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COUNTER DISPLAY UNIT

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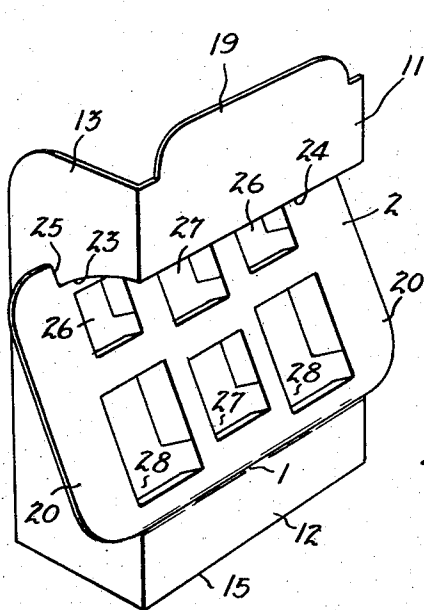


Fig. 1

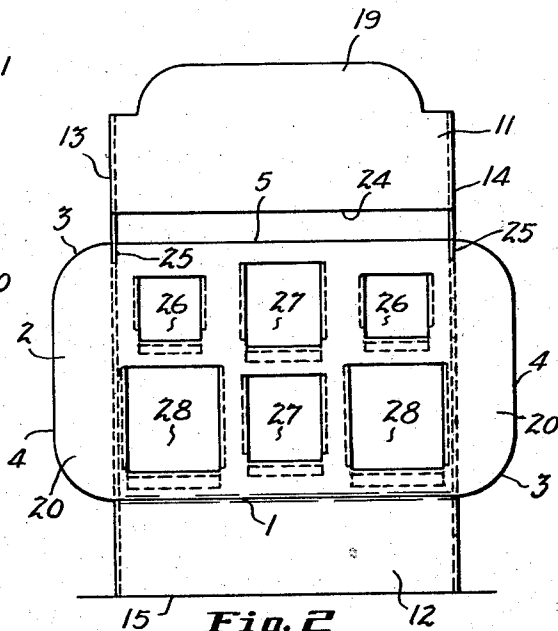


Fig. 2

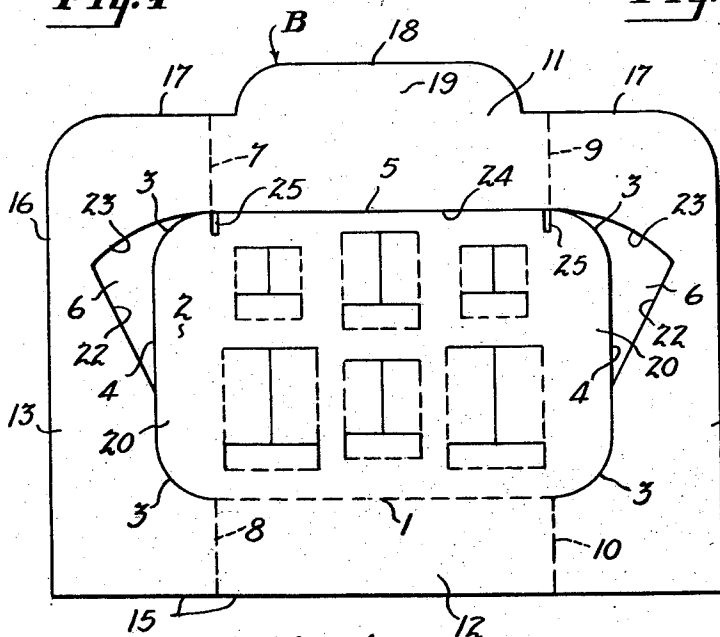


Fig. 4

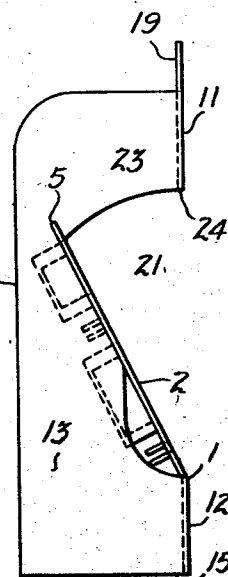


Fig. 3

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COUNTER DISPLAY UNIT

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3 Claims. (Cl. 248—198)

The present invention relates to counter display units and more particularly to one-piece collapsible display units made from sheets of fiberboard, paperboard or the like.

According to the present invention a paperboard blank is formed with a horizontal fold line and with a cut extending upwardly from one end of the fold line and horizontally and downwardly to the other end of the fold line to define a centrally located display panel. The portions of the blank surrounding the panel are divided by vertical fold lines into upper and lower front walls and side walls having hinged edges spaced inwardly from the ends of the panel whereby the panel has projecting portions at its opposite ends that extend beyond the ends of the front walls. Openings are provided in the side wall forming portions of the blank so that the panel may swing to an inclined position when the display unit is assembled. The openings and the cuts in the blank form recesses in the side walls of the assembled display unit that are of a size to receive the projecting portions of the display panel and to permit swinging of the panel. The openings have bottom edges that engage the display panel in a predetermined angular position thereof and provide inclined supporting ledges for the panel. The top edges of the openings in the side walls extend from the bottom edges to the top front wall of the display unit.

Notches are provided in the top edge of the display panel to permit swinging of the panel and to hold the side walls in positions substantially perpendicular to the front walls of the display unit. The side edges of the notches engage portions of the side walls when the panel is in an inclined position, and the bottom edges of the notches preferably engage the top edges of the openings in the side walls to hold the panel in said inclined position. Said top edges may be located at or radially outwardly of the locus of movement of the bottom edges of the notches to permit swinging of the panel toward and away from the supporting ledges.

The counter display unit is particularly advantageous since it may be made from substantially rectangular sheets of low cost with a minimum waste of material due to cutting and may be assembled or collapsed readily. The collapsed units lie flat and may be readily stacked in a minimum space. The unit provides an attractive display and has sufficient strength when in upright position to support cans, jars and other articles of substantial weight.

An object of the present invention is to provide an ornamental display unit which may be manufactured at low cost, stored in a minimum space, and readily assembled and collapsed and which can support filled cans, jars and other articles of substantial weight for display.

Other objects, uses and advantages of the present invention will become apparent from the following description and from the drawings in which:

Figure 1 is a perspective view of the display unit of the present invention on a reduced scale;

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Fig. 2 is a front elevational view of the unit shown in Fig. 1;

Fig. 3 is a side elevational view of the unit shown in Fig. 2 and on the same scale; and

Fig. 4 is a plan view of the blank from which the display unit of Figs. 2 and 3 is made and on the same scale as those figures.

The preferred form of counter display unit according to the present invention is shown in the drawings wherein like parts are identified by the same numerals throughout the respective views. The unit is made from a substantially rectangular blank B formed from a sheet of fiberboard, paperboard or the like of substantially uniform thickness.

The blank is formed with a horizontal fold line 1 having its opposite ends spaced equal distances from the opposite marginal ends of the blank and a cut extending vertically from one of said ends and horizontally and vertically downwardly to the other of said ends to define a symmetrical substantially rectangular display panel 2 having rounded corners 3, straight vertical side edges 4 and a straight horizontal top edge 5. The cut forming the display panel includes a straight slit forming the top edge of the panel and curved slits forming the lower rounded corners of the panel. Tapered openings 6 of similar shape are provided near each end of the blank between the curved and straight slits forming the edges of the panel to permit swinging of the panel when assembling the display unit.

The portions of the blank surrounding the display panel are divided by vertical fold lines 7 to 10 into upper and lower front walls 11 and 12 and left and right side walls 13 and 14 of similar shape. The blank shown herein has a straight horizontal bottom edge 15 parallel to the fold line 1 and forming the bottom edges of the walls 12, 13 and 14 and has straight vertical side edges 16 forming the side edges of the side walls 13 and 14.

The blank is shown herein as being symmetrical and with straight horizontal upper edges 17 and 18. The edges 17 are aligned and form the top edges of the side walls which are of the same height. The edge 18 forms the top edge of the upper front wall 11 and is spaced from the edges 17 and 18 so as to provide an upwardly projecting ornamental portion 19. As herein shown the upper corners of the side walls and said ornamental portion are rounded like the corners of the display panel to provide an attractive panel on which advertising matter may be printed.

The first pair of fold lines 7 and 8 are vertically aligned with an end of the horizontal fold line 1 to form a vertical hinged connection between the side wall 13 and the front walls 11 and 12. The second pair of fold lines 9 and 10 are likewise aligned with an end of the horizontal fold line to form a similar hinged connection, said pair being spaced the same distance from the nearest vertical edge 16 as the first pair so that each side wall may have the same dimensions and each front wall may have the same length. Each pair of aligned fold lines is spaced inwardly from a side edge 4 of the display panel so that the panel has projecting portions 20 at its opposite ends that extend laterally beyond the opposite ends of each front wall. As herein shown, the two projecting portions 20 and the openings 6 are of the same size and shape so that the recesses remaining in the side walls when the display unit is assembled as shown in Figs. 1 to 3 are of the same size and shape.

As best shown in Fig. 3, the display unit when assembled has laterally aligned recesses 21 formed in the parallel side walls of a size to permit swinging of the panel 2 and to receive the projecting portions 20 when the unit is collapsed.

Each opening 6 has a straight bottom edge 22 provid-

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ing an inclined ledge for engaging the bottom surface of the display panel 2 to support the same in a predetermined inclined position and has a curved top edge 23 extending from said bottom edge to the upper front wall 11 and forming the top edge of a recess 21.

The narrow slit in the blank separating the upper front wall 11 from the display panel 2 provides a straight bottom edge 24 on said front wall which is tangent to the curved edges 23 at the lower ends of the fold lines 7 and 9. Before the blank B is folded or after the display unit is collapsed, the display panel is in the plane of the front walls 11 and 12 and the top edge 5 of said panel is substantially in engagement with the lower edge 24 of the upper front wall. After assembly of the display unit, the panel engages the ledges 22.

A pair of vertically elongated notches 25 are provided in the top edge of the display panel in alinement with the fold lines forming the hinged connections between the side and front walls. The notches permit swinging of the panel which might otherwise be prevented by the edges 23 and limit movement of the side walls to hold them in positions substantially perpendicular to the front walls when the display unit is assembled.

The portions of the top edges 23 of the recesses adjacent the bottom edges 22 thereof are closer to the ends of the fold line 1 at the intersections of that fold line with the fold lines 8 and 10 than the top edge 5 of the panel and said bottom edges are alined with said intersections so that a portion of each side wall enters a notch 25 when the panel engages the supporting ledges and said ledges have line contact with the panel. The angular distances measured at said intersections between the bottom edges 22 and the lines containing the first pair of fold lines 7 and 8 and the second pair 9 and 10 are the same so that both ledges are engageable with the panel substantially throughout their lengths when the panel is in an inclined position.

In order to permit swinging of the panel 2, each top edge 23 may be the same or a greater distance from the end of the fold line 1 than the bottom of the nearest notch 25. The portion of each top edge adjacent the edge 22 of the inclined supporting ledge is preferably located substantially the same or a slightly smaller distance from an end of the fold line 1 as the bottom of the notch 25 so that said bottom engages the side wall and resists swinging movement of the panel 2 when the display unit is assembled. The width of each notch is preferably equal to or slightly less than the thickness of the side walls so that the notch will hold a side wall in position and will resist movement of the panel away from the supporting ledge when the display unit is assembled.

The top edges 23 may have any suitable shape, but are preferably curved. As herein shown, these edges have a uniform radius of curvature less than the height of the panel 2 so that the recesses 21 have the appearance of sectors when the display unit is assembled.

Articles to be displayed may be affixed to or carried by the display panel 2 in any suitable manner. As herein shown, the panel is cut to provide three pairs of symmetrically arranged article-receiving cut outs 26, 27 and 28 of different sizes. The cut outs are adapted to support cans, jars or similar articles for display purposes. As herein shown the blank B is cut to form three rectangular flaps on each cut out which can be folded to form a rectangular opening suitable for supporting such articles.

It is to be understood that in accordance with the provisions of the patent statutes, variations and modifications of the specific device herein shown and described may be made without departing from the spirit of the invention.

Having described my invention, I claim:

1. A paperboard blank for forming a collapsible counter display unit, said blank having portions that provide upper and lower front walls, a display panel hingedly

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connected to the lower front wall to swing about a horizontal fold line that extends along the length thereof and having an upper edge parallel to and adjacent to the lower edge of said upper front wall, said display panel extending beyond the opposite side ends of said front walls, alined vertical fold lines defining said opposite ends and extending from said panel to the margins of said blank, a left side wall hinged to the left ends of said upper and lower walls along one pair of said fold lines, a right side wall hinged to the right ends of said upper and lower walls along another pair of said fold lines, curved narrow slits extending a substantial distance from the opposite ends of said lower front wall and separating said panel from said side walls, and a tapering opening above each slit and extending from said slit to an end of said upper wall to separate said panel from one of said side walls, each of said side walls having an inclined panel-engaging supporting ledge alined with the intersection of the hinged edges of that side wall and of said panel and having an arcuate edge with a radius of curvature less than the height of said panel and extending from said ledge to the lower edge of said upper wall to permit swinging of the panel adjacent said supporting ledge, and a vertically elongated notch in said panel adjacent the top edge thereof and alined with the hinged edges of each of said side walls, each notch having a width substantially equal to the thickness of said side walls for receiving a portion of said side walls adjacent said ledge.

2. A blank for forming a counter display unit, said blank comprising a paperboard sheet having a horizontal fold line, a cut extending upwardly from one end of said fold line and horizontally and downwardly to the other end of said fold line to define a substantially rectangular display panel, the portions of the blank surrounding said panel providing upper and lower front walls and side walls integral with said front walls, the lower front wall being hingedly connected to said panel along said fold line, the side walls being hingedly connected to said front walls along pairs of alined vertical fold lines above and below said panel, said pairs being spaced inwardly from the opposite side edges of said panel so that each end of said panel projects beyond the ends of each front wall, a pair of notches in said panel alined with said pairs of fold lines and adjoining said upper front wall, each notch having a width corresponding substantially to the thickness of the blank so as to receive a portion of a side wall, each side wall having an opening with a bottom edge that provides an inclined ledge for engaging said panel to support the same in an inclined position, each ledge being located the same angular distance from the line in which the adjacent pair of vertical fold lines lie, said angular distance being measured from the intersection of said last-mentioned line and said horizontal fold line, each said opening providing a top edge extending laterally from the portion of the cut to which the notch opens to said bottom edge, said top edge being spaced farther from said intersection than the bottom of said notch, the portion of said top edge adjacent said bottom edge being closer to said intersection than the top edge of said panel so that said portion may enter a notch.

3. A blank for forming a counter display unit, said blank comprising a paperboard sheet having a horizontal fold line, a cut extending upwardly from one end of said fold line and horizontally and downwardly to the other end of said fold line to define a substantially rectangular display panel, the portions of the blank surrounding said panel providing upper and lower front walls and side walls integral with said front walls, the lower front wall being hingedly connected to said panel along said fold line, the side walls being hingedly connected to said front walls along pairs of alined vertical fold lines above and below said panel, said pairs being spaced inwardly from the opposite side edges of said panel so that each end of said panel projects beyond the ends of each front wall, a pair of notches in said panel alined with said pairs of fold

lines and adjoining said upper front wall, each notch having a width corresponding substantially to the thickness of the blank so as to receive a portion of a side wall, each side wall having an opening with a bottom edge that provides an inclined ledge for engaging said panel to support the same in an inclined position, each ledge being located the same angular distance from the line in which the adjacent pair of vertical fold lines lie, said angular distance being measured from the intersection of said last-mentioned line and said horizontal fold line, each said opening providing a top edge extending laterally from the portion of the cut to which the notch opens to said bottom edge, the majority of said top edge being spaced further from said intersection than the bottom of said notch, the portion of said top edge immediately adjacent said bottom edge being slightly closer to said intersection than the bottom of said notch whereby said notch

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is engageable with said top edge to wedge said panel in ledge-supported position.

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