Oct. 3, 1961 G. MERKEL ET AL 3,002,613

CARTON

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FIG. 1

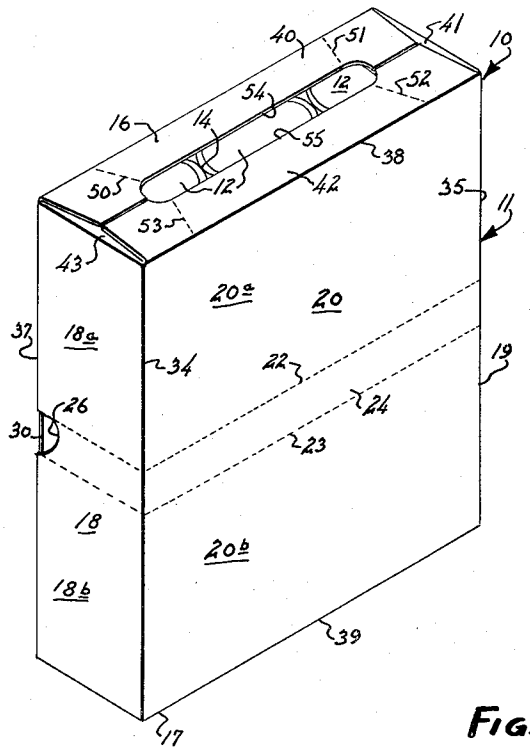


FIG. 2

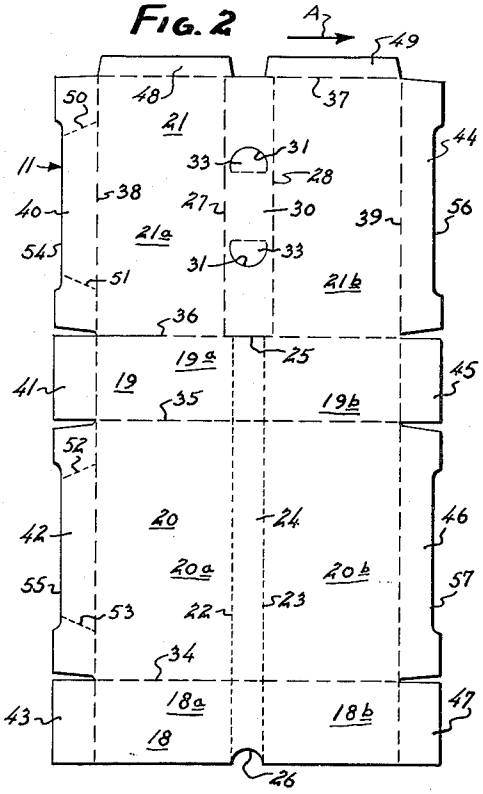


FIG. 3

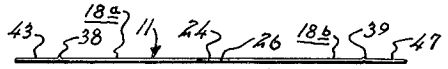
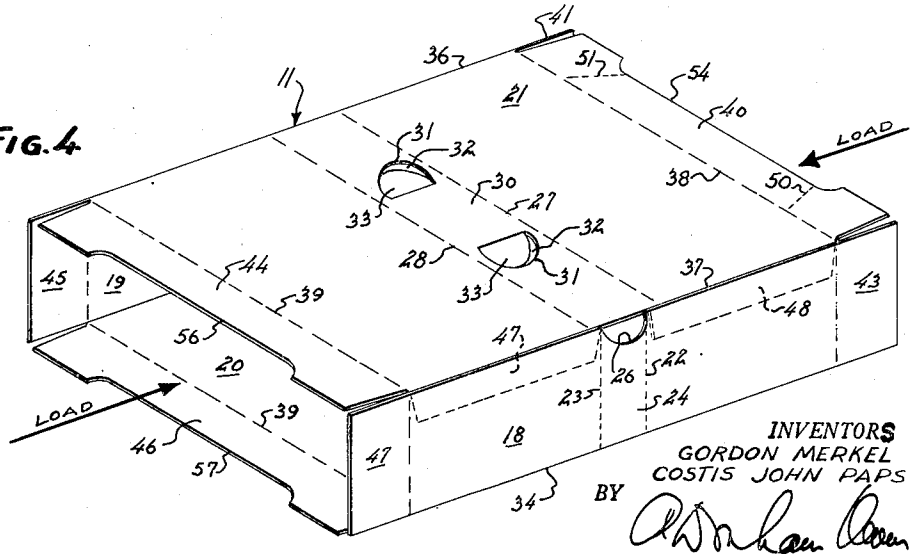


FIG. 4



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FIG. 5

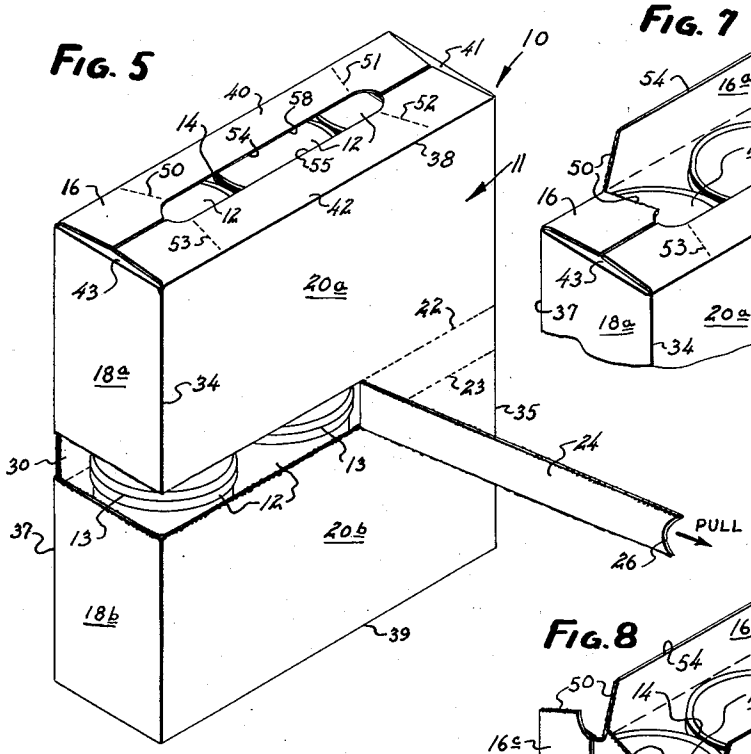


FIG. 7

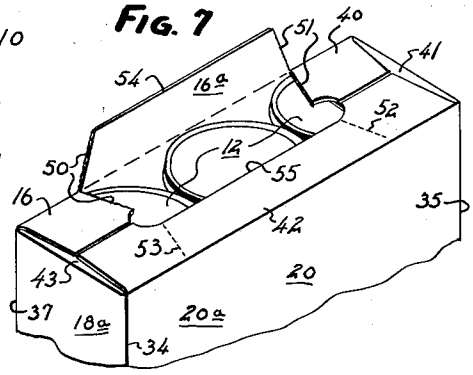


FIG. 8

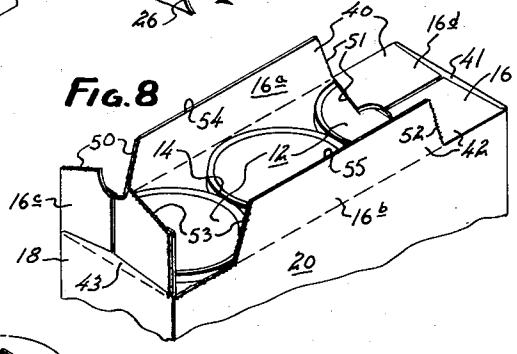
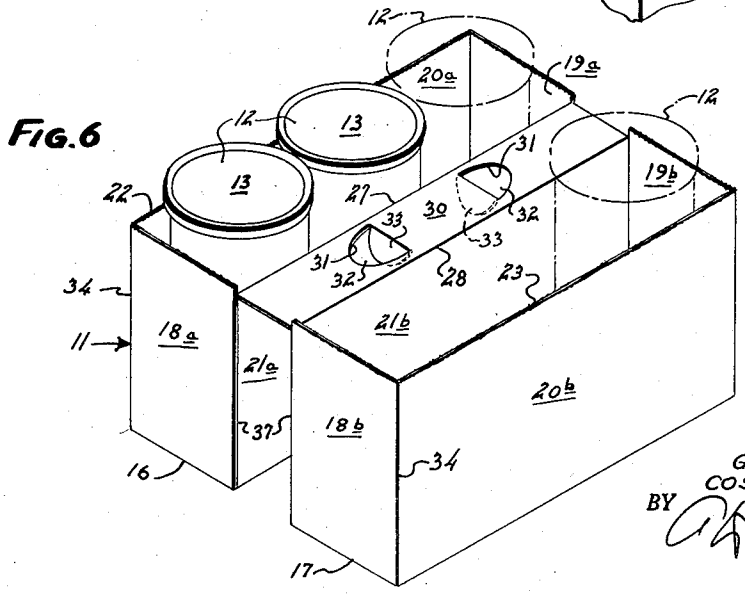


FIG. 6



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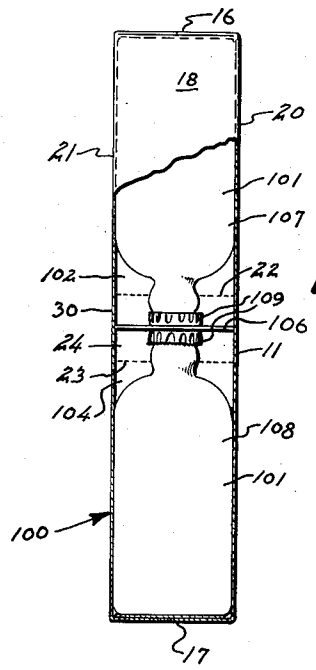


FIG. 10

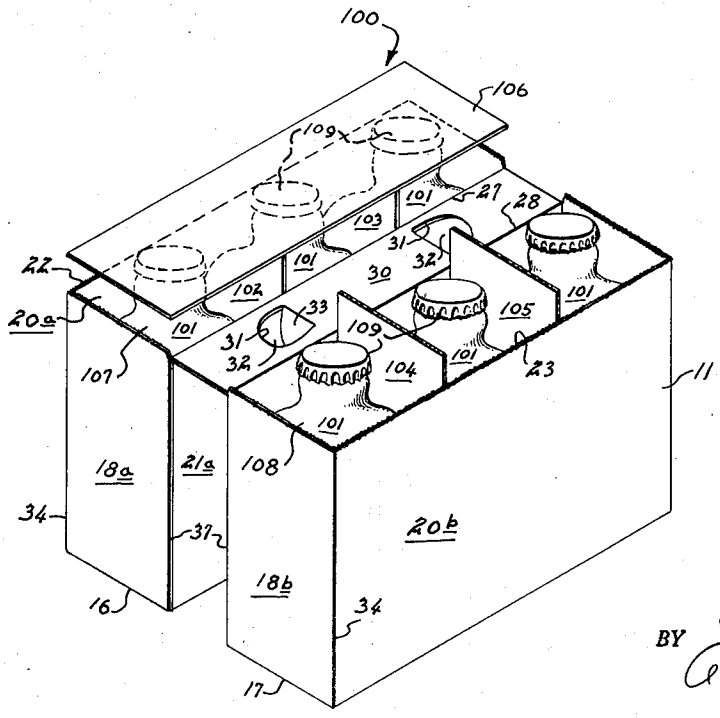


FIG. 9

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3,002,613

CARTON

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Filed Oct. 5, 1959, Ser. No. 844,454
7 Claims. (Cl. 206—65)

This invention relates to a new package and to an improved carton for said package.

The invention particularly relates to what are commonly known as six-packs, i.e., a package of six cans or bottles of beverages such as beer, soft drinks, etc. There are a great many six-packs on the market, but they are generally characterized by having two rows of cans or bottles side-by-side. In contrast, the present invention is characterized by having one row of three cans or bottles on top of and in end-to-end relationship with the other row of the same number of cans or bottles. This structure provides a modern slim-line design and makes a package that is convenient to carry, since it is about like carrying a book.

The present invention has another important advantage. A tear strip is provided which goes around three of the four sides of the container and makes it possible to convert the slim-line six-pack into a carton more like the conventional six-pack, for when the tear strip is removed, a remaining panel or web connects the two halves of the carton. This web has carrying-holes punched in it so that the carton can be carried by putting the fingers in the carrying holes.

Another important advantage of the invention is that the slim-line shape of the carton is especially suitable to large blocks of advertising. It makes a much more colorful and impressive display on the side walls of the panels than can be obtained with the conventional six-pack cartons.

Thus, among the objects of the invention are: to provide a carton which enables a better display; to provide an improved carton which is easily stored; to provide a carton which is especially convenient for the user to open; and to provide a carton which gives large panels for advertising or other matter.

Other objects and advantages of the invention and other structural features will appear from the following description of a preferred embodiment thereof.

In the drawings:

FIG. 1 is a view in perspective of a package embodying the principles of the invention, wherein six cans are held in a unitary carton.

FIG. 2 is a top-plan view of a blank from which the carton is made.

FIG. 3 is an end view of the blank.

FIG. 4 is a perspective view of the package laid on end with the end walls open to show how it is assembled from the blank and its state when it is ready for loading.

FIG. 5 is a view similar to FIG. 1, showing the tear strip partially pulled open.

FIG. 6 is a view in perspective showing the tear strip entirely removed, with the carton bent back along the supporting panel to enable it to be carried in a different position.

FIG. 7 is a fragmentary view in perspective showing one end of the package opened along end perforations.

FIG. 8 is a view similar to FIG. 7, showing the end more fully opened.

FIG. 9 is a view similar to FIG. 6 showing a package incorporating bottles instead of cans.

FIG. 10 is a view in elevation and partly in section of the package of FIG. 9, before the tear strip is torn.

A package 10 of this invention, as shown in FIG. 1, comprises a slim-line carton 11 enclosing a plurality of

containers, which here are cans 12. In the package 100 of FIGS. 9 and 10, the containers are bottles 101. Basically, the packages 10 and 100 are the same.

Unlike prior-art packages, where six-packs are made by having two parallel rows of cans or bottles, the package 10 has the ends 13 of one row 14 of cans 12 standing on the ends 13 of another row 15 of cans 12, making a top row 14 and a bottom row 15 in the normal upright position, although cans may be stacked into the carton 11 in other ways, and the carton 11 itself may lie on its side.

As shown, the carton has two end walls 16, 17, two narrow side walls 18, 19, and two wide side walls 20, 21. Midway between the end walls 16 and 17, the two narrow side walls 18 and 19 and one wide side wall 20 are provided with two discontinuous lines 22, 23 of perforations, which provide a tear strip 24 lying between the lines 22, 23 and terminated by a perforated end line 25 and a recessed edge 26, providing a pull tab for the tear strip 24. The fourth side wall 21 does not have perforations but, instead, is scored by two fold lines 27, 28 to make folding easier and to define between them a web or panel 30. The panel 30 is cut, preferably along a pair of circular arcs 31, to provide a pair of openings 32, each with a tab 33 attached to the web 30. This structure makes it easy to insert a finger and a thumb into the openings 32 and carry the package 10, either before or after the tear strip 24 is removed.

As FIG. 2 shows, the blank 11 is provided with fold lines 34, 35, 36, and 37 to define the four side walls 18, 19, 20, and 21. Fold lines 38 and 39 define top flaps 40, 41, 42, and 43 and bottom flaps 44, 45, 46, and 47, that make up the end walls 16 and 17. The blank 11 is also provided with glued tabs 48 and 49, defined partly by the fold line 37, which connects to the tabs 48 and 49 to the side wall 21. An important feature of the invention is that all the glue holding the carton together is applied lineally and continuously to the tabs 48, 49 while the blank is moved in the direction shown by the arrow A in FIG. 2. This eliminates the need for providing interrupted strips or spots of glue, which is very inconvenient when manufacturing cartons.

The end wall 16 is made by the four top flaps 40, 41, 42, 43; of these, the two flaps 40 and 42 are provided with lines of discontinuous perforations 50, 51, 52, 53. The flaps 40, 42, 44, and 46, also have recessed edges 54, 55, 56, 57, providing slots 58 in each end of the finished carton. Thus the lines 50, 51, 52, and 53 run from the recessed edges 54 and 55 to the fold line 38. The length of each flap 40, 41, 42, 43, 44, 45, 46, and 47 is about half the width of the end walls 18 and 19.

When the carton 11 is assembled, glue is applied along the areas 48 and 49, and the carton is folded along the lines 34, 35, 36, and 37 to give the empty carton 11 the shape shown in FIG. 4, where the end walls 16 and 17 are open. Cans 12 then are loaded into the carton 11 from each side or from only one side, as desired. In either event, the cans 12 are loaded into the positions shown in FIGS. 1 and 5, with the ends 13 of one row 14 against the ends 13 of the other row 15. Then the flaps 40, 41, 42, 43, 44, 45, 46, and 47 are glued to close end walls 16 and 17.

This is the way in which the package 10 appears in FIG. 1, when it is finished and on the grocer's shelf. Although it can be stacked in any direction, vertical stacking offers an attractive package and one which gives opportunity to display a large area of advertising on the side walls 18, 19, 20, and 21.

When the user buys the package 10, he may carry it as he would a book, as in FIG. 1, or by putting two fingers in the openings 32. Or he may carry it in a manner similar to that by which the normal six-pack is carried. He may do this by grasping the tab 36 and pulling off the

tear strip 24 to open the carton, as shown in FIG. 5, and then spreading the package along the fold lines 27 and 28, as shown in FIG. 6. This act divides each side wall 18, 19, 20, and 21 into two sections 18*a*, 18*b*, 19*a*, 19*b*, 20*a*, 20*b*, 21*a*, and 21*b*. This method may also be used to open the package 10 in order to get at the cans 12, so they can be opened and consumed, and the carton 10 may be left open and the cans 12 put back in, in order to dispose of them, later on.

If it is more convenient to carry the cans in the book-like shape, then the cans 12 may be gotten at from the top end wall 16 by tearing across the perforations 50, 51, 52, 53 as shown in FIGS. 7 and 8, dividing the end wall 16 into sections 16*a*, 16*b*, 16*c*, and 16*d*. Similarly, the cans 12 may again be restored in the same manner as before.

When bottles 101 are used instead of the cans 12, the Federal regulations call for insulating members separating the bottles, both those side-by-side and those end-to-end. Therefore, though the carton 11 is identical and through the carton 11 is loaded in a similar manner to that shown in FIG. 4, dividing strips 102, 103, and 104, 105 are provided between adjacent bottles 101 and a dividing strip 106 divides the top row 107 of bottles 101 from the bottom row 108, all the bottle caps 109 bearing against strip 106. Note that the bottles 101 are preferably put in with one row 107 inverted with respect to the other row 108. Then, when the tear strip 24 is removed, all bottles 101 will be right-side-up, as shown in FIG. 9.

To those skilled in the art to which this invention relates, many changes in construction and widely differing embodiments and applications of the invention will suggest themselves without departing from the spirit and scope of the invention. The disclosures and the description herein are purely illustrative and are not intended to be in any sense limiting.

We claim:

1. A carton for packing two end-to-end rows of on-end cylindrical containers, said carton having the general shape of a rectangular parallelepiped, with four side walls and two end walls, a narrow tear strip midway between the end walls running around three of said side walls leaving most of said three walls in place when said tear strip is torn off, and a panel on the fourth side wall marked by scores as a continuation of said tear strip and provided with a pair of perforations adapted for carrying the carton and contents with two fingers.

2. A carton for packing two end-to-end rows of three on-end cans, said carton having the general shape of a rectangular parallelepiped, with two wide side walls, two narrow side walls, and two end walls, a narrow tear strip midway between the end walls running around both said narrow side walls and one said wide side wall and forming only a small fraction thereof, and a panel on the other wide side wall marked by scores as a continuation of said tear strip and provided with a pair of carrying perforations.

3. The carton of claim 2 wherein said end walls are each made of four flaps, one from each side wall, and wherein the flaps extending from said narrow side walls are substantially the same length as the flaps extending from said wide side walls and wherein the flaps extending from said wide side walls are slightly less than half as long as the width of said narrow side walls so that they nearly meet and have deep central recesses at their edges to provide a viewing slot.

4. The carton of claim 3 wherein the flaps extending at one end of said carton from said wide side walls have a pair of perforated tear lines spaced apart from each other and lying in the recessed portions between the ends of the flaps extending from said narrow side walls.

5. A novel package, comprising two rows of three cans each packed on end with the rows end-to-end; and a carton enclosing the six cans and having the shape of a rectangular parallelepiped with two end walls and four side walls, said carton having a tear strip running generally parallel to said end walls and midway between them around three of said four walls, and a panel on said fourth wall marked by scores as an extension of said tear strip and having carrying holes punched therein.

6. A novel package, comprising two rows of three cans each packed on end with the rows end-to-end; and a carton enclosing the six cans and having the shape of a rectangular parallelepiped with two end walls, two narrow side walls, and two wide side walls, said carton having a tear strip running generally parallel to said end walls and midway between them around three of said four walls, and a panel on said fourth wall, marked by scores as an extension of said tear strip, and having carrying holes punched therein, said end walls being provided by flaps of substantially equal length extending from said side walls less than half the width of said narrow side walls, the flaps extending from said wide side walls being recessed to provide a central slot along said end walls when said flaps are glued in place, and at least one of them being provided with perforate tear lines near the ends of the recessed portions to enable quick opening thereof.

7. A novel package, comprising two rows of three cans each, packed on end with the rows end-to-end; and a carton enclosing the six cans and having the shape of a rectangular parallelepiped with two end walls and four side walls, said carton having a tear strip running generally parallel to said end walls and midway between them around three of said four walls and a panel on said fourth wall marked by scores as substantially an extension of said tear strip and having carrying means thereon.

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