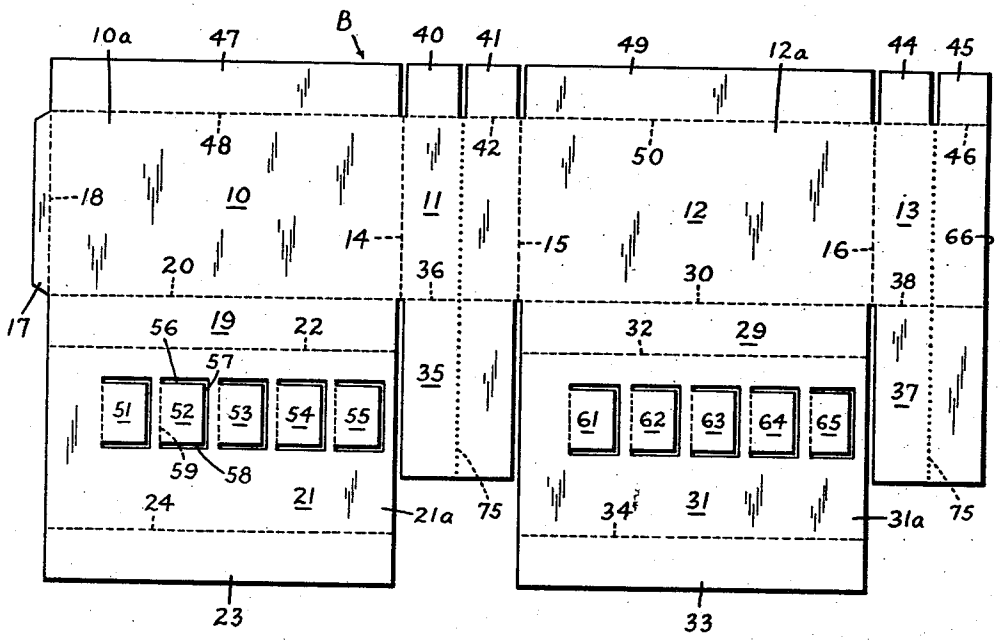
Aug. 27, 1957 J. M. NESS 2,804,254

SHIPPING AND DISPLAY CONTAINERS

Filed June 6, 1955 3 Sheets-Sheet 1

FIG.1.



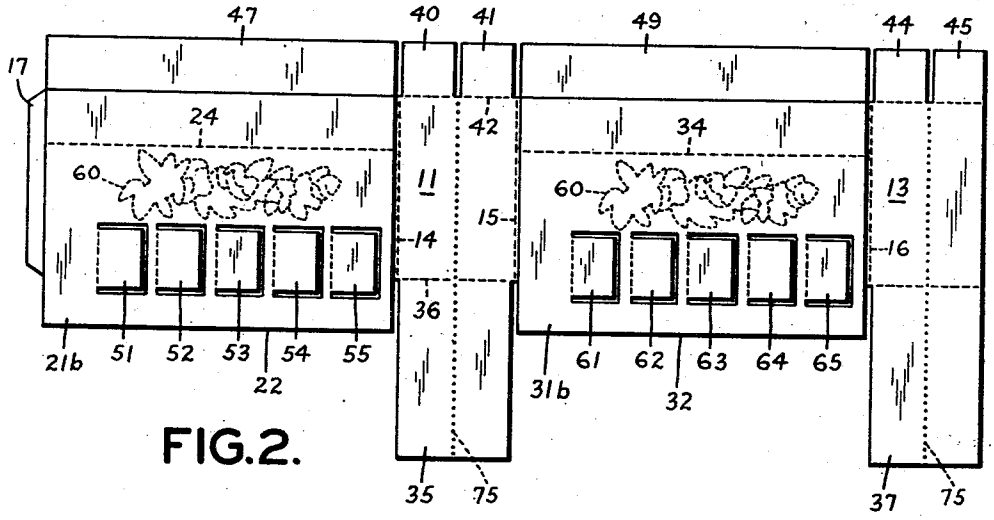


FIG.2.

SHIPPING AND DISPLAY CONTAINERS

Filed June 6, 1955 3 Sheets-Sheet 2

FIG.3.

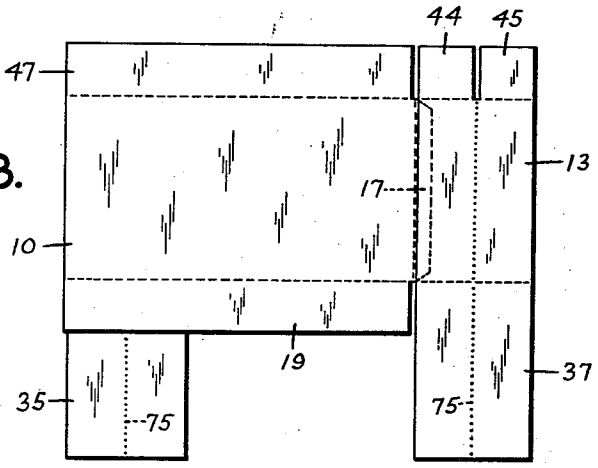


FIG.4.

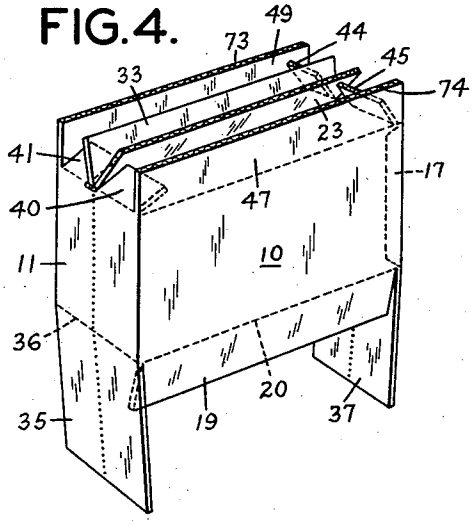
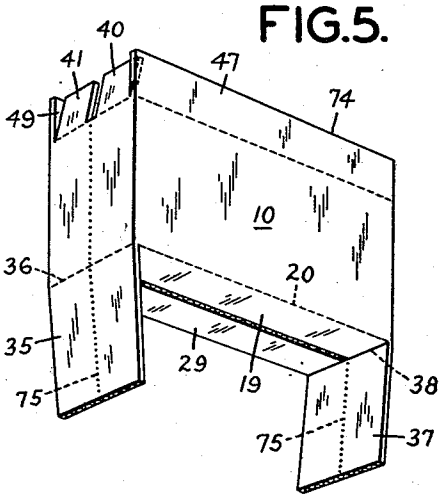


FIG.5.



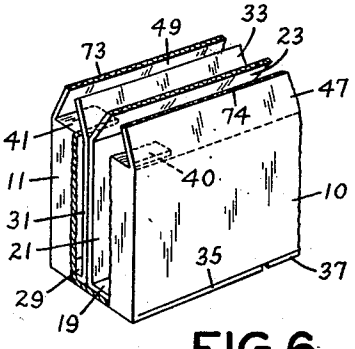


FIG.6.

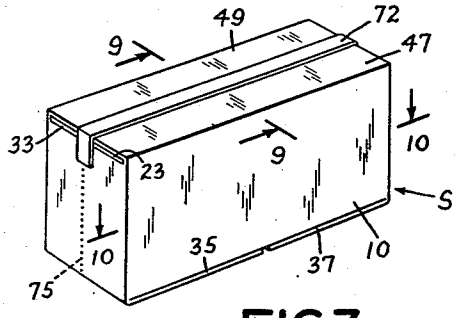


FIG.7.

Aug. 27, 1957 J. M. NESS 2,804,254

SHIPPING AND DISPLAY CONTAINERS

Filed June 6, 1955 3 Sheets-Sheet 3

FIG.8.

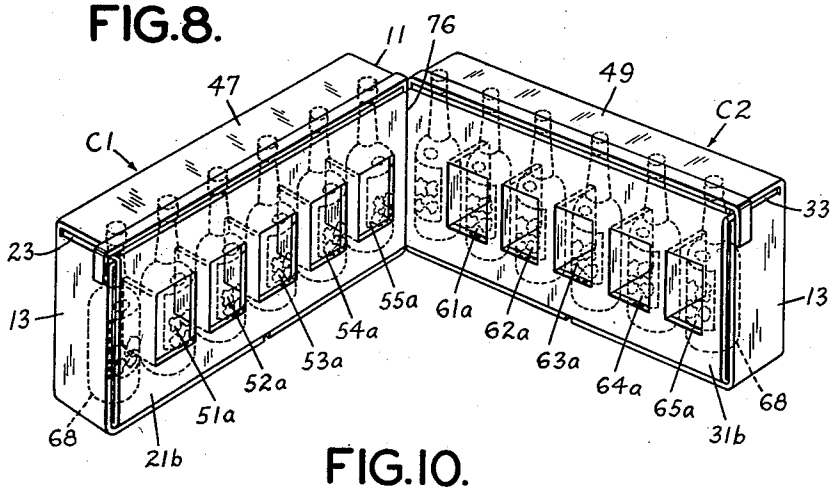


FIG.10.

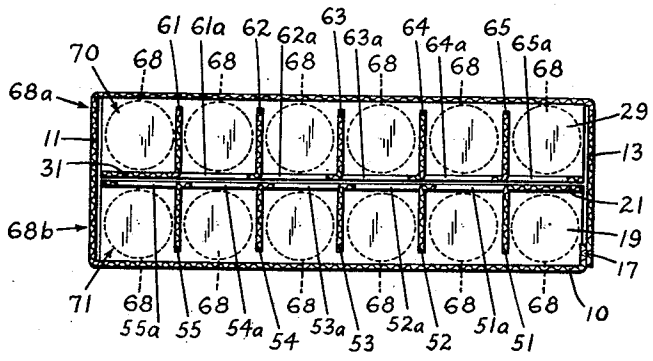
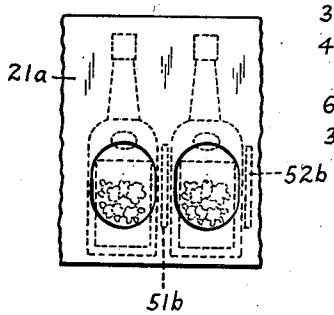


FIG.12.



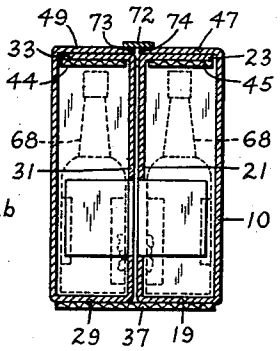


FIG.11.

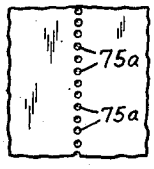


FIG.9.

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2,804,254

SHIPPING AND DISPLAY CONTAINERS

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Application June 6, 1955, Serial No. 513,541

5 Claims. (Cl. 229—28)

This invention relates to containers, and more particularly to shipping cartons, made of corrugated paper board or the like. Although the shipping cartons made according to the invention may be used for packing and shipping various kinds of products, it is especially adapted for packing and shipping bottled products, such as whiskey.

It is common practice in the whiskey producing industry for the producer to ship whiskey in case lots of twelve bottles each. Usually, the twelve bottles, making up the case, are packed and shipped in a carton of rectangular cross section, the bottles resting in the carton in four rows, and three bottles in a row; a criss-cross insert of corrugated paper board being set in the container so that the adjacent bottles are separated from each other by a protective shock absorbing partition. Although this type of shipping carton has served satisfactorily for shipping purposes, it does not lend itself for use as a display container for the contents of the carton after it is received by the retailer.

This invention provides a shipping carton for bottled products which is strong and durable and which can be formed from a one-piece blank and when set up and sealed serves admirably as a shipping carton, the bottles being packed in two rows having an equal number of bottles in a row. For example, if the shipping carton is designed for shipping a case of whiskey (twelve bottles), the bottles rest in the carton in two rows of six each. Later on, if desired, the shipping carton may be split in two by a simple operation to form two smaller containers, each of which contains a single row of bottles conveniently packaged for sale. Furthermore, the sealed shipping carton, containing the bottled goods may be utilized as an attractive display container for the contents.

Although the novel features which are believed to be characteristic of the invention are set forth in the annexed claims, the invention itself as to its objects and advantages and the manner in which it may be carried out, may be better understood by reference to the following description taken in connection with the accompanying drawings forming a part hereof, in which:

Fig. 1 is a plan view of a one-piece blank, which, when folded, forms the shipping carton;

Fig. 2 is a plan view showing the blank after certain folding operations in the course of setting up the carton from the blank shown in Fig. 1;

Fig. 3 is a plan view showing the blank after further folding operations, in the course of setting up the carton;

Fig. 4 is a view in perspective showing the carton further along in the course of being set up;

Fig. 5 is a view in perspective showing the carton, just prior to folding the bottom wall flaps;

Fig. 6 is a fragmentary view, and partly broken away, showing the interior longitudinal partition walls which separate the carton into two separate bottle holding compartments;

Fig. 7 is a perspective view of the shipping carton after it has been set up, packed, and sealed;

Fig. 8 is a perspective view of the packed carton after it has been split in two, to serve as a display container;

Fig. 9 is a view in cross section of the packed shipping carton, on line 9—9 of Fig. 7;

Fig. 10 is a view in cross section of the packed shipping carton, on line 10—10 of Fig. 7;

Fig. 11 is a fragmentary view to illustrate a modification and how the blank may be perforated, if desired, to facilitate splitting the carton in two; and

Fig. 12 is a fragmentary elevational view to illustrate a modification.

In the following disclosure the shipping carton is, for convenience of description, described in connection with the packing and shipping of whiskey in standard size quart bottles, but it will be understood that a shipping container may be constructed according to the invention, for other products packaged in bottles of any given size or other individual containers, such as canned or other goods put up in individual units; and, it will be understood that where the term "bottle" as used in the claims, the term is intended to include such other individual container units.

Referring now to the drawings, in which like reference characters, indicate similar parts throughout the several views, the one-piece blank B, shown in Fig. 1, is cut from corrugated paper board or other similar material suitable for a shipping carton and scored so that when folded or set up it will form the shipping carton, as illustrated in other views, as described hereinafter. The blank B comprises a front side panel **10**, a first end panel **11**, a back side panel **12** and a second end panel **13**. The blank is scored on line **14** between panels **10** and **11** and on **15** between panels **11** and **12** and on line **16** between panels **12** and **13**. The panel-connecting flap **17** (sometimes called a "glue" flap) extends from panel **10** and is divided therefrom by score line **18**. Extending from panel **10** is a bottom wall panel **19**, divided from panel **10** by score line **20**. Extending from panel **19** is a partition panel **21**, divided from panel **19** by score line **22**. Extending from panel **21** is a top-wall flap **23** divided from panel **21** by score line **24**. A bottom wall panel **29** extends from panel **12** and is divided therefrom by score line **30**. A partition panel **31** extends from panel **29** and is divided therefrom by score line **32**. As described in further detail hereafter, panel **19** and **29** each form a half bottom wall and together form a bottom for the shipping container when it is set up. A top-wall flap **33** extends from panel **31** and is divided therefrom by score line **34**. A first bottom wall flap **35** extends from the first end panel **11** and is divided therefrom by score line **36**. A second bottom wall flap **37** extends from the second end panel **13** and is divided therefrom by score line **38**. Extending from panel **11** is a pair of turn-in flaps **40** and **41**, divided therefrom by score line **42**. Extending from panel **13** is a similar pair of turn-in flaps **44** and **45** divided therefrom by score line **46**. Extending from panel **10** and from panel **12** are top-wall flaps **47** and **49** divided from said panels by score lines **48** and **50**.

Partition panel **21** is cut and scored to provide a row of shock absorbing divider panels **51**, **52**, **53**, **54**, **55** and partition panel **31** is cut and scored to provide a corresponding row of shock absorbing divider panels **61**, **62**, **63**, **64**, **65**. These divider panels are alike and it will be adequate to describe one of them as typical. The board is cut through on cut lines **56**, **57**, **58** and scored on line **59** so that the divider panel **52** may be folded upwardly from the plane of the panel **21** as viewed in Fig. 1 on the line **59** which is herein referred to as a hinge line. When divider panel **52** is folded on the hinge line to lie at right angles to the plane of panel **21** it will provide an open window, as described in further detail hereinafter. Thus when dividers **51** to **55** are similarly folded there is provided a row of windows and the dividers form a like num-

ber of shock absorbing portions when the shipping carton is set up and the same applies to the dividers **61** to **65** in panel **31**.

One manner of folding or setting up and packing the shipping carton is as follows:

Panels **21** and **31** are folded on score lines **22** and **32** so that the inside surface **21***a* of the panel lies against the inside surface **10***a* of panel **10** and inside surface **31***a* of panel **31** lies against inside surface **12***a* of panel **12**, as shown in Fig. 2. It will be noted that the face surface **21***b* of panel **21** and face surface **31***b* of panel **31** are now exposed (as in Fig. 2) and that the faces of these panels may be embellished in any manner or these surfaces may serve as space for advertising or with designs **60** which have aesthetic appeal. As will be mentioned later on, these faces become exposed when the shipping carton is subsequently split in two.

The next folding step is illustrated in Fig. 3, wherein it will be observed that panel **10** together with the now folded in panel **21** is folded on score line **14** so that the face **21***b* of panel **21** lies face to face on face **31***b* of panel **31**. Then end panel **13** is folded on score line **16**, so that the edge **66** of panel **13** meets and registers with score line **18** of panel **10** with the connecting flap **17** underlying the end panel. The connecting flap may be glued, or stapled to the end panel or the seam may be taped or the parts may be secured in any other conventional manner. Or, the connecting flap may be put on the end panel **13** instead of the side panel **10**. If desired, the partially formed carton may be shipped or stored in this flat condition as shown in Fig. 3.

To proceed with setting up the shipping carton, the partially set up box is opened to form a tubular shape of rectangular cross section, the front and rear walls **10**, **12** and end walls **11**, **13**, forming the rectangular tube with the partition panels **21** and **31** extending upwardly within the tube as illustrated in Fig. 4.

Next, bottom panels **19** and **29** are pushed upwardly toward the interior of the carton so that they lie at right angles to the vertical front and rear side walls **10** and **12**, as illustrated in Fig. 5 (side wall **12** not visible in this figure). This folding step forces the partition panels **21**, **31** further upwardly into the carton.

Then the bottom wall flaps **35**, **37** are turned in on score lines **36**, **38** at right angles to the vertical end panels **11**, **13** and secured to the bottom panels **19**, **29** (see Fig. 6). The bottom flaps **35**, **37** may be secured to the bottom surfaces of panels **19**, **29** by adhesive, by stapling or in any conventional manner.

The carton as thus set up is now ready to be packed. Six bottles **68** in a row **68***a* are placed in the container space **70** formed by rear side wall **12**, end walls **11**, **13** and the partition panel **31** and six bottles **68** in a row **68***b* are placed in the container space **71** formed by the front side wall panel **10**, end walls **11**, **13** and the partition panel **21** (see Fig. 10). It will be observed that the dividers **51** to **55** in panel **21** have been folded inwardly toward side wall **10** forming shock absorber partitions between adjacent bottles **68** in row **68***b*, which leaves the windows **51***a* to **55***a* open. Dividers **61** to **65** in panel **31** have been folded inwardly toward side wall **12** forming shock absorber partitions between adjacent bottles **68** in row **68***a* which leaves the windows **61***a* to **65***a* open. The bottoms of the bottles in row **68***a* rest upon bottom panel **29** and the bottoms of the bottles in row **68***b* rest upon bottom panel **19**. The faces **21***b* and **31***b* of partition panels **21** and **31** engage each other in face to face relation.

The shipping carton having been packed in the two separate compartments, a row of six bottles (half a case of whiskey) in each, turn-in flaps **41**, **44** are folded inwardly between top-wall flaps **33**, **49** and turn-in flaps **40**, **45** are folded inwardly between top-wall flaps **23**, **47**. Then top-wall flap **33** is folded down on flaps **41**, **44** and top-wall flap **23** is folded down on flaps **40**, **45**. Then top-wall flap **49** is folded on to flap **33** and top-wall flap **47** is folded on to flap **23**. The top-wall flaps **49**, **47** are secured to the top surfaces of the underlying flaps by staples, or by adhesive or by an adhesive tape **72** along the seam where the edges **73**, **74** of the top flaps **47**, **49** meet (see Figs. 7 and 9). The shipping carton, designated S, packed and sealed and containing twelve bottles (referred to in the trade as a case of whiskey) is ready for transportation or shipment, as illustrated in Fig. 7.

The shipping carton is not only useful for storing, transporting or shipping the whiskey but is designed to be utilized as a display container. For example, the retailer, who receives the case of whiskey in the shipping container S, may easily split the carton in two by cutting bottom, top and end walls of the carton along their center lines, viz., the dotted line **75**, which separates the carton into two smaller containers, **C1** and **C2**, each containing six bottles (a half case). For convenience of description, containers **C1** and **C2** are referred to herein as right hand container or compartment **C2** and left hand container or compartment **C1**.

If desired, the second end wall **11** may be left unsevered to provide a hinge **76** between the two containers **C1** and **C2** and the containers may be spread apart as illustrated in Fig. 8, thus exposing the embellished faces **21***b* and **31***b* and exposing the open windows **51***a* to **55***a* and **61***a* to **65***a* so that the bottles **68** and their attached labels are exposed to the viewer through the open windows; thus providing an attractive display container. If the customer should desire to purchase a half case, and not a full case, the containers **C1** and **C2** may be cut along hinge line **76** (see Fig. 8) to separate them and the retailer then has the bottles prepackaged in an attractive container. This half case container may then be conveniently wrapped by him and carried by the customer.

It will be observed that the partition panel **21** forms a side wall for container **C1** and panel **19** forms a bottom wall upon which the bottles in that container rest, and flap **23** which extends from partition panel **21**, together with flap **47** extending from side panel **10** forms a top closure for container **C1**. Partition panel **31** forms a side wall for container **C2** and panel **29** forms a bottom wall upon which the bottles in that container rest, and flap **33**, which extends from partition panel **31**, together with flap **49** extending from side panel **12** forms a top closure for container **C2**.

As illustrated in the fragmentary view of Fig. 12, the windows in the partition panels **21***a* (corresponding to partition panels **21** in Fig. 10) may, if desired, be ovaloid in shape, to provide shock absorber dividers **51***b* and **52***b*, for separating adjacent bottles in the carton. Also, if desired, the blank may be perforated along the dotted lines **75** to provide perforations **75***a* in the corrugated board so that the shipping container may be split in two along the perforated line. However, the walls of the shipping carton should not be so weakened as to lessen the strength of walls of the carton to an extent which might cause damage to the contents when the packed carton is handled.

In the foregoing, a shipping carton has been described for holding two rows of bottles, six in a row, but it will be apparent from the foregoing description that a carton may be constructed according to the invention for packing a lesser even number of bottles, equally divided into two rows: for example, two rows of bottles, three in a row (a half case of whiskey).

Also reference has been made to front and rear side walls and first and second end walls, etc., but it will be understood that these terms have been used for convenience of description, as the various walls will be front, rear or end depending upon the orientation.

The terms and expressions which have been employed herein are used as terms of description and not of limitation, and there is no intention in the use of such terms and expressions of excluding any equivalents of the features shown and described or portions thereof, but it is recognized that various modifications are possible within the scope of the invention claimed.

What is claimed is:

1. A shipping carton for bottles and the like produced from a one-piece blank of paper board to provide a right hand and a left hand bottle holding compartment constituting a pair of connected together containers, said carton comprising a vertical first end wall panel, a vertical second end wall panel in a plane parallel with said first end panel, a vertical front side wall panel at right angles to said end panels, a vertical rear side wall panel parallel with said front panel, a first bottom panel extending from the bottom end of said front side panel at right angles to said front side panel and extending to a center line parallel with and midway between said front and rear panels, said first bottom panel extending over half the area of the bottom of said carton, a first partition panel extending upwardly from said first bottom panel from said center line in a plane parallel with the planes of said front and rear panels, a first top-wall flap extending from the upper end of said first partition panel toward said front panel at right angles thereto, a second bottom panel extending from the bottom end of said rear panel at right angles thereto and extending to said center line, said second bottom panel extending over the other half of the area of the bottom of said carton, a second partition panel extending upwardly from said second bottom panel from said center line in a plane parallel with the planes of said front and rear panels and in face to face engagement with said upwardly extending first partition panel, a plurality of divider members cut out from and integral with said first partition panel and extending toward said front panel in planes substantially at right angles to said partition panels, a plurality of divider members cut out from and integral with said second partition panel and extending toward said rear panel in planes substantially at right angles to said partition panels, a second top-wall flap extending from the upper end of said second partition panel toward said rear panel at right angles thereto, a first bottom flap extending from the lower end of said first end panel and at right angles thereto and secured to the under surfaces of said first and second bottom panels, a second bottom flap extending from the lower end of said second end panel and at right angles thereto and secured to the under surfaces of said first and second bottom panels, a third top-wall flap extending from the upper end of said front panel toward said rear panel and at right angles thereto, a fourth top-wall flap extending from the upper end of said rear panel toward said front panel and at right angles thereto, said top-wall flaps providing a top wall for said carton, a turn-in flap extending from the upper end of said first end panel and lying under said first top-wall flap, a turn-in flap extending from the upper end of said first end panel and lying under said second top-wall flap, a turn-in flap extending from the upper end of said second end panel and lying under said first top-wall flap, a turn-in flap extending from the upper end of said second end panel and lying under said second top-wall flap, said carton providing two separate bottle holding containers when said top, bottom and end walls of said carton are severed in a plane between said face to face engaging partition panels.

2. A carton constructed according to claim 1 and adapted for packaging in two rows an even number of like bottles of conventional shape having cylindrical body portions in which the width of said bottom panels is approximately equal to the diameter of the cylindrical portion of a bottle and the length of said bottom panels is equal to approximately the diameter of the cylindrical portion of a bottle multiplied by one half the number of bottles.

3. A carton constructed according to claim 1 in which the ends of the bottom flaps meet midway between said end panels.

4. A carton constructed according to claim 3 in which the ends of the said third and fourth top-cover flaps meet midway between said front and rear panels.

5. A carton constructed according to claim 4 in which an adhesive tape covers the joint where said third and fourth top-cover flaps meet.

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