Nov. 24, 1942. W. B. CRANE 2,302,677

BOTTLE HOLDER

Filed Sept. 20, 1939 2 Sheets-Sheet 1

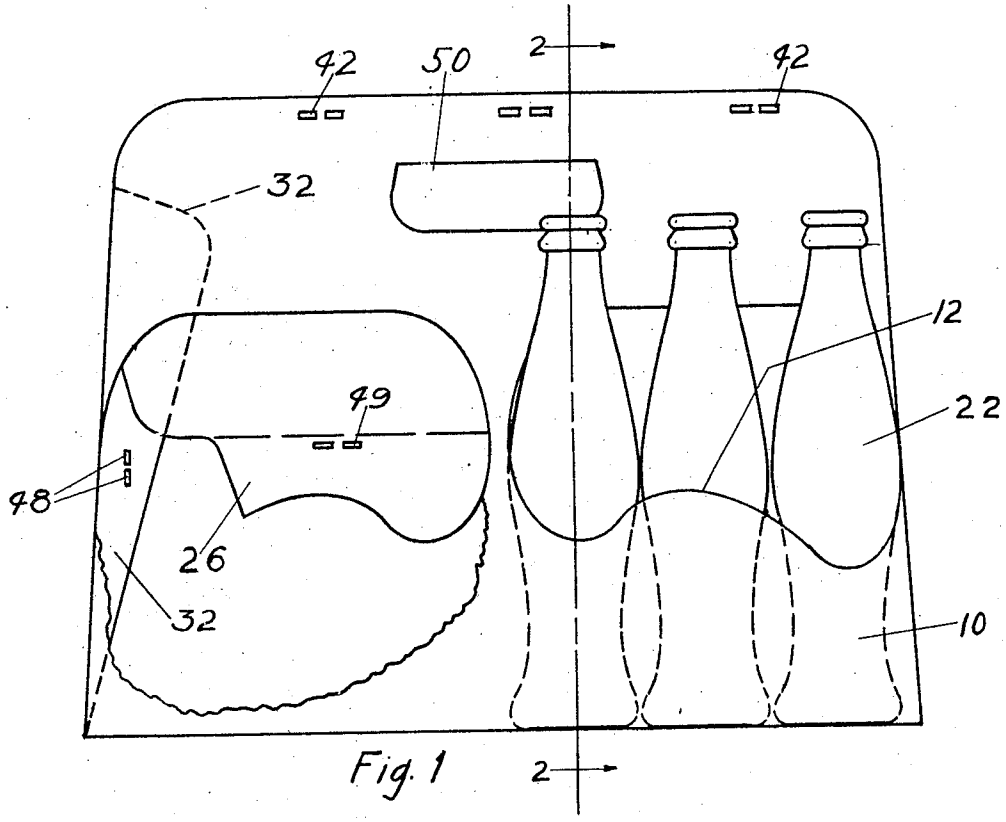


Fig. 1

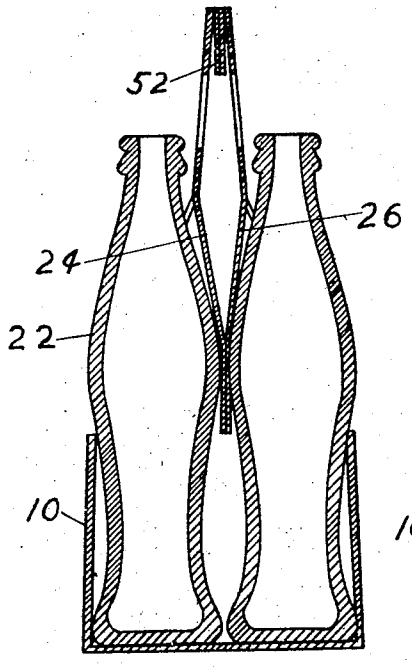


Fig. 2

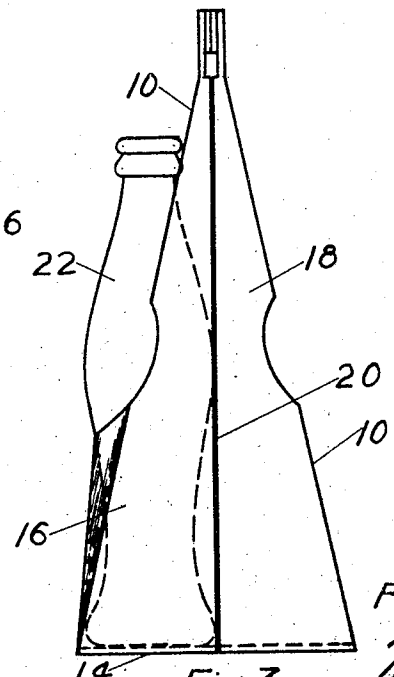


Fig. 3

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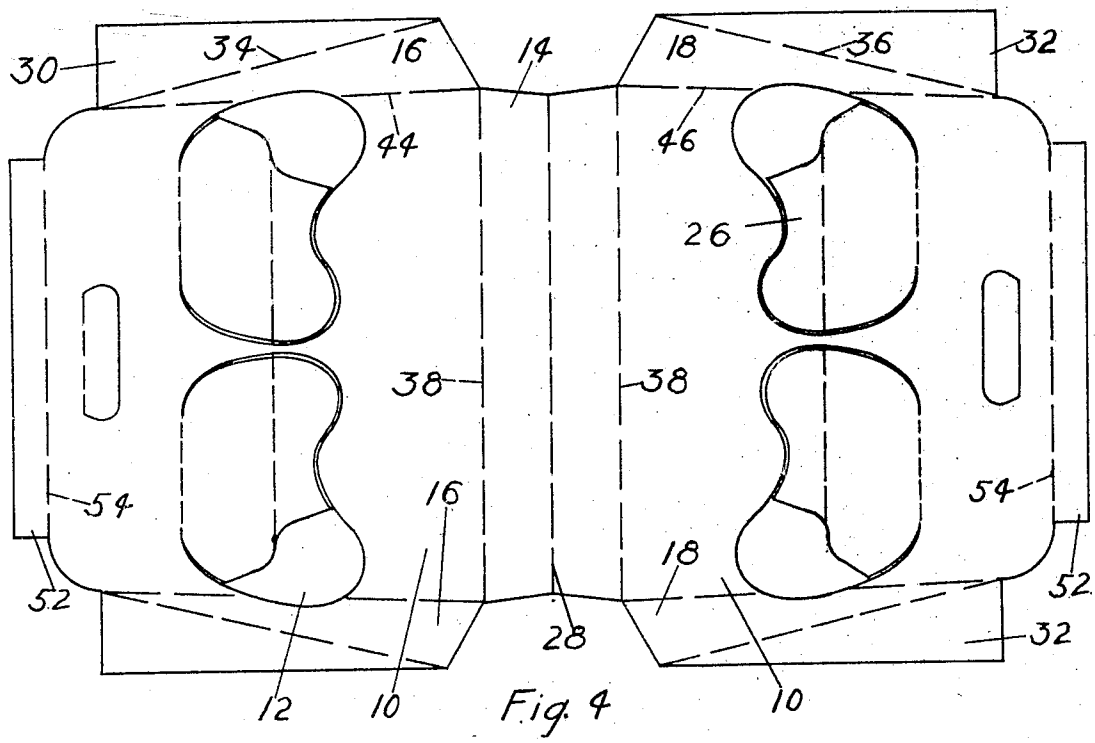


Fig. 4

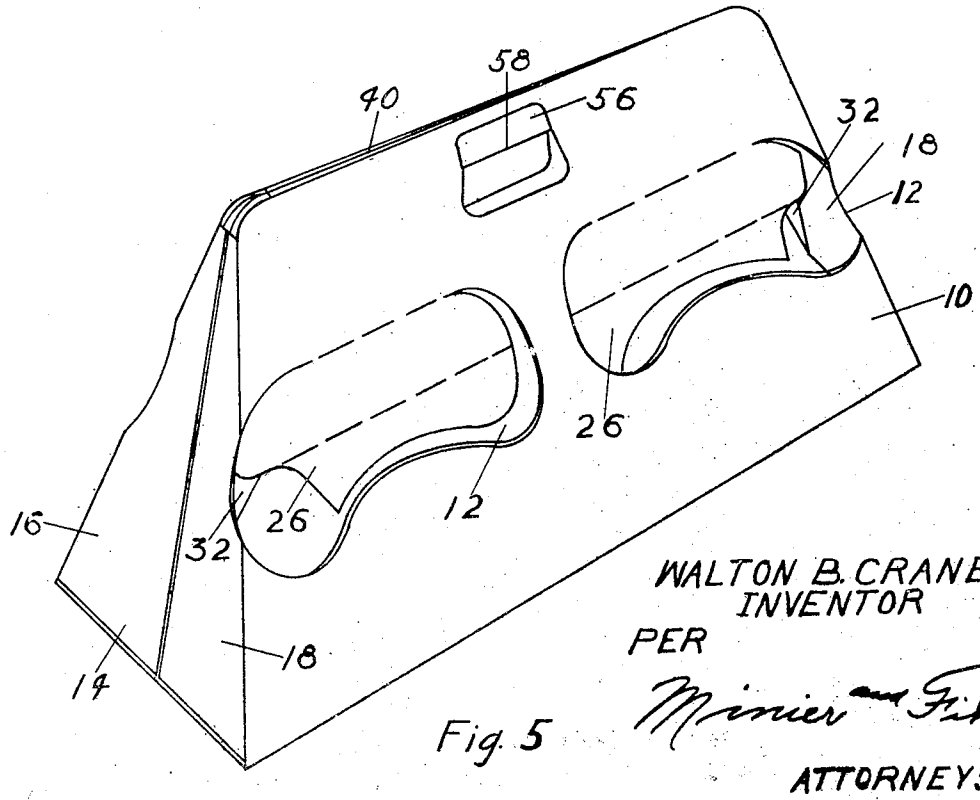


Fig. 5

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2,302,677

BOTTLE HOLDER

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Application September 20, 1939, Serial No. 295,741

2 Claims. (Cl. 229—52)

This invention relates to a new and improved carrier for bottles and has for one of its principal objects the provision of a collapsible container wherein a considerable number of bottles of beverage may be securely packaged and transported. The present application is a continuation in part from my prior application having Serial Number 268,198.

An important object of this invention is to provide a bottle carrier which permits the bottles to be inserted and removed with facility while it is in fully set-up and assembled condition.

Another important object of this invention is the provision of a strong, simple, and easily constructed bottle carrier which may be made of a single sheet of paper board or other inexpensive flexible material and which, in its completely fabricated and assembled condition, may be collapsed to flattened form for packaging and shipment, and may be set up very quickly and easily by the user without requiring any special apparatus or appliances for so doing.

A still further important object of this invention is to provide a bottle carrier which is so constructed as to carry the weight of the contained bottles safely and retain them securely in spite of the fact that its side walls are almost entirely traversed by apertures for reception and display of the contained bottles.

Another and still further important object of this invention is the provision of a convenient carrier for bottles which is effective to prevent defacement or "sanding" of the bottles by their rubbing against each other when carried in it and to prevent their being knocked against one another in the operation of inserting them into it.

Other and further important objects of the invention will be apparent from the disclosure in the accompanying drawings and following description.

In the drawings:

Figure 1 is a side elevation of a bottle carrier embodying this invention, partly broken away showing several bottles positioned therein.

Figure 2 is a sectional view taken on the line 2—2 of Figure 1.

Figure 3 is an end view of the carrier.

Figure 4 shows an extended blank or the unfolded bottle carrier.

Figure 5 is a perspective view of a bottle carrier embodying this invention.

In the illustrative constructions shown in the drawings the reference numeral 10 indicates generally the side walls of the bottle carrier. These side walls 10 have tab portions 24 and 26 cut out to provide apertures 12 through which bottles can be inserted.

The carrier when set up and empty is triangular in a vertical cross-section as can be seen in Fig. 3, and has a bottom 14 flexibly connected along fold creases 38 with the aforementioned side walls 10, and end walls formed by portions 16 and 18 which extend rearwardly from the lateral margins of the side walls and carry connecting flaps 30 and 32 which are folded inwardly from the margins of the end walls on diagonal crease lines 34 and 36.

The bottle carrier of this invention can be made of any suitable flexible material such as cardboard or the like. Upon the insertion of bottles 22 into the carrier through apertures 12, the lower portions of the side walls 10 yield outwardly but exert pressure inwardly against the bottles that tends to hold them in position.

As best shown in Fig. 2 the opposite tab portions 24 and 26 extend downwardly in spaced relationship in the mid-portion of the carrier, and their lower portions may be fastened together by stapling as at 49. These tabs form separators between the inner sides of the bottles which occupy the opposite apertures, so as to prevent them from coming in contact with each other. The securing tabs 30 and 32 which are opposite each other are fastened together in abutting relationship by stapling as at 48, and in the set-up carrier they extend inwardly over the bottom and act as separators between the opposite outermost bottles.

Figure 4 shows the layout of the single blank of material from which this carton is made. As is there illustrated, the base 14 is scored along its center at 28 so as to facilitate its being folded to permit the collapsing of the finished carrier to flattened condition such as to permit the stacking of a number of the collapsed carriers for compact packaging. For assembling the device from the flat blank, the lateral portions 16 and 18 and 30 and 32 are folded inwardly along the crease lines 44 and 46 to positions flat upon the side walls, and the sheet is then folded upon itself along the crease line 38 so as to bring the flaps 32 flat against the flaps 30. This also brings the side walls 10 together so that they may be fastened together by staples 42 adjacent their upper ends. The contacting flaps 30 and 32 are then stapled to each other at 48 and thus form connections between the associated end walls 16 and 18, which end walls, in turn, are integral with the respective side walls 10 along crease lines 40 and 46 above and below the apertures 12, the

lower portions of the side walls being integral with the bottom 14.

A handle is provided at the upper ends of the adjoining side walls 10. Two types of handles are shown in the drawings. The first is illustrated in Fig. 2 and comprises coinciding openings 50 formed in the side walls and reenforcements applied just above them. These reenforcements may be formed as flaps 52 at the upper ends of the side walls which are scored at 54 so that said flaps may be folded inwardly between the side walls, thus providing four plies of material immediately above the handle openings 50, the four thicknesses being stapled together at 42. This particular handle is very strong and affords also a stiffening reinforcement for the upper end of the carrier. Another type of handle is shown in Fig. 5 and comprises an opening in one side wall and an oppositely disposed opening and registering flap 56 in the opposite side wall. The flap 56 is completely cut away from the side wall at its bottom and sides but is merely scored at its top. A score 58 is formed parallel to the top scoring approximately midway down the flap 56, and this flap 56 is folded through the opening in the opposite side wall and then is bent upwardly along the midway scoring 58, thus providing a flat and comfortable gripping surface for the user's hand.

The carton of this construction can be made to carry safely a dozen or more bottles because of its strong construction and improved design. The particular carton shown in this application is designed to carry one dozen bottles, three occupying each of the four apertures 12, and the lower margins of said apertures are shaped so as to provide the subjacent side wall portions with resiliently flexible upwardly arched portions which cooperate with the depending separator flaps 24 and 26 to grip the bottles and retain them securely, yet permit them to be withdrawn in the upward direction when desired.

It is to be observed that bottle carriers of this construction may be completely fabricated and assembled and stapled at the place of manufacture in a flat collapsed condition which permits large numbers of them to be conveniently packaged for shipment or storage in relatively small space. Whenever the device is to be used for the packaging of bottles or other articles, it is very easily expanded or set up by swinging the lower ends of the side walls apart and swinging the end walls outwardly into right angular relationship to the side walls, whereupon the bottles, cans or other similar devices for which the holder is designed can be readily placed therein with a minimum expenditure of time and labor.

I am aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the principles of this invention, and I, therefore, do not propose limiting the patent granted hereon otherwise than as necessitated by the prior art.

I claim as my invention:

1. A carrier comprising a bottom, and side walls forming acute angles with the bottom and joined to form an acute angle at their top, end walls between the side walls and the bottom, said end walls being formed by flaps projecting from each end of the side walls, the pairs of flaps thus formed having in-turned portions in face-contacting relation along the medial plane of the device, the side walls being provided with apertures for reception of bottles and having tabs swung inwardly from upper marginal portions of said apertures, tabs of opposite side walls being fastened to each other, aligned openings in the joined upper portions of the side walls forming a handle, the lower and upper portions of the side walls adjacent the apertures adapted to yield outwardly and inwardly upon insertion of a bottle, and means joining the contacting pairs of flaps together, the bottom being scored medially to permit collapsing of the assembled empty structure into a flat shape.

2. A carrier as specified in claim 1 and wherein each of the side walls is provided with a plurality of bottle receiving apertures each of size to accommodate upper portions of a plurality of the intended bottles standing in a row on the bottom.

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