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BERRY BOX OR THE LIKE
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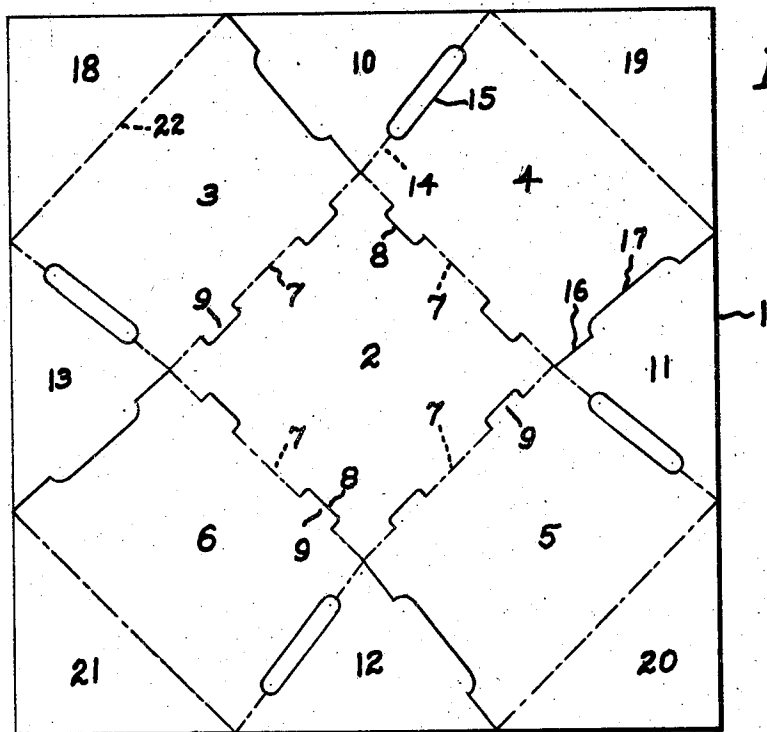


FIG. 1.

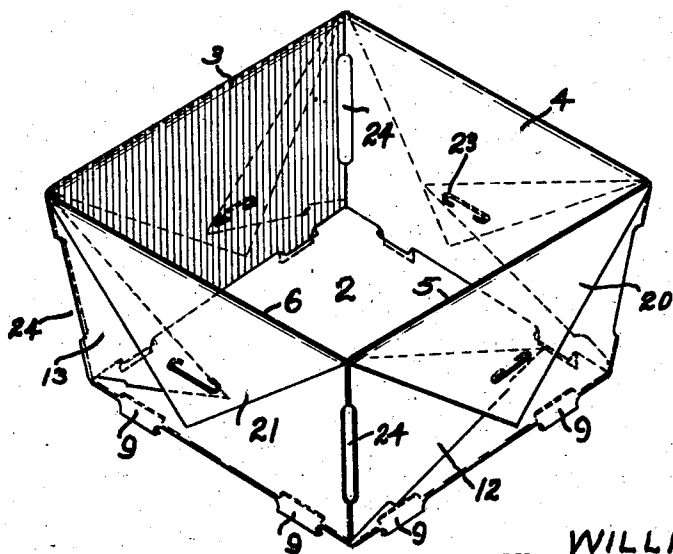


FIG. 2.

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BERRY BOX OR THE LIKE

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12 Claims. (Cl. 229—24)

1 My invention relates to the provision of tray- or box-like structures, of which the berry or fruit box is an example. A box for the exemplary purpose presents some special problems, including problems of shape, stiffness, ventilation, appearance and the raising of the bottom from any support on which the structure rests; and I shall describe my invention in connection with such a box.

An object of my invention is the provision of a box made from less board and a simpler blank and, in particular, a rectangular blank, so that there is no wastage of boxboard and no scrapping operation or scrap loss beyond that entailed in the formation of perforations for ventilation. It is also an object of my invention to attain these advantages in a structure which is adequately strong, of novel and attractive appearance, is tapered in form so as to be nestable, and is adequately ventilated.

Another object of the invention is the provision of a structure which may be set up more simply and economically than current structures.

These and other objects of my invention, which will be set forth hereinafter or will be apparent to one skilled in the art upon reading this specification, I attain by that certain construction and arrangement of parts of which I shall now describe the aforesaid exemplary embodiment. Reference is made to the drawing which forms a part hereof and in which:

Figure 1 is a plan view of the blank for the exemplary embodiment.

Figure 2 is a perspective view of the erected structure.

In these figures solid lines represent lines of cut, and dotted lines, lines of weakening or score lines to determine bending of board.

In Figure 1 I have indicated a square blank at 1. This is divided by cut and scored lines to provide a bottom panel 2 and side wall panels 3, 4, 5 and 6 articulated to the bottom panel by score lines 7. These score lines are interrupted at suitable intervals by U-shaped cut lines 8 extending into the bottom panel and providing non-scored, integral extensions 9 on the side walls. These extensions, when the side walls are erected as shown in Figure 2, form downwardly extending feet which raise the bottom of the structure somewhat above any plane surface upon which it rests. Circulation of air beneath the bottom is thus made possible; and the portions of the bottom panel 2, from which the feet members have been removed, constitute ventilation openings into the interior of the structure.

2 The side walls in the blank have various lateral flaps 10, 11, 12 and 13. These are articulated to the side walls; and I prefer to articulate one side flap to each of the side walls, although an opposite pair of side walls might be provided with two such side flaps per wall, the remaining side walls having no flaps. I have shown the flap 10 articulated to the wall 4 by a score line 14 which is interrupted intermediate its length by an elongated closed cut 15. This cut outlines a removable portion of the board providing a ventilating opening; and the removal of the board portions formed by this and three other similar cuts, as shown in Figure 1, is the only scrapping operation in the formation of my box.

The wall 4 is demarked from side flap 11 on wall 5 by a cut line 16, which is interrupted intermediate its length by a U-shaped cut 17 extending into the wall 4. When the wall 4 is thus severed from side flap 11, its side edge will thus be cut away corresponding to an edge of one of the ventilating openings just described.

25 The side walls 3, 4, 5 and 6 have articulated to them top flaps 18, 19, 20 and 21 by means of score lines, one of which is indicated at 22. Since these top flaps are formed in the corners of the blank, they are triangular in shape as shown; and the side flaps 10, 11, 12 and 13 are also triangular in shape.

30 In setting up the box, the side walls 3, 4, 5 and 6 are erected with respect to the bottom panel 2, and because the side walls are of tapered shape, the erected box or basket likewise has a tapered shape as illustrated in Figure 2. The end flaps 10, 11, 12 and 13 on the side walls are bent over outside adjacent side walls; and the top flaps 18, 19, 20 and 21 are bent over outwardly so as to overlie their respective side walls and portions of the bent-over side flaps. The parts are fastened in erected condition in any suitable fashion. It will be clear that the side flaps could be adhesively secured to the side walls which they lap, and that the top flaps in bent-over condition could be adhesively secured to the side walls and portions of the side flaps. However, for my purposes, I prefer to fasten these elements together by means of staples 23, grommets or the like, passing through the top flaps adjacent the apices thereof, through the side flaps adjacent their ends and through the respective side walls.

50 The box thus formed is strong. It is rigidified at the corners by the angular relationship of a side wall and its articulated side flap. It is rigidified at the top edges by the turning-over of the top flaps and these flaps, together with

the side wall flaps, rigidify the side walls. The structure will be made of boxboard of appropriate thickness in view of the strength requirements. For my uses, the board may advantageously be waterproofed or greaseproofed as by a treatment with paraffin or other coating substances. The appearance of the finished article is neat and attractive, particularly in view of the diagonal lines of the top flaps superimposed upon the side walls. Especially decorative results may be attained by using a two-faced board having a darker color upon one side than upon the other. For example, the surface of the board upon the outer side of the blank as the box is erected may be a brown color, while the other side of the board, forming the interior of the box, is white or light cream. This not only provides a container having a light colored interior with a suggestion of cleanliness and sanitation, but also the turning over of the top flaps as described results in the superposition of triangular light-colored panels upon the darker side wall outlines. The box not only has the ventilating openings in the bottom heretofore described, but ventilating openings 24 at the lines of juncture of the side walls. Additional ventilating openings can, of course, be provided.

Modifications may be made in my invention without departing from the spirit of it. Having thus described my invention in an exemplary embodiment, what I claim as new and desire to secure by Letters Patent is:

1. A square blank for a berry box or like article provided with cut and score lines defining a square main panel canted with respect to any side edge of the blank, side wall panels articulated to the side edges of the said bottom panel, said side wall panels having a depth from top to bottom not greater than the depth of the said bottom panel, side flaps of substantially triangular shape and of a size to fill the space in the blank between side edges of adjacent side wall panels, each of said side flaps being articulated at one edge to a side wall panel and being free of the adjacent side wall panel at another edge, and end flaps of triangular shape articulated to the outer ends of said side wall panels, said triangular side flaps having a height from their articulated bases to their apices greater than half the width of said side wall panels, and said end flaps having a height from their articulated bases to their apices greater than half the depth of said side wall panels, so that when a triangular side flap is lapped over an adjacent side wall panel in an erected structure made from the said blank, the outer end of said triangular side flap will occupy a position such that it can be lapped by the outer end of an end flap articulated to the said lapped side wall and folded over outwardly thereagainst, so that common fastening means may simultaneously engage said end flap, said side flap and the said lapped wall.

2. The structure claimed in claim 1 wherein the cut and scored lines defining the side wall panels are non-parallelly related to each other as respects individual panels, so as to provide an erected structure characterized by a tapered shape in at least one dimension.

3. The structure claimed in claim 1 wherein the score lines demarking the main panel from the side wall panels are interrupted by U-shaped cut lines extending inwardly of the main panel to provide legs for raising the main panel and ventilating openings therethrough.

4. The structure claimed in claim 1 wherein

the score lines demarking the main panel from the side wall panels are interrupted by U-shaped cut lines extending inwardly of the main panel to provide legs for raising the main panel and ventilating openings therethrough, and wherein the score lines articulating side flaps to side wall panels are interrupted by closed continuous cuts providing board portions removable to form ventilating openings at the side edges of the erected structure.

5. The structure claimed in claim 1 wherein the score lines demarking the main panel from the side wall panels are interrupted by U-shaped cut lines extending inwardly of the main panel to provide legs for raising the main panel and ventilating openings therethrough, and wherein the score lines articulating side flaps to side wall panels are interrupted by closed continuous cuts providing board portions removable to form ventilating openings at the side edges of the erected structure, and wherein the cut lines demarking the side walls from adjacent side flaps are interrupted by U-shaped cuts extending inwardly of the side walls to form cut-outs therein mating with said ventilating perforations.

6. The structure claimed in claim 1 wherein the score lines demarking the main panel from the side wall panels are interrupted by U-shaped cut lines extending inwardly of the main panel to provide legs for raising the main panel and ventilating openings therethrough, and wherein the score lines articulating side flaps to side wall panels are interrupted by closed continuous cuts providing board portions removable to form ventilating openings at the side edges of the erected structure, and wherein the cut lines demarking the side walls from adjacent side flaps are interrupted by U-shaped cuts extending inwardly of the side walls to form cut-outs therein mating with said ventilating perforations, and wherein the cut and score lines demarking the said side wall panels are non-parallelly related so as to provide a tapered erected structure.

7. A box formed from the blank of claim 1 characterized by an erected condition of the side wall panels with respect to the main panel, a disposition of the articulated side flaps to overlie side wall panels adjacent the side wall panels to which they are attached, and a disposition of the end panels to overlie said side wall panels and said side wall flaps.

8. A box formed from the blank of claim 1 characterized by an erected condition of the side wall panels with respect to the main panel, a disposition of the articulated side flaps to overlie side wall panels adjacent the side wall panels to which they are attached, and a disposition of the end panels to overlie said side wall panels and said side wall flaps, said side wall panels being tapered in conformation and having their largest lateral dimension away from said main panel.

9. A box formed from the blank of claim 1 characterized by an erected condition of the side wall panels with respect to the main panel, a disposition of the articulated side flaps to overlie side wall panels adjacent the side wall panels to which they are attached, and a disposition of the end panels to overlie said side wall panels and said side wall flaps, said side wall panels being tapered in conformation and having their largest lateral dimension away from said main panel, the score lines between said side wall panels and said main panel being interrupted by U-shaped cuts extending inwardly of the main

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panel to provide downwardly projecting feet on said side wall panels and ventilating openings in said main panel.

10. A box formed from the blank of claim 1 characterized by an erected condition of the side wall panels with respect to the main panel, a disposition of the articulated side flaps to overlie side wall panels adjacent the side wall panels to which they are attached, and a disposition of the end panels to overlie said side wall panels and said side wall flaps, said side wall panels being tapered in conformation and having their largest lateral dimension away from said main panel, the score lines between said side wall panels and said main panel being interrupted by U-shaped cuts extending inwardly of the main panel to provide downwardly projecting feet on said side wall panels and ventilating openings in said main panel, said structure having ventilating openings also at its side edges.

11. A box formed from the blank of claim 1 characterized by an erected condition of the side wall panels with respect to the main panel, a disposition of the articulated side flaps to overlie side wall panels adjacent the side wall panels to which they are attached, and a disposition of the end panels to overlie said side wall panels and said side wall flaps, said side wall panels being tapered in conformation and having their largest

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lateral dimension away from said main panel, said structure being formed of a two-faced board of contrasting color as respects the faces whereby a decorative effect is obtained by the superposition of end flaps of one color upon side wall panels of another color.

12. A box formed from the blank of claim 1 characterized by an erected condition of the side wall panels with respect to the main panel, a disposition of the articulated side flaps to overlie side wall panels adjacent the side wall panels to which they are attached, and a disposition of the end panels to overlie said side wall panels and said side wall flaps, said side wall panels being tapered in conformation and having their largest lateral dimension away from said main panel, the score lines between said side wall panels and said main panel being interrupted by U-shaped cuts extending inwardly of the main panel to provide downwardly projecting feet on said side wall panels and ventilating openings in said main panel, said structure having ventilating openings also at its side edges, said structure being formed of a two-faced board of contrasting color as respects the faces whereby a decorative effect is obtained by the superposition of end flaps of one color upon side wall panels of another color.

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