Dec. 13, 1949 V. FORTUNATO 2,491,039

CARRIER FOR BOTTLES OR LIKE ARTICLES

Original Filed May 26, 1939

Fig. 1.

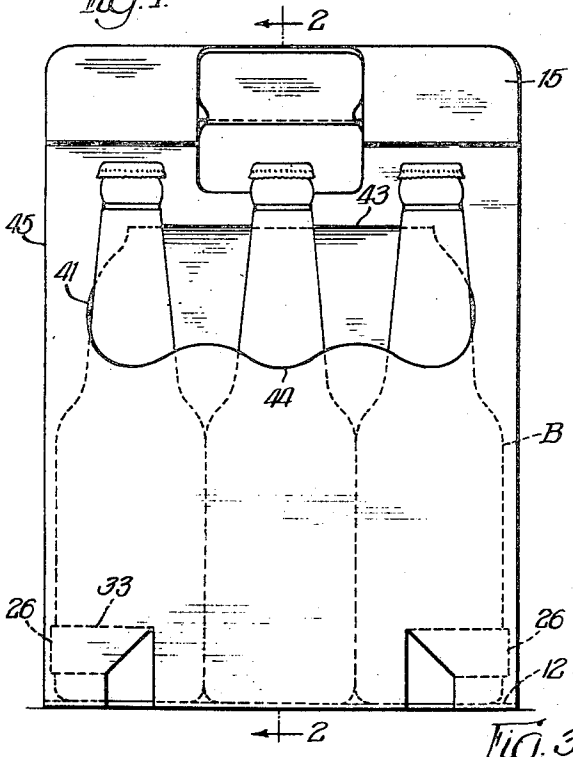


Fig. 2.

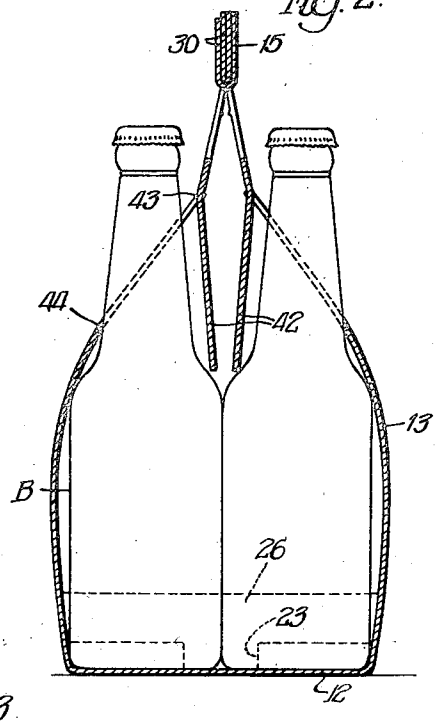


Fig. 3

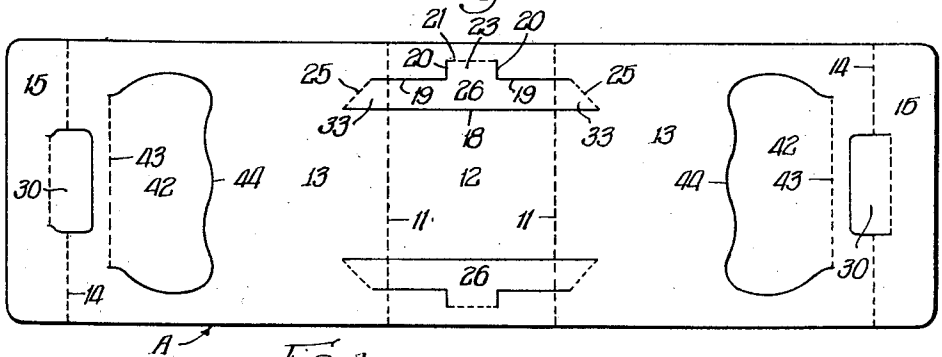
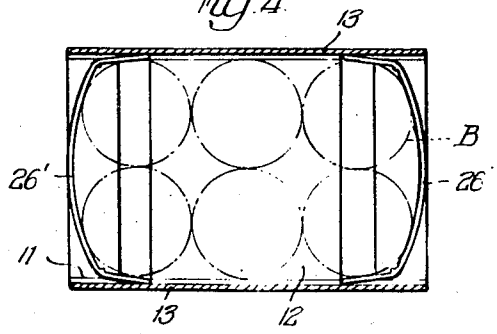


Fig. 4



INVENTOR.
Vincent Fortunato,
BY
Cromwell Greenbaum
Attys.

Patented Dec. 13, 1949

2,491,039

UNITED STATES PATENT OFFICE

2,491,039

CARRIER FOR BOTTLES OR LIKE ARTICLES

Vincent Fortunato, Brooklyn, N. Y., assignor to Morris Paper Mills, Chicago, Ill., a corporation of Illinois

Substituted for abandoned application Serial No. 275,792, May 26, 1939. This application March 20, 1943, Serial No. 479,887

10 Claims. (Cl. 224—45)

1

This invention relates to improvements in carriers or carrier cartons for packaging a plurality of bottles of beverage or similar articles. The present application is a substitute for the copending joint application of Vincent Fortunato and Charles J. Bacon, Serial No. 275,792, filed May 26, 1939, now abandoned.

The primary object of the invention resides in the provision of a cardboard bottle carrier which may be supplied to the user at low cost and employed effectively for the safe carrying of a group of bottles in upright position.

Another object is the provision of a collapsible bottle carrier which may be entirely set up in condition to receive the bottles before the bottles are placed in it, and from which the bottles may be removed without requiring any dismantling, distortion or mutilation of it.

Another object of the invention is to provide a carrier carton in which the weight of the bottles is wholly supported by the bottom and side walls of the carton, and retainer strips or bridge walls are disposed at the open ends of the carton and arranged to permit bottles to be placed very close to the ends of the bottom yet prevent accidental shifting of the lower ends of the bottles off of the ends of the bottom.

A further object of the invention is the provision of a carrier carton for bottle goods which is cut, scored and folded from a single rectangular blank of cardboard or like material with no waste of stock, and with all scores and creases made from the outer side of the blank, whereby the carrier carton is relatively inexpensive of manufacture.

Other features and objects of the invention will be apparent as the following specification is read in conjunction with the accompanying drawings, in which:

Fig. 1 is a side elevational view of my improved bottle carrier in set-up condition and with bottles in it;

Fig. 2 is a transverse sectional view of same such as might be taken on approximately line 2—2 of Fig. 1;

Fig. 3 is a plan view showing this bottle carrier in its completely knocked-down or flat condition; and

Fig. 4 is a horizontal or cross-sectional view illustrating the lower portions of a similar bottle carrier having certain of its features of slightly modified form.

By reference to Fig. 3 of the drawings, it will be seen that the carton is constructed from a single generally rectangular blank A of cardboard

2

or other equivalent material. The blank A is scored or creased for flexing on parallel lines 11 at equal distances from its transverse center or median line, to define a bottom wall forming panel 12 which extends transversely of the blank, and opposed side walls 13—13 extending from opposite side margins of said bottom wall. The blank A is scored inwardly of the ends thereof on the transverse parallel lines 14—14 to provide handle flaps 15—15. Slits 18—18 extend transversely of the bottom wall 12 and across the fold lines 11 and into the side wall panels or sections 13. The slits 18—18 are disposed parallel to and adjacent the longitudinal side edges of the blank A and are suitably spaced therefrom. Outwardly from each slit 18 is a pair of spaced aligned slits 19—19 arranged parallel thereto. The outer ends of the slits 19—19 terminate in the side wall sections short of the ends of slits 18, while their inner ends terminate at equal distances from the longitudinal center of the bottom wall 12 at relatively short slits 20—20 extending at right angles to them toward the adjacent end of the bottom. A crease line 21 connects the outer ends of each pair of slits 20 and therewith defines a foldable connecting web 23. Diagonal crease lines 25—25 connect the respective outer ends of the adjacent slits 18 and 19 and therewith define upwardly foldable retainer strips 26 each of which includes portions lying in and coplanar with the side wall panels 13 and bottom panel 12, respectively. When the blank A is folded to receive the bottles as will be hereinafter explained, the two retainer strips 26 are adapted automatically to assume upstanding positions at right angles to the bottom wall 12 and in spaced relation thereto. Each side wall section with its handle flap 15 is slotted and scored to form a handle opening and handle locking tab 30.

Each side wall 13 is provided with a single opening 41 defined by crease line 43 and slit 44 and capable of accommodating insertion of the intended bottles B, bottom first, individually or two at a time after the side walls have been erected and locked by the hand grip flaps 30. The material displaced by the formation of the opening 41 constitutes a flap 42, and is foldable inwardly on the transverse crease line 43, and when the carton is set up, the flaps 42 extend downwardly between the necks of the two rows of bottles. The bottom edge of the opening 41 is formed with three spaced depressions to facilitate insertion of the bottles. The material at the ends of the openings 41 is shaped to engage the necks of the end bottles of the two rows and coact

with the retainer strips 26 in holding the bottles in contact with each other. As before stated, the carton provided with the openings 41 may be entirely erected before inserting the bottles, for the bottles may be inserted bottom end first through the openings to seat upon the bottom wall 12. The connection of the side walls at the top holds their upper portions in upwardly converging relationship as shown in Fig. 2, so that openings 41 face somewhat upwardly, which facilitates insertion of the bottles through the openings. To remove bottles from this form of carrier carton, it is only necessary to grasp the neck of the middle bottle and lift the same upwardly through the opening 41 without disturbing the interlocking hand grip flaps 30. Thereafter the end bottles may be withdrawn through said opening.

In Fig. 4 is illustrated a slightly modified construction which differs from that above described only in the particular that the medial connecting webs 23 are omitted, the lines 19—19 being continuous along the outer margins of the retainer strips which are here designated 26'.

To set up the blank A to bottle-retaining position, an operator first positions the same upon a flat surface and folds the side walls upwardly on the parallel lines 11—11 to cause the side wall sections 13—13 to assume upstanding positions as shown in Fig. 2. As the blank is folded on the lines 11—11, the side wall sections 13—13 swing toward each other, and this shortening of the distance between them causes the retainer strips 26—26 to swing upwardly at lines 25—25 and 21 and move out of the plane of the bottom and side walls to substantially vertical upstanding positions. They may be aided by hand if desired. By reference to Fig. 3 it will be noted that the lines 11—11 extend transversely of the retainer strips 26 so as to set off foldable connecting webs 33 at the ends of said strips and, as the strips move to their upstanding position, the webs 33 swing outwardly toward the adjacent end of the bottom and fold toward the side wall sections to positions illustrated in Figs. 1 and 2. The side walls 13—13 are then caused to assume an upwardly converging relation and the hand grip flaps 15 are brought together. With the hand grip flaps in flat abutting engagement, the operator folds either of the flaps 30 through the hand opening of the juxtaposed flap 15, after which the two flaps 30 are folded upwardly to clear the aligned hand openings 34. The fold of the outermost folded flap 30 provides a rounded edge which permits the loaded carrier carton to be grasped and carried with comfort. The retainer strips 26—26 are relatively narrow so as to leave the carrier carton substantially open at its ends, but they hold the base ends of abutting bottles in engagement with one another and against sliding off the ends of the bottom. After removal of the bottles the empty carrier carton may be kept by the consumer and the empty bottles replaced therein for return to the place of purchase.

From the foregoing description, it will be seen that I have provided a carrier carton for bottled goods which can be constructed as a single unitary structure of simple form and without waste of material and which may be completely erected before any of the bottles are placed in it and in which the bottles are inserted in upright position; and which, moreover, permits removal and replacement of the bottles without involving any dismantling or distortion of the carrier, thus contributing to both the safety of the bottles and the durability of the carrier.

I claim:

1. A carrier formed from a foldable paperboard blank, scored and cut to provide a handle portion, a pair of upwardly extending and oppositely disposed side panels, a bottom panel connecting the bottom edges of the side panels, and a substantially straight retaining element located adjacent each free edge portion of the bottom panel, each retaining element being formed of material of the blank and extending across the bottom panel to the side panels and terminating along diagonal fold lines extending downwardly and outwardly in the side panels whereby each retaining element is adapted to swing outwardly into a plane at a right angle to the bottom panel, for engaging flatly against the sides of an article held by the carrier.

2. A carrier formed from a foldable paperboard blank cut and creased to provide a bottom panel and a pair of oppositely disposed side panels connected at their lower edges to opposite lateral margins of the bottom panel and formed to provide a handle at their upper ends, and a retaining element located adjacent each end portion of the bottom panel, each retaining element being formed of material within the blank and extending across the bottom panel and into the side panels and terminating at diagonal fold lines extending downwardly and outwardly in the side panels, whereby each retaining element is adapted to swing upwardly and outwardly from the bottom panel to a position where its faces stand at approximately right-angular relationship to the plane of the bottom panel in position to engage against the upright sides of bottles standing on the bottom panel.

3. A carrier as specified in claim 2 and wherein the retaining elements are provided with flexible tongues connecting them to the bottom panel approximately midway between the side panels.

4. A carrier as specified in claim 2 and wherein the retaining elements have end portions adapted to be folded to lie against inner surfaces of the proximate side panels.

5. A carrier as specified in claim 2 and wherein the retaining elements are of a length such as to bow outwardly to positions adjacent the proximate end margins of the bottom panel.

6. A carrier as specified in claim 2 and including means for holding the upper terminal portions of the side panels together and the side panels are provided in their upper portions with apertures through which bottles may be inserted to standing positions on the bottom panel between the retaining elements.

7. In a collapsible article carrier of the type fabricated from a blank of flexible material and characterized by upstanding, laterally spaced side walls, a bottom extending between and flexibly connected at its side margins to said side walls, a suspending member disposed in general parallelism to said side walls, and portions connecting said member to said respective side walls; the improvement comprising an integral article restraining element located adjacent an end of said carrier, said element being disposed in an operative, upstanding, generally parallel relation to the adjacent end margin of said bottom and generally normal to said side walls in the operative, erected condition of the carrier, said element being connected to an adjacent carrier side wall by an integral hinge and being connected to said carrier bottom by an integral hinge ex-

tending substantially inwardly of said end margin of said bottom, said hinges enabling movement of said element to and from an inoperative position paralleling said side walls and bottom, said last named hinge including a fold line paralleling and generally coplanar with said end margin of said bottom.

8. In a collapsible article carrier of the type fabricated from a blank of flexible material and characterized by upstanding, laterally spaced side walls, a bottom extending between and flexibly connected at its side margins to said side walls, a suspending member disposed medially above and in general parallelism to said side walls, and portions connecting said member to said respective side walls; the improvement comprising an integral article restraining element located adjacent an end of said carrier, said element being disposed in an operative, upstanding, generally parallel relation to the adjacent end margin of said bottom and generally normal to said side walls in the operative, erected condition of the carrier, said element extending between and being connected to the respective carrier side walls by integral hinges and being connected to said carrier bottom by integral hinge means extending substantially inwardly of said end margin of said bottom, said hinges and hinge means enabling movement of said restraining element to and from an inoperative position paralleling said side walls and bottom, said hinge means including a fold line paralleling and generally coplanar with said end margin of said bottom.

9. A paperboard carrier for articles of like size and shape comprising a pair of opposed side panels adapted to encase opposite sides of the

articles, a further panel extending at a right angle between and connected at opposed parallel side margins to said respective side panels, and a transversely extending strip of integral, one-piece character cut from the material of said panels, said strip including side portions and a connecting portion which are deflectable, respectively, from coplanar relation to said side panels and further panel, said strip being spaced inwardly of the end margins of said panels and being separated therefrom by cuts extending across said further panel and the side margins thereof into said side wall panels.

10. A paperboard carrier for articles of like size and shape comprising a pair of opposed side panels adapted to encase opposite sides of the articles, a further panel extending at a right angle between and connected at opposed parallel side margins to said respective side panels, and a transversely extending strip of integral, one-piece character cut from the material of said panels, said strip including side portions and a connecting portion which are deflectable, respectively, from coplanar relation to said side panels and further panel, said strip being spaced inwardly of the end margins of said panels and being separated therefrom by slits of negligible width extending across said further panel and the side margins thereof into said side wall panels, said slits terminating in said side panels only sufficiently beyond said respective side margins to free said strip adjacent its ends for free flexure out of the respective planes of said side panels.

VINCENT FORTUNATO.

No references cited.