

Dec. 4, 1962

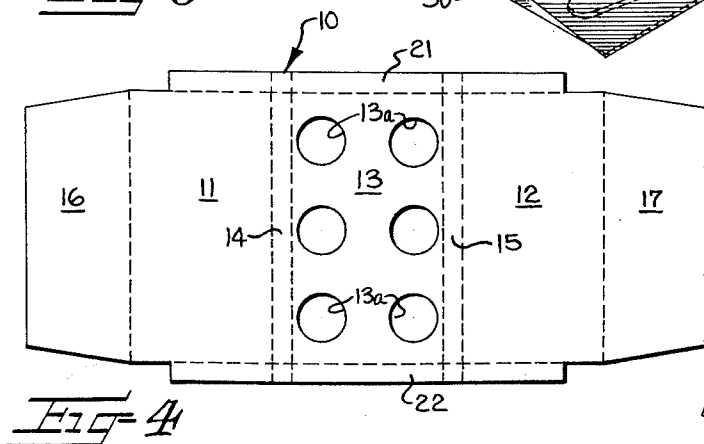
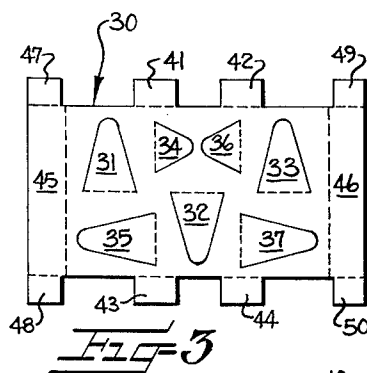
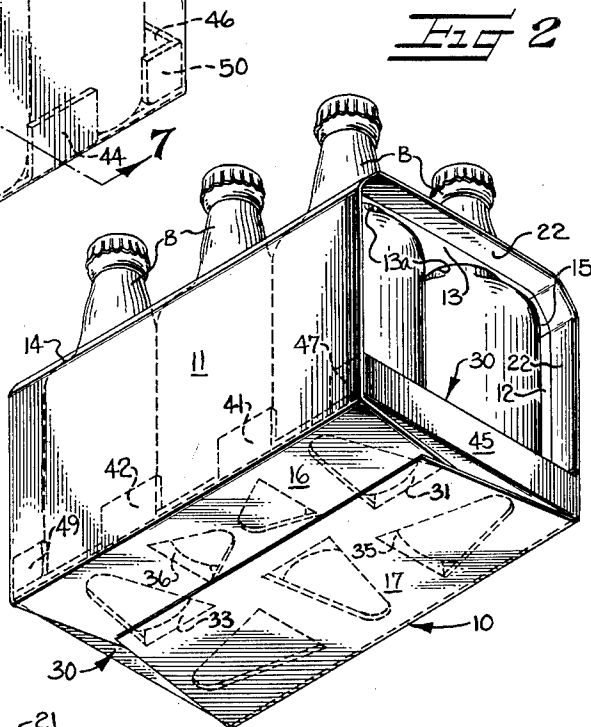
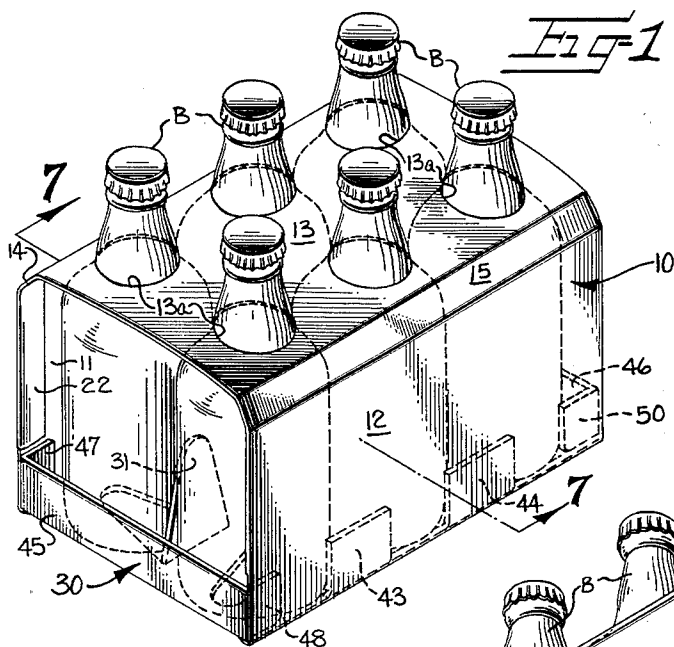
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3,066,795

BOTTLE CARTON

Filed Sept. 14, 1959

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

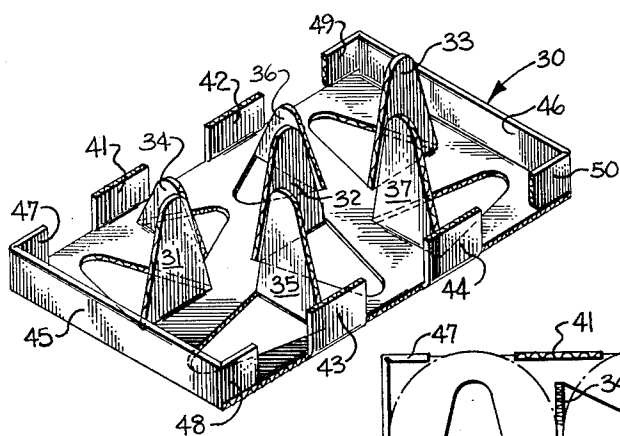


Fig-5

Fig-6

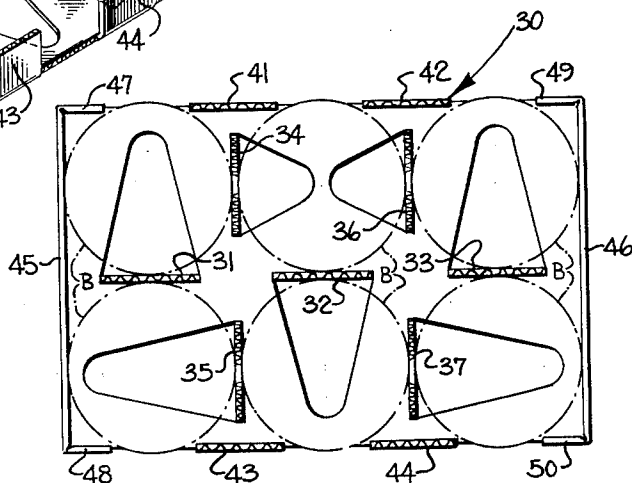
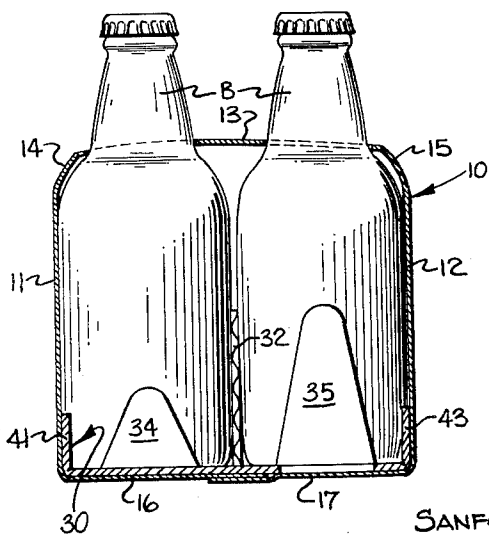


Fig-7



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3,066,795

## BOTTLE CARTON

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Filed Sept. 14, 1959, Ser. No. 839,954

5 Claims. (Cl. 206-65)

This invention relates to paperboard cartons or packages of the type adapted to be folded and secured around a group of articles such as bottles for protecting the bottles during the handling thereof.

The instant invention is more specifically directed to a wrap-around type of carton for at least two rows of bottles wherein the bottles are held out of engagement with each other in the carton. Prior art attempts in forming cartons of this type rely upon openings or slits formed in the top and side walls of the carton for receiving neck and bottom portions of the rows of bottles, respectively, for holding the bottles out of engagement with each other. A divider panel has sometimes been positioned between the adjacent rows of bottles but the bottles in each row were not insulated from each other and were dependent on the bottles being held from shifting by the openings in the carton in order to avoid damage thereto.

With the foregoing background material in mind, the instant invention is particularly directed to a novel wrap-around type of carton for rows of bottles wherein bottom wall portions of the carton extend upwardly between the rows of bottles as well as between adjacent bottles in each row. The proper protection of the bottles in the instant invention is thus not dependent on avoiding shifting of the bottles in the carton as in the prior art and the bottles are properly protected at all times.

More specifically the instant invention utilizes an auxiliary bottom wall in a wrap-around type of carton from which bottom wall extend a plurality of tabs positioned to extend between adjacent rows of bottles as well as adjacent bottles in each row.

Some of the features of the invention having been stated, other features will appear as the description proceeds when taken in connection with the accompanying drawings, in which

FIGURE 1 is an isometric view of a novel carton with the articles shown positioned therein;

FIGURE 2 is an isometric view similar to FIGURE 1 but looking from the bottom of the carton;

FIGURE 3 is a plan view of the blank for forming the auxiliary bottom wall of the carton;

FIGURE 4 is a plan view of the blank for forming the wrap-around wrapper of the carton;

FIGURE 5 is an erected isometric view of the auxiliary bottom wall shown in FIGURE 3;

FIGURE 6 is a plan view of the auxiliary bottom wall shown in FIGURE 5 with the bottles therein being shown in phantom lines; and

FIGURE 7 is a vertical sectional view taken on line 7-7 of FIGURE 1.

Referring now more specifically to the drawings, reference numeral 10 broadly indicates the wrap-around type of wrapper utilized with the instant invention with reference numeral 30 broadly indicating the auxiliary bottom wall which is adapted to be positioned inside the wrapper 10 in the completed carton or package as shown in FIGURE 1 for maintaining two longitudinal rows of bottles B out of engagement with each other.

Referring now specifically to FIGURE 4 wherein the wrap-around type of wrapper 10 is shown, this wrapper, as shown, is formed from an elongate sheet of

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paperboard which is suitably scored transversely thereof to define a pair of side wall panels 11 and 12 respectively, a top wall panel 13 and a pair of intermediate panels 14 and 15 which interconnect the side wall panels with the top wall panel. Hingedly connected to the outer edges of the side wall panels are bottom wall forming panels 16 and 17 which are adapted to be overlapped and adhesively secured to each other as shown in FIGURE 2 in the erected carton.

The top wall 13 as shown in FIGURE 4 is provided with a plurality of openings 13a, six being shown to correspond with the number of bottles B adapted to be positioned in the erected carton with their neck portions extending upwardly through the openings as shown in FIGURES 1 and 7.

To reinforce the side edges of the wrapper, outwardly extending panel portions 21 and 22 have been provided which are adapted to be folded inwardly and adhesively secured in the position shown in FIGURE 2 during the carton forming operation to reinforce the opposite ends of the carton. This prevents the carton walls in the erected carton from readily being torn and causing the bottles to fall therefrom.

Referring now to FIGURE 3 wherein the auxiliary bottom wall 30 is shown, it will be noted that the same is formed from an elongate integral sheet of material preferably corrugated paperboard for affording greater protection to the bottles in the carton. In this respect, the Interstate Commerce Commission regulations governing shipment packages of glassware such as bottles, require the paperboard to be of a predetermined thickness in order to meet the standards for properly preventing bottles from engaging each other. The thickness of this material which is required, in effect demands that corrugated paperboard be used from an economical point of view.

As shown in FIGURE 3, the auxiliary wall 30 is suitably scored and cut to define a longitudinal row of hingedly connected tabs 31, 32, 33 which when erected as shown in FIGURES 5 and 6 are positioned between the two rows of bottles in a common vertical plane with their hinge connection corresponding to the longitudinal axis of the bottom wall 30. It should particularly be noted that the tab 32 is formed from the opposite half of the auxiliary bottom wall than the tabs 31 and 33 and thus necessitate it being erected by being moved in a direction opposite from the tabs 31 and 33.

Two transverse rows of tabs are additionally provided for insulating or separating the bottles from each other. The first row of tabs comprises tabs 34 and 35 with the second row comprising tabs 36 and 37. The respective tabs in each of these rows are also formed from opposite halves of the auxiliary bottom wall with their axis or hinge line for each row lying in a common transverse plane. It should be noted that the tabs for forming each of these transverse row are moved into an erected position by being moved in an opposite direction from each other. More specifically, tab 34 is moved into an erected position in an opposite direction than the tab 35. The same is true of tabs 36 and 37.

Extending outwardly from opposite sides of the auxiliary bottom wall 30 are two pairs of bottle spacer tabs 41, 42, 43 and 44 respectively. These tabs when moved into erected position as shown in FIGURES 5 and 6 serve to engage the proximal side wall portions of adjacent bottles B and aid in retaining adjacent bottles from engaging each other.

Hingedly connected to opposite ends of the auxiliary bottom wall are panels 45, 46 which serve when erected as shown in FIGURES 1 and 2 as confining walls for the endmost bottles B by engaging proximal side wall

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portions of the bottles B and aid in preventing their sliding outside of the carton. To maintain the bottle confining wall panels 45, 46 in erected position, pairs of tabs 37, 48 and 49, 50, respectively, are provided on the opposite ends of the panels. These tabs have glue suitably applied thereto for adhering the same to the opposite side walls 11 and 12 of the carton as shown in FIGURES 1 and 2.

To assemble the carton to contain the bottles B therein, the various tabs and panels of the auxiliary bottom wall 30 are moved to the erected position shown in FIGURE 5, in which position adhesive may be applied to the under-surface of the auxiliary bottom wall 30 as well as to the outer surface of the upstanding bottle spacer tabs 41, 42, 43, 44 and the tabs 47, 48, 49 and 50. Now the bottles are positioned thereon in rows as shown in phantom lines in FIGURE 6 after which the wrap-around carton 10 is placed on top of the rows of bottles B to receive the neck portions thereof with the bottom wall forming flaps 16, 17 being suitably overlapped and adhesively secured together and to the auxiliary bottom wall 30 as shown in FIGURE 2.

The completed carton as will be observed, has an upstanding tab positioned between each of the adjacent bottles with the spacer tabs 41, 42, 43, 44 serving to engage the proximal side wall portions of adjacent bottles and prevent their shifting in the completed carton. It should be noted that the erected tabs 31 to 37 coincide in number and position with the midpoints between the adjacent openings 13a in the wrapper 10. Thus the tabs 31 to 37 serve to properly position the bottles on the auxiliary bottom wall for readily placing the wrap-around wrapper 10 around the bottles B with the neck portions of the bottles extending through the openings 13a.

The confining walls 45 and 46 as stated before serve to engage lower side edge portions of the endmost bottles and aid in preventing their shifting or sliding out of the confines of the package. It should be noted that this type of package may be properly called an open-ended wrapper type of package wherein the contents of the same may be readily viewed by a prospective purchaser from the opposite ends thereof.

It is thus seen that there has been provided an improved package for avoiding breakage of bottled goods such as beverages by providing means for insulating the proximal portions of each of the bottles from each other.

In the drawings and specification there has been set forth a preferred embodiment of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the claims.

I claim:

1. A package for readily breakable articles, such as bottles, comprising transverse and longitudinal rows of articles, a wrapper formed from an elongate paperboard blank scored transversely and folded about the articles to define a series of interconnected panels confining the articles therein, overlapping ends of said wrapper forming the bottom wall of the package, and an auxiliary bottom wall overlying the bottom wall of the package

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and having a plurality of upright tabs positioned between the proximal portions of adjacent articles in the transverse rows and the longitudinal rows and preventing engagement of the articles with each other.

2. A package for readily breakable articles, such as bottles, comprising rows of articles, a wrapper formed from an elongate paperboard blank scored transversely and folded about the articles to define a series of interconnected panels confining the articles therein, overlapping ends of said wrapper forming the bottom wall of the package, and an auxiliary bottom wall overlying the bottom wall of the package and having a plurality of integral upright tabs positioned between the proximal portions of adjacent articles in the rows and preventing engagement of the articles with each other, said tabs being arranged in longitudinal and transverse rows, said longitudinal row of tabs defining opposite halves of said auxiliary bottom wall, and at least one of the tabs in each row being formed in an opposite half of the auxiliary bottom wall than a remaining tab in the same row.

3. An open ended package for containing readily damageable articles, such as bottles of beverage, comprising transverse and longitudinal rows of articles, a wrapper formed from an elongate sheet of paperboard and being folded about the articles and being suitably scored transversely thereof to define opposing side walls, a top wall, and overlapping opposite ends of the wrapper defining a bottom wall, said top wall having transverse and longitudinal rows of openings therein corresponding in number to the articles packaged therein and in which the upper portions of the articles are received, and an auxiliary bottom wall adhesively secured to said bottom wall of the wrapper, said auxiliary bottom wall being suitably scored and cut to define a plurality of hingedly connected upstanding tabs, said tabs being positioned in vertical alignment with the transverse and longitudinal midpoints between adjacent openings in the top wall of the wrapper and in engagement with the adjacent articles to prevent proximal portions of the articles in the package from engaging and damaging each other.

4. In a package according to claim 3 wherein a plurality of spaced apart tabs extend upwardly from opposite sides of said auxiliary bottom wall and engage proximal portions of adjacent articles to aid in maintaining the articles out of engagement with each other.

5. In a package according to claim 3 wherein relatively short upstanding walls are connected to the opposite ends of said auxiliary bottom wall and serve to engage lower portions of the endmost articles and prevent their sliding out of the package.

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