

Dec. 20, 1955

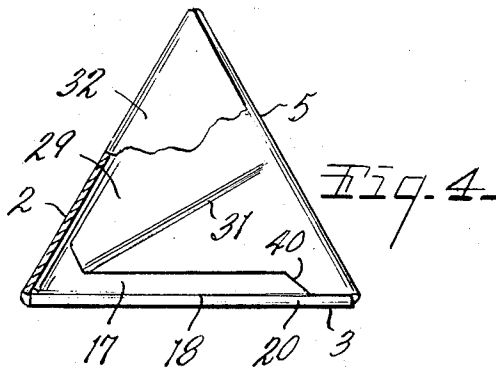
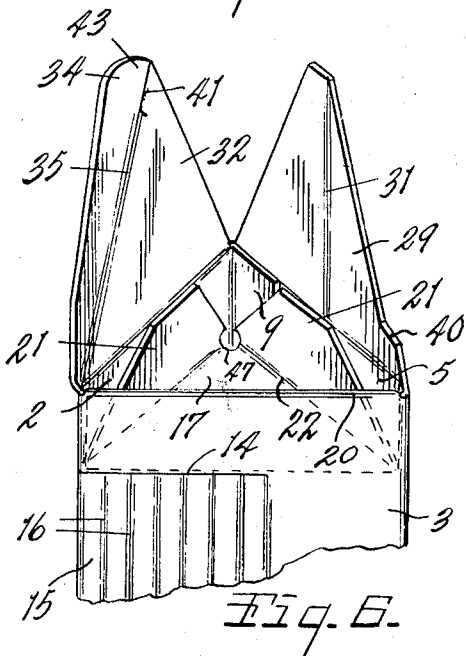
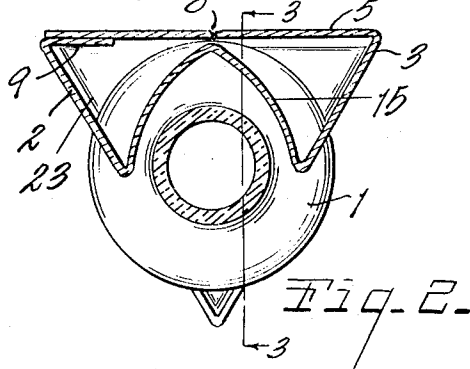
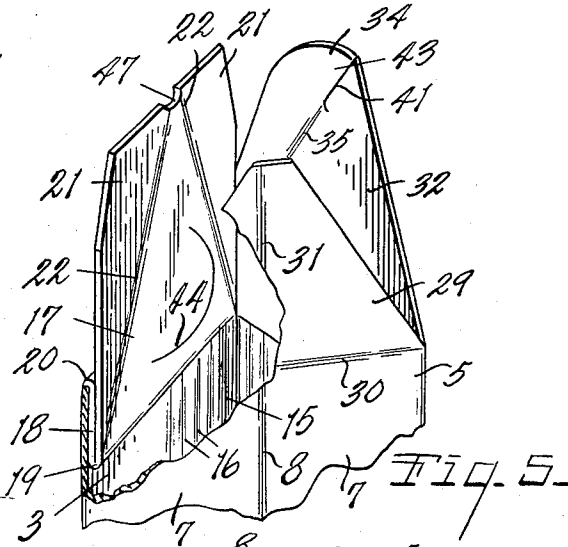
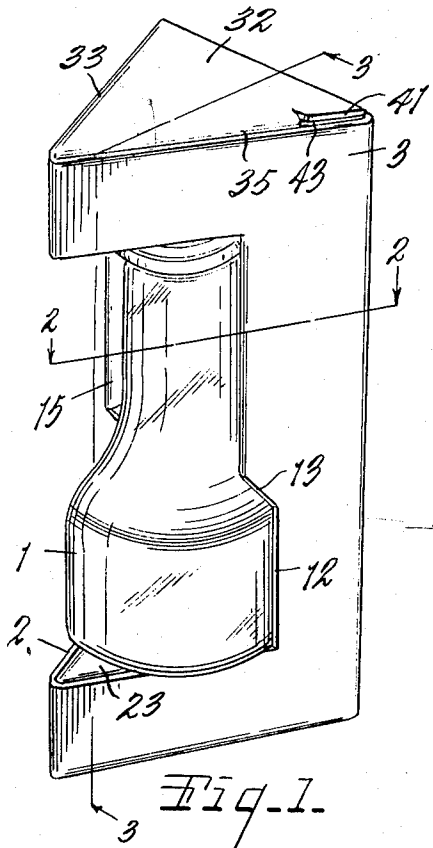
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2,727,620

COLLAPSIBLE DISPLAY CARTON

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2 Sheets-Sheet 1



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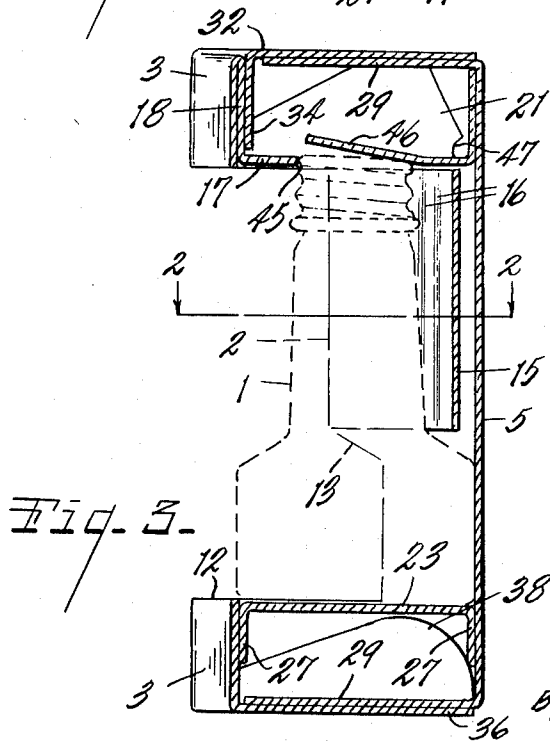
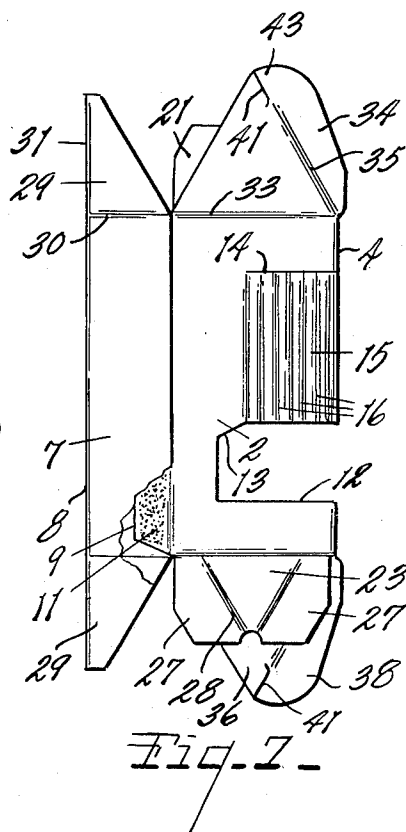
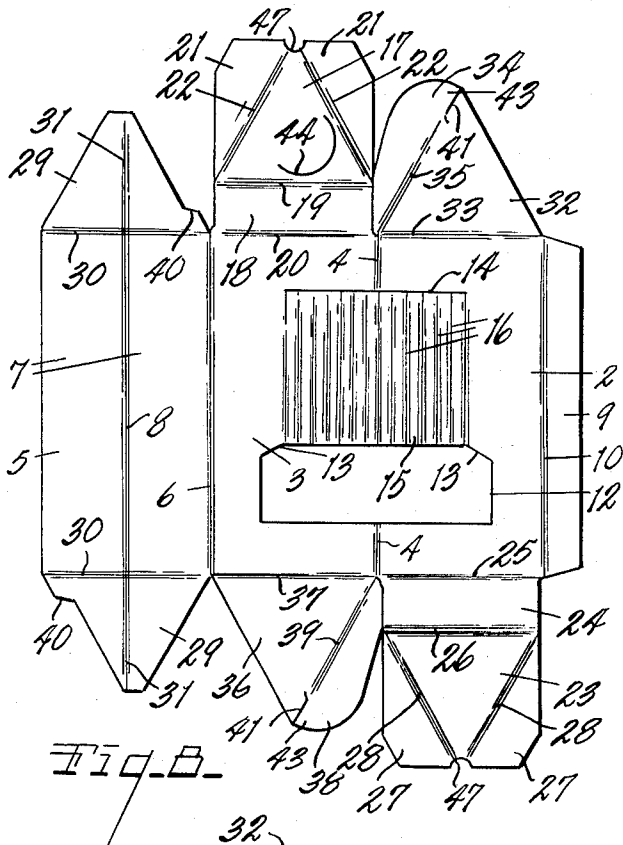
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COLLAPSIBLE DISPLAY CARTON

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2 Sheets-Sheet 2



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2,727,620

COLLAPSIBLE DISPLAY CARTON

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Application December 29, 1952, Serial No. 328,402

14 Claims. (Cl. 206—45.19)

This invention relates to improvements in a collapsible display carton.

The main objects of this invention are:

First, to provide a collapsible display carton which effectively displays the packaged product and at the same time effectively retains and protects it.

Second, to provide a collapsible display carton which serves to protect the packaged articles when they are arranged in a shipping or storage box or carton.

Third, to provide a display carton which is of a generally triangular horizontal section and may be compactly collapsed and quickly set up for use.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawings, in which:

Fig. 1 is a front perspective view of a carton embodying the invention with a bottle positioned therein.

Fig. 2 is a horizontal section on a line corresponding to line 2—2 of Figs. 1 and 3.

Fig. 3 is a vertical section on a line corresponding to line 3—3 of Figs. 1 and 2, the bottle being illustrated by dotted lines to facilitate disclosure of details of the carton.

Fig. 4 is a fragmentary end view, parts being broken away and in section.

Fig. 5 is a fragmentary perspective view of the upper end of the carton partially in erected position.

Fig. 6 is a fragmentary perspective view illustrating the parts in a partially erected position following that of Fig. 5.

Fig. 7 is a side view of the collapsed carton, parts being broken away to show structural details.

Fig. 8 is a plan view of the blank.

In Figs. 1, 2 and 3 of the accompanying drawing, we have illustrated a carton embodying our invention in erected position and with a bottle 1 disposed therein. The carton illustrated is designed particularly for a bottle of the shape illustrated and it will be understood that it would be somewhat modified for bottles or articles of other shapes.

The embodiment of the invention illustrated is formed of an integral blank and comprises rearwardly diverging side walls 2 and 3, the front edges of which are hingedly connected at 4. The rear wall designated generally by the numeral 5 is hingedly connected at 6 to the side wall 3 and is formed of panels 7 hingedly connected to each other at 8. The joint flap 9 is hingedly connected to the rear edge of the side wall 2 at 10. The joint flap 9 is adhesively secured as indicated at 11 in Fig. 7 to the inner side of the outer panel 7 of the rear wall, that is, outer as considered in the blank, and when the joint flap is thus secured the carton may be collapsed on the hinge connection 4 for the forward edges of the side walls and the hinge connection 8 for the rear wall panels as is shown in Fig. 7.

The side walls have a transverse opening 12 therein,

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the bottom edge of which is spaced upwardly from the lower edges of the side walls. In the structure illustrated, the upper corners of this opening 12 are beveled at 13 for a purpose which will be pointed out. The side walls also have a transverse slit 14 therein spaced upwardly from the upper edge of the opening 12 and defining therewith a deflectable panel 15. The panel 15 preferably has a plurality of vertical scores 16 permitting its easy deflection inwardly as shown in Figs. 1, 2 and 3 of the drawings to receive the neck of the bottle 1. The beveled corners 13 of the opening are cut to overlie and desirably engage the shoulder of the bottle.

A triangular upper holder member 17 is hingedly connected to the swingable support 18 at 19, the support in turn being hingedly connected at 20 to the upper edge of the side wall 3. The swingable support 18 may be swung into the erected walls against the inner side of the wall 3 as is illustrated in Figs. 3, 4, 5 and 6. The holder member 17 is provided with flaps 21 on its side edges hinged thereto at 22 to be folded upwardly against the inner sides of the rear wall and the side wall 2. These flaps also serve as spacers.

The side wall 2 is provided with a triangular bottom holder member 23 corresponding to the top holder member 17 and swingably connected to the lower edge of the side wall 2 by means of the support member 24 hinged to the side wall at 25 and to the holder member at 26. This bottom holder member is provided with flaps 27 hinged thereto at 28 and corresponding to the flaps 21 of the top holder member. The support members 18 and 24 are of such width that the bottom holder member is substantially in the plane of the bottom of the opening 12 and the top holder member is in substantially the plane of the slit 14 when the holder members are in erected position.

The rear wall is provided with a triangular inner closure flap 29 at each end hingedly connected to the rear wall at 30 and having folding scores 31 aligned with the hinge connection 8 for the rear wall panels.

The side wall 2 is provided with a triangular top wall 32 hingedly connected thereto at 33 and having a tucking flap 34 hingedly connected to one edge thereof at 35. The side wall 3 is provided with a bottom wall 36 hingedly connected thereto at 37 and provided with a tucking flap 38 hingedly connected thereto at 39.

The closure members 29 on the rear wall are conformed to provide shoulder-like keepers 40 while the top and bottom walls or members having slits 41 have angularly disposed portions at their inner ends, the slits being aligned with the hinging scores 35 and 39 of the tucking flaps 34 and 38 so that the end portions 43 of the tucking flap constitute detents which engage with the keepers 40 when the top and bottom members are fully closed with their tucking flaps in position. This retains the parts in fully erected position.

When the carton is in fully erected position it will be noted that the support members 18 and 24 for the top and bottom holder members and the flaps 21 and 27 serve as spacers to support the holder members in proper position. The top holder member is provided with a curved slit 44 which provides a recess 45 to engage the neck of the bottle and also provides a springable tongue 46 for yieldingly holding the bottle.

When the walls of the carton are in erected position, the deflectable panel 15 may be readily snapped or sprung inwardly to erected position shown in the drawings in which position the bottle may be quickly inserted and when inserted is securely retained and is effectively displayed. The size of the opening 12 and the vertical width of the deflectable portion 15 is varied according to the article to be packaged. It is desirable but not essential that shoulders 13 be provided. Articles other than bottles

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may be packaged and the deflectable portion may be omitted entirely although it is advantageous in supporting the side walls and materially adds to the attractiveness of the article.

The packaged articles may be packed for storage and shipment by arranging them alternately, that is, adjacent cartons being positioned to face oppositely. The notches 47 are formed at the apex of the holder members to facilitate folding of the side flaps thereof.

We have illustrated and described our invention in one highly practical embodiment thereof. We have not attempted to illustrate or describe other embodiments or adaptations as it is believed that this disclosure will enable those skilled in the art to embody or adapt our invention as may be desired.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A collapsible display carton of generally triangular horizontal section formed of an integral cut and scored blank and comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall comprising hingedly connected panels, one panel being hingedly connected to the rear edge of one side wall, the other side wall having a joint flap hingedly connected thereto and secured to the other rear wall panel, the side walls in the blank having a transverse opening therein spaced from their bottom edges and having a transverse slit spaced from the upper edge of said opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls, said deflectable panel portion being vertically scored to facilitate adjustment to a rearwardly bowed erected position, a triangular upper holder member hingedly connected to a swingable support member which is hingedly connected to the upper edge of one of said side walls to be positioned within the erected walls, said upper holder member having swingable wall engaging flaps on its side edges, a triangular bottom wall hingedly connected to the lower edge of said one side wall and having a tucking flap hingedly connected to one side edge thereof, a triangular bottom holder member hingedly connected to a swingable support which is hingedly connected to the bottom edge of the other side wall to be positioned within the erected walls, said bottom holder member having swingable wall engaging flaps on its side edges, and a triangular top wall hingedly connected to the upper edge of said other side wall and having a tucking flap hingedly connected to one edge thereof, the top and bottom walls having slits extending from the apexes thereof and aligned with the hinge connections of their tucking flaps to provide detents on the tucking flaps, the rear wall having triangular end closure flaps hingedly connected to its top and bottom edges and foldable within the top and bottom walls when the carton is erected, said end closure flaps having folding scores aligned with the hinge connection of the rear wall panels to each other, said rear wall end flaps being provided with keepers at the bases thereof with which the detents of the tucking flaps engage, the top holder member being slit to provide a recess with which the upper end of an article disposed within the carton may be engaged.

2. A collapsible display carton of generally triangular horizontal section formed of an integral cut and scored blank and comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall comprising hingedly connected panels, one panel being hingedly connected to the rear edge of one side wall, the other side wall having a joint flap hingedly connected thereto and secured to the other rear wall panel, the side walls in the blank having a transverse opening therein spaced from their bottom edges and having a transverse slit spaced from the upper edge of said opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls, said deflectable panel portion being ver-

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tically scored to facilitate adjustment to a rearwardly bowed erected position, a triangular upper holder member hingedly connected to a swingable support member which is hingedly connected to the upper edge of one of said side walls to be positioned within the erected walls, said upper holder member having swingable wall engaging flaps on its side edges, a triangular bottom wall hingedly connected to the lower edge of said one side wall and having a tucking flap hingedly connected to one side edge thereof, a triangular bottom holder member hingedly connected to a swingable support which is hingedly connected to the bottom edge of the other side wall to be positioned within the erected walls, said bottom holder member having swingable wall engaging flaps on its side edges, and a triangular top wall hingedly connected to the upper edge of said other side wall and having a tucking flap hingedly connected to one edge thereof, the rear wall having triangular end closure flaps hingedly connected to its top and bottom edges and foldable within the top and bottom walls when the carton is erected, said end closure flaps having folding scores aligned with the hinge connection of the rear wall panels to each other.

3. A collapsible display carton of generally triangular horizontal section comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall collapsibly connected to the rear edges of the side walls, the side walls having a transverse opening therein spaced from their bottom edges and having a transverse opening spaced from the upper edge of the first mentioned opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls and adjustable to a rearwardly bowed erected position, a triangular upper holder member hingedly connected to a swingable support member which is hingedly connected to the upper edge of one of said side walls to be positioned within the erected walls, said upper holder member having swingable wall engaging flaps on its side edges, a triangular bottom wall hingedly connected to the lower edge of said one side wall and having a tucking flap hingedly connected to one side edge thereof, a triangular bottom holder member hingedly connected to a swingable support which is hingedly connected to the bottom edge of the other side wall to be positioned within the erected walls, said bottom holder member having swingable wall engaging flaps on its side edges, and a triangular top wall hingedly connected to the upper edge of said other side wall and having a tucking flap hingedly connected to one edge thereof, the top and bottom walls having slits extending from the apexes thereof and aligned with the hinge connections of their tucking flaps to provide detents on the tucking flaps, the rear wall having triangular end closure flaps hingedly connected to its top and bottom edges and foldable within the top and bottom walls when the carton is erected, said rear wall end flaps being provided with keepers at the bases thereof with which the detents of the tucking flaps engage, the top holder member being slit to provide a recess with which the upper end of an article disposed within the carton may be engaged.

4. A collapsible display carton of generally triangular horizontal section comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall collapsibly connected to the rear edges of the side walls, the side walls having a transverse opening therein spaced from their bottom edges and having a transverse opening spaced from the upper edge of the first mentioned opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls and adjustable to a rearwardly bowed erected position, a triangular upper holder member hingedly connected to a swingable support member which is hingedly connected to the upper edge of one of said side walls to be positioned within the erected walls, said upper holder member

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having swingable wall engaging flaps on its side edges, a triangular bottom wall hingedly connected to the lower edge of said one side wall and having a tucking flap hingedly connected to one side edge thereof, a triangular bottom holder member hingedly connected to a swingable support which is hingedly connected to the bottom edge of the other side wall to be positioned within the erected walls, said bottom holder member having swingable wall engaging flaps on its side edges, and a triangular top wall hingedly connected to the upper edge of said other side wall and having a tucking flap hingedly connected to one edge thereof, the rear wall having triangular end closure flaps hingedly connected to its top and bottom edges and foldable within the top and bottom walls when the carton is erected.

5. A collapsible display carton of generally triangular horizontal section formed of an integral cut and scored blank and comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall comprising hingedly connected panels, one panel being hingedly connected to the rear edge of one side wall, the other side wall having a joint flap hingedly connected thereto and secured to the other rear wall panel, the side walls in the blank having a transverse opening therein spaced from their bottom edges and having a transverse slit spaced from the upper edge of said opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls, said deflectable panel portion being vertically scored to facilitate adjustment to a rearwardly bowed erected position, an upper holder member hingedly connected to a swingable support member which is hingedly connected to the upper edge of one of said side walls to be positioned within the erected walls, a triangular bottom wall hingedly connected to the lower edge of said one side wall and having a tucking flap hingedly connected to one side edge thereof, a bottom holder member hingedly connected to a swingable support which is hingedly connected to the bottom edge of the other side wall to be positioned within the erected walls, and a triangular top wall hingedly connected to the upper edge of said other side wall and having a tucking flap hingedly connected to one edge thereof, said tucking flaps having detent portions the rear wall having triangular end closure flaps hingedly connected to its top and bottom edges and foldable within the top and bottom walls when the carton is erected, said end closure flaps having folding scores aligned with the hinge connection of the rear wall panels to each other, said rear wall end flaps being provided with keepers at the bases thereof with which the detents of the tucking flaps engage, the top holder member being slit to provide a recess with which the upper end of an article disposed within the carton may be engaged.

6. A collapsible display carton of generally triangular horizontal section comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall collapsibly connected to the rear edges of the side walls, the side walls having a transverse opening therein spaced from their bottom edges and having a transverse opening spaced from the upper edge of the first mentioned opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls and adjustable to a rearwardly bowed erected position, an upper holder member hingedly connected to a swingable support member which is hingedly connected to the upper edge of one of said side walls to be positioned within the erected walls, a triangular bottom wall hingedly connected to the lower edge of said one side wall and having a tucking flap hingedly connected to one side edge thereof, a bottom holder member hingedly connected to a swingable support which is hingedly connected to the bottom edge of the other side wall to be positioned within the erected walls, and a triangular top wall hingedly con-

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nected to the upper edge of said other side wall and having a tucking flap hingedly connected to one edge thereof.

7. A collapsible display carton of generally triangular horizontal section formed of an integral cut and scored blank and comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall collapsibly connected to the rear edges of the side walls, the side walls in the blank having a transverse opening therein and having a transverse slit spaced from the upper edge of said opening and therewith defining a panel portion swingably connected along opposed vertical side edges thereof to the side walls and deflectable to a rearwardly bowed position when the carton is erected, and triangular upper and lower holder members swingably connected to the side walls to be adjusted to erected position within the walls with the upper holder member in approximately the plane of said slit in the side walls and the lower holder member in approximately the plane of the lower edge of said opening, the upper holder member being slit to provide an article receiving recess, said side and rear walls being provided with end closure members having interlocking engagement when in closed position, said holder members being provided with outturned spacer members coacting with said closure members to support the holder members in spaced relation from said closure members.

8. A collapsible display carton of generally triangular horizontal section formed of an integral cut and scored blank and comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall collapsibly connected to the rear edges of the side walls, the side walls in the blank having a transverse opening therein and having a transverse slit therein spaced from the upper edge of the opening, said opening and slit defining a panel portion swingably connected along opposed vertical side edges thereof to the side walls and disposed in a rearwardly bowed position in the erected carton, and triangular upper and lower holder members swingably connected to the side walls to be adjusted to erected position within the walls with the upper holder member in approximately the plane of said slit in the side walls and the lower holder member in approximately the plane of the lower edge of said opening, the upper holder member being slit to provide an article receiving recess, said side and rear walls being provided with end closure members having interlocking engagement when in closed position, said holder members being provided with outturned spacer members coacting with said closure members to support the holder members in spaced relation from said closure members.

9. A collapsible display carton of generally triangular horizontal section formed of an integral cut and scored blank and comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall collapsibly connected to the rear edges of the side walls, the side walls in the blank having a transverse opening therein and having a transverse slit spaced from the upper edge of said opening and therewith defining a panel portion swingably connected along opposed vertical side edges thereof to the side walls and deflectable to a rearwardly bowed position when the carton is erected, and triangular upper and lower holder members swingably connected to the side walls to be adjusted to erected position within the walls with the upper holder member in approximately the plane of said slit in the side walls and the lower holder member in approximately the plane of the lower edge of said opening.

10. A collapsible display carton of generally triangular horizontal section formed of an integral cut and scored blank and comprising rearwardly diverging side walls hingedly connected to each other at their front edges, a rear wall collapsibly connected to the rear edges of the side walls, the side walls in the blank having a transverse opening therein and having a transverse slit therein spaced

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from the upper edge of the opening, said opening and slit defining a panel portion swingably connected along opposed vertical side edges thereof to the side walls and disposed in a rearwardly bowed position in the erected carton, and triangular upper and lower holder members swingably connected to the side walls to be adjusted to erected position within the walls with the upper holder member in approximately the plane of said slit in the side walls and the lower holder member in approximately the plane of the lower edge of said opening.

11. A display carton of generally triangular horizontal section comprising rearwardly diverging side walls and a rear wall, the side walls having a transverse opening therein and a transverse opening spaced from the upper edge of the first mentioned opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls, said deflectable panel portion being vertically scored to facilitate adjustment to a rearwardly bowed erected position, an upper holder member positioned within said walls in approximately the plane of said transverse slit in said side walls, a bottom holder member disposed in substantially the plane of the bottom of the said opening, and end closures for the ends of the carton.

12. A display carton of generally triangular horizontal section comprising rearwardly diverging side walls and a rear wall, the side walls having a transverse opening therein and a transverse opening spaced from the upper edge of the first mentioned opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls and adjustable to a rearwardly bowed erected position, an upper holder member positioned within said walls in approximately the plane of said transverse slit in said side walls, a bottom holder member disposed in substantially the plane of the bottom of the said opening, and end closures for the ends of the carton.

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13. A display carton comprising connected side walls having a forwardly facing article receiving transverse opening therein and a transverse opening spaced from the upper ends of the side walls and spaced from the upper edge of the first mentioned opening and therewith defining a deflectable panel portion swingably connected along opposed vertical side edges thereof to the side walls, said deflectable panel portion being vertically scored to facilitate adjustment to a rearwardly bowed erected position, an upper holder member positioned within said walls, and a bottom holder member for an article disposed in said opening, said bottom holder member being disposed between and supported by said side walls.

14. A display carton comprising connected side walls having a forwardly facing article receiving transverse opening therein and a transverse opening spaced from the upper ends of the side walls and spaced from the upper edge of the first mentioned opening, the portion of the walls between said openings being swingably connected along opposed vertical side edges thereof to the side walls and being bowed inwardly when the carton is erected, an upper holder member above said inwardly bowed portion of said front walls, and an article supporting bottom holder member disposed between and supported by said side walls.

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