

Feb. 26, 1946.

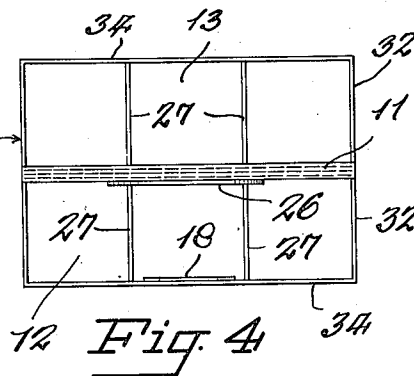
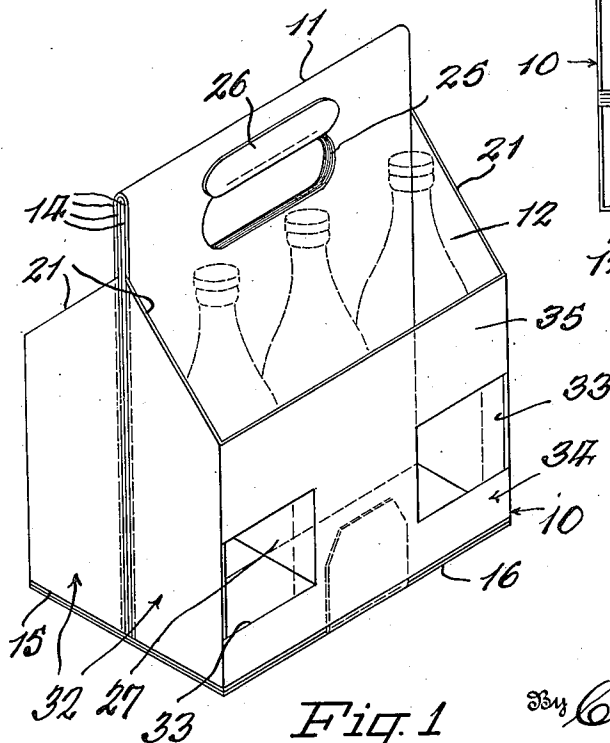
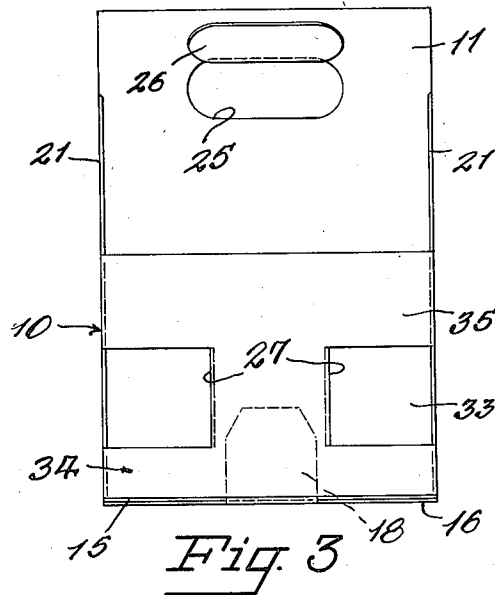
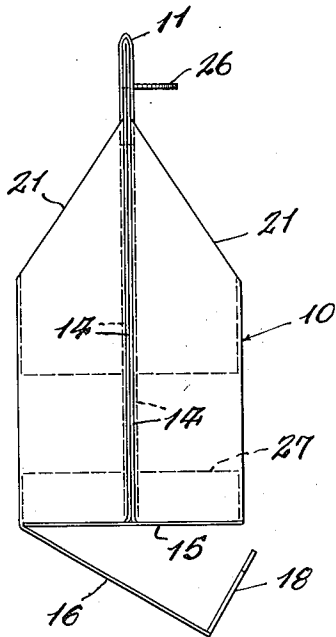
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2,395,711

COLLAPSIBLE BOTTLE CARRIER

Filed Jan. 5, 1945

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

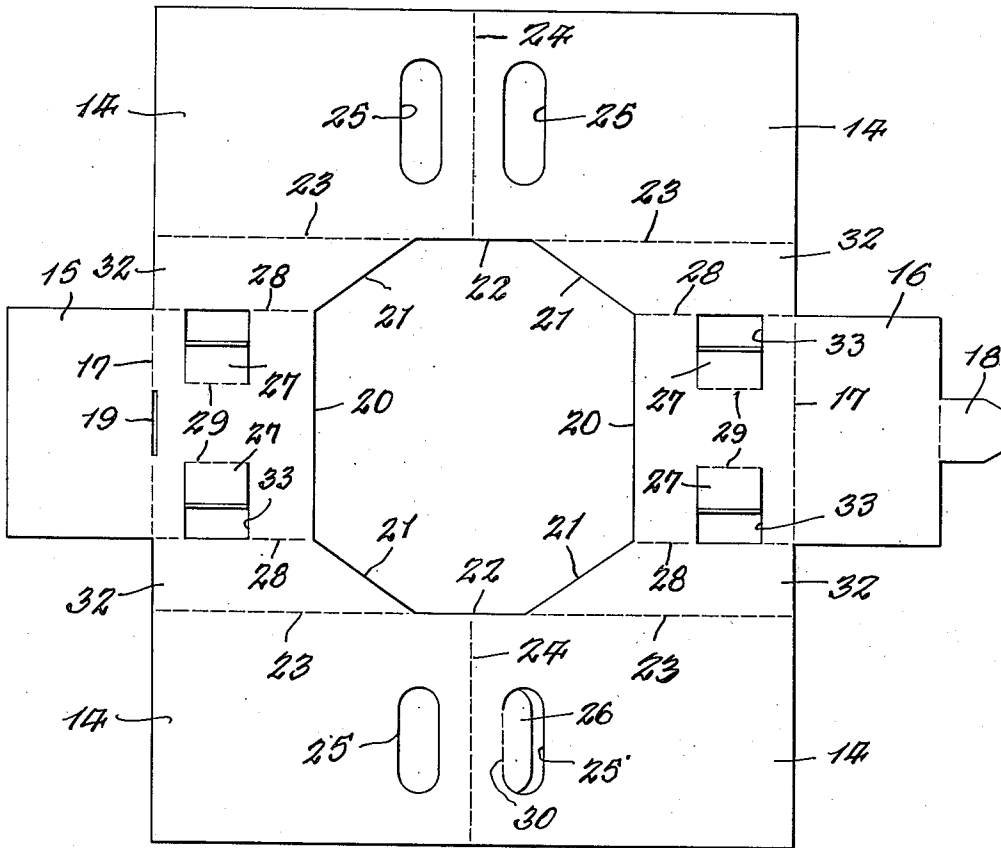


Fig. 2

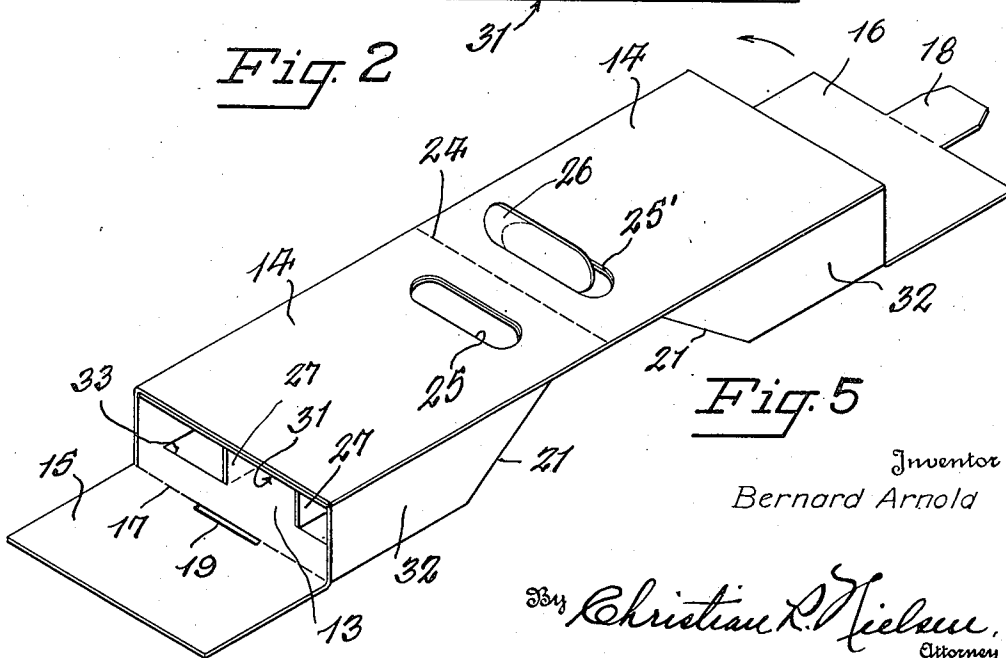


Fig. 5

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UNITED STATES PATENT OFFICE

2,395,711

COLLAPSIBLE BOTTLE CARRIER

Bernard Arnold, Laurel, Md.

Application January 5, 1945, Serial No. 571,417

4 Claims. (Cl. 229-52)

This invention relates to a bottle carrier and it consists in the constructions, arrangements and combinations herein described and claimed.

It is a particular object of the invention to provide a combined bottle carrier and display carton, which may be formed from a single blank of sheet material.

It is also an important object of the invention to provide a novel construction of blank wherein those portions of the assembled carrier which support the greatest weight of the bottles being carried is reinforced to such an extent that liability of breakage of the carrier is avoided.

It is a still further important object of the invention to provide a carrier which may be formed from card-board or other suitable material of a required weight, which may be fed through a proper cutting machine in web form, the web being cut and scored in a manner to minimize waste of the web.

It is also an object of the invention to provide a carrier the blank of which may be maintained in flat collapsed condition, permitting ready handling and shipping, the blanks being readily assembled in finished form with but little effort and by inexperienced persons.

Additional objects, advantages and features of invention will be apparent from the following description considered in conjunction with the accompanying drawings, wherein

Figure 1 is a perspective view of a carrier constructed in accordance with the invention.

Figure 2 is a plan view of the blank.

Figure 3 is a side elevation of the assembled carrier.

Figure 4 is a top plan view thereof.

Figure 5 is a perspective view illustrating one stage of assembly of the carrier.

Figure 6 is an end view of the carrier illustrating the final interlocking step of assembling the blank.

Attention is first invited to Figure 1, wherein it will be seen that the carrier 10 consists of a box-like structure having a carrying handle 11 disposed in the vertical medial plane of the box, defining respective compartments 12 and 13 upon either side of the handle. It will be noted that the handle 11 is defined by four panels of sheet material 14 folded upon themselves into back to back relation, thus affording a handle of ample strength.

Reference is now made to Figure 2 of the drawings, for an understanding of the construction of the blank, wherein it will be seen that the blank is of substantially rectangular shape and

in actual practice, the blank has a measurement of 20 inches wide by twenty-five and one-half (25½") inches long, in the construction of a carrier for well-known soft drink bottles of the smaller size. Where larger bottles are to be accommodated, the dimensions will be increased in proportion to the size of the bottles. A flap 15 is formed upon one side of the length of the blank and upon the opposite side a flap 16 is provided, formed as integral parts of the blank, each of the flaps being scored along respective lines 17 coextensive with the longitudinal edges of the blank. The flaps 15 and 16 are located medially of the length of the blank and project from the blank a distance of four and one-half (4½") inches and seven (7) inches in length. The flaps 15 and 16 will constitute the base of the carrier when assembled. The flap 16 includes a tongue 18 adapted to be inserted through a slot 19 formed at the base of the flap 15, when the flaps are brought into overlapped relation, as will be described.

The blank is cut away centrally thereof substantially in the form of an octagon, opposite angles 20 being seven (7) inches long, or the width of the flaps 15 and 16, and extend parallel to the longitudinal edges of the blank. From the terminal ends of the angles 20, the cut-away portion is defined by angles 21, of four inch lengths, the opening or cut-away part being completed by the angles 22 which will be seen to extend parallel to the width of the blank. A line of scoring 23 is formed in the blank coincident with respective angles 22 terminating at the longitudinal edges of the blank. The panels 14 are thus formed, a pair at each side of the cut-away portion or opening formed in the blank. The panels 14 are scored as at 24, these lines of scoring extending parallel to the longitudinal edges of the blank.

Elongated openings 25 are formed in three of the panels 14, while in the fourth panel is formed with a similar opening 25' partially blanked out, leaving a flap 26 which is employed to interlock the panels 14 in the assembled carrier, as well as to reinforce the openings 25 when the device is being carried.

In order that the compartments 12 and 13 may be provided with spacers or separators, preventing contact between bottles, the blank is formed with flaps 27, struck out on lines coincident with respective lines of scoring 28 aligned with respective horizontal edges of the flaps 15 and 16. The flaps 27 are scored along respective lines 29

to permit ready folding in the formation of bottle cells.

In the blank condition of the carrier as shown in Figure 2, these may be readily stacked for shipment or storage, and when it is desired to assemble a carrier, the blank may be lightly folded along the scored lines 23, 24, 28, 29, and along scored line 30. The folds along lines 23 and 28 being in a direction to present the panels 14 so as to overlie the octagon shaped cut out portion of the blank.

The panels 14 at the lower portion of the blank, as seen in Figure 2, will now be referred as 31, and these panels will be first folded inwardly above the cut-out portion of the blank, the fold being along lines 23 and 28 and the material 32 between these lines of fold will constitute end walls of respective compartments 12 and 13. The panels 14 at the opposite side of the blank are folded inwardly so as to lie flat upon the blank portion 31 as shown in Figure 5. In this position of the blank, the second lines 24 are in registry permitting ready folding to bring the two uppermost panels 14 into abutting flat relation, the direction of fold being indicated by an arrow in Figure 5. The openings 25-25' will also be in registry. The flap 15 is now folded along the scored line 17 so as to extend across the bottoms of compartments 12 and 13 when the flap 16 may be folded to assume a position flat upon the flap 15; and finally the tongue 18 is inserted into the slot 19. The carrier is thus assembled except for folding the flap 26 inwardly through registered openings 25, and folding the flaps 27 inwardly of respective compartments 12 and 13.

It will be noted that by forming the cut-out portion of the blank in the shape described, the angles 21 define tapered upper edges on the side walls 32 of the compartments 12 and 13, allowing ample clearance for placing and removing bottles from the compartments.

The openings 33 of the front walls 34 will permit display of the merchandise and the spaces 35 are suitable for display of advertising matter.

While I have shown and specifically described the invention, this is by way of illustration only, and I consider as my own, all such modifications in construction as fairly fall within the scope of the appended claims.

I claim:

1. In a portable carrier for bottles, formed

from a single blank of sheet material, comprising a handle consisting of four panels folded to lie in parallel relation, the inner two of said panels having respective end wall flaps, a side wall connecting the end wall flaps upon respective sides, bottom wall flaps flexibly connected to respective side walls and movable to a position across said four panels and beyond, one of said bottom walls having a slot, the other of said bottom walls having a tongue for insertion through said slot, said side walls having partition walls foldable in the direction of said panels defining bottle cells and said panels having aligned hand hold openings.

2. The structure of claim 1, in which one of the outermost panels is provided with a flap bendable through the aligned hand hold openings.

3. In a portable carrier for bottles, formed from a single blank of sheet material, said blank having a medial opening of substantial size, a pair of panel members flexibly connected at opposite sides of said opening, said panels being foldable along a line co-extensive with the adjacent boundary of the opening to lie over said opening one above the other, a second line of fold inwardly of and parallel to the first line of fold, the space between said lines of fold forming end walls of respective compartments of an assembled carrier, the space between said second lines of fold forming respective side walls of a compartment, a pair of flap members flexibly connected to said blank and a pair of a width corresponding to the distance between said second two lines of fold, each of said flaps having a line of fold coincident with respective edges of the blank, one of said flaps having a slot, the other of said flaps having a tongue, said flaps being folded in overlying relation for disposition of the tongue within the slot, said flaps forming a bottom wall for the compartments, said panel members each having a line of fold intermediate their lengths, whereby the four panels may be moved to present the two uppermost panels into parallel abutting relation.

4. The structure of claim 3 in which the opening is of substantially octagonal shape certain angles of which define inclined end edges on said end walls.

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