July 14, 1964 E. L. ARNESON 3,140,797

ARTICLE CARRIER

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Fig. 1

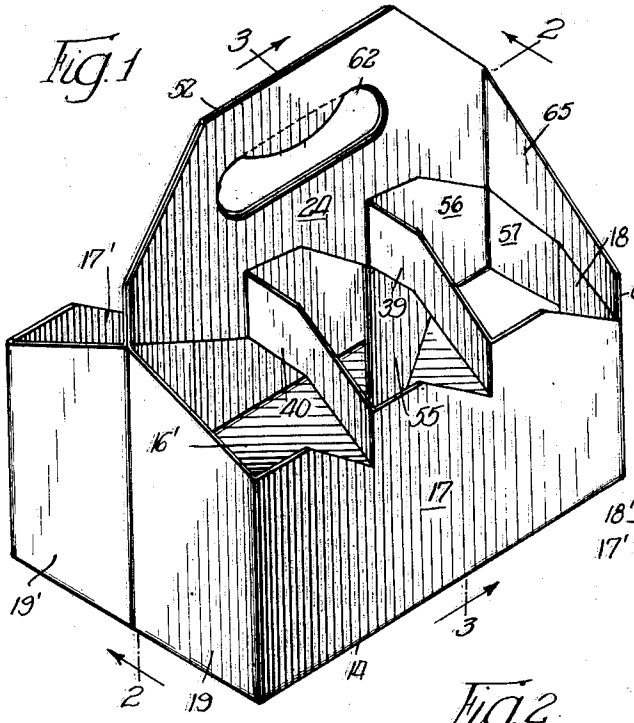

Fig. 3

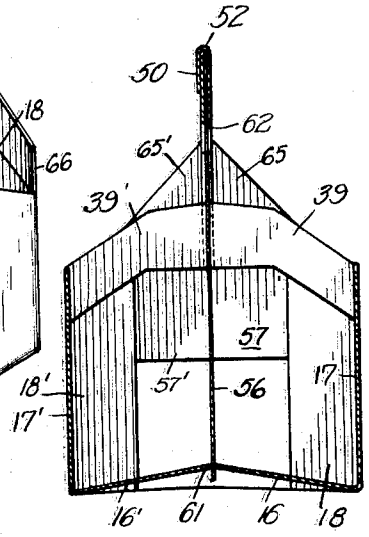

Fig. 2

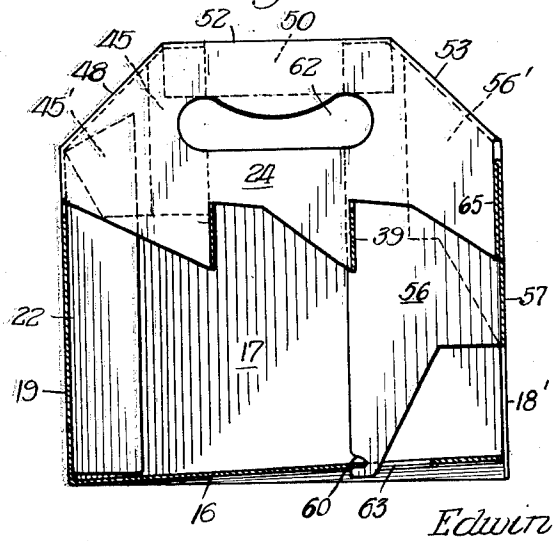

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Fig. 4

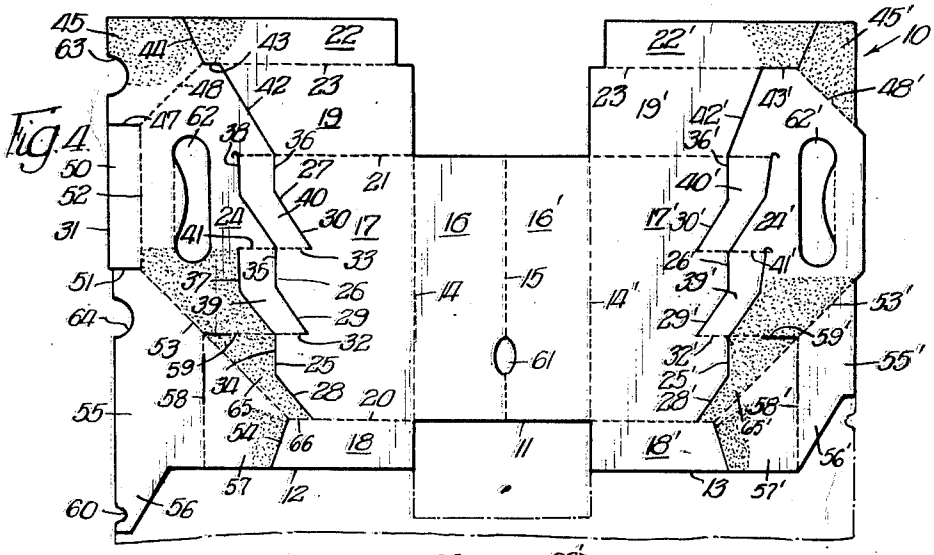


Fig. 5

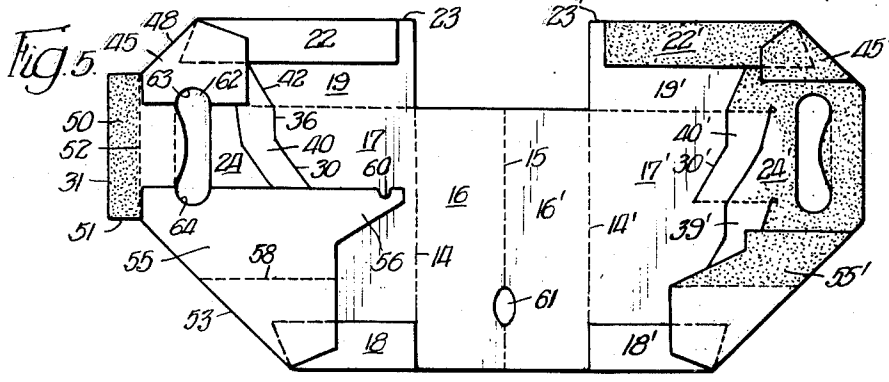
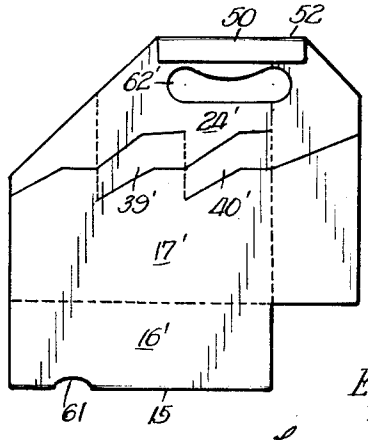


Fig. 6



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ARTICLE CARRIER

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Fig. 7

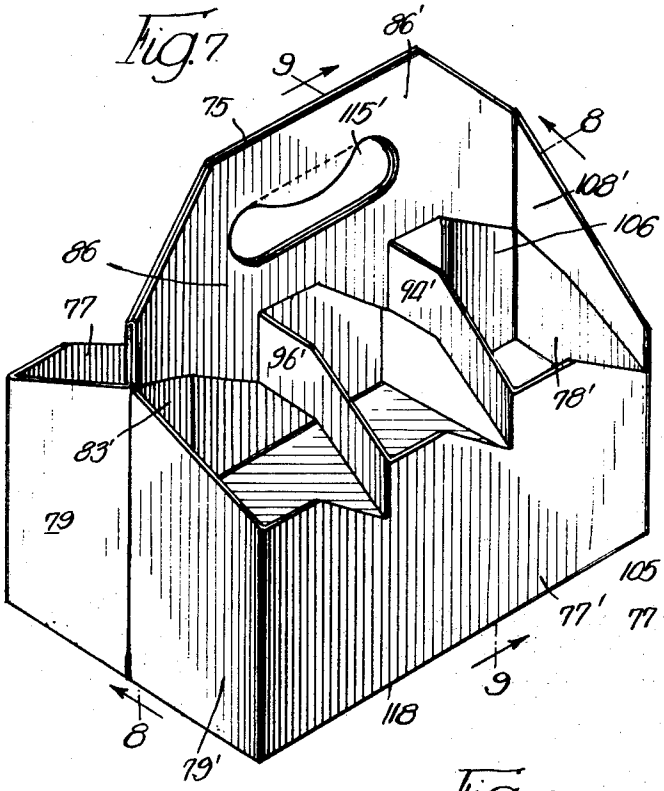


Fig. 9

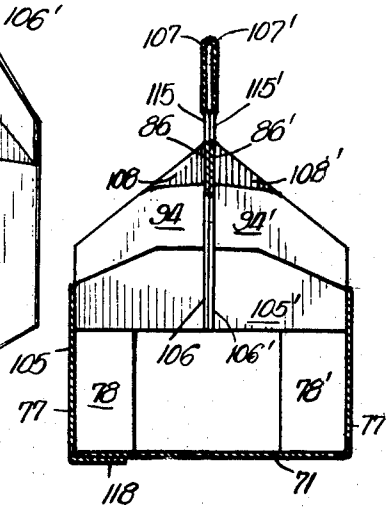
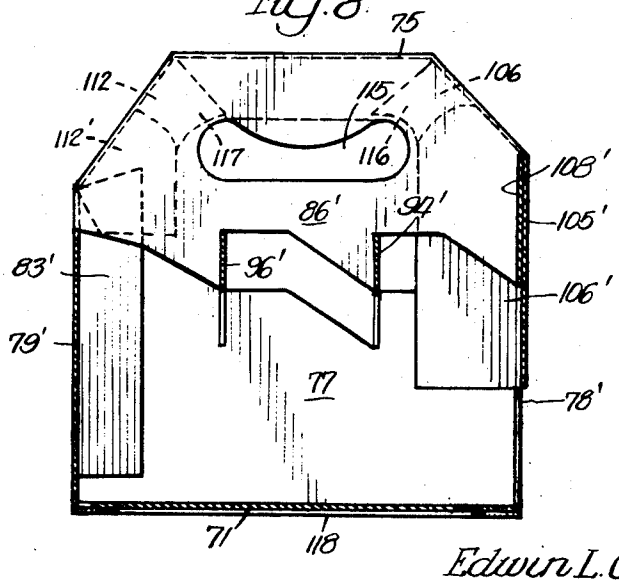


Fig. 8



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ARTICLE CARRIER

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Fig. 10

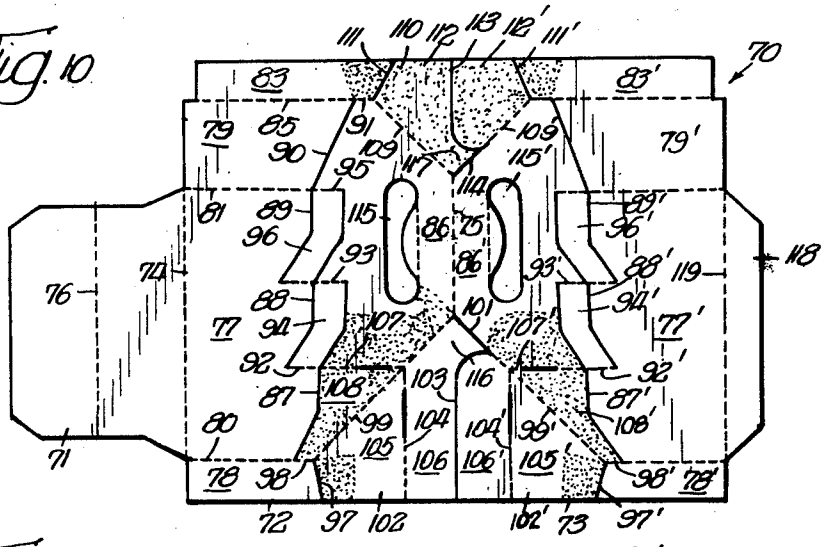


Fig. 11

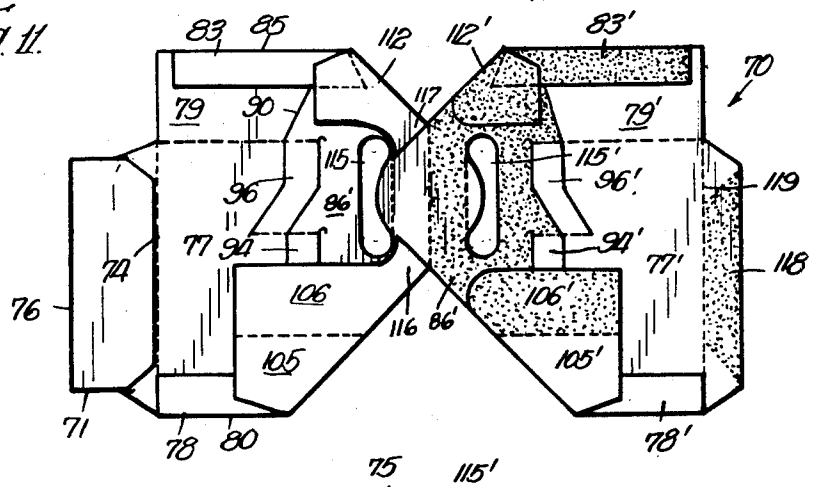
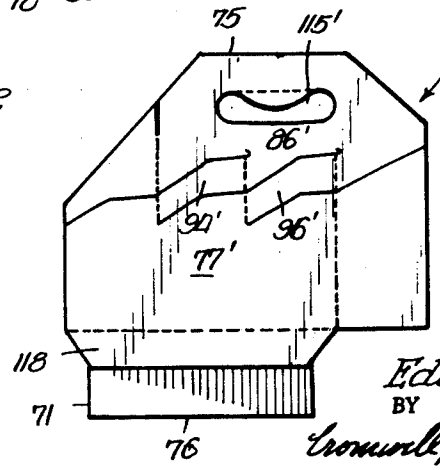


Fig. 12



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United States Patent Office 3,140,797 Patented July 14, 1964

3,140,797

ARTICLE CARRIER

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Filed July 9, 1962, Ser. No. 208,465
16 Claims. (Cl. 220—113)

This invention relates to article carriers and is particularly concerned with improvements in a carrier of the type which is formed from sheet material cut and folded so as to provide a tray-like cellular compartment for the articles and a strong and sturdy center partition and associated handle structure.

The present carrier is of the general type which is characterized by opposed pairs of vertical and flexible side and end walls, by a longitudinal partition and handle structure extending in a vertical plane between the end walls and parallel to the side walls and by flexible cross partition straps which are disposed in longitudinally spaced, vertical planes and are integrally hinged on vertical fold lines to the respective side walls and to the longitudinal partition and handle structure. The carrier is formed from a blank which can be cut from fiberboard or paperboard stock sheets previously imprinted on one side thereof only with little waste in cutting. The blank is cut, creased and folded with certain partition forming portions being adhesively secured so as to provide a collapsed bottom panel having side panels foldably connected thereto with inturned cross partition forming straps hinged at one end to the side wall panels and at the other end to a multi-ply longitudinal partition and handle structure which is connected at its opposite ends to end panels hingedly connected to the ends of the side panels.

The principal object of the present invention is to provide a carrier of the type described which is formed from a blank of smaller dimensions than heretofore required and which is of strong and rugged construction so as to adequately support the articles carried therein and to withstand the abuse normally encountered during repeated use in the marketing of articles such as bottled beverages and the like.

It is a more specific object of the invention to provide a cellular carrier of the type described in which end wall and longitudinal partition members at one end of the carrier are derived by folding on a diagonal line portions of the blank which adjoin the handle forming sections thereof, the latter constituting the top portion of the longitudinal partition and handle structure of the carrier.

These and other objects and advantages of the invention will be apparent from a consideration of the several forms of the carrier which are shown by way of illustration in the accompanying drawings wherein:

FIGURE 1 is a perspective view of an article carrier having embodied therein the principal features of the invention, the carrier being shown in set up empty condition;

FIGURE 2 is a longitudinal, vertical section taken on the line 2—2 of FIGURE 1;

FIGURE 3 is a vertical cross section taken on the line 3—3 of FIGURE 1;

FIGURE 4 is a plan view of the inside face of the prepared blank from which the carrier is formed, the view showing glue applied to certain areas of the blank preliminary to executing the first folding operation;

FIGURE 5 is a plan view of the blank shown in FIGURE 4 following certain further folding and gluing operations;

FIGURE 6 is a plan view of the completed carrier in flat, knocked down condition;

FIGURE 7 is a perspective view of a modified form of the carrier in set up empty condition;

FIGURE 8 is a longitudinal vertical section taken on the line 8—8 of FIGURE 7;

FIGURE 9 is a vertical cross section taken on the line 9—9 of FIGURE 7;

FIGURE 10 is a plan view of the inside face of the prepared blank from which the carrier of FIGURE 7 is formed, the view showing glue applied to certain areas of the blank preliminary to executing the first folding operations;

FIGURE 11 is a plan view of the blank shown in FIGURE 10 following certain further folding and gluing operations; and

FIGURE 12 is a plan view of the completed carrier in flat knocked down condition.

Referring first to the form of the carrier which is illustrated in FIGURES 1 to 6, the carrier is fabricated from a generally rectangular paperboard blank **10** which is cut and creased or scored as shown in FIGURE 4. The blank **10** is divided in the longitudinal direction into a bottom forming center section **11** and two wall and partition forming end sections **12** and **13** by parallel transverse score lines **14** and **14'** which are equally spaced from the medial transverse score line **15**, the latter dividing the bottom forming section **11** into two equal panels **16** and **16'**. Since the blank sections **12** and **13** are divided, to a large extent, into wall and partition forming elements by identical creasing or scoring and cutting lines, only one of these sections will be fully described, corresponding parts of the same relationship on the opposite side of the medial score line **15** will be indicated by the same numerals primed.

The end section **12** of the blank is divided by longitudinally extending, transversely spaced score lines and transversely extending cutting lines into side wall panel **17**, end wall panels **18** and **19** at opposite sides thereof which are separated therefrom by the parallel score lines **20** and **21** extending longitudinally of the blank, and a longitudinal partition forming panel **22** adjoining the end wall panel **19** and separated therefrom by the score line **23** also extending longitudinally of the blank. The end wall panel **19** has a dimension in the direction transversely of the blank which corresponds to half the width of the carrier or the dimension in the longitudinal direction of the blank of one of the bottom wall panels **16**, while the opposite end wall panel **18** has a dimension transversely of the blank which is approximately half of the corresponding dimension of the end wall panel **19**.

A longitudinal partition and handle forming panel **24** is separated from the side wall panel **17** and the adjoining end wall panel **19** by parallel, spaced cutting lines **25**, **26** and **27** which have parallel inner portions **28**, **29** and **30** inclined in the direction of the end edge **31** of the blank, and terminating at their inner ends at points which are in approximate alignment transversely of the blank. The cutting line **28** terminates at its inner end at the hinge forming score line **20** and the cutting lines **29** and **30** terminate at the inner ends of longitudinally extending, hinge forming score lines **32** and **33** which are parallel with each other and which divide the side wall panel **17** in the transverse direction of the blank into three equal portions. The cutting lines **25**, **26** and **27** have transversely aligned and transversely extending portions **34**, **35** and **36** which terminate at the score lines **32**, **33** and **21**, respectively. The cutting lines **25** and **26** have extended outer portions **37** and **38** which parallel the inner portions **29**, **35** and **30**, **36**, respectively, of the cutting lines **26** and **27**, which terminate at the outer ends of the longitudinal score lines **33** and **21** and which form with the cutting lines **26** and **27** cross partition strap members **39** and **40**. The strap members **39** and **40** are adapted to hinge at one end about the score lines **32** and **33** and at the other end about the score line **21**

and the outer portion 41 of the score line 33 when the handle panel 24 is moved out of the plane of the side wall panel 17. The cutting line 27 has an outwardly inclined extension 42 which frees the handle panel 24 from the top forming edge of end wall panel 19 leaving the panel 24 connected in hinged relation to the outer end of the longitudinal partition panel 22 by a hinge forming extension 43 of the score line 23.

At one corner of the blank section 12 the longitudinal partition panel 22 is separated by a cutting line 44 from a generally triangular shaped corner panel 45 which is freed at its opposite side by the longitudinal cut 47 extending inwardly of the blank and which is adapted to fold on the diagonal score line 48, which connects the inner ends of the cutting lines 44 and 47, into overlying relation with the adjoining portion of the handle panel 24 so as to form a reinforcing ply at one end of the handle structure. The handle panel 24 is provided with a handle edge reinforcing flap 50 which is taken from the outer end margin of the blank by cutting on parallel, longitudinally extending cutting lines 47 and 51 and which is adapted to fold about a transverse score line 52 connecting the inner ends of the cutting lines 47 and 51. At the opposite corner of the blank section 12 a hinge forming diagonal score line 53 and a cutting line 54, together with the cutting line 51, divide from the main portion of the blank section a panel 55 which constitutes a combination handle reinforcing and longitudinal partition and end wall member. The panel 55 is divided into a longitudinal partition and handle reinforcing panel portion 56 and an end wall forming panel portion 57 by a partially cut through score lie 58 which extends from the side edge of the blank section 12 to the intersection of the hinge forming diagonal score line 53 with a partially cut, longitudinally extending score line 59, the latter forming an extension of the longitudinal score line 32. The outer end portion of the panel 56 is notched at 60 so that the end thereof forms a hook for engaging in a cooperating slot 61 in the bottom wall 16, 16' when the carrier is set up as shown in FIGURE 2. The handle panel 24 is provided with a hand hole 62 and the two panels 45 and 55 are provided with notches 63 and 64 in the end edge 31 of the blank which align with the hand hole 62 when these panels are folded on the hinge lines 48 and 53, respectively. The portion 65 of the panel 24 which lies between the score lines 53 and 59, the cutting line 28, and the end portion 66 of the score line 20 is folded into and becomes part of the end wall when the carton is fabricated as shown in FIGURES 1 and 2.

At the other end of the blank 10 the section 13 is cut and scored in a similar manner with the handle flap 50 being omitted and the corner panels 45' and 55' having a dimension in the longitudinal direction of the blank which is smaller than the corresponding dimension of the panels 45 and 55. Also, the panel 55' is cut away at the corner, enabling the blanks to be nested with alternate blanks reversed in position for cutting the same from a larger sheet as indicated in FIGURE 4. Otherwise, the panels in the end section 13 of the blank are identical in construction with the corresponding panels in the opposite end section 12 of the blank.

The blank 10, when cut and scored or creased, is glued and folded to provide the carrier which is illustrated in FIGURE 1. In setting up the carrier from the blank, glue is applied, as shown in FIGURE 4, to the longitudinal partition and handle panels 22, 24, 45 and 55 in the blank section 12 and 22', 24', 45' and 55' in the blank section 13. The panels 18, 22 and 18', 22' are first folded inwardly about the score lines 20, 21 and 20', 21' into overlying relation with the adjoining end wall 19, 19' and side wall panels 17, 17'. Thereafter, the longitudinal partition and handle reinforcing panels 45, 55 and 45', 55' are folded inwardly about the diagonal score lines 48, 53 and 48', 53' so as to overlie portions of the panels 17, 18, 22 and 24 and 17', 18', 22' and 24' which brings the blank into the condition shown in FIGURE 5. Glue is then applied to the exposed faces of the handle flap 50 and the panels 18', 22', 24', 45' and 55'. The blank is then folded about the medial score line 15 and the handle cover flap 50 is folded over about the score line 52 onto the outside face of the handle panel 24' which completes the gluing and folding of the blank and provides the collapsed carrier as shown in FIGURE 6 which, when opened up, has the form shown in FIGURE 1.

It will be noted that in the completed carrier portions of the end walls at one end of the carrier and certain longitudinal partition panels are derived from the outside corners of the blank and folded inwardly about diagonal lines into their final position. The arrangement provides four thicknesses or four plies of material in the areas of the handle structure where tearing is most likely to occur, that is, in the areas between the end of the hand holes 62, 62' and the outside top diagonal edges of the longitudinal center panel which are defined by the fold lines 48, 53 and 48', 53' so that the handle area is adequately reinforced.

A modified form of the carrier is illustrated in FIGURES 7 to 12 of the drawing which is fabricated from a generally rectangular blank 70, with the blank being cut and creased or scored as shown in FIGURE 10. The blank 70 is divided in the longitudinal direction in a bottom forming end section 71 and two wall and partition forming sections 72 and 73 by parallel, transverse score lines 74 and 75. The bottom forming section 71 is divided by a transverse score line 76 which is parallel to the score line 74 into two substantially equal bottom forming half panels. The two blank sections 72 and 73 are cut and scored so that they are to a large extent symmetrical about the transverse score line 75. Only one of these sections will be fully described. Corresponding parts of the same relation on the opposite side of the score line 75 will be indicated by the same numerals primed.

The blank section 72 which extends between the parallel score lines 74 and 75 is divided by longitudinally extending, transversely spaced score lines and transversely extending cutting lines into side wall forming panel 77, end wall panels 78 and 79 at opposite sides thereof which are separated therefrom by parallel score lines 80 and 81 extending longitudinally of the blank, and a longitudinal partition forming panel 83 which is separated from the adjoining end wall panel 79 by a longitudinally extending score line 85.

A longitudinal partition and handle forming panel 86 is separated from the side wall panel 77 by parallel spaced cutting lines 87, 88 and 89. The cutting line 89 has an end portion 90 extending across the end wall panel 79 and terminating at the score line 85 with the panel 86 remaining attached to the longitudinal partition panel 83 on the extension 91 of the score lines 85 at the one side of the blank. The cutting lines 87 and 88 have parallel portions extending between the longitudinal score lines 92 and 93 which define a cross partition strap 94 while the score lines 88 and 89 have parallel portions extending between the longitudinal score line 93 and an end portion 95 of the score line 81 which define another cross partition strap 96. The score lines 92 and 93 are spaced an equal distance from the score lines 80 and 81 and from each other so as to divide the side wall panel 77 in the transverse direction of the blank into three equal parts. The longitudinal partition and handle panel 86 is freed at the opposite side of the blank from the end wall panel 78 on the transverse cutting line 97 and remains attached in hinged relation to the panel 78 by the small end extension 98 of the score line 80.

The handle and longitudinal partition panel 86 is scored on the line 99 which extends diagonally from the intersection of the cutting line 97 with the end of score line 93 to the end of transverse score line 75 and divides

therefrom a panel portion 100 which is separated from the adjoining blank section 73 by the cutting line 97' and the diagonal score line 99', the latter extending perpendicular to the score line 99 and having the inner end portion cut through at 101. The panel portion 100 is divided into two panels 102 and 102' by an inverted J-shaped cutting line 103 having its stem aligned with the transverse score line 75 and its hooked end terminating at the outer end of the cut 101. The panels 102 and 102', which constitute combination end wall and longitudinal partition panels, are subdivided by parallel transverse, partly cut, partly scored lines 104 and 104' into end wall panels 105 and 105' and longitudinal partition panels 106 and 106'. The longitudinal score lines 92 and 92' are extended at 107 and 107' to the intersection of the transverse score lines 104 and 104' with the diagonal score lines 99 and 99' and each of the score lines 104, 107 and 104', 107' subtends an angle of 45 degrees with the respective score lines 99 and 99'. The panel portions 102 and 102' are adapted to hinge on the diagonal score lines 99 and 99' into overlying relation with portions of the side wall panels 77, 77' and handle panels 86, 86' including the end wall reinforcing panels 108, 108' which are defined by the cutting line 87 and score lines 98, 99, 107 and by the cutting line 87' and score lines 98', 99', 107'.

At the other side of the blank 70 diagonal score lines 109, 109' extend from the end of the score line 75, in right angled relation, to the score lines 91 and 91' so as to divide from the panels 86 and 86' a handle reinforcing panel portion 110 which is freed from the longitudinal partition panels 83 and 83' by cutting lines 111 and 111'. The panel portion 110 is subdivided into two smaller panels 112 and 112' by a J-shaped cutting line 113 which has its stem portion aligned with the score line 75. The score line 109' is cut through at 114 to free the panel 112 for hinged movement about the score line 109 into overlying relation with adjoining portions of the panel 86. The handle panels 86 and 86' are provided with hand holes 115 and 115' and the J-shaped cutting lines 103 and 113 provide the panels 106 and 112 with inner portions 116 and 117 which reinforce the handle in the areas between the ends of the hand holes 115 and 115' and the top edge forming fold line 75.

The blank section 73 is provided with a glue flap 118 for connection with the bottom wall forming panel 71 which extends along the end edge of the blank, which glue flap is separated from the side wall forming panel 77' by a transverse score line 119.

The blank 70, when cut and scored or creased, is glued and folded to provide the carrier which is illustrated in FIGURE 7. In setting up the carrier from the blank, glue is applied, as shown in FIGURE 10, to the longitudinal partition panels 83, 83', the end wall panels 105, 105', the end wall reinforcing panels 108, 108', the handle panels 86, 86', and the handle reinforcing panels 112, 112'. The panels 83, 83' and 78, 78' are first folded inwardly about the score lines 85, 85' and 80, 80' into overlying relation with adjacent portions of the end wall panels 79, 79' and the side wall panels 77, 77'. The end wall and longitudinal partition panels 102 and 102' are folded inwardly about the diagonal lines 99 and 99' so as to overlie the end wall reinforcing panels 108, 108', and portions of the handle panels 86, 86'. The handle reinforcing panels 112 and 112' are folded inwardly about the diagonal score lines 109 and 109' and the bottom wall 71 is folded on the score line 76. This brings the blank into the condition shown in FIGURE 11. Glue is then applied to the exposed faces of the panels 112', 86', 83' and 106' as shown or to the corresponding panels on the opposite side of the medial score line 75. The blank is then folded about the medial score line 75 which completes the gluing and folding of the blank and provides the collapsed carrier as shown in FIGURE 12 which, when opened up, has the form shown in FIGURE 7.

While both forms of the carrier which have been illustrated in the drawings are designed for a six bottle package, the invention may be readily incorporated in a carrier for a larger number of bottles. All that is required to adapt the invention to an eight bottle package, for example, is to add an additional pair of bottle receiving cells in the center of the carrier. However, when the carrier is designed for a larger number of bottles, it is desirable to provide additional reinforcement for the handle panels which, preferably, is in the form of a separate insert panel of sufficient size to extend around the hand hole openings and having a depth which will bring the lower margin at least to the bottom of the hinge connection of the cross straps with the longitudinal partition so as to reinforce these connections. The reinforcing insert is, of course, glued to the handle and partition forming panels and enclosed between the same.

While particular materials and specific details of construction have been referred to in describing the several forms of the carrier which are illustrated, it will be understood that other materials and equivalent details of construction may be resorted to within the spirit of the invention.

I claim:

1. A cellular article carrier formed from a flexible paperboard blank which is cut and scored to provide, when set up, a foldable bottom wall, upstanding side walls hinged to the side edges of the bottom wall, end walls hinged to opposite end edges of the side walls, a multi-ply longitudinal partition and handle structure hinged at its opposite ends to the end walls and cell defining cross strap members connected on vertical hinge lines at opposite ends thereof to the side walls and to said longitudinal partition and handle structure, said longitudinal partition and handle structure including a pair of outer partition and handle forming panels which extend downwardly from a top edge and have a hinged connection with the cross strap members, and a pair of inner handle reinforcing panels at each end of said longitudinal partition and handle structure which are folded downwardly and inwardly on diagonal fold lines defining downwardly and outwardly inclined top edge portions of said handle structure and which reinforcing panels are sandwiched between the outer partition and handle forming panels and connected to the end walls.

2. A cellular article carrier as recited in claim 1, and at least one of said handle reinforcing panels extending a substantial distance in the direction of the bottom wall and below the hinged connection of the cross strap members with said outer longitudinal partition and handle forming panels.

3. A cellular article carrier formed from a flexible paperboard blank which is cut and scored to provide, when set up, a foldable bottom wall, upstanding side walls hinged to the side edges of the bottom wall, end walls hinged to opposite end edges of the side walls, a longitudinal partition and handle structure hinged at its opposite ends to the end walls and cell defining cross strap members hinged at their opposite ends to the side walls and to said longitudinal partition and handle structure, said longitudinal partition and handle structure including a pair of outer partition and handle forming panels which extend downwardly from a top edge to a hinged connection with the cross strap members, a pair of inner handle reinforcing panels at each end of said longitudinal partition and handle structure which are folded downwardly and inwardly on diagonal fold lines defining outwardly and downwardly inclined end extensions of said top edge, each pair of said inner handle reinforcing panels being secured in face engaging relation between the outer partition and handle forming panels and said inner handle reinforcing panels being hinged to the end wall forming panels.

4. A cellular article carrier as recited in claim 3, and one of said handle reinforcing panels at one end of said

longitudinal partition and handle structure extending approximately to the carrier bottom wall.

5. An article carrier formed from a paperboard blank which is cut and scored to provide in set-up article receiving condition a foldable bottom wall, side walls extending upwardly of the side edges of the bottom wall, end walls extending inwardly of the side edges of the side walls, a center longitudinal partition and handle structure connected at its opposite ends to the end walls, said longitudinal partition and handle structure comprising a pair of outer panels having hinged connections at their lower margins with vertically disposed inclined cross straps extending from the side walls and dividing the carrier into cells on each side of the longitudinal partition and handle structure, said outer panels being hinged at one end of the carrier to the upper ends of a pair of inner longitudinal partition panels extending inwardly of a hinged connection with the adjacent end wall and at the opposite end of the carrier to a pair of end wall reinforcing panels which extend downwardly from inclined top end wall edge forming folds, a pair of inner longitudinal partition reinforcing panels hingedly connected to the end walls at the last mentioned end of the carrier and folded downwardly from an upwardly inclined top edge fold which connects said panels with the outer panels of said longitudinal partition and handle forming structure.

6. An article carrier as recited in claim 5, and said inner longitudinal partition reinforcing panels extending inwardly of the upper ends of the inclined top edge folds so as to reinforce the upper grip forming portion of the handle structure.

7. An article carrier formed from a paperboard blank which is cut and scored to provide in set-up article receiving condition a foldable bottom wall, side walls extending upwardly of the side edges of the bottom wall, end walls extending inwardly of the side edges of the side walls, a center longitudinal partition and handle structure connected at its opposite ends to the end walls, said longitudinal partition and handle structure comprising a pair of outer panels having hinged connections at their lower margins with vertically disposed, longitudinally spaced cross straps which are hinged at their outer ends to side walls and which divide the carrier into a plurality of cells on each side of the longitudinal partition and handle structure, said outer panels being hinged at one end of the carrier to the upper ends of a pair of inner longitudinal partition panels extending inwardly of a hinged connection with the adjacent end wall and at the opposite end of the carrier to a pair of end wall reinforcing panels which extend downwardly from inclined top end wall edge forming folds, a pair of inner longitudinal partition reinforcing panels integrally hinged to the end walls at the last mentioned end of the carrier and folded downwardly from an upwardly inclined top edge fold which connects said panels with the outer panels of said longitudinal partition and handle forming structure with one of said inner longitudinal partition reinforcing panels extending to the bottom wall and having an end hook formation for engaging in a slot in the bottom wall so as to connect the same with the bottom wall.

8. An article carrier formed from a paperboard blank which is cut and scored to provide in set-up article receiving condition a foldable bottom wall, side walls extending upwardly of the side edges of the bottom wall, end walls extending inwardly of the side edges of the side walls, a center longitudinal partition and handle structure connected at its opposite ends to the end walls, said longitudinal partition and handle structure comprising a pair of outer panels having connections at their lower margins with integrally hinged cross straps extending from the side walls and dividing the carrier into cells on each side of the longitudinal partition and handle structure, said outer panels being integrally hinged at one end of the carrier to the upper ends of a pair of inner longitudinal partition panels extending inwardly of a hinged connection with the adjacent end wall and having their upper end portions secured between said outer panels and said outer panels being integrally hinged at the opposite end of the carrier to a pair of generally triangular end wall reinforcing panels which extend downwardly from an integrally hinged connection with the top edge of a pair of end wall panels and which are also integrally hinged to a second pair of end wall panels which are hinged to the side walls, a pair of inner longitudinal partition reinforcing panels hingedly connected to the first mentioned pair of end wall panels and folded downwardly from an upwardly inclined top edge fold which integrally connects said inner panels with the outer panels of said longitudinal partition and handle forming structure.

9. An article carrier formed from a paperboard blank which is cut and scored to provide in set-up article receiving condition a foldable bottom wall, side walls extending upwardly of the side edges of the bottom wall, end walls extending inwardly of the side edges of the side walls, a center longitudinal partition and handle structure connected at its opposite ends to the end walls, said longitudinal partition and handle structure comprising a pair of outer panels having hinged connections at their lower margins with cross straps extending from the side walls and dividing the carrier into cells on each side of the longitudinal partition and handle structure, said outer panels being hinged at one end of the carrier to the upper ends of a pair of inner longitudinal partition panels which extend inwardly of a hinged connection with the adjacent end wall and at the opposite end of the carrier to a pair of inner end wall reinforcing panels which extend downwardly from inclined top end wall edges and a pair of longitudinal partition and end wall forming panels hingedly connected to said inner end wall reinforcing panels along said inclined top end wall edges and folded downwardly so as to connect in overlapping relation with a pair of end wall forming panels which are integrally hinged to the side walls.

10. An article carrier formed from a paperboard blank which is cut and scored to provide in set-up article receiving condition a foldable bottom wall, side walls extending upwardly of the side edges of the bottom wall, end walls extending inwardly of the end edges of the side walls, a center longitudinal partition and handle structure connected at its opposite ends to the end walls, said longitudinal partition and handle structure comprising a pair of outer panels having hinged connections at their lower margins with vertically disposed, longitudinally spaced cross straps which are hinged at their outer ends to the side walls and which divide the carrier into a plurality of cells on each side of the longitudinal partition and handle structure, said outer panels being hinged at one end of the carrier to the upper ends of a pair of inner longitudinal partition panels extending inwardly of a hinged connection with the adjacent end wall and said outer panels being hinged at the opposite end of the carrier to a pair of end wall reinforcing panels which extend downwardly from inclined top end wall edge forming folds which connect the end wall reinforcing panels with a pair of upper end wall panels, and a pair of inner longitudinal partition reinforcing panels integrally hinged to said pair of end wall panels and sandwiched between the outer panels of said longitudinal partition and handle structure, said pair of upper end wall panels being hingedly connected to the upper ends of a pair of lower end wall panels which are hinged to the ends of the side walls.

11. An article carrier as recited in claim 10, and said upper end wall panels having portions which overlap and are secured to portions of said lower end wall panels.

12. An article carrier as recited in claim 10, and said upper end wall panels being connected to the upper ends of said lower end wall panels on vertical hinge lines which are aligned with the vertical hinge lines of the lower end wall panel connections with the side walls.

13. A cellular article carrier formed from a flexible

paperboard blank which is cut and scored to provide, when set up, a foldable bottom wall, upstanding side walls hinged to the side edges of the bottom wall, end walls hinged to opposite end edges of the side walls, a longitudinal partition and handle structure hinged at its opposite ends to the end walls and cell defining cross strap members connected on vertical hinge lines at opposite ends thereof to the side walls and to said longitudinal partition and handle structure, said longitudinal partition and handle structure including a pair of outer partition and handle forming panels which extend downwardly from a top edge and are hinged to the cross strap members, and inner longitudinal partition panels which extend inwardly from a hinged connection with the end walls, one of said end walls having inner and outer top panel forming portions which are connected on vertical hinge lines to the outer partition and handle forming panels and the inner longitudinal partition panels, respectively, said end wall top panels being hingedly connected along the top edges of the end wall and said inner end wall top panels having hinged connections with lower end wall panel forming portions which are hinged to the end edges of the side walls with their uppermost margins secured to said end wall top panel portions.

14. A flexible paperboard blank cut and scored to divide the same into a plurality of panels which, when folded and set up, provide a cellular article carrier, said blank being divided by parallel score lines into a bottom wall forming section and adjoining side wall and partition and handle forming sections, each of said last mentioned blank sections being divided by cutting lines and hinge forming score lines into a side wall panel, a handle and partition panel, a pair of connecting cross straps between the side wall panel and the handle and partition panel and end wall panels at opposite ends of the side wall panel and a pair of combination end wall and longitudinal partition panels which are taken from the area of the blank adjoining one end of the handle and partition panels and which are separated from the handle and partition panels by hinge forming score lines extending from the score lines defining the end edges of the side wall panels diagonally to the end of the transverse score line separating the two side wall and partition and handle forming sections of the blank so that said combination panels may be folded on the diagonal score lines into overlying relation with portions of the adjacent side wall panels, and said combination panels being subdivided by a score line extending normal to an end edge of the handle and partition panel into an end wall panel and a longitudinal partition panel.

15. A flexible paperboard blank as recited in claim 14, and a pair of handle reinforcing panels taken from the area of the blank adjoining the handle and partition panels at the opposite ends of said panels which reinforcing panels are separated from the handle and partition panels by hinge forming diagonal score lines extending from the score lines defining the outer edges of the adjacent end wall panels to the end of the transverse score line separating the side wall and partition and handle forming sections of the blank.

16. A flexible paperboard blank cut and scored to divide the same into a plurality of panels which, when folded and set up, provide a cellular article carrier, said blank being divided by parallel score lines into a bottom wall forming section and two side wall and partition and handle forming sections, each of said last mentioned blank sections being divided by cutting lines and hinge forming score lines into a side wall panel, a handle and partition panel, a pair of connecting cross straps between the side wall panel and the handle and partition panel, end wall panels at opposite ends of the side wall panel and a combination end wall and longitudinal partition panel which is taken from the area adjoining one end of the handle and partition panel and which is separated from said handle and partition panel by a hinge forming score line extending from the score line defining the end edge of the side wall panel diagonally in the direction of the top edge of the handle and partition panel so that said combination panel may be folded on said diagonal score line into overlying relation with portions of the adjacent side wall, and said combination panel being subdivided by a score line extending normal to an end edge of the handle and partition panel into an end wall panel and a longitudinal partition panel.

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