June 11, 1957 W. A. RINGLER 2,795,352

COLLAPSIBLE BOTTLE CARRIERS

Filed May 10, 1952 7 Sheets-Sheet 1

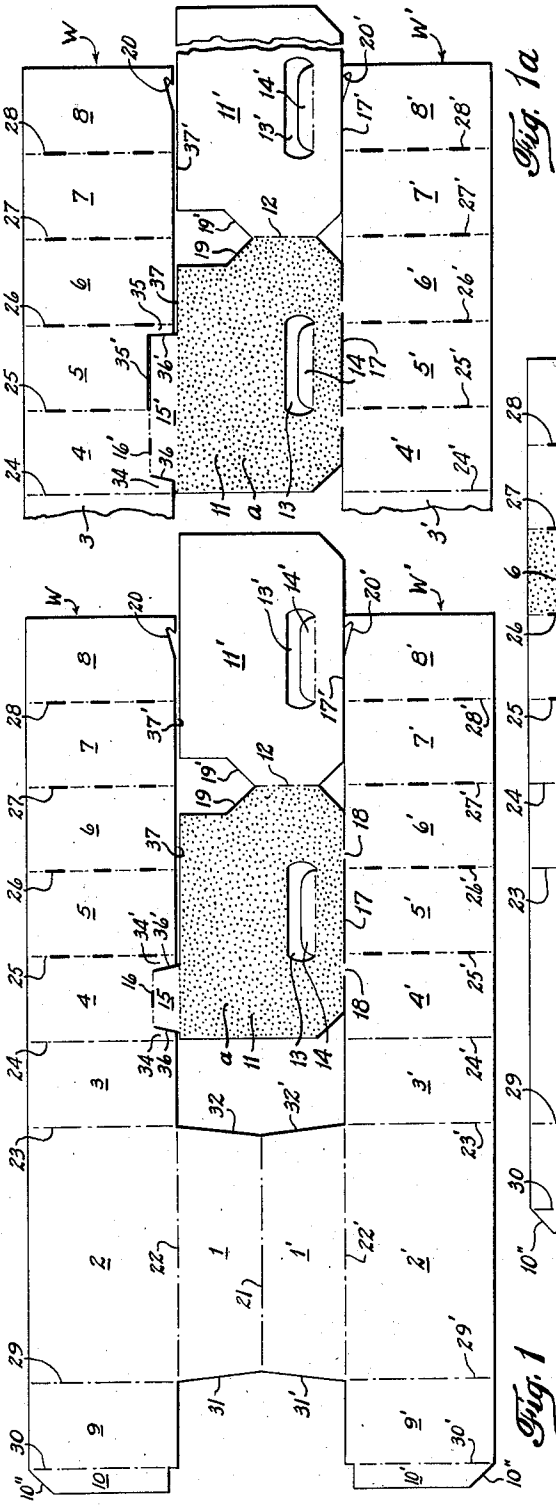


Fig. 1

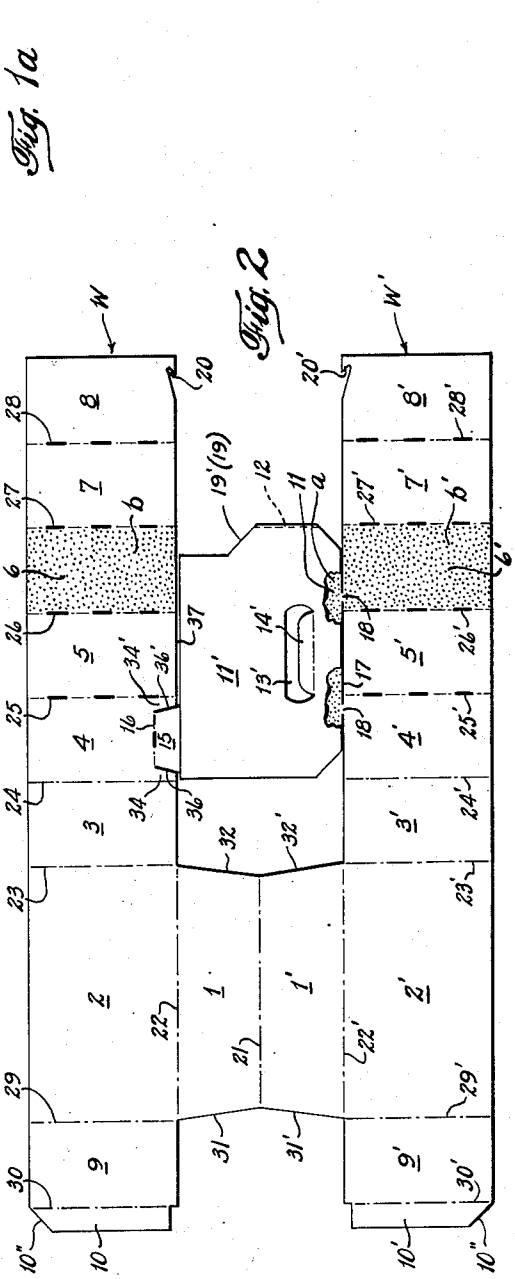


Fig. 1a

Fig. 2

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COLLAPSIBLE BOTTLE CARRIERS

Filed May 10, 1952 7 Sheets-Sheet 2

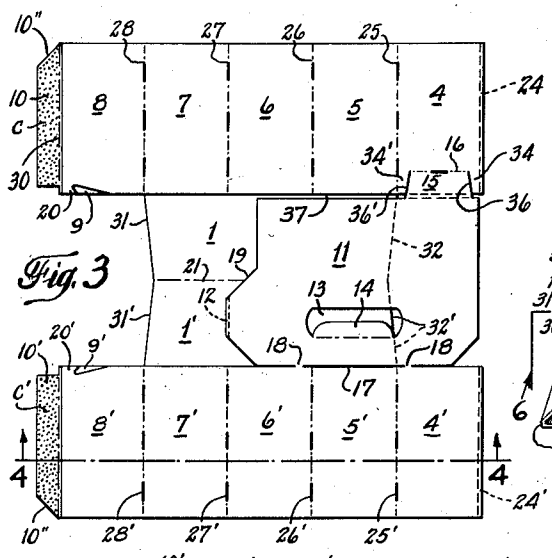


Fig. 3

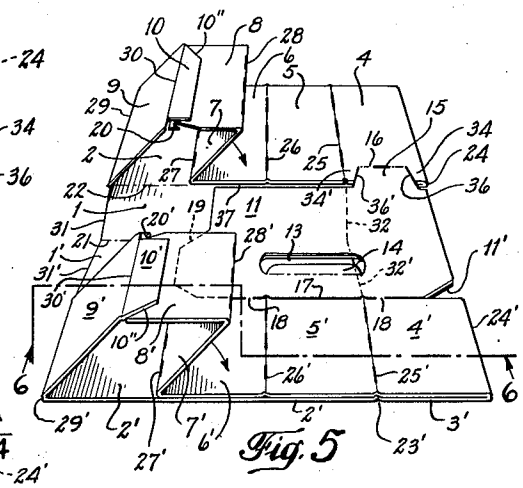


Fig. 5

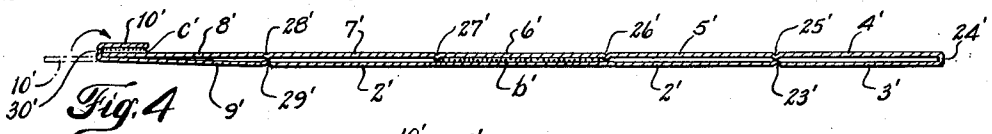


Fig. 4

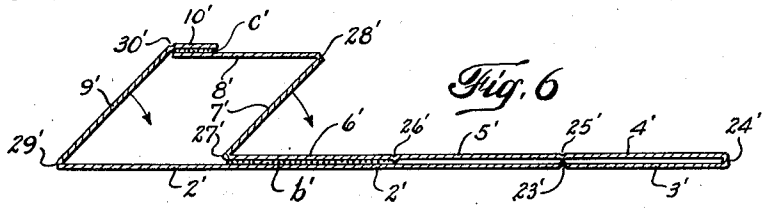
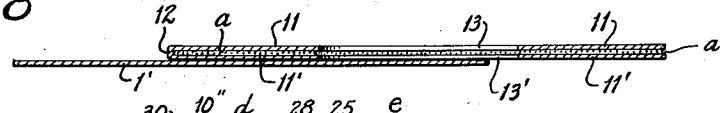


Fig. 6

Fig. 8



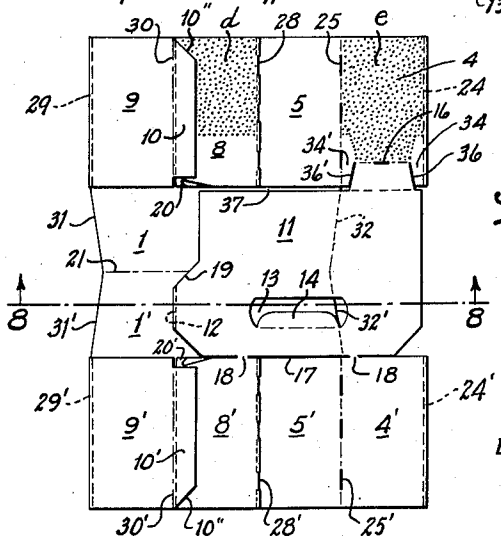


Fig. 7

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COLLAPSIBLE BOTTLE CARRIERS

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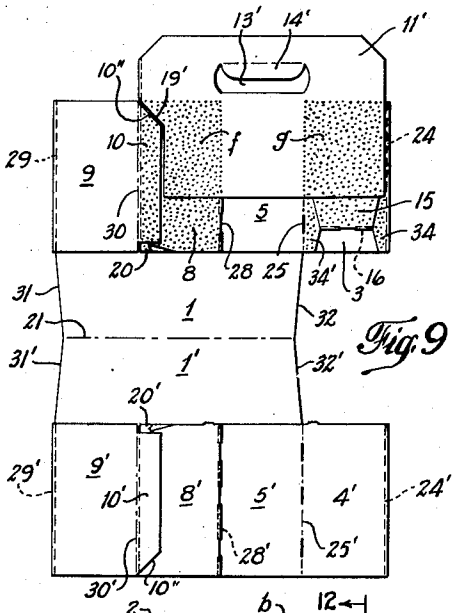


Fig. 9

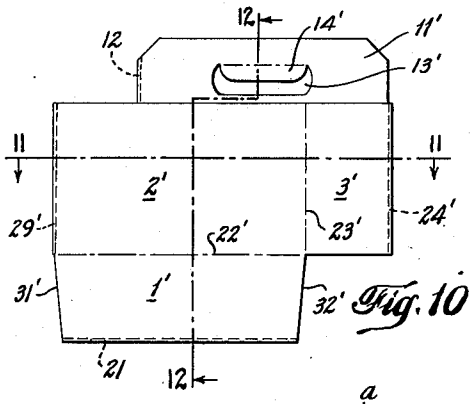


Fig. 10

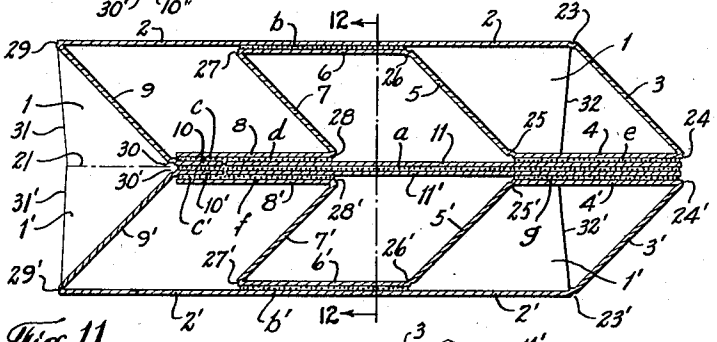


Fig. 11

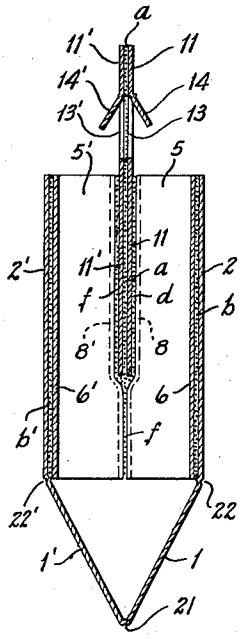


Fig. 12

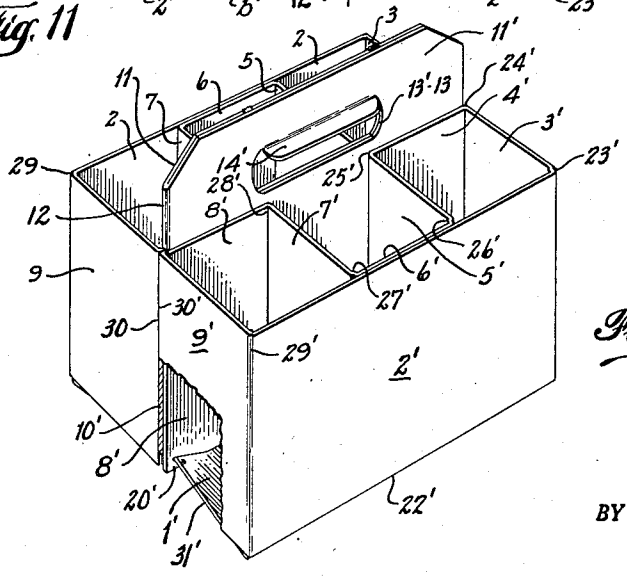


Fig. 13

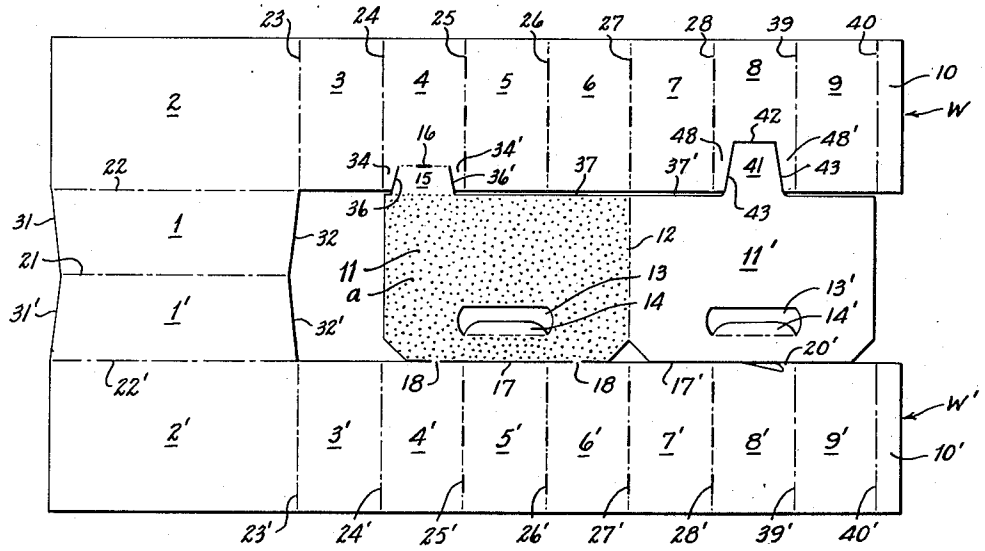
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June 11, 1957 W. A. RINGLER 2,795,352

COLLAPSIBLE BOTTLE CARRIERS

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Fig. 14



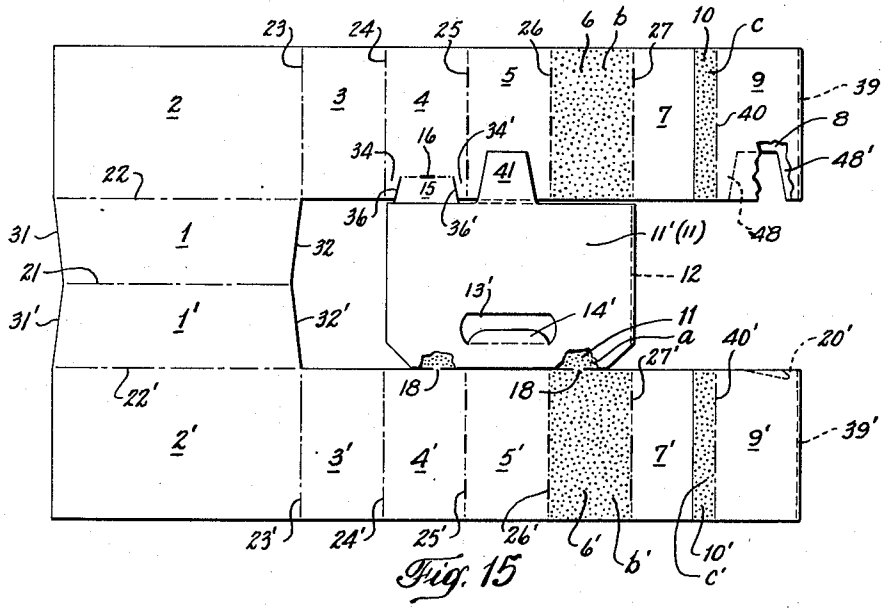


Fig. 15

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June 11, 1957 W. A. RINGLER 2,795,352

COLLAPSIBLE BOTTLE CARRIERS

Filed May 10, 1952 7 Sheets-Sheet 5

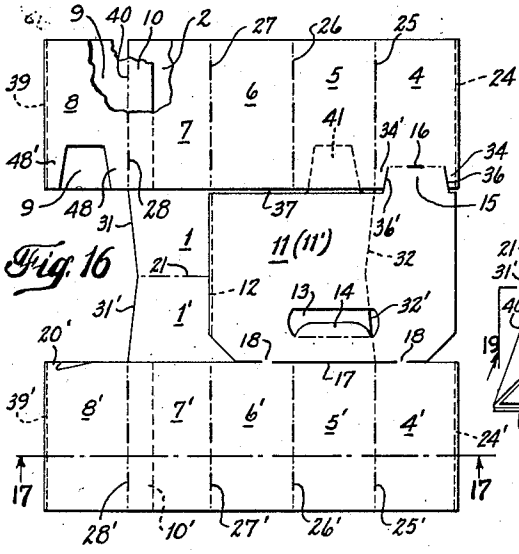


Fig. 16

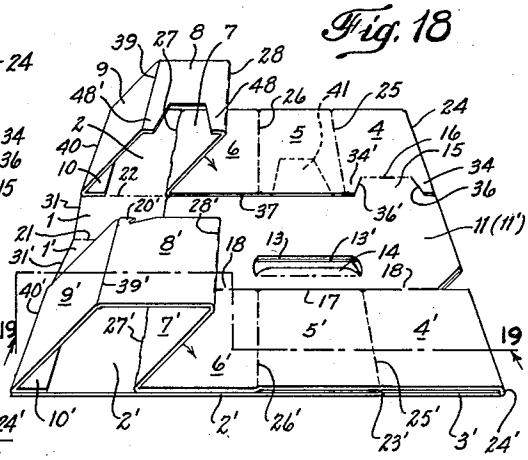


Fig. 18

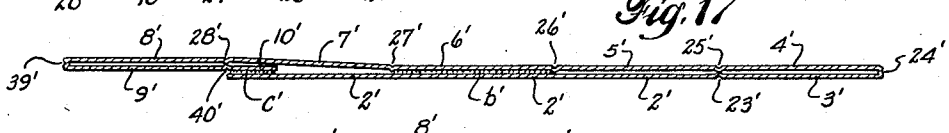


Fig. 17

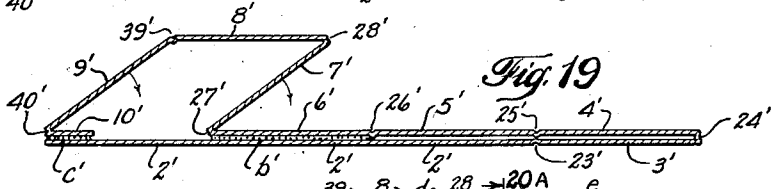


Fig. 19

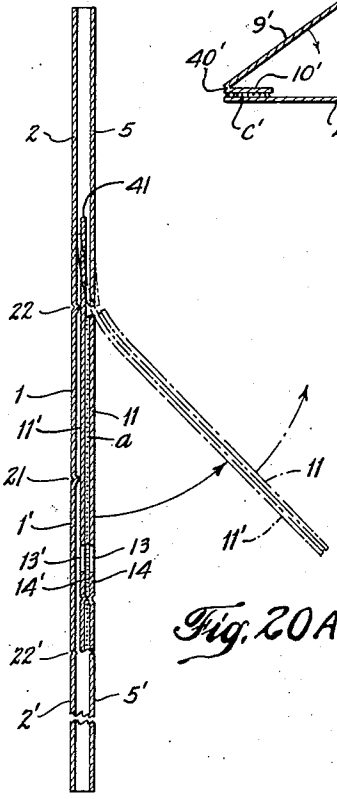


Fig. 20A

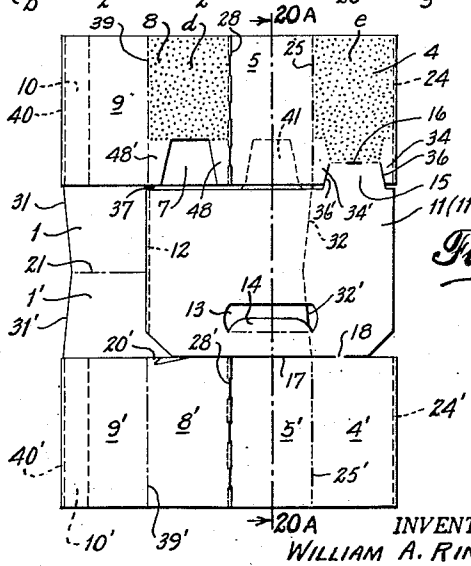


Fig. 20

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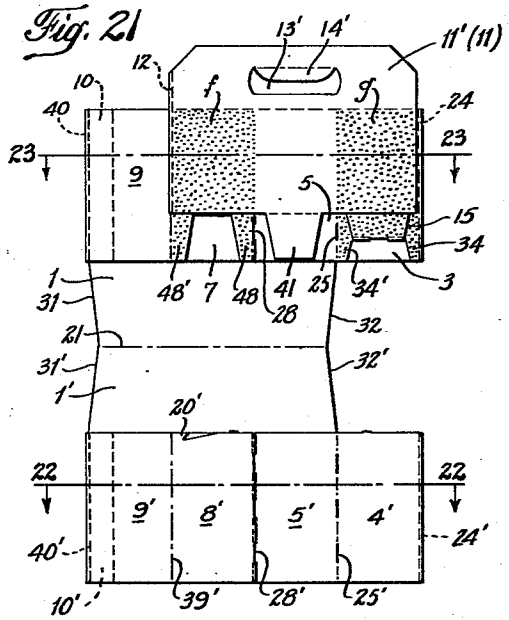
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Ruben J. Carlson
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June 11, 1957 W. A. RINGLER 2,795,352

COLLAPSIBLE BOTTLE CARRIERS

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Fig. 21



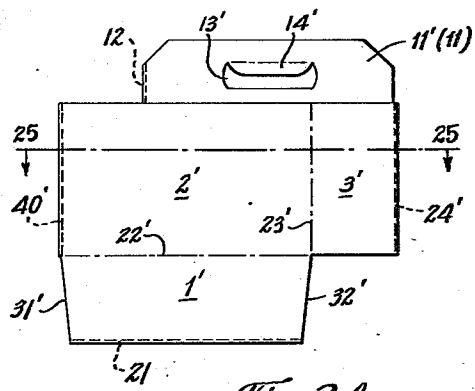


Fig. 24

Fig. 22

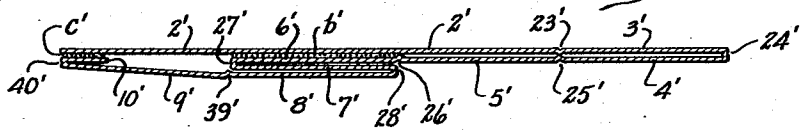
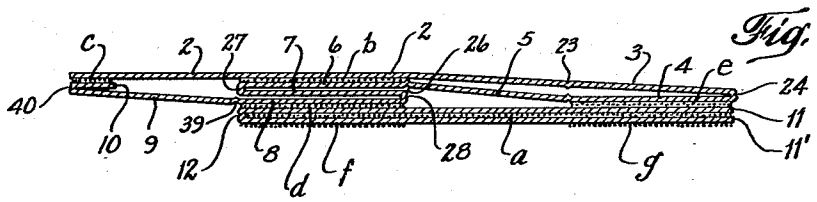


Fig. 23



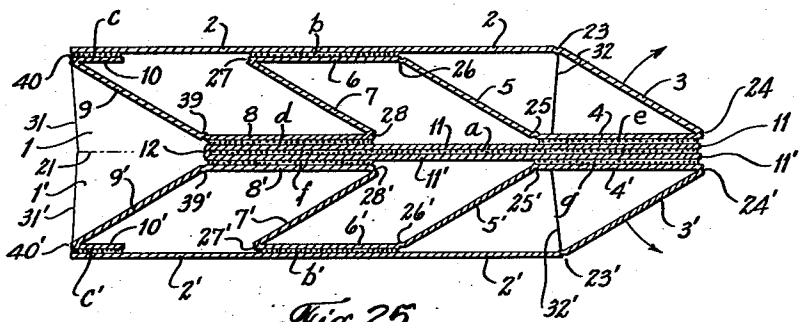


Fig. 25

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COLLAPSIBLE BOTTLE CARRIERS

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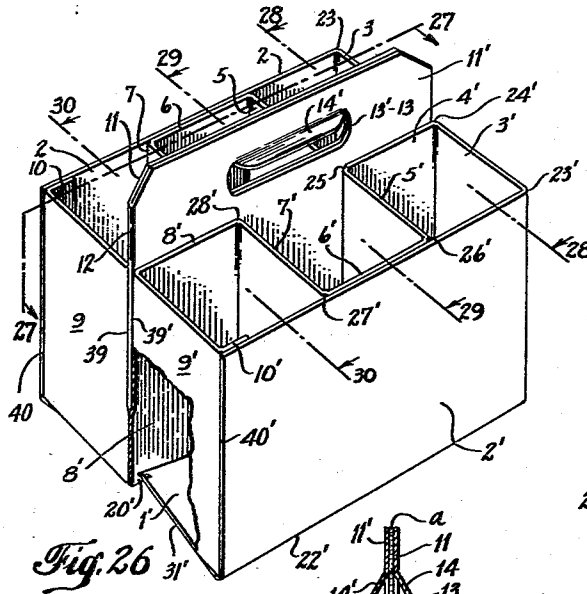


Fig. 26

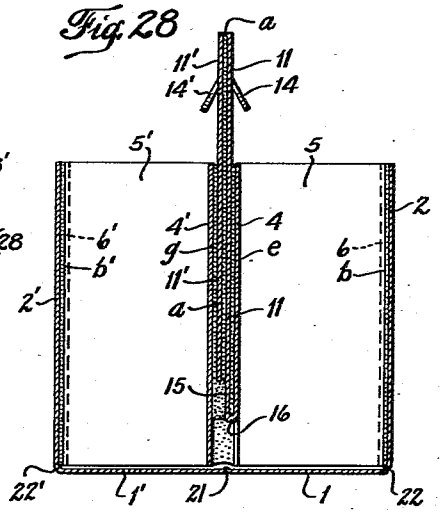


Fig. 28

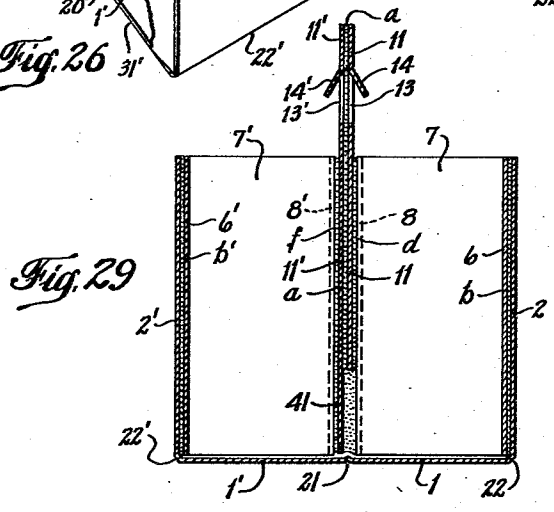


Fig. 29

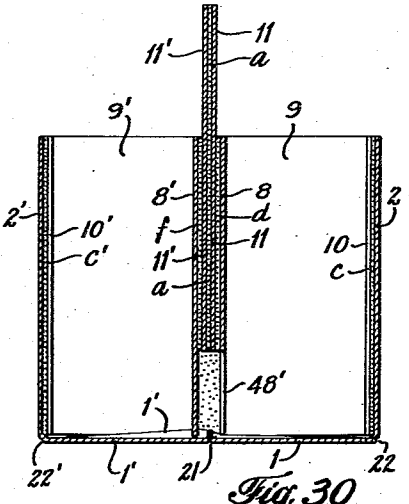


Fig. 30

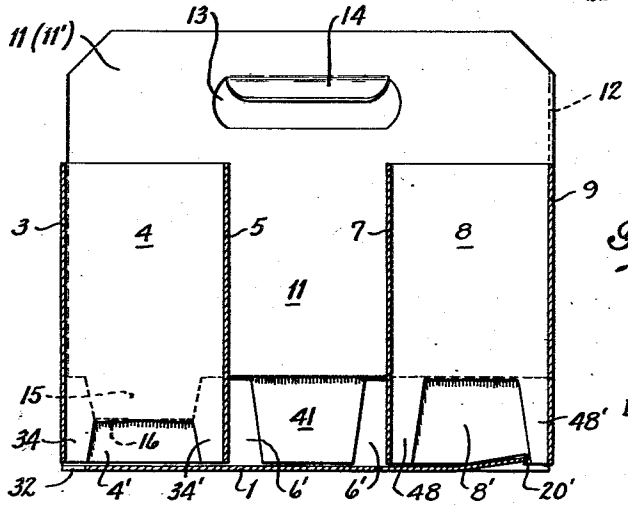


Fig. 27

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United States Patent Office 2,795,352 Patented June 11, 1957

2,795,352

COLLAPSIBLE BOTTLE CARRIERS

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

Application May 10, 1952, Serial No. 287,118

12 Claims. (Cl. 220—113)

This invention relates to collapsible bottle carriers, and more particularly to twin compartmented multicelled bottle carriers formed from paperboard or fiberboard materials which are designed to permit flat collapse thereof during shipment and storage and convenient erection for bottle filling and transportation.

The large and increasing consumer demand for bottled soft drinks, beer and other bottled beverages, has made it desirable and necessary for the beverage bottling and distributing industry to furnish with their respective beverage products attractive bottle holders or carriers by means of which the consumer may conveniently transport and receive delivery of a plurality of beverage filled bottles and conveniently return the empty bottles to the beverage bottler or distributor. In order to effectively and economically pack the beverage bottles in bottle carriers, distribute the bottle filled carriers to the retailer or consumer, and remove the empty bottles from the returned carriers, beverage bottlers and distributors have found it increasingly desirable to install systematized handling equipment for filling the carriers, for placing the carriers in the low walled distributor cases as commonly used, for handling, stacking and transporting the carrier filled distribution cases, and for removal of the empty bottles from the returned carriers so that they may be expeditiously washed and cleansed before reuse.

Bottle carriers made in accordance with this invention are designed to satisfy these exacting requirements of the beverage bottling and distributing industry. These carriers are also designed and constructed to permit low cost manufacture and assembly thereof, to provide carriers which are durable and lasting in use, convenient and attractive for consumer handling, rigid and sturdy when erected, provide cushioned protection and retainment of the bottles inserted therein, and additionally present substantial flat surface areas for the reception of attractive advertising decoration, with the bottles therein adequately displayed.

These bottle carriers are made from substantially rectangular blanks of paperboard or fiberboard material which may be cut and scored in a manner to usefully incorporate substantially all the paperboard stock into the finished carriers with an almost insignificant amount of waste resulting in cutting. The stock sheets from which the blanks are cut need be finished and decorated on one side only, since the bottle filled carrier as assembled from the blank exposes only one face of the blank to exterior view. The carrier blanks are also designed to permit high speed gluing and folding thereof into completed bottle carriers in collapsed form in a single pass through a standard folding and gluing machine. The carrier handle is formed as an integral part of the center partition and is shaped from two hingedly connected sections captured from paperboard material located between the spaced wing extensions which as scored provide the cell forming walls of the carrier. The paired handle forming sections of the blank are integrally connected for superimposed folding, and one of the handle forming sections is integrally and foldably connected by a root extension to one of the wing extensions. Thus, all parts of the blank are integrally connected for automatic sequential gluing and folding into the collapsed carrier at high production speed.

As assembled, the adjacent end cells of the carrier are separated and the bottles therein cushioned by four thicknesses of paperboard, and the intermediate cells are separated and the bottles therein cushioned by two thicknesses of paperboard. The cross partitions are firmly and foldably secured to the interior faces of the side panels and to the plural thickness center partition, providing a carrier which is rigid and sturdy when erected, unyielding to bottle load strain, and convenient to collapse and erect. The handle part may be made to extend any convenient distance above the top horizontal edges of the bottle receiving cells and the cell walls may be made of any desired depth to adequately protect and contain bottles of almost any height.

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 appended hereto, 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 an inside face view of the blank as cut and scored from a paperboard or fiberboard stock sheet for assembly into the bottle carrier shown in Fig. 13, this view also showing adhesive applied to the main handle forming section thereof preliminary to the initial folding operation;

Fig. 1*a* is an inside face view of a carrier forming blank which is similar in form to the blank shown in Fig. 1 except that the main handle forming section of the blank of Fig. 1*a* presents a root extension somewhat longer than the root extension associated with the main handle forming section of the blank shown in Fig. 1;

Fig. 2 is an inside face view of the blank shown in Fig. 1 after the initial folding operation has been completed, this view also showing adhesive applied to certain areas of the wing extensions in preparation for the second folding operation;

Fig. 3 is an inside face view of the blank shown in Fig. 2 as the same would appear when the second folding operation has been completed, this view showing adhesive applied to the securing flaps of the blank in preparation for the third folding operation;

Fig. 4 is a horizontal cross sectional view of the folded blank as it would appear after the second folding operation and when viewed along line 4—4 of Fig. 3;

Fig. 5 is a perspective view of the partially folded blank shown in Fig. 3 as it would appear when undergoing the third or shift folding operation wherein the pair of end cells at the left hand side of the blank are laterally shifted to overlie the adjacent side wall panels;

Fig. 6 is a horizontal cross sectional view taken along line 6—6 of Fig. 5, this view further illustrating the relationship of the blank parts when the end cells at the left side of the blank are undergoing shift folding movement;

Fig. 7 is a plan view of the blank shown in Fig. 5 as the same would appear when the end cell shift has been completed, this view also showing adhesive applied to further areas of one of the folded wing extensions in preparation for the following folding operation;

Fig. 8 is a horizontal cross sectional view of the blank folded as shown in Fig. 7 and as it would appear when viewed along line 8—8 thereof;

Fig. 9 is a plan view of the blank as it would appear after the handle part as shown in Fig. 7 has been folded to final position, this view also showing adhesive areas applied to spaced parts of the blank preparatory to the next folding operation;

Fig. 10 is a plan view of the fully assembled collapsed carrier produced by folding the blank shown in Fig. 9 along its bottom collapsing score;

Fig. 11 is a horizontal cross sectional view of the assembled carrier as the same would appear when undergoing erection expansion from its collapsed form shown in Fig. 10;

Fig. 12 is a vertical cross sectional view of the partially expanded carrier as the same would appear when viewed along line **12—12** of Fig. 10 and Fig. 11;

Fig. 13 is a perspective view of the fully erected carrier as formed from the blank shown in Fig. 1, certain parts being broken away to illustrate structural details;

Fig. 14 is an inside face view of a modified form of blank as cut and scored from a paperboard or fiberboard stock sheet for assembly into the modified form of carrier shown in Fig. 26, this view also showing adhesive applied to the main handle forming section thereof preliminary to the initial folding operation;

Fig. 15 is an inside face view of the blank shown in Fig. 14 after the initial folding operation has been performed thereon, this view also showing adhesive applied to certain areas of the wing extensions in preparation for the second folding operation;

Fig. 16 is an inside face view of the blank as the same would appear when the second folding operation has been performed thereon;

Fig. 17 is a horizontal cross sectional view of the blank shown in Fig. 16 as the same would appear when viewed along line **17—17** thereof;

Fig. 18 is a perspective view of the blank formed as shown in Figs. 16 and 17 as it would appear when the end cells at the left hand side of the blank are subjected to shift folding to superimpose the same over the adjacent side wall panels of the blank;

Fig. 19 is a horizontal cross sectional view taken along line **19—19** of Fig. 18, this view further illustrating the folding relationship of the end cell walls during shifting movement thereof;

Fig. 20 is a plan view of the blank shown in Figs. 18 and 19 as the same would appear when the end cell shift has been completed, this view also showing adhesive applied to spaced areas of one of the folded wing extensions of the blank in preparation for the following folding operation;

Fig. 20*a* is a transverse cross sectional view of the blank as viewed along line **20***a*—**20***a* of Fig. 20, this view illustrating the manner in which the tab extension associated with the companion handle forming section emerges during swinging movement of the paired handle sections to final position;

Fig. 21 is a plan view of the blank as it would appear after the paired handle sections as shown in Fig. 20 have been folded to final position, this view also showing adhesive applied to spaced areas of the blank in preparation for the final folding operation;

Fig. 22 is a horizontal cross sectional view of the blank folded as shown in Fig. 21 as it would appear when viewed along line **21—21** thereof;

Fig. 23 is another horizontal cross sectional view of the blank as it would appear when viewed along line **23—23** of Fig. 21;

Fig. 24 is a plan view of the fully assembled collapsed carrier produced by folding the blank shown in Fig. 21 along its bottom collapsing score;

Fig. 25 is a horizontal cross sectional view of the assembled carrier taken along line **25—25** of Fig. 24 as the same would appear when undergoing erection expansion from its collapsed form shown in Fig. 24;

Fig. 26 is a perspective view of the fully erected carrier formed from the blank shown in Fig. 14, certain parts being broken away to illustrate structural details;

Fig. 27 is a longitudinal cross sectional view of the fully erected carrier as the same would appear when viewed along line **27—27** of Fig. 26;

Fig. 28 is a transverse cross sectional view taken through the paired end cells at the right side of the erected carrier as the same would appear when viewed along line **28—28** of Fig. 26;

Fig. 29 is another transverse cross sectional view taken through the paired intermediate cells of the carrier as the same would appear when viewed along line **29—29** of Fig. 26; and

Fig. 30 is a further transverse cross sectional view taken through the paired end cells at the left side of the erected carrier as the same would appear when viewed along line **30—30** of Fig. 26.

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

The improved bottle carriers of this invention may be advantageously made from paperboard or fiberboard blanks of substantial rectangular form as illustrated in Figs. 1 and 14. In their manufacture, a large size paperboard or fiberboard stock sheet of selected quality is printed and decorated on one side thereof only, and the stock sheet is then scored and cut in a single pass through the cutting and scoring machine, adjusted to perform the requisite cutting and scoring operations, to provide a plurality of carrier forming blanks of requisite form. The carrier forming blanks as thus cut and scored result in very little waste of stock sheet material, and are in a form which permits high speed gluing and folding of the carrier forming blanks in a single pass through an automatic gluing and folding machine of substantially standard construction. As a result, high speed and low cost production of these bottle carriers may be attained.

These improved carrier forming blanks as shown in Figs. 1 and 14 are cut and scored to provide a bottom panel particularly designed to support two rows of bottles with three bottles in each row. The bottom panel comprises bottom half sections **1** and **1'** of similar size, hingedly connected along a longitudinally extending collapsing score **21**. Side panels **2** and **2'** are hingedly connected to the opposite side edges of the bottom sections **1** and **1'** along parallel extending scores **22** and **22'** which are also parallel to the bottom collapsing score **21**. Wings *w* and *w'* extend from adjacent side edges of the side panels **2** and **2'** to provide the material from which the cell forming walls are formed.

The wings *w* and *w'* of the blanks shown in Figs. 1 and 14 are scored to form a pair of end wall sections **3** and **3'** foldably connected along score lines **23** and **23'** to one of the adjacent side edges of the side panels **2** and **2'** respectively. A pair of end cell center partition sections **4** and **4'** are foldably connected along score lines **24** and **24'** to the respective end wall sections **3** and **3'**. Cross partition sections **5** and **5'** are foldably connected along score lines **25** and **25'** to the respective end cell center partition sections **4** and **4'**, and a pair of side wall liner sections **6** and **6'** are foldably connected along score lines **26** and **26'** to the respective cross partition sections **5** and **5'**. Cross partition sections **7** and **7'** are foldably connected along score lines **27** and **27'** to the adjacent side wall liner sections **6** and **6'**, and end cell center partition sections **8** and **8'** are foldably connected along score lines **28** and **28'** to the adjacent cross partition sections **7** and **7'**.

The score lines **23**, **24**, **25**, **26**, **27** and **28** of the blanks shown in Figs. 1 and 14 are arranged in substantially parallel and equally spaced relationship, in substantial alignment with the score lines **23'**, **24'**, **25'**, **26'**, **27'** and **28'** respectively. As thus formed and defined, the end panel sections **3** and **3'**, the end cell center partition sections **4** and **4'**, the cross partition sections **5** and **5'**, the

side wall liner sections 6 and 6', the cross partition sections 7 and 7' and the end cell center partition sections 8 and 8' are of substantially uniform width, which width approximates the diameter of the bottles to be contained in the carrier assembled therefrom.

The handle part of the carrier assembled from the blanks shown in Figs. 1, 1*a* and 14 is in each instance captured from material between the wing extensions *w* and *w'* which would otherwise be discarded as waste. The handle part comprises a pair of handle forming sections 11 and 11' joined together by a connecting score 12 which is substantially in alignment with the aligned scores 27 and 27' which traverse the wing extensions *w* and *w'*. The paired handle forming sections 11 and 11' are designed to be folded along the connecting score 12 into superimposed relationship to provide a handle part having a horizontal length which is substantially equal to the horizontal length of the side panels 2 and 2'. The handle forming sections 11 and 11' have hand hole openings 13 and 13' therein which fall into aligned registry when the companion handle forming section 11' is superimposed over the main handle forming section 11. Edging flaps 14 and 14', designed to be rebent to provide a four-ply hand grip when the carrier is assembled, are captured during cutting of the hand hole openings 13 and 13' respectively.

The handle forming section 11 of the blanks shown in Figs. 1, 1*a* and 14 is in each instance separated from the bottom forming edges of the wing extension *w'* by cut line 17, except that the cut line 17 is preferably interrupted by narrow breakable necks 18 which temporarily connect the main handle forming section 11 to the end cell center partition section 4' and the side wall liner section 6' during the initial folding operations to thereby insure folding accuracy. The companion handle forming section 11' as shown in Figs. 1, 1*a* and 14 is in each instance fully separated by a line cut 17' from the bottom forming edge of the wing extension *w'*. The opposite edge of the handle forming section 11' is also fully separated by cut line 37' from the bottom forming edge of the wing extension *w*. The cut lines 17 and 17' which define the top forming edges of the handle sections 11 and 11' when fully assembled into carrier form, are preferably substantially in alignment with the folding score 22' which connects the bottom forming section 1' to the side wall panel section 2'. Likewise, the cut line 37' which defines the bottom forming edge of the handle forming section 11' may also be made substantially in alignment with folding score 22 which joins the bottom forming section 1 to the side wall panel 2. The height of the handle forming section 11' as defined by the edge forming cuts 17' and 37' would thus be approximately equal to the combined width of the bottom forming sections 1 and 1' as defined between the folding scores 22 and 22'.

The bottle receiving cells of the twin compartmented carriers as made from the blanks shown in Figs. 1, 1*a* and 14 are made of sufficient depth to adequately accommodate the bottles to be inserted therein, to retain the bottles in the cells and protect the bottles against injury when pocketed therein, and at the same time permit adequate display of the upper parts of the bottles. It will also be appreciated that the upper portion of the handle part of the carrier must extend a sufficient distance above the top edge of the cell walls so that the fingers may be conveniently inserted into the registered hand holes 13 and 13' in the handle forming sections 11 and 11' when the carrier cells are filled with bottles.

To facilitate assembly, the main handle forming section 11 of the blanks shown in Figs. 1, 1*a* and 14 is in each instance preferably hingedly connected to the lower end of end cell center partition section 4 by means of a folding score extending horizontally thereacross. In cases where relatively low bottles are to be nested in the carrier cells, the cell forming walls may be made sufficiently low to permit the handle forming section 11 to be hingedly connected to the end cell center partition section 4 along a score line which is substantially in alignment with score line 22 which defines the lower edge of the side wall panel 2. Thus, where relatively low bottles are to be nested in the carrier, a handle forming section 11 having an overall height equal to the width of the combined bottom forming sections 1 and 1' may be sufficient to place its hand hole 13 above the top edge of the cell forming walls for convenient insertion of the fingers into the hand hole when the carrier is assembled.

However, when the cell walls must be of sufficient height to adequately nest medium height or relatively high bottles, it is desirable to provide the handle forming section 11 with a root extension which is captured from the lower end of the end cell center partition section 4 and is hinged thereto. Thus the root extension 15 for the blanks shown in Figs. 1 and 14, and the root extension 15' for the blank shown in Fig. 1*a* may in each instance be of sufficient height to place the aligned hand holes 13 and 13' of the handle forming sections 11 and 11' as fully assembled into carrier form sufficiently above the top edge of the cell forming walls to permit convenient insertion of the fingers therein, and at the same time permit formation of the cell forming walls of sufficient height to adequately pocket both medium height or relatively high bottles.

The root extension 15 for the handle forming section 11 of the blanks shown in Figs. 1 and 14 is in each instance defined by a folding score 16 somewhat shorter in length than the full width of the end cell center partition section 4, the ends of the score being joined by vertically inclined cuts 36 which define spaced legs 34 and 34' at the lower end of section 4 between the cuts 34 and 34' and the adjacent transverse folding scores 24 and 25. Except for the root extension 15, the main handle forming section 11 of the blanks shown in Figs. 1 and 14 is in each instance separated from the wing extension *w* by a cut 37 which is substantially in alignment with the separating cut 37' of the companion handle forming section 11'.

As a modification, the main handle forming section 11 of the blanks shown in Figs. 1 and 14 may be provided with a root extension 15' as shown in Fig. 1*a* which is substantially longer than the root extension 15 associated with the blanks of Figs. 1 and 14. As shown in Fig. 1*a*, the root extension 15' may in part be captured from the lower end of the end cell center partition section 4 and in part captured from the lower end of the adjacent cross partition section 5. The root extension 15' is hinged to the end cell center partition section 4 only along the folding score 16', and is separated from the cross partition section 5 by a cut line 35' which is substantially in alignment with the hinging score 16'. The root extension 15' is defined at one end thereof by the vertically inclined cut 36 which meets the adjacent end of the folding score 16' so as to define a leg extension 34 at the lower end of the end cell center partition section 4. The other end of the root extension 15' is separated from the cross partition section 5 by a vertical cut 36' to define a leg extension 35 at the lower end of the cross partition section 5 and located between the cut 36' and the adjacent transverse score 26. The remaining part of the bottom forming edge of the main handle section 11 is otherwise separate from the wing extension *w* by a horizontal cut 37 which is substantially in alignment with the cut 37' which defines the corresponding edge of the companion handle forming section 11.

In the blanks shown in Figs. 1 and 14, the ends 31 and 32, 31' and 32' of the bottom forming sections 1 and 1' may be slightly inclined towards the bottom collapsible score 21 so that the fully erected carriers formed therefrom may be filled with bottles and snugly nested in a shipping crate in a manner so that the end

edges of the adjacent bottle filled carriers will not overlap or otherwise interfere with the removal of any selected bottle filled carrier as nested in the shipping crate. The bottom forming edge of the end cell center partition section 8' of the blanks shown in Figs. 1, 1*a* and 14 may also be provided with a hook formation 20' to engage the end edge 31' of the bottom forming section 1' adjacent the collapsible score 21 to thereby maintain the assembled carrier in erected form as shown in Figs. 13 and 26. The lower end of the end cell center partition section 8 of the blanks shown in Figs. 1 and 1*a* may also be provided with a corresponding hook portion 20 to engage the end edge 31 of the bottom forming section 1 when the carrier is fully erected.

It will be noted that the blank shown in Fig. 1 has only one pair of end wall sections 3 and 3' incorporated into the wing extensions *w* and *w'* which extend from the right hand side of the side wall panels 2. In this form of the invention, the other pair of end wall panels 9 and 9' extend from the left hand end of the side wall panels 2 and 2' and are hinged thereto by the score lines 29 and 29'. Securing flaps 10 and 10' are hingedly connected to the end wall sections 9 and 9' along the aligned scores 30 and 30'. Each of the securing flaps 10 and 10' may have a beveled outer end 10'' for a purpose which will presently appear. The paired end wall sections 9 and 9' preferably have the same width and height as the paired end wall sections 3 and 3' extending from the right hand side of the side wall panels 2 and 2'. The end cell center partition sections 4 and 4', 8 and 8'; the cross partition sections 5 and 7, 5' and 7'; and the side wall liner sections 6 and 6' may also be made of the same height as the end wall sections 3 and 9, 3' and 9', with the exception that the root extension 15 for the main handle forming section 11 may be captured from the lower end of the end cell center partition section 4 in the manner above described.

In the carrier formed from the blank shown in Fig. 1 it is desirable to provide an edge cutout 19 in the main handle forming section 11 and a corresponding edge cutout 19' in the companion handle forming section 11'. The cutouts 19 and 19' fall into registry when the companion handle forming section 11' is folded over the main handle forming section 11. The aligned cutouts 19 and 19' provide space for the reception of the upper beveled ends 10'' of the glue flaps 10 and 10' when the carrier is fully assembled.

In assembling a carrier from the blank formed as shown in Fig. 1, an area of adhesive *a* is first applied to the inside face of the main handle forming section 11. In the first folding operation, the companion handle forming section 11' is folded along the connecting score 12 into registering relationship over the glued area *a* of the main handle forming section 11 and then pressed into adhesive contact therewith as shown in Fig. 2. As thus folded, the unfinished inside faces of the handle forming sections 11 and 11' are adhesively secured together, with the outer finished faces of the handle forming sections 11 and 11' forming the exposed outside faces of the handle part.

In the second gluing operation as shown in Fig. 2, areas of adhesive *b* and *b'* are applied to the inside face of the side wall liner sections 6 and 6'. The wing extensions *w* and *w'* are then plowed or folded over along the aligned scores 24 and 24' so as to thereby place the glued inside faces of the side wall liner sections 6 and 6' in adhesive contact with the center portion of the underlying side wall panels 2 and 2' as shown in Figs. 3 and 4. It will also be noted that by this folding operation the end cell center partition sections 4 and 4' are placed in overlying registry with the end wall sections 3 and 3' respectively, the cross partition sections 5 and 7, 5' and 7' along with the intermediate side wall liner sections 6 and 6' are placed in overlying registry with the underlying side wall panels 2 and 2', and the end cell center

partition sections 8 and 8' are placed in overlying registry with the underlying end wall sections 9 and 9', with the glue flaps 10 and 10' extending beyond the free edge of the overlying end cell sections 8 and 8' as shown in Fig. 3. In this same folding operation, the paired handle forming sections 11 and 11' as previously glued together are swung into the position shown in Fig. 3 to partly overlie the bottom forming sections 1 and 1', with the main handle forming section 11 then overlying the companion handle forming section 11'.

In the next gluing operation adhesive strips *c* and *c'* are applied to the upper exposed faces of the projecting glue flaps 10 and 10' as shown in Fig. 3. In the next folding operation as shown in Fig. 4, the glue flaps 10 and 10' are folded or plowed over and pressed into adhesive contact with the adjacent edges of the end cell center partition sections 8 and 8'. In the blank as thus formed both pairs of end cells are fully formed in collapsed state, with the paired end cells at the left hand side of the blank as shown in Fig. 4 partly overhanging the adjacent side edge of the side wall panels 2 and 2'.

The collapsed end cells at the left side of the blank extending as shown in Fig. 4, must next be shifted in the manner shown in Figs. 5 and 6 through an angle of approximately 180° so as to overlie the adjacent side wall panels 2 and 2'. This end cell shifting movement may be readily effected by a plowing operation whereby the end wall panels 9 and 9' are lifted and swung to the right through an angle of approximately 180° as shown in Figs. 5 and 6, which plowing operation automatically effects folding of the end cell center partition sections 8 and 8' and cross partition sections 7 and 7' so as to place the cross partition sections 7 and 7' in adjacent overlying relation to the side wall liner sections 6 and 6', and to place the end cell center partition sections 8 and 8' in adjacent overlying relation to the downwardly folded cross partition sections 7 and 7' as will be evident by referring to Figs. 5 and 6. This shift operation also places the end wall sections 9 and 9' in adjacent overlying relation to the side wall panels 2 and 2'. When this shift folding operation has been completed, the blank will then have been folded as shown in Figs. 7 and 8.

In the next folding step the paired handle forming sections 11 and 11' are swung into final position as guided by the hinging score 16. Previous to this swinging movement of the paired handle forming sections 11 and 11', adhesive is applied to that area *d* of the collapsed end cell center partition section 8 which is to be covered by the adjacent left hand portion of the handle forming section 11 when folded into final position. Similarly, an area of adhesive *e* is applied to the exposed face of the collapsed end cell center partition section 4 which is to be covered by the right hand portion of the handle forming section 11 and its associated root extension 15 as indicated in Fig. 7. Care should be taken to apply no adhesive to the exposed face of the cross partition section 5 positioned intermediate the end cell center partition sections 4 and 8.

When the end cell center partition sections 4 and 8 have thus been glued as shown in Fig. 7, the adhesively joined and paired handle forming sections 11 and 11' are swung upwardly along the collapsing score 16 which serves as a hinge or pivot therefor. The folding score 16 is of such length as to guide the upper swinging movement of the paired handle forming sections 11 and 11' so that when the handle sections have been swung through 180° as shown in Fig. 9, the left hand portion of the handle section 11 will become adhesively secured to the glued area *d* of the end cell center partition section 8, and the right hand side of the handle section 11 will be adhesively secured to the glued area *e* of the underlying end cell center partition section 4. When the handle sections 11 and 11' have been thus folded, the handle forming section 11' will overlie the handle section 11 as shown in Fig. 9, and the aligned hand holes 13 and 13'

will be spaced the required distance above the top edge of the underlying side wall panel **2**. As previously pointed out, the spacing of the aligned hand holes **13'** and **13** above the top edge of the underlying side wall panel **2** may be accurately determined by making the root extension **15** of the required height. It will also be noted that the aligned cutouts **19** and **19'** in the handle sections **11** and **11'** are shaped to interfit with the upper end of the glue flap **10** as shown in Fig. 9, so that the glue flap **10** will be snugly pocketed in the cutout thus formed.

In the final gluing operation, adhesive is applied to that area *f* of the handle section **11'**, the glue flap **10**, and the exposed end cell center partition section **8**, which corresponds to the exposed area of the glue flap **10'** and the end cell center partition section **8'** to be superimposed thereover in the final folding operation. Similarly, adhesive is applied to that area *g* of the handle section **11'**, the root extension **15** and the leg portions **34** and **34'** of the underlying end cell center partition section **4** which is to be covered by the end cell center partition section **4'** when folded into final position, care being taken to apply no adhesive to the center portion of the handle section **11** or the exposed lower portion of the underlying end wall section **3**.

When the glue areas *f* and *g* have thus been applied as indicated in Fig. 9, the blank is folded along its bottom collapsing score **21** so as to place end wall section **9** in overlying but unglued registry with the end wall section **9**; and to place glue flap **10'** and end cell center partition section **8'** in overlying and glued registry with the securing flap **10** and the glued left hand portion of the handle section **11'** and the glued lower portion of the end cell center partition section **8**. As a result of this final folding operation, the cross partition section **5'** is placed in overlying but unglued registry with the center portion of the handle section **11'** and the exposed lower end portion of the cross partition section **5**. Also as a result of this final folding operation, end cell center partition section **4'** is placed into glued registry with the glued area *g* of the right hand portion of the handle section **11'**, the exposed root extension **15** thereof, and the exposed leg portions **34** and **34'** of the end cell center partition section **4**. On the application of pressure to the thus folded blank to insure firm adhesion of the glue, the carrier will have been fully completely assembled into the collapsed form as shown in Fig. 10, ready for shipment and storage for subsequent use.

To erect the fully assembled but collapsed carrier as shown in Fig. 10, the bottom panel at the collapsing score **21** is placed on a flat surface and downward pressure exerted thereon, thereby causing the carrier to become partially expanded into the form in Figs. 11 and 12. Complete expansion and erection of the carrier may be accomplished by shifting the paired handle sections **11** and **11'** and associated end cell center partition sections **8** and **8'**, **4** and **4'** to the left as shown in Fig. 11, sufficient to effect hooking engagement between the foot lugs **20** and **20'** and the adjacent end edges **31** and **31'** of the bottom panel as shown in Fig. 13.

In the blank shown in Fig. 14, it will be noted that the end wall sections **9** and **9'** are formed as an integral part of the wing extensions *w* and *w'* and may be foldably connected along the aligned score lines **39** and **39'** to the adjacent edges of the end cell center partition sections **8** and **8'**. The glue flaps **10** and **10'** may also be foldably connected to the adjacent side edges of the end wall sections **9** and **9'** along the aligned score lines **40** and **40'**. By associating the end wall sections **9** and **9'** as an integral part of the wing extensions *w* and *w'*, the carrier forming blank as shown in Fig. 14 may be made substantially completely rectangular with almost insignificant waste of stock sheet material when these blanks are cut therefrom.

Carriers assembled from blanks shown in Figs. 1 and 1*a* present when assembled an intermediate divider section between the intermediate cells which is provided by the paired handle sections **11** and **11'** as shown in Fig. 11. However, where the handle section **11** is provided with a root extension **15** or **15'** as shown in Figs. 1 and 1*a*, the bottom defining edges **37** and **37'** of the handle sections **11** and **11'** will be spaced a corresponding distance above the expanded bottom panel as is evident by referring to Figs. 9 and 12, leaving an uncovered space between the lower edge of the double ply center divider section and the expanded bottom panel. This slight opening or gap is immaterial in most cases, since the major length of the paired bottles in the intermediate cells are fully separated and amply cushioned by the intermediate portion of the paired handle sections.

However, in event the lower ends of the paired bottles in the intermediate cells are so shaped as to require cushioned separation, a buffer flap extension **41** may be captured from the lower end of the end cell center partition **8** to form an integral part of the handle section **11'**. When the carrier is assembled from the blank shown in Fig. 14, the buffer flap extension **41** will project below the bottom edge **37—37'** of the double ply handle part in a manner to substantially fill the space between the intermediate cells as defined by the bottom edge **37—37'** of the double ply handle part and the erected bottom panel of the carrier as shown in Fig. 27.

The buffer flap extension **41** is captured from the lower end of the end cell center partition section **8** by providing a horizontal cut **42** therein which is joined to vertically inclined cuts **43** so as to define a leg portion **48** between the transverse score **28** and the adjacent cut **43**, and to also define a leg portion **48'** between the transverse score **39** and the adjacent cut **43**. As thus defined, the buffer flap **41** forms a relatively stiff flap extension projecting from the lower end of the handle section **11'** which may extend substantially down to the bottom panel of the erected carrier. The hole in end cell center partition section **8** left by the removal of the buffer flap extension **41**, subsequently becomes fully covered and closed when the carrier is assembled by the full length end cell center partition section **8'**.

In assembling a carrier from the blank formed as shown in Fig. 14, an area of adhesive *a* is first applied to the inside face of the main handle forming section **11**. In the first folding operation, the companion handle forming section **11'** is folded along the connecting score **12** into registering relationship over the glued area *a* of the main handle forming section **11**, and then pressed into adhesive contact therewith as shown in Fig. 15. As thus folded, the unfinished inside faces of the handle forming sections **11** and **11'** are adhesively secured together, with the outer finished faces of the handle forming sections **11** and **11'** forming the exposed outside faces of the handle part. Also in the first folding operation, the end wall sections **9** and **9'** are folded along the aligned scores **39** and **39'** so as to place them in overlying relation to the adjacent end cell center partition sections **8** and **8'**, with the glue flaps **10** and **10'** overlapping the adjacent cross partition sections **7** and **7'** as shown in Fig. 15.

In the second gluing operation as shown in Fig. 15, areas of adhesive *b* and *b'* are applied to the inside face of the side wall liner sections **6** and **6'**. Also adhesive strips *c* and *c'* are applied to either the glue flaps **10** and **10'** or to the left hand side edges of the side wall panels **2** and **2'** to which the flaps **10** and **10'** are to be secured.

The wing extensions *w* and *w'* are then plowed or folded over along the aligned scores **24** and **24'** so as to thereby place the glued inside faces of the side wall liner sections **6** and **6'** in adhesive contact with the center portion of the underlying side wall panels **2** and **2'** as shown in Figs. 16 and 17. It will also be noted that by this folding operation the end cell center partition sections **4** and **4'** are placed in overlying registry with the end wall sections **3** and **3'** respectively; and cross partition sections **5** and **7**, **5'** and **7'** along with the intermediate side wall

liner sections 6 and 6' are placed in overlying registry with the underlying side wall panels 2 and 2'. The end cell center partition sections 8 and 8' remain in overlying registry with the underlying end wall sections 9 and 9', but the glue flaps 10 and 10' are placed in adhesive contact with the adjacent free edges of the underlying side wall panels 2 and 2' as shown in Fig. 17. In this same folding operation the paired handle forming sections 11 and 11' as previously glued together are swung into the position shown in Fig. 16 to partly overlie the bottom forming sections 1 and 1', with the main handle forming section 11 then overlying the companion handle forming section 11'. The buffer flap extension 41 will then also underlie the bottom edge of the cross partition section 5 as shown in dot and dash lines in Fig. 16.

In the blank as thus formed both pairs of end cells are fully formed in collapsed state, with the paired end cells at the left hand side of the blank as shown in Figs. 16 and 17 partly overhanging the adjacent side edge of the side wall panels 2 and 2'. The collapsed end cells at the left side of the blank extending as shown in Figs. 16 and 17 must next be shifted in the manner shown in Figs. 18 and 19 through an angle of approximately 180° so as to overlie the adjacent side wall panels 2 and 2'. This end cell shifting movement may be readily effected by a plowing operation whereby the end wall sections 9 and 9' are lifted and swung to the right through an angle of approximately 180° as shown in Figs. 18 and 19, which plowing operation automatically effects folding of the end cell center partition sections 8 and 8' and cross partition sections 7 and 7' so as to place the cross partition sections 7 and 7' in adjacent overlying relation to the side wall liner sections 6 and 6', and to place the end cell center partition sections 8 and 8' in adjacent overlying relation to the downwardly folded cross partition sections 7 and 7' as will be evident by referring to Figs. 18 and 19. This shift operation also places the end wall sections 9 and 9' in adjacent overlying relation to the side wall panels 2 and 2'. When this shift folding operation has been completed, the blank will then have been folded as shown in Fig. 20.

In the next folding step, the paired handle forming sections 11 and 11' are swung into final position as guided by the hinging score 16. Previous to this swinging movement of the paired handle forming sections 11 and 11', adhesive is applied to that area *d* of the collapsed end cell center partition section 8 which is to be covered by the adjacent left hand portion of the handle forming section 11 when folded into final position, care being taken to apply no adhesive to the underlying cross partition section 7 which remains exposed between the leg portions 48' and 48 of the end cell center partition section 8. Similarly, an area of adhesive *e* is applied to the exposed face of the collapsed end cell center partition section 4 which is to be covered by the right hand portion of the handle forming section 11 and its associated root extension 15 as indicated in Fig. 20. Care should be taken to apply no adhesive to the exposed face of the cross partition section 5 positioned intermediate the end cell center partition sections 4 and 8.

When the end cell center partition sections 4 and 8 have thus been glued as shown in Fig. 20, the adhesively joined and paired handle forming sections 11 and 11' are swung upwardly along the collapsing score 16 which serves as a hinge or pivot therefor. The folding score 16 is of such length as to guide the upper swinging movement of the paired handle forming sections 11 and 11' so that when the handle sections have been swung through 180° as shown in Fig. 21, the left hand portion of the handle section 11 will become adhesively secured to the glued area *d* of the end cell center partition section 8, and the right hand side of the handle section 11 will be adhesively secured by the glued area *e* of the underlying end cell center partition section 4.

Since the cross partition section 5 lays loosely over the underlying side wall panel 2, the buffer flap extension 41 will automatically withdraw from its position therebetween when the handle sections are swung towards final position as illustrated in Fig. 20*a*. When the paired handle sections 11 and 11' have been swung into final position as shown in Fig. 21, the buffer flap extension 41 will have snapped into straightened position so as to extend coplanar with its associated handle section 11' and in position to substantially close the space between the intermediate cells below the bottom edges 37 and 37' of the paired handle sections 11 and 11'. In event difficulty is encountered in effecting unimpeded withdrawal of the buffer flap extension 41 from its position beneath the lower end of the cross partition section 5 during the swinging movement of the paired handle sections, the buffer flap extension 41 may be shortened or the lower end of the cross partition section 5 may be slightly cut away to the extent necessary during formation of the blank to insure the desired smooth and unimpeded withdrawal of the buffer flap extension 41 from its position beneath the cross partition section 5.

When the paired handle sections 11 and 11' have been swung into final position as shown in Fig. 21, the handle forming section 11' will overlie the handle section 11, and the aligned hand holes 13 and 13' will be spaced the required distance above the top edge of the underlying side wall panel 2. As previously pointed out, the spacing of the aligned hand holes 13' and 13 above the top edge of the underlying side wall panel 2 may be accurately determined by making the root extension 15 of the blank shown in Fig. 14 of the required height.

In the final gluing operation, adhesive is applied to that area *f* of the handle section 11' and the exposed leg portions 48 and 48' of the end cell center partition section 3, which correspond to the area of the end cell center partition section 8' to be superimposed thereover in the final folding operation, care being taken to apply no adhesive to the cross partition section 7 exposed between the leg portions 48 and 48' of end cell center partition section 8. Similarly, adhesive is applied to that area *g* of the handle section 11', the root extension 15 and the leg portions 34 and 34' of the underlying end cell center partition section 4 which is to be covered by the end cell center partition section 4' when folded into final position, care being taken to apply no adhesive to the center portion of the handle section 11 or the exposed lower portion of the underlying end wall section 3.

When the glue areas *f* and *g* have thus been applied as indicated in Fig. 21, the blank is folded along its bottom collapsing score 21 so as to place end wall section 9' in overlying but unglued registry with the end wall section 9; and to place end cell center partition section 8' in overlying and glued registry with the glued left hand portion of the handle section 11' and the glued leg portions 48 and 48' of the end cell center partition section 8. As a result of this final folding operation, the cross partition section 5' is placed in overlying but unglued registry with the center portion of the handle section 11' and its buffer flap extension 41. Also as a result of this final folding operation, end cell center partition section 4' is placed into glued registry with the glued area *g* of the right hand portion of the handle section 11', the exposed root extension 15 thereof, and the exposed leg portions 34 and 34' of the end cell center partition section 4. On the application of pressure to the thus folded blank to insure firm adhesion of the glue, the carrier will have been fully completely assembled into the collapsed form as shown in Fig. 24, ready for shipment and storage for subsequent use.

To erect the fully assembled but collapsed carrier as shown in Fig. 25, the bottom panel at the collapsing score 21 is placed on a flat surface and downward pressure exerted thereon, thereby causing the carrier to become partially expanded into the form in Fig. 25. Complete expansion and erection of the carrier may be

accomplished by shifting the paired handle sections 11 and 11' and associated end cell center partition sections 8 and 8', 4 and 4' to the left as shown in Fig. 25, sufficient to effect hooking engagement between the foot lug 20' and the adjacent end edges 31 and 31' of the bottom panel as shown in Fig. 26.

In the event that the paperboard stock material used in forming the blanks shown in Figs. 1 and 14 is of such a nature as to impede the desired high speed swinging movement of the paired handle sections 11 and 11' along the hinging score 16 to accurate final position, the swinging operation of the handle part into accurate final position can be facilitated by making the root extension associated with the blanks shown in Figs. 1 and 14 in the form of the root extension 15' as shown in the modification of Fig. 1*a*. In this form, it will be noted that the hinging score 16' can be made somewhat longer than the hinging score 16 shown in Figs. 1 and 14 to thereby facilitate the accurate swinging movement of the handle part to final position. Additionally, the free cut edge 35' of the root extension 15' as aligned with the hinging score 16' also serves as a pivot edge to steady the handle part during its swinging movement to final position. It will therefore be understood that the blanks shown in Figs. 1 and 14 may be made with a root extension 15' conforming to that shown in Fig. 1*a* where the use of such modification appears desirable to facilitate final swinging movement of the composite handle part. It will, however, be noted that the use of an elongated root extension 15' such as shown in Fig. 1*a* will leave a corresponding gap between a part of the free lower edge of the cross partition section 5 and the erected bottom panel.

The blanks shown in Figs. 1 and 14 will form assembled carriers wherein the paired end cells at the left end of the carriers as shown in Figs. 11, 12 and 25, 26 and 27 will be separated by a center partition part which extends fully down to the erected bottom panel. In the form shown in Figs. 11 and 12 this center partition part will be of double ply thickness at the lower end thereof as provided by the adhesively joined end cell center partition sections 8 and 8', and will be of four ply thickness where the paired handle sections 11 and 11' are sandwiched therebetween. The paired end cells at the right end of the carriers as shown in Figs. 11, 12, 25 and 27 will also be separated by a center partition which extends fully down to the erected bottom panel, since the hole at the lower end of the end cell center partition 4 will be covered and closed by the lower end of the full length end cell center partition section 4'. This center partition part will also be of two ply thickness at the leg portions 34 and 34', of three ply thickness at the upfolded root extension 15, and of four ply thickness where the paired handle sections 11 and 11' are laminated between the end cell center partition sections 4 and 4'.

In the carrier formed from the blank shown in Fig. 1 the intermediate cells are separated and defined by a double ply center partition part as provided by the paired handle sections 11 and 11', except that a slight open gap may be presented between the lower edges 37 and 37' of the paired handle sections and the erected bottom panel. Where cushioned protection for the lowermost end of the intermediate bottles is required, buffer flap extension 41 captured from the lower end of the end cell center partition section 8 may be provided to cushion the lower ends of the intermediate bottles as illustrated in Fig. 27.

The hole left by the material as removed from the lower end of the end cell center partition section 8 is covered and closed by the full length end cell center partition section 8' so that the bottles placed in the paired end cells at the left end of the carrier are cushioned and protected throughout their length.

Where the handle section 11' is provided with a root extension 15' of elongated form as shown in Fig. 1*a*, the gap between the intermediate cells as defined by the lower edge 35' of the handle section 11' and the erected bottom panel will be thereby materially reduced.

The side panels 2 and 2' and the end panel sections 3 and 3' and 9 and 9' may be made in any desired height to adequately display the beverage bottles contained therein, and may be given any desired and attractive top edge contour. The cross partitions 5 and 5' and 7 and 7' may also be made full height and unbroken to provide strong and sturdy bottle confining cells, additionally supply added strength to the carrier. The side panels 2 and 2', the end panel sections 3 and 3' and 9 and 9' also present substantially flat and uninterrupted surfaces for clear and attractive advertising decoration. To facilitate the collapsing movement of the cross partitions, the score lines 25, 26, 27 and 28 as well as the score lines 25', 26', 27' and 28' may, if desired, be interrupted by spaced cuts as indicated in Figs. 1 and 14.

Carriers constructed in accordance with this invention are balanced and symmetrical in appearance, and can be made in numerous attractive forms and patterns. These carriers are also so made as to present the finished and decorated side of the blank as the outer surfaces of the erected carrier, thereby providing a carrier of improved appearance, which need be printed and decorated on one side thereof only at a substantial saving in cost.

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-cell two compartment bottle carrier formed from a single blank of sheet material having a bottom panel formed by a pair of foldably connected bottom sections, a pair of side panels foldably connected to the opposite side edges of the bottom panel, a pair of end panel sections at each end of the carrier foldably connected to the adjacent side edges of the side panels, a pair of inwardly extending center partition sections arranged in back to back relationship and foldably connected to each pair of end panel sections, transversely extending cross partitions foldably connected to the center partition sections and to the adjacent side panels, a handle forming part which includes a pair of overlapping handle forming sections integrally and foldably connected along a side edge thereof, and having a lower edge portion thereof integrally and foldably connected to the lower portion of one of said center partition sections only, said handle part extending substantially the full length of the carrier with the side portions thereof sandwiched between both pairs of center partition sections and spanning the space between the paired center partition sections, the upper portion of said handle part extending above the side panels and having a hand hole therein.

2. A multi-cell two compartment bottle carrier formed from a single blank of sheet material having a bottom panel formed by a pair of foldably connected bottom sections, a pair of side panels foldably connected to the opposite side edges of the bottom panel, a pair of end panel sections at each end of the carrier foldably connected to the adjacent side edges of the side panels, a pair of inwardly extending center partition sections arranged in back to back relationship and foldably connected to each pair of end panel sections, transversely extending cross partitions foldably connected to the center partition sections and to the adjacent side panels, a plural-ply handle forming part extending between both pairs of center partition sections and spanning the space therebetween, said handle forming part having a root extension at the lower end thereof integrally and foldably connected to the lower portion of one of said center partition sections only, the upper portion of said handle part extending above the side panels and having a hand hole therein.

3. A multi-cell two compartment bottle carrier formed from a single blank of sheet material having a bottom panel formed by a pair of foldably connected bottom sections, a pair of side panels foldably connected to the opposite side edges of the bottom panel, a pair of end panel section at each end of the carrier foldably connected to the adjacent side edges of the side panels, a pair of inwardly extending center partition sections arranged in back to back relationship and foldably connected to each pair of end panel sections, transversely extending cross partitions foldably connected to the center partition sections and to the adjacent side panels, a handle forming part which includes a pair of overlapping handle forming sections integrally and foldably connected along a side edge thereof, one of said handle forming sections having a root extension at the lower end thereof integrally and foldably connected to the lower portion of one of said center partition sections only, said handle part extending substantially the full length of the carrier with the side portions thereof sandwiched between both pairs of center partition sections and spanning the space therebetween, the upper portion of said handle part extending above the side panels and having a hand hole therein.

4. A multi-cell two compartment bottle carrier formed from a single blank of sheet material having a bottom panel formed by a pair of foldably connected bottom sections, a pair of side panels foldably connected to the opposite side edges of the bottom panel, a pair of end panel sections at each end of the carrier foldably connected to the adjacent side edges of the side panels, a pair of inwardly extending center partition sections arranged in back to back relationship and foldably connected to each pair of end panel sections, transversely extending cross partitions foldably connectd to the center partition sections and to the adjacent side panels, a plural-ply handle forming part having a root extension at the lower end thereof integrally and foldably connected to the lower portion of one of said center partiton sections only, and a buffer flap extension projecting downwardly between said spaced pair of center partition sections, said handle part having the side portions thereof sandwiched between both pairs of center partition sections and spanning the space therebetween, the upper portion of said handle part extending above the side panels and having a hand hole therein.

5. A multi-cell two compartment bottle carrier formed from a single blank of sheet material having a bottom panel formed by a pair of foldably connected bottom sections, a pair of side panels foldably connected to the opposite side edges of the bottom panel, a pair of end panel sections at each end of the carrier foldably connected to the adjacent side edges of the side panels, a pair of inwardly extending center partition sections arranged in back to back relationship and foldably connected to each pair of end panel sections, transversely extending cross partitions foldably connected to the center partition sections and to the adjacent side panels, a handle forming part which includes a main handle section foldably connected at the lower end thereof to the lower portion of one of said center partition sections and a secondary handle section overlying said main handle section and foldably connected to a side edge thereof, one of said handle sections having a buffer flap extension integral therewith and projecting downwardly between said spaced pair of center partition sections, said handle part having the side portions thereof sandwiched between both pairs of center partition sections and spanning the space therebetween, the upper portion of said handle part extending above the side panels and having a hand hole therein.

6. A multi-cell two compartment bottle carrier formed from a single blank of sheet material having a bottom panel formed by a pair of foldably connected bottom sections, a pair of side panels foldably connected to the opposite side edges of the bottom panel, a pair of end panel sections at each end of the carrier foldably connected to the adjacent side edges of the side panels, a pair of inwardly extending center partition sections arranged in back to back relationship and foldably connected to each pair of end panel sections, transversely extending cross partitions foldably connected to the center partition sections and to the adjacent side panels, a handle forming part which includes a main handle section and a secondary handle section overlying said main handle section and integrally connected thereto along a side edge thereof, said main handle section having a root extension at the lower end thereof integrally and foldably connected to the lower portion of one of said center partition sections only, said secondary handle section having a buffer flap extension projecting downwardly between said spaced pair of center partition sections, said handle part extending substantially the full length of the carrier with the side portions thereof sandwiched between both pairs of center partition sections and spanning the space therebetween, the upper portion of said handle part extending above the side panels and having a hand hole therein.

7. A bottle carrier forming blank having a bottom panel presenting foldably connected bottom sections, a pair of opposite side panels foldably connected to said bottom panel, a pair of spaced wing extensions projecting laterally from adjacent side edges of both side panels, each of said wing extensions including an end panel foldably connected to the side edge of the side panel, a center partition section foldably connected to said first end panel, a cross partition section foldably connected to said first center partition section, and a side wall liner section foldably connected to said cross partition section, and a plural-ply handle forming part captured from material between said wing extensions, said handle forming part including a main handle section integrally and foldably connected to the lower portion of one of said center partition sections but otherwise separable from said wing extension, and a secondary handle section separable from said wing extensions but integrally and foldably connected to a side edge of said main handle section and having an overall length substantially equal to the length of said side wall panels and an overall heighth substantially greater than the heighth of said side wall panels, each of said handle sections having a hand hole opening therein.

8. A bottle carrier forming blank having a bottom panel presenting foldably connected bottom sections, a pair of opposite side panels foldably connected to said bottom panel, a pair of spaced wing extensions projecting laterally from adjacent side edges of both side panels, each of said wing extensions including an end panel foldably connected to the side edge of the side panel, a first center partition section foldably connected to said first end panel, a first cross partition section foldably connected to said first center partition section, a side wall liner section foldably connected to said first cross partition section, a second cross partition section foldably connected to said side wall liner section, and a second center partition section foldably connected to said second cross partition section, and a handle forming part captured from material between said wing extensions, said handle forming part including a main handle section integrally and foldably connected to the lower portion of one of said first center partition sections but otherwise separable from said wing extensions, and a secondary handle section separable from said wing extensions but integrally and foldably connected to a side edge of said main handle section, said main handle section having an overall length substantially equal to the length of said side wall panels and an overall heighth substantially greater than the heighth of said side wall panels, said secondary handle section having an overall length and heighth substantially complementary to said main handle section, both of said handle sections having a hand hole opening therein.

9. A bottle carrier forming blank having a bottom panel presenting foldably connected bottom sections, a pair of opposite side panels foldably connected to said

bottom panel, a pair of spaced wing extensions projecting laterally from adjacent side edges of both side panels, each of said wing extensions including an end panel foldably connected to the side edge of the side panel, a first center partition section foldably connected to said first end panel, a first cross partition section foldably connected to said first center partition section, a side wall liner section foldably connected to said first cross partition section, a second cross partition section foldably connected to said side wall liner section, and a second center partition section foldably connected to said second cross partition section, and a handle forming part captured from material between said wing extensions, said handle forming part including a main handle section foldably conected to the lower portion of the first center partition section of one of said wing extensions and a secondary handle section foldably connected to a side edge of said main handle section, said second handle section having a buffer flap extension integral therewith and cut from the lower end of the second center partition section of said last named wing extension, both of said handle sections having a hand hole opening therein.

10. A bottle carrier forming blank having a bottom panel presenting foldably connected bottom sections, a pair of opposite side panels foldably connected to said bottom panel, a pair of spaced wing extensions projecting laterally from adjacent side edges of both side panels, each of said wing extensions including an end panel foldably connected to the side edge of the side panel, a first center partition section foldably connected to said first end panel, a first cross partition section foldably connected to said first center partition section, a side wall liner section foldably connected to said first cross partition section, a second cross partition section foldably connected to said side wall liner section, and a second center partition section foldably connected to said second cross partition section, and a handle forming part captured from material between said wing extensions, said handle forming part including a main handle section having a root extension foldably connected to the first center partition section of one of said wing extensions and a secondary handle section foldably connected to a side edge of said main handle section, said second handle section having a buffer flap extension integral therewith and cut from the lower end of the second center partition section of said last named wing extension, both of said handle sections having a hand hole opening therein.

11. A bottle carrier forming blank having a bottom panel presenting foldably connected bottom sections, a pair of opposite side panels foldably connected to said bottom panel, a pair of end panels foldably connected to adjacent side edges of both side panels, a pair of spaced wing extensions projecting laterally from the other adjacent side edges of both side panels, each of said wing extensions including a second end panel foldably connected to the side edge of the side panel, a first center partition section foldably connected to said second end panel, a first cross partition section foldably connected to said first center partition section, a side wall liner section foldably connected to said first cross partition section, a second cross partition section foldably connected to said side wall liner section, and a second center partition section foldably connected to said second cross partition section, and a handle forming part captured from material between said wing extensions, said handle forming part including a main handle section integrally and foldably connected to the lower portion of one of said first center partition sections but otherwise separable from said wing extensions, and a secondary handle section separable from said wing extensions but integrally and foldably connected to a side edge of said main handle section, said main handle section having an overall length substantially equal to the length of said side wall panels and an overall heighth substantially greater than the heighth of said side wall panels, both of said handle sections having a hand hole opening therein.

12. A bottle carrier forming blank having a bottom panel presenting foldably connected bottom sections, a pair of opposite side panels foldably connected to said bottom panel, a pair of spaced wing extensions projecting laterally from an adjacent side edge of both side panels, each of said wing extensions including a first end panel section foldably connected to the side edge of the side panel, a first center partition section foldably connected to said first end panel section, a first cross partition section foldably connected to said first center partition section, a side wall liner section foldably connected to said first cross partition section, a second cross partition section foldably connected to said side wall liner section, a second center partition section foldably connected to said second cross partition section, and a second end panel section foldably connected to said second cross partition section, and a handle forming part captured from material between said wing extensions, said handle forming part including a main handle section having a root extension foldably connected to the lower portion of the first center partition section of one of said wing extensions and a secondary handle section foldably connected to a side edge of said main handle section and foldable to overlie said main handle section, said second handle section having a buffer flap extension integral therewith and cut from the lower end of the second center partition section of said last named wing extension, both of said handle sections having a hand hole opening therein.

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