United States Patent

Slevin

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[54] BOTTLE CARRIER

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[52] **U.S. Cl.** **220/111,** 220/113

[51] **Int. Cl.** **B65d 75/00**

[58] **Field of Search** 220/113, 110, 111, 112; 229/DIG. 9

[56] **References Cited**

UNITED STATES PATENTS

1,634,596	7/1927	Schurmann	229/DIG. 9
2,371,317	3/1945	Ringler	220/113
2,529,725	11/1950	Currie	220/112 X
3,010,604	11/1961	Arneson	220/113
3,138,285	6/1964	Wenzel	220/113
3,203,585	8/1965	Wood	220/111 X
3,456,841	7/1969	Mahon et al.	220/113

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Assistant Examiner—James R. Garrett
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[57] **ABSTRACT**

An article carrier of the type having a plurality of cells therein for receiving articles, such as bottles, is provided, with the carrier being of the folded blank type with the blank being constructed in such a way that a plurality of serially disposed blanks are struck from a sheet of material with ends of the blanks being nested and defined in part by cut lines, such that no material is wasted between adjacent serially disposed blanks, and with the blanks being struck from the sheet of material in a plurality of rows, with the blanks in adjacent rows being nested such that no material is wasted between blanks in adjacent rows. Opposite ends of the blanks are cut to define separators for a carrier in its folded condition, with those portions of the blanks which define separators being configured to define complementally shaped cutouts in adjacent blanks, which, in the folded condition of the carrier define cutouts or voids. A minimum amount of material is utilized for the carrier bottom wall to enable the nesting of adjacent blanks in the same row along the blank-forming material.

13 Claims, 6 Drawing Figures

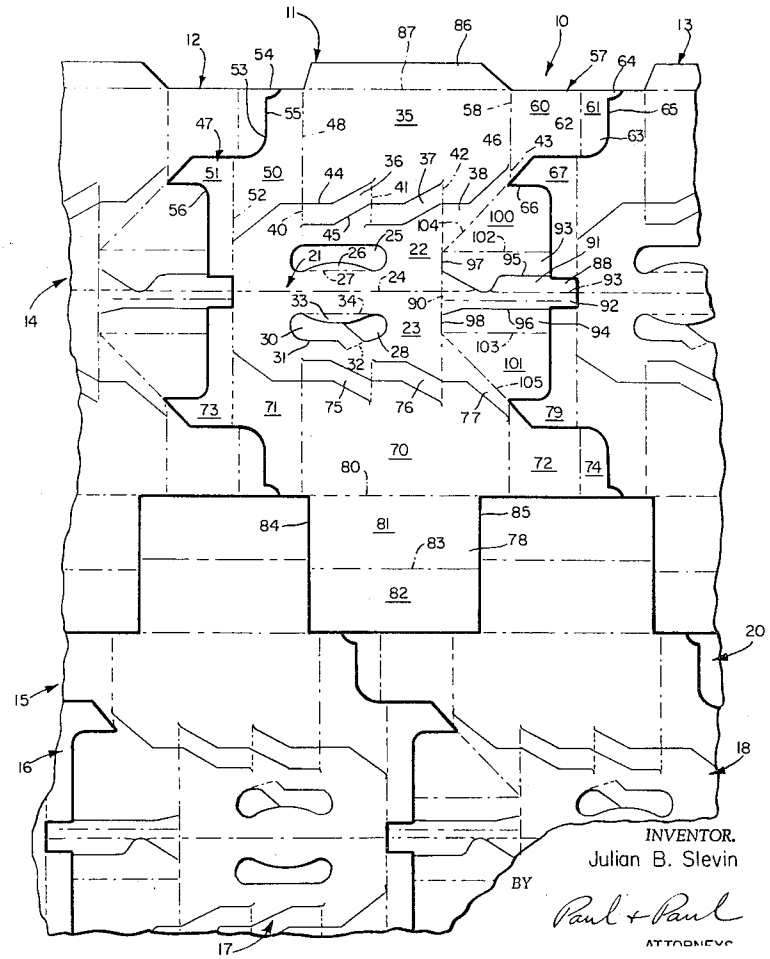
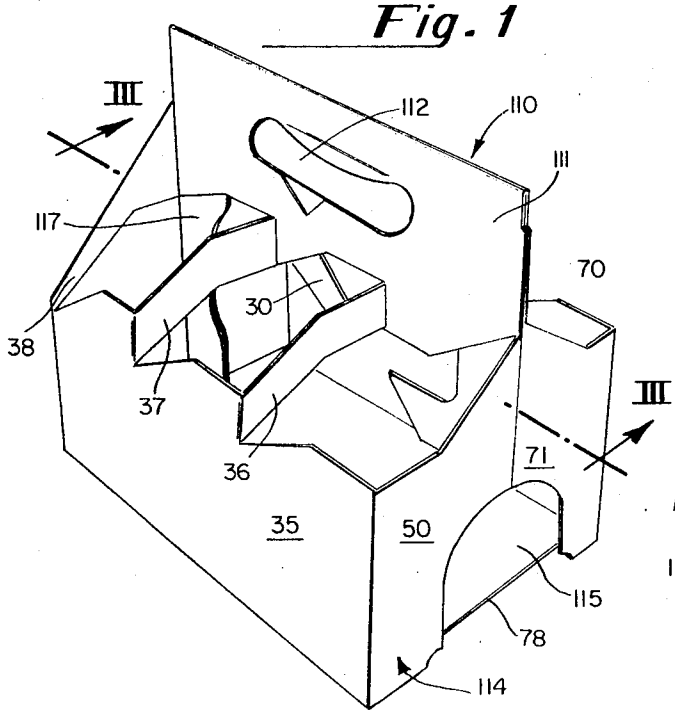


Fig. 1



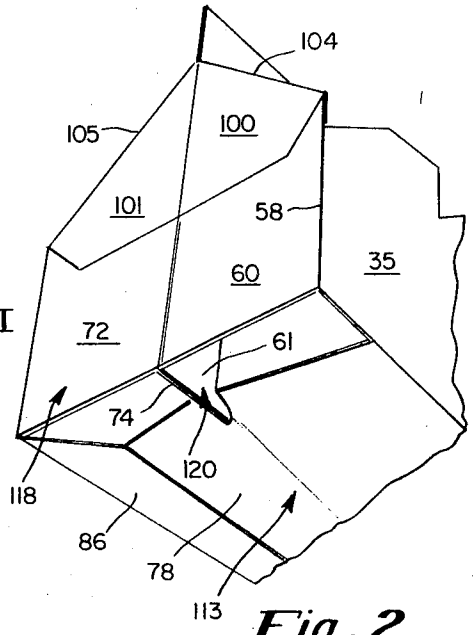


Fig. 2

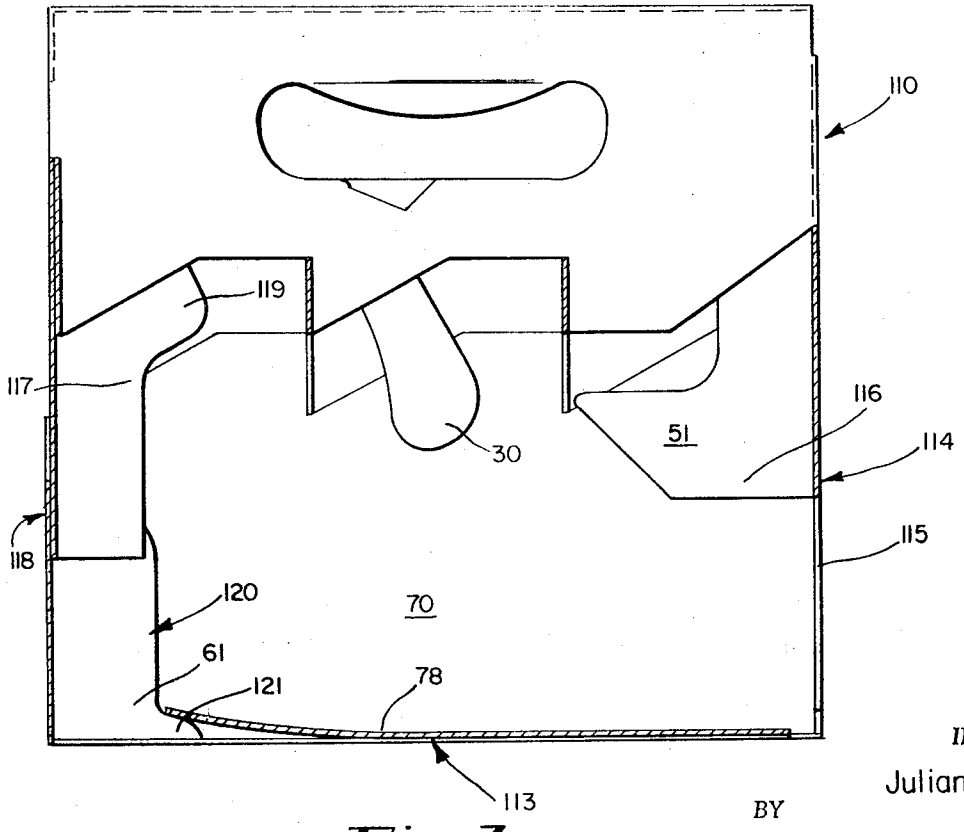


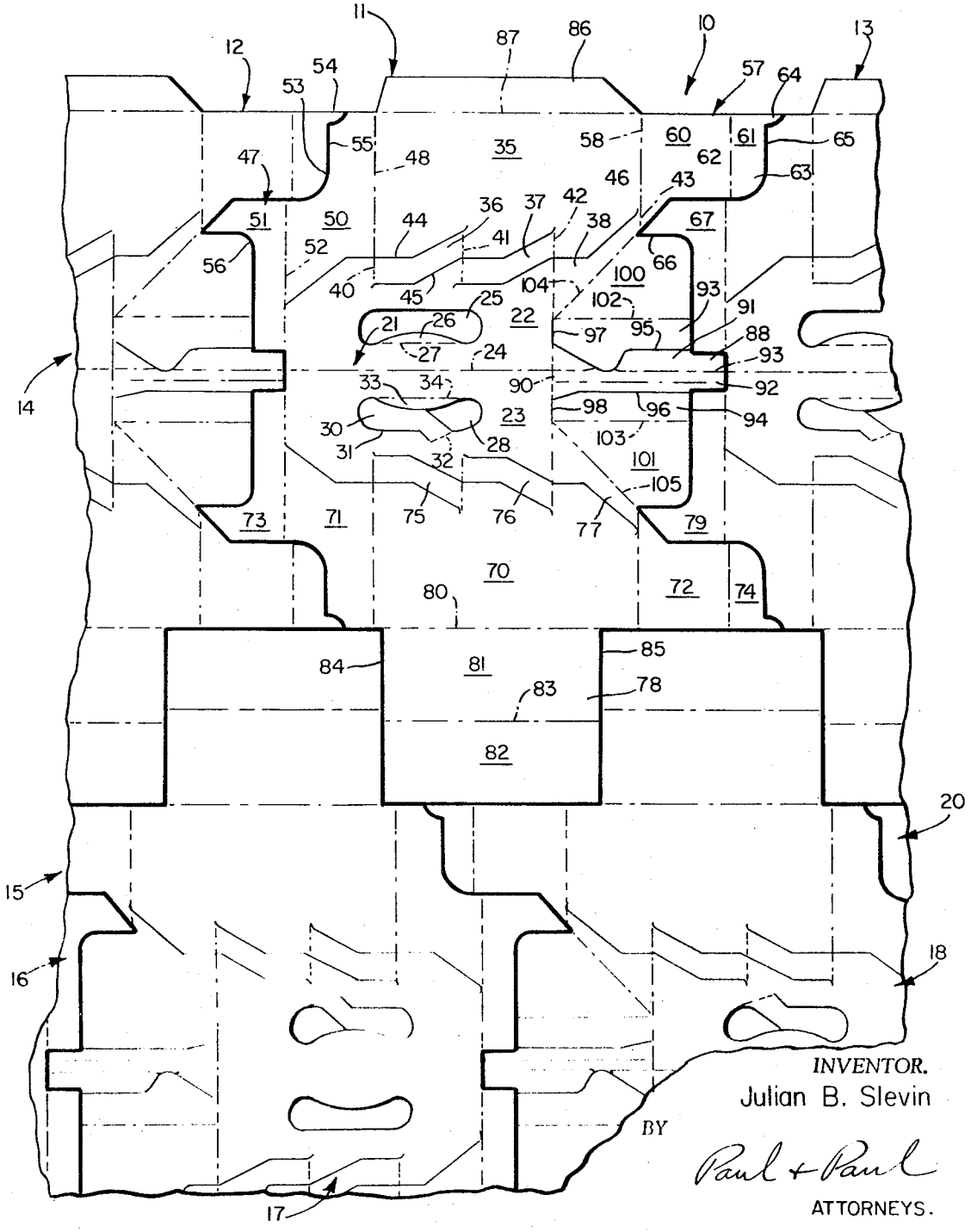
Fig. 3

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Fig. 4


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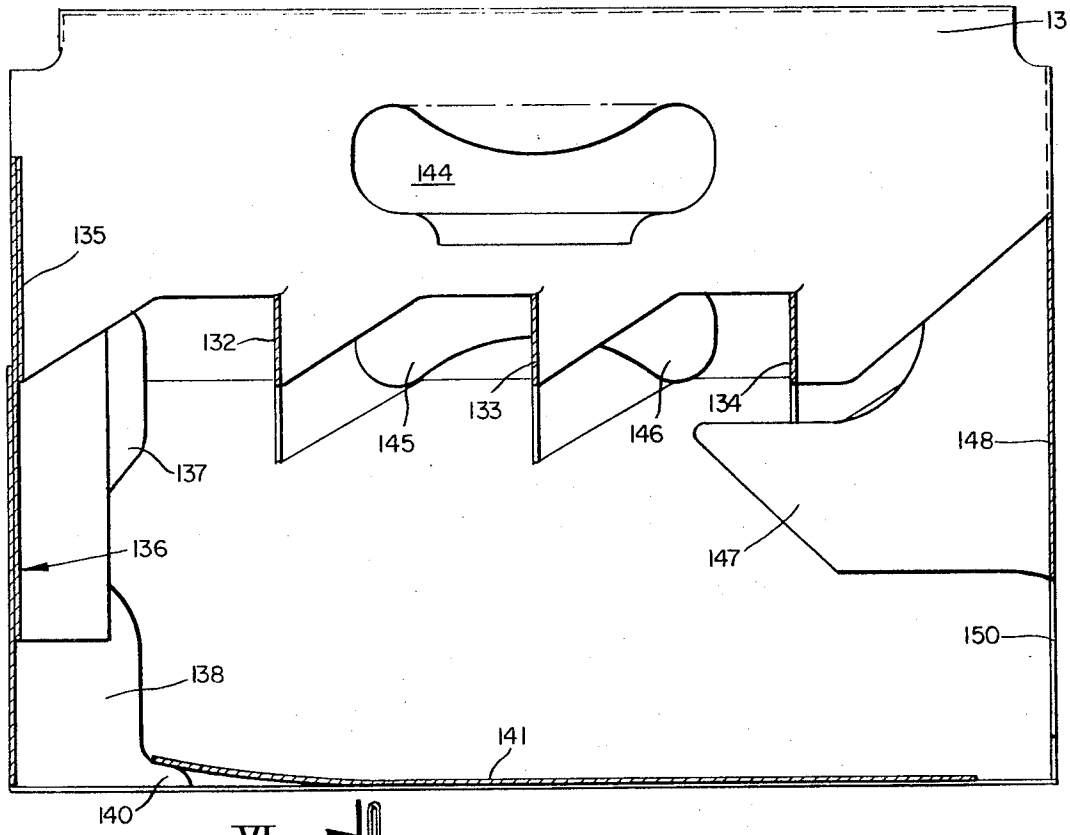


Fig. 6

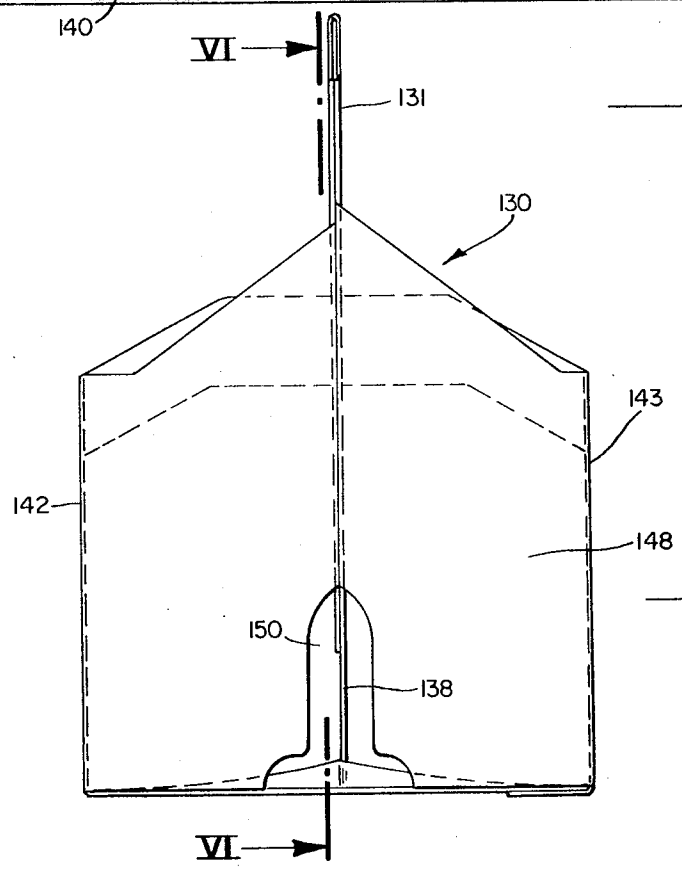


Fig. 5

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BOTTLE CARRIER

BACKGROUND OF THE INVENTION

In the carrier industry today, particularly in the bottle carrier industry, most bottle carriers are made of a paper board material.

With increasing demand for bottle-packaged beverages and the like, particularly of the throw-away type, there is an increasing demand for paper board article carriers of the disposable type which places an increasing burden upon existing timberlands for supplying the needs of industry for paper board. With the decrease in the supply of available timberlands, there is an ever-increasing need to conserve material wherever possible. This need is not only dictated by the available supply of material, but also by the increasing costs of sheet paper board material from which carriers are generally made.

Accordingly, there is an ever-increasing need to conserve the material utilized in the formation of paper board carriers and the like without appreciably sacrificing the carrying strength of such carriers.

SUMMARY OF THE INVENTION

The present invention is directed toward providing a solution to the above-mentioned and other problems by providing a blank and an article carrier constructed therefrom, with the blank for the carrier being configured in such a manner as to obtain the greatest possible number of carriers of a given size struck from a given length and width of sheet material, and to essentially eliminate wasted material between adjacent blanks as the same are struck from a given sheet. Also, separators are desired in the formation of blanks which, when the blank is folded into a carrier, will separate adjacent bottles or other articles disposed in cells on opposite sides of the carrier. The construction of a blank that will yield the desired separators as unitary items with the remainder of the blank, but yet which will not unnecessarily lengthen the necessary size of material required for the formation of a given number of blanks has been found to be possible if certain cut-outs are provided in opposite ends of the blanks as they are being struck, such cut-outs being complementally configured with respect to the configurations of separators of adjacent struck blanks, such that, the configuration of a given cut-out is defined at least in part by a cut line that is common with the cut line defining the configuration of the separator on an adjacent blank. In accomplishing this, the length of the carrier bottom wall between carrier ends is somewhat reduced.

Accordingly, it is a primary object of this invention to strike a plurality of blanks from a sheet of blank-forming material in such a manner as to make most efficient use of a given amount of blank-forming material.

It is a further object of this invention to provide a blank of novel construction having opposite ends that are complementally configured.

It is a further object of this invention to accomplish the above objects, wherein end portions of one blank that are designed to become separator members in the folded condition of the carrier blank are complementally configured with respect to cut-out portions of an opposite end of the same blank.

It is a further object of this invention to accomplish the above objects, wherein the blanks are struck from the sheet of material in nested relationship.

It is yet another object of this invention to accomplish the above objects, wherein carriers are constructed with less material utilized in the formation of the bottom walls thereof.

It is a further object of this invention to construct carriers having certain cut-out portions in end walls thereof.

Other objects and advantages of the present invention will be readily apparent to those skilled in the art from a reading of the following brief description of the drawing figures, the detailed descriptions of the preferred embodiments, and the appended claims.

IN THE DRAWINGS

FIG. 1 is a top perspective view of an article carrier in accordance with this invention, wherein one carrier and cut-out is clearly illustrated.

FIG. 2 is a fragmentary bottom perspective view of the remote end of the carrier illustrated in FIG. 1.

FIG. 3 is a longitudinal vertical sectional view taken through the carrier of FIG. 1, generally along the line III—III of FIG. 1.

FIG. 4 is a fragmentary plan view of a sheet of material having a plurality of carrier blanks illustrated therein, in nested relationship, in two adjacent rows, with the carrier blanks in each row being serially disposed, and with one blank being fully illustrated.

FIG. 5 is an end elevationsl view of an alternative form of an article carrier in accordance with this invention.

FIG. 6 is a longitudinal sectional view of the carrier of FIG. 5, taken generally along the line VI—VI of FIG. 5.

Referring now to the drawings in detail, reference is first made to FIG. 4, wherein there is illustrated, a sheet of material generally designated by the numeral **10**, and comprising an elongated sheet of paper board material. At the center of FIG. **10** there is illustrated one complete blank generally designated by the numeral **11** having adjacent blanks **12** and **13** fragmentally illustrated at opposite ends of the blank **11**, disposed respectively against leading and trailing ends of the blank **11**, with all of the blanks **11**, **12** and **13** being serially disposed in a given row **14** of blanks.

Another row **15** of fragmentally illustrated blanks **16**, **17**, **18** and **20** is illustrated at the lower end of FIG. **4**, in nested relation with respect to the blanks **11**, **12** and **13**, as illustrated.

All of the blanks **11**, **12**, **13**, **16**, **17**, **18** and **20** are of identical construction, so only blank **11** will be hereinafter described in detail.

The blank **11** includes a handle portion **21** comprising handle panels **22** and **23** connected together along a longitudinally disposed fold line **24**.

The handle panel **22** is provided with a cut-out **25** of a configuration for accommodating the hand of a carrier, such cut-out **25** defining a lip **26** connected to the panel **22** along a fold line **27**.

The panel **23** includes a cut-out portion **28** and a separator tab **30** defined by cut line **31** and connected to the panel **23** by means of a fold line **32**. A lip **33** is also provided, connected to the panel **23** by means of a fold line **34**.

A side panel **35** is also provided, connected to the handle panel **22** by separator strips **36**, **37** and **38** by a series of fold lines **40**, **41**, **42** and **43**, with the separator strips **41**, **42** and **43** being also defined by cut-lines **44**, **45** and **46**.

A blank end portion **47** is connected to the side panel **35**, along a fold line **48**, with the end portion **47** including an end panel **50** having a free tab **51** comprising a separator panel, connected to the panel **50** along a fold line **52**, with the fold line **52** also connecting the panel **51** to the handle panel **22** at one end thereof. The leftmost end of the panels **50** and **51** are defined by a cut line **53** that extends from a free end **54** of the panels **11** and **12**, to the fold line **24** separating the handle panels **22** and **23**, with the cut line **53** providing a cut-out in the panel **50** of the configuration illustrated, and also defining the leftward inverted and mirror-imaged L-shaped configuration **56** of the panel **51**.

An end panel portion **57** is connected to the panel along a fold line **58**, with the panel portion **57** including an end panel **60**, having a free tab **61** in the form of a separator panel connected to the panel **60**, along a fold line **62**.

The panel **61** includes a main portion **63**, and an end protrusion **64** extending along the line **54**, with the rightmost end of the panel **61** as illustrated in FIG. **4** being defined by a cut line **65** that separates the panel **61** from a complementally configured portion of an adjacent blank **13**, with the cut line **65** merging with a cut line **66** that defines a cut-out **67**, of the panel **60**, such cut-out **67** being configured as is the outline of the panel **51**.

A side panel 70, end panels 71 and 72, separator panels 73 and 74, and separator panels 75, 76 and 77 are provided, connected to each other, and to the handle panel 23 in the same manner, and by similar fold lines, as are panels 35, 50, 51, 60, 61, 36, 37 and 38 respectively connected to the handle panel 22, but with the higher numbered group of such panels comprising a mirror-image of the configuration of the lower numbered group of such panels.

A bottom panel 78 is connected to the panel 70, along a fold line 80, with the panel 78 having bottom panel halves 81 and 82 connected together along a fold line 83, and with the panel 78 being of a dimension measured between opposite ends 84 and 85 thereof that is less than the similarly measured length of the side panels 35 and 70, as for example, between the fold lines 48 and 58.

A panel in the form of a tab 86 is provided, connected to the panel 35 along a fold line 87, with the panel 86 being adapted to be glued or otherwise secured to one surface of the panel 82, when the blank 11 is folded into its assembled condition.

A handle support member 88 is provided, connected to each of the panels 22 and 23, along a fold line 90, with the support member 88 comprising a pair of panels 91 and 92 connected together along a fold line 93, with the panels 91 and 92 being separated from adjacent separator panels 93 and 94 respectively by suitably configured score lines 95 and 96, especially configured as illustrated in FIG. 4.

The separator panels 93 and 94 are separated from their adjacent respective handle panels 22 and 23 by cut lines 97 and 98, and are connected to adjacent triangularly configured gusset panels 100 and 101 by respective fold lines 102 and 103. The panel 100 is connected the panel 38 along a fold line 104, as is the panel 101 connected to the panel 77 along a fold line 105.

It will thus be seen that a plurality of blanks 11, 12, 13, 16, 17, 18 and 20, as well as many other blanks may be cut from a single sheet of material 10, with the blanks being cut in serially adjacent manner, one immediately adjacent the other, in two or more distinct rows 14 and 15.

The panels 51 and 73, for example, are cut from the adjacent blank 12, such that the leftmost end wise configuration of the blank 11 is identical to the cut-outs provided at the rightmost end of the blank 12, as viewed in FIG. 4, and also, is identical with the configuration of the cut-outs 67 and 79 at the rightmost side of the blank 11. Similarly, the cut-out 55 provided in the panel 50 and the similar cut-out for the panel 71 are necessary to provide separator tab panels for the blank 12 similar to the separator panels 61 and 74 of the blank 11. By providing cut-outs of the type mentioned in the several paragraphs above, and thereby sacrificing some voids or absences of material in the finished product, a greater number of blanks 11 may be cut from a given length of material, measured in the direction of the fold line 24.

It will also be noted that blanks in rows 14 and 15 are constructed with their bottom panel-forming wall members 78 disposed adjacent one another, in interlocked fashion, with the absence of any wasted material therebetween, with the orientation of the blanks 16, 17, 18 and 20 in the row 15 being opposite that of the blanks in the row 14, as illustrated in FIG. 4. It will thus be seen that panels of, for example, blank 17, having configurations similar to the panel 51 are extending rightward, rather than leftward as with the panel 11 in FIG. 4. However, this arrangement of panels in rows 14 and 15 permits an interlocking or nested relationship with respect to panel bottom members 78, as illustrated.

It will further be understood that another row of panels (not illustrated) could be disposed with their bottom wall tabs, constructed in a manner similar to the tabs 86, but being disposed on opposite sides of the tab panel 86, adjacent the upper edge of the sheet of material illustrated in FIG. 4, along the line 54, with the bottom tabs 86 internested in a manner similar to the nesting of the bottom wall panel members 78 discussed above.

From all of the foregoing, it will be understood that a plurality of blanks may be struck from a given sheet 10 of material, with a minimum of waste, comprising only the material that is struck from the handle cut-outs 25 and 28.

With reference now to FIGS. 1 through 3, it will be seen that the blank 11 has been folded and secured in such a manner as to form a carrier 110, for bottles and the like, with the carrier 110 being adapted to carry six articles, such as bottles, in that six cells are provided, with three on opposite sides of the carrier 110, as illustrated. It will be seen that, the handle panels 22 and 23 form a handle 111, having a handle hole 112 therein, provided by the cut-outs 25 and 28, and the cut line 31. The panels 91 and 92 of the member 88 are folded along the fold line 93, and along the fold line 90, to lie between the panels 22 and 23, for support of the upper inner handle portion 111 in the assembled condition.

The panel 30 is folded downwardly along the fold line 32 and forms a separator 30 between center-most cells on opposite sides of the carrier 110. This is best illustrated in FIG. 3.

The side panels 35 and 70 are disposed, as illustrated, spaced from the handle portion 111 by the separator strips 36, 37, 38 and by the strips 75, 76, and 77 (not illustrated), to define three separate cells on each side of the carrier 110, with the strips 36 and 37 and the strips 75 and 76, separating adjacent bottles or other articles (not illustrated), in the same row.

The bottom member 78 is engaged with the tab 86 to form a bottom wall 113. The panels 50 and 71 form an end wall 114, with the cut-out portions of the panels 50 and 71 forming a composite cut-out 115, as illustrated in FIG. 1. The panels 51 and 73 are joined inwardly of the carrier 110, beneath the handle portion 111, to form a separator 116 for adjacent bottles at the rightmost end of the carrier 110, but in rows on opposite sides of the handle portion 111, as illustrated in FIGS. 1 and 3.

The gusset panels 100 and 101 are folded inwardly along the fold lines 104 and 105, respectively, and with the separator panels 93 and 94 being also folded inwardly along their respective fold lines 103 and 013 to an upper separator member 117 disposed beneath the handle portion 111, separating opposite rows thereof, between the cells at the leftmost end of the carrier 110, with the separator 117 including an inner protrusion 119 at an upper end thereof.

The end panels 60 and 72 are folded along the fold lines, such as that 58, which separate those panels from the side panels 35 and 70, respectively to comprise an end wall 118, with separator tabs 61 and 74 being joined together, and preferably adhered by glue or the like, as are the tabs 51 and 73, as well as the separator members 93 and 94, secured together.

The tabs 61 and 74 form a lower separator member 120 for the leftmost end cells, for separating articles carried therein between the rows on opposite sides of the carrier handle portion 11, as illustrated in FIG. 3. The separator member 120 separates the bottoms of bottles in the associated cells, and the inwardly extending protrusions 64 cooperate to define a lip 121 that engages the leftmost end of the bottom wall 113, as illustrated in FIG. 3, and supports the same.

It will be noted that the bottom wall 113 is of a shorter dimension at a distance between the end walls 114 and 118, and that the shortness of the bottom wall 113 is most prominent, at the leftmost end thereof, as viewed in FIG. 3, or at the end having the greatest support, namely that provided by the protrusions or lips 121, that also being the same end with the greatest separation between articles in adjacent end cells, provided by the separator 120 and the inward protrusion 119. It will also be apparent that the leftmost end of the bottom wall 113, as viewed in FIG. 3, is spaced from the end wall 118, by an amount approximating the inward extension of the separator member 120 above the inwardly extending lip support 121.

It will also be noted that the rightmost end of the bottom wall 113 does not meet the end wall 114, but is set back therefrom by a short amount, such setback however, not approaching the setback provided at the leftmost end the bottom wall 113, as viewed in FIG. 3. Thus, additional support is provided at the rightmost end of the carrier 110, as viewed in FIG. 3, as much as the rightmost end 113 is the end having less

separator support, such separator support being provided by the separator members **51** and **73**, at a height above and spaced from the bottom wall **113** of the carrier **110**. Also, the end of the carrier **110** having the greatest bottom wall support is the end having the least end wall supporting area, namely the end **114** having the substantial cut-out **115** therein.

It will thus be apparent that a most efficient utilization of the material **10** available for the formation of any given blank **11** is provided, in that overall support is not sacrificed along with the economy of material, but that, in a given zone where material is being decreased, rigidity and support are provided by other material elements.

Thus, with particular reference to the carrier **110** of FIG. **3**, it will be noted that the bottom **113** has less width than three bottles that would be carried in the cells of a given row, such that the end bottles would only be partially supported, particularly with respect to the end bottles at the leftmost end of the carrier **110** as view in FIG. **3**.

With particular reference to FIGS. **5** and **6**, it will be seen that there is provided a carrier **130**, which is of eight cell construction, adapted to carry four articles, such as bottles, on opposite sides of a handle portion **131** thereof. The blank for forming the carrier **130** is constructed in a manner that is essentially the same as the construction of the carrier blank **11** in FIG. **4**, but that the proportions of various ones of the panels are altered somewhat in order to facilitate the formation of a carrier having eight cells as opposed to the formation of a carrier having three cells. Thus, three separator strips **132**, **133** and **134** are provided between cells, with an additional strip **135** being provided along an end wall **136**. The end wall **136** has an upper separator member **137** between cells at the leftmost end thereof, as viewed in FIG. **6**, in opposite rows, with a lower separator **138** having a bottom wall support **140** thereon also being provided. The bottom wall **141** is connected to side walls **142** and **143** in the same manner as the connection provided for the blank **11**. That portion which is struck from the blank to form the handle void **144** is bent downwardly to form separator legs **145** and **146** beneath the handle portion **131**, and in line therewith, to separate the middle cells in one row from the middle cells in the row on the opposite side of the handle portion **131**. Also, a separator **147** is provided that extends completely across a rightmost end cell as viewed in FIG. **6**, into an adjacent cell section, to separate cells on opposite sides of the handle portion **131** that are second from the rightmost end, as viewed in FIG. **6**.

The bottom wall **141** is spaced from the end wall **136**, also be an amount substantially equivalent to the inward extension of the separator **138** above the protrusion **140**, with the bottom **141** also being spaced from the opposite end wall **148** by a lesser amount, and with the end wall **148** having a cut-out portion **150** therein, which, in the formation of the blank which forms the carrier **130** facilitates the formation of a separator member **138** of a next adjacent blank.

It will thus be seen that that the ends of this invention, of conserving material, but yet providing the necessary support for articles carried in a given carrier may be accomplished, regardless of the number of cells provided for the carrier. Accordingly, various modifications may be made in the details of construction of the blanks, as well as the layout, and as well as in the formation of the carriers formed from the blanks, without departing from the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

1. A blank for forming a one-piece multiple cell bottle carrying carton that has cells, each of rectangular cross-section and cross-sectional size equal to at least the full diameter of a bottle to be carried therein, comprising a pair of handle panels connected together along a common first fold line and having a set of separator strips connected to each said handle panel at locations across said handle panels from said common fold line along a series of second fold lines disposed transverse to said first fold line; with a side-forming carton panel being connected to each said set of separator strips along a third series of fold lines transverse to said first fold line; a pair of end panel portions connected to said side panel along fourth fold lines disposed transverse to said first fold line; and a bottom panel portion connected to a first said side panel along a fifth fold line parallel to said first fold line; with said bottom panel portion being of a lesser dimension measured in the direction of said fifth fold line than the dimension of each said side panel measured between fourth fold lines thereof, and tab means for securing said bottom panel portion to a second said side panel.

2. The blank of claim **1**, wherein two end panel portions of similar construction are disposed opposite each other on opposite sides of said first fold line at each end of said side panel, with each end panel portion having a tab connected thereto along one of a series of sixth fold lines.

3. The blank of claim **2**, wherein a cut-away portion is provided in each of two of said end panel portions that are disposed opposite each other on opposite sides of said first fold line; said cut-away portions being complementally configured with respect to end tabs connected to the remaining two end panel portions along fold lines, at opposite ends of said side panels from said cut-away portions.

4. The blank of claim **3**, wherein each said end panel portion is provided with a cut-away portion and a tab portion complementally configured relative to a tab portion and a cut-away portion respectively at the opposite end of each said side panel.

5. A folded bottle carrier for receiving bottles in open-topped cells thereof, wherein each cell is of a rectangular cross-section and cross-sectional size equal to at least the full diameter of a bottle to be carried therein, comprising a pair of opposed sidewall panels, a pair of opposed end walls connected to said sidewall panels along fold lines, a handle portion comprising handle panels connected to each other at their upper edges by a fold line, said handle panels being connected to said end panels and extending therebetween, generally parallel to said sidewall panels, a bottom wall connected to said sidewall panels along at least one fold line on one side of said bottom wall, a plurality of separator panels extending between said sidewall panels and adjacent ones of said handle panels defining bottle-receiving cells and connected to said sidewall panels and handle panels along fold lines, with at least one of said end walls comprising a pair of end panels, each end panel extending halfway across said end wall, with a cut-out in said one end wall, symmetrically disposed with respect to the center of said end wall, said cut-out extending downwardly to the lower ends of aid end panels, wherein said bottom wall is of a lesser dimension measured between opposed end walls, than the distance between said opposed end walls, and with said bottom wall being located closer to said one end wall having said cut-out therein, than to the other said end wall.

6. The carrier of claim **5**, wherein said end wall having a cut-out therein has separator tabs connected to end panels thereof along fold lines, with said separator tabs being joined together beneath said handle portion to define an article separator member between adjacent end cells.

7. The carrier of claim **5**, wherein the end wall opposite the end wall with said cut-out comprises a pair of end panels, each having separator tabs connected thereto along fold lines, said tabs being disposed together in inwardly directed relation of the carton beneath the handle portions, with said tabs cooperating to define a separator member between adjacent article-receiving cells at the adjacent end of the carrier, said separator member having a major portion disposed above the bottom wall that is of a dimension measured inwardly of the carrier from the adjacent end thereof that substantially equals the distance between said end wall opposite the cut-out end wall and the adjacent end of said bottom wall in the vicinity of said separator member.

8. The carrier of claim **7**, wherein said separator member is provided with tab lower end portions protruding inwardly of the carrier in engagement with a central end portion of said bottom wall.

9. The carrier of claim 7, wherein the carrier is provided with six article-receiving cells, with three cells being disposed on opposite sides of said handle portion.

10. The carrier of claim 7, wherein the carrier is provided with eight article-receiving cells, with four cells being disposed on opposite sides of said handle portion.

11. A material construction including a plurality of article carrier blanks disposed in flat form as cut components of a single sheet of material, said blanks being disposed in a row, with blanks in the row being serially arranged in their cut condition adjacent each other, with each blank including handle-forming panels connected along a common first fold line, separator strips connected to said handle panels along a series of second fold lines, side panels connected to said separator strips along a series of third fold lines, end panels connected to said side panels along a series of fourth fold lines, and separator panels connected to said end panels along fold lines at opposite leading and trailing ends of each said blank, with cut-out portions being provided at opposite leading and trailing ends of said said blank in each said end panel and in each said separator panel, with the leading end of one blank being complementally configured with respect to the immediately adjacent trailing end of an adjacent said blank, with said separator panels being of identical outline construction as an adjacent cut-out portion of an adjacent said blank, along a common outline separating said blanks, whereby there is no material disposed between said adjacent blanks that would not be used to form one of said adjacent blanks.

12. The construction of claim 11, wherein there are two immediately adjacent rows of said blanks, and each blank in a row is provided with a bottom panel extending from a side panel, laterally of the remainder of said blank, with bottom panels of adjacent said blanks in a given row being defined at least in part by cut lines at each end of said bottom panel extending transverse to said first fold line, and spaced from each other the distance of the length of a bottom panel as measured between its said cut lines and wherein said immediately adjacent rows of said blanks are similarly configured with respect to said above-mentioned blanks, arranged with the bottom panels of blanks in one of the said adjacent rows disposed between the blank bottom panels of the other said row of blanks and with ends of said bottom panels of said adjacent rows extending transversely to said first fold line and being defined by said cut lines at ends of said bottom panels of the other said row, whereby no material is disposed between blanks in adjacent rows that would not be used to form bottom panels of blanks in said adjacent rows.

13. The construction of claim 12, wherein blanks in one said row have their leading and trailing ends facing in opposite directions respectively with respect to the leading and trailing ends of blanks in the other said row.

* * * * *

UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,651,982 Dated March 28, 1972

Inventor(s) Julian B. Slevin

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 2, Line 15 - "elevationsl" should be "elevational"

Column 4, Line 36 - "103 and 013" should be "102 and 103"

Column 6, Line 2 (Claim 1) insert "each" before "said side panel"

Signed and sealed this 26th day of September 1972.

(SEAL)
Attest:

EDWARD M.FLETCHER,JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents

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