

March 21, 1967

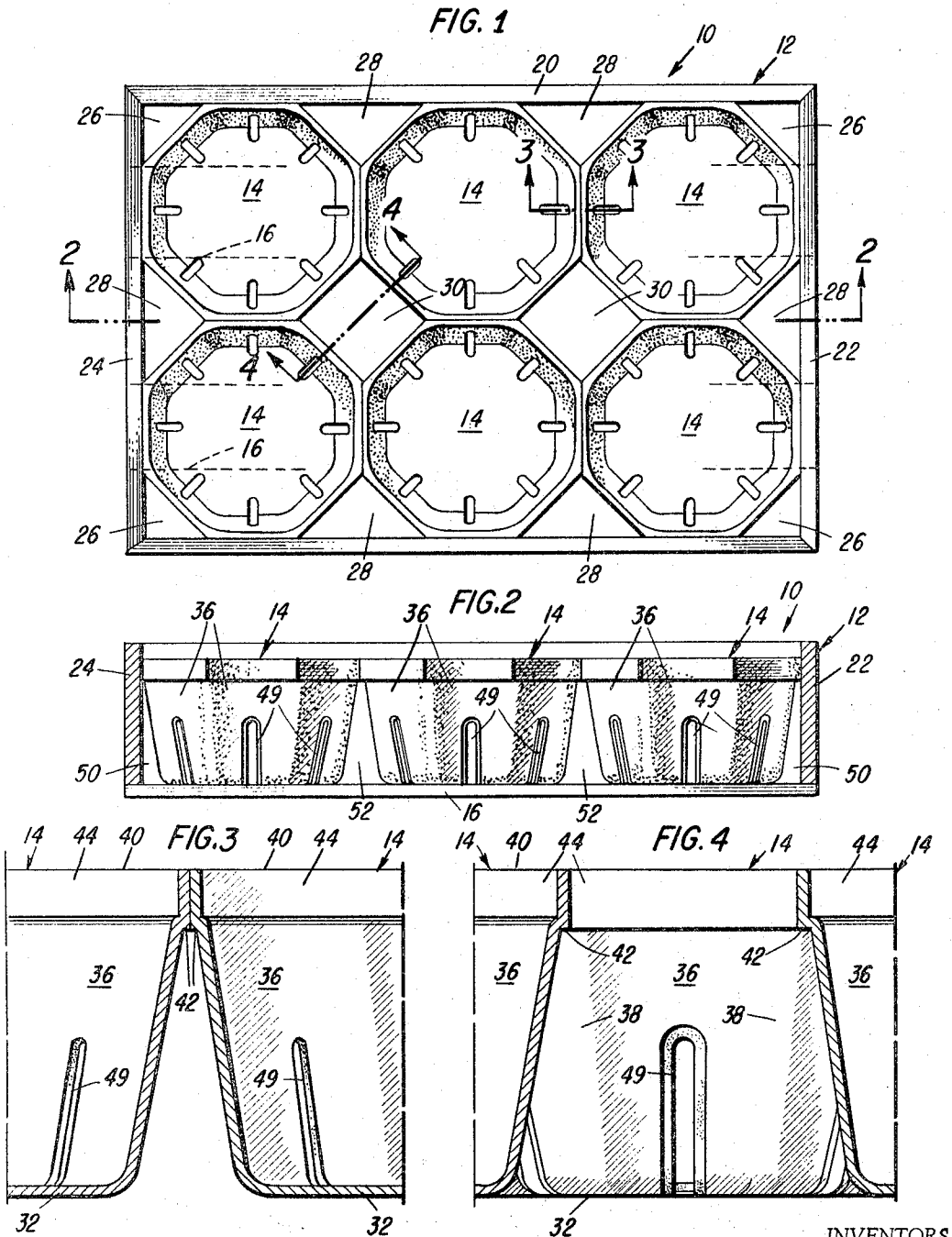
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3,310,218

MOLDED PULP PRODUCE PACKAGE

Filed March 11, 1965

4 Sheets-Sheet 1



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4 Sheets-Sheet 2

FIG. 5

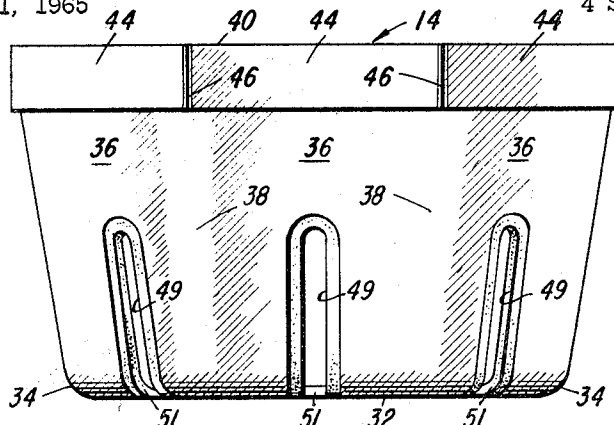


FIG. 7

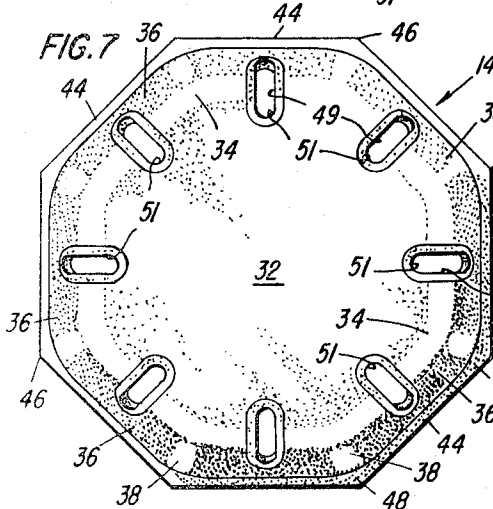


FIG. 6

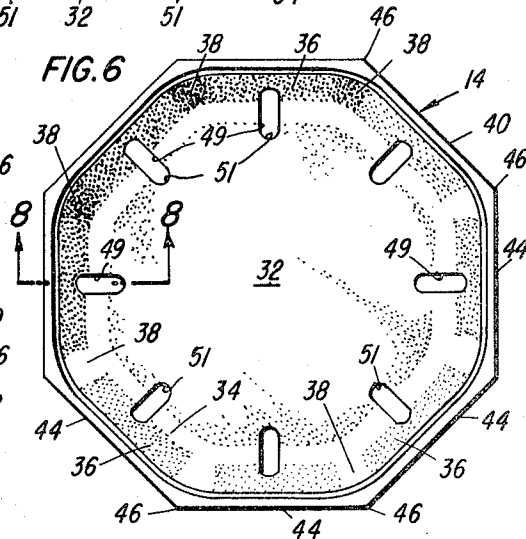


FIG. 8

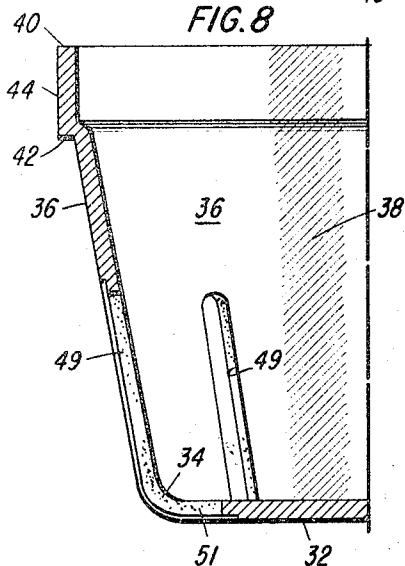
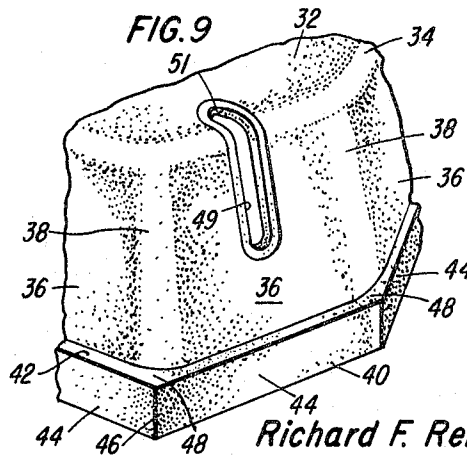


FIG. 9



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4 Sheets-Sheet 3

FIG. 10

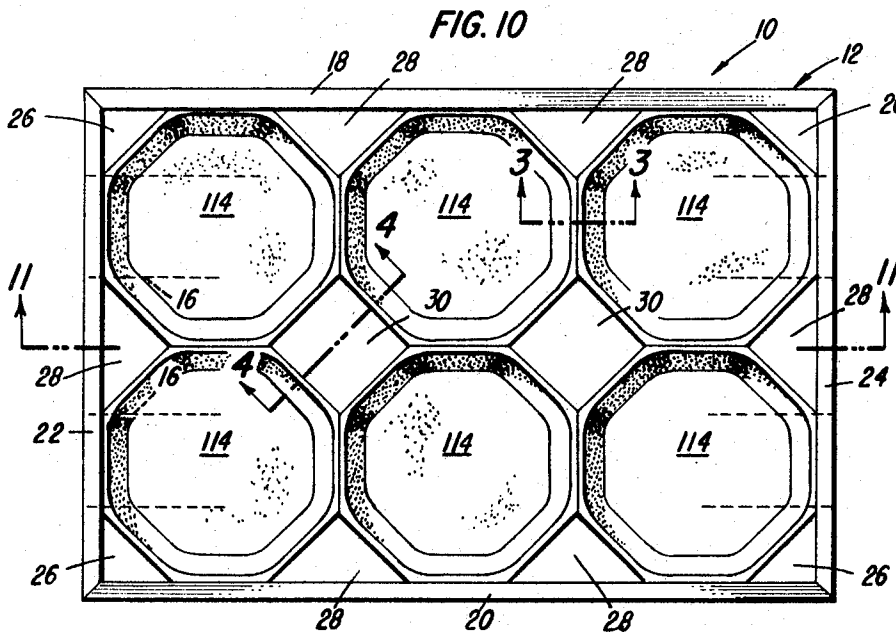


FIG. 11

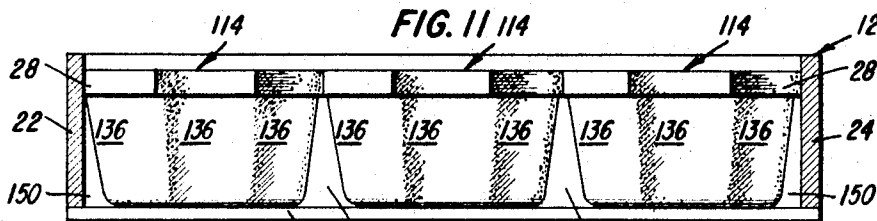


FIG. 12

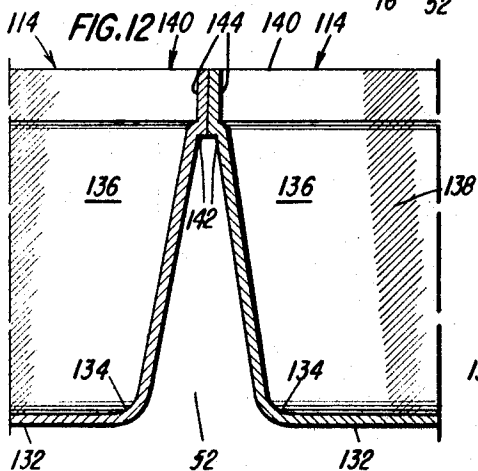
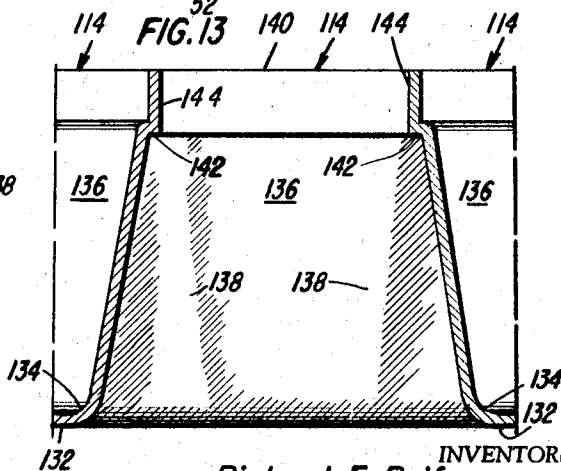


FIG. 13



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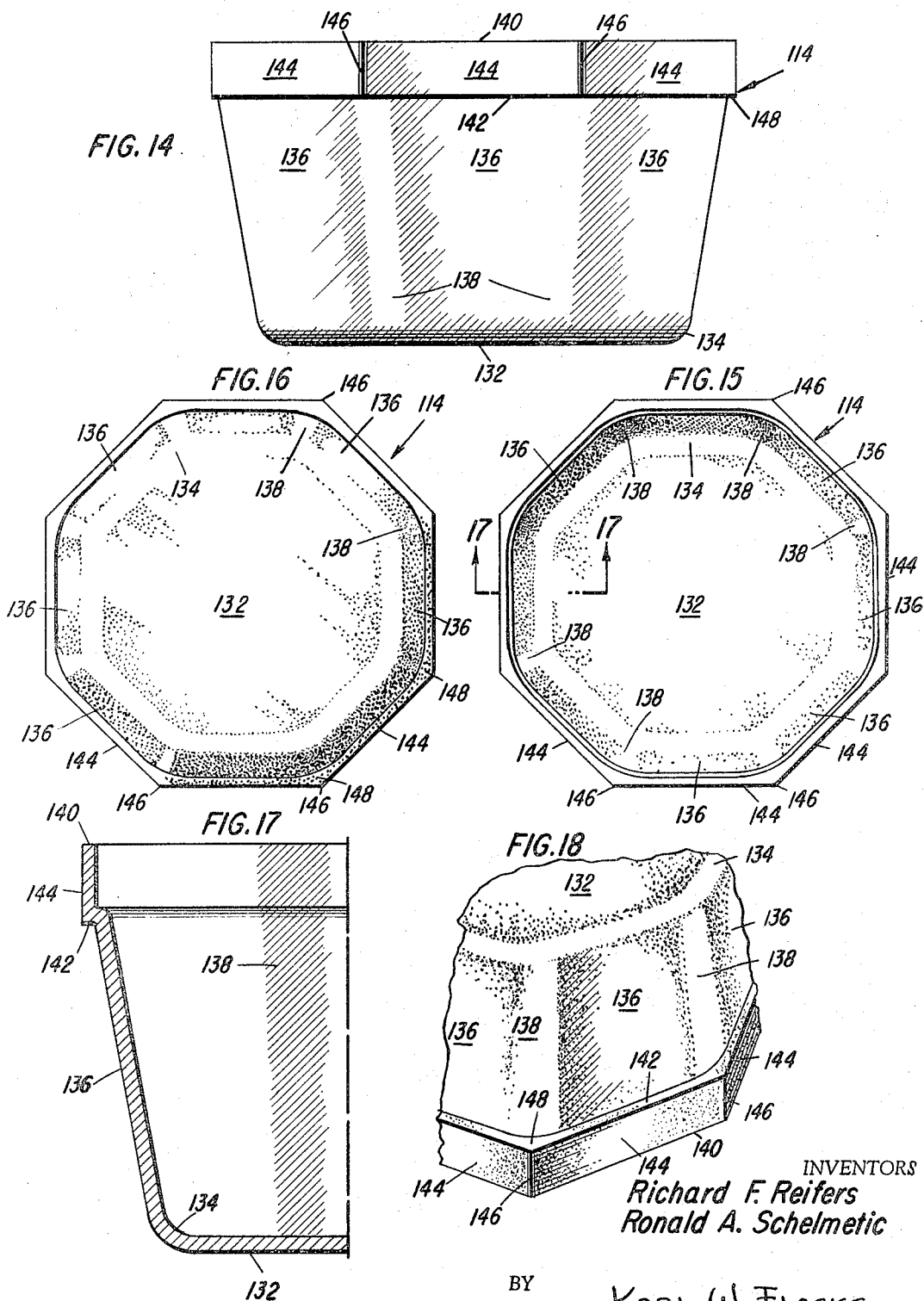
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4 Sheets-Sheet 4



1

3,310,218

MOLDED PULP PRODUCE PACKAGE

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3 Claims. (Cl. 229—15)

This invention relates generally to container and more particularly to a novel container and package facilitating the measuring, and protection of berries, fruit and the like during shipment and other phases of handling prior to and during retail sales.

The primary object of the present invention is to provide a novel package utilizing octagonally shaped berry trays or baskets which readily fit into a rectangular container and in which the octagonally shaped trays or baskets include portions providing air passages surrounding each basket and in which chimneys or tunnels communicate with the surrounding air passages at the side of the baskets or trays in the rectangular container.

Another object of the present invention is to provide a novel package including a plurality of octagonally shaped berry baskets or trays, and in which the baskets include means for facilitating the removal thereof from the packaging container as well as providing means for insuring maximum refrigeration and air circulation of the baskets or trays and the commodity contained therein.

Another primary object of the present invention is to provide a novel package utilizing octagonally shaped berry baskets which readily fit into a rectangular container and in which the octagonally shaped baskets include portions providing air passages surrounding each basket and in which chimneys or tunnels communicate with the surrounding air passages at each of the alternate sides of the baskets in the rectangular container, and in which the baskets include in the wall panels and bottoms thereof slot portions whereby air is circulated into the interior of the baskets and the contents contained therein as well as through the surrounding air passages.

Another object of the present invention is to provide a novel berry basket having an octagonal shape in which the basket has a configuration ensuring that it will be filled to its maximum capacity, and having an octagonal, outwardly extending peripheral upper flange ensuring proper stacking and denesting of the stack of baskets as well as providing means whereby the baskets may be readily handled both during packaging and by the consumer at the retail source without damage to the product contained in the berry baskets, and in which the walls of the baskets include slot portions therein extending into the bottom wall of the basket for facilitating the circulation of air to the interior of the basket to aid in the preservation of the product contained in the basket.

These, together with other and more specific objects of the invention will become apparent from a consideration of the following description when taken in conjunction with the drawing forming a part thereof;

FIG. 1 is a top plan view of the novel package;

FIG. 2 is a vertical section taken on the plane of line 2—2 of FIG. 1;

FIG. 3 is an enlarged, fragmentary, vertical section taken on the plane of line 3—3 of FIG. 1;

FIG. 4 is a fragmentary, enlarged, vertical section taken on the plane of line 4—4 of FIG. 1;

FIG. 5 is an enlarged side elevation of one of the berry baskets of the invention;

FIG. 6 is a top plan view of FIG. 5 on a reduced scale;

FIG. 7 is a bottom plan view of FIG. 5 on a reduced scale;

2

FIG. 8 is an enlarged, fragmentary vertical section taken on the plane of line 8—8 of FIG. 6;

FIG. 9 is an enlarged, fragmentary perspective view of the berry basket with the basket inverted;

FIG. 10 is a top plan view of another embodiment of the novel package;

FIG. 11 is a vertical section taken on the plane of line 11—11 of FIG. 10;

FIG. 12 is an enlarged, fragmentary, vertical section taken on the plane of line 12—12 of FIG. 10;

FIG. 13 is a fragmentary, enlarged, vertical section taken on the plane of line 13—13 of FIG. 10;

FIG. 14 is an enlarged side elevation of one of the baskets or trays shown in FIGS. 10—13;

FIG. 15 is a top plan view of FIG. 14, on a reduced scale;

FIG. 16 is a bottom plan view of FIG. 14, on a reduced scale;

FIG. 17 is an enlarged, fragmentary vertical section taken on the plane of line 17—17 of FIG. 15; and

FIG. 18 is an enlarged, fragmentary perspective view of the berry basket or tray of FIGS. 10—13 with the tray inverted.

Referring to the drawing in detail, and first considering FIGS. 1 and 2, a package assembly is indicated generally at 10 and comprises a container or crate 12 in which are disposed a plurality of similar, octagonal berry baskets 14.

The container or crate 12 may be produced from any suitable material, i.e. paperboard, wood, etc., comprising a bottom wall 16 having opposed pairs of vertically extending walls 18, 20 and 22, 24, suitably secured at the corners.

When the berry baskets 14 are positioned in the container 12, they form with the adjacent wall portions of the container and with each other a plurality of vertically opening spaces or "chimneys." The openings at the corners of the package are identified at 26, intermediate openings adjacent the walls of the container 12 are indicated at 28, and vertical openings formed between adjacent berry baskets are indicated at 30.

The berry baskets 14 are produced from a relatively porous molded pulp and have a regular octagonal shape. Although the berry baskets illustrated in this exemplary embodiment have sides of equal length, it is clearly apparent to those skilled in the art that the term "regular octagon" is intended to encompass elongated octagons in which a pair of opposed side walls are of a greater length than the six remaining side walls at the ends of the berry basket. In this manner, the capacity of the berry baskets may be varied to accordingly measure one-half pint, one pint or one quart, for example.

Considering FIGS. 5—9, the berry baskets 14 include an octagonal bottom wall 32 connected by a peripheral radius 34 to a plurality of upwardly inclined wall panels 36. Adjacent vertical edges of the wall panels 36 are connected to each other on a concave-convex radius edge portion 38, which, as seen in FIG. 6, provides a rounded area for accommodating correspondingly rounded portions of berries or fruit, etc. This expedient will ensure that the berry baskets are completely filled so that the consumer receives a full measure of the commodity being merchandised as well as reinforce the tray at the "corners," i.e. connections between the panels 36.

The wall panels 36 and corners 38 therebetween terminate in an upper peripheral flange 40 having a lower, outwardly disposed ledge portion 42 (see FIG. 9). The peripheral flange 40 includes segments 44 corresponding to the number of wall panels 36, and the corners thereof merge into a sharp linear margin 46 defining an enlarged, substantially triangular reinforced ledge 48 immediately above and substantially bisecting the rounded corners 38 between adjacent wall panels.

The peripheral flange 40 facilitates nesting and orientation of the stack of berry baskets, i.e. prior to the baskets being filled with the commodity and disposed in the container, and also the ledges 42 provide means whereby the filled baskets may be readily removed from the container 14 by inserting one's fingers in the vertical openings 26, 28 and 30 formed in the complete package. Additionally, when a plurality of berry baskets are disposed in the container 12, the peripheral flange 40, which includes sharply defined segments 44, will facilitate orientation of the berry baskets in the container 12. Still further, shocks to the outer surfaces of the walls of the container 14 will be transmitted to the peripheral flange 40, and since the wall panels 36 of the baskets are angularly related and converged downwardly from this peripheral flange, this construction will minimize shock transmitted to the contents in the filled baskets.

Each of the baskets 14 includes at the wall panels 36 an elongated slot 49 which terminates below the ledge 42 of the peripheral flange 40 and which continues as indicated at 51 into the adjacent portion of the octagonal bottom wall 32.

Since the wall panels 36 of the berry baskets converge downwardly, the wall panels adjacent the walls 18-24 of the container will form therewith passage portion 50 which communicates with the openings 26 and 28, as previously described, and adjacent baskets will form therebetween passages 52 communicating with openings 28, as well as with the vertical openings 30 between adjacent baskets (see FIGS. 1-4).

It will be noted that each of the baskets 14 is provided in the package 10 with a vertical opening adjacent alternate side wall panels of the baskets and refrigerating air will not only circulate through the passage portions 50 and 52, which surround each of the baskets, but will also communicate with the interior of the baskets through the slots 49 and portions 51 thereof for engagement and circulation through the contents of the filled baskets.

Referring to FIGS. 10-18 in detail, and first considering FIGS. 10 and 11, the package assembly, similar to the embodiment of FIGS. 1-9, is indicated generally at 100 and comprises a container, tray or crate 12 in which is disposed a plurality of similar octagonal berry baskets or trays 114.

The container, tray or crate 12 is similar to that of the previously described embodiment and, accordingly, similar reference numerals are used to identify similar previously described structure.

When the berry baskets 114 are positioned in the container 12, they form with the adjacent wall portions of the container and with each other a plurality of vertically spaced openings or "chimneys" as well as passages surrounding the trays.

The berry baskets 114 are produced from a relatively porous molded pulp and have a regular octagonal shape. The berry baskets or trays are illustrated in the exemplary embodiment as having sides of equal length, however, the term "regular octagon" is intended to encompass elongated octagons, etc. and the baskets or trays 114 may have different capacities.

Considering FIGS. 14-18, the trays or baskets 114 include an octagonal bottom wall 132 connected by a peripheral radius 134 to a plurality of upwardly inclined wall panels 136. Adjacent vertical edges of the wall panels 136 are connected to each other on a concavo-convex radius edge portion 138 which, as seen in FIG. 15, provides a rounded area for accommodating corresponding portions of berries, fruit, i.e., the commodity therein, which will insure that the basket is completely filled according to the measure of merchandise being sold, as well as reinforcing the "corners," i.e., connections with the panels 136.

The wall panels 136 and corners 138 therebetween terminate in an upper peripheral flange 140 having a lower, outwardly disposed ledge portion 142 (see FIG. 18). The

peripheral flange 140 includes eight segments 144 corresponding to the wall panels 136, and the corners thereof merge in a sharp linear margin 146 defining an enlarged, substantially, triangular reinforced ledge 148 immediately above the corners 138 between adjacent wall panels.

The peripheral flange 140 facilitates nesting and orientation of a stack of baskets or trays, i.e., prior to the baskets being filled with the commodity and disposed in the container 12 and also the ledges 142 provide means whereby the berry baskets may be readily removed from the container 12 by inserting one's finger into the vertical openings formed in the completed package. Additionally, when a plurality of trays or baskets are disposed in the container 12, the peripheral flange 140, which includes the sharply defined segments 144, will facilitate orientation of the trays in the container 12. Still further, shocks to the walls of the container 12 will be transmitted to the peripheral flange 140, since the wall panels 136 are angularly related or converge downwardly from the peripheral flange and this construction minimizes shock transmitted to the contents of the filled trays.

Since the wall panels 136 of the trays converge downwardly, the wall panels adjacent the walls 18-24 of the container 12 will form the passage portions 50 which communicate with the openings, and adjacent trays will form therebetween passages 52 also communicating with the opening (see FIGS. 10-15, for example).

It will be noted, just as in the previously described embodiment, that the through passages 50 and 52 permit circulation of refrigerating air and air circulation about the baskets and out of the container, and thus provide substantially the same function and structure as that shown in FIGS. 1-9.

It will be obvious to those skilled in the art that various changes may be made without departing from the scope of the invention and therefore the invention is not limited to what is shown in the drawings and described in the specification, but only as indicated in the appended claims.

What is claimed is:

1. In combination, a rectangular container including a bottom wall having pairs of opposed vertical walls connected at adjacent ends and defining a rectangular collar, and a plurality of regular, octagonal baskets of a porous molded pulp material disposed in said rectangular container and engaging inner surface portions of said collar, said baskets having an upper, substantially rigid octagonal frame, wall panels depending angularly from said frame, and disposed inwardly from the outer surface of said octagonal frame, said wall panels being connected to an octagonal bottom wall, said baskets each having a through passage surrounding each basket in said rectangular container and formed by adjacent portions of said container walls and adjacent basket walls, and a vertical passage disposed at alternate wall portions of said baskets and communicating with said through passages, said passages adjacent the inner surface of said rectangular container being triangular and having at least one side equal to the length of one side of an octagonal basket when viewed in plan, and vertical passages surrounded by four baskets being rectangular and having sides equal to the length of one side of said baskets when viewed in plan, adjacent sections of said basket frames terminating in a sharply defined vertical line of demarcation for orienting the baskets in said rectangular container, adjacent edges of said basket wall panels terminating in a common radius for accommodating berries, fruit and the like therein.

2. The combination as claimed in claim 1 in which each of said basket wall panels includes therein a slot terminating short of said basket frame and continuing into an adjacent portion of said basket bottom wall, said slot communicating with the through passages surrounding said basket panel walls and promoting the circulation of air from said through passages into the interior of said baskets.

5

3. The combination as claimed in claim 1, in which said frame forms a peripheral lip therebeneath with said basket panels providing means for rigidifying the upper edge of said basket and insuring proper nested relationship in a vertical stack of said baskets, said octagonal frame having a sharp, vertical edge at adjacent ends of adjacent frame segments overlying and in alignment with the common radius of vertical edges of said basket wall panels and defining a substantially triangular lip thereabove.

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