

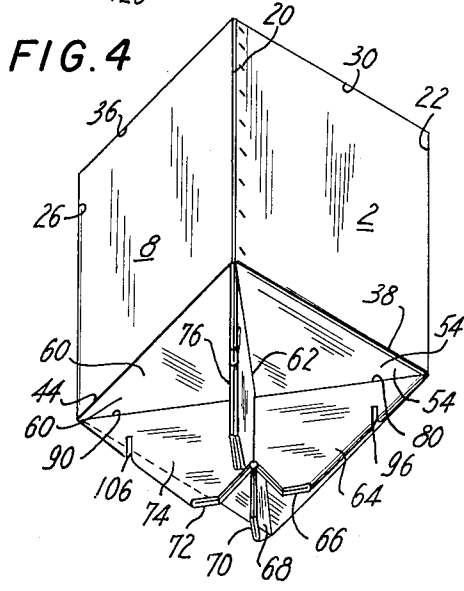
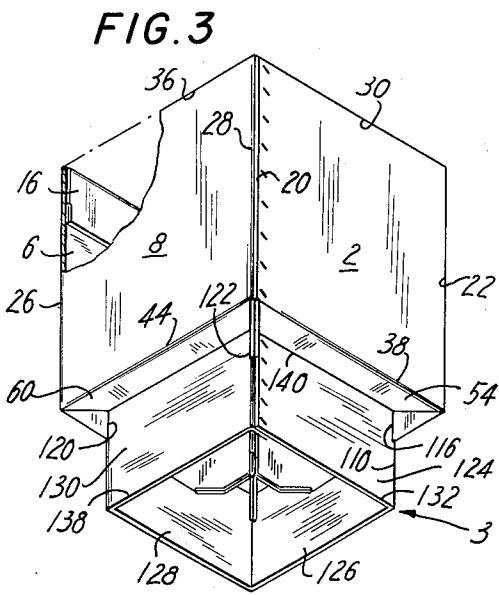
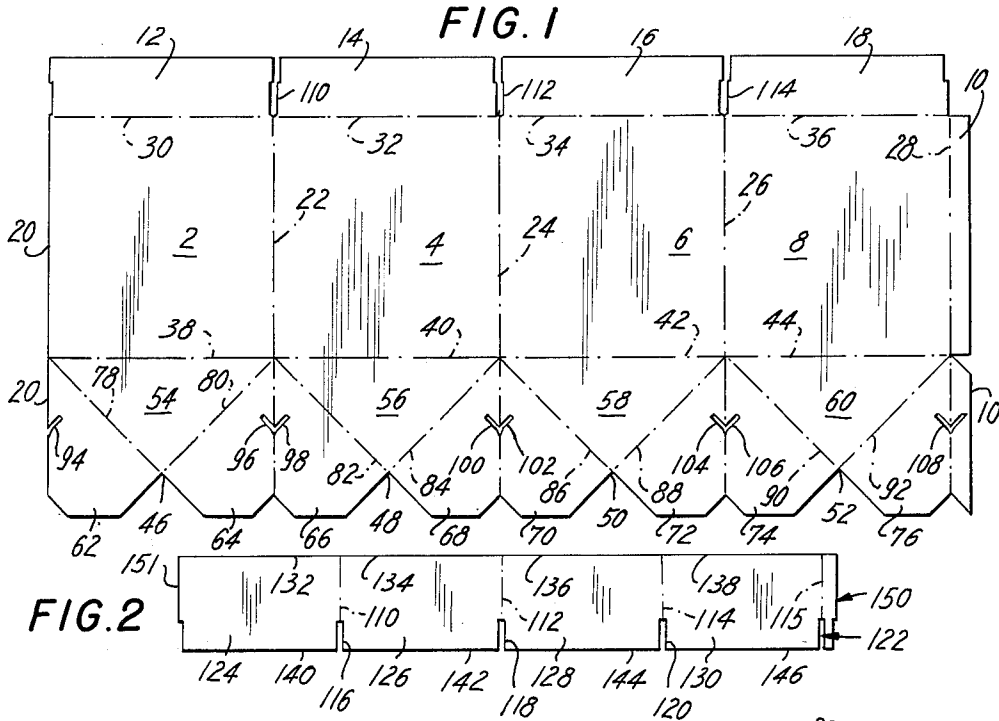
Feb. 13, 1962

H. STUMPF, JR
DISPLAY CONTAINER

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Filed June 17, 1960

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

FIG. 5

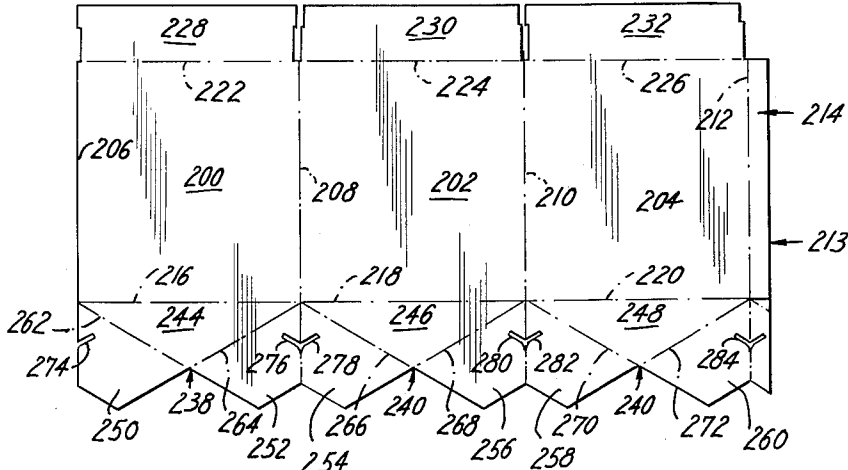


FIG. 6

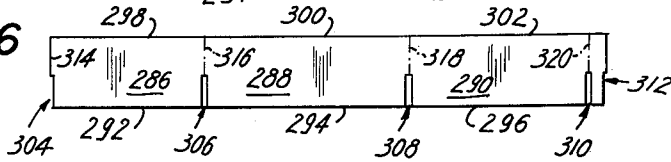


FIG. 7

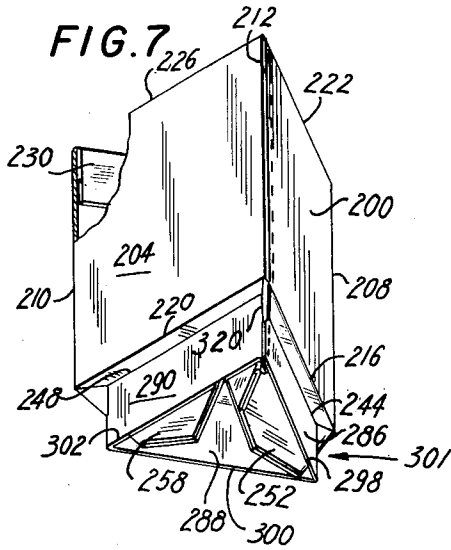
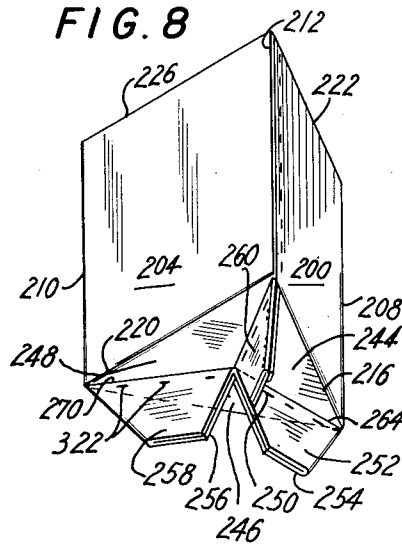


FIG. 8



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3,021,042

DISPLAY CONTAINER

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3 Claims. (Cl. 229-16)

This invention relates to display containers constructed of sheet material such as corrugated paperboard, cardboard, or any material possessing sufficient stiffness to be formed into a container. More specifically, this invention relates to a novel container with base supporting ribs integral with the display container bottom forming segments, formed preferably from a one piece blank and a one piece supporting collar. The container blank may be shipped flat and assembled where it is to be utilized. In some embodiments of the invention, the display container may be formed into a tube and shipped flat, to be assembled where utilized by folding along the score lines and placing the supporting collar in position.

The display container provides a strong, rigid, and stable display stand for merchandise. Another feature of this invention is a specially treated base which permits the floor area to be cleaned and mopped without damage to the appearance or structure of the display stand.

This display container provides a recessed base which allows customers to conveniently approach the stand without kicking or stumbling against the base.

This invention provides a display stand of great stability, that will not easily tip due to the construction of the supporting base and collar.

Many advantages reside in the details of construction and arrangement and for purposes of illustration, but not of limitation, embodiments of the invention are shown in the accompanying drawings and descriptions.

In the accompanying drawings—

FIGURE 1 is a plan of the preferred form of the blank for folding to form a display container.

FIGURE 2 is a plan of the preferred form of the blank for folding to form the supporting collar.

FIGURE 3 is a bottom perspective of assembled display container with supporting collar in place, a top portion of the wall broken away to illustrate the top flap folded into the carton.

FIGURE 4 is a bottom perspective of assembled display container without the means for holding the supporting ribs in juxtaposition attached.

FIGURE 5 is a plan of the blank for folding to form a three sided embodiment of the invention.

FIGURE 6 is a plan of the blank for folding to form a supporting collar for a three sided embodiment of the invention.

FIGURE 7 is a bottom perspective of a three sided container with the supporting means in position. A portion of the wall panel is broken away to illustrate the top flap folded downwardly into the carton.

FIGURE 8 is a bottom perspective of a three sided display container showing the supporting rib structure held in place with staples as the means for holding the supporting ribs in juxtaposition.

Referring to the accompanying drawings by numerals, the preferred embodiment of this display container is constructed from a blank as illustrated in FIGURE 1. The blank is of generally rectangular shape having four wall panels 2, 4, 6, 8 of equal width at their bases, said wall panels defined by vertical fold lines 22, 24, 26, 28 and vertical edge 20, and top edges 30, 32, 34, 36 with top flaps 12, 14, 16, 18 foldably connected thereto, top flaps having slots 110, 112, 114, in an edge therein;

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and bottom fold lines 38, 40, 42, 44 with bottom panels 46, 48, 50, 52 foldably connected to wall panels 2, 4, 6, 8 and scored with diagonal score lines 78, 80, 82, 84, 86, 88, 90, 92 to form supporting rib panels 62, 64, 66, 68, 70, 72, 74, 76 and also isosceles triangular bottom panels 54, 56, 58, 60 of equal size and with each supporting rib panel thereof having slots 94, 96; 98, 100; 102, 104; 106, 108, respectively. Wall panel 8 is provided with marginal edge tab 10 attached along vertical fold line 28.

Collar 3 of FIGURE 3 is formed from the blank of FIGURE 2 which is a single piece of suitable sheet material such as corrugated board or the like. The collar may be waterproofed by applying, in a suitable manner to the sheet, a waterproofing material such as wax or synthetic resin.

Collar 3 is formed from a single blank of sheet material of generally rectangular shape (FIGURE 2) with vertical fold lines 110, 112, 114, 115; slots 116, 118, 120, 122; horizontal edges 132, 134, 136, 138, 140, 142, 144, 146 and marginal edge 151 forming panels 124, 126, 128 and 130 with marginal edge tab 150 attached to panel 130 along fold line 115.

The container is formed by folding of panels 2, 4, 6, 8, along vertical fold lines 22, 24, 26, 28 so that adjoining panels are perpendicular to each other, with marginal edge 10 mutually contacted and secured to wall panel 2 along edge 20 to form a rectangular tube. Marginal edge tab 10 may be secured to wall panel 2 by suitable means such as glue, resin, staples, or tape. Panels 46, 48, 50, 52 are folded inwardly along bottom fold lines 38, 40, 42, 44 and panels 62, 64, 66, 68, 70, 72, 74, 76 at the same time are folded outwardly along diagonal score lines 78, 80, 82, 84, 86, 88, 90, 92 to form equal isosceles triangular bottom panels 54, 56, 58, 60 and supporting ribs composed of juxtaposition panels 64-66, 68-70, 72-74, 76-62 and juxtapositioned slots 96-98, 100-102, 104-106, 108-94. As can be seen clearly in FIGURE 4, the equal isosceles triangular bottom panels, when so folded, meet at their apices at the center or midpoint of the bottom of the container which is maintained in level and completely closed condition and supported from each corner to the center thereof by the integrally formed supporting base ribs. The collar may be formed by folding the blank of FIGURE 2 along vertical fold lines 110, 112, 114 so that adjoining panels 124, 126, 128, 130 are perpendicular to each other with marginal edge tab 150 mutually contacted with panel 124 along edge 151 to form a tube with a configuration having the same number of wall panels as the display container of FIGURE 1. Marginal edge tab 150 may be secured to panel 124 by any suitable means such as glue, staples, or tape to form the tubular structure having the same number of wall panels as display container FIGURE 1.

Collar 3 is placed over the juxtapositioned supporting rib panels 64-66, 68-70, 72-74, 76-62 in such a manner that slots 116, 118, 120, 122 in the collar are received in slots 96-98, 100-102, 104-106, 108-94 of supporting rib panels 64-66, 68-70, 72-74, 76-62 respectively. This construction provides a display container with a segmented bottom integral with a supporting stand formed of juxtapositioned supporting ribs formed from a single blank of sheet material and locked into place with a supporting collar. This is the preferred embodiment. However, other display containers with any desired number of sides may be constructed in the same manner and are contemplated by this invention including a display container with three wall panels as hereinafter described.

The blank, FIGURE 5, is of generally rectangular shape having three wall panels 200, 202, and 204, equal

to each other in width at their bases which wall panel 200 is formed by vertical edge 206, bottom fold line 216, vertical fold line 208, and top fold line 222. Wall panel 202 is formed by vertical fold lines 208 and 210, bottom fold line 218, and top fold line 224. Wall panel 204 is formed by vertical fold lines 210 and 212, bottom fold line 220 and top fold line 226. Top flaps 228, 230, and 232 are foldably attached to top fold lines 222, 224 and 226 respectively.

Bottom panels 238, 240, and 242 are foldably connected to bottom fold lines 216, 218, and 220 respectively. Bottom panels 238, 240 and 242 are scored with diagonal score lines 262, 264; 266, 268; 270, 272 respectively to form supporting rib panels 250, 252, 254, 256, 258, 260 with each supporting rib panel thereof having slots 274, 276, 278, 280, 282, 284 respectively and also equal isosceles triangular bottom panels 244, 246, 248. Wall panel 204 is provided with marginal edge tab 214. The collar may be formed from a single blank of generally rectangular shape with vertical edges 314, 320, vertical score lines 316, 318, and horizontal edges 298, 300, 302, 292, 294, 296. Collar wall panel 290 having marginal tab 312 attached thereon. The container is formed by folding of panels 200, 202, 204, along vertical fold lines 208, 210, so that marginal edge tab 214 and wall panel 200 mutually are contacted and secured to form a tube. Marginal edge tab 214 may be secured to panel 200 at edge 206 by any suitable means such as glue, resin, staples or tape to form a tube. Panels 238, 240, 242 are folded inwardly along bottom score lines 216, 218, 220, and at the same time panels 250, 252, 254, 256, 258, 260, are folded outwardly along diagonal score lines 262, 264, 266, 268, 270, 272, to form equal isosceles triangular bottom panels 244, 246, 248, and juxtapositioned supporting rib panels 252—254, 256—258, 260—250, and similarly coinciding slots 276—278, 280—282, 284—274.

The collar 301 may be formed from the blank of FIGURE 6 by folding panels 286, 288, 290, along vertical fold lines 316, 318 so that marginal tab 312 and collar wall panel 286 are mutually contacted and secured to form a tube with a configuration having the same number of wall panels as the display container. Marginal edge 312 may be secured to wall panel 286 by any suitable means such as glue, tape, resin, or staples.

Collar 301 is placed over the juxtapositioned supporting rib panels 252—254, 256—258, 260—250, in such a manner that slots 306, 308, 310—304 of the formed collar supporting means are received into slots 276—278, 280—282, 284—274, of supporting rib panels 252—254, 280—282, 284—274, respectively. This construction provides a display container with three sides, a container bottom integral with the base supporting ribs with the double fold supporting ribs formed from a single blank of sheet material and locked into place with a supporting collar, said collar forming an offset or recessed base.

In another form of this invention other fastening means may be substituted for the sheet material collar, such as a wire, rope, or a thin band of suitable ma-

terial which may be passed through the slots in the supporting ribs and fastened after the container is formed to hold the supporting ribs in place. A rubber band of suitable size may be stretched over the supporting ribs to fit the slots in the supporting ribs and when placed in position will hold the supporting ribs in juxtaposition to provide a rigid base.

In another contemplated embodiment of this invention the supporting ribs are fastened together in juxtaposition by staples 322 as shown in FIGURE 8, thus eliminating the necessity of slots in the supporting ribs and the necessity of a supporting collar or any other fastening means interconnecting the different supporting ribs. In this embodiment the juxtapositioned supporting ribs may also be held together by suitable adhesives, tape, or by any other suitable means within the skill of the art.

I claim:

1. A display container made of foldable sheet material comprising at least three upright wall panels of equal width at their bases connected to each other along vertical fold lines, a bottom panel connected to each upright wall panel along a bottom fold line perpendicular to the said vertical fold lines, each bottom panel being scored diagonally from the ends of said bottom fold lines to provide isosceles triangular bottom panels of equal size with a supporting rib panel on either side thereof, the bottom panels being folded inwardly toward each other from their respective associated upright wall panels along said bottom fold lines and the supporting rib panels being folded outwardly along said diagonal score lines, each of said equal isosceles triangular bottom panels meeting at the apex of the others to form the bottom of the container and each of said supporting rib panels being in juxtaposition with a supporting rib panel of an adjoining bottom panel to form an integral supporting base rib of double thickness extending along the bottom of the container from a corner thereof, each supporting base rib having a slot in an outer edge thereof, and a supporting collar fitted into the slot of each supporting base rib to reinforce and hold together the supporting base ribs and providing an offset base for the container.

2. The display container of claim 1 in which the apices of the equal isosceles triangular bottom panels meet at the midpoint of the bottom of the container and each supporting base rib extends along the bottom of the container from a corner to the center thereof.

3. The display container of claim 1 in which the bottom of the supporting collar and the bottoms of the supporting base ribs are in the same horizontal plane, whereby the container is supported by the said supporting collar as well as by said supporting base ribs.

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