Dec. 31, 1940. W. E. TURNER 2,227,330

SHORT WALL CARRIER

Filed May 11, 1938

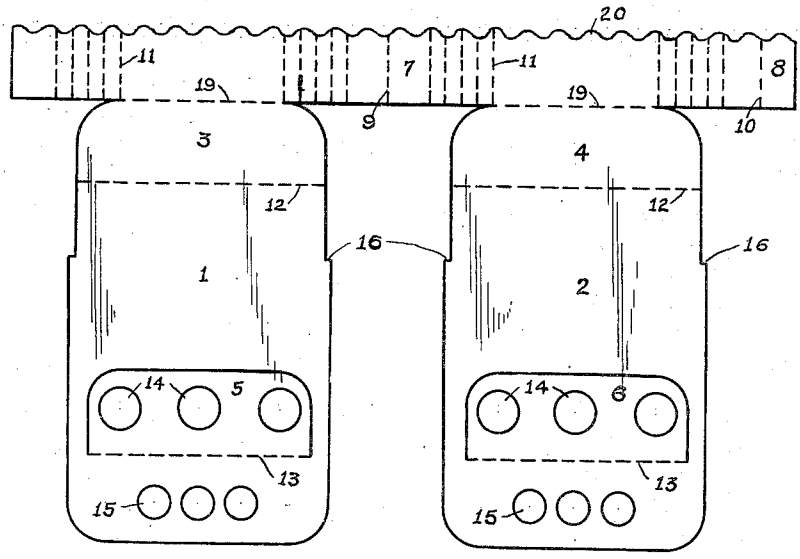


FIG. 1.

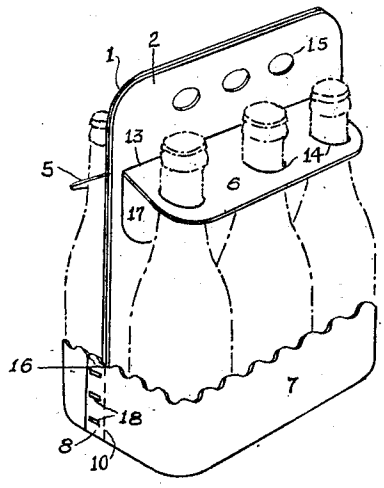


FIG. 2

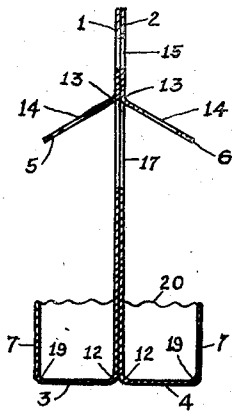


FIG. 3.

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SHORT WALL CARRIER

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13 Claims. (Cl. 229—27)

My invention relates to bottle carriers and more particularly to carriers of the short wall type, permitting folding for shipping purposes.

In the prior art it has generally been the practice to employ bottle carriers of the three or six bottle type and having side walls extended to form handles. Some of such constructions require that the carrier be opened every time a bottle is removed; and provide no means for operating the two rows of bottles or for cushioning them to prevent rattling or breakage.

Other types use the long side walls with handles projecting from the central partition for carrying purposes. However, no means is provided for preventing the bottles from being raised out of the box when force is exerted upon the handles. When this occurs, the bottom collapses.

And still another type employs a box of the short wall type, employing flaps secured to the edges of the partition members, for retaining the body forming the ends and side walls in shape. No positive means is provided for retaining the bottles in the carrier. Furthermore, the flaps must be folded before the carrier can be collapsed. Tabs are cut from the partition portions for imposition between the bottles in each row to assist in separating them. Since the walls of the carriers in this construction are short, the bottles are insecurely seated in the carrier and tend to dislodge or fall out when not carefully handled.

Applicant with a knowledge of all the defects in and objections to the prior art has for an object of his invention the provision of a short wall bottle carrier having a body portion forming the outer walls and projections from the body portion forming the bottom partition and handle of the carrier. Struck from the partition element are flaps having openings therethrough for reception of the necks of the bottles to be carried. The flaps are joined to the partition portions through creased lines or scored portions enabling the flaps to be freely swung outwardly for engagement and disengagement with the bottles but retaining such resiliency as will then restore each flap to the plane of its respective partition portion.

Applicant has as another object of his invention the provision of a short wall bottle carrier with positive means for engagement with the bottles to retain them in the carrier and to maintain their relative position with respect to each other for preventing rattling or breakage.

Applicant has as a further object of his invention the provision of an easily and quickly collapsible carrier, which may be folded and readily stacked in quantities for storage or shipping.

Applicant has as another object of his invention the provision of a carrier which eliminates any foldable flaps secured to the edges of the partition walls for maintaining the body in box shape and relies upon the engagement of the bottles with the body of the carrier to perform this function, thus eliminating the strips or folding flaps and the step of folding said flaps to collapse the carrier. Other objects and advantages of my invention will appear from the following specification and accompanying drawing and the novel feature thereof will be particularly pointed out in the annex claims.

In the drawing Figure 1 is a plan view of the blank from which my improved carrier is made. Figure 2 is a perspective of my improved carrier as it would appear if the bottles were seated therein. Figure 3 is a cross-section of my improved carrier, showing the bottle neck receiving flaps in extended relation.

Referring to the drawing in detail 7 represents generally the body of the carrier made of paper board, card board, or any other appropriate material, which is bent to form the short side and end walls of the carrier. The body 7 is creased or scored in a number of places to form the bends connecting the sides with the ends and is indicated by the dotted lines 11. Body 7 is also creased or scored at or near the center of the end-forming portions indicated by dotted lines 9, 10, to form the overlapping tab 8 and to facilitate folding at these points, in order that the carrier may be collapsed for shipping or storing purposes.

The upper edge of the body is cut to form waves, as at 20, to add attractiveness to the carrier. To the lower edge of the side wall forming portions of the body 7 are secured extensions 1, 3, and 2, 4, through the creased or scored lines 19, 19. These extensions themselves are creased or scored transversely along the dotted lines 12, 12, to form a partition and a bottom. Struck from the partition portions 1, 2 are flaps 5, 6, creased or scored along the lines 13, 13 for the purpose of folding outwardly to receive the necks of the bottles seated in the carrier through the openings 14 formed therein. At the lower extremities of the partition portions are rows of openings 15 adapted to register when the partition portions are in assembled relation and form the handle for moving the carrier.

On the edges of the partition-forming portions

1, 2 are abutments 16 formed at the termination of the upper overhanging parts with the lower reduced parts. These abutments are adapted to engage the upper edge of the body 7 which seats in the reduced parts, maintaining the body in assembled relation with respect to the partition and resists any tendency of downward force upon the partitions to collapse the carrier.

In assembling or setting up the carrier, the body 7 is folded along the crease 9 and the tab 8 is folded back along body 7 to overlap it. In this overlapped position, the tab is stitched by staples 18 to the body 7 completing it. The extensions 1, 3 and 2, 4 are then bent along the creases 12, 19 and passed up through the body 7 to form the bottom 3, 4 and partition 1, 2. The flaps 5, 6 coincide with and lie in the plane of their respective partition portions.

Rows of bottles may be seated in the carrier on each side of the partition. Before this is done, however, the flaps 5, 6 must be bent outwardly along the creased lines 13, 13, leaving the opening 17 in the partition. After the bottles are positioned in the carrier, the flaps are moved downwardly so that the openings 14 therein receive the necks of the bottles to retain them in the carrier and maintain their relative positions with respect to each other. The bottles cause the body 7 of the box to define side and end walls and to interlock with abutments 16 to give a relatively rigid structure.

When, in this assembled position, the openings 15 are in registration for the reception of the fingers of the hand to form a handle. While this type of handle is used, which is shown in this particular case, it is obvious that other types, which perform the same function in the same way, may be substituted therefor.

When shipping or stacking the carriers, the body 7 is collapsed along the lines 9, 10 and the bottom 3, 4 and body 7 are folded flat against the partition portions 1, 2 along the lines 12, 12 and the flaps 5, 6 are permitted to return to the planes of their respective partitions. This makes a compact flat structure, which is easily stacked or shipped in quantities.

Having thus described my invention, I claim:

1. A bottle carrier of the character described made from a single blank of material comprising a body portion scored at a plurality of places to provide when folded pairs of short side and end walls, a bottom and partition forming element secured to each side wall of said body, flaps struck from the partitions and having bottle neck receiving openings for retaining the bottles in position, and a handle secured to the partition elements.

2. A bottle carrier of the character described made from a single blank of material comprising an elongated section scored transversely at a plurality of places and foldable at said places to form a body including short side and end walls, a bottom and partition forming element secured to each side wall, said partition elements projecting upwardly beyond the side walls, flaps struck from said partition elements, and having means for engagement with the bottles to maintain them in position, and handle portions formed integrally with the upper extremity of said partition portions.

3. A bottle carrier of the character described made from a single blank of material comprising a body scored transversely at a plurality of places and foldable to form short sides and ends, a bottom wall portion secured to the lower extremity of each side wall, partition elements joined by crease lines to said bottom portions, said partition elements projecting up through and beyond said body, flaps cut from the partition elements for engagement with the bottles of the carrier, said flaps being joined at their upper edges to said partition and normally being in the plane thereof, and handles secured to the upper extremities of said partition elements.

4. A bottle carrier of the character described made from a single blank comprising a body portion secured transversely in a plurality of places for engagement with the lower part of bottles to form relatively narrow side and end walls, bottom portions secured to the side walls through crease lines, partition elements secured to said bottom portions and passing up through the body and projecting beyond its upper extremity to form a central partition for separating two rows of bottles, flaps secured at their upper edges to said partition elements for engagement with the upper portions of said bottles to retain them in position, and handles projecting upwardly from said elements for lifting the carrier.

5. A bottle carrier of the character described comprising a body scored transversely in a plurality of places for engagement with only a limited part of bottles to form side and end walls through crease lines, bottom portions secured through crease lines to the side walls, partition elements secured to said bottom portions and passing up through the body and projecting beyond its upper extremity, flaps secured to said partition elements for engagement with bottles to retain them in position, and handles secured to the partition element for carrying it.

6. A bottle carrier of the character described comprising a body scored transversely at a plurality of places for engagement with the lower part of bottles to form side and end walls, bottom portions secured to the side walls, partition elements secured to said bottom portions and passing up through the body and projecting above the upper extremity thereof to form a central partition, flaps struck from the projections of the partition elements above the body, means on said partition elements for engagement with bottles to retain them in position, and handles on said partition elements for said carrier.

7. A bottle carrier of the character described comprising a body forming side and end walls, bottom-forming portions secured to the lower edge of said side walls, partition elements secured to said bottom portions and passing up through and beyond the upper extremity of said body, a handle on the upper end of the partition elements, and shoulders on said partition elements for engagement with the upper edge of said body to maintain the carrier in assembled position.

8. A bottle carrier of the character described comprising a body scored transversely in a plurality of places to form side and end walls when in engagement with bottles, bottom-forming portions secured to said side walls, partition elements secured to said bottom portions and passing up through said body and projecting beyond its upper extremity, handles secured to said partitions for carrying said carrier, shoulders on the edges of said elements for engagement with the upper edge of said body to maintain it in assembled position, and flaps secured to said elements to retain the bottles.

9. A bottle carrier of the character described

comprising a body scored transversely at a plurality of places for engagement with bottles to form side and end walls, bottom-forming portions secured to said side walls, partition elements secured to said bottom portions and passing up through said body beyond the upper extremity thereof, shoulders on said elements for engagement with said body to maintain the carrier in assembled position, flaps struck from the projection of said partition elements above said body for engagement with bottles to retain them in position, and a handle joined to the partition elements for carrying said carrier.

10. A bottle carrier of the character described comprising a body creased transversely in a plurality of spaced places for engagement with bottles to form side and end walls, bottom portions secured to said side walls, partition elements joined to the bottom portions and passing up through the body portion beyond the upper extremity thereof, shoulders on said elements for engagement with said body to maintain the carrier in assembled position, flaps struck from the walls of the projecting portions of said elements above the body, openings through said flaps for the reception of the necks of bottles to retain them in position, and a handle secured to said partition elements to lift said carrier.

11. A bottle carrier of the character described comprising a body scored transversely in a plurality of places for engagement with bottles to form side and end walls, additional transverse scores in the end walls to permit folding thereof to collapse the carrier, bottom portions secured to said side walls, partition elements joined to the bottom portions and passing up through said body to form a central partition, flaps on said partition elements for engagement with bottles to retain them in position, and handles joined to the partition elements for lifting said carrier.

12. A bottle carrier of the character described comprising a body scored transversely in a plurality of places for engagement with bottles to form side and end walls, additional transverse scores across the end walls to permit folding thereof to collapse the carrier, bottom portions secured to said side walls, partition elements joined to the bottom portions and passing up through said body to form a central partition, shoulders on said partition elements for engagement with said body to maintain the carrier in assembled position, flaps secured to said partition elements for engagement with bottles to prevent their displacement, and a handle secured to said partition elements.

13. A bottle carrier of the character described comprising a body scored transversely in a plurality of places for engagement with the lower part of bottles to form side and end walls, additional transverse scores across the end walls to permit folding thereof and facilitate collapse of the carrier, bottom-forming portions secured to said side walls, partition elements joined to the bottom portions, shoulders on said partition elements for engagement with said body to maintain the carrier in assembled position, flaps secured to said partition elements for engagement with bottles to prevent their displacements, and rows of registering openings formed in the upper end of said partition elements to form a handle.

WILLIAM E. TURNER.