July 18, 1944. J. F. POWER 2,353,846

BOTTLE CARRIER

Filed March 31, 1941

FIG. 1.

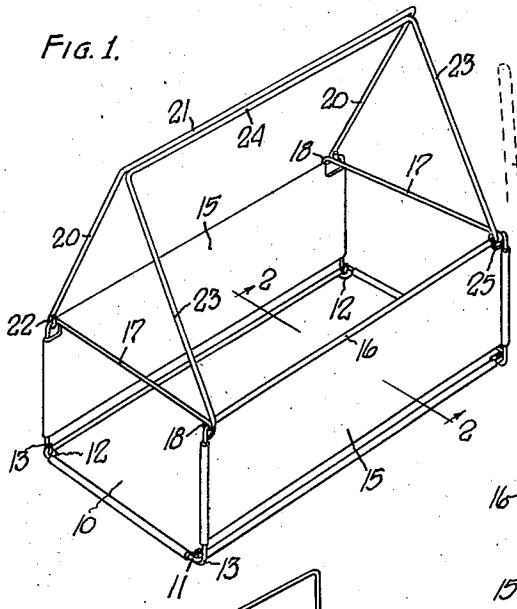


FIG. 2.

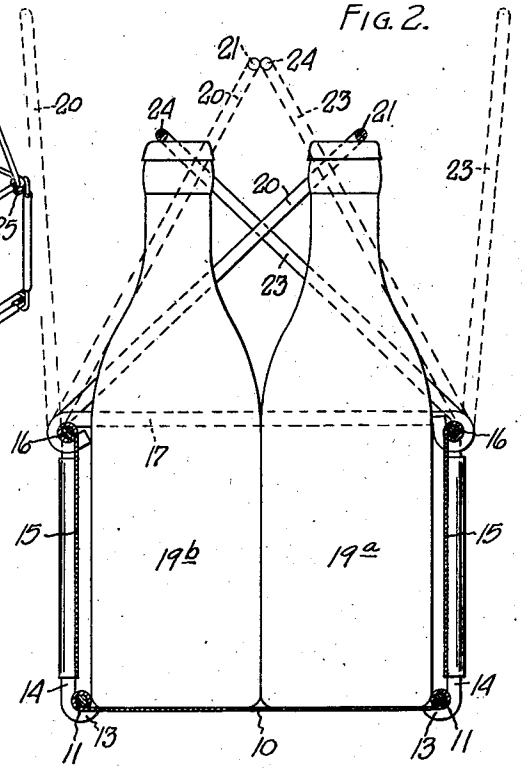


FIG. 4.

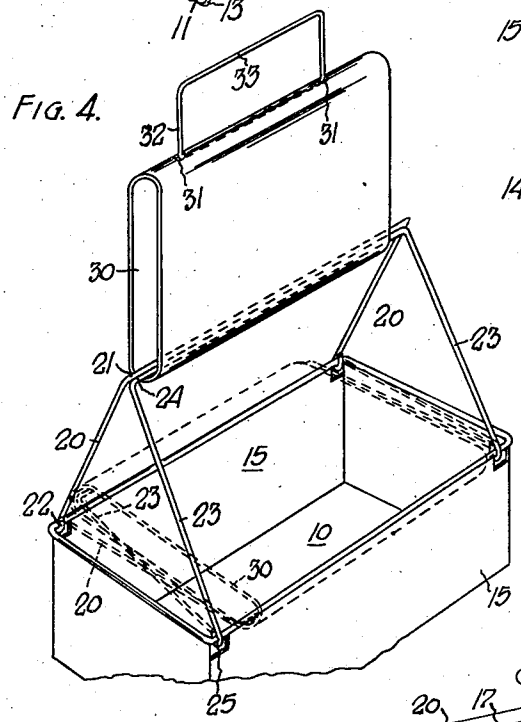
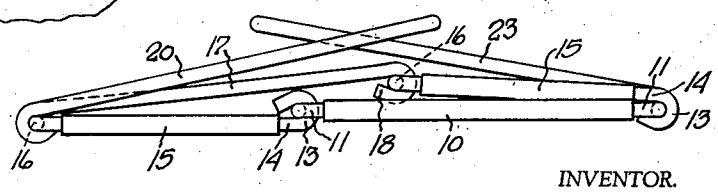


FIG. 3.



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BOTTLE CARRIER

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11 Claims. (Cl. 224—48)

This invention relates to a bottle carrier; and has for its primary object to provide a novel, simple, inexpensive and indestructible bottle carrier.

A further object is to provide a bottle carrier which may be collapsed to flat condition.

A further object is to provide a collapsible carrier construction to be held erect by the bottles carried thereby.

A further object is to provide a bottle carrier with a pair of pivoted bails cooperating to form a handle and so proportioned and arranged that the same may be pivoted to crossed relation to rest upon the tops of bottles within the carrier and thereby permit stacking of the carriers.

Other objects will be apparent from the description, drawing, and appended claims.

In the drawing:

Fig. 1 is a perspective view of one form of the bottle carrier.

Fig. 2 is a vertical, transverse, sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is an end view of the device in collapsed condition.

Fig. 4 is a fragmentary perspective view of a modified embodiment of the invention.

Referring to the drawing, and particularly, to Figs. 1, 2, 3, thereof, numeral 10 designates the base of the carrier which is preferably formed of sheet metal with its sides bent around a rectangular endless wire base frame 11. The corners of the base are preferably cut out at 12.

The ends 13 of the vertical portions 14 of an inverted U-shaped wire member are bent around and pivoted to opposite longitudinal runs of the base frame 11 adjacent the ends of said runs. A side panel 15 may be secured to each U-shaped frame, as by bending of the ends thereof around the vertical wire arms 14 and by bending of the upper edge portion thereof around the horizontal run 16 of said wire frame. End bars 17 have their opposite end portions 18 bent around the upper horizontal wire portions 16 of the U-shaped side frame.

Bottles 19 are adapted to rest upon the base plate 10 of the carrier, and are confined within the carrier by means of the side panels 15 and the end bars 17. The side panels and end bars are so arranged and proportioned as to snugly receive a given number of bottles, for example, six bottles. The carrier is normally held in erect position by the bottles, but may be collapsed to flat condition, as illustrated in Fig. 3, when the bottles are removed therefrom. It will be understood that these bottles are primarily intended for dispensing quantities of bottles of soft drinks, and therefore that the provision of the panels 15 affords space for the bottler to advertise his product and to insure against the subsequent use thereof by a bottler in the same locality selling a different brand of goods.

An inverted U-shaped wire bail, comprising parallel arms 20 and a cross piece 21, has portions 22 at its ends bent around the opposite ends of the run 16 of one side forming wire frame of the carrier. A second inverted U-shaped bail, comprising parallel arms 23 of the same length as arms 20 of the first named bail and in intermediate part 24 of a length less than part 21 of the first named bail, is pivoted to the opposite side forming frame by means of bent end portions 25 thereof extending around the sides of run 16 of said side frame. The arms 20 and 23 of the two bails are of a length or height such that, when the intermediate portions 21—24 of the bails are arranged in engagement as illustrated in Fig. 2, said portions 21—24 will extend above the tops of the bottles 19 and thereby afford a two-part hand grip by means of which the carrier may be grasped and held. The length or height of the portions 20 and 23 of the bails is also proportioned relative to the height of the bottles to be arranged therein so that when the bails are arranged in crossed or intersecting relation, as illustrated in full lines in Fig. 2, the bail portion 24 will bear upon the top of the bottle 19*b* at the side of the carrier opposite that to which that bail is pivoted, while the portion 21 of the opposite bail will rest upon the top of bottle 19*a*. This arrangement permits carriers of this type to be stacked without interference from the handle bails by virtue of the fact that each carrier will rest upon the bail portions 21 and 24 of the carrier therebelow and the stacked weight is sustained by the bottles. It will also be observed that the pivotal mounting of these handle bails will accommodate pivoting thereof to the outermost dotted line positions illustrated in Fig. 2, wherein the bails are clear of and positioned outwardly of the opposite sides of the carrier, and hence will not interfere with the filling and emptying of the carriers.

While the collapsible construction of the carrier is to be preferred, it will be understood that the body of the carrier, namely the base and side and end portions, may be of rigid construction. The two handle bails 20—21 and 23—24 may be pivoted to such a rigid carrier in the same relation as illustrated in the preferred embodiment, and may be pivoted to any of the three

positions illustrated in Fig. 2; namely, the hand grip position, the stacking position with the bails crossed and resting upon the tops of the bottles, and the filling position with the bails swung to opposite sides clear of each other and of the carrier.

A modified embodiment of the invention is illustrated in Fig. 4, wherein the portions 21 and 24 of the two bails extend through an elongated hollow member 30. As here illustrated, the member 30 is of substantial vertical dimension and is of flattened form. A pair of openings 31 are formed in member 30 at its upper end, and through these openings pass opposed portions of a rectangular endless wire handle member 32. In this embodiment of the invention, when the device is to be collapsed, the member 30 is turned to the dotted line position illustrated in Fig. 4 substantially parallel to and adjacent the top of the carrier, which accommodates a crossed position of the bails 20—21 and 23—24. Also, when in this position, the handle 32 may be pushed inwardly so that the hand grip 33 thereof will bear against the outer surface of the member 30 and the whole device will assume a compact collapsed form.

The primary advantage of this improved carrier construction is that, being formed of wire and metal, it is capable of long use. As compared to the conventional paper board carriers which are now used commercially, and which can only be refilled once or twice before they are broken, disfigured, marred, or otherwise unfit for re-use according to accepted merchandising standards, this metal carrier may be re-used almost indefinitely.

A further advantage of the device over previous constructions resides in the arrangement of the handle bails to facilitate the handling of the carrier, the stacking thereof, or positioning thereof in an out of the way position during filling of the carrier. Another advantage of the construction resides in its collapsibility which permits it to be shipped in flat form without requiring the user to set it up before using it. I am aware that carriers of the paperboard type are now manufactured which can be shipped in flat form, but these constitute mere paperboard blanks which must be folded or erected before they can be used by the bottler. Also, the collapsible character of this carrier accommodates ready storage thereof, especially during the winter season when the quantity of the carriers used is small, so that the bottler does not have the problem of storing erected collapsible carriers during a dull season.

I claim:

1. A carrier comprising a preformed base, a pair of preformed walls pivoted at opposite sides of said base, a pair of end bars pivotally connected at their ends to the upper ends of said walls, and a pair of preformed bails each pivotally connected to the upper portion of one of said walls adjacent each end thereof, to form a handle, said carrier being collapsible to flat form and held erect by the contents thereof.

2. A collapsible carrier adapted to receive a plurality of rows of bottles comprising a preformed base, a pair of preformed walls pivoted at opposite sides of said base, a pair of end bars pivoted to the upper ends of said walls, and a pair of preformed bails each pivoted to opposite ends of one wall, one of said bails being longer than the other whereby said bails may be pivoted to crossed relation, said bails being of a height to engage above said bottles to form a carrier handle and be crossed to rest upon the tops of bottles at the side of said carrier opposite that to which the bail is pivoted.

3. A bottle carrier comprising a container open at its top and adapted to receive a pair of rows of bottles, and a handle portion comprising a pair of bails pivoted to said container in opposed relation about axes parallel to said rows, one of said bails being shorter than the other to pass therein, said bails being of a height to engage each other at an elevation spaced above the tops of said bottles and to rest upon the tops of said bottles when arranged in intersecting relation.

4. A bottle carrier comprising a collapsible container open at its top and adapted to receive and be held erect by bottles which project above the top of the container, and a pair of hand grip members pivoted to said container at spaced points and about parallel axes and having substantially straight gripping portions adapted to engage each other linearly at an elevation spaced above the tops of said bottles, said members being arranged to pivot to intersecting relation one within the other and being of a height whereby said gripping portions lie flat upon the tops of said bottles when said members are pivoted to intersecting relation.

5. A collapsible article carrier comprising a base, a pair of inverted U-shaped wire frames having their lower ends pivoted to opposite sides of said base, a pair of end bars pivoted at their ends to the adjacent ends of the upper parts of opposite frames, and a pair of inverted substantially U-shaped wire bails each pivoted at its lower ends to the upper part of one of said frames, said carrier being held erect by its contents.

6. A collapsible article carrier comprising an endless wire base frame, a base panel mounted on and spanning said base frame, inverted U-shaped wire side frames having their lower ends pivoted to said base frame adjacent the corners thereof, end bars pivoted to and interconnecting the side frames adjacent the upper corners thereof, and a pair of wire bails pivoted to said side frames, said carrier being held in erect position by the articles carried thereby.

7. A collapsible article carrier as defined in claim 6, wherein said base panel is cut-away at its corners to receive the pivot connections of said side frames with said base frame.

8. A collapsible carrier as defined in claim 6, and side panels carried by said side frames and terminating above said base frame, said base panel and side panels having cut outs at their corners to accommodate the pivotal interconnections of said frames, end bars and bails.

9. A carrier comprising a container open at its top, a pair of inverted U-shaped bails pivoted to the opposite sides of said container, and a handle unit including an elongated open ended hollow member in the form of a flattened tube receiving the upper portions of said bails, said bails being arranged to pivot to intersecting relation and the major transverse dimension of said hollow member being substantially equal to the spacing between the upper ends of said bails when said bails are folded inwardly to substantially horizontal position.

10. A carrier as defined in claim 9, and a rigid endless handle member extending longitudinally of and loosely encircling a portion of said hollow member for bodily movement in the plane thereof between retracted and projecting relations to said hollow member.

11. A carrier comprising a container open at its top, a pair of inverted U-shaped wire bails pivoted to opposite sides of said container, an elongated open ended hollow member loosely receiving the upper portions of said bails, said hollow member having a short and a comparatively long transverse axis, and a rigid longitudinal endless hand grip member loosely encircling a portion of said hollow member and shiftable parallel to the major transverse axis of said member between projected and retracted positions, said hollow member being positioned with its major axis upright when said carrier is suspended from said hand grip and being shiftable to horizontal position to accommodate pivoting of said bails to intersecting relation.

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