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CONTAINER CARRIER

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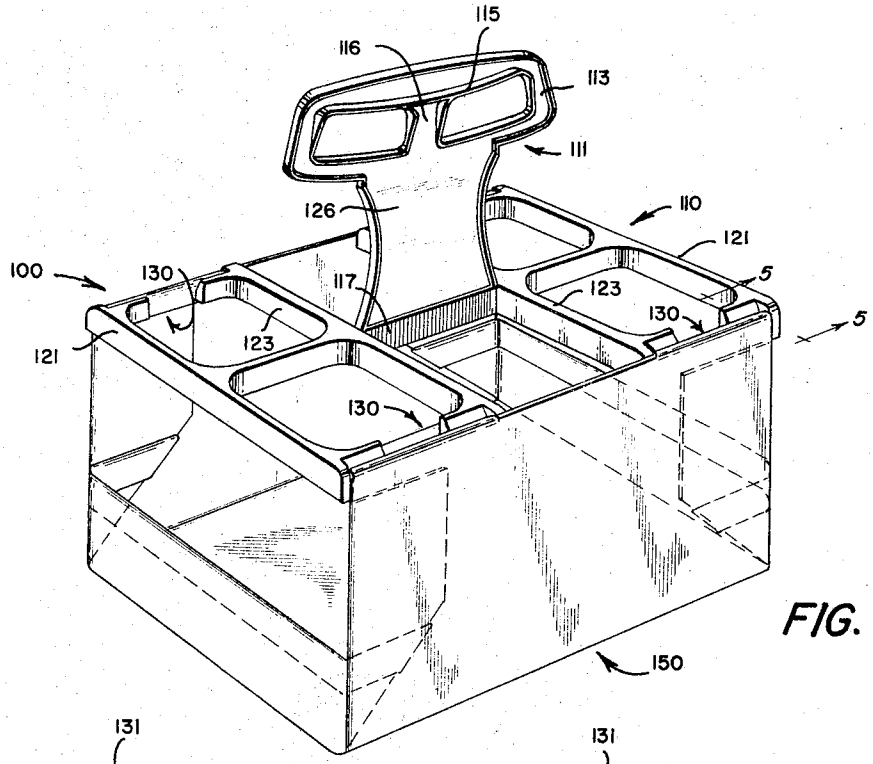


FIG. 1

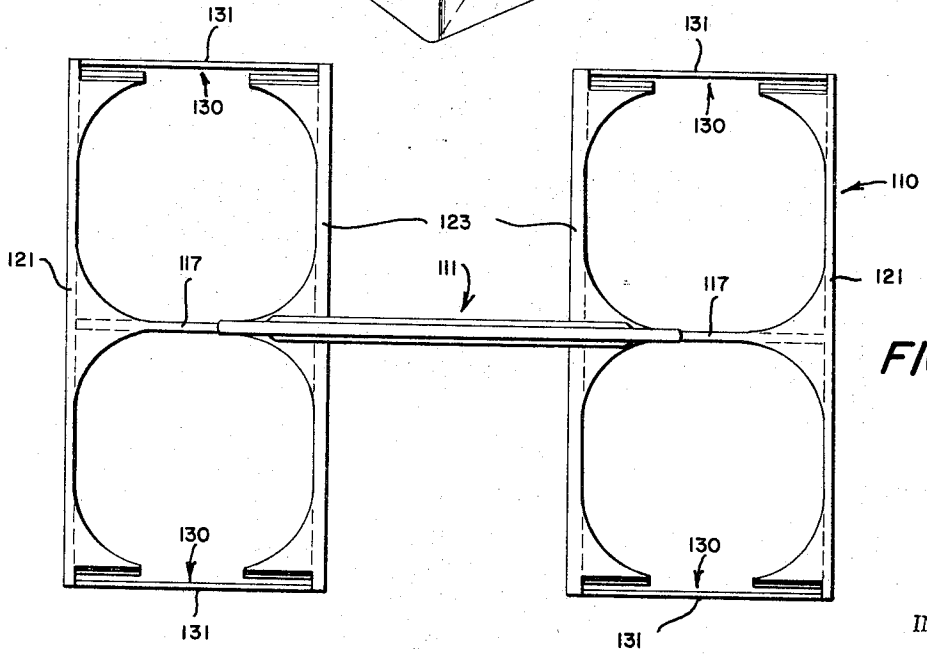


FIG. 2

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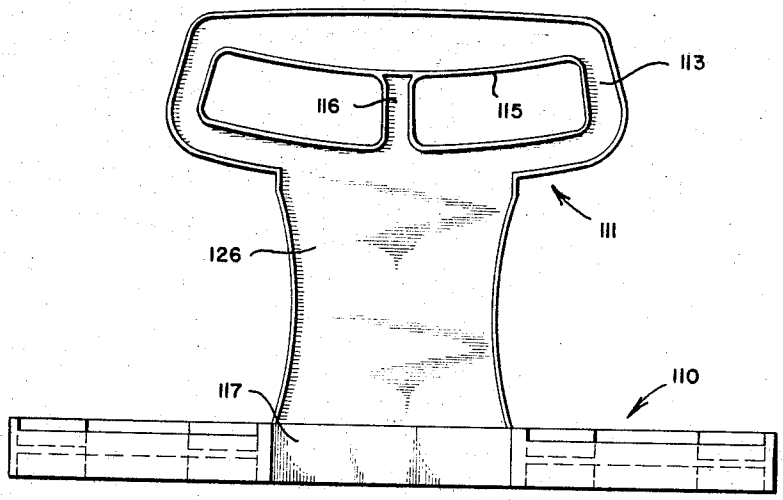


FIG. 3

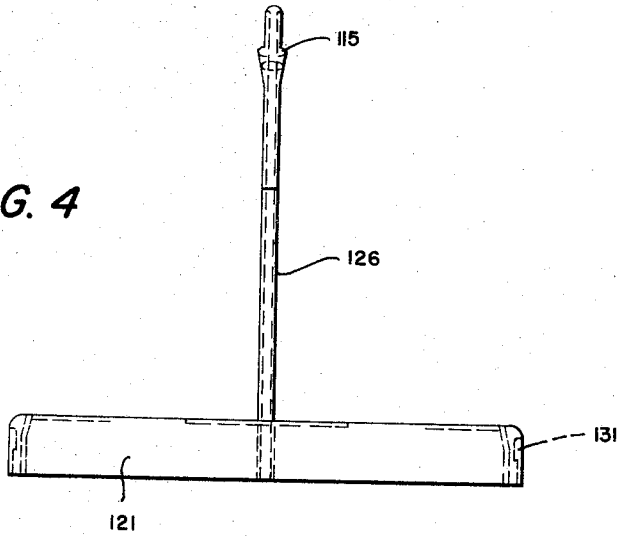


FIG. 4

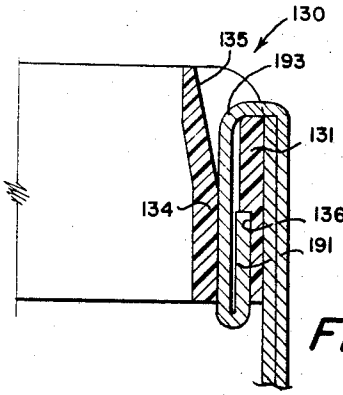


FIG. 5

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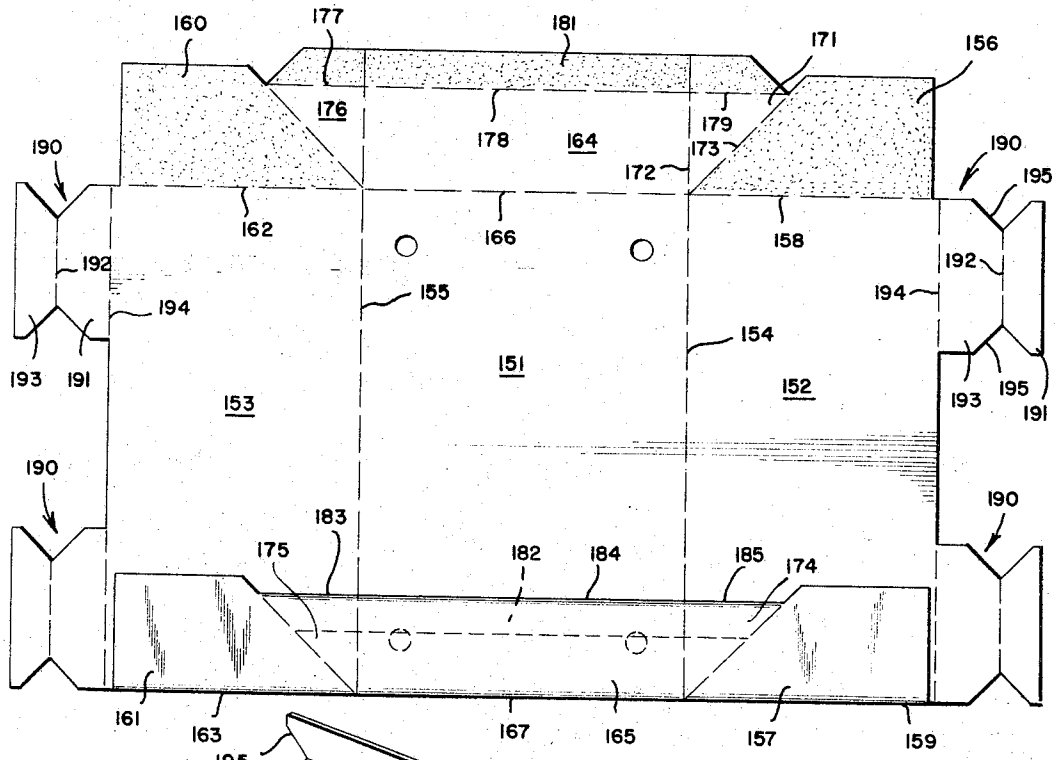


FIG. 6

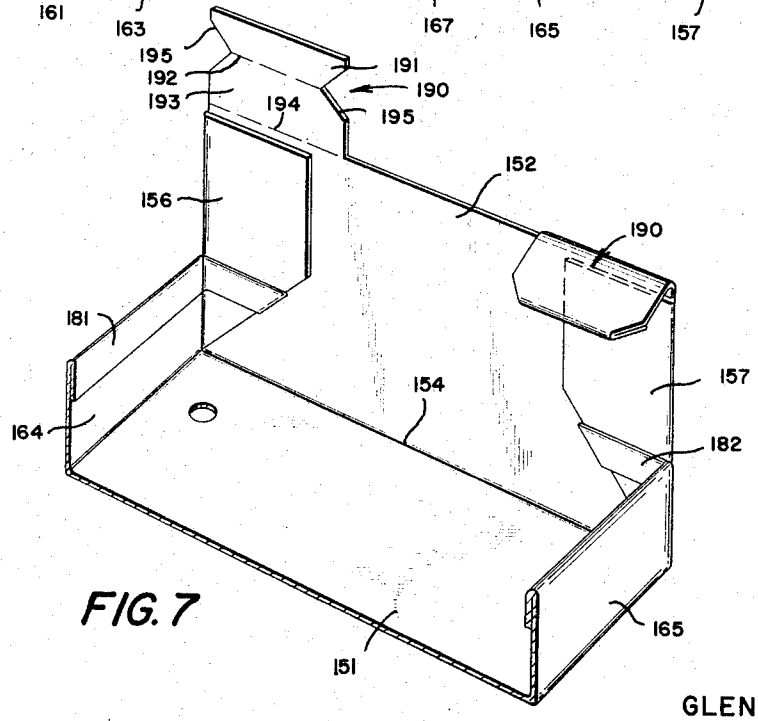


FIG. 7

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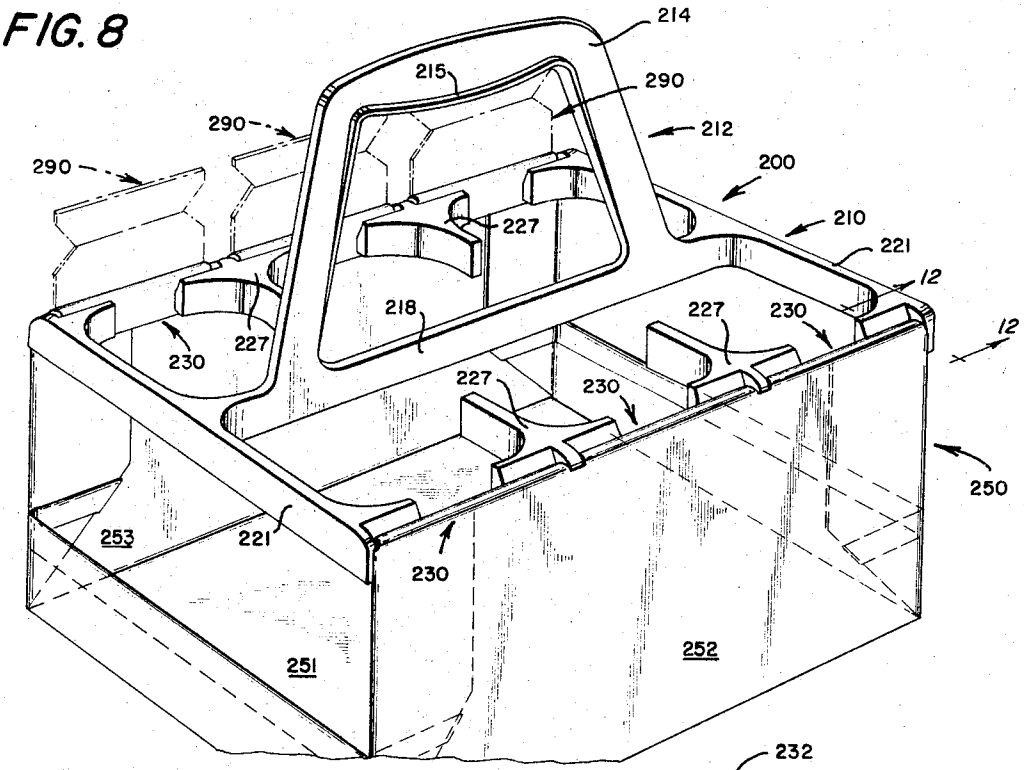
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FIG. 8



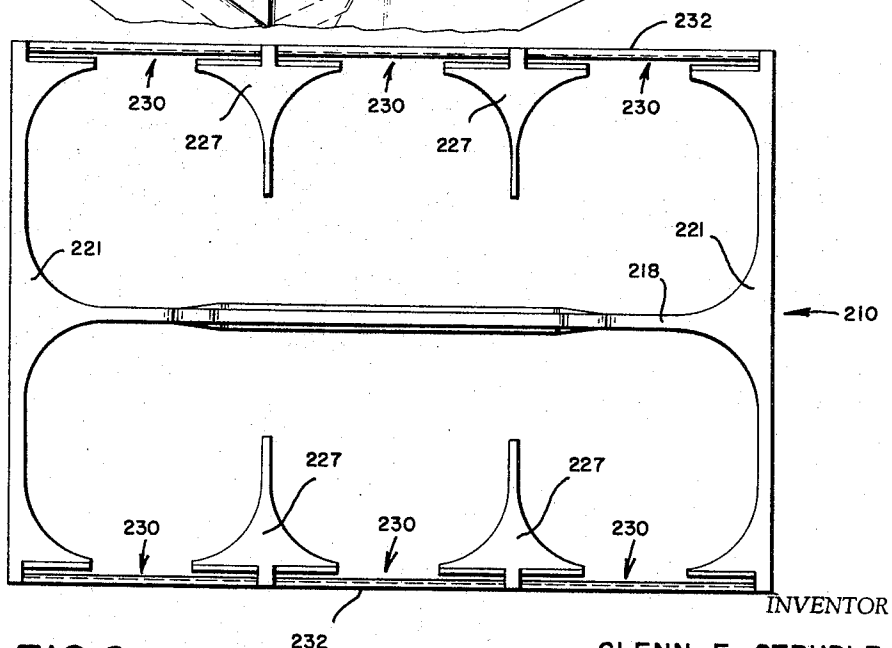


FIG. 9

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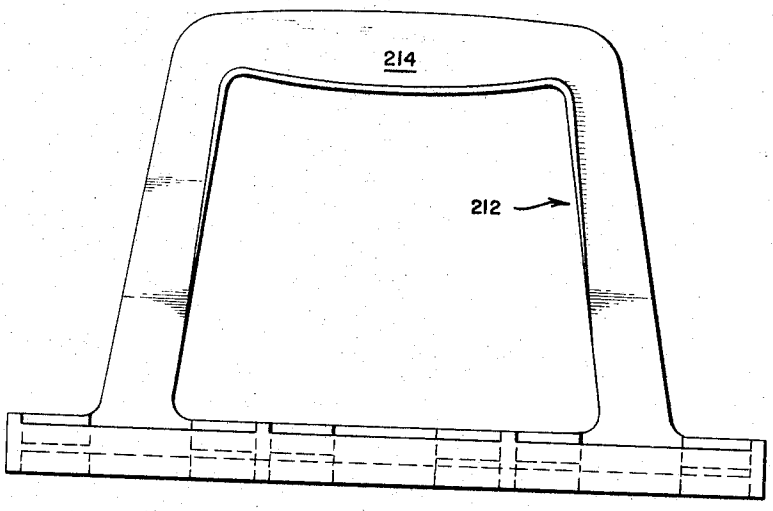


FIG. 10

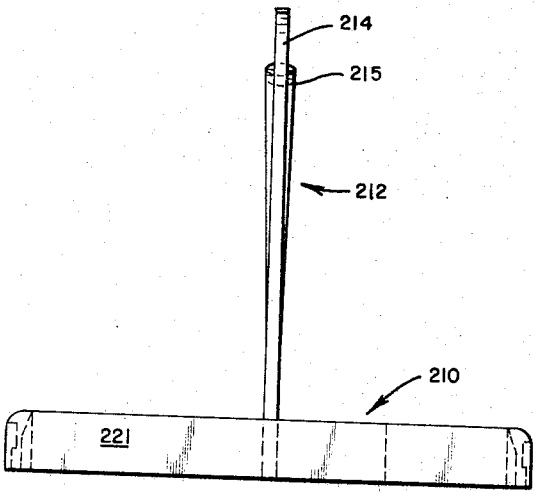


FIG. 11

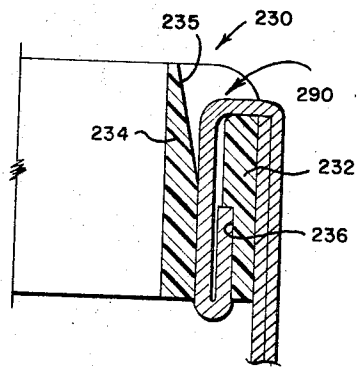


FIG. 12

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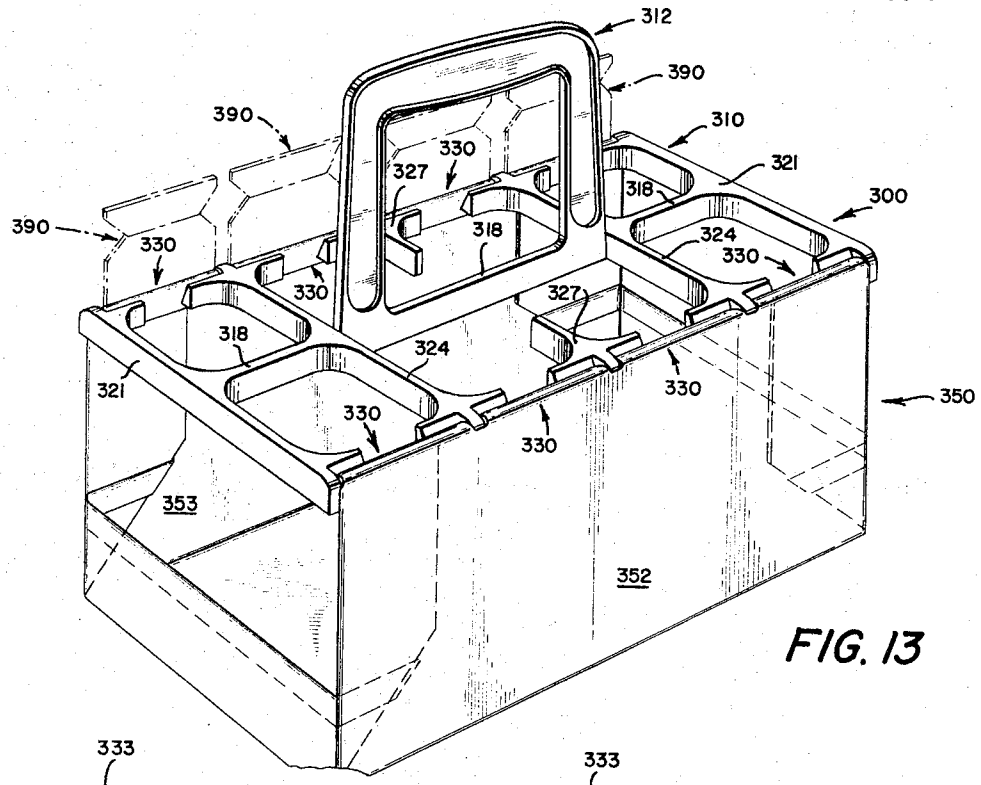


FIG. 13

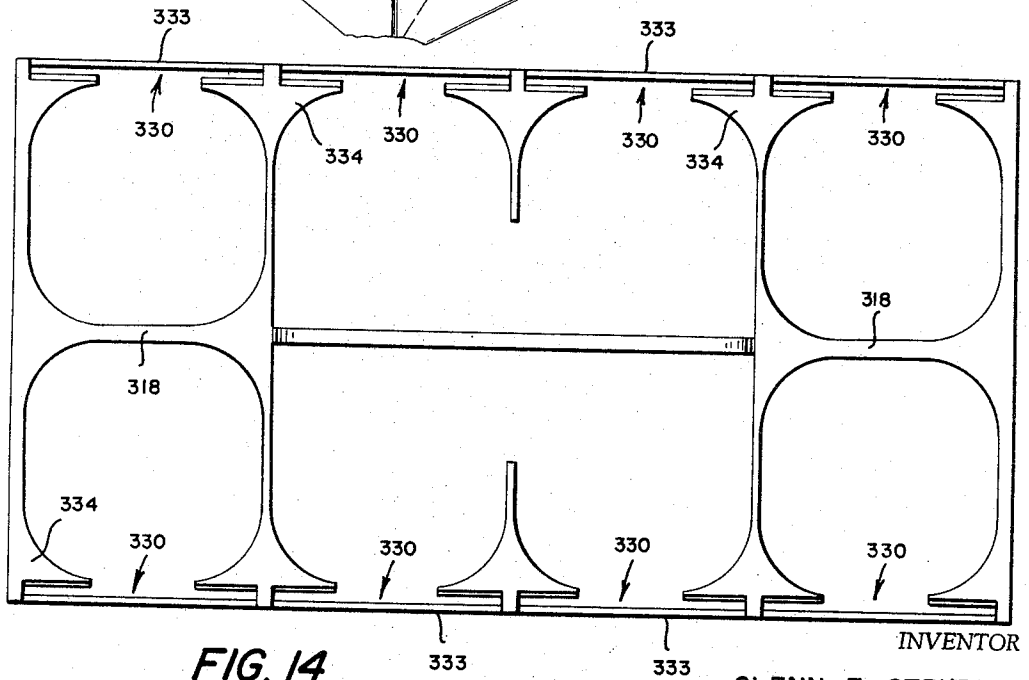


FIG. 14

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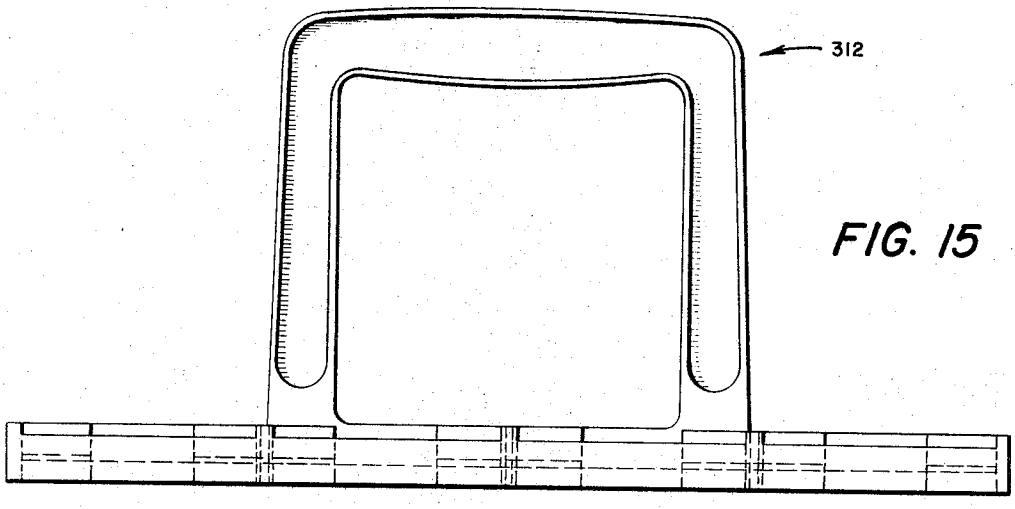


FIG. 15

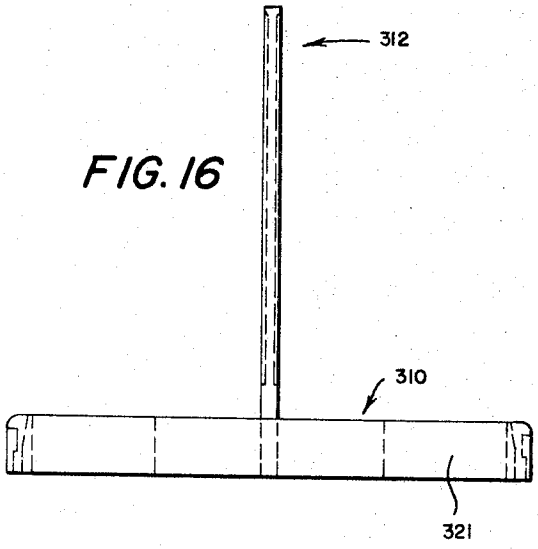


FIG. 16

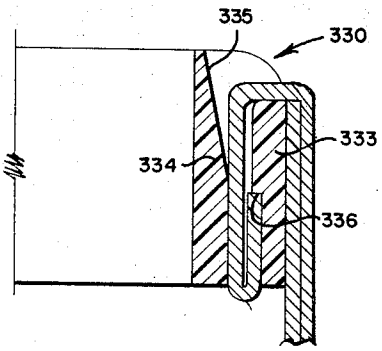


FIG. 17

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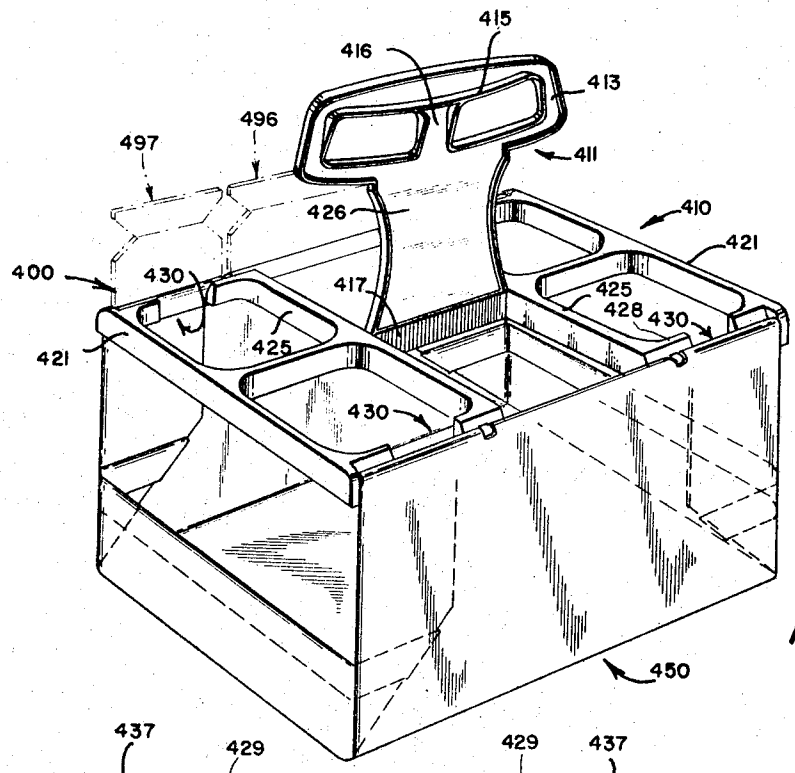


FIG. 18

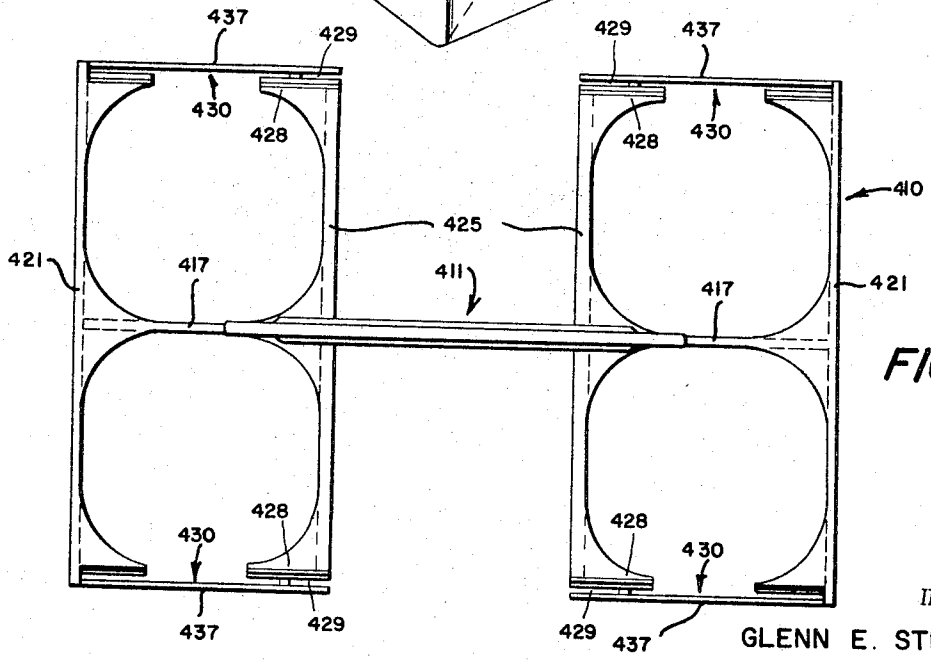


FIG. 19

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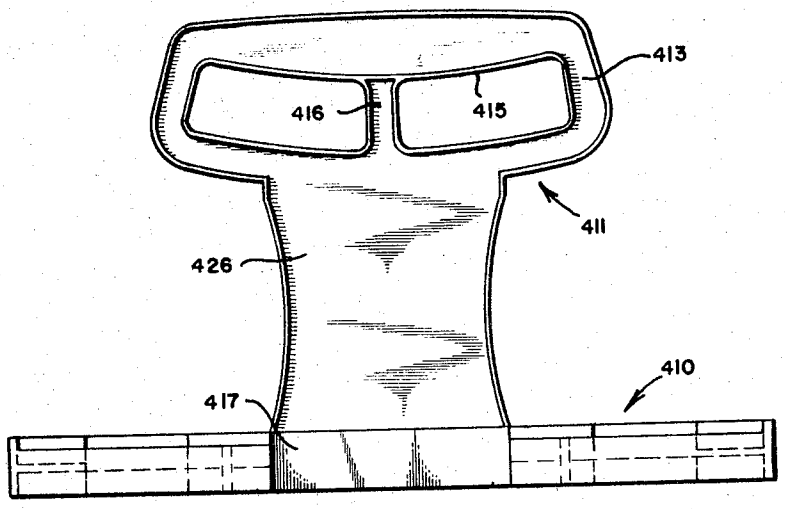


FIG. 20

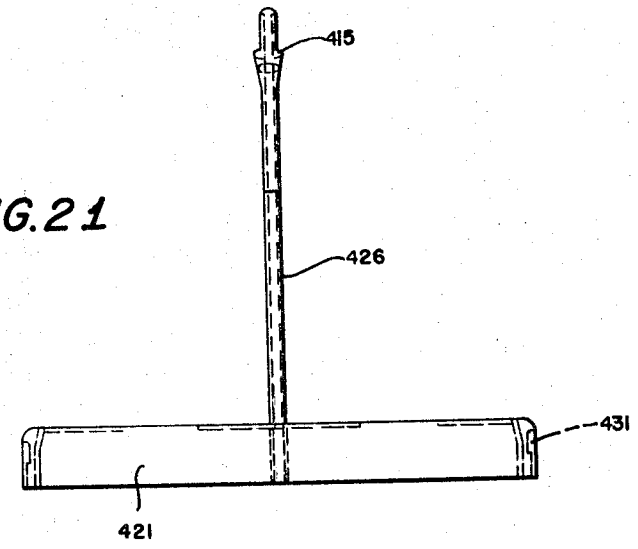


FIG. 21

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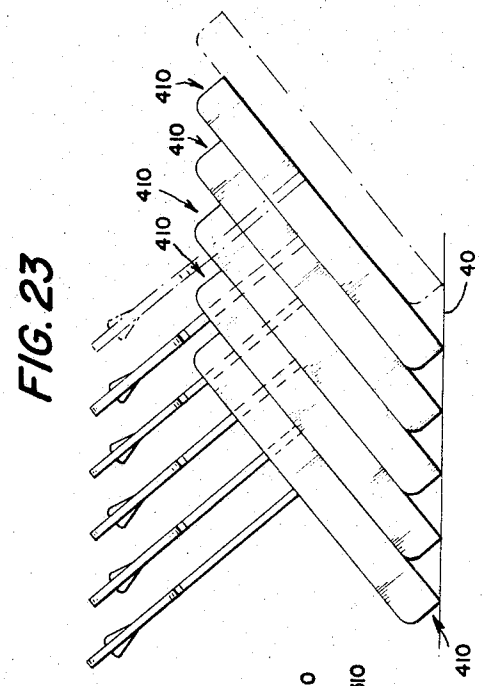


FIG. 23

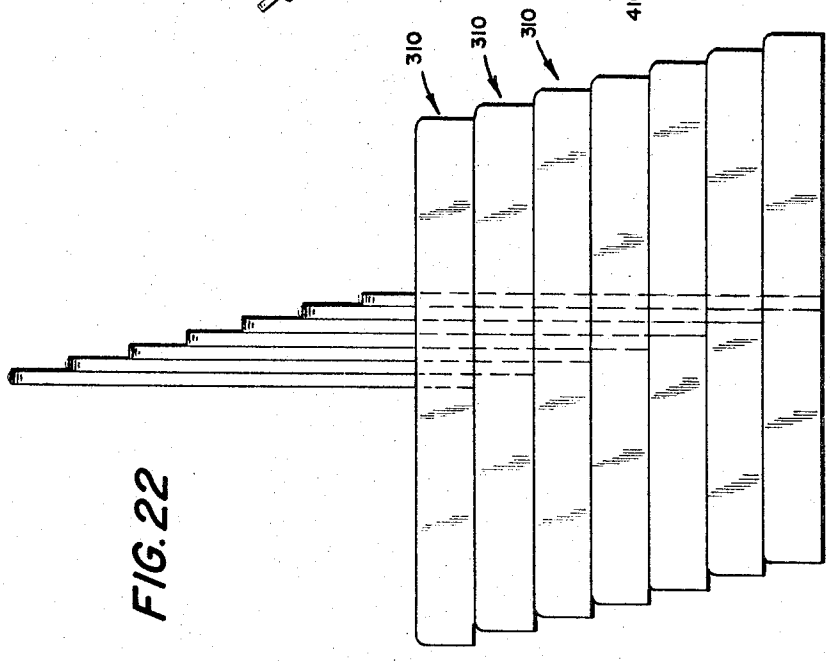


FIG. 22

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United States Patent Office 3,339,796 Patented Sept. 5, 1967

3,339,796
CONTAINER CARRIER

Glenn E. Struble, Hamilton, Ohio, assignor to Diamond International Corporation, a corporation of Delaware

Filed Oct. 23, 1964, Ser. No. 406,000
26 Claims. (Cl. 220—117)

The present invention relates to a carrier for bottles or cans and has particular reference to an improved combination of plastic, aluminum, or material similar to either and paperboard carrier.

Accordingly the present invention is directed to providing an economical re-useable carrier with replaceable advertising bottom section for soft drink and beer industries.

The invention seeks to provide a novel carrier which is a combination of plastic, aluminum or some similar material and paperboard. This allows the plastic-like or metal portion to be a one-time purchase and the inexpensive paperboard portion to be replaceable.

With the combination of the present invention manufacturers can build into the plastic, aluminum or similar material top portion all the strength which is required in the handle and separator cell areas and use the paperboard for pictorial and advertising copy.

The all cardboard carrier which is generally used at present may be re-used for approximately four trips and then is usually discarded because of its soiled appearance necessitating the purchase of a completely new carrier. With the combination carrier of the present invention only the cardboard or paperboard portion must be repurchased with great savings to the soft drink and beer companies.

Basically the carrier of the present invention involves the concept of joining a permanent more expensive plastic-like or metal handle and separator portions to an inexpensive replaceable cardboard or paperboard bottom or supporting portion to create a versatile economical carrier. Replacement of the paperboard portion also allows periodic change in the advertising matter thereon.

With the new arrangement it is possible to replace the paperboard section without any necessity of tearing apart of glued portions or of the use of any gluing machines in assembling the new cardboard portion to the plastic-like or metal portion allowing the use of a much less expensive assembling machine.

The above and other objects and advantages of the invention will become apparent upon full consideration of the following detailed description and accompanying drawings in which:

FIG. 1 is a perspective view of the carrier of the present invention in an embodiment made to hold six containers;

FIG. 2 is a top plan view of only the handle and horizontal separator section from FIG. 1;

FIGS. 3 and 4 are a front elevation and side elevation respectively of the handle and horizontal separator section of FIG. 2;

FIG. 5 is a cross section along lines **5—5** of FIG. 1;

FIG. 6 is a view of the paperboard supporting means of the carrier shown in FIG. 1 with a fold taken in said paperboard section;

FIG. 7 is a partial perspective view showing final stages in the folding of the paperboard section of FIG. 6;

FIG. 8 is a perspective view of another embodiment of the carrier of the present invention, also used to carry six containers;

FIG. 9 is a top plan view of the handle and horizontal separator section of the carrier shown in FIG. 8;

FIGS. 10 and 11 are a front elevation and side elevation respectively of the handle and horizontal separator section shown in FIG. 9;

FIG. 12 is a cross section view along lines **12—12** in the perspective view of FIG. 8;

FIG. 13 is a perspective view of a third embodiment of the carrier of the present invention which is used for carrying eight containers;

FIG. 14 is a top plan view of the handle and horizontal separator section of the embodiment shown in FIG. 13;

FIGS. 15 and 16 are a front elevation and side elevation respectively of the handle and horizontal separator section of FIG. 14;

FIG. 17 is a cross section view along lines **17—17** in FIG. 13;

FIG. 18 is a perspective view of a fourth embodiment of the carrier of the present invention which is used for carrying six containers;

FIG. 19 is a top plan view of the handle and horizontal separator section of FIG. 18;

FIGS. 20 and 21 are a front elevation and side elevation respectively of the handle and horizontal separator section of FIG. 19;

FIG. 22 is a side elevation of stacked handle and horizontal separator sections of the type illustrated in the third embodiment; and

FIG. 23 is a side elevation of stacked handle and horizontal separator sections of the type illustrated in the fourth embodiment.

One embodiment of the present invention is illustrated in FIGS. 1–7 by the combination carrier **100** shown therein. This combination carrier consists of a plastic, or a similar material, or aluminum or similar metallic material, handle **111** and horizontal separator section **110** which will have attached thereto a paperboard supporting means **150** forming the sides and bottom of carrier **100**.

The handle **111** and horizontal separator section **110** is shown in detail in FIGS. 1–4. It consists of a handle **111** having a gripping portion **113** at its upper end. Gripping portion **113** has an opening through which the fingers of the hand are extended around, grasping the wide lip **115** across the top of the opening. A center portion **116** vertically across the opening of the gripping portion **113** may be formed in the handle to strengthen it. Gripping portion **113** is attached to a center cross bar **117** extending between end bars **121** while passing through transverse bars **123** of horizontal separator section **110**, by means of handle pedestal portion **126**.

Cross bar **117**, besides furnishing points of connection for handle **111** also forms, in combination with end bars **121** and transverse bars **123** cell dividers to hold the containers in the container carrier in separate cells out of contact with each other, thus safeguarding these containers, especially bottles, against damage. Although not necessary to this invention, the corners formed by intersecting bars may be rounded as shown.

Connecting the ends of end bars **121** with adjacent ends of transverse bars **123** are locking means **130** by which connection is made with the paperboard supporting means **150**.

Paperboard supporting means **150**, as illustrated in FIGS. 6 and 7, is a preferred form that may be used with the horizontal separator section **110**. Paperboard supporting means **150** consists of a bottom panel **151** to which are attached front and rear panels **152** and **153**, respectively, by score lines **154** and **155**, respectively. Side flaps **156** and **157** are attached by score lines **158** and **159**, respectively, to the sides of front panel **152**. In a like manner side flaps **160** and **161** are attached by score lines **162** and **163**, respectively, to rear panel **153**. Side panels **164** and **165** are attached by score lines **166** and **167**, respectively, to bottom panel **151**. Triangular section **171** is located between side panel **164** and side flap **156** separated therefrom by score lines **172** and **173**, respectively. Triangular sections **174**, **175** and **176** are

similarly located between side flaps and side panels and separated therefrom by score lines as shown in FIG. 6. A single continuous score line of line lengths, **177**, **178** and **179** separates lip **181** from triangular section **176**, side panel **164** and triangular section **171**, respectively. In a similar manner lip **182** is separated from triangular section **175**, side panel **165** and triangular section **174** by a score line of line lengths **183**, **184** and **185**. Holes in bottom panel **151** are for use with assemblying machinery. Side flaps **156**, **157**, **160** and **161** have glue placed on the inside surface thereof or on the adjacent surfaces of the front panel **152** and rear panel **153** which they would contact when folded along score lines connecting them to these panels. Lips **181** and **182** in a similar manner have glue on their inside surfaces or surface which would be adjacent thereto after folding. If a straight line gluing machine is preferred to perform this gluing operation, then a straight strip of glue covering the outer edges of side flaps in line with lips **181** and **182** and the inside surfaces of those lips, before fold over, will suffice to glue together the necessary parts as described above but with the use of less complicated gluing machinery. FIG. 6 in its lower portion illustrates the fold over of lip **182** which is followed by the fold over of side flaps and side panel after application of glue to those side flaps or surfaces adjacent thereto. Lip **181**, side flaps **156** and **160**, and side panel **164** would be folded in a similar manner on their score lines **177–178–179**, **158**, **166** and **162** after the application of glue thereto. On the outside edge of front panel **152** and rear panel **153** are located paperboard locking tabs **190**. All of the locking tabs **190** are similar to each other and each consists of an end tab **191** separated by score line **192** from connecting section **193** which is attached but separated from opposite ends of rear and front panels **152** and **153** by score lines **194**.

After glue has been applied to the lips, side flaps, and the lips, side flap, and side panel sections have been folded on their respective score lines to overlie front, rear and bottom panels **152**, **153** and **151**, respectively, the paperboard supporting means **150** are in the form which they may be shipped to bottlers with no additional gluing necessary. It is, of course, more convenient to place printed matter on the outside surface of the paperboard before application of glue and folding of lips, side flaps, and side panels and this is the usual manner of doing this printing. The handles and horizontal separator sections are shipped to the bottling plants in stacked relationship as discussed later in connection with FIGS. 22 and 23.

FIG. 7 illustrates a half section of paperboard supporting means **150** as erected and preparatory to connection with horizontal separator section **110**. Although the vertical panel illustrated in FIG. 7 is designated as front panel **152**, this also illustrates positioning of rear panel **153** since the paperboard supporting means **150** is symmetrical in regard to opposite sides and front to rear as is the horizontal separator section **110**. Paperboard supporting means **150** may be erected by pivoting front panel **152** and rear panel **153** upwardly about score lines **154** and **155**, respectively, to form an angle of approximately 90° with bottom panel **151**. It will then be noted that side panels **164** and **165** are thereby caused to pivot outwardly until they too form approximately 90° angles with bottom panel **131**. This also causes triangular sections **171**, **174**, **175** and **176** to pivot upwardly until they are held pressed against the adjacent side flaps glued to the front and rear panels respectively. Connection is then made by one of each of paperboard locking tabs **190** to each of locking means **130** thereby connecting paperboard supporting means **150** to horizontal separator section **110** and handle **111**. This connecting and locking process is accomplished by taking a locking tab **190** and folding end tab **191** inwardly and over connecting section **193** on score line **192** as illustrated in FIG. 7. The entire locking tab **190** is then folded inwardly again along its score line **194**. Notches **195** having a V shape with their apices at opposite ends of score line **192** are found on opposite sides of each locking tab **190** to facilitate entry of these tabs into locking means **130**.

As shown in the enlarged section view of FIG. 5, the locking tab **190** is bent over the outer wall formed by connecting bar **131** of locking means **130** and inserted in between this outer wall and an inner wall **134** of the locking means. Inner wall **134** is formed from a perpendicular extension near the ends of end and transverse bars. As illustrated, it is not necessary for the extensions to meet each other. To facilitate the entry of locking tab **190**, inner wall **134** has a tapering portion **135** sloping downwardly toward outer wall **131**. A notched portion **136** on the inside surface of outer wall **131** extending to the bottom of that wall receives end tab **191** and prevents the withdrawal of locking tab **190** from locking means **130**. The weight of bottles in the paperboard supporting means **150** causes a downward force on this section and tends to tighten the locking tabs **190** in their respective locking means **130** of the horizontal separator section **110**. As can be seen in the embodiment illustrated, this attachment of paperboard supporting means **150** to horizontal separator section **110** does not require any gluing operation and may be done at the bottling plant, or may be done elsewhere without the use of special machinery if performed by hand, wherever additional combination carriers may be required, such as at the retail outlets.

Similar parts of the container carrier illustrated in other embodiments of this carrier are numbered with the same number but in a different hundred series. It should also be noted that all embodiments are substantially symmetrical from front to back and side to side.

A second embodiment of a six container carrier of the present invention is illustrated in FIGURES 8–12. This embodiment, illustrated by carrier **200**, differs from the previously illustrated embodiment in certain respects. The horizontal separator section **210** has a handle **212** which has a wide lip **215** but with a gripping portion **214** which extends down to a cross bar **218** without the use of any intermediate handle pedestal portion. This cross bar **218** is attached to end bars **221** without any transverse bars interrupting its continuity. An additional locking means **230** is located on both the front, and rear of horizontal separator section **210** between locking means **230** located as in the previous embodiment and separated therefrom by separator segments **227**. These somewhat triangular shaped separator segments **227** are used to separate and keep separate the containers in the carrier and also provide the extensions to form inner walls **234** for locking means **230** where these inner walls were formed by extensions on the transverse bars in the previous embodiment. Paperboard supporting means **250** is similar in all respects to paperboard supporting means **150** except for the addition of more cardboard locking tabs **290** in the front and rear, spaced between locking tabs found in the previous embodiment, in positions to lock in the center locking means **230** in front and rear respectively. Locking means **230** in horizontal separator section **210** are similar to those in the previous embodiment as is shown in the enlarged view of locking means **230** in FIG. 12.

Another embodiment of the container carrier designated as carrier **300** and with parts numbered in the 300 series is illustrated in FIGS. 13–17. This carrier is made for the purpose of carrying eight bottles or cans and combines features of both of the previous embodiments. The handle **312** is similar in construction to handle **212** with differences therefrom mostly of an ornamental nature and the optional omission of the wide lip on the gripping portion. The sections formed from end bars **321** and transverse bars **324** on each side of horizontal separator section **310** appear similar to those sections in the first embodiment illustrating carrier **100** except that they would appear to have been moved further apart and had

separator segments **327**, similar to separator segments **227** in carrier **200**, placed along the front edge between transverse bars **324**, with a similar separator segment **327** placed along the rear edge between the same transverse bars **324**. Also transverse bars **324** have perpendicular extensions on their ends extending toward separator segments **327** to form the inner walls of locking means **330** in cooperation with extensions on segments **327**. This structure allows the placement of four locking means **330** for attachment of the front panel of paperboard supporting means **350** and four locking means **330** for attachment of the rear panel of paperboard supporting means **350**. Paperboard supporting means **350** differs from means **150** and **250** of the previous embodiments only in the number of locking tabs along front and rear panel edges. In this embodiment there are four locking tabs **390** along each edge of front and rear panels **352** and **353** respectively to correspond with the four locking means **330** on each of the front and rear parts of horizontal separator section **310**. As illustrated in FIG. 17, the same type of locking section is used in the horizontal separator section of this embodiment as previously described.

A fourth embodiment which is a variation of the first embodiment for holding six containers is illustrated in FIGS. 18–21.

The handle **411** is attached to cross bar **417** which is connected at the midpoints of end bars **421** and intersected by transverse bars **425**. It is in the construction of the end portions of the transverse bars and their connection to connecting bars **437** in which the difference between horizontal separator sections **110** and **410** is apparent.

In this embodiment, connecting bars **437** are connected to end bars **421** as previously described but their connection to transverse bars **425** is made to the perpendicular extension **428** on transverse bar **425** thereby forming a slot **429** between extension **428** and an end portion of connecting bar **437** extending beyond its connecting point with the extension **428**.

The paperboard supporting means **450** used with horizontal separator section **410** uses three locking tabs in the front and three in the rear to attach paperboard supporting means **450** to horizontal separator section **410** but because of the variation in construction of horizontal separator section **410** the center locking tab **496** extends beyond the confines of the center cell bounded by transverse bars **425** and therefore is larger than locking tabs **497** on either side. Although there is this variation in size of locking tabs in this embodiment their shape and the method of attachment remains the same as described previously.

The cardboard sections may be shipped to the bottling and assembly plants after gluing of the side flaps in a flattened condition, but the most economical and convenient way for shipping of the handle and horizontal separator sections made of a plastic or similar material, or if made of metal such as aluminum or similar material, is by placing them in stacked relation to each other. FIG. 22 illustrates the nesting of these sections formed with handles thereon as illustrated in the third embodiment described in connection with FIGS. 13–16. If slight lateral displacement due to lip width on the handle gripping portion is taken into account, this same form of stacking may be done with the second embodiment illustrated in FIGS. 8–11. Because of the elimination of the transverse bars in the second embodiment, FIGS. 8–11, or the additional spacing between the transverse bars in the third embodiment, FIGS. 13–16, the handle and horizontal separator sections of carriers **200** and **300** are not limited in the number of such sections which may be stacked.

When the handle and horizontal separator sections of carriers **100** or **400** are stacked, this must be done as illustrated in FIG. 23 if no limitation is to be placed on the number of such sections which may be stacked. If stacked as in FIG. 22, then because of the extension of gripping portion **413** beyond the confines of transverse bars **425**, the number of such handle **111** or **411** and horizontal separator sections **110** or **410** which may be stacked is limited to approximately five such sections depending on handle size and horizontal separator section thickness. But these same handle and horizontal separator sections, when placed at an angle to a common plane **40** with the points of their lowest edges touching that plane, may be stacked in unlimited numbers. The angle of the horizontal separator sections with common plane **40** must be such that every fifth handle **111** or **411** must be even with or forward of the connecting bars **131** or **437** when relative sizes of handle size and horizontal separator thickness are as discussed.

It will be obvious to those skilled in the art that various changes may be made without departing from the scope of the invention and therefore the invention is not limited to what is shown in the drawings and described in the specification but only as indicated in the appended claims.

What is claimed is:

1. A container carrier comprising
- a separator section including
  - a pair of end bars forming opposite edges of said separator section,
  - a cross bar connecting substantially the midpoints of said end bars,
  - locking means located along edges perpendicular to said end bars,
- a handle extending above and attached to said cross bar,
- and a paperboard supporting means having
  - locking tabs extending from said paperboard supporting means and bent inward to connect with said locking means.

2. The container carrier of claim **1**, further characterized by
- transverse bars intersecting said cross bar and parallel to said end bars.

3. The container carrier of claim **2**, further characterized by said handle including
- a gripping portion extending in the plane of said cross bar further than the distance between two of said transverse bars intersecting said cross bar closest to its center,
- and a pedestal attaching said gripping portion to said cross bar.

4. The container carrier of claim **3**, further characterized by said gripping portion having an opening through which the fingers are inserted
- and a lip of greater thickness than the remainder of said handle lining the top edge of the opening in said gripping portion.

5. A container carrier comprising
- a separator section,
  - a pair of end bars forming opposite edges of said separator section,
  - a cross bar connecting to substantially the midpoints of said end bars,
  - transverse bars intersecting said cross bar and parallel to said end bars,
  - locking means located along edges perpendicular to said end bars including
    - an outer wall connecting adjacent ends of said end bars to said transverse bars,
    - an inner wall defined by extensions near the adjacent ends of said end and transverse bars, perpendicular to said bars and jutting toward each other,
    - a notch in the surface of the outer wall facing the adjacent surface of the inner wall and extending to the bottom of said outer wall,

and a paperboard supporting means hanging from said separator section including
a bottom panel,
front and rear panels attached to said bottom panels substantially at right angles to said bottom panel,
side panels attached at opposite edges of said bottom panel,
side flaps attached at opposite sides of said front and rear panels,
triangular sections connecting each of said side flaps to a side panel,
and locking tabs attached at opposite ends of said paperboard supporting means including
connecting sections attached to said front and rear panels,
and an end tab attached to each of said connecting sections,
the width of said connecting sections measured from the connection with said front and rear panels to the connection with its end tab being greater than the width of said end tab measured from its connection with said connecting section attached thereto and its opposite, parallel edge.

6. A container carrier comprising
a separator section,
a pair of end bars forming opposite edges of said separator section,
a cross bar conecting substantially the midpoints of said end bars,
locking means located along edges perpendicular to said end bars,
connecting bars connecting the ends of said end bars and forming the outer walls of said locking means,
extensions near the ends of said end bars perpendicular to said bars and defining a portion of the inner walls of said locking means,
separator segments attached to said connecting bars with extensions parallel to said connecting bars and defining additional portions of the inner walls of said locking means,
notches on the surfaces of said connecting bars facing toward the inner wall and extending to the bottom of said connecting bars,
and a paperboard supporting means hanging from said separator section including
a portion panel,
front and rear panels attached to said bottom panels substantially at right angles to said bottom panel,
side panels attached at opposite edges of said bottom panel,
side flaps attached at opposite sides of said front and rear panels,
triangular sections connecting each of said side flaps to a side panel,
and locking tabs attached at opposite ends of said paperboard supporting means including
connecting sections attached to said front and rear panels,
and an end tab attached to each of said connecting sections,
the width of said connecting sections measured from the connection with said front and rear panels to the connection with its end tab being greater than the width of said end tab measured from its connection with said connecting section attached thereto and its opposite, parallel edge.

7. A container carrier comprising
a separator section,
a pair of end bars forming opposite edges of said separator section,

a cross bar connecting to substantially the midpoints of said end bars,
transverse bars intersecting said cross bar and parallel to said end bars,
connecting bars connecting the ends of said end bars and intersecting the ends of said transverse bars adjacent to those ends,
separator segments attached to said connecting bars at a point between their intersections with said transverse bars,
locking means located along said connecting bars,
said connecting bars forming the outer walls of said locking means,
extensions near the ends of said end bars and said transverse bars perpendicular to said bars and defining a portion of the inner walls of said locking means,
extensions on said separator segments parallel to said connecting bars defining additional portions of the inner walls of said locking means,
notches on the surfaces of said connecting bars facing toward the inner walls and extending to the bottom of said connecting bars,
and paperboard supporting means hanging from said separator section including
a bottom panel,
front and rear panels attached to said bottom panels substantially at right angles to said bottom panel,
side panels attached at opposite edges of said bottom panel,
side flaps attached at opposite sides of said front and rear panels,
triangular sections connecting each of said side flaps to a side panel,
and locking tabs attached at opposite ends of said paperboard supporting means including
connecting sections attached to said front and rear panels,
and an end tab attached to each of said connecting sections,
the width of said connecting sections measured from the connection with said front and rear panels to the connection with its end tab being greater than the width of said end tab measured from its connection with said connecting section attached thereto and its opposite, parallel edge.

8. A container carrier comprising
a separator section,
a handle attached to said separator section,
and paperboard supporting means hanging from said separator section by the opposite ends of said paperboard supporting means,
said paperboard supporting means having
locking tabs extending from opposite ends of said paperboard supporting means and bent over an edge of said separator section to form overhanging connections with said separator section,
a plurality of locking means located along opposite sides of said separator section in adjacent relationship to said locking tabs when said paperboard supporting means is in erected position,
said locking means including
an outer wall and an inner wall,
and a notch in one of said walls extending to the bottom thereof on the surface adjacent and facing said other wall.

9. The container carrier of claim 8, further characterized by
said notch in one of the walls of said locking means being located on the surface of the outer wall facing the adjacent surface of the inner wall,
and said inner wall having a tapered portion at its top

with the surface adjacent said outer wall sloping downward toward said outer wall.

10. The container carrier of claim **9**, further characterized by said locking tabs including

a connecting section being part of and attached to the remainder of said paperboard supporting means at a score line,

and an end tab attached to said connecting section at a score line,

the width of said end tab measured from its score line to the parallel edge being less than the width of said connecting section measured between its two parallel score lines.

11. A rigid support for a container carrier comprising

a separator section,

a handle attached to said separator section,

a plurality of locking means located along opposite sides of said separator section including

an outer wall and an inner wall,

and a notch in one of said walls extending to the bottom thereof on the surface adjacent and facing said other wall.

12. The rigid support for a container carrier of claim **11**, further characterized by

said notch in one of the walls of said locking means being loacted on the surface of the outer wall facing the adjacent surface of the inner wall,

and said inner wall having a tapered portion at its top with the surface adjacent said outer wall sloping downward toward said outer wall.

13. A container carrier comprising

a separator section,

a handle attached to said separator section,

and paperboard supporting means hanging from said separator section including

a bottom panel,

front and rear panels attached to said bottom panels substantially at right angles to said bottom panel,

side panels attached at opposite edges of said bottom panel,

locking tabs attached at opposite ends of said paperboard supporting means along the edges of said front and rear panels,

side flaps attached at opposite sides of said front and rear panels,

an adhesive material on the inside surface of said side flaps on the surfaces which contact said front and rear panels,

and triangular sections connecting each of said side flaps to a side panel,

said locking tabs including

connecting sections attached to said front and rear panels,

and an end tab attached to each of said connecting sections,

the width of said connecting sections measured from the connection with said front and rear panels to the connection with its end tab being greater than the width of said end tab measured from its connection with said connecting section attached thereto and its opposite, parallel edge.

14. The container carrier of claim **13**, further characterized by

said locking tabs having oppositely placed V shaped notches with their apices located at the connection between said end tab and said connection section.

15. A container carrier comprising

a separator section including

a pair of end bars forming opposite edges of said separator section,

a cross bar connecting substantially the midpoints of said end bars,

transverse bars intersecting said cross bar and parallel to said end bars,

locking means located along edges perpendicular to said end bars including

an outer wall connecting adjacent ends of said end bars to said transverse bars,

an inner wall formed by extensions near the adjacent ends of said end and transverse bars, perpendicular to said bars and jutting toward each other,

a handle attached to said cross bar,

and a paperboard supporting means having

locking tabs extending from said paperboard supporting means and bent inward to connect with said locking means.

16. The container carrier of claim **15**, further characterized by said locking means including

a notch in the surface of the outer wall facing the adjacent surface of the inner wall and extending to the bottom of said outer wall.

17. A rigid support for a container carrier comprising

a separator section including

a pair of end bars forming opposite edges of said separator section,

a cross bar connecting substantially the midpoints of said end bars,

transverse bars intersecting said cross bar and parallel to said end bars,

locking means located along edges perpendicular to said end bars including

an outer wall connecting adjacent ends of said end bars to said transverse bars,

an inner wall formed by extensions near the adjacent ends of said end and transverse bars, perpendicular to said bars and jutting toward each other,

and a handle attached to said cross bar.

18. The rigid support for a container of claim **17**, further characterized by said locking means including

a notch in the surface of the outer wall facing the adjacent surface of the inner wall and extending to the bottom of said outer wall.

19. A container carrier comprising

a separator section including

a pair of end bars forming opposite edges of said separator section,

a cross bar connecting substantially the midpoints of said end bars,

connecting bars connecting the ends of said end bars,

locking means located along edges perpendicular to said end bars having outer and inner walls with said outer walls formed by said connecting bars,

and a handle attached to said cross bar,

and a paperboard supporting means having

locking tabs extending from said paperboard supporting means and folded over said outer walls to connect with said locking means.

20. The container carrier of claim **19**, further characterized by

extensions near the ends of said end bars perpendicular to said bars and defining a portion of the inner walls of said locking means,

and separator segments attached to said connecting bars with extensions parallel to said connecting bars and defining additional portions of the inner walls of said locking means.

21. A rigid support for a container carrier comprising

a separator section including

a pair of end bars forming opposite edges of said separator section,

a cross bar connecting substantially the midpoints of said end bars,

connecting bars connecting the ends of said end bars,

locking means located along edges perpendicular to said end bars having outer and inner walls with said outer walls formed by said connecting bars,

extensions near the ends of said end bars perpendicular to said bars and defining a portion of the inner walls of said locking means,

and separator segments attached to said connecting bars with extensions parallel to said connecting bars and defining additional portions of the inner walls of said locking means,

and a handle attached to said cross bar.

22. A container carrier comprising

a separator section including

a pair of end bars forming opposite edges of said separator section,

a cross bar connecting substantially the midpoints of said end bars,

transverse bars intersecting said cross bar and parallel to said end bars,

connecting bars connecting the ends of said end bars and intersecting the ends of said transverse bars adjacent to those ends,

and separator segments attached to said connecting bars at a point between their intersections with said transverse bars,

locking means located along edges perpendicular to said end bars,

a handle attached to said cross bar,

and a paperboard supporting means having

locking tabs extending from said paperboard supporting means and bent inward to connect with said locking means.

23. A container carrier comprising

a separator section including

a pair of end bars forming opposite edges of said separator section,

a cross bar connecting substantially the midpoints of said end bars,

connecting bars connecting the ends of said end bars,

locking means located along edges perpendicular to said end bars having outer and inner walls with said outer walls formed by said connecting bars,

extensions near the ends of said end bars and said transverse bars perpendicular to said bars and defining a portion of the inner walls of said locking means,

extensions on said separator segments parallel to said connecting bars defining additional portions of the inner walls of said locking means,

a handle attached to said cross bar,

and a paperboard supporting means having

locking tabs extending from said paperboard supporting means and bent inward to connect with said locking means.

24. A rigid support for a container carrier comprising

a separator section including

a pair of end bars forming opposite edges of said separator section,

a cross bar connecting substantially the midpoints of said end bars,

connecting bars connecting the ends of said end bar,

locking means located along edges perpendicular to said end bars having outer and inner walls with said outer walls formed by said connecting bars,

extensions near the ends of said end bars and said transverse bars perpendicular to said bars and defining a portion of the inner walls of said locking means,

extensions on said separator segments parallel to said connecting bars defining additional portions of the inner walls of said locking means,

and a handle attached to said separator section.

25. A stack of a plurality of articles,

each article comprising

a cross bar,

end bars attached to opposite ends of said cross bar,

transverse bars spaced from each other in parallel relationship to said end bars and intersecting said cross bar,

a handle attached to said cross bar and parallel therewith having an upper portion extending beyond the confines of said transverse bars and a lower portion within the confines of said transverse bars,

and connecting bars between outer ends of said end bars and said transverse bars;

said stack comprising

each said article in said stack resting upon the article therebelow,

each said article laterally displaced from each other article with said lateral displacement of said articles so spaced with respect to one another so as to eliminate interference bewteen said connecting bars and said upper portion of said handle,

said articles placed at a common angle of inclination to a common plane with the lowest point on each article within the common plane.

26. The stack of a plurality of articles of claim **25**, further characterized by

said handle being co-planar with said cross bar.

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