Nov. 3, 1959 G. R. HOTTON 2,911,126

BOTTLE AND CAN CARRIER

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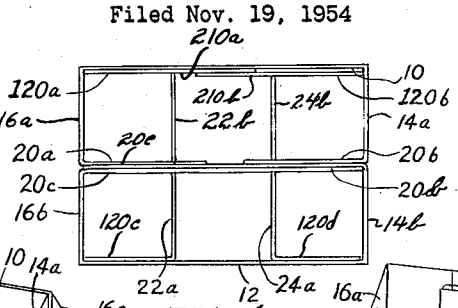


FIG. 4

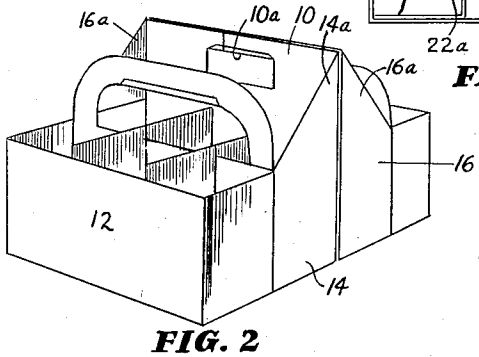


FIG. 2

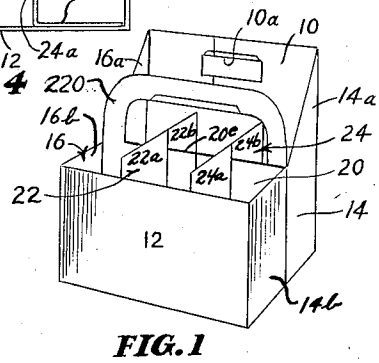


FIG. 1

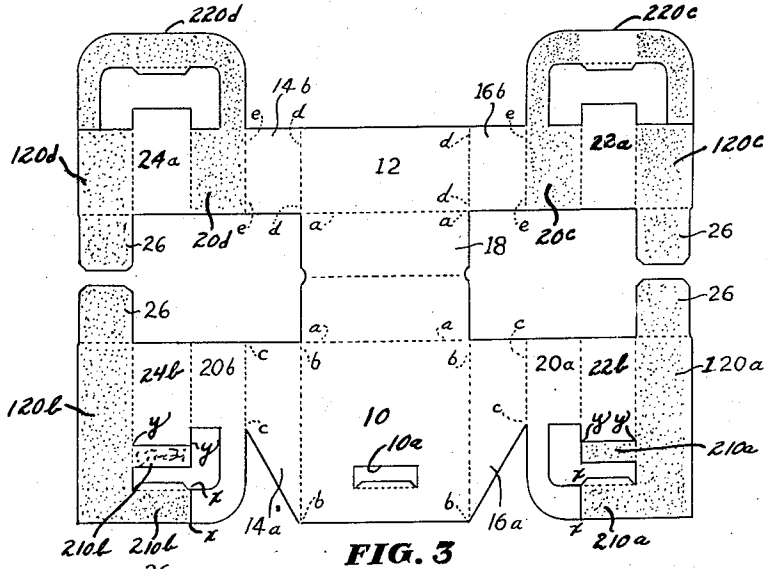


FIG. 3

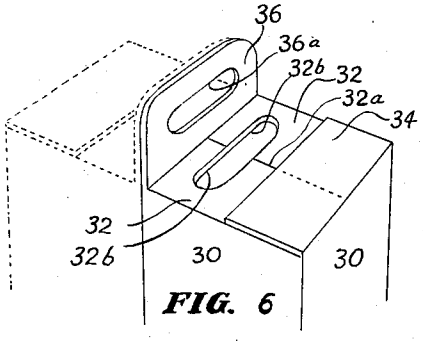


FIG. 6

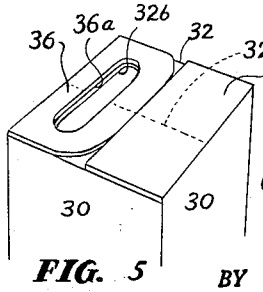


FIG. 5

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BOTTLE AND CAN CARRIER

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1 Claim. (Cl. 220—115)

My invention relates to an improved bottle and can carrier which can be readily carried either singly or in duplicate from the single hand of the user.

Bottle and can carriers of material such as cardboard possess numerous advantages over carriers constructed of wood or similar material because they permit the ultimate user to carry the bottles or cans from the store to his home and then discard the carrier. Moreover, such carriers may be folded flat for convenient storage before or after use. However, with such carriers it is generally impossible to carry more than one carrier from the single hand since the carrying handle is disposed only in the center of the carrier.

In accordance with the present invention this problem is overcome by providing in a single carrier a first handle which is located on the center of gravity of the carrier—thus providing a convenient handle to carry the carrier singly—and a second handle on the margin of the carrier so that the two carriers may be carried in back-to-back relation by the single hand of the user. When two carriers are thus carried, the center of gravity is on a line passing through the two marginal handles and, in addition, each carrier bears against the other to prevent twisting effect on the handles.

In one form of the structure of the present invention the central handle and the marginal handle are separately constructed and remain permanently in the lifting position. In a second form the marginal handle is foldably mounted on the container so that—when folded—it forms part of the central handle and in the raised or unfolded position it permits the user to carry a pair of carriers in back-to-back relationship.

It is therefore a general object of the present invention to provide an improved bottle carrier which may be carried singly or in duplicate by the single hand of the user.

A further object of the present invention is to provide a carrier with a marginal handle and in which a web of cardboard or the like firmly supports the carrier from the handle in cantilever fashion.

Another object of the present invention is to provide an improved bottle carrier in which a single handle folds to permit selective carrying of the carrier either from the center or in back-to-back relationship with another like carrier.

My invention further resides in the construction of a bottle carrier of the aforementioned type which is simple, inexpensive, attractive, easily used, and prefabricated from a flat sheet for shipment and storage in the collapsed flat condition to the end that a practical commercial unit is achieved.

The novel features which I believe to be characteristic of my invention are set forth with particularity in the appended claim. My invention itself, however, together with further objects and advantages thereof, will best be understood by reference to the following description taken in connection with the acompanying drawings, in which:

Figure 1 is a view in perspective of a bottle carrier constructed in accordance with the present invention;

Figure 2 is a view in perspective showing a pair of the bottle carriers of the type shown in Figure 1 in back-to-back relationship with another carrier to be carried in unison;

Figure 3 is a development of the cardboard blank from which the carrier of Figure 1 may be constructed;

Figure 4 is a top plan view of Figure 1;

Figure 5 is a view in perspective of the top portion of an alternative form of the present invention; and

Figure 6 is a view like Figure 5 but with the handle in upright position for carrying a pair of carriers and showing by dotted lines the second carrier in back-to-back relationship with the carrier of Figure 5.

Referring now to Figure 1, the bottle carrier there shown consists of a cardboard blank of the conformation shown in Figure 3 folded to define a rear wall **10**, a front wall **12** and side walls **14** and **16**. The box so formed is closed at its bottom by cardboard web **18**, Figure 3, which is part of the cardboard blank. Interiorly, the box defined by the walls and bottom is divided into six bottle pockets by central longitudinal divider **20** defined as hereinafter described, and by the two transverse dividers **22** and **24** also defined as hereinafter described.

The central longitudinal divider **20** has an upstanding handle portion **220** which protrudes upwardly therefrom. It will be noted that the user can lift the carrier by simply extending his hand under this handle and lifting. Since the handle **220** is centrally disposed the carrier does not tend to tip. In addition, the back wall **10** extends above the top edge of the front portions of side walls **14** and **16** and the front wall **12** and is windowed at **10***a* to provide an edge or marginal handle by which the carrier can be lifted. It will be further observed that the side walls **14** and **16** extend diagonally upward in their rear portions to form a web which rigidly sustains the carrier as a whole when lifted by the back wall **10**.

Figure 2 shows a pair of carriers of the type shown in Figure 1 in back-to-back relationship for lifting by placing the hand through the aligned and registered windows **10***a*. It will be observed that when the carriers are so positioned and lifted, the center of gravity of the two carriers extends through the axis of the handle formed by window **10***a* so that the two carriers are lifted as a unit and there is no tendency to tilt. Moreover, the weights of the two carriers oppose each other to prevent twisting effect on the back walls **10**.

The carrier of Figures 1 and 2 is formed by the blank shown in Figure 3. This blank is marked to indicate the various parts ultimately formed on the carrier. The first step in the folding operation is that of folding the front wall **12** and the rear wall **10** to upright position. That is, the carrier is folded along the guide lines *a*—*a*. Thereupon the side wall portions **14***a* and **16***a*, Figure 3, are folded forwardly along the lines *b*—*b* and then folded along the lines *c*—*c* to form a portion of the central longitudinal divider **20**. The portions of the blank forming the divider **20** are indicated at **20***a*, **20***b*, **20***c* and **20***d*, Figure 3. The portions **22***b* and **24***b* are then folded back as shown in Figure 4 and hereinafter described, the blank being cut along lines *x*—*x* and *y*—*y* for this purpose. Thereupon the front wall **12** is folded back along the lines *d*—*d* to form the side wall portions **14***b* and **16***b* and then along the lines *e*—*e* to form the central longitudinal divider portions **20***c* and **20***d*. These are thus folded again as shown in Figure 4 to form the transverse dividers **22***a* and **24***a*.

It will be observed from Figure 4 that the portions **20***a* and **20***c* and portions **20***b* and **20***d* of the blank overlap and are seated together to form the respective end portions of the central longitudinal divider **20**. Pref-

erably a separate center member **20***e* of cardboard or the like extends the whole length of the divider **20** and forms a surface to which portions **20***a*, **20***b*, **20***c* and **20***d* are glued. It will further be observed that top edges **220***c* and **220***d* of portions **20***c* and **20***d* extend the full distance along divider **20** to form the handle part **220**. However, the portions **210***a* and **210***b* are coplanar with portions **120***a* and **120***b*, respectively, and are glued to the back wall **10** to reinforce the same, particularly at window **10***a*. The flaps **26** are folded down over the bottoms of the respective bottle pockets to reinforce the same.

In the above assembly the parts are preferably glued at the regions that seat against each other and in such a manner that the glue does not interfere with a flat fold of the carrier preliminary to a popup position to receive the contents. Such gluing is shown in the stippled areas of Figure 3, in which areas glue is applied to the side of the blank opposite to that shown in Figure 3. This includes, for example, the portions **120***a*, **120***b*, **120***c* and **120***d*; flaps **26**; and portions **210***a*, **210***b*, **220***c* and **220***d*.

It will be noted from Figures 1 and 2 that the rear portions **14***a* and **16***a* of the side walls extend diagonally up to the top margin of the rear wall **10**. These portions accordingly form webs which support the entire carrier in cantilever fashion from the rear wall **10**. Accordingly, when the carrier is lifted by the handle **10***a*, all of the bottles in the carrier are effectively supported.

Figures 5 and 6 show an alternative form of the present invention. As shown in these figures, the carrier is of an elongated column conformation of rectangular cross section. The lengthy side walls are indicated at **30**. One opposed pair of side walls **30** are folded over to form cooperating flaps **32** which are contiguous to meet in line **32***a*. Each flap **32** has a half-window **32***b* which mates with the like half-window of the other flap to form an elongated window as shown.

The other pair of opposed flaps are indicated at **34** and **36**, respectively. The flap **34** is of rectangular conformation and folds over the flaps **32** as shown. It is glued to these flaps to form a firm top cover for the carrier. Flap **36** is of conformation to mate with the flap **34** when folded as shown in Figure 5. Moreover, flap **36** has a window **36***a* which registers with the two half-windows **32***b* of the flaps **32** as shown. The flap **36** is lightly glued down, so that when desired it may be raised to the position shown in Figure 6.

When the flap **36**, Figure 5, is in the folded down position as shown, the carrier has a single finger-receiving opening defined by the windows **36***a* and **32***b*. The user can insert his hand into this window with the fingers extending towards the central axis of the carrier and underlying the top portion of the carrier at the region of the axis of its center of gravity so that when lifted the carrier tends to assume a convenient upright position.

When it is desired to carry two carriers simultaneously the handle **36** is shifted to the upright position as shown in Figure 6 where it may mate with a like handle as shown by the dotted lines of that figure. In this case, the hand of the user may be inserted through the windows **36***a* to lift the two carriers in back-to-back relationship where they will remain in upright position to be conveniently carried. In this instance—since the weights of the cans or bottles are balanced and the weights are all below the fold lines of the foldable handles—there is no tendency of the foldable handle to twist.

It will be observed from the foregoing that the carrier construction of the present invention permits the user to carry the carrier either singly or with another like carrier all by the use of the single hand. It is thereby possible for the purchaser of soft drinks or other cans to carry either one carrier or two carriers as suits his fancy and in a fully convenient manner.

While the carrier is above described with reference to cardboard, other suitable sheet materials may be used if desired. Such materials include plastics and metals. Also, if collapsibility is unnecessary non-sheet materials may be used such as, for example, a molded plastic construction.

While I have shown and described specific embodiments of the present invention it will, of course, be understood that many variations and alternative embodiments may be made without departing from the true spirit and scope thereof. I therefore intend by the appended claim to cover all modifications and alternative constructions falling within their true spirit and scope.

What I claim as new and desire to secure by Letters Patent of the United States is:

A blank for forming a carrier for holding a plurality of objects such as cans or bottles, said blank being generally rectangular with four corners; said blank being in the form of two side strips joined intermediate the corners by a connecting portion which, when the blank is folded, forms the base of the carrier; one of said strips having a central portion in juxtaposition with said connecting portion which central portion when the blank is folded forms the front of the carrier; the other of said strips having a central portion in juxtaposition with said connecting portion which central portion when folded forms the back of the carrier, and being of materially greater vertical extent than the front of the carrier, said last mentioned central portion having an opening therethrough adjacent and spaced from the outer edge of said portion which opening will form a hand grip opening in the back of said carrier when said blank is folded; each of said strips having four consecutive portions from the central portion to each corner thereof, the first of said four portions from said central portion forming one-half of an end of the carrier when said blank is folded, the second of said four portions from said central portion forming a part of a longitudinal divider for said carrier when said blank is folded, the third of said four portions from said central portion forming a part of a transverse divider when said blank is folded, the fourth of said four portions from said central portion being in juxtaposition with and adapted to be affixed to said central portion when said blank is folded; said one strip having two generally U-shaped portions each of which has one end of said U extending outwardly from a second portion, respectively, with the other end of the U being adjacent the respective fourth portion, whereby when said blank is folded into a carrier said U-shaped portions will extend upwardly side by side to form a central handle for said carrier; said blank having a plurality of tab portions, each of said tab portions extending inwardly from one of said four portions at the sides of said central portions, whereby said tab portions overlie and may be affixed to said connecting portion to reinforce the bottom of said carrier when said blank is folded.

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