28
2,441,134	5/48	Brogden et al.	220—113
2,527,478	10/50	Gray	220—115
2,781,898	2/57	Desmond et al.	206—65
2,798,603	7/57	Grinspoon	206—65
2,849,112	8/58	Forrer	220—112
2,950,041	8/60	Stone	220—108 X
2,993,618	7/61	Kulig	220—112

FOREIGN PATENTS

21,917	12/05	Great Britain
890,068	2/62	Great Britain

GEORGE O. RALSTON, *Primary Examiner.*

FRANKLIN T. GARRETT, *Examiner.*