MULTI-USE CONTOUR DISPLAY CARTON

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MULTI-USE CONTOUR DISPLAY CARTON
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This invention relates to a novel carton construction, and more particularly to a carton possessing unique characteristics for display and promotional purposes which maximizes utilization of shelf space for the retailer while also providing considerable packaging economies for the manufacturer of the goods packaged therein.

In a highly competitive retail economy it is of the essence to pare packaging costs to a minimum while at the same time providing a package or carton which will efficiently display and direct attention to the goods offered to the consumer.

It is therefore an object of the present invention to provide a carton which provides novel versatility in the packaging of goods, and more particularly to provide a carton which can be used with any of a plurality of similar goods which differ in various respects, as for example in grade, color or price, wherein the carton stock can be preprinted to accommodate the several variations contemplated, yet when displayed for sale, be correctly marked as to the particular features of the particular packaged goods therein.

Other objects and advantages of the present invention will become apparent from the following detailed description taken in connection with the accompanying drawings in which:

FIGURE 1 is a perspective view of a carton constructed according to the invention.

FIGURE 2 is a top plan view of the carton of FIGURE 1.

FIGURE 3 is a transverse sectional elevation of the carton taken on the line 3—3 of FIGURE 2, the indicia panels being shown as removed therefrom.

FIGURE 4 is a longitudinal sectional view taken on the line 4—4 of FIGURE 1.

FIGURE 5 is a plan view of the blank from which the carton of FIGURE 1 is formed, subsequent to removal of the surplus indicia panels initially provided thereon.

FIGURE 6 is a fragmentary view of an illustrative punching and die means which may be employed in removing the surplus indicia panels prior to carton erection and filling.

FIGURE 7 is a perspective view of a modified form of carton adapted for standing erect for display; the indicia panels being not shown thereon.

FIGURE 8 is a fragmentary plan view of the blank from which the carton of FIGURE 7 is formed, particularly illustrating the support foot construction thereof.

Referring to the drawings, the carton 10 of FIGURES 1—6 is formed from the blank shown in FIGURE 5, and includes front wall 12, rear wall 14, narrow connecting side panels 16, 18, inner end panels 18, 18 at each end of rear wall 14, and outer end panels 20, 20 similarly associated with front wall 12. A conventional glue flap 22 extends along one edge of rear wall 14 for adhesive securing of one side panel 16 in forming the carton into tubular form.

The carton is formed from conventional carton stock which may include a decorative outer foil lamina to enhance the attractive appearance thereof, and is suitably printed with desired trademark, advertising and informational data.

Front wall 12 in the initial scoring and cutting of the carton blank is provided with a plurality of spaced knock-out indicia portions or panels 24 defined respectively by potential lines of separation 26. One such pane 24 is illustrated in the several figures, the remaining indicia panels of like configuration, shown as three in number, having been removed therefrom subsequent to blank manufacture by suitable means, as for example a co-operating punch and die arrangement 28, 30, FIGURE 6. The removed panels 24 respectively define product view apertures 32 in the front carton wall 12.

Specifically, the carton blank as manufactured includes the entire set of indicia panes 24, and the carton user in imprinting the blank as hereinabove mentioned, also imprints each individual indicia pane 24 with a different legend in accordance with the varying characteristics of any of the several types of goods which may be ultimately packaged therein. Thus, for example, the several panels 24 may be respectively imprinted as to the color choice available of the ultimately cartoned goods, as “Blue,” “Green,” “Yellow” and “Red”; or, the panes may be respectively printed as to price variations, as for example, “$1.00,” “$0.90,” “$0.80,” “$0.75,” or “2¢ Off,” “4¢ Off,” “10¢ Off,” “2¢ for 1 Special,” “Free premium,” etc.

It will thus be seen that the packager may place an order for cartons variably imprinted in the several indicia panes 24 in accordance with whatever variations he may contemplate for his product line, and need maintain in inventory only a single type of preprinted carton for a range of similar products having variations in color, brand, price, specific use instructions, etc. In this manner it will be seen that the expense of separately ordering and separately stockin smaller quantities of cartons each individually printed as to the particular characteristics of a single specific product ultimately produced therein is obviated, thereby effecting a material saving in relatively expensive preprinted carton stock.

Prior to carton erection and packaging of a selected product therein in a given product run, a quantity of the identical cartons having the variably printed indicia panes 24 therein are run through an inexpensive adjustable blanking punching and die set, as diagrammatically illustrated at 28, 30 in FIGURE 6, wherein the punch elements 34 are adjusted so as to knock out the unwanted indicia panes 24, leaving only the selected one thereof providing the information as to the particular item to be cartoned therein.

The blanking operation is perhaps more efficiently performed by the carton manufacturer upon the request of the carton user, after which tubed and blanked cartons having the desired pane 24 remaining are shipped ready for filling to the carton packager or user. Alternatively, entire carton blanks may be shipped to the carton user, who as needed tubes the surplus panels 24, and thereafter tubes the carton by effecting securing of glue flap 22.

In this connection the removal of the surplus indicia panes 24 provides a plurality of view apertures 32, whereby the subsequent purchaser may inspect the goods within the carton on display.

The indicia panes 24, and the resultant view apertures 32, in the illustrated embodiments are of oval configuration to decoratively complement the generally oval cross-sectional configuration of the carton, but it will be apparent that the members 24 and the carton configuration illustrated may be of any configuration whatever in accordance with the particularities of the carton, its contents, or merchandising plan of the packager.

Referring again to the basic carton construction, it will be seen that after tubing of the carton blank by securing the glue flap 22, the carton is outwardly bulged front and rear wall configuration illustrated by successive infolding of the end flaps 18, 20.
By virtue of the arcuate terminal edge and the spaced arcuate fold line 19 of each flap, the carton will not only be bowed outwardly along the front and back walls 12, 14 as shown, but also the flaps 18, 20 possess an inherent toggle-like action as the same are flexed downwardly and inwardly to snap overcenter causing the lapped carton end flaps to partake of the concave configuration best seen in FIGURE 2, with the flaps resiliently held in infolded position, whereby no further adhesive means are necessary to secure the carton in closed condition.

Each of the innermost end flaps 18, 18 is provided with a notch at 36 to facilitate entry of the finger or fingernail in opening either end of the carton, which is easily effected by flipping the end panels 18, 20 outwardly back to their substantially coplanar relation to their adjacent front and back walls.

The outwardly bowed front and rear walls 12, 14 bear a cooperative relation to the removable indicia panes 24 in that the strengthening of the carton walls resulting from stressing the same to an arcuate outwardly bowed configuration more than compensates for the relative weakening of the front wall by removal of the several panels 24 in forming the view apertures, whereby the carton suffers no loss in effective strength by indicia pane removal therefrom.

In the form of carton of FIGURES 7 and 8, the modified end flaps 38, 40 at the lower end of the carton are so configured as to permit the carton to stand erect without further support, thereby enhancing the display and merchandising capability thereof, especially as employed with the indicia panes and view apertures. Specifically, while the modified end flaps 38, 40 possess the same arcuate terminal edges as the upper flaps 18, 20, the flaps 38, 40 are each connected to the respective front and back walls 42, 43 by a pair of complementary spaced arcuate crease line segments 42, 42 rather than by the continuous arcuate crease line 19 of the FIGURE 5 carton. The arcuate fold lines 42, 42 are connected by a generally reversely directed shallow U-shaped slip 44 facing outwardly from its adjacent carton wall. Each slit 44 includes a straight-line central portion 46 terminating in a narrow arcuate segment 48 extending to the respective fold lines 42. The straight-line slit portions 46 are parallel to and slightly outwardly spaced from the ends of narrow side wall panels 16.

This described construction of end flaps 38, 40 results in the formation of similar foot members 50, 50 at the lower ends of the carton, coupled with the lower edges of side panels 16, 16, provide a four-point base support for the carton, enabling the same to stand erect by itself, as seen in FIGURE 7, despite the generally elongated and narrow configuration of the carton 10. Further, the relatively elongated feet 50 defined by the straight-line slit portions 46 render the support base surprisingly stable. As before, the panes 38, 40 by virtue of arcuate fold line portions 42, 42 thereof effect a toggle-like action during infolding thereof, whereby the carton lower end remains closed without further securing until manually opened.

While not specifically illustrated in the views of FIGURES 7 and 8, it will be seen that the self-standing feature of the modified carton 10 is especially advantageous for use with the arrangement of indicia panes 24 and view apertures 32 above discussed, whereby the modified cartons 10 may be readily displayed on the shelf with the informative printing in panes 24 in upright position in a manner to be easily read by the purchaser, while the carton contents may be inspected through the view aperture 32.

While the invention has been disclosed and described in connection with the specific cartons illustrated in the drawings, it will be understood that other and varying forms of cartons, indicia panes, etc., may be employed without departing from the spirit and scope of the invention.

What is claimed is:

1. A multi-use merchandising display carton including a front wall, a plurality of spaced panes having indicia thereon integrally formed with said front wall, each said pane being respectively defined by a line of separation forming a closed loop with the indicia on each said pane respectively having differing information, whereby all said panes, other than a selected pane having information thereon specifically related to the carton contents, are removed from said front wall by rupturing said separation lines respectively associated therewith prior to merchandising of said carton and wherein each resultant ruptured line defines an aperture through said front wall permitting inspection of the carton contents.

2. The carton of claim 1 wherein said front wall thereof is normally flexed to an outwardly arcuated bowed configuration thereby to maximize the structural rigidity of said carton notwithstanding removal of said indicia panes from the said front wall thereof.

3. The carton of claim 1 wherein all of said indicia panes are of identical configuration to permit ready rupturing of each line of separation associated therewith by tool means of like configuration.

4. A multi-use merchandising and display carton comprising relatively wide and elongated front and rear walls, connected along their longitudinal margins by narrow side walls and provided with infolded end flaps at each end of said front and rear walls, said front wall having thereon a plurality of spaced panes of similar configuration integrally formed with said front wall and bearing respectively differing product-information indicia thereon, said indicia panes being peripherally defined by a line of separation forming a closed loop to permit removal from said front wall of all indicia panes other than a pane bearing selected product-information specifically related to the carton contents and prior to merchandising of said carton.

5. Separation lines associated with unwanted indicia panes defining after rupture viewing apertures through said front wall for contents inspection, said carton end flaps each being connected to the adjacent wall by inwardly arcuate fold lines and each terminating in an outwardly arcuate edge in engagement with the other wall to impart to said front and rear walls outwardly arcuated bowed configurations to rigidify said carton including said front wall notwithstanding the plurality of view apertures therein, the said end flaps at the lower ends of said front and rear walls each having a generally U-shaped outwardly directed slit therein to define a U-shaped foot portion on each said wall, said foot portions and the adjacent lower ends of said side walls providing support for said carton to permit the same to be self-supporting in erect position on shelf display, thereby also to dispose said front wall indicia pane and viewing apertures in a substantially vertical plane for ready observation and use thereof by a potential purchaser.

6. A multi-use merchandising and display carton comprising relatively wide and elongated front and rear walls, connected along their longitudinal margins by narrow side walls and provided with infolded end flaps at each end of said front and rear walls, said front wall having thereon a plurality of spaced panes integrally formed with said front wall and bearing respectively differing product-information indicia thereon,
each said indicia pane being peripherally defined by a line of separation forming a closed loop to permit removal from said front wall of all indicia panes other than a pane bearing selected product-information specifically related to the carton contents and prior to merchandising of said carton, said separation lines associated with unwanted indicia panes defining after rupture viewing apertures through said front wall for contents inspection, said carton end flaps each being connected to the adjacent wall by inwardly arcuate fold lines and each terminating in an outwardly arcuate edge in engagement with the other wall to impart to said front and rear walls outwardly bowed configurations to rigidify said carton including said front wall notwithstanding the plurality of view apertures therein.

References Cited by the Examiner

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Date</th>
<th>Inventor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,516,398</td>
<td>11/1924</td>
<td>McDowell</td>
</tr>
<tr>
<td>1,752,504</td>
<td>4/1930</td>
<td>Penrose</td>
</tr>
<tr>
<td>2,018,707</td>
<td>10/1935</td>
<td>Daller</td>
</tr>
<tr>
<td>2,186,940</td>
<td>1/1940</td>
<td>Sullivan</td>
</tr>
<tr>
<td>2,286,647</td>
<td>6/1942</td>
<td>Roberts</td>
</tr>
<tr>
<td>2,420,045</td>
<td>5/1947</td>
<td>Krug</td>
</tr>
<tr>
<td>3,155,273</td>
<td>11/1964</td>
<td>Cote</td>
</tr>
</tbody>
</table>

FOREIGN PATENTS

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Date</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>123,101</td>
<td>12/1946</td>
<td>Australia</td>
</tr>
<tr>
<td>93,388</td>
<td>11/1938</td>
<td>Sweden</td>
</tr>
</tbody>
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