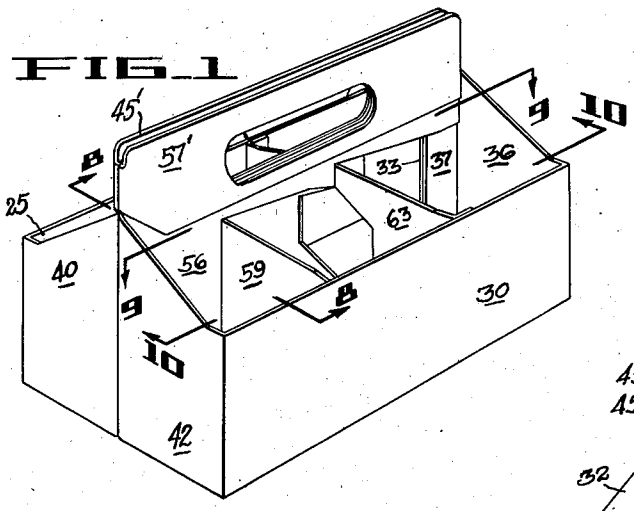
July 22, 1958 C. D. PAINTER 2,844,282

CELLULAR BOTTLE CARRIER

Original Filed Oct. 6, 1953 2 Sheets-Sheet 1

FIG_1



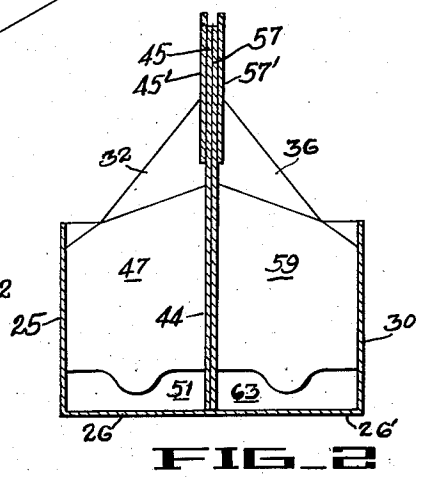


FIG_2

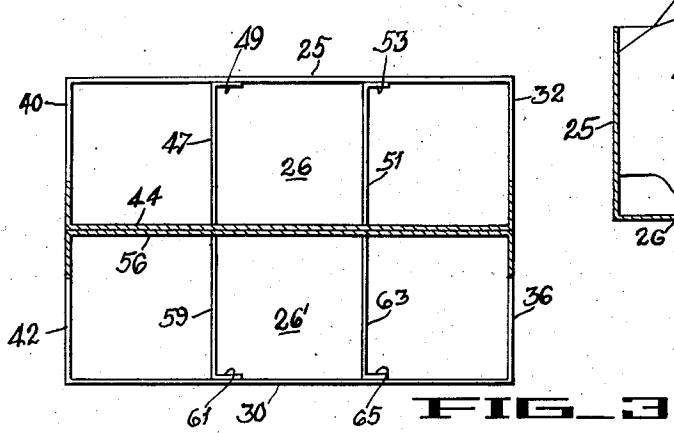


FIG_3

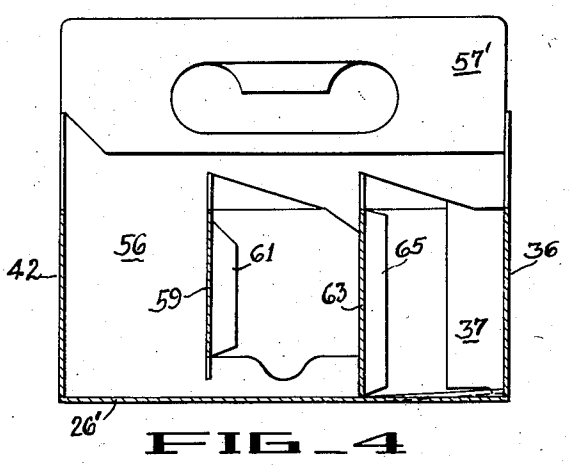


FIG_4

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CELLULAR BOTTLE CARRIER

Original Filed Oct. 6, 1953 2 Sheets-Sheet 2

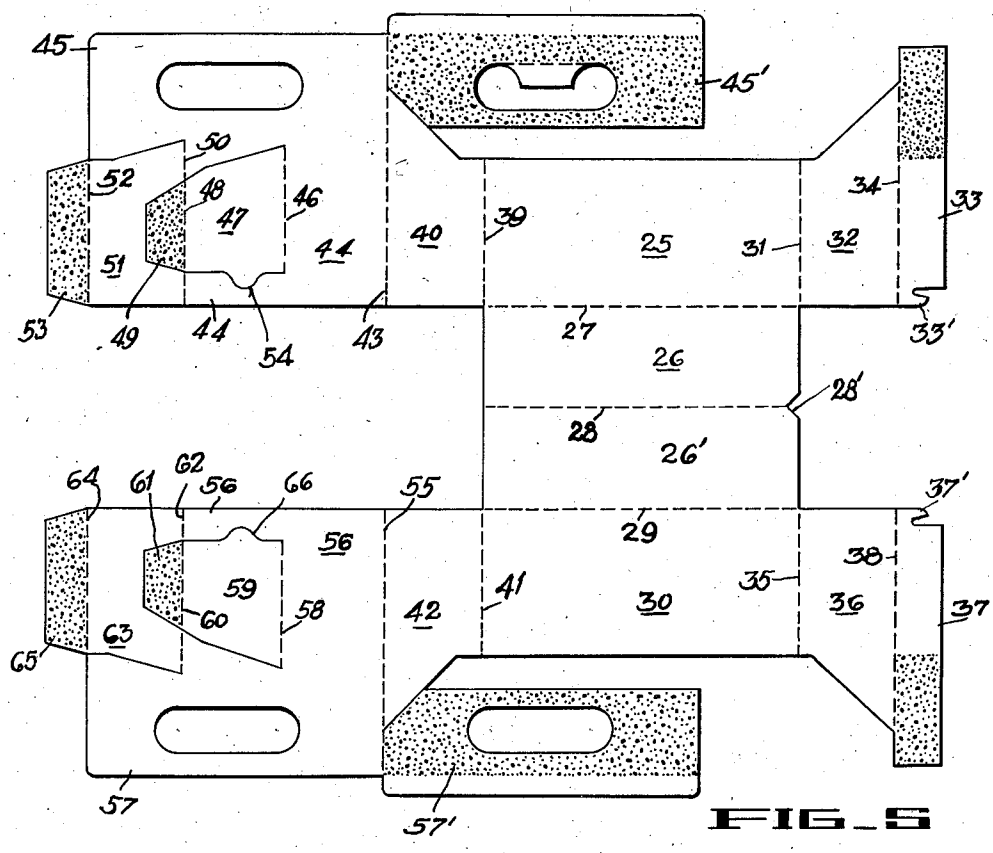


FIG_5

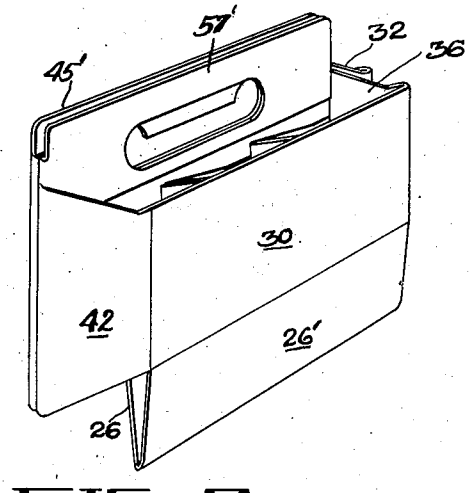


FIG_6

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CELLULAR BOTTLE CARRIER

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Original application October 6, 1953, Serial No. 384,390. Divided and this application September 11, 1956, Serial No. 611,807

1 Claim. (Cl. 220—115)

This invention relates to an improved bottle carrier of the type having a number of rows of compartments for holding a plurality of bottles.

The bottle carrier constituting the present invention embodies a substantially flat folded cardboard structure which may be easily converted into a cellular carrier wherein a number of bottles may be supported and carried in upstanding positions. My improved bottle carrier is made from a pre-cut cardboard blank which is capable of being mechanically folded into substantially flat compact form for convenience in packing and storage. From its collapsed form the cardboard structure may be easily set up by hand and converted into a cellular carrier wherein a number of rows of cells having bottoms and side walls are provided for holding a plurality of bottles in upright positions. The arrangement of the walls of the cells is such that the bottles supported in the carrier are not allowed to contact one another, thereby normally avoiding breakage when the loaded carrier is carried from place to place.

The primary object of my invention is to provide an improved cellular bottle carrier which is adapted to be collapsed for convenience in shipping or storage, and which embodies a number of open compartments for holding a plurality of bottles in spaced upright positions.

Another object of my invention is to provide an improved cellular bottle carrier of the kind characterized, one which is formed with a handle for use in conveniently carrying the carrier and the bottles held therein.

Other and further objects of my invention will be pointed out hereinafter, or will be indicated in the appended claims or will be obvious to one skilled in the art upon an understanding of the present disclosure. For the purpose of this application I have elected to show herein certain forms and details of a cellular bottle carrier embodying my invention; it is to be understood, however, that the embodiment of my invention herein shown and described is for purposes of illustration only and that therefore it is not to be regarded as exhaustive of the variations of the invention.

In the accompanying drawings:

Fig. 1 is a perspective view showing another embodiment of my invention;

Fig. 2 is a sectional view taken on the line 8—8 of Fig. 1;

Fig. 3 is a sectional view taken on the line 9—9 of Fig. 1;

Fig. 4 is a sectional view taken on the line 10—10 of Fig. 1;

Fig. 5 is a plan view of a blank from which the bottle carrier shown in Fig. 1 is formed; and

Fig. 6 is a plan view of the bottle carrier shown in Fig. 1 in partially collapsed form.

As shown in Figs. 1 to 6 my improved bottle carrier may embody another form. Referring to these figures and particularly the illustration in Fig. 5 of the blank from which the carrier is formed, the numeral 25 designates a rectangular shaped side member having a bottom portion 26 of slightly less width secured thereto along a longitudinal crease line 27. Connected to the lower edge of the bottom portion 26 along a longitudinal crease line 28 is a similarly shaped bottom portion 26'. Connected to the lower edge of the bottom portion 26' along a longitudinal crease line 29 is another side member 30. The side members 25 and 30 are identical in size and shape, and when the blank is folded and set up they form the opposed vertical sides of the carrier. The bottom portions 26 and 26' form the bottom of the carrier when the blank is folded and set up. Connected to the right hand vertical edge of the side member 25 along a vertical crease line 31 is an end portion 32 which has a gummed or adhesive coated narrow extension or flap 33 connected to its lateral vertical edge along a vertical crease line 34. Connected to the left hand vertical edge of the side member 30 along a vertical crease 35 is an end portion 36 which has a gummed or adhesive coated narrow extension or flap 37 connected to its lateral vertical edge along a vertical crease line 38. The end portions 32 and 36 are substantially the same shape and size and they form one end of the carrier when the blank is folded and set up. Connected to the left hand vertical edge of the side member 25 along a vertical crease line 39 is an end portion 40, and connected to the right hand edge of the side member 30 along a vertical crease line 41 is an end portion 42. The end portions 40 and 42 are substantially the same shape and size and they form the opposite end of the carrier when the blank is folded and set up. The end portions 32, 36, 40 and 42 are all substantially the same shape and size. Connected to the outer lateral edge of the end portion 40 along a vertical crease line 43 is a longitudinal inner partition member 44 which has a laterally disposed elongated handle portion 45 extending upwardly from its upper end. The underneath side (not shown) of the inner longitudinal partition member 44 is gummed or coated with an adhesive. Connected to the handle portion 45 along the vertical crease line 43 is a similarly shaped handle portion 45'. Both handle portions 45 and 45' are provided with gummed or adhesive coated upper surfaces which make it possible to attach such surfaces together when the blank is folded. Connected to the longitudinal partition member 44 along a vertical crease line 46 is a transverse partition member 47. Connected to the outer or free end of the transverse partition 47 along a vertical crease line 48 is a gummed or adhesive coated flap or extension 49. Connected to the outer edge of the longitudinal partition 44 along a vertical crease line 50 is another transverse partition member 51, and connected to the lateral edge of the latter along a vertical crease line 52 is a gummed or adhesive coated flap or extension 53. The transverse partition member 47 and its extension or flap 49 are cut from the longitudinal partition 44 and the transverse partition member 51, respectively, as indicated by the cut line 54. Connected to the outer lateral edge of the end portion 42 along a vertical crease line 55 is a longitudinal inner partition member 56 which has an elongated handle portion 57 extending downwardly from its lower end. The underneath side (not shown) of the inner longitudinal partition member 57 is gummed or coated with an adhesive. Connected to the handle portion 57 along the vertical crease line 55 is a similarly shaped handle portion 57'. Both handle portions 57 and 57' are provided with gummed or adhesive coated upper surfaces which make it possible to attach such surfaces together when the blank is folded and set up. Connected to the longitudinal partition member 56 along a vertical crease line 58 is a transverse partition member 59. Connected to the outer or free end of the transverse partition mem-

ber 59 along a vertical crease line 60 is a gummed or adhesive coated flap or extension 61. Connected to the outer edge of the longitudinal partition member 57 along a vertical crease line 62 is another transverse partition member 63, and connected to the lateral edge of the latter along a vertical crease line 64 is a gummed or adhesive coated flap 65. The transverse partition member 63 and its extension or flap 65 are cut from the longitudinal partition member 59 and the transverse partition member 63, respectively, as indicated by the cut line 66. The underneath sides of the longitudinal partition member 56 and both flaps 33 and 37 are gummed or coated with an adhesive, it being here noted that the underneath sides of the longitudinal partition members 44 and 56 are secured together by such adhesive when the blank is folded and set up, and similarly the underneath sides of the flaps 33 and 37 are attached together in the formation of the carrier. The underneath sides of the handle portions 45 and 57 are gummed or coated with an adhesive so they may be secured together when the blank is folded and set up.

In the folding of the blank shown in Fig. 5, the longitudinal partition members 44 and 56 together with the handle portions 45, 57, the transverse partition members 47, 59, the flaps 49, 61, the transverse partition members 51, 63, and the flaps 53, 65, are folded inwardly as units along the crease lines 43 and 55 upon the end portions 40, 42, the side members 25, 30, and the handle portions 45', 57'. The flaps 49 and 61 thereupon become attached by the adhesive material thereon to the side members 25 and 30 respectively, and similarly the flaps 53 and 65 also become attached by the adhesive material thereon to these same side members 25 and 30, respectively. Since the flaps 49 and 53, as well as the flaps 61 and 65, become attached to their respectively associated sides 25 and 30 at uniformly spaced distances from each other, and since the widths of the transverse partition members 47, 51, 59, and 63 are the same, the said transverse partition members will maintain the sides 25 and 30 in spaced parallel positions when the blank is folded and finally set up. The handle portions 45 and 45' are securely attached together by means of the adhesive coating on the upper side of the handle portion 45', and similarly the handle portion 57 is secured to the handle portion 57' by the adhesive material on the latter. The adhesive coatings applied to the upper surfaces of the various parts of the blank, as indicated by the stippling on Fig. 5, are preferably so applied before the initial folding of the blank. The end portions 32, 36, and the flaps 33, 37 are next folded inwardly as units along the crease lines 31 and 35. The end member 32 becomes superimposed upon the side member 25 and the flap 53 while the flap 33 becomes superimposed upon and is secured to the right hand end of the handle portion 45 by the adhesive on such flap. Similarly the end member 36 becomes superimposed upon the side member 30 and the flap 65 while the flap 37 becomes superimposed upon and is secured to the right hand end of the handle portion 57 by the adhesive on the said flap. At this point adhesive coatings are applied to the then upper surfaces of the longitudinal partitions 44 and 56, or either of them, as well as to the then upper surfaces of the flaps 33 and 37 or either of them. The upper half of the partially folded blank is then folded downwardly along the crease line 28 upon the lower half of the partially folded blank. The contacting surfaces of the longitudinal partition members 44 and 56 are thereupon secured together by the adhesive coating thereon, and similarly the contacting surfaces of the flaps 33 and 37 are secured together.

By pressing the opposite ends of the folded blank inwardly toward each other the then outer end portions 40 and 42 are swung outwardly about the crease lines 43 and 55 respectively until they become positioned in substantially the same plane. At the same time the end portions 32 and 36 are also swung outwardly about the crease lines 31 and 35 respectively, until they become positioned in substantially the same plane. When thus set up the end portions 24, 40 form one end of the carrier while the other end portions 32, 36 form the opposite end thereof, both of the said ends being in parallel vertical planes. During the same setting up movement the sides 25 and 30 are separated and brought into parallel positions, the transverse partitions 47 and 59 swing outwardly into a common transverse plane, and the transverse partitions 51 and 63 also swing outwardly into a common transverse plane. The flaps 33 and 37 have projecting tongues 33' and 37' formed on their inner adjacent ends, and when the blank is finally set up these tongues become positioned against each other and are latched onto the bottom members 26 and 26' along the crease line 28 at a notch 28' formed in said bottom members, thereby securely holding the bottom members in a common plane.

What I claim is:

A one-piece article carrier blank of flexible paperboard stock, comprising two sets of side wall, end wall and longitudinal partition and handle-forming panels, the respective panels of each of said sets being integrally connected by vertical creases in the order named, a one-piece bottom-forming panel disposed between and integrally connected by horizontal creases to adjacent bottom-defining margins of said side wall panels, transverse partition sections integrally hinged by vertical creases to said partition and handle-forming panels and comprising cutouts therefrom swingable about those hinge creases out of the planes of the respective last named panels, one of said cutouts in each set being spaced within the borders of the corresponding partition and handle-forming panel and extending across the hinge line of the other cutout, so that the hinge of the latter cutout is integrally connected at the top and bottom to its panel, and a handle-reinforcing panel, extending completely around its handle opening, associated with each of said sets of panels, each of said reinforcing panels being integrally hinged by a vertical crease to an end of the corresponding partition and handle-forming panel and being separated at least in part by a cut from a top defining margin of the adjacent end and side wall panels of each of said last named sets, the outer margin of each reinforcing panel lying substantially outwardly, in the lateral sense, of the outer margin of its associated partition and handle-forming panel, and opposed outer margins of said side wall panels lying substantially inwardly of the outer margins of said respective partition and handle-forming panels, each reinforcing panel occupying a space between said separating cut therefor and a longitudinal projection of said outer margin of its associated partition and handle-forming panel.

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