July 24, 1956 W. A. RINGLER 2,755,959

MULTI-CELLED ARTICLE CARRIERS

Filed Oct. 30, 1952 4 Sheets-Sheet 1

Fig. 1

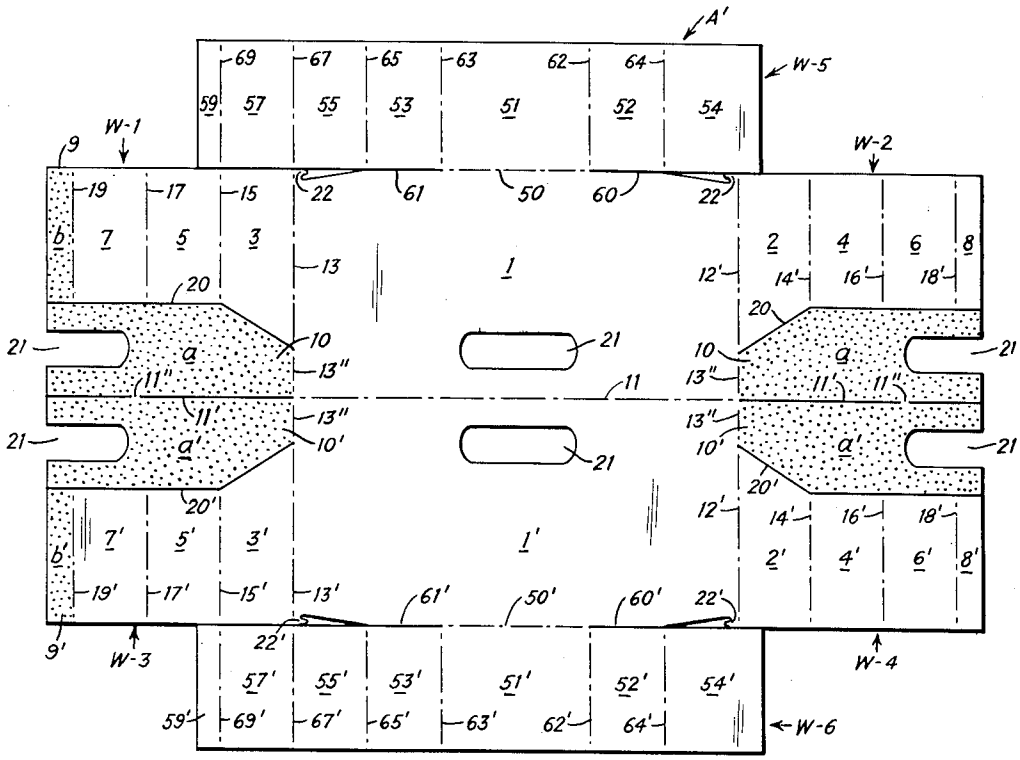
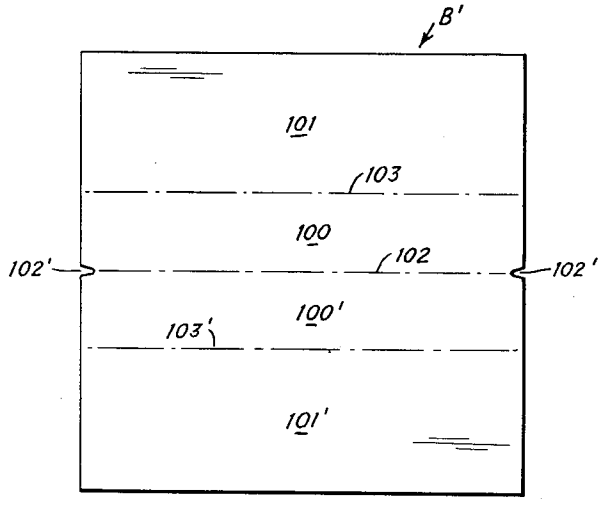


Fig. 2



INVENTOR.
WILLIAM A. RINGLER
BY
Reuben J Carlson
ATTORNEY

July 24, 1956 W. A. RINGLER 2,755,959

MULTI-CELLED ARTICLE CARRIERS

Filed Oct. 30, 1952 4 Sheets-Sheet 2

Fig. 3

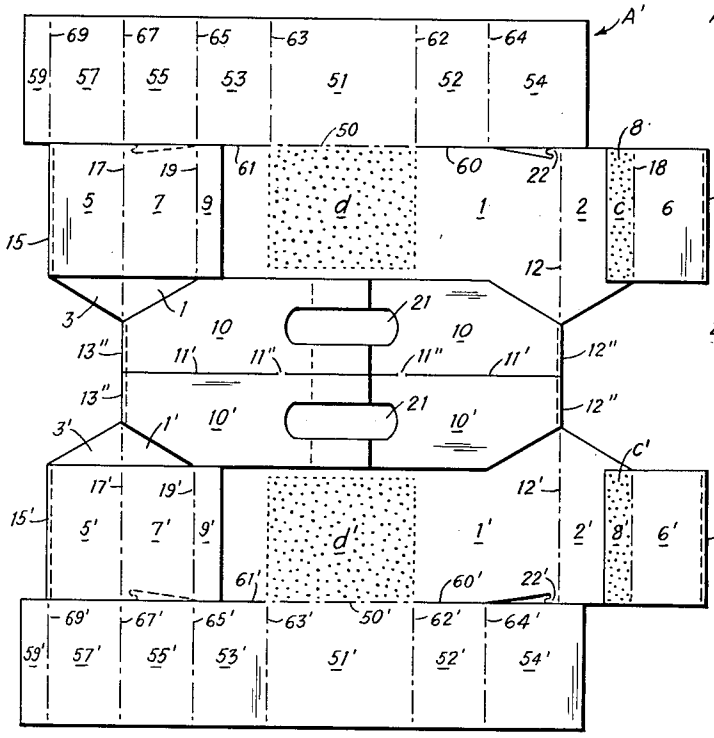
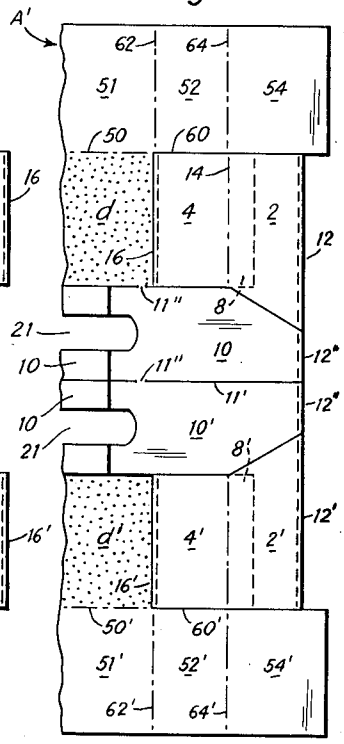


Fig. 4



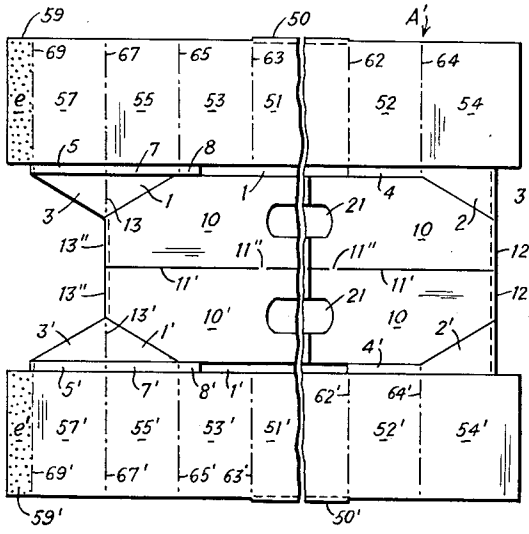


Fig. 5

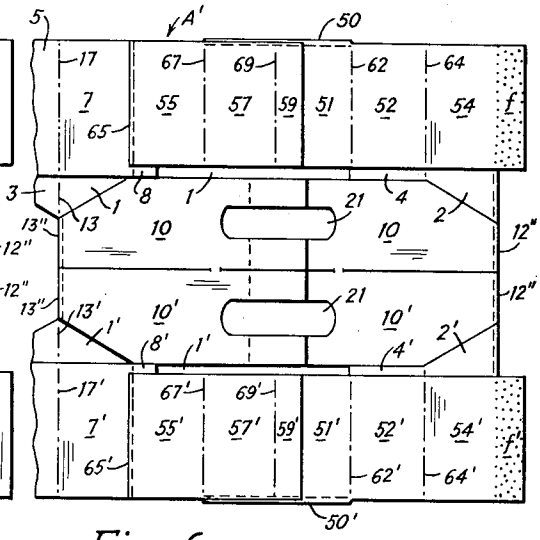


Fig. 6

INVENTOR.
WILLIAM A. RINGLER

BY Reuben J. Carlson

ATTORNEY

July 24, 1956 W. A. RINGLER 2,755,959

MULTI-CELLED ARTICLE CARRIERS

Filed Oct. 30, 1952 4 Sheets-Sheet 3

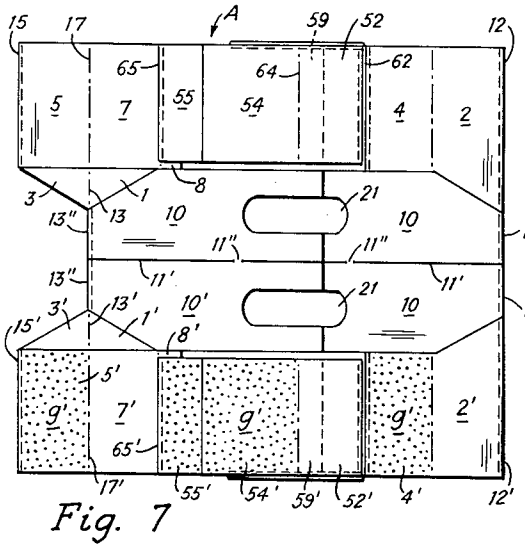


Fig. 7

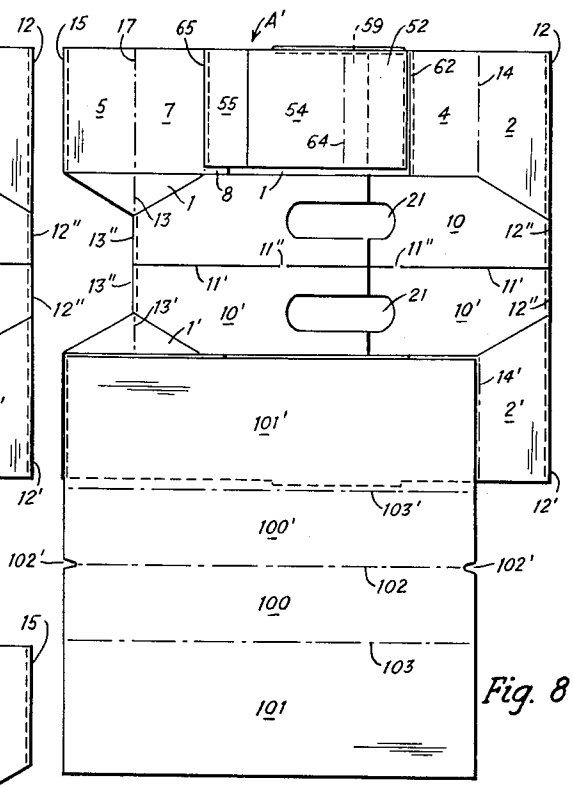


Fig. 8

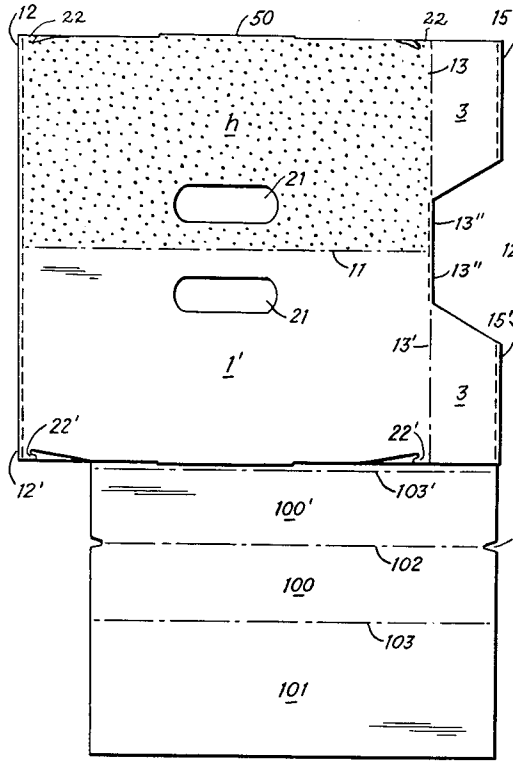


Fig. 9

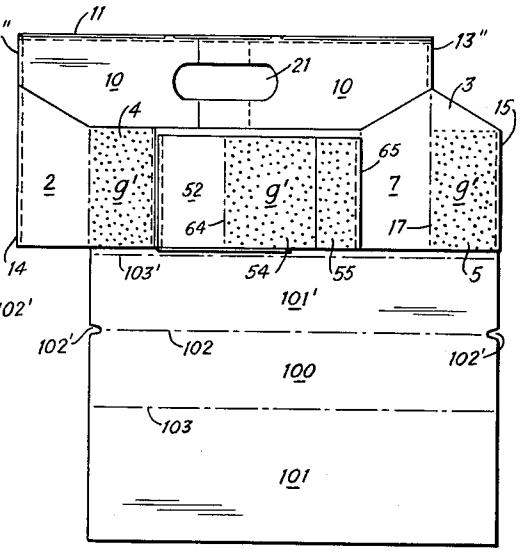


Fig. 10

INVENTOR.
WILLIAM A. RINGLER
BY
Reuben J. Carlson
ATTORNEY

July 24, 1956 W. A. RINGLER 2,755,959

MULTI-CELLED ARTICLE CARRIERS

Filed Oct. 30, 1952 4 Sheets-Sheet 4

Fig. 11

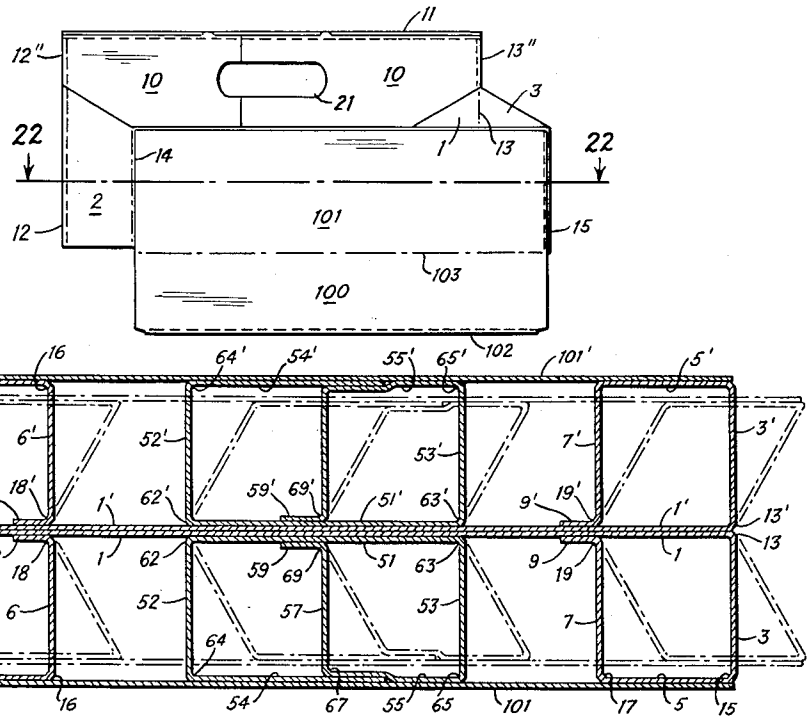


Fig. 12

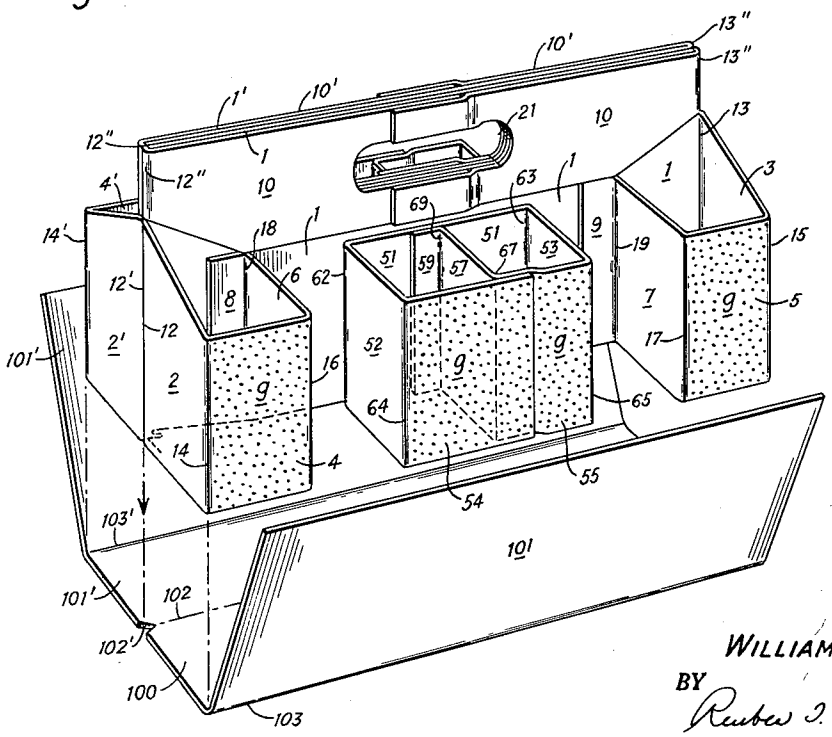


Fig. 13

INVENTOR.
WILLIAM A. RINGLER
BY Reuben J. Carlson
ATTORNEY

United States Patent Office 2,755,959 Patented July 24, 1956

2,755,959

MULTI-CELLED ARTICLE CARRIERS

William A. Ringler, Wayne, Pa., assignor to The Gardner Board & Carton Co., Middletown, Ohio, a corporation of Ohio

Application October 30, 1952, Serial No. 317,632

6 Claims. (Cl. 220—113)

This invention relates to multi-celled article carriers designed to permit flat collapse thereof when shipped and stored but readily expansible into erected form to receive articles in the cells thereof.

Twin compartmented article carriers having any desired even number of cells are constructed in accordance with this invention from two blanks of paperboard or fiberboard material which are substantially rectangular in form. One of the blank parts provides the center partition structure having handle forming portions which are reinforced and strengthened by handle facing flaps which together provide a handle part of at least four ply thickness. This blank also provides the end panel sections and both pairs of end cells for the carrier. The companion blank part provides the collapsible bottom panel and the paired side panels which are adhesively attached to the side wall liner sections forming a part of the end cells associated with the first blank part. Where the carrier is to be equipped with more than six cells, the intermediate cells are formed from top and bottom wings integrally associated with either the first blank part or the second blank part.

The blank part which forms the center partition and end cell structure of the carrier presents a pair of center partition panels which are foldably connected along the top edge thereof, with an end cell forming wing foldably connected to each end edge of both center partition panels. The handle facing flaps are captured from material between adjacent end wings of the blank and are foldably connected to the adjacent end edges of the center partition panels in a manner to permit high speed folding thereof into adhesive contact with the upper handle forming portions of the center partition panels. The cell forming end wings of the blank are designed to be speedily assembled into collapsed tubular form and into overlying relation to the respective center partition panels with which they are associated. The side panels of the companion blank are then adhesively secured to the side wall liner sections of the collapsed cells of the first blank to complete the carrier in collapsed form.

The intermediate cells are formed from top and bottom wings foldably connected to the bottom edges of the center partition panels of the first blank. The intermediate cell forming wings of the blank are assembled into collapsed tubular form before the paired blanks are joined together.

Carriers made in accordance with this invention are strong and sturdy in construction and present full height cross partitions which extend down to the erected bottom panel of the carrier. By making the carrier of two separate blanks, the bottom and side panel forming blank may be made of heavier or stronger paperboard or fiberboard material than the blank which forms the center partition and end cell structure of the carrier. As a result of this permissible selection of two different stock sheet materials, carriers can be made in accordance with this invention which have bottom panels which will carry

substantially heavier article loads than otherwise attainable.

Other objects and advantages of this invention will become apparent as the disclosure proceeds.

Although the characteristic features of this invention will be particularly pointed out in the claims, the invention itself, and the manner in which it may be carried out, may be better understood by referring to the following description taken in connection with the accompanying drawings forming a part hereof, in which

Fig. 1 is a plan view of a blank designed to form both the end and intermediate cells and the center partition structure for a twelve bottle carrier; areas of adhesive being shown applied to certain parts of the blank in preparation for the first folding operation;

Fig. 2 is a plan view of the prepared blank which, when assembled with the blank part shown in Fig. 1, forms the bottom and side panels for this twelve bottle carrier;

Fig. 3 is a plan view of the blank part shown in Fig. 1 as it would appear after the first folding operation has been executed thereon which completes the formation of one pair of end cells, this view showing adhesive applied to additional areas of the blank;

Fig. 4 is a fragmentary view of the right hand portion of the blank shown in Fig. 3 as it would appear when the next folding operation has been executed thereon and which completes the formation of the other pair of end cells;

Fig. 5 is a plan view of the blank shown in Figs. 3 and 4 as it would appear after the intermediate cell forming wings have been folded to overlie the adjacent center partition panels thereof, this view also showing adhesive strips applied to certain areas of the intermediate cell forming wings;

Fig. 6 is a plan view of the blank shown in Fig. 5 as it would appear after the intermediate cell forming wings thereof have received their second folding operation, this view showing further adhesive strips applied to the intermediate cell forming wings thereof in preparation for the next folding operation;

Fig. 7 is a plan view of the blank part shown in Figs. 5 and 6 as it would appear after completion of the assembly of the intermediate cells thereof, this view also showing adhesive applied to one set of side wall liner sections thereof;

Fig. 8 is a plan view of the blank parts shown in Figs. 2 and 7 as initially connected together and after one side panel of the blank part shown in Fig. 2 has been adhesively secured to the glued set of side wall liner sections of the other blank part shown in Fig. 7;

Fig. 9 is a plan view of the reverse side of the paired blank parts initially connected together as shown in Fig. 8, this view also showing adhesive applied to the entire surface of one of the center partition panels thereof;

Fig. 10 is a plan view of the connected blank parts shown in Fig. 9 as they would appear after the following folding operation has been executed thereon, this view showing adhesive applied to the other set of side wall liner sections thereof preparatory to attaching the unassembled side panel thereto;

Fig. 11 is a plan view of the fully assembled carrier in collapsed form and as it would appear after the final folding operation has been executed on the blank parts shown in Fig. 10;

Fig. 12 is a horizontal cross section of the fully expanded twelve cell carrier as it would appear when viewed along line 12—12 of Fig. 11, this view also showing in phantom lines the cross sectional appearance of the carrier when undergoing erection expansion; and

Fig. 13 is a perspective view of this twelve cell carrier with the bottom and side panel forming part thereof exploded from the erected cell and center partition forming

part to better illustrate the structural details of the carrier.

Similar reference characters refer to similar parts throughout the several views of the drawings and the specification.

The two blank parts from which these carriers are formed are cut from stock sheets of selected paperboard or fiberboard material which need be imprinted on one side thereof only. The two blanks may be cut and scored from the same or different stock sheets on an automatic cutting and scoring machine at high production speeds with very little or no waste material resulting. The two blanks are adapted for high speed assembly into carrier form on automatic gluing and folding machines having means operative to register a side wall panel of one blank part with one set of collapsed cells associated with the other blank part.

Figs. 1 and 2 show a pair of prepared blanks A' and B' from which a twelve cell carrier may be made and assembled in accordance with this invention as shown in Figs. 11, 12 and 13. The blank A' provides the center partition structure and all the cells for this twelve cell carrier while the blank B' provides the bottom and side panels thereof. The blank A' comprises a pair of center partition panels **1—1'** foldably connected along a top edge forming score **11**, the center partition panels **1—1'** being sized to extend the full length of the twelve cell carrier and down to the erected bottom panel thereof. A pair of left hand wings *w*–**1** and *w*–**3** is foldably connected along aligned scores **13—13'** to the adjacent end edge of the center partition panels **1—1'**, a pair of right hand wings *w*–**2** and *w*–**4** is foldably connected along aligned scores **12—12'** to the opposite end edges of the center partition panels, and a pair of top and bottom wings *w*–**5** and *w*–**6** is foldably connected to the bottom ends of the center partition panels **1—1'** along parallel extending hinging scores **50—50'**.

The left hand wings *w*–**1** and *w*–**3** form one pair of end cells for the carrier and comprise a pair of end panel sections **3—3'** foldably connected along the aligned scores **13—13'** to the adjacent end edges of the center partition panels **1—1'**, a pair of side wall liner sections **5—5'** foldably connected along the aligned scores **15—15'** to the end panel sections **3—3'**, a pair of cross partition sections **7—7'** foldably connected along aligned scores **17—17'** to the side wall liner sections **5—5'** and a pair of center partition securing flaps **9—9'** foldably connected along aligned scores **19—19'** to the cross partition sections **7—7'**. The right hand wings *w*–**2** and *w*–**4** form the other pair of end cells for the carrier and likewise comprise a pair of end panel sections **2—2'** foldably connected along aligned scores **12—12'** to the opposite end edges of the center partition panels **1—1'**, a pair of side wall liner sections **4—4'** foldably connected along aligned scores **14—14'** to the end panel sections **2—2'**, a pair of cross partition sections **6—6'** foldably connected along aligned scores **16—16'** to the cross partition sections **6—6'**, and a pair of center partition securing flaps **8—8'** foldably connected along aligned scores **18—18'** to the cross partition sections **6—6'**.

One pair of handle facing flaps **10—10'** is captured from otherwise wasted material between the left hand wings *w*–**1** and *w*–**3** and are foldably connected at one end thereof to the adjacent end edge of the center partition panels **1—1'** along aligned scores **13''** which are substantially in alignment with the scores **13—13'**. A second pair of handle facing flaps **10—10'** may also be captured from material between the right hand wings *w*–**2** and *w*–**4** and are foldably connected at one end thereof to the opposite end edges of the center partition panels **1—1'** along aligned scores **12''** which are substantially in alignment with the scores **12—12'**. Each pair of handle facing flaps **10—10'** is separate from each other by a cut **11'** extending substantially in alignment with the top edge forming score **11** and are separated by cuts **20—20'** from the upper edges of the adjacent wings. The center

partition panels **1—1'** are also provided with hand hole cutouts **21** with which hand hole cutouts **21** formed in both pairs of the handle facing flaps **10—10'** align when the handle facing flaps **10—10'** are folded over the upper handle forming portions of the center partition panels **1—1'** as shown in Fig. 3. The handle part for the carrier is thus of four ply thickness at the end portions thereof, and of six ply thickness in the area of the hand hole cutout **21** where the free ends of the handle facing flaps **10—10'** overlap as shown in Fig. 13.

The upper and lower wings *w*–**5** and *w*–**6** which form the intermediate cells of the carrier comprise a pair of center partition liner sections **51—51'** foldably connected by scores **50—50'** to the adjacent lower edges of the center partition panels **1—1'**. As shown in Fig. 1, a pair of intermediate cross partitions **53—53'** is foldably connected along aligned scores **63—63'** to the left end edges of the center partition liner sections **51—51'**, a pair of side wall liner sections **55—55'** is foldably connected along aligned scores **65—65'** to the adjacent intermediate cross partition sections **53—53'**, a further pair of intermediate cross partitions **57—57'** is foldably connected along aligned scores **67—67'** to the adjacent side wall liner sections **55—55'**, and a pair of center partition liner flaps **59—59'** is foldably connected along aligned scores **57—57'** to the adjacent cross partition sections **57—57'**. An additional pair of cross partition sections **52—52'** is foldably connected along aligned scores **62—62'** to the right end edges of the adjacent center partition liner sections **51—51'**, and a pair of side wall liner sections **54—54'** of greater width than the side wall liner sections **55—55'** is foldably connected along aligned scores **64—64'** to the adjacent cross partition sections **52—52'**.

The foldably connected sections **53**, **55** and **57** and the associated center partition securing flap **59** are separated from the lower edge of the center partition panel **1**, the adjacent end panel section **3** and the side wall liner section **5** by a separating cut **61**. The connected sections **52** and **54** are likewise separated from the bottom edge of the center partition panel **1** and the adjacent end panel section **2** by a separating cut **60** substantially in alignment with the separating cut **61**. The foldably connected sections **53'**, **55'** and **57'** and the associated center partition liner flap **59'** are likewise separated from the bottom edge of the center partition panel **1'**, the adjacent end panel section **3'** and the adjacent side wall liner section **5'** by a separating cut **61'** as shown in Fig. 1. Similarly, the foldably connected sections **52'** and **54'** are separated from the bottom edge of the center partition panel **1'** and the adjacent end panel section **2'** by a separating cut **60'** extending substantially in alignment with the cut **61'**.

The bottom and side panel forming blank B' as shown in Fig. 2 comprises a pair of bottom panel sections **100—100'** foldably connected along a bottom collapsing score **102**, the bottom sections **100—100'** having a length sufficient to provide a full length bottom for the twelve cell carrier. A pair of side panels **101** and **101'** is foldably connected to the opposite side edges of the bottom sections **100—100'** along parallel extending scores **103—103'**. The bottom and side panel forming blank B' may be formed from the same stock sheet material as its companion center partition and cell forming blank A', or if desired, the blank B' may be formed from heavier or stronger stock sheet material.

The center partition and cell forming blank A' as shown in Fig. 1 is assembled by applying adhesive areas *a—a'* over the entire faces of both pairs of handle facing flaps **10—10'** as shown in Fig. 1. Thereupon, the handle facing flaps **10—10'** at the right hand side of the blank as shown in Fig. 1 may first be folded along the aligned scores **12''** so as to overlie the adjacent face of the upper handle forming portions of the center partition panels **1—1'** so as to become adhesively secured thereto, and the paired handle facing flaps **10—10'** at the left hand side of the blank may then be folded along the aligned scores

13'' so as to become adhesively secured to the upper handle forming portions of the center partition panels 1—1', with the free ends of both pairs of facing flaps adhesively secured together in partially overlapped relationship as shown in Fig. 3. To facilitate this folding operation, both pairs of handle facing flaps 10—10' may be temporarily connected by interrupting the cut lines 11' to leave a breakable connecting neck 11'' which holds the panel facing flaps together so that they can be folded as paired units.

In the same gluing operation, adhesive strips *b*—*b'* are applied to the center partition liner flaps 9—9' and the left hand wings *w*–1 and *w*–3 then folded along the aligned scorces 15—15' so as to adhesively secure the flaps 9—9' to the inside face of the adjacent center partition panels 1—1' as shown in Fig. 3, thereby completing the collapsed assembly of one pair of end cells. In substantially the same folding operation, the cross partition sections 6—6' associated with the right hand wings *w*–2 and *w*–4 are folded along aligned scores 16—16' so as to place the cross partition sections 6—6' in overlying relation to the adjacent side wall liner sections 4—4'. Adhesive strips *c*—*c'* are then applied to the overfolded pair of center partition securing flaps 8—8' as shown in Fig. 3, and the right hand wings *w*–2 and *w*–4 then folded along aligned scores 12—12' so as to adhesively secure the glued flaps 8—8' to the adjacent center partition panels 1—1' as shown in Fig. 4, thereby completing the collapsed assembly of the other pair of end cells for this carrier.

The folding assembly of the top and bottom wings *w*–5 and *w*–6 is then ready to proceed to provide the intermediate cells for the carrier. In this operation, adhesive areas *d*—*d'* are first applied to those portions of the center partition panels 1—1' to be covered by the adjacent center partition liner sections 51—51', and the top and bottom wings *w*–5 and *w*–6 are then folded along the longitudinal extending scores 50—50' to adhesively secure the center partition liner sections 51—51' to the adjacent center partition panels 1—1' as shown in Fig. 5.

In the next operation, adhesive strips *e*—*e'* are applied to the center partition liner flaps 59—59' and the left hand portion of the wings *w*5 and *w*6 then folded along the aligned scores 65—65' to thereby adhesively secure the glue flaps 59—59' to the adjacent center partition liner sections 51—51' as shown in Fig. 6. In substantially the same operation, strips of adhesive *f*—*f'* are applied to the end edge portions of the relatively wide side wall liner sections 54—54' as shown in Fig. 6, and the right hand portions of the intermediate cell forming wings *w*–5 and *w*–6 are then folded along the aligned scores 62—62' to thereby adhesively secure the glued edge portions of the side wall liner sections 54—54' to the adjacent previously folded side wall liner sections 55—55' as shown in Fig. 7. As thus glued and folded the intermediate cells will be fully assembled in collapsed form and will lie between the collapsed end cells of the blank as shown in Fig. 7.

When the blank has been assembled into the form shown in Fig. 7, it is ready to receive the bottom and side panel forming blank B' as shown in Fig. 2. In applying the blank B' to the blank A' assembled in the form shown in Fig. 7, adhesive areas *g'* are first applied to the side wall liner sections 4' and 5 and to the partially overlapped side wall liner sections 54' and 55' as shown in Fig. 7, care being taken to apply no adhesive to the end panel section 2' or to the cross partition sections 7' and 52'. One of the side wall panels 101' of the blank B' is then applied in superimposed registry to the glued surfaces of the side wall liner sections 4', 5', 54' and 55' in the manner shown in Fig. 8. A coating *h* of adhesive is then applied to the entire face of the center partition panel 1, which can be done while the connected blanks are in the position shown in Fig. 8 or in the inverted position shown in Fig. 9. In the next folding operation blank A' as shown in Fig. 9 is folded along the top edge defining score 11 to thereby adhesively secure the center partition panels 1 and 1' in back to back relationship as shown in Fig. 10.

In the next gluing operation, adhesive areas *g* are applied to the other set of side wall liner sections 4, 5, 54 and 55 as shown in Fig. 10, care being taken to apply no adhesive to the intervening cross partition sections 7 and 52 or the end panel section 2. When thus glued, the blank B' is folded along its bottom collapsing score 102 so as to place its side panel 101 into adhesive secured registry with the glued surfaces of the side wall liner sections 4, 5, 54 and 55, thereby completing the assembly of this twelve cell carrier in collapsed form as shown in Fig. 11.

The assembled blank part A' of this carrier as shown in Figs. 12 and 13 provides a center partition structure which is formed by the center partition panels 1 and 1' as overlapped by the center partition liner sections 51—51' and the paired center partition liner flaps 9—9' and 8—8'. The handle part is of four ply construction at the ends thereof and of six ply construction at the hand grip area thereof. Two pairs of end cells are completely formed by the left hand wings *w*–1 and *w*–3 and the right hand wings *w*–2 and *w*–4, while two pairs of intermediate cells are formed by the top and bottom wings *w*–5 and *w*–6 of blank A' as shown in Fig. 13. The other two pairs of intermediate cells are completed when the side panels 101 and 101' of the blank B' have been secured to the side wall liner sections of the assembled blank part A'. A collapsible twelve cell carrier which is sturdy and strong in construction is thus provided.

This twelve cell carrier may be erected by pressing its bottom collapsing score 11 against a flat surface and thereupon retained in erected form by interlocking one pair of hook portions 22—22' formed in the bottom ends of the center partition panels 1—1' into engagement with the adjacent notched cutout 102' formed in the adjacent end of the bottom panel. To provide further support for the bottom panel, another pair of hook portions 22—22' may be formed in the bottom edge of the center partition panels 1—1' to interlock with the corresponding notch 102' formed in the opposite end edge of the bottom panel.

Multi-celled twin compartmented carriers constructed according to this invention are particularly adapted to receive bottles in the cells thereof, although these carriers can be designed for the transportation of various other solid articles as desired. The carrier shown in Figs. 12 and 13 is equipped with twelve cells designed to receive twelve bottles. However, these carriers can also be made to provide eight or ten cells if desired.

In making a ten cell carrier, the center partition panels 1—1' of the blank A' shown in Fig. 1 would be appropriately reduced in length and the bottom and side panel forming blank B' shown in Fig. 2 would also be appropriately reduced in length. To make the ten cell carrier by the use of the blank A' shown in Fig. 1 for example, it is only necessary to reduce the width of the center partition liner sections 51—51', and remove the third pair of cross partition sections 57—57' and their associated securing flaps 59—59' so that the top and bottom wings *w*–5 and *w*–6 provide only two pairs of intermediate cross partition sections 52—52' and 53—53' and two pairs of side wall liner sections 54—54' and 55—55'.

To provide an eight cell carrier, the center partition panels 1—1' of blank A' shown in Fig. 1 and the bottom panel sections 100—100' and the side panels 101—101' of blank B' shown in Fig. 2 would be appropriately reduced in length. The paired center partition liner sections 51—51' would also be reduced in length and the paired sections 53—53', 55—55' and 57—57' and the flaps 59—59' would be removed, thereby leaving only one pair of intermediate cross partition sections 52—52' and the associated side wall liner sections 54—54'.

The multi-celled twin compartmented article carriers made in accordance with this invention and equipped with any desired even number of cells are strong and sturdy in construction and readily collapsible into flat form, and can easily be erected and maintained in erected position. The handle part for these carriers may be made of not less than four plys of sheet material with the center partition structure extending down to the erected bottom panel and the full length of the carrier. The center partition structure has a thickness of not less than two plys of sheet material throughout its length and height. The end panel sections extend down to the erected bottom panel and are integrally but foldably connected to the ends of the center partition panels to provide a carrier of great strength. All of the cross partition sections also extend down to the erected bottom panel and can be made of any desired height. The side panels are also reinforced and strengthened by the side wall liner sections associated with the cell forming structures of the carrier.

Where the carrier is to be used in the transportation of heavy bottles or another heavy article loads, the bottom and side panel forming blank B' may be made from a stronger, tougher or heavier sheet material than that used to form the companion blank A'. Carriers can thus be made in accordance with this invention to satisfy almost any use condition, and with a variegated number of even cells which are generally similar in design and appearance. Since these multi-celled carriers are generally similar in structure irrespective of the number of cells with which they are equipped, the blanks therefor can be assembled on substantially the same gluing and folding machines by making only selected adjustments of the gluing and folding devices thereof. As a result, substantial savings in production costs can be effected where carriers having a variegated number of article receiving cells are to be produced.

While certain novel features of this invention have been disclosed herein and are pointed out in the claims, it will be understood that various omissions, substitutions and changes may be made by those skilled in the art without departing from the spirit of this invention.

What is claimed is:

1. A multi-celled twin compartmented article carrier comprising a pair of center partition panels foldably connected along the top edge thereof and secured together in back to back relation and extending substantially the full length of the carrier, end cell structures foldably connected to both ends of both center partition panels, an intermediate cell structure in each of said twin compartments positioned between the adjacent end cell structures and integrally hinged to the lower edge of the adjacent center partition panel, said end cell and intermediate cell structures providing end panel sections, the cross partition sections and side wall liner sections for the carrier, a bottom panel having a longitudinally extending collapsing score, and side panels foldably connected to said bottom panel and secured to the adjacent side wall liner sections of the adjacent end cell and intermediate cell structures.

2. A multi-celled twin compartmented article carrier formed from two separate blank parts, one of said blank parts providing a pair of center partition panels foldably connected along the top edge thereof and secured together in back to back relation and extending substantially the full length of the carrier, end cell structures foldably connected to both ends of both center partition panels, and an intermediate cell structure in each of said twin compartments positioned between the adjacent end cell structures and integrally hinged to the lower edge of the adjacent center partition panel, said end cell and intermediate cell structures providing the end panel sections, the cross partition sections, and the side wall liner sections for the carrier, said companion blank part providing a bottom panel having a longitudinally extending collapsing score, and opposite side panels foldably connected to said bottom panel and adhesively secured to the adjacent side wall liner sections of the adjacent cell structures.

3. A multi-celled twin compartmented article carrier formed from two separate blank parts, one of said blank parts providing a pair of center partition panels foldably connected along the top edge thereof and extending substantially the full length of the carrier, two pairs of end cell structures integrally connected to both ends of both center partition panels, and intermediate cell structures positioned between the end cell structures, each of said intermediate cell structures having a center partition liner section foldably connected to the lower edge of the adjacent center partition panel, said end cell and intermediate cell structures providing the end panel sections, the cross partition sections and the side wall liner sections for the carrier, said companion blank part providing a bottom panel having a longitudinally extending collapsing score, and opposite side panels foldably connected to said bottom panel and adhesively secured to the adjacent side wall liner sections of the adjacent cell structures.

4. A blank formed from sheet material and designed to provide a structural part for a multi-celled twin compartmented article carrier, said blank including a pair of full length center partition sections foldably connected along the top edge thereof, an end wing extending from each end edge of both of said center partition panels, hand hole cutouts in the upper handle forming portions of said center partition panels, and an intermediate wing foldably connected to the lower end of each of said center partition panels, each of said end wings including an end panel section foldably connected to the adjacent end edge of the center partition panel, a side wall liner section foldably connected to the end panel section, a cross partition section foldably connected to the side wall liner section, and a securing flap foldably connected to the cross partition section, each of said intermediate wings including a center partition liner section foldably connected to the bottom end of the adjacent center partition panel, an intermediate cross partition section foldably connected to each end edge of said center partition liner section, a side wall liner section foldably connected to each of said intermediate cross partition sections, a third cross partition section foldably connected to one of said intermediate side wall liner sections, and a center partition securing flap foldably connected to said third cross partition section.

5. A blank formed from sheet material and designed to provide a structural part for a multi-celled twin compartmented article carrier, said blank including a pair of full length center partition sections foldably connected along the top edge thereof, an end wing extending from each end edge of both of said center partition panels, a pair of handle facing flaps captured from material between each pair of adjacent end wings and foldably connected to the adjacent end edges of said center partition panels, hand hole cutouts in said handle facing flaps and in the upper handle forming portions of said center partition panels, and an intermediate wing foldably connected to the lower end of each of said center partition panels, each of said end wings including an end panel section foldably connected to the adjacent end edge of the center partition panel, a side wall liner section foldably connected to the end panel section, a cross partition section foldably connected to the side wall liner section, and a securing flap foldably connected to the cross partition section, each of said intermediate wings including a center partition liner section foldably connected to the bottom end of the adjacent center partition panel, an intermediate cross partition section foldably connected to each end edge of said center partition liner section, a side wall liner section foldably connected to each of said intermediate cross partition sections, a third cross par-

tition section foldably connected to one of said intermediate side wall liner sections, and a center partition securing flap foldably connected to said third cross partition section.

6. A pair of companion blanks formed from sheet material and designed when assembled together to provide a multi-celled twin compartmented article carrier, one of said blanks including a pair of full length center partition sections foldably connected along the top edge thereof, an end wing extending from each end edge of both of said center partition panels, a pair of handle facing flaps captured from material between each pair of adjacent end wings and foldably connected to the adjacent end edges of said center partition panels, hand hole cutouts in said handle facing flaps and in the upper handle forming portions of said center partition panels, and an intermediate wing foldably connected to the lower end of each of said center partition panels, each of said end wings including an end panel section foldably connected to the adjacent end edge of the center partition panel, a side wall liner section foldably connected to the end panel section, a cross partition section foldably connected to the side wall liner section, and a securing flap foldably connected to the cross partition section, each of said intermediate wings including a center partition liner section foldably connected to the bottom end of the adjacent center partition panel, an intermediate cross partition section foldably connected to each end edge of said center partition liner section, a side wall liner section foldably connected to each of said intermediate cross partition sections, a third cross partition section foldably connected to one of the said intermediate side wall liner sections, and a center partition securing flap foldably connected to said third cross partition section, said companion blank including a bottom panel having a longitudinally extending collapsing score, and side panels foldably connected to said bottom panel and designed to be secured to the adjacent side wall liner sections of said wings when assembled to provide cell structures.

References Cited in the file of this patent

UNITED STATES PATENTS

771,798	Johnson	Oct. 4, 1904
1,653,633	Koeser	Dec. 27, 1927
2,001,816	Coyle	May 21, 1935
2,154,085	Bergstein	Apr. 11, 1939
2,345,746	Goodyear	Apr. 4, 1944
2,372,351	Arneson	Mar. 27, 1945
2,460,108	Smith	Jan. 25, 1949
2,687,232	Arneson	Aug. 24, 1954

FOREIGN PATENTS

800,026	France	June 25, 1936
126,777	Sweden	Nov. 22, 1949