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H. G. ZASTROW

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CARRIER CARTONS

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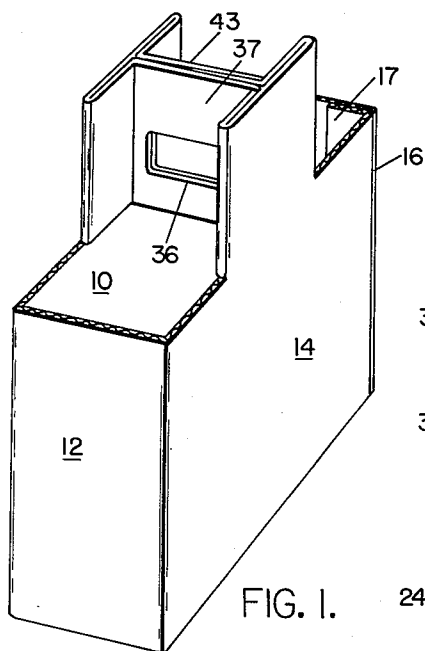


FIG. 1.

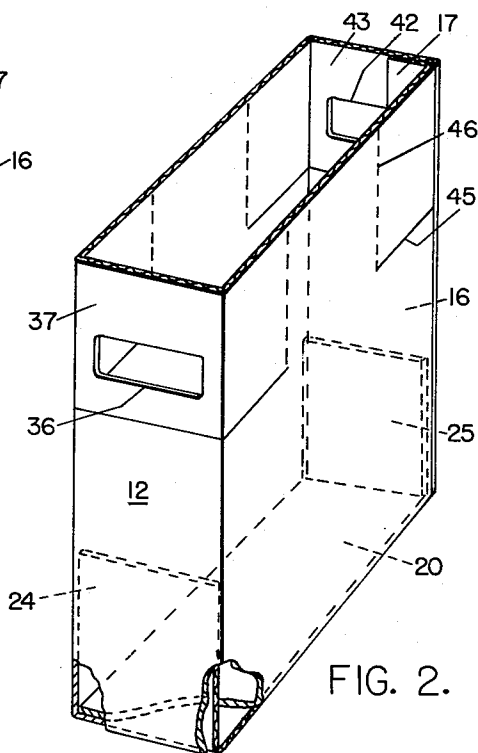


FIG. 2.

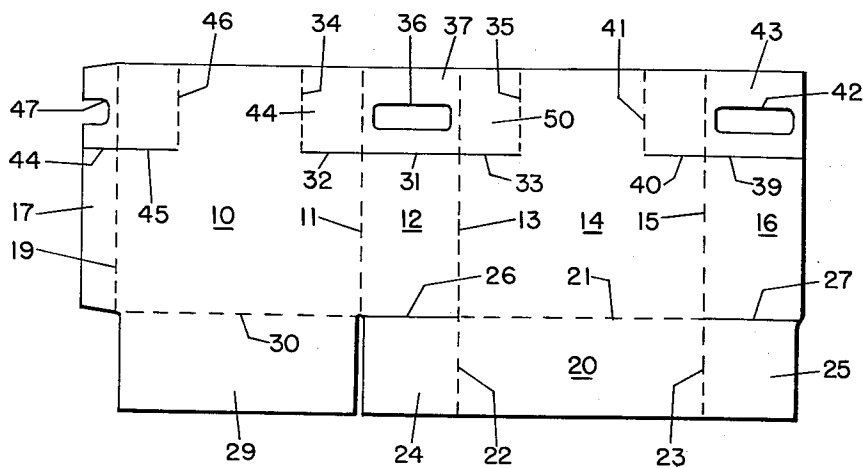


FIG 3

INVENTOR
HAROLD G ZASTROW

BY *Robert M. Dunning*
ATTORNEY

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CARRIER CARTONS

Harold G. Zastrow, Minneapolis, Minn., assignor to Waldorf Paper Products Company, Ramsey County, Minn., a corporation of Minnesota

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This invention relates to an improvement in carrier cartons and deals particularly with a carton capable of supporting four bottles of liquid to be carried.

It is an object of the present invention to provide a carrier carton which does not require excessive container stock and which may incorporate a carrying handle by means of which the container may be carried.

A further feature of the present invention resides in the provision of a carton including a series of walls arranged in tubular formation and including cut lines extending across each end wall and adjoining portions of the side walls. The portions of the paper board above the cut lines may be folded inwardly so that the portions of the end panels above the cut line may form handle panels intermediate the end walls. These inwardly folded end wall portions are provided with handle holes through which the hand may be inserted for carrying the carton.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification FIGURE 1 is a perspective view of the carrier in condition for use.

FIGURE 2 is a perspective view of the carrier before the handle walls are folded inwardly.

FIGURE 3 is a diagrammatic view of the blank from which the carrier is formed.

The carrier is formed from an elongated blank of paper board, corrugated board or the like, and includes a side wall panel 10 foldably connected along a fold line 11 to an end wall 12. The end wall 12 is foldably connected along a fold line 13 to a side wall panel 14. This panel 14 is foldably connected along a fold line 15 to an end wall 16.

A stitch flap 17 is foldably connected to one end wall panel of the series such as the panel 10 by means of a fold line 19.

The bottom closure includes a bottom panel 20 foldably connected to the lower edge of the side wall panel 14 along a fold line 21. The bottom wall 20 is foldably connected along parallel fold lines 22 and 23 to end wall lining flaps 24 and 25 respectively. These flaps 24 and 25 are separated from the end walls 12 and 16 respectively along cut lines 26 and 27 so that these flaps 24 and 25 may fold up into right angular relation to the bottom wall 20 and inwardly of the end walls 12 and 16 respectively. The bottom closure flap 29 is hingedly connected to the lower edge of the side wall 10 along a fold line 30 which is substantially aligned with the fold line 21. This bottom panel 29 is normally folded to lie above the bottom panel 20 and between the upturned flaps 24 and 25 at opposite ends of the bottom panel 20 to hold these flaps 24 and 25 from folding inwardly.

The upper portion of the end wall 12 is severed from the lower portion thereof along a cut line 31. Cut lines 32 and 33 form extensions of the cut line 31 and extend into the side wall panels 10 and 14 respectively. The lengths of the cut line 32 and 33 is usually approximately one-fourth of the width of the panels 10 and 14 for a purpose which will be later described.

The fold lines 34 and 35 extend from the ends of the cut lines 32 and 33 to the top of the side walls 10 and 14 and extend parallel to the fold lines 11 and 13.

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The handle hole 36 is provided in the portion 37 of the end wall 12 above the cut line 31.

The upper portion of the end wall 16 is also severed by means of a cut line 39 and a continuing cut line 40 extends into the side wall 14 as a continuation of the cut line 39. The cut line 40 is of a length equal to substantially one-quarter the width of the side wall panel 14. The fold line 41 extends from the end of the cut line 40 to the top of the blank and extends parallel to the fold line 15. A handle hole 42 is provided in the portion 43 of the end wall 16 which lies above the cut line 39.

A cut line 44 extends across the stitch flap 17 and a continuing cut line 45 extends into the side wall 10 to a length of approximately one-quarter the width of the side wall 10. A fold line 46 extends from the end of the cut line 45 to the top of the blank and extends parallel to the fold line 19. The cut line 44 is designed to register with the cut line 39 and the handle holes 36 and 42 are designed to be in register when the upper portions of the end walls are folded in the manner described.

The stitch flap 17 is notched as indicated at 47, the notch registering with the end of the handle hole 42. Thus when the stitch flap 17 is folded into overlapping relation with the end wall 16 and is stitched thereto, the handle hole 42 will be open throughout its length.

The carrier cartons are normally shipped and stored in the flat folded condition described with the stitch flap 17 stitched to the end wall 16. When the carrier container is to be used, the walls are folded into rectangular relation and the various bottom panels 20 and 29 are folded to lie inwardly of the walls to which they are hinged. When in this condition, the flaps 24 and 25 lie in surface contact with the end walls 12 and 16 with which they are lined but from which they have been severed. The bottom panel 20 is next folded to extend across the bottom of the carton, and the flaps 24 and 25 are folded to lie inwardly of the end walls 12 and 16.

Preferably in order to cause the bottom to form easily, the end flaps 24 and 25 are first folded to overlie the bottom panel 20 and these flaps 24 and 25 are thus sandwiched between the bottom panel 20 and the side wall panel 14 when the bottom flap 20 is folded upwardly along the fold line 21. The bottom panel 29 is also folded up against its side wall 10. Accordingly, when the bottom panel 20 is folded down into horizontal position, the flaps 24 and 25 will naturally tend to unfold and to extend along their respective end walls 12 and 16. The flap 29 may then be folded down between the flaps 24 and 25 to overlie the flap 20 and the bottom closure is complete.

In order to form the carton handle, the carton is folded along the fold lines 35 and 34 until the portions 44 and 50 of the side walls 10 and 14 above the cut lines 32 and 33 lie in surface contact with the inner surface of the adjoining portions of the side walls 10 and 14. As will be obvious, in folding the panels inwardly it is necessary to press inwardly one corner of the upper portion of the container, and swing the portion of the side wall adjoining that corner through 180 degrees. In folding the other upper portion of the side wall inwardly, the carton must be distorted to some extent by bending the side walls outwardly at their center.

The panel portion 43 of the end wall panel 16 is then folded inwardly in the same manner, the panel portions 37 and 43 of the end walls 12 and 16 respectively being folded into surface contact as indicated in FIGURE 1 of the drawings. In this position, the handle holes 36 and 42 are in registry and a double thickness handle panel structure is provided which is capable of withstanding considerable weight. When the carrier carton is used for carrying four bottles, two bottles are positioned on each side of the inwardly folded handle panels and the

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tops of the bottles preferably extend substantially flush with the upper surfaces of the handle panels so that the carriers may be stacked one above the other.

In accordance with the patent statutes I have described the principles of construction and operation of my carrier container, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A carrier carton including rectangularly arranged side and end walls, and a bottom closure, cut lines extending continuously across each of the end walls and into both adjoining side walls, and parallel fold lines extending from the ends of the cut lines to the top edges of the side walls, the portions of the side walls above the portions of each of said cut lines in said side walls being folded inwardly of the portions of the side walls between said fold lines, and the portions of the end walls above said cut lines extending between the side walls intermediate said end walls.

2. The structure of claim 1 and in which the portions

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of the end walls above said cut lines are provided with hand holes.

3. The structure of claim 1 and in which the portions of the side walls above said cut lines are in substantially face contact.

4. The structure of claim 1 and in which the cut lines are in a common plane.

5. A carrier carton including rectangularly arranged side and end walls, and a bottom closure, cut lines extending continuously across the end walls and into the side walls, and parallel fold lines extending from the ends of the cut lines to the top edges of the side walls, the fold lines being spaced from the nearest lines of fold connecting the side walls to the end walls a distance substantially equal to one-fourth the width of the side walls.

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