

[54] **CARTON DOUBLE-WALL BASE AND CONTAINER UTILIZING SAME**

[75] Inventor: **John W. Clarke**, Indianapolis, Ind.

[73] Assignee: **Eli Lilly and Company**, Indianapolis, Ind.

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[51] Int. Cl. **B65d 5/50**, B65d 45/00

[58] Field of Search 206/45.19; 229/45, 44, 229/35, 36; 200/45.34

[56] **References Cited**

UNITED STATES PATENTS

2,944,727	7/1960	Moore	229/45
2,970,742	2/1961	Fleisig	229/45
2,987,425	5/1961	Rodriguez	229/45 X
3,101,881	8/1963	Crane	229/45 X
3,327,841	6/1967	Schurman et al.	206/45.19 X
3,370,775	2/1968	Link	229/45 X
3,381,880	5/1968	Lewallen et al.	229/36
3,458,113	7/1969	Swartzbaugh	229/44

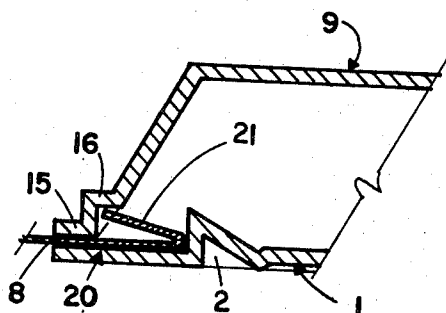
3,524,564	8/1970	Schurman	206/45.34 X
3,567,013	3/1971	Tannenbaum	206/45.34 X
3,767,110	10/1973	Congleton	229/45

Primary Examiner—Davis T. Moorhead
Attorney, Agent, or Firm—Ralph W. Ernsberger;
 Everet F. Smith

[57] **ABSTRACT**

A carton double-wall base adapted for attaching a cover thereto comprising a top wall and a bottom wall, said top and bottom walls being sealed together around the perimeter edges thereof, said base thus formed having one or more entrance passages provided between the inside surfaces of said top and bottom walls, with a locking notch integrally molded into said top wall immediately inboard of said entrance passage and laterally coextensive therewith and an internal rib molded into said bottom wall inboard of said locking notch and in cooperation therewith, said internal rib being laterally coextensive with said entrance passage. Containers utilizing such a carton double-wall base and a cover adapted to be engaged with such base are also provided.

16 Claims, 9 Drawing Figures



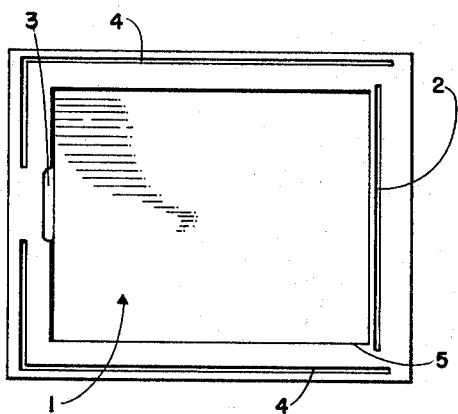


FIG. 1

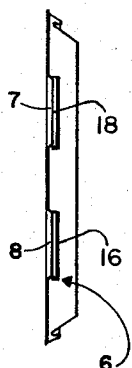


FIG. 2

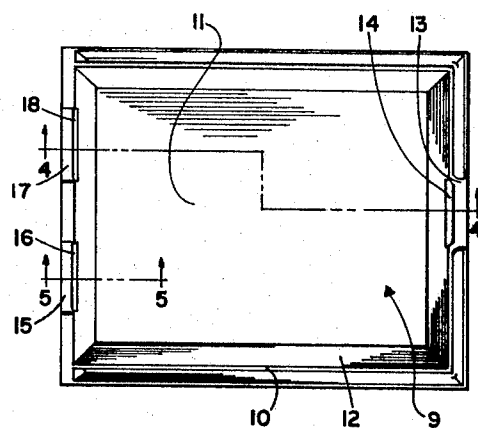


FIG. 3

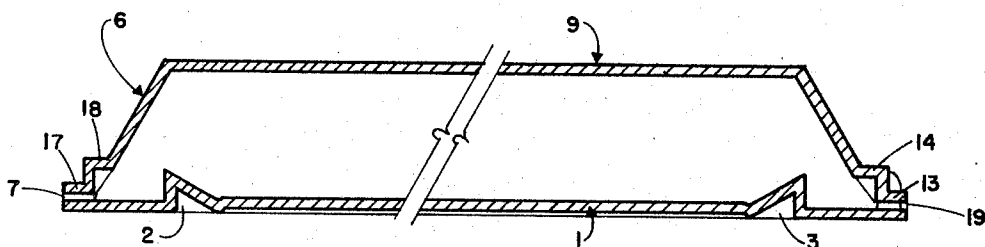


FIG. 4

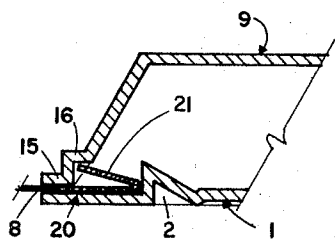


FIG. 5

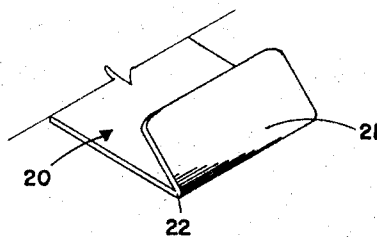


FIG. 6

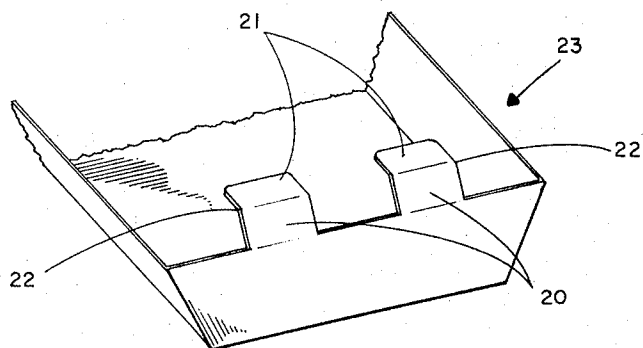


FIG. 7

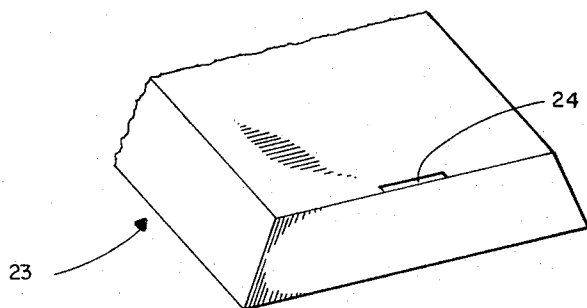


FIG. 8

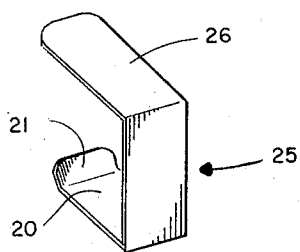


FIG. 9

CARTON DOUBLE-WALL BASE AND CONTAINER UTILIZING SAME

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to containers. More particularly, this invention relates to a carton double-wall base, which when combined cooperatively with a pre-designed cover having hinge or latching panels with locking flaps attached thereto, is adapted to receive such locking flaps for attaching said cover thereto. The combination of said base and said pre-designed cover comprises a novel, new and useful container for packaging articles of commerce.

2. Description of the Prior Art

Double-wall bases for cartons, molded from thermoformable plastics have gained wide acceptance in the packaging of consumer products. This has come about because, along with the thermoforming of the base, cavities can be molded into the top wall of said base in a configuration which resembles the profile of the article to be packaged. The article can then be protectively inserted or fitted into the pre-designed molded cavity in a secure position. A cover of paperboard, cardboard, fiberboard, and the like, or plastic can then be provided to complete the packaging.

In many designs of cartons comprised of a double-wall base, there has been a problem in securing the cover to the base. This is particularly true where a friction fit is not appropriate or even possible between the base of the carton and the sidewalls of the cover.

Accordingly, it is an object of this invention to provide a carton double-wall base adapted for attaching thereto a cover wherein such attachment does not depend upon a friction fit between said base and said cover.

Another object of this invention is to provide a carton double-wall base adapted for hingedly attaching thereto a cover which can be opened and closed repeatedly to display an article nested in said double-wall base without detaching said cover from said base.

Still another object of this invention is to provide a carton double-wall base adapted for receiving hinge and latching panels with locking flaps attached thereto and in the receiving of said panels having an automatic locking effected with the locking flaps thereon.

Yet another object of this invention is to provide a container for packaging articles of commerce which provides, in a cooperating combination, a carton double-wall base adapted for receiving hinge and latching panels with locking flaps attached thereto and a pre-designed cover for such base that has integrally connected hinge and latching panels with locking flaps attached thereto which are disposed on said cover in a position to be mated with the means for receiving such hinge and latching panels with locking flaps attached thereto provided in said base.

A further object of this invention is to provide a container for packaging articles of commerce which comprises, in a cooperating combination, a carton double-wall base adapted for receiving hinge and latching panels with locking flaps attached thereto, a cover for said base adapted for receiving tuck flaps, and independent latching panels with locking flaps foldably joined to one end and tuck flaps foldably joined to the opposite end thereof, said latching panels being equal in number to the number of means for receiving said locking flaps

provided in said base and the means for receiving said tuck flaps provided in said cover.

SUMMARY

It has now been discovered that a carton double-wall base adapted for attaching a cover thereto can be constructed by providing one or more entrance passages between the inside surface of the top and bottom walls of said base into which can be inserted hinge or latching panels with locking flaps attached thereto. Cooperating with said entrance passage and laterally coextensive therewith is a locking notch integrally molded in said top wall inboard of said entrance passage and an internal rib integrally molded into said bottom wall inboard of said locking notch. Said entrance passage, locking notch and internal rib being in longitudinal alignment, one with the other. It has further been discovered that such a carton double-wall base can be cooperatively combined with a cover to which is integrally attached one or more hinge or latching panels with locking flaps attached thereto to provide a container for packaging articles of commerce. Said base and said cover are joined by inserting the locking flaps connected to said cover into the locking notches in said base. Alternatively, independent latching panels with appropriate flaps foldably joined at opposite ends thereof can be utilized to join said base and said cover to provide said container.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view showing the outside surface of the bottom wall of the carton double-wall base.

FIG. 2 is an elevation view of one end of the carton double-wall base.

FIG. 3 is a plan view of the outside surface of the top wall of the carton double-wall base.

FIG. 4 is a cross-sectional view of the carton double-wall base taken along the line 4—4 of FIG. 3.

FIG. 5 is a fragmentary cross-sectional view of an end of the carton double-wall base with a self-locking hinge or latching panel in place.

FIG. 6 is a perspective view of a self-locking hinge or latching panel.

FIG. 7 is a fragmentary perspective view of a carton cover showing hinge or latching panels attached.

FIG. 8 is a fragmentary perspective view of a carton cover adapted for receiving tuck flaps.

FIG. 9 is a perspective view of an independent latching panel.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The novel structure of one embodiment of this invention is comprised of a carton double-wall base which is provided with entrance passages between the walls thereof into which self-locking hinge and latch panels can be inserted, and means integrally molded into said walls which cooperate with a locking flap foldably joined to said panels to effect a locked attachment of a cover to said base.

Conventionally, carton double-wall bases are vacuum molded from two independent sheets of a thermoformable plastic such as polystyrene, polyethylene, polypropylene, ABS, and the like. The bottom of said base is formed from still one sheet and the top of said base from the other. The bottom and top of said bases are sealed around the perimeter, generally by pressure

and heat while the plastic is still hot from the heat of the forming operation. Usually, compressed gas is introduced between the sheets to prevent the latter from collapsing or becoming distorted as the hot air trapped between the sheets in the molding operation begins to cool.

Ordinarily, the bottom wall of a carton double-wall base is a simple flat sheet. Frequently, stiffening ribs are molded into the sheet in the vacuum forming process; the area of the bottom wall dictating the number, size and shape of said ribs, if any. A preferred stiffening rib arrangement is a perimeter rib just inboard of the position where the top and bottom walls are sealed; the rib being concave to the outside surface of the bottom wall.

The top wall of the carton double-wall base is generally raised substantially above the inside surface of the bottom wall to allow for integral molding of forms concave to the surface of the top wall into which various objects can be fitted or inserted. The inside surface of the top wall of the carton double-wall base where cavities have been formed to accept various articles usually will contact the inside surface of the bottom wall of said base and thus provide structural support and rigidity to said base.

In the instant invention, a section of the perimeter edge of the top of the carton double-wall base is raised slightly above the plane of the inside surface of said top wall, and any stiffening rib utilized in said bottom wall is omitted from that section of the bottom wall of said base which is to be aligned with said section of said top wall and no seal is made at such section providing an entrance passage between said bottom wall and said top wall for the insertion of a hinge or latching panel therebetween.

At a position inboard of such entrance passage and longitudinally aligned therewith, there is molded into said bottom wall of said carton double-wall base an internal rib convex to the inside surface of said bottom wall, laterally coextensive with said passage, with the outboard side of said internal rib being essentially at right angles to the inside surface of said bottom, and rising to a height substantially greater than the height of said entrance passage. Such an internal rib serves as a stop for the hinge or latching panel inserted into the entrance passage.

Alternatively, an appropriately placed stiffening rib can substitute for said internal rib, particularly in smaller packages.

Inboard of the entrance passage, adjacent thereto and laterally coextensive therewith, there is incorporated in the top wall of the carton double-wall base a locking notch. Said locking notch comprises a groove in the inside surface of said top wall parallel with the inboard edge of said entrance passage.

In this invention, there is incorporated in one side of a carton double-wall base one of said entrance passages with the cooperating elements described above. Preferably, one or more of said passages will be incorporated in opposing sides of said base. In an especially preferred carton double-wall base, shown in FIG. 3 of the annexed drawings, two of such passages are incorporated in one side, and one passage in the other. Such a configuration provides a carton double-wall base wherein a cover having two integrally attached hinged panels with locking flaps foldably joined thereto, can be securely connected therewith. A latching panel,

with a locking flap foldably joined thereto, either integrally attached to said cover or independent thereof, can be inserted in the single entrance passage on the side opposite said hinge panels to secure a closure of the carton.

An especially preferred means of attachment of a carton cover to the carton double-wall base of this invention comprises utilizing an independent latching panel having a locking flap on one end of engagement with the locking notch provided in one side of said base, and a tuck flap foldably joined to the opposite end of said latching panel for insertion into a prepositioned slit in said cover.

The structure of this embodiment of the instant invention can be more readily understood by reference to the drawings attached.

In FIG. 1, the outside surface of the bottom wall 1 of the carton double-wall base is shown in a plan view. A depression formed by an internal rib 2 is shown inboard from one end of said bottom wall 1. In FIG. 1, internal rib 2 is depicted as extending substantially all the distance from one side to the other of the end of said bottom wall. While this structure is operative, and in some instances will be utilized; such is not essential. Such a structure can be utilized where a single hinge or latching panel is laterally coextensive with the breadth of said internal rib 2, or two or more separate hinge or latching panels are employed and said internal rib 2 is also used as a stiffening rib. At the opposite end of said bottom wall 1 is shown a depression formed by internal rib 3. Internal ribs 2 and 3 are structured so that the outboard sides of said internal ribs, parallel to the edge of said bottom wall 1, rise at essentially right angles to the inside surface of said bottom wall 1. The seal channels 4 shown in FIG. 1 are omitted from the location in front of both internal ribs 2 and 3. Said seal channels need be omitted only where an entrance passage is provided for the insertion of a hinge or latching panel. A stiffening rib 5 is shown around the perimeter of said bottom wall 1 interiorly of said internal ribs 2 and 3. Stiffening ribs are not part of this invention, but do add rigidity to the carton double-wall base, and are generally employed on larger structures.

An end view of the carton double-wall base is shown in FIG. 2. The numeral 6 refers to said base, which comprises a bottom wall 1, shown in FIG. 1, and a top wall 9 shown in FIG. 3. The bottom wall 1 and the top wall 9 are formed independently by a vacuum molding process and brought together mechanically and sealed around the edges with heat and pressure. Seal lines 4 are shown in FIG. 1. In FIG. 2, numerals 7 and 8 show independent entrance passages which are defined between the inside surfaces of said bottom wall 1 and said top wall 9. Said entrance passages 7 and 8 are generally formed by raising the edges of said top wall 9 and omitting the seal where said entrance passages 7 and 8 are located.

The numerals 16 and 18 refer to locking notches, and are coordinated between FIG. 2 and FIG. 3 to show both the elevation and the plan. These locking notches are molded into said top wall 9 inboard of entrances passages 7 and 8 and are depicted more definitively in FIG. 4. The top wall 9 of said carton double-wall base is shown in FIG. 3. The seal line 10 on said top wall 9 corresponds to seal line 4 on said bottom wall 1 shown in FIG. 1. The numeral 11 is directed to the outside surface of said top wall 9 which is generally comprised of

depressed moled cavities into which various articles can be fitted or inserted. The shape of the form usually represents an outline of the article to be positioned therein. The upwardly extending sides 12 of said top wall 9 are shown in FIG. 3 as rising at an acute angle from the point of attachment of said bottom wall 1 with said top wall 9. Such rise is usually a function of aesthetics and can be any acute angle or a 90° angle, as desired. Such is not an element of this invention. The structure of the novel carton double-wall base 6 is shown clearly in FIG. 4. Bottom wall 1 and top wall 9 are shown in their relative positions with no depressed molded cavities evident in top wall 9. The view is cross-sectional along with the lines 4—4 of FIG. 3. Internal ribs 2 and 3 are positioned essentially equidistant inboard from the opening to the entrance passages 7 and 19. Such entrance passages are located at opposite ends of the base 6. In the dimensioning of the structure of said base 6, the distance from the opening to said entrance passages 7 and 19 to the outboard side of the internal ribs 2 and 3 is dictated by the dimensions of the hinge and latching panels which are to be inserted into said passages. The outboard sides of said internal ribs 2 and 3 rise essentially at right angles to the inside surface of said bottom wall 1. The remainder of the structure of said internal ribs 2 and 3 can be of any design convenient to the molding operation. The design shown here is essentially a triangle and has been found to be easily moldable and effective in imparting rigidity to said bottom wall 1. The height of the rise of internal ribs 2 and 3 above the inside surface of said bottom wall 1 should be substantially greater than the height of the openings of said entrance passages 7 and 19, preferably double or more. Generally, the internal ribs 2 and 3 will rise above the inside surface of bottom wall 1 from about $\frac{1}{8}$ to about $\frac{1}{2}$ inch.

The raised lands 13 and 17 on the edges of top wall 9, which along the continuous straight edges of bottom wall 1, define the entrance passages 7 and 19 which extend inwardly from the openings to said entrance passages 7 and 19 for a distance of from about $\frac{1}{8}$ to about $\frac{1}{2}$ inch and then terminate. Immediately inboard from the terminus of said raised lands 13 and 17 are located locking notches 14 and 18 respectively. Said locking notches 14 and 18 can be integrally connected to the respective raised lands 13 and 17, but such is not necessary. The locking notches 14 and 18 in FIG. 4 are structured so that the outboard sides are essentially vertical to said raised lands 13 and 17 and rise to a height substantially greater than the height of the opening to said entrance passages 7 and 19. Preferably, the former is 2 or 3 times or more greater than the latter. Generally, when the configuration of the locking notches is similar to that shown in FIG. 4, the vertical side of said locking notches 13 and 17 will rise for a distance of from about $\frac{1}{8}$ to about $\frac{1}{2}$ inch depending upon the size of the structure into which said locking notches are incorporated. At the upper terminus of the vertical sides of said locking notches 14 and 18 said vertical sides are then turned inward at essentially right angles to define a horizontal side which then extends inwardly a distance essentially the same as the height of the rise of the vertical sides. This distance will depend, as does the height of the vertical sides, upon the size of the structure into which the locking notches are incorporated and the dimension will generally be from about $\frac{1}{8}$ inch to about $\frac{1}{2}$ inch. It is to be understood that although the locking

notches 14 and 18 are depicted in FIG. 4 as being essentially a triangle, such a configuration is not an essential element of this invention. These locking notches are in effect a groove in the inside surface of the wall 9 of said base 6 and said locking notches 14 and 18 can take any kind of a geometric form that will provide a trap for the terminal end of the locking flap and prevent the latter from moving in an arc which would permit the return of said locking flap to a position which would allow for the withdrawal of the hinge or latching panel from the entrance passages 7 and 19 respectively.

In FIG. 5, which is a fragmentary portion of FIG. 3 shown along the lines 5—5 in a cross-sectional view, a hinge or latching panel 20 with a locking flap 21 is shown in place and locked. It will be noted that the point where the locking flap 21 is foldably joined to the hinge or latching panel 20 is essentially in contact with the internal rib 2 and that the end of locking flap 21 is located just short of the vertical side of locking notch 16 and is blocked from moving upwardly in an arc by the horizontal side of said locking notch 16. A distance between the side of said internal rib 2 and the vertical side of said locking notch 16 must of necessity be coordinated in the design so that in the cooperation of said hinge or latching panel 20, said panel 20 cannot be inserted into said entrance passage 8 to a point where the terminal end of said locking flap 21 is not disposed beneath the horizontal side of said locking notch 16.

The structure of a typical hinge or latching panel 20 with a foldably joined locking flap 21 is shown in FIG. 6. The fold or crease line 22 is prepositioned to effectively cooperate with the integrally formed locking notches provided in the novel carton double-wall base of this invention.

In still another embodiment of this invention, the carton double-wall base described hereinbefore is cooperatively combined with a cover, said cover having integrally connected therewith hinge panels with a locking flap foldably joined thereto. The hinge panels are equal in number to the number of entrance passages and cooperating locking notches in said base. Generally, 2-hinge panels will be employed, such as those shown in FIG. 7. However, the invention encompasses a single hinge panel, or a plurality greater than 2.

In FIG. 7, hinge panels 20 are integrally connected with cover 23. In practice, hinge panels 20 are inserted through the entrance passages, better depicted as 8 in FIG. 5, until the locking flap 21 is inserted to the point where the inboard terminus of said flap at the fold line 22 with hinge panel 20, contacts the outboard side of internal rib 2 and the terminal end of said locking flap 21 is trapped in locking notch 16. When such a mating is effected, the hinge panels 20 provide a secure connection of said cover 23 to said base 6, and the cooperating combination of cover 23 and base 6 results in a container for packaging articles of commerce wherein said cover can be alternately opened to display the merchandise and closed through many cycles without detaching said cover from said base.

Another embodiment of the instant invention, a variation of the container for packaging articles of commerce described next above, comprises the carton double-wall base described hereinbefore in cooperative combination with a cover whereon there is connectively disposed a plurality of hinge or locking panels, said panels on said cover equaling the number of entrance passages in said base and so located as to be con-

veniently mated one panel with one entrance passage.

When one or more of said panels from the plurality thereof are disposed on each of two opposite sides of said cover, and the panels are inserted into the entrance passages in said base and the locking flaps trapped in the locking notches, the cover is securely connected to the base as the panels act to lock the cover to the base. The resultant container is effectively a pilfer-proof package which must be noticeably altered to gain entrance thereto.

In this embodiment of the invention, more than one side of a cover as shown fragmentarily in FIG. 7 with the hinge or latching panels connected thereto, is connected to a base and the mating is carried out as described hereinbefore for a cover and base where the hinge panels and entrance passages are on one side only of each part of the container.

In a further embodiment of this invention, the carton double-wall base described hereinbefore is cooperatively combined with a cover therefor, said cover having integrally connected therewith on one side thereof hinge panels with a locking flap foldably joined thereto, said hinge panels being equal in number to the number of entrance passages in one side of said base and disposed on said cover in a position for mating with said passages. The hinge panels on said cover will be disposed in the same fashion as those illustrated in FIG. 7. Although FIG. 7 shows two hinge panels 20 connected with one end of a carton cover, this invention is operative with only one hinge panel or a plurality of panels greater than two. On the opposite end from said hinge panels, there are on said cover a number of slits 24 equal in number to the number of entrance passages in the side of said base opposite the side wherein said hinge panels are inserted. FIG. 8 shows a fragmentary perspective view of a carton cover adapted for receiving tuck flaps with slits therein as the means for receiving such flaps. The slits are referred to by the number 24. The slits 24 in said cover 6 are disposed in longitudinal alignment with the entrance passages in said base 6 to which they relate. Independent latching panels 25, shown in FIG. 9, are provided equal in number to the number of slits in said cover. The latching panels 25 have locking flaps 21 foldably joined to one end for engagement with the locking notches in said base and tuck flaps 26 foldably joined to the opposite end thereof for insertion into said slits in said cover.

The combination comprising this embodiment of the instant invention is effected when the locking flaps 21 connected to the hinge panels 20 which are attached to the cover are inserted into the entrance passages in said base and the latching panels are mated to the entrance passages in said base and the slits in said cover respectively.

Still another embodiment of this invention comprises the cooperative combination of the carton double-wall base described hereinbefore, a carton cover in which there is provided the number of slits for receiving tuck flaps attached to latching panels consistent and in alignment with the number of entrance passages provided in one side of said base, and latching panels such as those described hereinbefore which are mated with the entrance passages in said base and the slits in said cover. The latching panels which effectively bring together the combination described immediately above are shown in FIG. 9. The tuck flap 26 is inserted into the slit provided in the carton cover. The hinge flap

with the locking flap foldably joined thereto is inserted into an entrance passage in the base.

The resultant container provides a package wherein the cover is connected with the base but is not secured thereto in such a manner that a destructive force is required to achieve entrance thereto.

Yet another embodiment of the instant invention comprises, in a cooperative combination, the carton double-wall base described hereinbefore, a cover in which there is provided slits on at least two sides thereof said sides being disposed opposite one another, and latching panels equal in number to the number of slits in said cover which are in longitudinal alignment with an equal number of entrance passages in said base. The combination is effected by inserting the hinge panels with the locking flap foldably joined thereto into each of the entrance passages in said base and in turn inserting the tuck flaps at the opposite ends of said latching panels into the slits in said cover.

The resulting container is one in which the cover and base are secure to each other by the latching panels used for that purpose, but such attachment is not of such a character that a destructive force is required to remove said cover from said base. Consequently, this container can be used to effectively provide packaging for articles where a pilfer-proof package is not required and still have a container which can be shipped and handled without fear that the cover will come off the base exposing the article packaged therein or allowing the article to be discharged from such package.

While particular embodiments of this invention have been shown and described hereinbefore, it will be understood that the invention is not limited thereto and it is intended in the appended claims to cover all such changes and modifications as come within the spirit and scope of the invention.

What is claimed is:

1. A carton double-wall base adapted for cooperative engagement with a carton cover comprising:

1. An independently formed top wall having one or a plurality of integrally formed raised lands along a segment of the edge on one or on each of two opposing sides, and an integrally formed locking notch laterally coextensive with and positioned inboard from each land, said locking notch comprising a groove in the inside surface of said top wall immediately adjacent to said land;
2. An independently formed bottom wall having integrally formed therein, and disposed to cooperate with said locking notches in said top wall, internal ribs equal in number to the number of said locking notches in said top wall, said internal ribs positioned inboard from the edge of said bottom wall and rising upwardly from the inside surface of said bottom wall with the outboard side of such ribs essentially parallel to said edge and making essentially a right angle with said surface; said top and bottom walls being vertically aligned in a position wherein each locking notch in said top wall is in longitudinal alignment with an internal rib in said bottom wall, and an entrance passage defined between the inside surface of each raised land in said top wall and the inside surface of said bottom wall, said entrance passage being in longitudinal alignment with said locking notch and said internal rib; and

4. said so-aligned top and bottom walls being sealed together around the perimeter edge, exclusive of the segment of said edge whereat there is an entrance passage, forming said base.

2. a container for packaging articles of commerce comprising in a cooperating combination the carton double-wall base of claim 1 and a cover therefor having integrally connected therewith hinge panels with a locking flap foldably joined thereto, said hinge panels being equal in number to the number of entrance passages in one side of said base and disposed on said cover in a position for mating with said passages on the one side of said base.

3. A container for packing articles of commerce comprising in a cooperating combination the carton double-wall base of claim 1 and a cover therefor having integrally connected therewith latching panels with a locking flap foldably joined thereto, said latching panels being equal in number to the number of entrance passages in said base and disposed on said cover in a position for mating with said passages.

4. A container for packaging articles of commerce comprising in a cooperating combination the carton double-wall base of claim 1, a cover therefor having integrally connected therewith hinge panels with a locking flap foldably joined thereto, said hinge panels being equal in number to the number of entrance passages in one side of said base and disposed on said cover in a position for mating with said passages, said cover also having slits therein equal in number to the number of entrance passages in the side of said base opposite the side wherein said hinge panels are inserted and disposed in said cover in longitudinal alignment with said passages to which said slits relate, and independent latching panel equal in number to the number of slits in said cover, said latching panels having locking flaps foldably joined to one end for engagement with said locking notches in said base and tuck flaps foldably joined to the opposite end thereof for insertion into said slits in said cover.

5. a container for packaging articles of commerce comprising in a cooperating combination the carton double-wall base of claim 1, a cover therefor having slits therein in one side in longitudinal alignment with the entrance passages in one side of said base to which said slits relate and equal in number to the number of said passages, and independent latching panels equal in number to the number of slits in said cover, said latching panels having locking flaps foldably joined to one end for engagement with said locking notches in said base and tuck flaps foldably joined to the opposite end thereof for insertion into said slits in said cover.

6. A container for packaging articles of commerce

comprising in a cooperating combination the carton double-wall base of claim 1, a cover therefor having slits therein for receiving tuck flaps, said slits being equal in number to the number of entrance passages in said base and in longitudinal alignment with said passages, and independent latching panels equal in number to the number of slits in said cover, said latching panels having locking flaps foldably joined to one end for engagement with said locking notches in said base and tuck flaps foldably joined to the opposite end thereof for insertion into said slits in said cover.

7. The base of claim 1 wherein each raised land is elevated from about 0.010 to about 0.100 inch above the horizontal plane of the edge of said top.

8. The base of claim 1 wherein each raised land extends inwardly from the edge of said top from about $\frac{1}{8}$ to about $\frac{1}{2}$ inch.

9. The base of claim 1 wherein each locking notch has a width to depth ratio of from 2:1 to 1:2.

10. The base of claim 1 wherein each locking notch has an essentially vertical side extending upwardly from the inboard terminus of the raised land with which said vertical side cooperates at essentially a right angle for a distance of from about $\frac{1}{8}$ to about $\frac{1}{2}$ inch, and a horizontal side that is essentially the same dimension and joins said vertical side at the terminus thereof at essentially a right angle.

11. The base of claim 1 wherein the inside surface of a raised land and the inside surface at the flat edge of said bottom wall define an entrance passage that is from about 0.010 to about 0.100 inch high.

12. The base of claim 1 wherein the outboard side of the internal ribs extends upwardly at essentially a right angle from the surface of said bottom wall to a height of from about $\frac{1}{8}$ to about $\frac{1}{2}$ inch.

13. The base of claim 1 wherein there is one integrally formed locking notch and cooperating entrance passage and internal rib on one side of said base.

14. The base of claim 1 wherein there is one integrally formed locking notch and cooperating entrance passage and internal rib on each of two opposite sides of said base.

15. The base of claim 1 wherein there is one integrally formed locking notch and cooperating entrance passage and stop channel on one side, and a plurality of independent integrally formed locking notches and cooperating entrance passages and internal ribs on the opposite side of said base.

16. The base of claim 1 wherein there are a plurality of integrally formed locking notches, and cooperating entrance passages and internal ribs on each of two opposite sides of said base.

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