

[54] **BOOK-TYPE CARTON**

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[51] Int. Cl. **B65d 5/50**

[58] Field of Search..206/45.11, 45.14, 45.17, 45.19, 206/46 FR, 65 R, DIG. 20; 229/34 HW, 38, 39 R, 44 R

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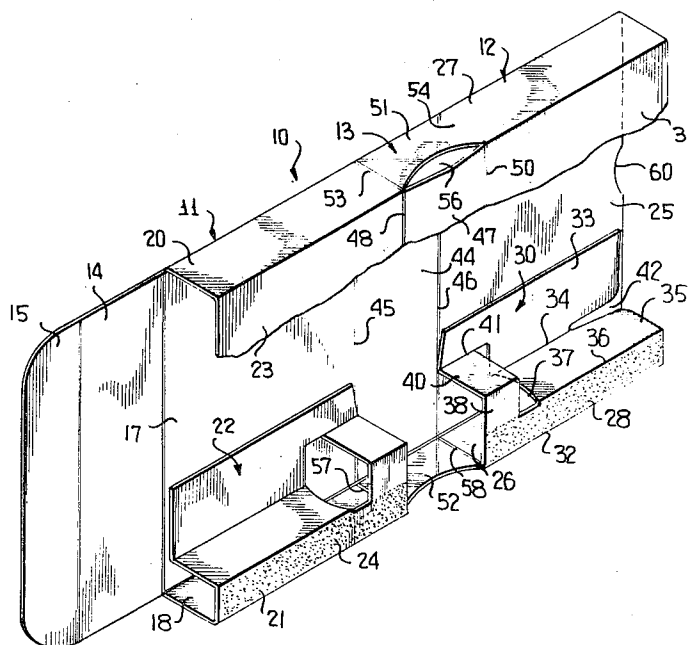
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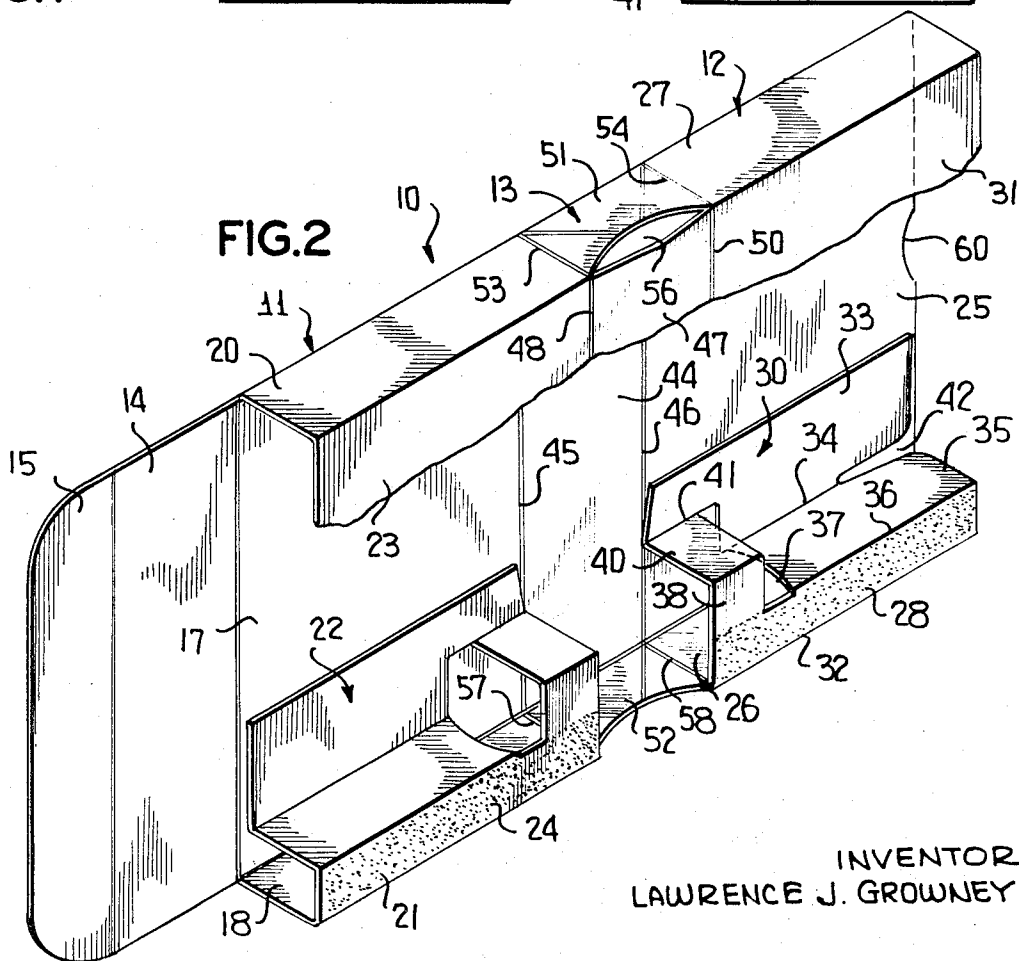
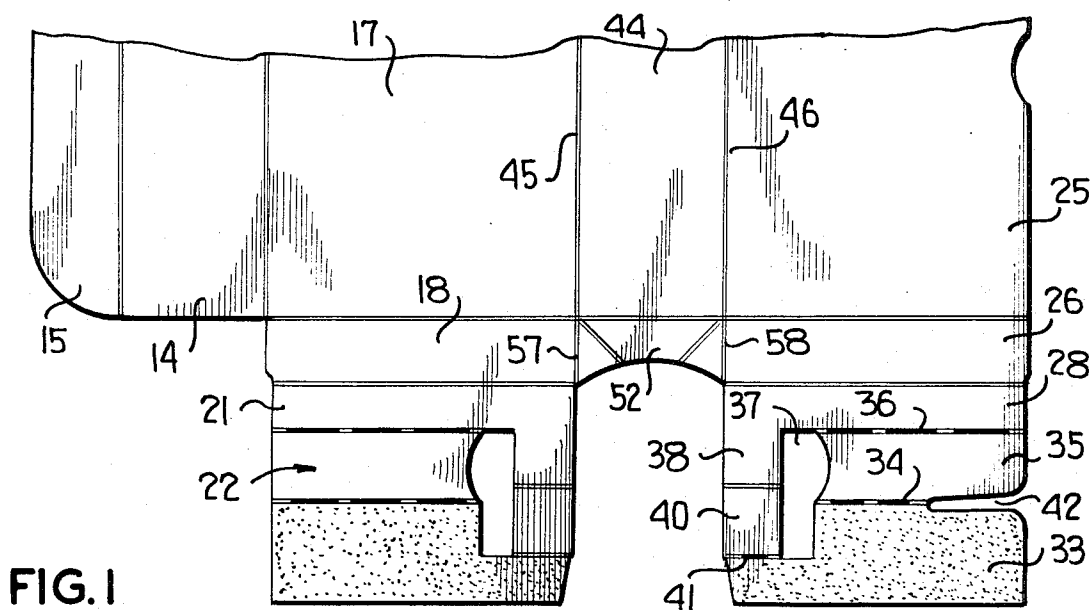
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[57] **ABSTRACT**

This disclosure relates to a book-type carton which is basically formed of two hollow sections constructed to have positioned therein articles to be dispensed with the articles being displayed. Each of the carton sections includes an article support, and the carton is readily foldable to a closed position with the carton including a closure panel which is readily interlockable with one of the article supports in a novel manner which in no way detracts from appearance or strength of the carton.

4 Claims, 5 Drawing Figures





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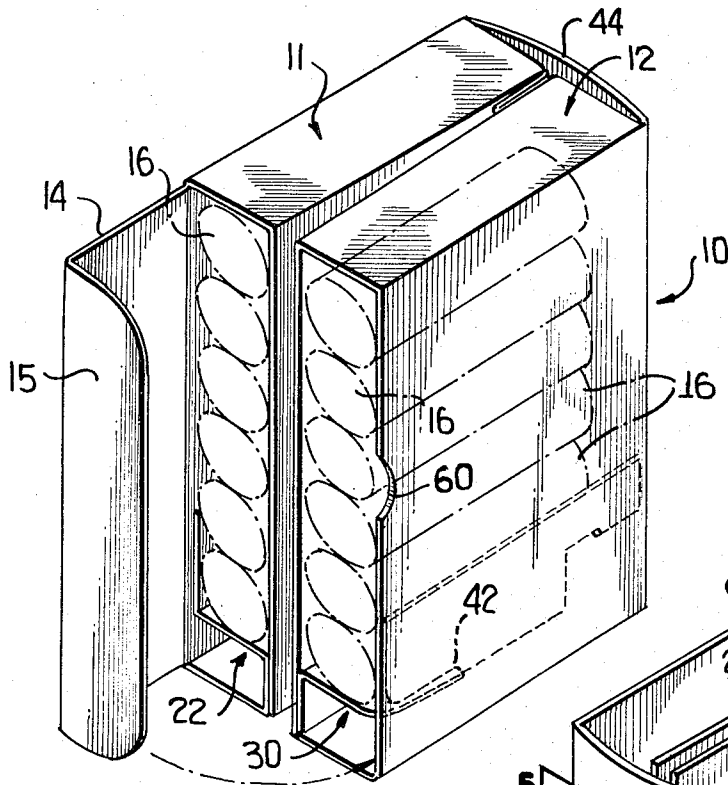


FIG. 3

FIG. 4

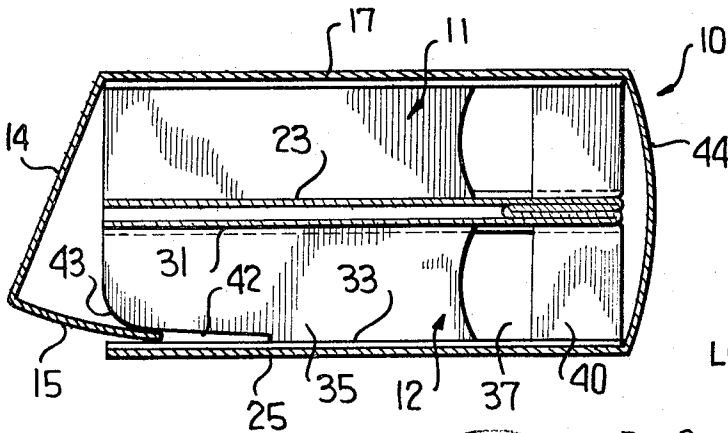
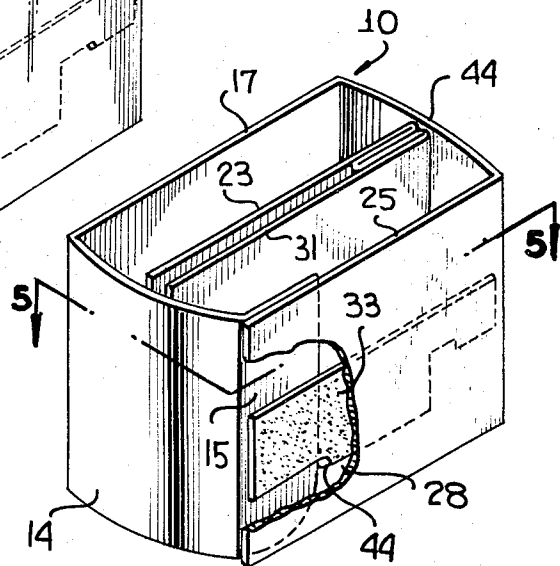


FIG. 5

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BOOK-TYPE CARTON

This invention relates in general to new and useful improvements in cartons, and more particularly relates to a carton having the general appearance of a book.

In accordance with this invention, there is provided a carton which is formed of two hollow sections joined together by an intermediate hinge section whereby the hollow sections may be swung into opposed cooperative closing relation. The carton is also provided with a closure panel which is intended to oppose the hinge section, which closure panel is provided with a locking flap for locking the carton in its closed position.

Each of the hollow sections includes first and second panels which are arranged in spaced opposed relation and which are connected together at their lower portions by means of an article support. When the carton is in its partially open state, the articles stored within the sections are readily dispensible through the open ends of the sections, which open ends are normally closed by the closure panel.

In accordance with this invention it is desired to provide a novel means for facilitating the retention of the locking flap in its closed position. In accordance with this invention, a simple modification is made in the article support of the hollow section which is intended to receive the locking flap. The modification requires no additional material and detracts very little, if any, from the structural strength of the article support.

In accordance with the foregoing, the principal feature of this invention is to provide a modified form of article support wherein a notch is formed in the article support opening out through the free end of the hollow section adjacent the exterior wall thereof, the notch being configured to facilitate the entry of the locking flap and being dimensioned to tightly receive the same so as to effect a locking of the locking flap within the hollow section and thus prevent the accidental opening of the carton.

With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawings:

In the drawings:

FIG. 1 is a fragmentary plan view of a blank from which a carton in accordance with this invention is formed, those portions of the carton blank to which this invention particularly relates being specifically illustrated.

FIG. 2 is a perspective view of the completed carton in a fully open position with the interior walls of the hollow sections being broken away for purposes of clarity.

FIG. 3 is a perspective view of the carton of FIG. 2 in a folded position prior to the swinging of the closure panel and the locking flap to a carton closing position.

FIG. 4 is a perspective view of the closed carton with the upper portion thereof cut away and with one of the exterior walls thereof partially broken away so as to show the specific details of the locking components thereof.

FIG. 5 is a horizontal sectional view taken along the line 5—5 of FIG. 4 and shows more specifically the relationship of the locking flap to the locking slot formed in the article support.

Referring now to the drawings in detail, it will be seen that there is illustrated a carton which is formed in accordance with this invention, the carton being generally identified by the numeral 10. The carton 10 is basically formed of a pair of hollow sections, generally identified by the numerals 11 and 12, and interconnected by means of an intermediate hinge section which is generally identified by the numeral 13. In addition, the carton 10 includes a closure panel 14 and a locking flap 15.

It is intended that the carton 10 have the general appearance of a storybook and that a well known candy product be stored within the hollow sections 11 and 12, the candy product being illustrated in phantom in FIG. 3 and being identified by the numeral 16. In order to assure the rigidity of the carton 10 and at the same time to facilitate the mounting of the candy 16 therein, each of the hollow sections 11 and 12 is of a specific structural configuration.

The hollow section 11 includes an external panel 17 which has connected to the lower edge thereof along a fold line, a bottom panel 18. A similar top panel 20 is connected to the upper edge of the panel 17 along a fold line. The bottom panel 18 has extending upwardly from the front edge thereof a securing panel 21 which, in turn, carries an article support which is generally identified by the numeral 22.

The hollow section 11 further includes an internal panel 23 which is disposed in spaced parallel relation to the external panel 17 and which has the lower edge portion thereof secured to the connecting or securing panel 21 by means of adhesive 24 on the securing panel 21. The article support 22 both rigidifies the hollow section 11 and provides suitable means for the mounting of the product 16 within the hollow section 11.

As indicated above, the hollow section 12 is of a construction very similar to the hollow section 11. The hollow section 12 includes an external panel 25 which has connected to the lower edge thereof a bottom panel 26 and to the upper edge thereof a top panel 27. The bottom panel 26, in turn, carries an upstanding securing panel 28 which is disposed parallel to and is spaced from the external panel 25. The securing panel 28 further carries an article support, which is generally identified by the numeral 30. The article support 30 is of a construction very similar to that of the article support 22, but in accordance with this invention, is of a specific construction as will be described in detail hereinafter.

The hollow section 22 also includes an internal panel 31 which is connected to the edge of the top panel 27 disposed remote from the external panel 25. The internal panel 31 extends parallel to the external panel 25 and has a free edge portion which is secured to the securing panel 28 by means of a suitable adhesive 32 applied to the surface thereof.

At this time the specific details of the article support 30 will be set forth. It is to be noted that the article support 30 includes a terminal panel 33 which is secured to the inner surface of the exterior panel 25. The terminal panel or mounting panel 33 has connected thereto along a fold line 34 a support panel 35, which support panel is, in turn, connected to the securing panel 28 along a fold line 36.

It is to be noted that the support panel 35 does not extend the full width of the hollow section 12. Instead, the article support 30 is provided with a notch arrangement 37 which permits the securing panel 28 to be provided with an integral upstanding projection 38 which has hingedly connected thereto a stop panel 40 which extends between the extension 38 and the mounting panel 33 and is connected to the mounting panel 33 along a fold line 41. It will be readily apparent that a product, such as the product 16, resting upon the support panel 35 will be limited as to its movement into the interior of the hollow section 12 by the stop panel 40.

It will be readily apparent from a review of FIG. 2 that the article support 22 is constructed substantially identical to the aforescribed article support 30 and differs therefrom primarily in that the two article supports are of left and right hand constructions. In addition, the article support 30 differs from the article support 22 in that it is provided with a locking notch 42. The locking notch 42 is partially formed in the support panel 35 and partially in the mounting panel 33. The locking notch or slot 42, from a functional standpoint, is disposed in a plane normal to the plane of the exterior panel 25 and is of a tapered configuration, as is best shown in FIG. 5. In addition, it is provided with a flared entrance portion 43 to facilitate the entrance of the locking flap 15 thereinto.

Referring once again to FIG. 2, it is to be noted that the hinge section 13 includes an exterior panel 44 which extends between the exterior panels 17 and 25 and which is connected thereto along fold lines 45 and 46, respectively. The hinge section 13 also includes an internal panel 47 which extends between the internal panels 23 and 31 and is connected thereto along fold lines 48 and 50, respectively. While the exterior panel 44 is intended to remain planar or have a slightly bowed configuration, as is shown in FIG. 5, the internal panel 47 is intended to be reversely folded upon itself in the manner which is also clearly shown in FIG. 5 so as to facilitate the folding of the carton 10 so as to bring the internal panels 23 and 31 into opposed face-to-face relation as is shown in FIG. 5.

The hinge section 13 also includes an upper closure panel 51 and a lower closure panel 52 which are of similar configuration. The upper closure panel 51 extends between the top panels 20 and 27 and is connected thereto along fold lines 53 and 54, respectively. It is to be noted that the top panel 51 is separated from the internal panel 47 by means of a notch 56 and is provided with suitable fold lines to facilitate the folding thereof into the interior of the carton when the hollow sections 11 and 12 are moved into generally parallel relation.

The lower end panel 52 extends between the bottom panels 18 and 26 and is connected thereto along fold lines 57 and 58, respectively. The lower end panel 52 has a recessed free edge and is provided with suitable fold lines to also facilitate the automatic folding thereof into the interior of the carton 10 when the hollow sections 11 and 12 are moved towards one another.

It will be readily apparent from the foregoing description of the carton 10 that when the carton is erected, the hollow sections 11 and 12 thereof will be of a rigid construction and will suitably support a product which is to be packaged. Thereafter, the

product, such as the product 16, may be inserted into the hollow sections 11 and 12 through the remote open ends thereof with the product resting upon the support panels of the article supports 22 and 30 and the movement of the product into the interior of the respective hollow sections 11 and 12 being restricted by the stop panels 40 thereof.

After the product has been placed within the hollow sections 11 and 12, the carton 10 may be readily closed so as to protect the product and retain the same within the carton by swinging the hollow sections 11 and 12 towards a parallel relationship such as that generally shown in FIGS. 3 through 5. The carton is finally closed by swinging the closure panel 14 to a position closing the open ends of the hollow sections 11 and 12 and by inserting the locking flap 15 into the open end of the hollow section 12 in the manner shown in FIG. 5. The locking flap 15 enters into the locking slot 42 and is wedged therein so as to hold the carton 10 in its closed position.

At this time it is pointed out that a free edge of the external panel 25 is provided with a suitable rounded notch 60 therein which permits engagement of ones finger with the locking flap 15 to facilitate the withdrawal of the locking flap and the opening of the carton when it is desired to dispense the product contained therein. It will be readily apparent that the wedge shaped configuration of the locking slot 42 provides for the necessary locking of the locking flap 15 in position and, at the same time, in no way detracts from the over-all ornamental appearance of the carton. Furthermore, inasmuch as there is an ample connection between the support panel 35 and the mounting panel 33 along the fold line 34, the formation of the notch 42 provides only a minor detraction at the most from the structural strength of the carton. On the other hand, this minor change in the carton construction does facilitate the necessary locking thereof to permit the ready handling of the carton without the product 16 disposed therein from being freed. In addition, the configuration of the locking slot 42 is such that the carton may be opened and closed a number of times as is required for the dispensing of numerous separate pieces of a product, which separate piece construction of the product is clearly shown in FIG. 3.

Although only a preferred embodiment of the carton has been specifically illustrated and described herein, it is to be understood that minor variations may be made in the carton construction without departing from the spirit and scope thereof as defined in the appended claims.

I claim:

1. A carton comprising a hollow section having an open end, said hollow section having an intermediate article support therein, a closure panel for closing said open end, a locking flap carried by said closure panel for reception within said hollow section for retaining said closure panel in a closed position, and means on said article support defining a locking slot for receiving said locking flap, said hollow section including first and second panels arranged in spaced opposed relation, said article support including a support panel extending between said first and second panels, and said locking slot being formed in said support panel, said support panel being carried by and connected to a securing

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panel, said securing panel being secured to one of said first and second panels, said securing panel having an extension disposed remote from said carton open end, and a stop panel carried by said extension and extending between said first and second panels in spaced relation to said support panel.

2. A carton comprising a hollow section having an open end, said hollow section having an intermediate article support therein, a closure panel for closing said open end, a locking flap carried by said closure panel for reception within said hollow section for retaining said closure panel in a closed position, and means on said article support defining a locking slot for receiving said locking flap, said hollow section including first and second panels arranged in spaced opposed relation, said article support including a support panel extending between said first and second panels, and said locking slot being formed in said support panel, a mounting

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panel connected to one edge of said support panel along a fold line with said mounting panel being fixedly secured to said first panel on the inner surface thereof, and said locking slot being formed in said mounting panel in addition to being formed in said support panel with said slot being along said fold line, said first and second panels also being connected together by end panels, a securing panel carried by one of said end panels and being secured to said second panel, and said support panel being connected to said securing panel.

3. The carton of claim 2 wherein said carton simulates a book and includes a second section connected to said hollow section by an intermediate hinge section, and said closure panel is carried by said second section.

4. The carton of claim 3 wherein said second section also has an open end closable by said closure panel.

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