

Feb. 22, 1966

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3,236,413

FOLDED BLANK ARTICLE CARRIER

Filed Nov. 21, 1963

3 Sheets-Sheet 1

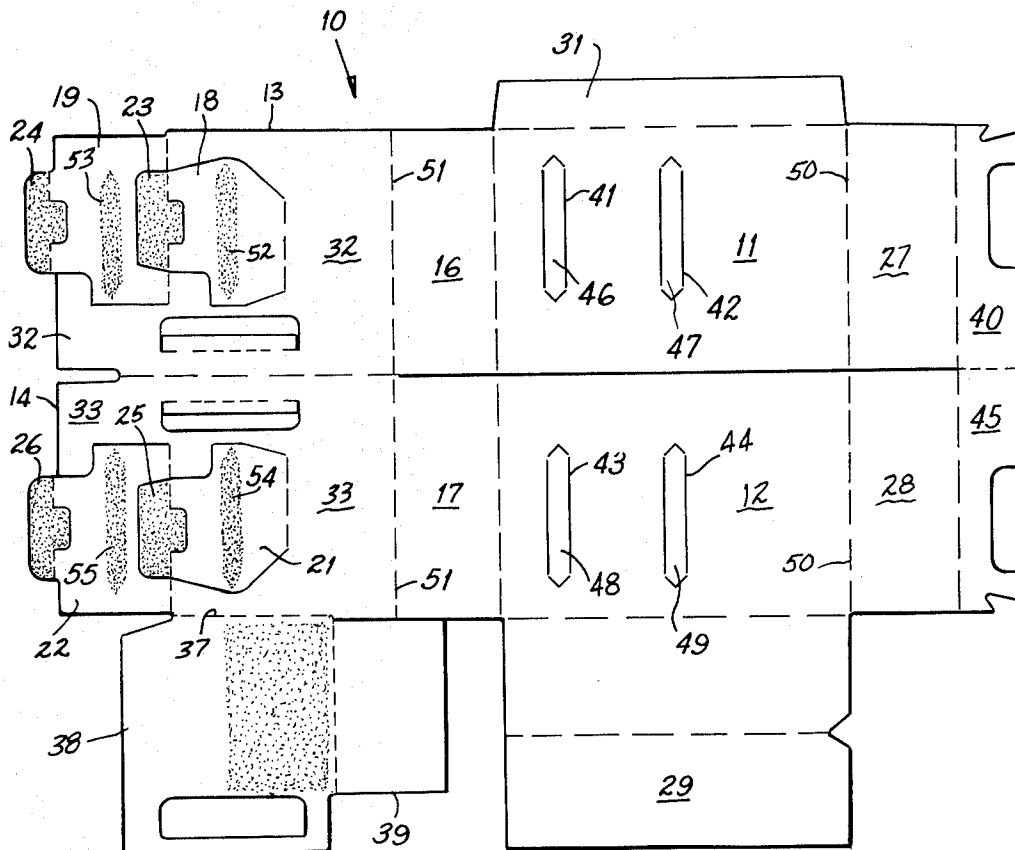


FIG - 1

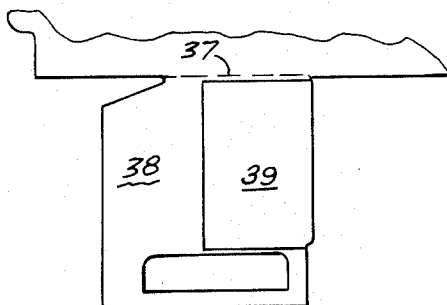


FIG - 2

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3 Sheets-Sheet 2

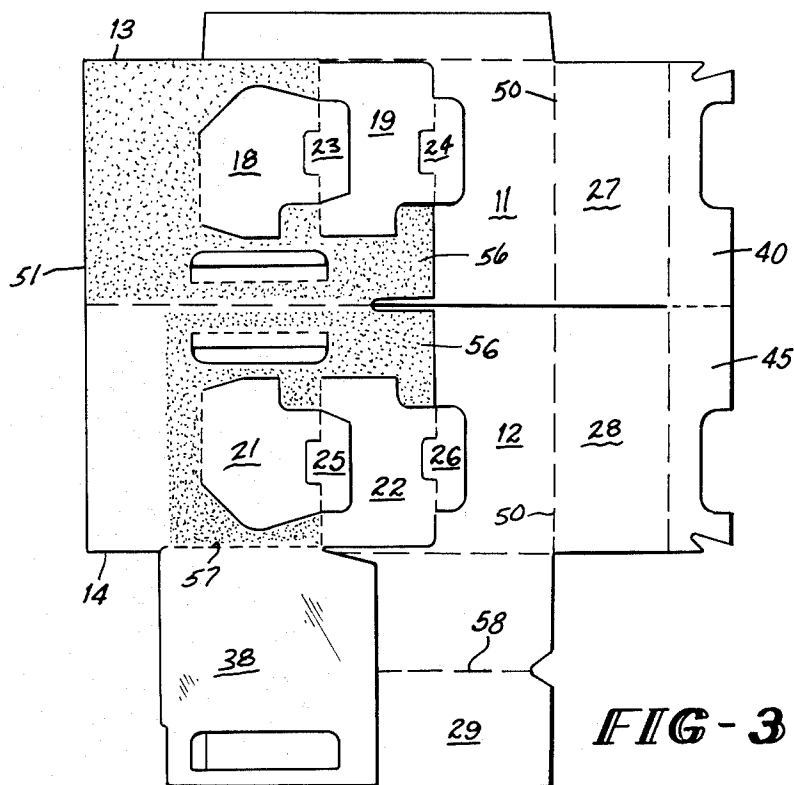


FIG-3

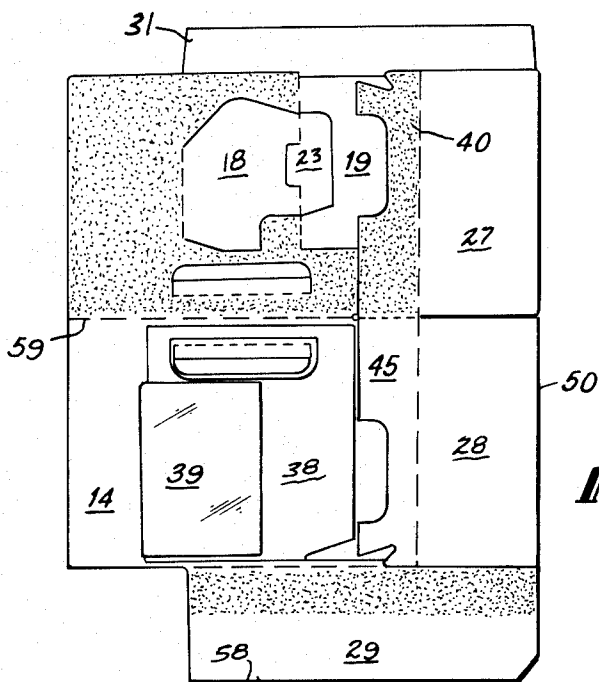


FIG-4

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3 Sheets-Sheet 3

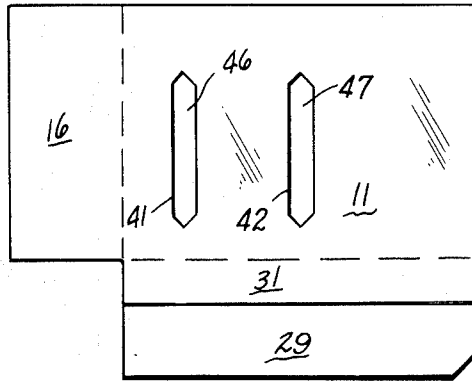


FIG - 5

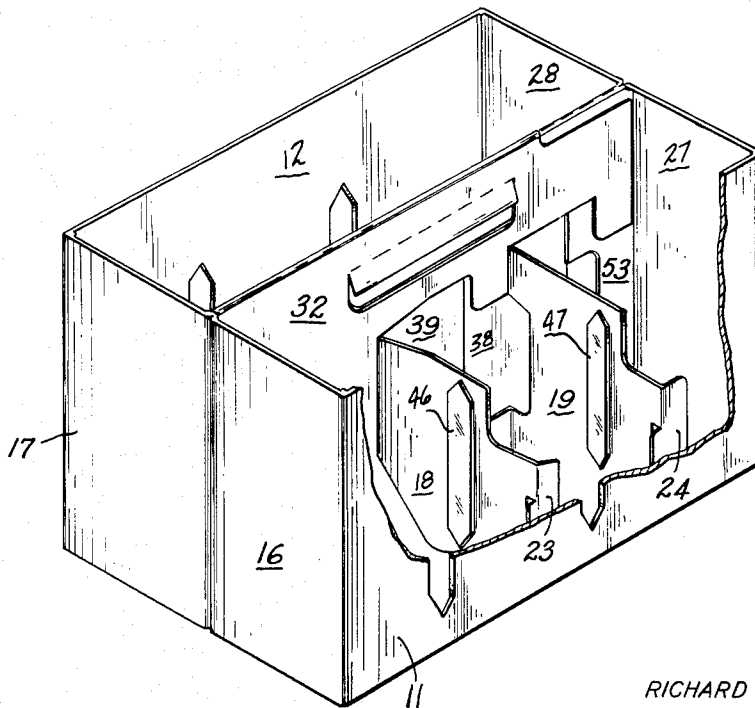


FIG - 6

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3,236,413

FOLDED BLANK ARTICLE CARRIER

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1 Claim. (Cl. 220—113)

The present invention relates to article carriers and relates in particular to basket-style, multi-cell article carriers of the type having longitudinal transverse partitions for separating the articles disposed in the carrier.

Usually the articles packaged in the carrier are glass beverage bottles; obviously, these articles need sound partition structures or separators to prevent breakage.

A particular feature of the invention is the provision of a novel paperboard blank convertible into a multi-cell carrier.

Another feature of the invention is the provision of a novel process for fabricating the blank.

A still further feature of the invention is the provision of a novel process for converting the blank into a carrier.

A still further feature of the invention is the provision of a novel multi-cell article carrier providing doubly longitudinal and transverse partitions separating the articles.

A paperboard blank embracing certain features of the present invention and susceptible of conversion into a multi-cell, basket-style article carrier may comprise a pair of side wall panels and at least one partition panel connected to a mating side wall panel, said mating side wall panel having at least one identifiable and removable section normally disposed within the plane of said panel, said section being operable to connect with its mating partition so that upon conversion of the blank into an erected carrier the section is removed from the mating side wall panel and transferred to said mating partition panel effective to develop a double ply thickness in said partition panel.

A process embracing certain principles of the present invention may comprise the steps of dividing a sheet of board material into side wall panels and partition panels, connecting at least one partition panel to one side wall panel, cutting said one side wall panel to develop a line of weakness and to identify a removable section within the panel, fastening said partition panel to its mating side wall panel in the region of said removable section and thereafter moving the partition panel relative to its mating side wall panel effective to transfer said section out of the plane of said side wall panel.

Other features and advantages of the invention will become more apparent from an examination of the succeeding specification when read in conjunction with the appended drawings in which:

FIG. 1 is a plan view of a blank utilizing the principles of the present invention;

FIG. 2 shows a portion of the illustration of FIG. 1 and indicates the first fabrication step;

FIGS. 3, 4 and 5 show subsequent fabrication steps in converting the blank into a multi-cell carrier, and,

FIG. 6 is a perspective view of the finished carrier with certain portions thereof broken away to show the final position of the removable sections after having been transferred out of the plane of the side wall panels.

FIG. 1 shows a blank 10 having side wall panels 11 and 12 hingedly connected to partition panels 13 and 14 through intervening end panels 16 and 17, respectively.

Note that the partition panels 13 and 14 include transverse partitions 18, 19, 21 and 22 operable to rotate

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out of the plane of panels 13 and 14 in well known fashion to join mating side walls 11 and 12; the joint is achieved by utilizing glue flaps 23, 24, 25 and 26 (see FIG. 6).

5 Side wall panels 11 and 12 are joined on their opposite or right hand ends as viewed in FIG. 1 by end wall panels 27 and 28 while reference numeral 29 designates a bottom panel operative to connect to bottom panel flap 31.

10 The material remaining in partition panels 13 and 14 after transverse partitions 18, 19, 21 and 22 have been formed defines longitudinal partitions as identified by the reference numerals 32 and 33.

15 Hinged to partition panel 14 along score line 37 is a reinforcing longitudinal partition 38 having a reinforcing flap 39.

Referring now in detail to side wall panels 11 and 12, note that these panels are formed (by partial cutting, scoring, perforating or other suitable operation) with 20 lines of weakness 41, 42, 43 and 44 identifying removable sections 46, 47, 48 and 49.

Normally sections 46 through 49 are disposed coplanar with the panels 11 and 12; as will become more apparent hereinafter, these sections are automatically removed 25 during the course of converting the blank into a carrier.

As will be apparent from an examination of FIGS. 5 and 6, sections 46 and 47 are ultimately transferred to their mating transverse partitions 18 and 19 to develop a double ply thickness in the transverse partitions. Sections 48 and 49 are similarly transferred to transverse 30 partitions 21 and 22.

Referring now to FIGS. 2 through 5, the method of erecting the blank into a carrier will be described.

35 First of all, in accordance with customary practice, the mottled hatching throughout the various drawings is for the purpose of identifying glue areas.

FIG. 2 shows reinforcing flap 39 rotated into the plane of and glued to the reinforcing partition 38.

40 FIG. 3 shows partition panels 13 and 14 rotated about score line 51 so that glue flaps 23, 24, 25 and 26 engage and connect their respective side wall panels 11 and 12. Note, also, that the glue areas labelled 52 through 55 engage and connect with their corresponding sections 46 through 49 of the panels 11 and 12.

45 FIG. 4 shows the next fabrication step wherein end walls 27 and 28 have been rotated inwardly about score line 50 with glue flaps 40 and 45 fastening to the glue area indicated by the reference numeral 56 in FIG. 3.

50 FIG. 4 also shows that reinforcing partition 38 has been rotated inwardly about score line 57 with reinforcing flap 39 appearing on the outside or top of the pack. Panel 38 makes contact and is glued to panel 14 in accordance with the glue pattern shown in FIG. 3.

55 In addition, FIG. 4 shows that approximately one half of bottom panel 29 has been rotated about score line 58 to assume the position shown.

Next the top half of the blank pack, as shown in FIG. 4, is rotated downwardly about score line 59 to develop the fully formed (collapsed) carrier disclosed in FIG. 60 5. In this operation, glue flap 31 overlays and connects with panel 29 and the glue areas shown in FIG. 4 operate to fasten the blank pack together.

The collapsed carrier of FIG. 5 is erected in well known fashion to develop the erect carrier of FIG. 6. 65 During the course of the erection step, sections 46 through 49 of the side wall panels 11 and 12 are lifted or transferred from the plane of their respective panels and subsequently appear carried by transverse partitions 18 and 19 (see FIG. 6) and 21 and 22 (not shown) to form a double ply thickness in the transverse partitions

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and thus a double ply thickness between articles deposited in adjacent cells of the carrier.

It is anticipated that a number of modifications and variations may be devised in the blank, carrier and method of fabricating the carrier without departing from the spirit and scope of the present invention.

What is claimed is:

A multi-cell basket style article carrier fabricated from a blank including a pair of opposed side wall panels and a partition panel connected to each side wall panel, each said partition panel having two transverse partition sections partially removable therefrom, and each side wall panel having two completely removable sections defined entirely by a line of weakness, said carrier having in its erected condition a longitudinal partition, for transverse partitions, and two sidewalls, each said transverse partition having a tab connected thereto to provide a double ply thickness, each said tab having been removed from

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a side wall and defined entirely by a broken line of weakness, and each said side wall having voids defined by broken lines of weakness and corresponding in shape to said tabs.

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