

Dec. 9, 1969

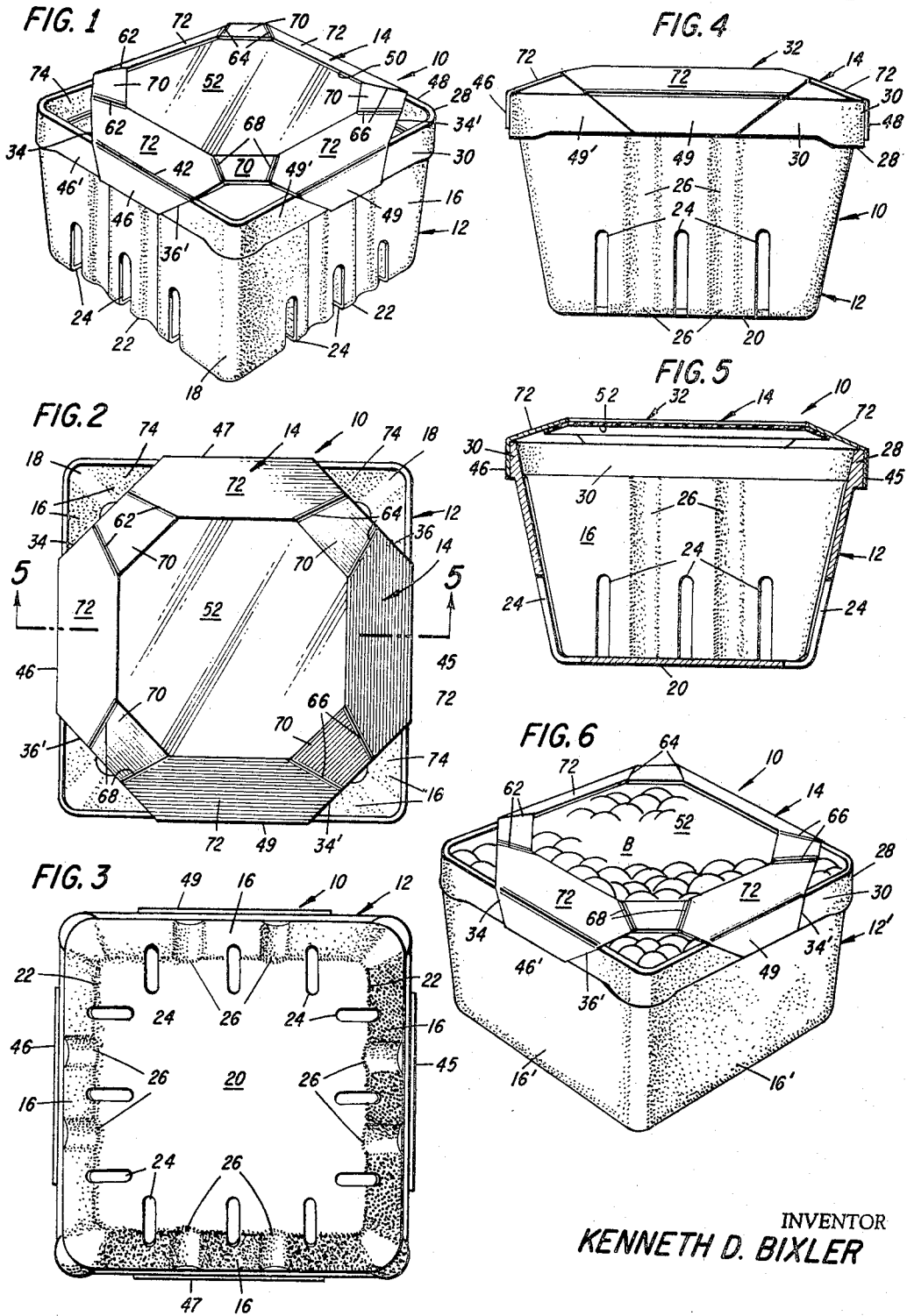
K. D. BIXLER

3,482,680

PRODUCE PACKAGE AND BLANK FOR PRODUCING THE LID

Filed Aug. 23, 1968

2 Sheets-Sheet 1



INVENTOR
KENNETH D. BIXLER

BY

KARL W. FLOCKS
ATTORNEY

Dec. 9, 1969

K. D. BIXLER

3,482,680

PRODUCE PACKAGE AND BLANK FOR PRODUCING THE LID

Filed Aug. 23, 1968

2 Sheets-Sheet 2

FIG. 7

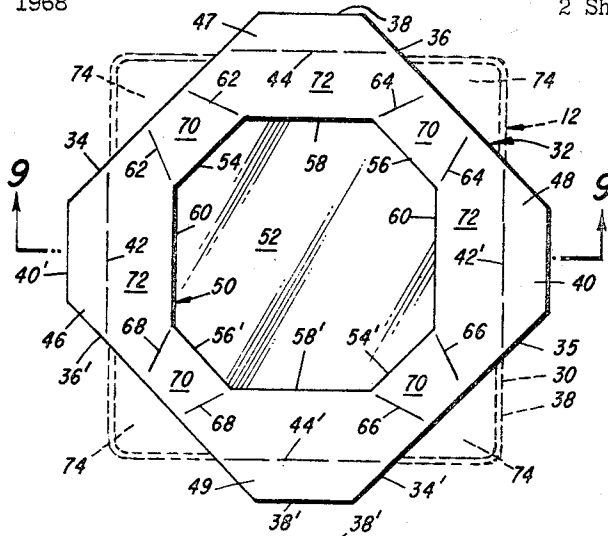


FIG. 8

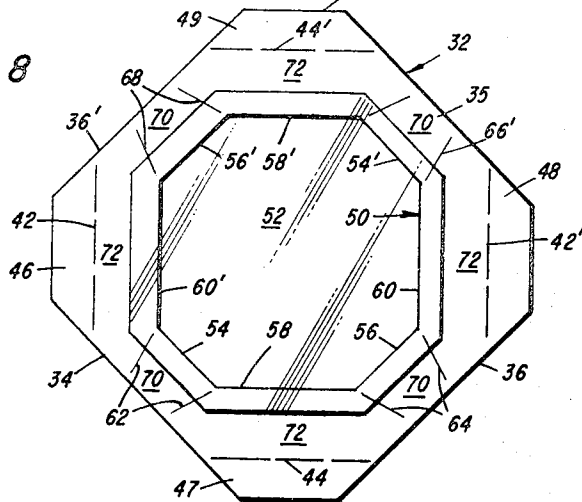
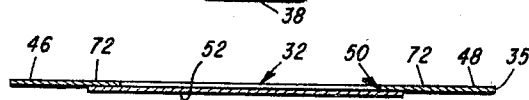


FIG. 9



INVENTOR
KENNETH D. BIXLER

BY

KARL W. FLOCKS
ATTORNEY

1

2

3,482,680

PRODUCE PACKAGE AND BLANK FOR PRODUCING THE LID

Kenneth D. Bixler, Huntington, N.Y., assignor to Diamond International Corporation, New York, N.Y., a corporation of Delaware

Filed Aug. 23, 1968, Ser. No. 754,932
Int. Cl. B65d 25/00, 5/00

U.S. Cl. 206—45.31

6 Claims

ABSTRACT OF THE DISCLOSURE

A package for produce such as berries and the like in a basket filled with heaped produce has fixed thereto a three-dimensional, see-through cap providing ventilation for the produce while restraining the produce in the basket.

A package for produce such as berries and the like should not only protect the product, but should be attractive, retain the product in the basket, permit the consumer to generally observe the package contents, permit stacking of the packages without damage to the product, and permit air circulation through the package to facilitate circulation of cooling and/or freezing air and deterring spoilage of the fresh produce.

Primary objects of the present invention are to provide a novel package which includes all of the desirable qualities mentioned above; to provide a novel package in which the closure cap permits heaping of berries or the like and provides a three-dimensional closure cap restraining the product in heaped relation, while bridging and protecting the packaged produce to provide a flat plateau support facilitating stacking of the packages, as well as providing spaced ventilation opening in the corner and a viewing aperture whereby the package contents may be readily observed.

These together with other objects and the nature and advantages of the invention will become apparent from the following description when taken in conjunction with the drawing forming a part thereof in which:

- FIG. 1 is a perspective view of the novel package;
- FIG. 2 is a top plan view of FIG. 1;
- FIG. 3 is a bottom plan view of FIG. 1;
- FIG. 4 is a side elevational view of one side of the package;
- FIG. 5 is a vertical section taken on the plane of line 5—5 of FIG. 2;
- FIG. 6 is a perspective view, similar to FIG. 1, showing a modified basket or tray;
- FIG. 7 is an enlarged top plan view of a blank from which the three-dimensional cap is produced;
- FIG. 8 is a bottom plan view of FIG. 7; and
- FIG. 9 is a section taken on line 9—9 of FIG. 8.

Referring to the drawing in detail, and first considering FIGS. 1-5, a produce package for berries or the like is indicated generally at 10 and comprises a basket or tray 12 and a three-dimensional lid or cap indicated generally at 14. The tray or basket 12 can assume many uniform polygonal shapes and is preferably produced by molding a slurry pulp, however, the basket can be produced from paperboard, wood, plastic, etc. Further, in this exemplary embodiment, the basket is substantially rectangular; see FIG. 2, and comprises four sides 16 joined at radiused corners 18 which are formed integral with a bottom wall 20 by means of radiused marginal edges 22. The side walls 16 may, in this exemplary embodiment, include slots 24 extending through both the side walls and bottom wall and spaced therealong. Intermediate the slots 24 are flutes or reinforcing ribs 26. Further, the side walls 16, as seen in FIGS. 4 and 5, for example, diverge upwardly and are

formed integral with a peripheral rib or flange 28 which has a substantially planar outer surface 30.

Before describing the three-dimensional lid or cap 14, attention is drawn to FIG. 6 in which a package, similar to that shown in FIG. 1, is indicated generally at 10' and comprises a basket or tray 12' and lid or cap 14 similar to that shown in FIG. 1. With respect to the basket or tray 12', it will be noted that the side walls 16' correspond generally to those indicated at 16 in FIG. 1, for example, however, the side walls do not include reinforcing flutes and/or slots extending through the side walls and bottom wall. On the other hand, the tray or basket 12' includes a peripheral reinforcing flange or rib 28 having a planar outer surface 30, the function of which will be subsequently described.

The lid or cap 14 will straddle the basket or trays 12, 12' and comprises a body or cut-and-scored blank, indicated generally at 32 which is produced in any suitable manner from a suitable paperboard, plastic material, etc.; see FIGS. 7-9.

The blank 32 is substantially planar, prior to being assembled or mounted on the basket or tray, and in this exemplary embodiment comprises a body portion 35 formed as an octagon including relatively long, mutually parallel opposed pairs of margins 34, 34' and 36, 36' disposed in right angular relation with respect to each other. The margins 34-36' are connected by intermediate, respective, mutually parallel pairs of margins 38, 38' and 40, 40' likewise disposed in respective right angular relationship and extending at 135° with respect to the adjacent margins 34-36', respectively. The blank 35 is so proportioned with respect to the marginal flange 28 of the tray so that the score lines 42, 42' and 44, 44', which extend parallel to margins 38, 38' and 40, 40', respectively, and are disposed intermediate portions of margins 34, 36; 36, 34'; 34', 36'; and 36', 34. These margins 42-44' will be disposed in substantially coplanar relation to the upper marginal edges of the flange or frame 28 of the basket or tray 12 and/or 12' when the lid is mounted on the basket to form a completed package. The score lines 42, 42'; 44, 44' form mounting tabs 46, 47, 48 and 49 which are suitably secured to outer surface portions 30 of the frame 28 at sides 46, 47', 48' and 49', respectively; see FIGS. 1 and 2, for example.

The body member 35 preferably has formed therein an octagonal viewing aperture 50 disposed symmetrically with respect to the sides 34-36'. The aperture 50 is preferably covered by transparent sheet material 52 extending peripherally beyond the aperture 50 as seen at 54 in FIG. 8. The aperture 50 includes opposed, mutually parallel pairs of marginal edges 54, 54'; 56, 56' parallel to and disposed inwardly of the outermost margins 34, 34'; 36, 36'; 38, 38'; 40, 40'.

Converging uniformly from the terminal ends of margins 54, 56, 54' and 56' of the aperture 50 and extending substantially to intermediate portions of the margins 34-36', respectively, are pairs of score or fold lines 62-68 which define trapezoidal and hexagonal segments 70 and 72, in alternately disposed relationship about the viewing aperture 50.

When the lid at 14 is folded to the condition shown in FIGS. 1, 2 and 4-6, after the baskets or trays are filled with berries B, the tabs 46-49 are suitably secured to the portions 46, 49', respectively, of the tray rim, and the segments 70 and 72, will be disposed in angularly depending relationship from the substantially planar portion 52 of the lid, i.e., in prism-like relationship and the upper marginal edge of the viewing aperture 50 and the transparent sheet 52 will provide a ledge or resting portion for completed packages when they are stacked in a packing crate, for example.

3

The margins 34-36' will extend diagonally across the corners of the tray forming triangular openings 74 at the package corners providing good air circulation as well as exposing a portion of the package contents.

The lid 14, which straddles the tray, permits the heaping of berries or whatever product is packaged, while protecting the contents, and permits ready stacking of the packages without damage, as well as permitting the ultimate consumer to obtain a good picture of what the package contains, a portion of the product which is exposed at the openings 74 and permits extremely close examination of the package contents. The slots 24 of the embodiment shown in FIG. 1, for example, improve air circulation through the package, however, substantially good ventilation is provided by the package illustrated in FIG. 6.

The prism-like lid in conjunction with the polygonal tray affords a package meeting all the requisites of good packaging criteria.

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 the invention is not to be considered limited to what is shown in the drawings and described in the specification.

What is claimed is:

1. A package comprising basket means having a polygonal upper edge comprising coplanar, straight-edge portions intersecting at corners of the basket;
 a product in the basket; and
 a prism-like lid straddling the basket and including hinged securing tabs connected to the basket and having straight-edge margins at the hinged connection to the basket and disposed substantially parallel to and overlying straight-edge portions of the upper edge of the basket;
 said lid including a central, polygonal, planar area defined by angularly related, straight-edge, coplanar margin surrounded by alternately disposed, trapezoidal and hexagonal planar segments depending angularly from said planar area,
 said hexagonal segments having one edge hingedly connected to the hinge margin of a respective one of said securing tabs,
 said alternate trapezoidal segments having angular side edges hingedly connected to adjacent ends of two adjacent hexagonal segments,
 said trapezoidal segments diverging toward the corners of said basket and terminating in a transverse, linear margin extending into and forming side edges of the adjacent hexagonal segments to which said trapezoidal segment is connected, said outer linear edge extending transversely of a corner of said basket and forming a triangular ventilation opening thereat.

4

2. The structure as claimed in claim 1, in which said basket is rectangular and said lid is octagonal.

3. The structure as claimed in claim 1, in which said planar lid area is octagonal and comprises a viewing aperture.

4. The structure as claimed in claim 3, in which said viewing aperture is substantially covered by a transparent sheet element integral with said lid.

5. A blank for producing a three-dimensional, prism-like lid with planar facets for use on a basket having coplanar, polygonally related, straight marginal edge portions, comprising:

a planar body portion having a central, polygonal central area defined by angularly related straight marginal edges,

said area being bordered by alternately disposed, planar trapezoidal and hexagonal segments each having a straight edge portion defining a portion of said central area,

said hexagonal segments including an outer marginal hinge line parallel to said just-mentioned straight margin forming a portion of said central area, a securing tab hingedly connected to the outer marginal hinge line of said hexagonal segments, said hexagonal segments being disposed in rectangular relationship and said trapezoidal segments being disposed therebetween,

said trapezoidal segments having opposite converging side margins hingedly connected to adjacent ends of two rectangularly related hexagonal segments, said trapezoidal segments having an outer margin parallel to the margin forming a part of said central polygonal area, said outer margin extending linearly through angular portions of said hexagonal segments in angular relationship to the portions of adjacent hexagonal segments hingedly connected to the trapezoidal segments.

6. A blank as claimed in claim 5, in which said central polygonal area is octagonal and is removed from said blank element forming a viewing opening therethrough.

References Cited

UNITED STATES PATENTS

3,343,660 9/1967 Bailey.

JAMES B. MARBERT, Primary Examiner

U.S. Cl. X.R.

229-16