March 22, 1966 T. E. CATHCART, JR., ETAL 3,241,660

COLLAPSIBLE FULL VIEW DISPLAY CARTON

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Fig. 1.

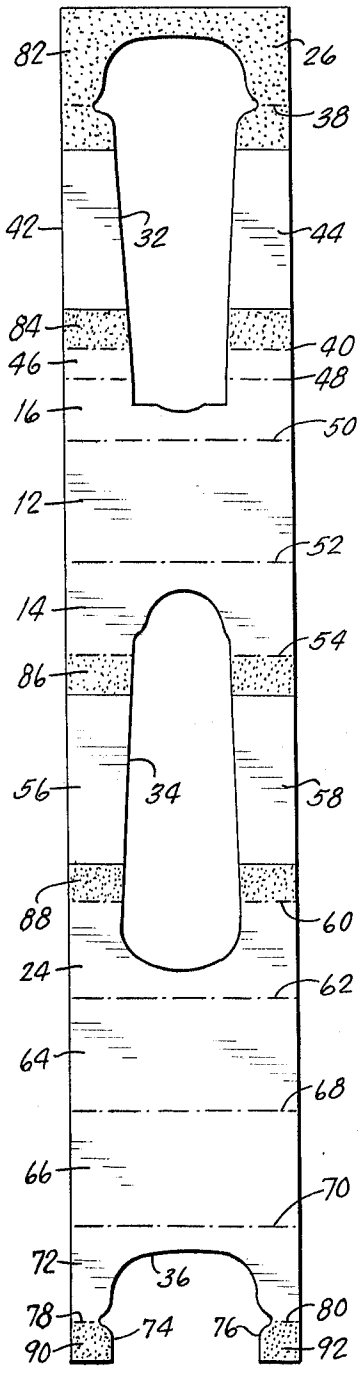


Fig. 2.

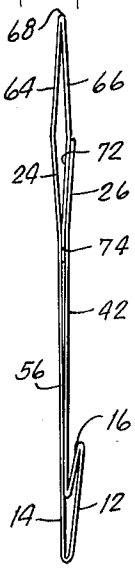


Fig. 3.

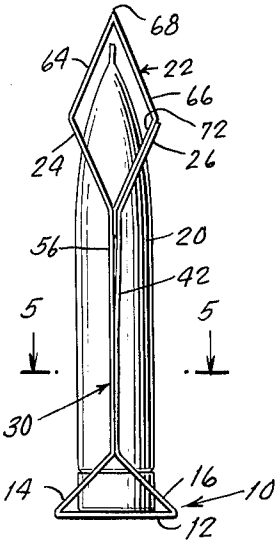
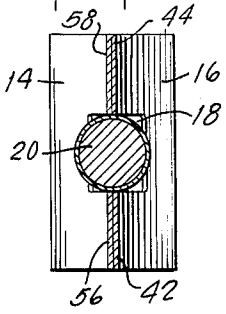


Fig. 5.



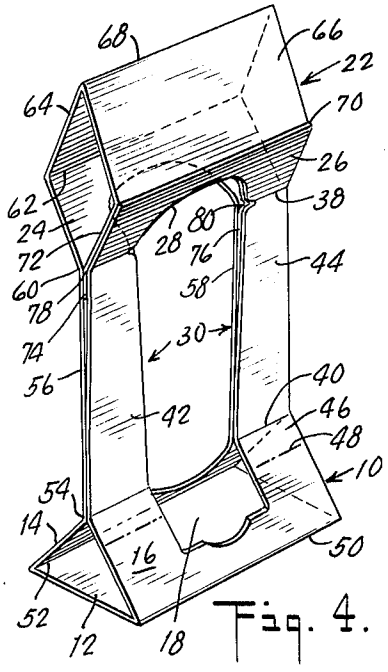


Fig. 4.

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COLLAPSIBLE FULL VIEW DISPLAY CARTON

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4 Claims. (Cl. 206—45.14)

This invention relates to a display carton, and more particularly to a collapsible or foldable display carton.

It is the primary object of this invention to provide a display carton which will afford a means for displaying to a maximum extent its packaged contents, while at the same time affording a great degree of protection to the contained package and its content.

Certain products have heretofore been merchandised in artistic bottles, tubes and jars, enclosed in cartons which either entirely or in large part concealed the attractive appearance of the internal package. At least a partial display of the enclosed package heretofore has been achieved by resort to window cutouts in the face of the carton. Such cutouts have sometimes been open but usually they have been covered by some transparent window material. Whatever success has been achieved in the display of the contents of a carton has been limited and subjected to one or more disadvantages.

In certain industries, typified by that of cosmetics, the products are ordinarily packaged in artistically conceived containers in the form of bottles, tubes or jars. The appeal of the artistic and usually expensive packages has been largely lost by enclosing them in cartons of ordinary appearance for the purpose of shipment and subsequent sale at the retail level. Some manufacturers have, in such cases, resorted to equally expensive and artistic cartons with a resulting increase in the overall cost of the product. It is, therefore, desirable to make available a carton which will afford a substantially complete view of the package therein, and which, at the same time, will in itself be attractive and afford a great degree of protection to the enclosed package and its contents.

It is a further object of this invention to provide a display carton which is inexpensive to make, which is collapsible, and, therefore, convenient to ship and store, and yet one which in itself is attractive.

The objectives of this invention are achieved by providing a display carton having a base structure including a base panel adapted to support the carton in upright position, and in which the base structure also has a pair of base sections converging upwardly from the base panel to form between them a base receptacle for one end of a container. The other end of the carton comprises a head structure including a pair of head panels forming between them a receptacle for the opposite end of a container seated at its one end in the base receptacle. Interconnecting the base structure and the head structure are a pair of spaced columns adapted to receive between them a container seated at its respective ends in the base receptacle and the head receptacle. The structure thereby provides a carton in which the package is securely held and protected but at the same time exposed to view in almost its entirety.

Further objectives and advantages of this invention will become apparent as the description is read in light of the drawing, in which:

FIG. 1 is an extended plan view of the blank from which the display carton is formed;

FIG. 2 is a side elevational view of the carton in folded or collapsed condition;

FIG. 3 is a view similar to that of FIG. 2 with the exception that the carton is erected into operative position and is illustrated with a container in the form of tube therein;

FIG. 4 is a perspective view of the display carton in erected position; and

FIG. 5 is a sectional view taken on line 5—5 of FIG. 3.

In brief, the display carton herein (FIG. 4) has a base structure 10, including a base panel 12 adapted to support the carton in upright position. A forward base section 14 and a rear base section 16 both converge upwardly from the base panel 12 and form between them a base receptacle 18 for one end of a container 20 (FIG. 3). A head structure 22 (FIG. 4) includes a pair of head panels 24 and 26 forming between them a head receptacle 28 for the opposite end of the container 20. A pair of spaced columns 30 interconnect the base structure 10 and the head structure 22. These columns are adapted to receive therebetween a container seated at its respective ends in the base receptacle 18 and the head receptacle 28 whereby the container 20 within the carton is displayed between the columns 30.

A more particular understanding of the invention can be attained by reference to FIG. 1 which shows the cutout blank of material, such as cardboard, from which the carton is most conveniently fabricated.

In FIG. 1, it is shown that a single blank of material is utilized in the construction of the carton. In this figure, the blank is died out to form the container embracing portions of the carton. Thus, cutouts 32, 34 and 36 are formed which, when the blank is folded, it will define the base receptacle 18, the head receptacle 28 and the columns 30. Parallel creases, or score lines, are formed transversely in the blank to permit the proper folding thereof and to define the several elements of which the carton is formed. A score line 38 near one end of the blank defines between it and the end of the blank the head panel 26. A score line 40 in conjunction with the score line 38 define the length of a pair of back panels 42 and 44. A fold strip 46 is formed between the score line 40 and a spaced score line 48. Between the score line 48 and a score line 50 is the rear base section 16 and immediately adjacent is the base panel 12 whose width is defined by the score line 50 and a score line 52. Between the score line 52 and a score line 54 is the forward base section 14. A pair of face panels 56 and 58 are formed between the score line 54 and a score line 60, while the head panel 24 lies between the score line 60 and a score line 62. A front display panel 64 is articulated to the head panel 24 by the score line 62, and a back display panel 66 is also articulated to the front display panel 64 on a score line 68. Beyond the back display panel 66 and separated therefrom by a score line 70 is a glue lap 72 which terminates in a pair of glue lap extensions 74 and 76 which are traversed respectively by score lines 78 and 80.

Glue is then applied to certain areas of the preformed blank, as indicated by the stippled areas 82, 84, 86, 88, 90 and 92. The blank is then folded such that the end of the head panel 26 is brought substantially into coincidence with the score line 70 (FIG. 4) with the head panel 26 overlying the glue lap 72 and its glue lap extensions 74 and 76. As so folded, the score line 68 will constitute the upper extremity of the structure. In order to completely collapse the carton such that the several glue areas will register as intended, the base panel 12 is folded inwardly on the score line 52. This fold is possible because of the score lines 48 and 50 which permit the face of the rear base section 16 to fold into contact with the columns 30.

An adhesive connection is now effected between the glue areas 90 and 92 on the glue lap extensions 74 and 76, respectively, and the glue area 88. At the same

time, the glue area **82** will be brought into contact with the outer face of the glue lap **72** including its glue lap extensions **74** and **76**.

Glue may be applied to the entire confronting faces of the back panels **42** and **44** and the face panels **56** and **58** which form the columns **30**. However, limited areas of these panels may be glued together effectively as shown by the more limited glue areas associated with these panels. In any event, when the carton is folded as described, the glue areas **84** and **86** will be in registration to connect the base of the back panel **42** to the base of the face panel **56**, and in like manner, the base of the back panel **44** to the base of the face panel **58**.

It should be noted that the several score lines across the carton blank are so related to each other in respect of their position on the blank that certain of the score lines will coincide with each other. Thus, the score lines **62** and **70** will coincide with each other; the score lines **38** and **60** will coincide with each other and with the score lines **78** and **80** in the glue lap **72**; and finally the score lines **40** at the base of the back panels **42** and **44** will coincide with the score line **54** at the base of the face panels **56** and **58**.

After the folding and gluing operation, the carton will be in a collapsed form as shown in FIG. 2. This is a convenient form in which to store the carton or to ship them to an ultimate user. When the user receives the carton and is ready to package his product therein, the carton is erected as shown in FIG. 4. In this condition the base panel **12** and the forward and rear base sections **14** and **16**, respectively, will assume a relationship which is triangular in cross section such that the base panel **12** may be considered disposed in a horizontal plane to form a support for the carton. The columns **30** will extend in an upright direction from the apex of the base structure **10** and the head structure **22** will assume a cross-sectional configuration which is generally diamond shaped. One end of the container **20** can now be inserted into one end thereof of base receptacle **18** and the opposite end thereof into the head receptacle **28**. By reason of the flexibility of the carton, this insertion is easily accomplished simply by flexing the carton at the one or more of its score lines.

It should be noted that the glue lap extensions **74** and **76** extend downwardly between their associated column panels to impart strength to the structure at a point where weakness may otherwise be manifest. Furthermore, it is also of importance to note that the score line **48** at the inner edge of the fold strip **46** is below the glue area **84** and, therefore, together with the fold strip **46** permits the base structure **10** to be folded flat with the rear base section **16** in face-to-face contact with the back panels **42** and **44** of the column structures **30**.

The invention provides the advantage that the merchandise container when so packaged is directly displayed almost in its entirety and it is firmly held in such display position within the carton without the use of additional

transparent wrapping. Withal, the substantial external surfaces of the carton provide ample space for artistic decoration and/or desired sales messages. Finally, the invention provides a carton which is very inexpensive to manufacture, ship and store, and which is simple to erect and fill.

While the novel features of the invention have been illustrated and described in connection with a specific embodiment of the invention, it is believed that this embodiment will enable others skilled in the art to apply the principles of the invention in forms departing from the exemplary embodiment herein, and such departures are contemplated by the claims.

What we claim is:

1. A display carton having a base structure including a base panel adapted to support said carton in upright position, a pair of base sections converging upwardly from said base panel and forming between them a base receptable for one end of a container, a head structure including a pair of head panels forming between them a head receptacle for the opposite end of a container seated at its one end in said base receptacle, and a pair of laterally spaced columns each comprising a back panel and a face panel interconnecting said base structure and said head structure and defining therebetween a through passage being adapted to receive therein a container seated at its respective ends in said base receptacle and said head receptacle whereby a container within said carton is displayed between said columns.

2. The carton of claim 1, wherein each said face panels comprises an extension of one of said base sections and each said back panels comprises an extension of the other of said base sections, coinciding hinge lines extending across said face panels and said back panels at their junction with said base structure, a hinge line extending in parallel with said first-named hinge lines across one of said base sections between said base panel and one of said last-named hinge lines, and an adhesive connection between said panels comprising each of said columns.

3. The carton of claim 1, in which said head structure includes a front display panel and a substantially coextensive back display panel.

4. The carton of claim 3, in which one of said display panels includes a pair of glue lap extensions adapted to enter between the upper ends of said face panels and back panels comprising said spaced columns whereby said structure is reinforced at the junction of said columns and said head structure.

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