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2,491,149

BOTTLE CARRIER

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Fig. 1.

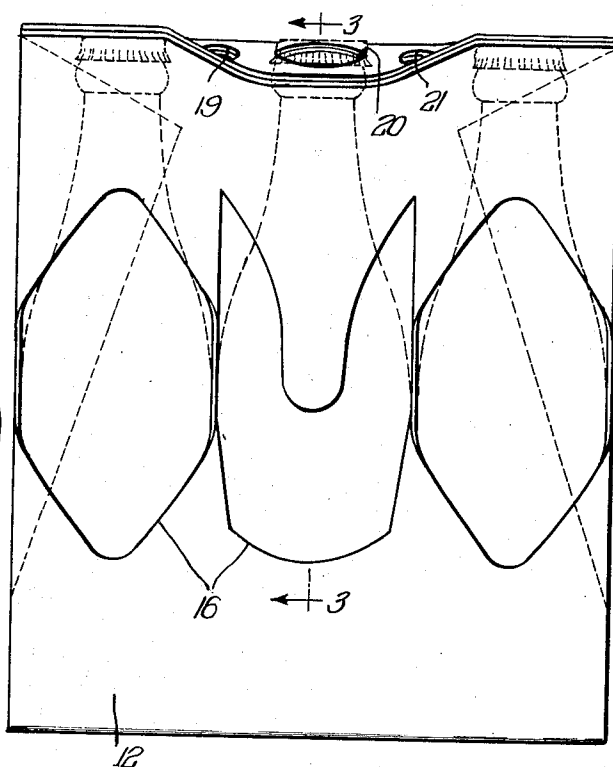


Fig. 2.

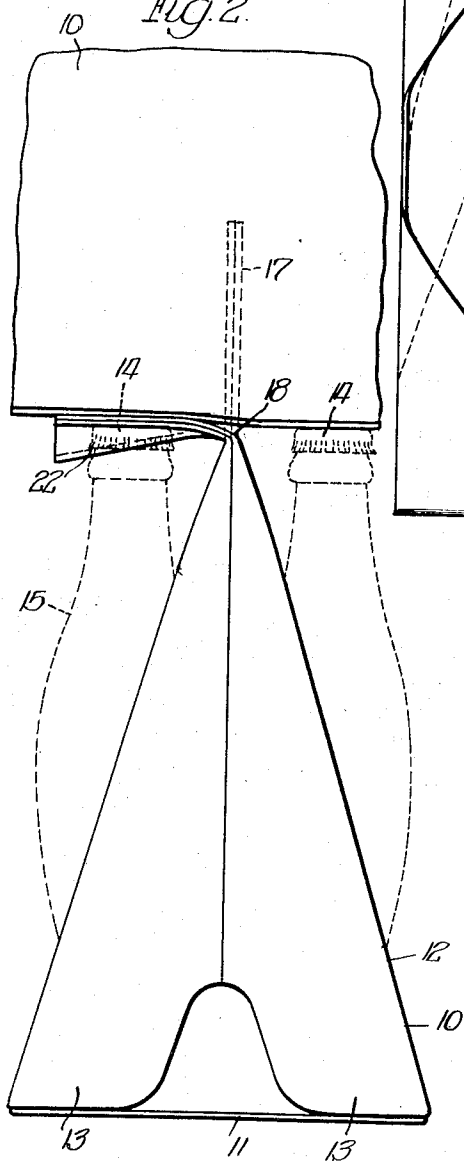
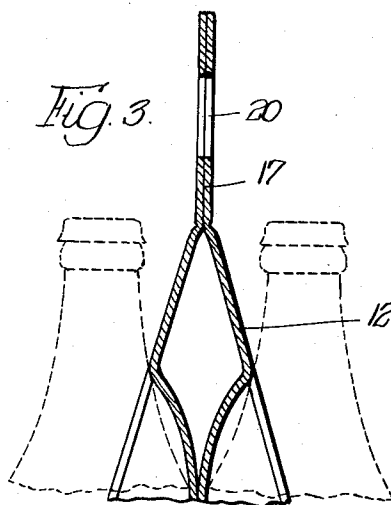


Fig. 3.



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## UNITED STATES PATENT OFFICE

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## BOTTLE CARRIER

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4 Claims. (Cl. 224-45)

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This invention relates to an improved bottle carrier having novel provisions adapting the same to be vertically stacked for display or storage purposes.

It is an object of the invention to provide a bottle carrier of compact, generally triangular outline having a central, vertically extending suspending handle projecting along the apex thereof, along with provisions for deflecting and releasably locking said handle in a lowered, horizontal position permitting vertically aligned stacking of a plurality of filled carriers.

Another object is to provide a very simple and inexpensive glued bottle carrier construction characterized by a laterally flexible, normally upstanding handle portion, said portion being bendably retractable to a position at or beneath the top of the carrier and bottles therein, enabling the stable stacking of a plurality of filled carriers in vertically aligned rows.

A still further object is to provide a bottle carrier having a laterally and horizontally retractable handle portion or panel of the type described, along with novel provisions for engaging said portion or panel with a bottle to hold the same in said retracted position.

The foregoing statements are indicative in a general way of the nature of the invention, but other and more specific objects will be apparent to those skilled in the art upon a full understanding of the construction and operation of the device.

A single embodiment of the invention is presented herein for purpose of exemplification, but it will be appreciated that the invention is susceptible of incorporation in other modified forms coming equally within the scope of the appended claims.

In the drawings,

Fig. 1 is a view in side elevation illustrating a bottle carrier according to my invention with a suspending handle portion thereof bendably withdrawn to and restrained in a retracted position enabling vertically aligned stacking of a plurality of filled carriers, the outlines of bottles in the carrier being indicated in dotted line in this as well as in the two other views;

Fig. 2 is a fragmentary view in end elevation of two filled and stacked carriers in the condition shown in Fig. 1, the position of the handle of one thereof in its operative, unstacked and upstanding position for transporting the carrier being indicated in dotted lines; and

Fig. 3 is a fragmentary view in section on a line corresponding to line 2-3 of Fig. 1, further illustrating the position and relationship of the

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parts in the carrying position of the handle portion.

The present invention relates to improvements in bottle carriers of the type exemplified by the patents to Crane No. 2,302,676, of November 24, 1942, Arneson No. 2,345,565, of April 4, 1944, and Gilbert No. 2,362,995, of November 21, 1944; although it will be apparent from the following description that the provisions of the invention are also generally applicable to bottle carriers of the general type characterized by an upstanding central suspending handle or panel, wherein the tops of the bottles are exposed in the carrier. The invention affords an improved method for the retraction of such a handle to a position at or below the level of the tops of bottles positioned in the carrier, thereby enabling a plurality of filled carriers to be stacked in neat, vertically aligned side-by-side relationship. Heretofore the presence of the upstanding handle portion has made it necessary to stack the carriers in a laterally staggered relation if, indeed, it was possible to stack the same at all. At the same time, my invention enables the handle to be retained in a retracted position compacting the carrier for storage in low shelf space even when not stacked, against the inherent resilience of the material thereof.

Referring to the drawings, the reference numeral 10 generally designates a bottle carrier of the type similar to the carrier of the above patents, in which the tops of bottles are fully exposed in the filled carrier. This carrier is fabricated of a suitable grade of paper board or cardboard in an all glued construction, comprising a bottom 11, the upwardly inclined, convergent side walls 12 which are bendably connected at their lower margins to the bottom and the in-folded end panels 13 which are bendably connected to lateral margins of the side walls 12 to define end walls for the carrier.

Panels 13 are offset inwardly of and normal to the periphery of the carrier at their adjacent edges and adhesively secured together, thereby defining internal vertical partitions medially of the carrier. The side walls 12 converge upwardly to a meeting point adjacent and preferably somewhat below the level of the tops of the caps 14 on bottles 15 disposed in apertures 16 provided in the side walls of the carrier. From this juncture line the walls continue upwardly vertically in parallel side-by-side and adhesively secured engagement to constitute a double-p'y upstanding handle portion or panel 17 medially of a row of bottles 15 on either side thereof. Apertures 16 in side walls 12 are adapted to receive the

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bottles 15, bottom end first, in a snug and compact manner.

The invention does not concern itself with the various particular details of construction of the side and end walls and bottom of the described carrier and it should be understood that numerous modifications of these parts may be made without departing from the principle of the invention. As to the handle portion 17, the specific construction thereof is likewise not absolutely critical in the invention other than the fact that it extends from a point adjacent or immediately below the level of bottle caps 14, at which it merges with the body of the carrier, to a position substantially above said tops. It is also desirable that the material of the handle portion 17 be creased or scored at this point for lateral bending along a line 18 paralleling the top and bottom of the carrier and extending across the width of the handle portion.

As illustrated in Figs. 1 and 3, the handle portion or panel 16 is provided with a plurality of spaced holes 19, 20 and 21 for access of the user's fingers in transporting the carrier. The apertures designated 19 and 21 may be of any size appropriate to afford convenient entry of the user's fingers and a comfortable grip. However, the central hole 20 must be made sufficiently large to enable it to be snapped over the crimped skirt 22 of the cap 14 on one of the center bottles 15 when bent on line 18 into the position of the handle portion 17 illustrated in solid line in Fig. 2. Needless to say, the hole 20 must also be laterally aligned with the centermost bottle for this purpose and should not be so excessively large in diameter as to swing freely in either direction over the cap 14. Its vertical spacing in panel 17 is approximately equal to the lateral spacing of the engaged bottle top, both relative to bend line 18.

A spring snapping engagement with the cap skirt is contemplated once the handle panel 17 is depressed to horizontal position, which releasably locks the handle in position enabling stacking of the carriers. When it is desired to transport the carrier, a slight lateral pressure on the engaged bottle or handle releases the above described latching action, whereupon panel 17 springs upwardly to the dotted line carrying position of Fig. 2.

A plurality of filled cartons may be stacked, as illustrated in Fig. 2, in a perfectly stable condition, with the bottom of one resting on the bottles in the next lower, and may be removed for handling or transfer with or without release of the depressed handles. This permits placing of the filled carriers in a low shelf space wherein the upright handles would require excessive space. The double ply, glued construction of the handle panel 17 insures against weakening thereof as a consequence of the lateral bending which accompanies the above use of the carrier, without necessitating fabrication of the carrier itself from an excessively heavy grade of stock.

What I claim is:

1. A paperboard bottle carrier of the type described, comprising side walls and a bottom, and a suspending handle disposed medially of and extending substantially above the walls, said walls terminating in the immediate region of the tops of bottles disposed in the carrier and being bendably connected to the handle by a creased fold line adjacent the top thereof along which the handle is bendable into a retracted, substantially horizontal position approximately at the level of

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said tops, said handle having an opening the axis of which is spaced from said fold line a distance approximating the lateral spacing of the axis of a bottle therefrom, the opening being shaped so that its outer margin, in said retracted position of the handle, has frictional, snap engagement with the margin of said bottle top to hold the handle in said retracted position.

2. A one-piece, flexible paperboard bottle carrier of the type described, comprising integrally connected side walls and a bottom, and a suspending handle integral with the walls disposed medially thereof and extending substantially thereabove, said walls terminating not higher than the tops of bottles disposed in the carrier and being bendably connected to the handle by a creased fold line adjacent the top thereof along which the handle is bendable into a retracted, substantially horizontal position approximately at the level of said tops, said handle having an opening the axis of which is spaced from said fold line a distance approximating the lateral spacing of the axis of a bottle therefrom, the opening being shaped so that its outer margin, in said retracted position of the handle, has frictional, snap engagement with the margin of said bottle top to hold the handle in said retracted position.

3. A paperboard bottle carrier of the type described, comprising a body portion adapted to receive bottles and a suspending member bendably connected to the top of said body portion to one side of certain of the bottles along a creased fold line located approximately at the elevation of the tops of said bottles, said handle member being laterally bendable about said fold line toward retracted position over the tops of said bottles and having an opening aligned with and telescopingly receiving a bottle top in said retracted position a portion of said handle member which laterally adjoins said opening presenting a surface adapted to rest on the top of a bottle at one side of the telescoped bottle.

4. A paperboard bottle carrier comprising integrally connected side walls, a bottom and a suspending handle integral with said walls, said handle being disposed medially of and extending substantially above said walls, and being provided with a longitudinally extending, creased fold line located, with respect to the vertical dimension of said carrier, in the immediate region of the tops of bottles disposed in the carrier on one side of said handle, along which fold line the handle is bendable into a retracted, substantially horizontal position approximately at the level of said bottle tops, said handle having an opening therein spaced from said fold line a distance approximating the lateral spacing of said bottle tops from said handle, said opening being shaped and disposed so that its margin, in said retracted position, has frictional snap engagement with the margin of said bottle top to hold the handle in said retracted position.

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The following references are of record in the file of this patent:

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| 2,375,467 | Chapman  | May 8, 1945   |