July 14, 1942. C. J. ARTHUR 2,289,859

CONTAINER PACKAGE

Filed Aug. 12, 1940 2 Sheets-Sheet 1

Fig. 1.

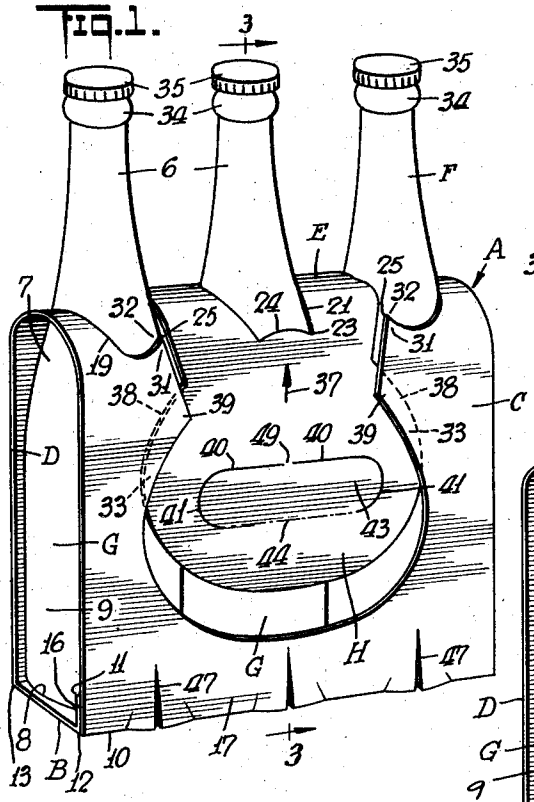


Fig. 2.

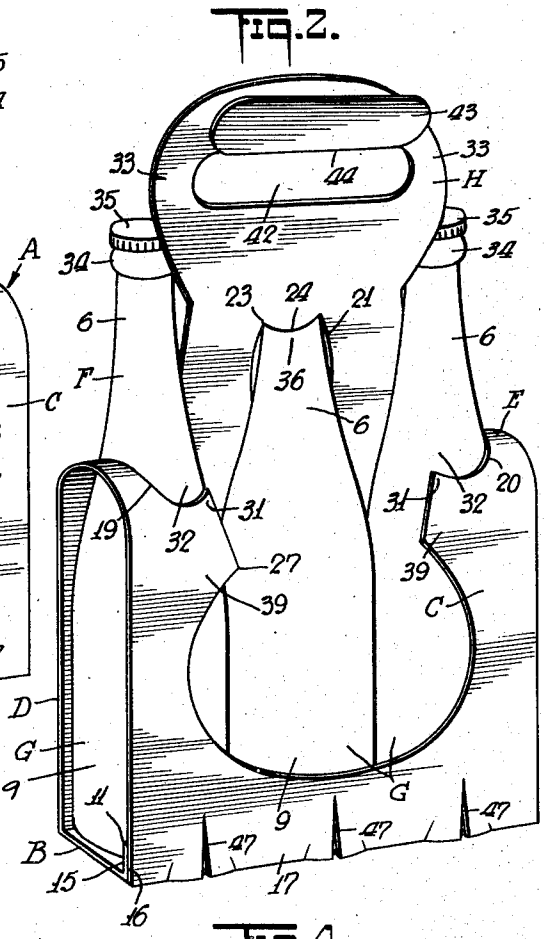


Fig. 3.

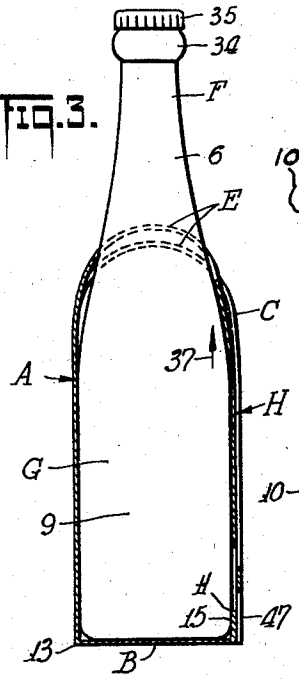
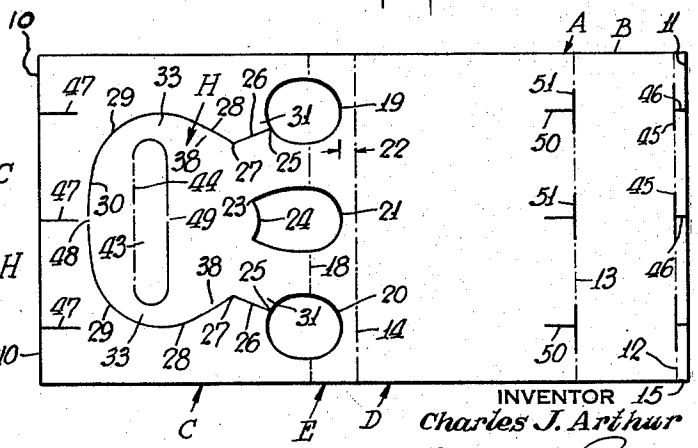


Fig. 4.



INVENTOR
Charles J. Arthur
BY
Sammy Rice
ATTORNEY

July 14, 1942. C. J. ARTHUR 2,289,859

CONTAINER PACKAGE

Filed Aug. 12, 1940 2 Sheets-Sheet 2

Fig. 5.

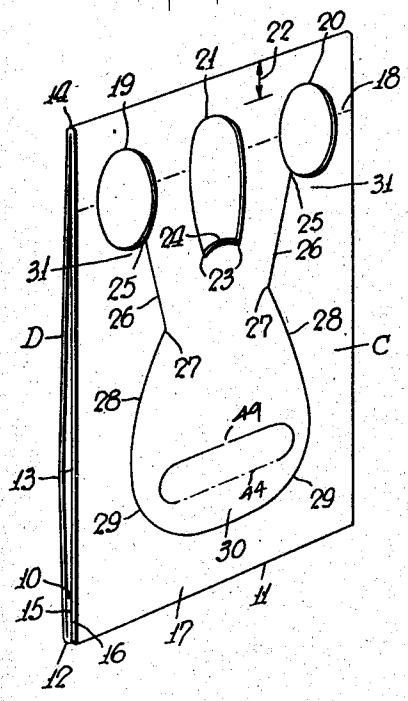


Fig. 6.

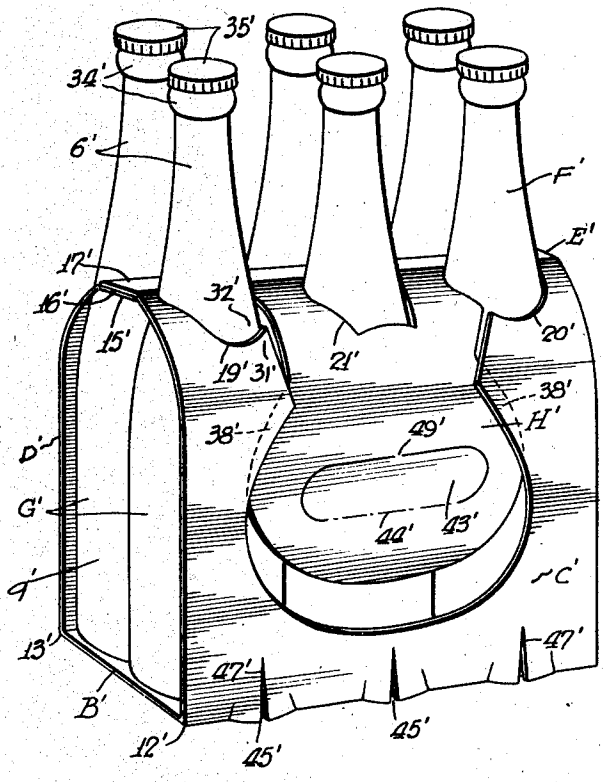
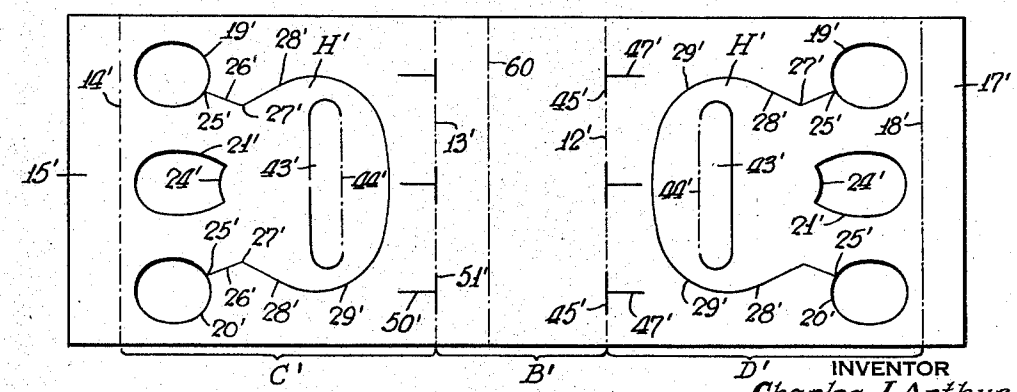


Fig. 7.



INVENTOR
Charles J. Arthur
BY
ATTORNEY

Patented July 14, 1942 2,289,859

UNITED STATES PATENT OFFICE

2,289,859

CONTAINER PACKAGE

Charles J. Arthur, Pelham Manor, N. Y.

Application August 12, 1940, Serial No. 352,287

4 Claims. (Cl. 224—45)

The present invention relates to a container package and it particularly relates to a carrier for bottles and similar shaped containers.

In the sale and merchandising of bottled materials, particularly carbonated beverages, such as cola drinks, root beer, ginger ale, beer and so forth, it has been found desirable from a merchandising point of view to sell such bottles in lots of 2, 3, 4 or 6, as the case may be.

It has been found difficult, however, to sell this bottled merchandise in these lots because of the difficulty of carrying them from the store to the home or apartment of the consumer, and it is not usually convenient or possible to utilize metal or wooden carriers for such bottled merchandise, both because of the cost and also because of the added weight and increased deposit which would be necessary.

It is, therefore, among the objects of the present invention to provide an improved, inexpensive, low cost container package or carrier for bottled merchandise of the character above described, which will enable inexpensive, ready merchandising of such bottled merchandise in lots of 2, 3, 4 or 6, as the case may be, and which will not only aid in the merchandising of this bottled merchandise, but also will permit selling of this bottled merchandise in relatively larger quantities without increased cost and at a discount.

Another object is to provide a simple, inexpensively, readily manufactured carrier for bottled merchandise of the character above described.

In forming or providing carriers for bottled merchandise, particularly carbonated soft drink beverages, it has been found most desirable to use a die cut, creased and folded paper board with recesses to engage a part of the bottles and at the same time forming both a support for the sides and bottoms of the bottle and a handle to enable carrying of the bottles.

It is among the further objects of the present invention, therefore, to provide a simple, inexpensive cardboard carrier for containers of the character above described, which with a minimum of consumption of paper board will provide a most effective, relatively durable carrier for bottled merchandise, and particularly for bottled soft drink carbonated beverages.

Still further objects and advantages will appear in the more detailed description set forth below, it being understood, however, that this more detailed description is given by way of illustration and explanation only and not by way of limitation, since various changes therein may be made by those skilled in the art without departing from the scope and spirit of the present invention.

In accomplishing the above objects, it has been found most satisfactory to provide as a basis of the carrier or package, a die cut, creased and folded cardboard or paper board sleeve, which when utilized for receiving or carrying the bottles, will be of approximately rectangular cross section and have a flat base upon which the bottom of the bottles rest and also a top portion having openings through which the necks of the bottles may protrude.

In the preferred construction, a part of the side of the carrier is cut away and may be upturned either to form a handle, or left downturned in position to form a lock for the carrier, which lock will enable the carrier to be moved or carried by one of the bottles in the carrier, and particularly by the center bottle in the case of a three-bottle carrier.

Such a sleeve-like carrier or package may be readily formed by die cutting from cardboard or paper board stock without the necessity of providing excess stock extending above the necks of the bottles, and in no case is it necessary to use more stock than would be necessary to extend the height of the rectangular sleeve-like or box-like carrier to between ⅝ to ¾ the height of the bottle.

In the drawings, which show one of the various forms of the present invention, but to which the invention is by no means restricted, since many changes and alterations may be made therein, all within the scope of the present invention.

Fig. 1 is a side perspective view of a completed package or carrier with the bottles of soft drink carbonated beverage therein, with the handle in locking position,

Fig. 2 is a side perspective view similar to Fig. 1, with the handle in elevated position,

Fig. 3 is a side sectional view upon the line 3—3 of Fig. 1,

Fig. 4 is a top plan view of the blank after scoring, creasing and die cutting, which may be employed for the carrier of Figs. 1 to 3,

Fig. 5 is a side perspective view of the completed blank of Fig. 4, after it has been formed into the sleeve-like carrier,

Fig. 6 is a side perspective view similar to Fig. 1 of a modified construction, in which the carrier with its handle in locking position receives six bottles, and

Fig. 7 is a plan view of the blank which may be utilized for forming the carrier of Fig. 6.

Referring to Figs. 1 to 3, the sleeve-like container A is provided with a base B, sides C and D, a handle H, and a top section E having recesses for receiving the top or neck portions F of the bottles G.

The bottles G in said carrier A have the base portions 8, the side cylindrical portions 9, which converge at 7 into the necks 6, which have the mouth portions 34 and the caps 35.

The handle H is shown in locking position in Fig. 1 and in carrying position in Fig. 2.

Referring to Fig. 4, the sleeve A is formed of a rectangular piece of cardboard stock, which for example may be of white patent coated news board, laminated board, white patent coated manila lined board, kraft board or other available paper boards.

It may vary widely in thickness depending upon the weight of the bottles and for three 12 fluid ounce bottle carriers, it may be for example from 30 to 40 points in thickness, each point being equivalent to a thousandth of an inch. This board will pass through a creasing, scoring and die cutting machine, which will perform these operations simultaneously and then subsequently it may be passed through a printing press. If desired, however, the board may be printed before creasing, scoring and cutting.

In the creasing, scoring and die cutting machine, the paper board will be cut in sections, as indicated by the cut lines 10 and 11. These cut lines are indicated at 10 and 11 in Figs. 4 and 5.

The fold lines are indicated at 12, 13 and 14. The fold line at 12 will form the extension 15, which may be glued at 16 to the lower portion 17 of the side portion C of the carrier A. The fold lines 13 and 14 will form the rear side D of the container. The glued junction 16 may also be made at other places or instead of glueing, taping or stapling or other attachments may be employed.

The top side E of the container, which may or may not have a fold line as indicated at 18 in Fig. 4, has the cut-out portions 19, 20 and 21, said cut-out portions 19, 20 and 21 preferably terminating a substantial distance away from the fold line 14, as indicated by the dimension 22.

The outside openings 19 and 20, which receive the necks of the outside bottles G, are relatively short, as indicated in Figs. 4 and 5 and constitute ovals or circles or similar round shapes, while the central opening 21 is somewhat elongated and terminates at the points 23 and has an inturned tab portion 24.

Extending from the inside edges of the openings 19 and 20 are the cut lines 26, which converge inwardly and toward one another until the points 27 when they first curve outwardly, as indicated at 28 and then inwardly at 29 to the cut line 30.

The cut lines 26, 28 and 29 will form the peak portions 31, which serve to hold the outside bottles in position when the handle member H is elevated, as indicated in Fig. 2.

These peak portions will contact the necks F of the outside bottles at 32 adjacent to the cylindrical walls 9 thereof and just as the bottle starts sharply to converge upwardly at 6 towards its mouth 34.

In Fig. 2, when the handle H is extended, the widest portions 33 of the handle member H will also contact the mouths 34 and the caps 35 of the outside two bottles of the group of bottles shown in Fig. 2.

Additionally, in this position, the lower portion 24 of the opening 21 will contact the middle portion 36 of the neck of the central bottle G, as also shown in Fig. 2.

Ordinarily the resiliency of the paper stock constituting the cut-out handle H will cause the handle to move slightly in the direction 37, as indicated in Fig. 1, with the result that the portions 38 of the handle H will lock themselves below the inturned corner portions 39 of the sleeve.

As a result, the entire package, as for example shown in Fig. 1, may be raised by grasping the neck 6 of the central bottle.

The center portion of the handle is provided with the cut lines, as indicated at 40, with the semi-circular portions at 41, which may be pressed out on the crease 44 to form an opening 42 for reception of the hand when the carrier is to be used with the handle H in upturned position, as indicated in Fig. 2. The upturned tab 43 and the crease 44 serve to protect the hand.

It is thus apparent that the applicant has provided, as shown in Figs. 1 and 2, a double position carrier, in one position, as shown in Fig. 1, the handle H serving as a lock and in the other position, as shown in Fig. 2, the handle H enabling suspension of the package with assurance that in either position the three bottles G will be held firmly in the container and may be readily handled, shipped or carried from the store to the home or apartment, as the case may be.

Where the bottles, instead of having cylindrical sides, have downwardly converging portions or flared bottoms, vertical slits, as indicated at 46, 47 and 50 and horizontal slits, as indicated at 45 and 51, may be formed at the crease lines 12 and 13 at the base B. The slits 47 will coincide with the slits 46.

When these slits are provided, as indicated in Fig. 2, the downwardly diverging portion of the bottle will project slightly through the lower portions of the sides C and D and the bottle will be more firmly held in position therein by the side walls C and D.

In assembling the cartons A with the bottles G, they either may be as shown in Fig. 4 with the tabs at 48 and 49 left in position, whereupon the sheet A of Fig. 4 may be placed by an automatic packaging machine over three bottles G with the openings 19, 20 and 21 receiving the necks F of such bottles G. Then the ends of the blank may be turned inwardly and the sleeve may be completed by glueing at 16, as indicated in Fig. 1.

In this manner of assembly, it is not necessary to lift the handle H to insert the bottles. It is then only necessary to break the tab connection 49 to form the carrier handle H, as shown in Fig. 2, when the bottles are actually sold and are ready to be carried away by the consumer. If desired, in this assembly the handle H might be omitted and the package handled by the central bottle or a separate handle be provided. To remove the bottles it would then be necessary to rip the sleeve, which then could not be reused.

Alternately, the sleeves may first be prepared as indicated in Fig. 5 and shipped in that condition, in which case then the bottles may be readily inserted in position by lifting up the handle member, as indicated at H after breaking the tab 48, whereupon the outside bottles G are first placed in position, followed by insertion of the middle bottle G. If desired, however, the outside bottles G may be inserted from the ends of the package. Then the handle H may be locked into the position as shown in Fig. 1.

The embodiments of Figs. 6 and 7 show a form of carrier or package which may be utilized for carrying six bottles.

In this construction similarly functioning parts to those described and shown in connection with Figs. 1 to 5 are indicated by the same letters and numerals, however, primed.

In the construction of Figs. 6 and 7, two han-

dle members H'—H' are provided and the transverse slits 45' and 47' and 50' and 51' are positioned at the folds 12' and 13'.

The junction in the construction shown in Fig. 7 is formed at the top of the sleeve between the necks of the bottles, and at this portion of the sleeve, the sections 15' and 17' are joined together by the adhesive connection 16'.

As indicated in Fig. 6, the handles H' will lock on both sides of the container and both handles may be elevated together to form a handle which will be reinforced by the double ply thickness 15' and 17' at the top of the sleeve. The portions 43' might be inserted into the opening 42' of the other handles to enable a firmer handle construction.

If desired, the double ply thicknesses 15' and 17' may be turned downwardly or upwardly instead of horizontally in the portion E' at the top of the carrier and also an extra handle might be glued between the upturned or downturned plies 15' and 17'.

If desired, with the slits 45, 46, 47, 50 and 51 in Fig. 4 or 45', 47', 50' and 51' in Fig. 7, the bottoms B and B' may be made of slightly less width than the diameter of the bottom of the bottle G in Fig. 1, or the diameter of two bottles in Fig. 6, to assure bulging by the bottles G.

It is, of course, obvious that any number of bottles may be carried by the sleeve construction of the present application and that the present application merely shows and describes one preferred embodiment.

The adhesive connections, as indicated at 16, may be made at various places in and about the sleeve A at other places and corners than shown in Figs. 1 and 6.

The blank spaces on the front and back of the carrier, as indicated at C and D, may carry advertising matter and it will be noted that substantial area is left for this purpose.

The fold 60 in Fig. 7 enables the blank of Fig. 7 after the attachment of the portions 15' and 17' to form the completed sleeve, to be folded as the three-bottle carrier of Fig. 5. It will be noted this fold comes upon the bottom B' and does not weaken the construction.

If desired, in the arrangement of Fig. 6, a sheet of corrugated board may be inserted between the two rows of bottles G' to prevent them from contacting one another.

The assembly as shown in Fig. 6 may be most conveniently accomplished by inserting the bottles in the completed sleeve, although where the adhesive attachment 16' is adjacent the bottom or lower portions of the sides, the blank of Fig. 7 may be placed upon the bottles and then subsequently formed into a sleeve.

In connection with the three-bottle containers of Fig. 1, it will be noted that the handle H substantially centrally suspends such carrier, the suspension being directly over the center lines or axes of the bottles rather than over one of the sides of the carrier.

It will be noted that it is quite convenient to carry two assemblies, as indicated in Fig. 1, by placing the handles H together in extended position, and if desired, interlocking the tongues 43 by inserting them through the opposite openings 42.

Many other changes could be effected in the particular features of container package designed, and in the methods of operation set forth, and in specific details thereof, without substantially departing from the invention intended to be defined in these claims, the specific description herein merely serving to illustrate certain elements by which, in one embodiment, the spirit of the invention may be effectuated.

What is claimed is:

1. A bottle carrier made of a die-cut and scored sheet of flexible paper board receiving a plurality of elongated bottles having cylindrical side walls, reduced diameter necks and bottoms arranged in at least one row in side by side relationship, comprising a folded blank partly enclosing and supporting the bottles, said blank having a bottom portion upon which the bottoms of the bottles are positioned, said bottom portion having a length sufficient to receive the length of the row of bottles, said blank also having two side portions extending upwardly from the long sides of the bottom portions, said side portions being as wide as the bottom portions and extending upwardly only partway of the height of the bottles and terminating substantially below the tops of the bottles, and said blank also having a top portion having the same width as the side portions and attached to the top of at least one side portion, said top portion extending across said bottles intermediate of the height of said necks and having a plurality of openings arranged side by side corresponding to the number of bottles in the carrier, each opening receiving one reduced diameter neck and at least one side portion having a wide deep cut extending a major portion of the width and depth of said side portion but terminating substantially above the bottom of and substantially inside of the side edges of said side portion, said deep cut extending across the cylindrical side walls, enabling a large section of said portion thereof to be folded away from the side portion and upwardly and extend obliquely across the necks of the bottles to above the tops of the bottles to form a handle, said handle section being connected by a fold line to the blank adjacent the top of the folded blank, the opening in the handle section embracing and encircling the neck of a central bottle.

2. The carrier of claim 1, said carrier being formed as a continuous sleeve enclosing the cylindrical side walls and the lower parts of the reduced diameter neck portions and the remainder of the neck portions projecting above said sleeve.

3. The carrier of claim 1, said handle section having outwardly bulged parts which engage the tops of the outside bottles in each row when the section is folded away from the side portion to above the tops of the bottles and which engage the sides of said cuts when the handle section is permitted to remain in position in the side portion of the carrier having said wide deep cut.

4. The carrier of claim 1 in which said handle section is provided with outwardly projecting portions and the material bordering the recess left in said one side portion by removal of said handle section is provided with inwardly projecting portions, said outwardly and inwardly projecting portions being engaged upon movement of said handle section upwardly in back of said inwardly projecting portions to hold said handle section in position.

CHARLES J. ARTHUR.

Patent No. 2,289,859 **Granted July 14, 1942**

CHARLES J. ARTHUR

The above entitled patent was extended October 9, 1951, under the provisions of the act of June 30, 1950, for 6 years and 88 days from the expiration of the original term thereof.

Comissioner of Patents.