

June 5, 1956

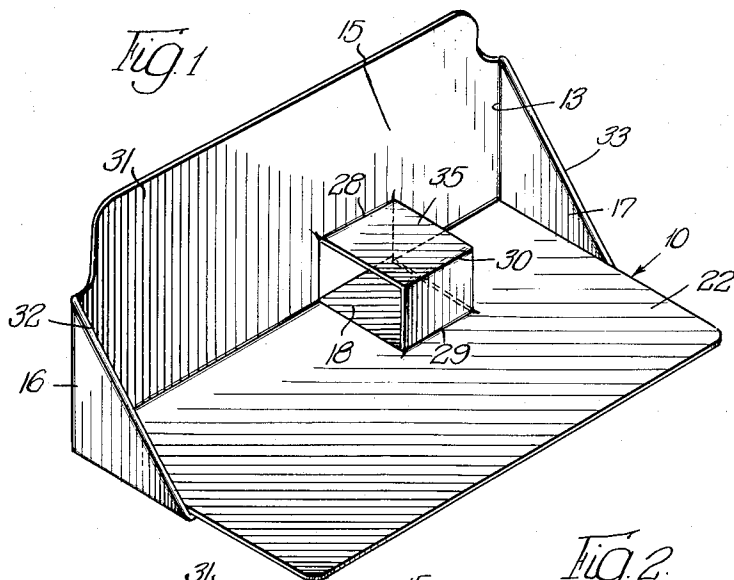
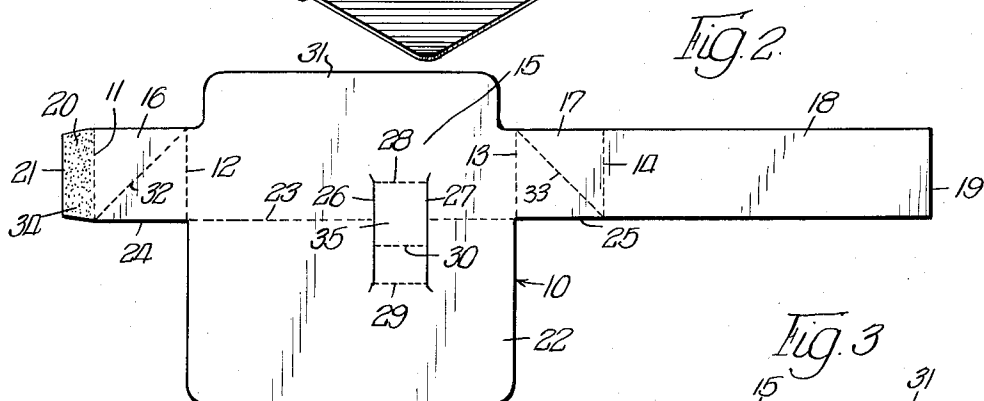
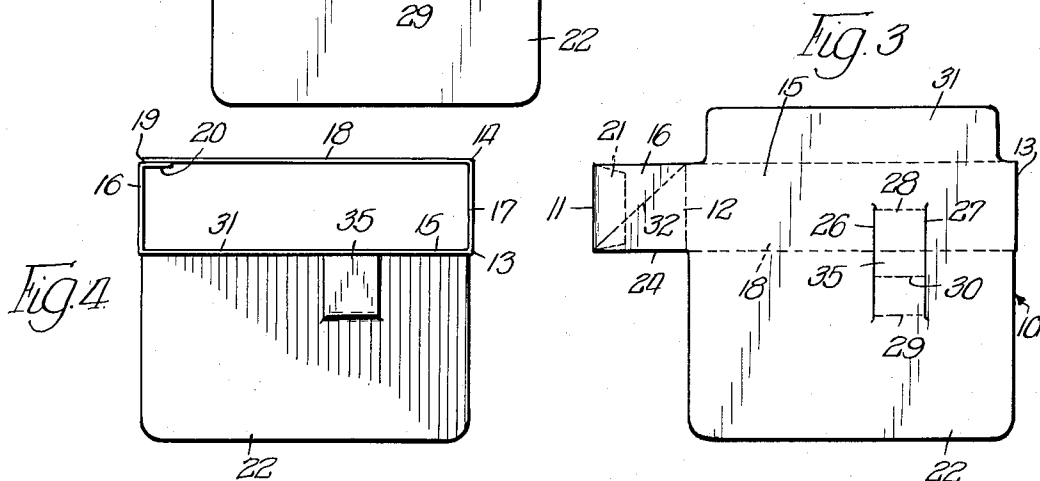
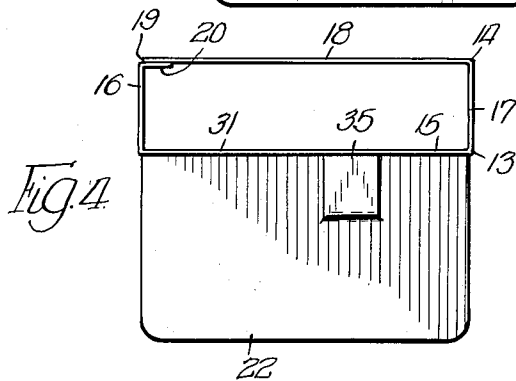
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2,748,927

COLLAPSIBLE DISPLAY CONTAINERS

Filed Jan. 29, 1952

4 Sheets-Sheet 1



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June 5, 1956

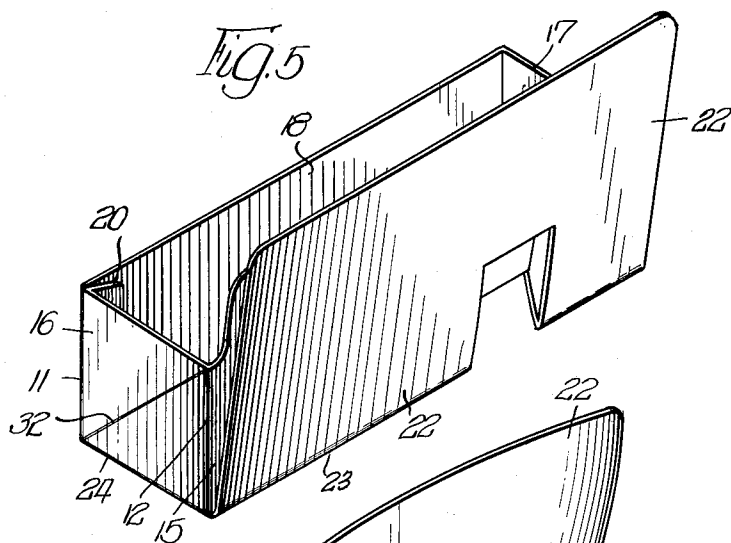
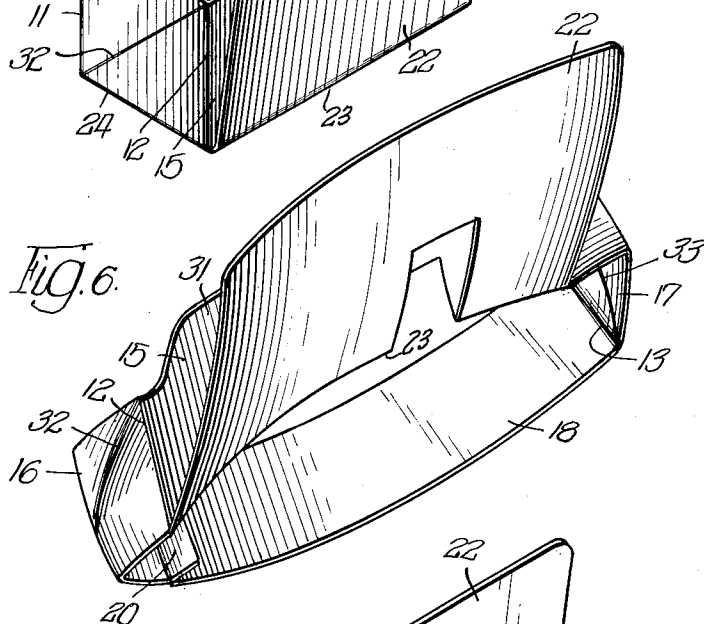
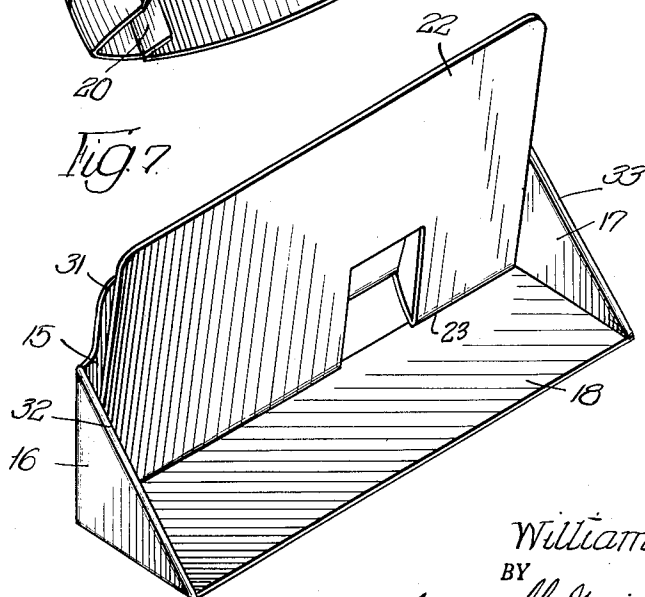
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COLLAPSIBLE DISPLAY CONTAINERS

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4 Sheets-Sheet 2



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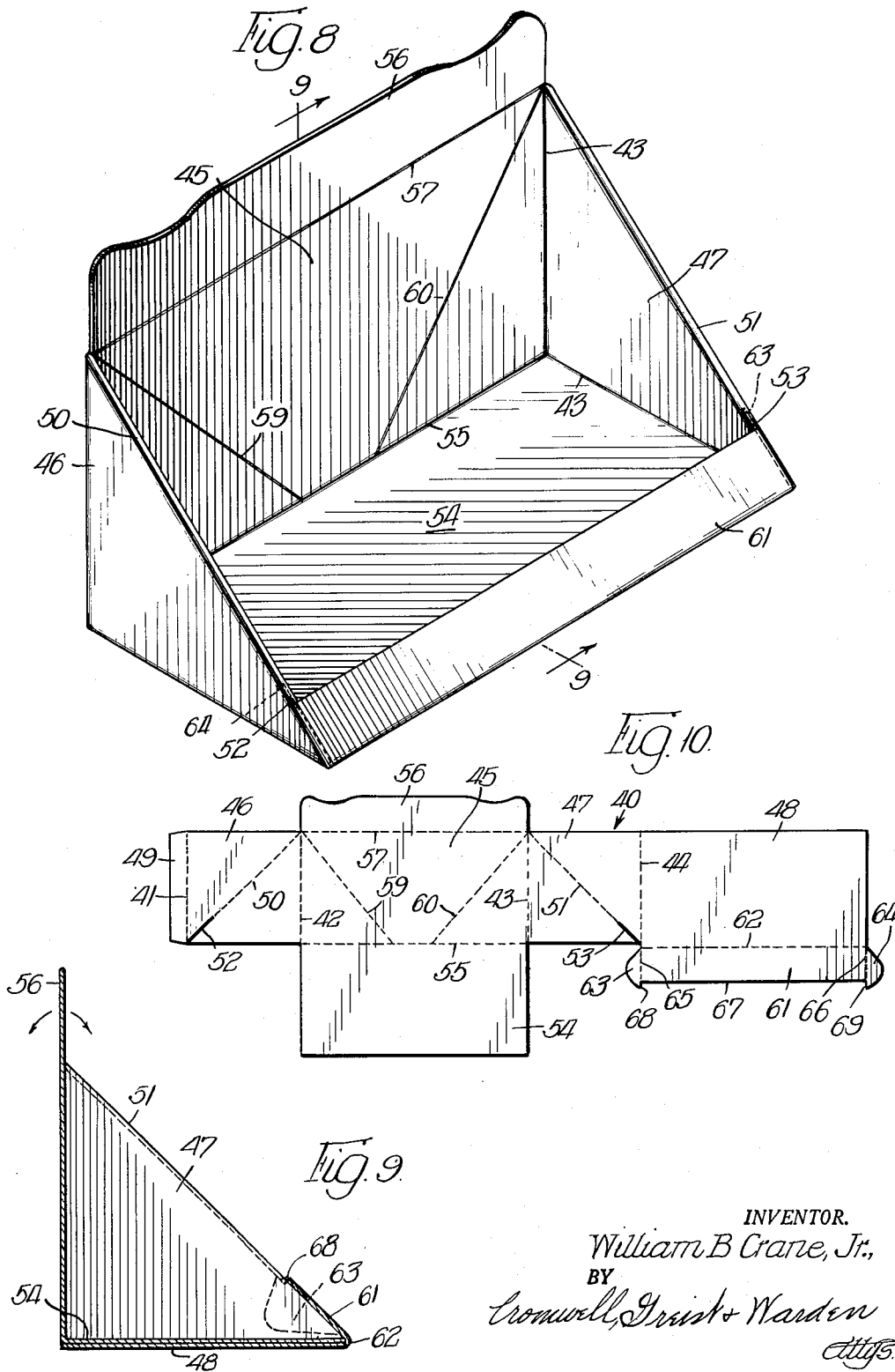
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COLLAPSIBLE DISPLAY CONTAINERS

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4 Sheets-Sheet 3



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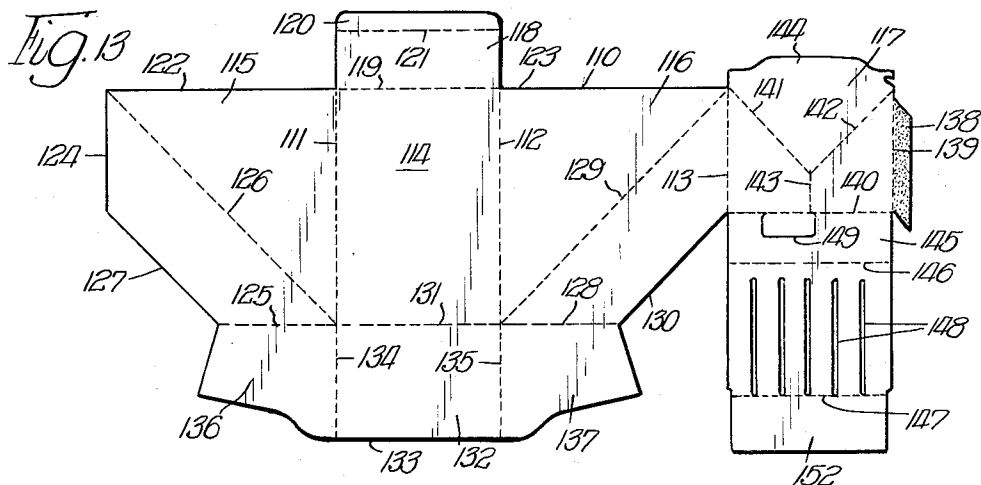
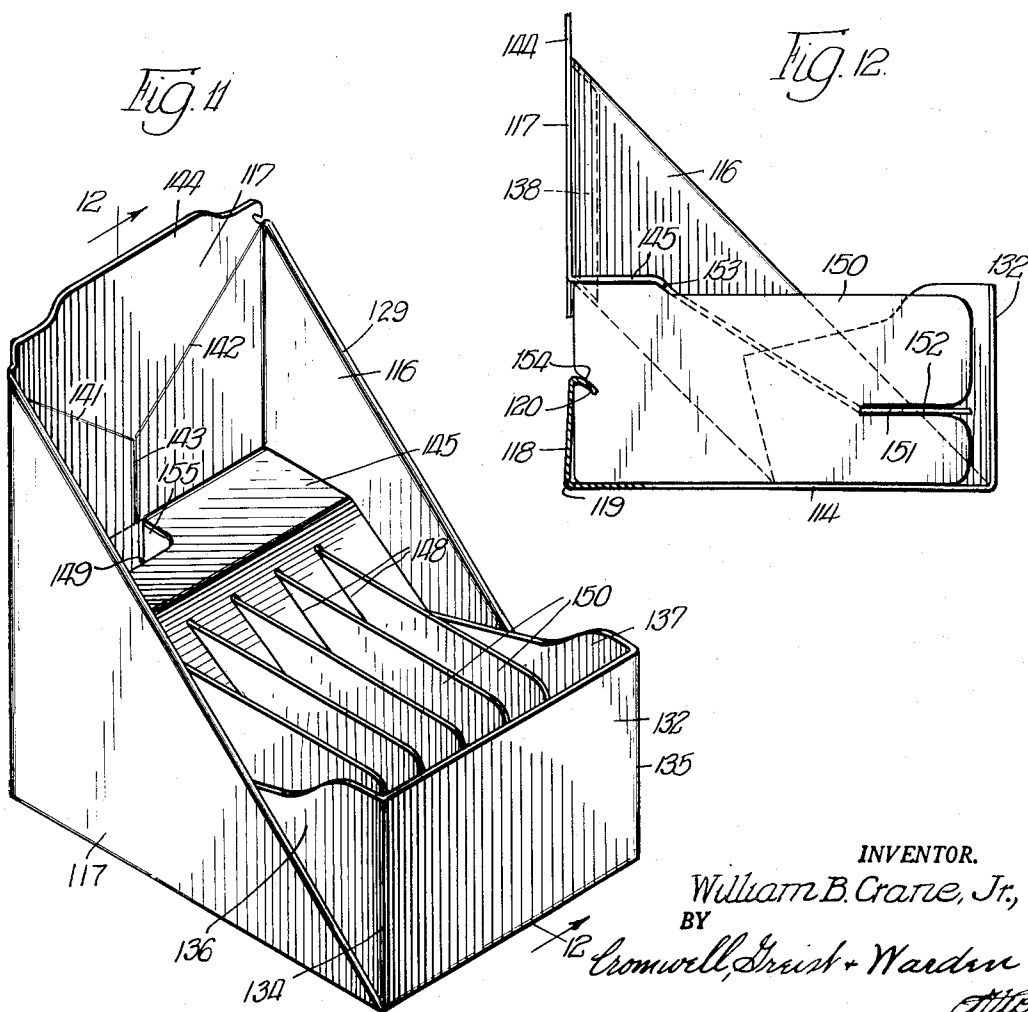
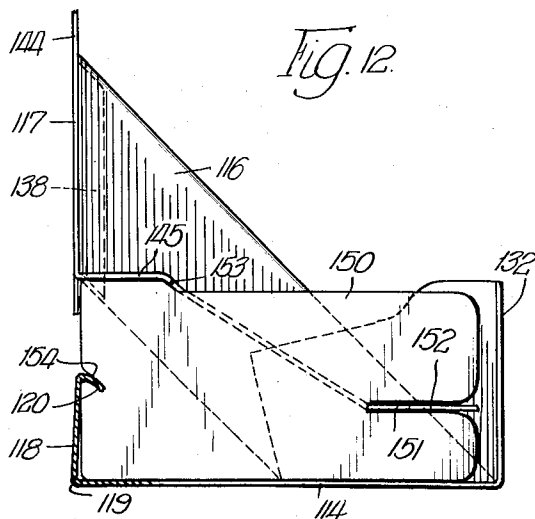
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2,748,927

COLLAPSIBLE DISPLAY CONTAINERS

Filed Jan. 29, 1952

4 Sheets-Sheet 4



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2,748,927

COLLAPSIBLE DISPLAY CONTAINERS

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Application January 29, 1952, Serial No. 268,886

13 Claims. (Cl. 206—44)

This invention relates to containers and is more particularly concerned with improvements in collapsible tray-type containers which are adapted to receive merchandise positioned therein so that the merchandise is displayed in a pleasing and attractive manner.

It is a general object of the invention to provide a container which is formed from a blank of paperboard or similar material cut and scored to divide the same into a plurality of panels, which panels are connected and folded into a flattened condition for shipment, and which is adapted to be subsequently opened out or set up in the form of a display tray or carton for receiving one or more articles of merchandise arranged therein so that the container and its contents form an attractive display unit.

It is a more specific object of the invention to provide a combination shipping and display container comprising angularly related back and bottom wall members and connecting end wall members which are generally triangular and which are hingedly connected to the back and bottom members in such a manner as to permit folding and collapsing of all the members into a flattened condition for shipment to the user.

It is a further object of the invention to provide a display device which comprises an upright back wall, a forwardly extending bottom wall, and end wall forming members connected to the bottom wall and back wall along transverse fold lines, which end wall forming members are foldable upon themselves into generally triangular shaped end walls of double thickness, with all the wall members adapted to be collapsed into flattened relation.

It is another object of the invention to provide a container comprising a back wall and a forwardly extending article supporting wall hinged along the bottom edge of the back wall, end walls hinged along the end edges of the back wall and connected at their opposite edges by a bottom forming wall, the back and bottom walls being movable from a collapsed position in parallel planes to a position where they are in planes at right angles to each other with the end walls being foldable upon themselves about diagonal lines.

It is a further object of the invention to provide a display container of the type described in which the bottom wall is provided with a front wall forming member which is adapted to be hinged about the forward edge thereof and interlocked at its end edges with the end wall forming members to provide a display area which is enclosed on four sides by upstanding wall members.

It is another object of the invention to provide a display container of the type described which comprises an upstanding back wall, a forwardly extending bottom wall, an upstanding front wall and triangular, double folded end walls connecting the back and bottom wall together with a plurality of vertical partition members which are held in spaced relation by interlocking engagement with a generally horizontal partition member extending forwardly from the back wall.

These and other objects of the invention will be ap-

parent from a consideration of the several forms of display container which are shown by way of illustration in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a display tray or container which incorporates therein the principal features of the invention, the container being shown in the set-up position for reception of the merchandise which it is adapted to display;

Fig. 2 is a plan view of a paperboard blank cut and scored preparatory to forming the container of Fig. 1;

Fig. 3 is a plan view of the blank of Fig. 1 with its ends connected to form the container in its initially collapsed condition;

Fig. 4 is a plan view showing the first stage in setting up the container;

Figs. 5, 6 and 7 are perspective views showing various stages in the setting up of the container to position the walls thereof as shown in Fig. 1;

Fig. 8 is a perspective view of a modified form of the container;

Fig. 9 is a section on the line 9—9 of Fig. 8;

Fig. 10 is a plan view of a paperboard blank cut and scored preparatory to forming the container shown in Fig. 8;

Fig. 11 is a perspective view of a further modified form of container;

Fig. 12 is a section taken on the line 12—12 of Fig. 11; and

Fig. 13 is a plan view of a paperboard blank cut and scored preparatory to forming the container shown in Fig. 11.

Referring to Figs. 1 to 7 of the drawings, there is illustrated a display device or container which incorporates the principal features of the invention and which is particularly adapted for the shipment and display of an article of merchandise such as, for example, a toy pistol. It will be understood that the container shown may be adapted for shipment and display of one or more articles of merchandise of a similar character or of an entirely different character without alteration of the essential features of the container.

The display device is adapted to be formed from a blank 10 (Fig. 2) of paperboard or any similar flexible material which has sufficient rigidity to retain its shape and sufficient flexibility to permit it to be folded from collapsed to erected position. The blank 10 is cut as shown and provided with longitudinally spaced transverse score lines 11, 12, 13 and 14 which divide the same lengthwise into a back forming panel 15, two end forming panels 16, 17 at opposite ends of the back panel 15 and a bottom forming panel 18 extending from the score line 14 to the end edge 19 of the blank. A connecting tongue or flap 20 extends from the score line 11 to the other end edge 21 of the blank.

An article supporting or bottom forming panel 22 extends laterally of the back wall forming panel 15 and is divided therefrom by a longitudinally extending score line 23 which is aligned with the longitudinally extending side edges 24 and 25 of the adjoining end forming panels 16 and 17. The panel 22 may be of any desired lateral dimension, it being shown in illustrated form approximately twice the width of the bottom forming panel 18. A pair of longitudinally spaced, transversely extending cutting lines 26, 27 extend across the score line 23 and project into panels 15 and 22. The cutting lines 26, 27 are connected at their ends by transversely spaced, longitudinally extending score lines 28 and 29 and a parallel longitudinally extending score line 30 intermediate the end score lines 28 and 29. Panel 15 may also be provided with a lateral extension 31 along the opposite side edge which may be of any width desired.

The end forming panels 16 and 17 are provided with

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score lines 32 and 33 extending diagonally and in opposite directions dividing each of these panels into equal triangular sections.

The blank 10 is formed into the container by first folding the section thereof comprising panels 17 and 18 backwardly about the score line 13 and thereafter folding the connecting tongue 20 about score line 11 over the end margin thereof after applying an adhesive 34 to the surface of the connecting flap 20. The completed container initially formed in flattened condition is shown in Fig. 3, the view showing the front face of the back wall forming panel 15 and the upper face of the article supporting panel 22.

In setting up the container to place it in condition for receiving the article which it is adapted to display the panels 15, 16, 17 and 18 are first squared up or brought into right angled relation as shown in Figs. 4 and 5. The article supporting panel 22 is then folded upwardly about the score line 23 into juxtaposition with the forward face of the panel 15, the strap-like retaining member 35 formed by the cutting lines 26, 27 being folded about the score lines 28, 29 and 30 to position it between the panels 15 and 22 as shown in Fig. 5. Thereafter the flattened or juxtaposed panels 15 and 22 are bowed along the fold line 23 and carried upwardly and rearwardly toward the panel 18, the end wall forming panels 16 and 17 folding upon themselves about the score lines 32 and 33 into triangular end wall forming position, and the bottom wall forming panel 18 moving into right angular relation with the back wall forming panel 15 as shown in Fig. 7. The setting up of the device is completed by swinging the article supporting panel 22 downwardly about the fold line 23 into engagement with the uppermost surface of the bottom panel 18 which swings the strap member 35 into the position shown in Fig. 1 for reception of a portion of an article, such as the barrel of a toy pistol, which may be placed on the panel 22 and retained thereon by the strap 35 in a position where it may be examined and observed without removal from the container, the container serving as a means for mounting the article so that it may be handled by the prospective purchaser in a convenient manner without contact with the article itself.

In the modification illustrated in Figs. 8 to 10 the blank 40 is divided by transverse score lines 41, 42, 43 and 44 into a back forming panel 45, integral end wall forming panels 46 and 47 and a bottom wall forming panel 48. The end wall forming panel 46 is provided along the end margin of the blank with a connecting tongue 49. The end wall panels 46 and 47 are provided with score lines 50 and 51, respectively, which extend diagonally of the panels in diverging relation and each of which is cut or slotted at one end at 52 and 53. The back wall forming panel 45 is provided with a laterally extending article supporting bottom wall forming panel 54 separated therefrom by longitudinal score line 55 and at the opposite side with a display panel 56 extending laterally therefrom and separated by the score line 57. The article supporting bottom wall forming panel 54 is approximately the same size as the bottom wall forming panel 48. The back wall panel 45 is provided with diagonal score lines 59 and 60 which extend from opposite corners in converging relation to the score line 55. The bottom wall forming panel 48 is provided with a front wall forming panel 61 separated therefrom by longitudinal score line 62 which is parallel and spaced outwardly slightly from the longitudinal score line 55. At its opposite ends the panel 61 is provided with generally triangular shaped locking tabs 63 and 64 which are separated therefrom by score lines 65 and 66, the outer corners of the tabs 63 and 64 extending somewhat beyond the marginal edge 67 of the panel 61 to provide locking abutments 68 and 69.

In folding and connecting the panels of the blank 40 to form the initially collapsed container, the portion

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of the blank comprising panels 47 and 48 is folded about the transverse score line 43. The connecting flap 49 is folded about the transverse score line 41 and adhesively secured to the end margin of the panel 48. The container is opened out or set up in the same manner as described with reference to the container shown in Fig. 1, with the front forming panel 61 being folded upwardly about the score line 62 after the article supporting panel 54 is folded downwardly into engagement with the bottom forming panel 48 to form a bottom wall of double thickness of material. The locking tabs 63 and 64 are folded inwardly about the score lines 65 and 66 and engaged in the slotted portions 52 and 53 provided on the score lines 50 and 51 of the end wall panels 46 and 47 bringing the panel 61 which forms the front wall of the container into upright position. Panel 61, being tilted inwardly blocks the article supporting panel 54 from any movement upwardly and retains the same in its forwardly extending position where it is adapted to receive the article or articles of merchandise to be supported and displayed in the container. The merchandise may be retained on the panel 54 by any desired fastening means, such as adhesive, or cooperating slits in either one or both of panels 45 and 54. The top flap 56 may be omitted, if desired, since it is provided merely to increase the display surface of the back wall of the container. Also, when provided, it may be folded in either direction about the score line 57 to reduce the height of the container for storage and shipment. The crease lines 59 and 60 provided in back panel 45 facilitate bending or bowing of panels 45 and 54 during the setting up of the container, forming definite fold lines along which the material will more readily bend.

A further modification of the invention is illustrated in Figs. 11 to 13 which provides a container adapted to display a plurality of articles having the general shape of a toy pistol, with the articles arranged neatly and compactly for shipment and display. The blank 110 (Fig. 13), which is cut and scored to provide this form of the container, is divided by transverse score lines 111, 112, 113 into a bottom forming panel 114, two adjoining end forming panels 115 and 116 and a back wall forming panel 117 extending longitudinally of the blank. The bottom forming panel 114 is provided along one side edge with a laterally extending panel 118 separated therefrom by the longitudinal score line 119 and having at its outer margin a relatively narrow flap portion 120 divided therefrom by longitudinally extending score line 121. The score line 119 is aligned with the side edges 122, 123 of the adjoining end wall panels 115 and 116.

The end wall forming panel 115 extends longitudinally of the blank from the transverse score line 111 to the end margin 124 of the blank and laterally between the side edge 122 and the longitudinal score line 125 at the opposite side of the blank. The panel 115 is provided with a diagonal score line 126 extending from the intersection of the transverse score line 111 with the longitudinal score line 125 to the opposite corner formed at the intersection of side and end edges 122 and 124. The opposite outer corner of the panel 115 is cut away along a diagonal line 127 generally parallel to the score line 126.

The opposite end wall forming panel 116 extends in a longitudinal direction between the score lines 112 and 113 and in the lateral direction between the side edge 123 and a longitudinally extending score line 128 which is aligned with score line 125. This panel has a diagonal score line 129 which extends in diverging relation to the diagonal score line 126 from the intersection of the score lines 112 and 128 to the intersection of score line 113 and side edge 123. The outer corner of panel 116 is cut away along a diagonal line 130. The two end wall forming panels 115 and 116 are of substantially identical shape extending in opposite directions from the score lines 111 and 112, respectively.

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The bottom forming panel 114 extends in the longitudinal direction between the score lines 111 and 112 and transversely between the score lines 119 and 131, the latter being aligned with score lines 125 and 128 of adjoining end wall panels and separating the panel 114 from a front wall forming panel 132. The panel 132 extends laterally from the score line 131 to the side edge 133 of the blank and longitudinally between score lines 134 and 135 which are aligned with transverse score lines 111 and 112, respectively. End wall forming flaps 136 and 137 extend longitudinally of the blank on opposite sides of the front wall forming panel 132 and are of generally rectangular shape being integral with the adjoining end forming panels 115, 116 and front wall forming panel 132 along two sides defined by the score lines 125, 134 and 128, 135, respectively.

The back wall forming panel 117, which is separated from the main portion of the blank by the transverse score line 113, is provided along the end edge of the blank with a corner connecting tongue or flap 138 separated therefrom by transverse score line 139. The panel 117 extends laterally of the blank to the longitudinally extending score line 140 and is less in width than the bottom wall panel 114 and end wall panels 115 and 116. The longitudinal score line 140 terminates at the intersection of the transverse score line 113 with the diagonal cutting line 130. The panel 117 is scored on the lines 141, 142 and 143 which form a Y across the panel and facilitate bending or bowing of the panel when the container is erected. Along its one side edge the panel 117 is provided, if desired, with a laterally extending portion 144 to increase the display area of the panel. The extension 144 may of course be varied in width, as desired.

A cross partition forming panel 145 extends laterally of the longitudinal score line 140 and is divided into three sections by score lines 146 and 147 which extend longitudinally of the blank and which are spaced laterally thereof. A plurality of laterally extending longitudinally spaced partition receiving slots 148 are provided which extend from the score line 147 to a point short of the score line 146. The panel 145 is cut along the U-shaped line 149 adjacent the longitudinal score line 140 for a purpose which will be described.

The blank 110 is folded and connected to form the container in the same manner as previously described in connection with the container shown in Fig. 1. The portion of the blank comprising end wall panel 116 and back wall panel 117 is folded about the transverse score line 112 with the corner connecting tongue or flap 138 being folded about the score line 139 and secured by a suitable adhesive to the margin of the end wall forming panel 115 along the end edge 124, the adhesive being applied to flap 138 as indicated in Fig. 13 or to the margin of panel 115.

This form of the container is set up in the same manner as previously described, with the transverse partition forming panel 145 being initially folded about the score line 140 flat against the face of the back wall forming panel 117 and being finally moved downwardly into the position shown in Figs. 11 and 12 after the other wall forming members are in set up position. Thereafter a plurality of partition forming blanks 150 are positioned in vertically spaced relation in the slots 148. Each of the blanks 150 is generally rectangular in shape and is provided at its forward edge with an inwardly extending slot 151 adapted to receive the end portion 152 of the panel 145 which has been moved into horizontal position as shown (Fig. 12). Each of the vertical partition members 150 is somewhat wider at the one end providing in the upper edge a slanting abutment portion 153 for engagement beneath the portion of the partition blank 145 between the ends of the slots 148 and the score line 146. At the end opposite the slot 151 each partition

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member 150 is provided with a relatively short inwardly extending, diagonal slot 154 which is adapted to receive the flap portion 120 of the panel 118, the latter being turned upwardly about the score line 119 after all of the partition members 150 are inserted in the slots 148. The articles which are adapted to be displayed in the container are positioned in the spaces between the partitions 150 in row arrangement. One additional article may be supported in display position along the back wall 117 by inserting a portion thereof in the aperture 155 which is provided in the partition 145 by the U-shaped cutting line 149, when the partition is folded about the crease line 140.

In this form of the invention when the container is packed with a plurality of articles, usually extending somewhat above the top edge of the front wall 132, a plurality of pairs of the packed containers may be stacked in nested relation for shipment by arranging each pair in inverted superimposed relation to each other. The triangular end walls of two containers arranged in this fashion cooperate to form substantially complete side enclosures for the nested containers.

While specific details of construction have been shown in illustrating the several forms of the invention, and specific materials have been referred to in describing the same, it will be understood that other details of construction and other materials may be resorted to within the spirit of the invention.

I claim:

1. A collapsible display container comprising a vertical back wall, a horizontal bottom wall and end walls, said end walls being formed by a double thickness of material, which end wall material is folded upon itself about a diagonal fold line and connected at its opposite ends along transverse hinge lines to the back wall and bottom wall, respectively, and an article supporting flap integrally connected along the bottom edge of said back wall and extending forwardly thereof between said end walls and above said bottom wall said article supporting flap having its ends free for movement relative to said end walls.

2. A collapsible display container comprising a back wall, a bottom wall and connecting end walls, said bottom wall having two members, one of said bottom wall members being connected in hinged relation along one edge only to said back wall and the other of said bottom wall members being hingedly connected at its opposite ends to said end walls, said end walls being triangular and comprising two members hingedly connected to each other along a diagonal line with one of said end wall members hingedly connected at an edge thereof adjacent one end of said diagonal line to said last mentioned bottom wall member and the other one of said end wall members being hingedly connected at an edge adjacent to the other end of said diagonal line to the end of said back wall.

3. A collapsible display container formed from a single blank of paperboard material cut and scored to provide a vertically extending back wall forming panel, a horizontally extending bottom wall forming panel and connecting vertically extending end wall panels which are folded upon themselves along diagonal lines, and which are hinged at opposite ends to the back wall and bottom wall forming panels along vertical and horizontal lines, respectively, an article supporting panel connected to the bottom edge of said back wall panel and extending forwardly thereof above the bottom wall panel, and an unlined front wall panel hinged to the forward edge of said bottom wall forming panel and connected to the end wall panels.

4. A collapsible display container formed from paperboard material cut and scored to provide a vertically extending back wall forming panel, a horizontally extending bottom wall forming panel and connecting vertically extending end wall panels which are folded upon them-

selves along diagonal lines, and which are hinged at their opposite ends to the back wall and bottom wall forming panels along vertical and horizontal lines, respectively, an article supporting panel extending from the bottom edge of said back wall panel forwardly above the bottom wall panel, a front wall panel hinged to the forward edge of said bottom wall panel and end flaps on said front wall panel adapted to be engaged in interlocking relation with the folded diagonal edges of said end wall forming panels.

5. In a collapsible display container having a vertical back wall, a horizontal bottom wall and connecting end walls which end walls are each formed by a double thickness of material folded upon itself about a diagonal fold line and connected at its opposite ends along transverse hinge lines to the back wall and bottom wall, respectively, an article supporting flap connected to said back wall and extending forwardly thereof between said end walls and above said bottom wall, a front wall on said bottom wall and end connecting flaps on said front wall, said end walls having slots at the forward end of the diagonal fold line and said end connecting flaps being engaged in interlocking relation in said slots.

6. A collapsible display container formed from a single blank of paperboard material which is cut and transversely scored to divide the same into a plurality of panels connected in extended series, said container comprising when erected a back wall, a bottom wall, connecting end walls which are foldable on themselves along diagonal lines and hinged at opposite ends to the back wall and bottom wall, respectively, and an article supporting panel extending forwardly from the bottom edge of said back wall and resting on said bottom wall.

7. A collapsible display container formed from a single blank of paperboard material which is cut and scored to divide the same into connected panels, said panels forming when in erected condition a vertically extending back wall, a horizontally extending bottom wall having a double thickness of material and vertically extending end walls, said end walls comprising generally rectangular panels which are folded upon themselves along diagonal lines and which are each hinged at one end along vertical hinge lines to the opposite ends of the back wall and at the opposite ends along horizontal hinge lines to the opposite ends of the bottom wall.

8. A collapsible display container formed from a single elongate blank of paperboard material cut and scored to provide a vertically extending back wall forming panel, a horizontally extending generally rectangular bottom wall forming panel hinged to the bottom edge of the bottom wall forming panel and vertically extending side wall forming panels connecting said back wall forming panel and said bottom forming panel, said side wall panels being folded upon themselves along diagonal lines and being hinged along their opposite ends to the end edges of the back wall and the bottom wall forming panels along vertical and horizontal lines, respectively.

9. A blank for a collapsible display container formed from a single sheet of paperboard material cut and scored along transverse lines to divide the same into a series of connected wall forming panels, two of said panels being adapted to form the back and bottom walls of the container and being separated in spaced relation to each other by end wall forming panels when opposite ends of the blank are connected in tube forming relation, said end wall forming panels being generally rectangular and having diagonal score lines extending from the juncture of a transverse fold line defining the transverse edge of the back wall forming panel with a longitudinal line defining the adjoining longitudinal edge of the back wall form-

ing panel to the juncture of a transverse fold line defining a transverse edge of the bottom wall forming panel with a longitudinal line defining the opposite longitudinal edge of the bottom wall forming panel whereby to permit the end wall forming panels to be folded upon themselves into triangular end wall forming relation and to bring said bottom wall forming panel into right angled forwardly extending relation with said back wall forming panel.

10. A blank for a collapsible display container as recited in claim 9 and an article supporting panel extending laterally from a longitudinal side edge of the back wall forming panel which article supporting panel is adapted to be folded to a position at right angles to the plane of said back wall forming panel and supported on said bottom wall forming panel in the erected condition of the container.

11. A blank for a collapsible display container as recited in claim 10 and a relatively narrow article retaining panel extending laterally from a longitudinal edge of the bottom wall forming panel, said article retaining panel having end tabs extending longitudinally of the blank which are adapted to be connected to the end walls in the erected condition of the container.

12. A collapsible display container comprising a back wall, a bottom wall, an article supporting wall, and connecting end walls, said bottom wall and said article supporting wall being in superimposed relation forming a double thickness of material, said article supporting wall member being connected in hinged relation along one edge of said back wall and said bottom wall member being hingedly connected at its ends to said end walls, said end walls being triangular and comprising two members hingedly connected to each other along a diagonal line and to the bottom wall member and back wall member respectively along transverse lines, said bottom wall member having a front wall forming member connected along its forward edge and provided with end wall forming flaps hingedly joined to said end walls.

13. A collapsible display container formed from a single blank of paperboard material cut and scored to provide a vertical back wall forming panel, a horizontal bottom wall forming panel extending forwardly from said back wall forming panel and connecting end wall forming panels which are divided into triangular portions foldable upon each other along diagonal lines which diagonal lines extend between the top edge of said back wall forming panel and the front edge of said bottom wall forming panel, and an article supporting panel having a hinged connection with the bottom edge of said back wall forming panel and extending forwardly therefrom, said article supporting panel having a forward portion thereof supported on the bottom wall forming panel.

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