Oct. 26, 1948. J. A. McCORMICK 2,452,204

METHOD AND PACKING STRUCTURE FOR HIGH PACKING HANDLED BASKETS WITH FRUIT

Filed Jan. 22, 1944

2 Sheets-Sheet 1

FIG. 1

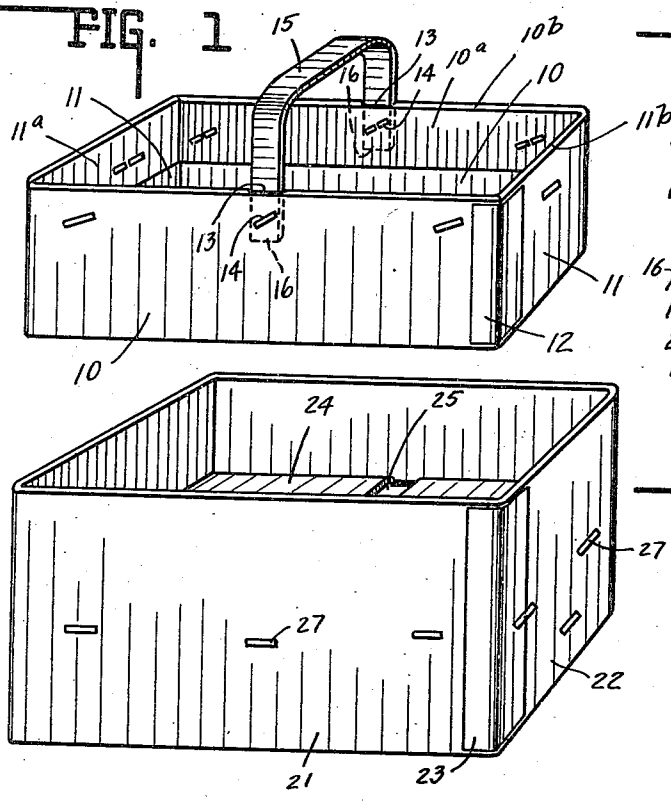


FIG. 2

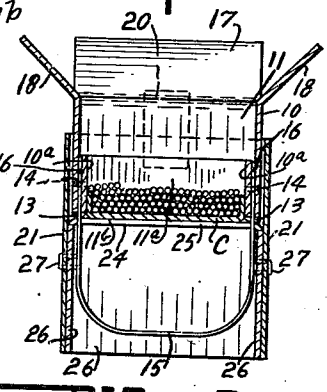
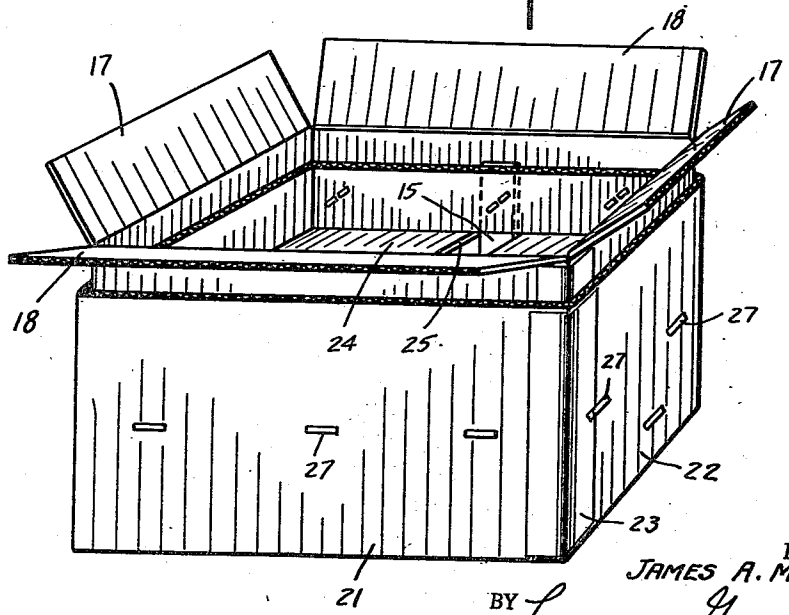


FIG. 3



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2 Sheets-Sheet 2

FIG. 4

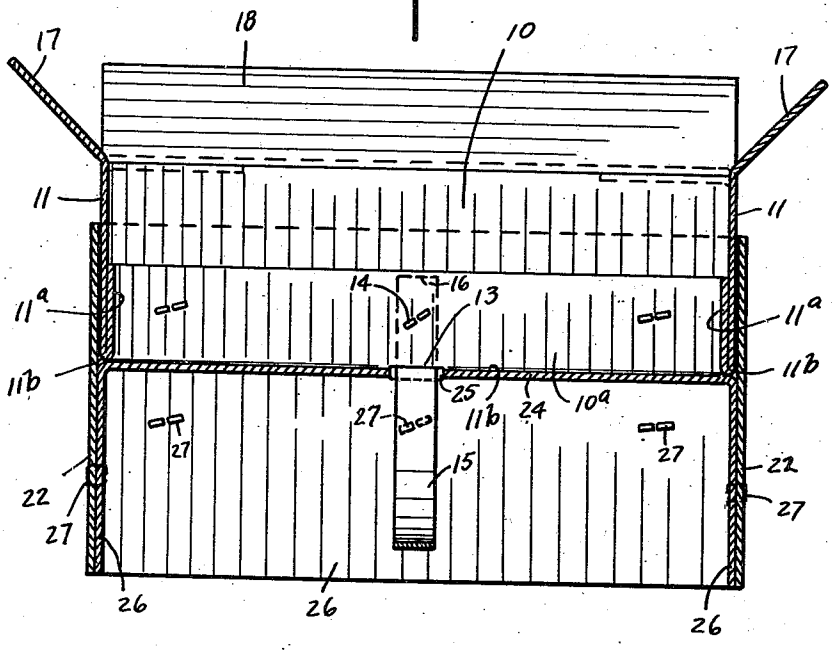


FIG. 5

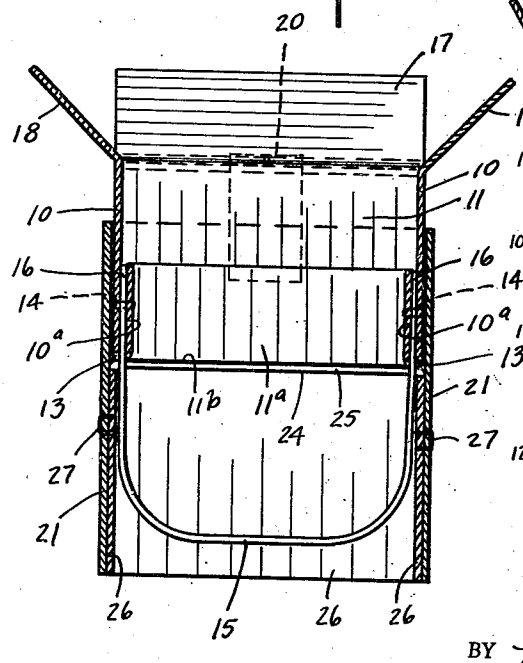
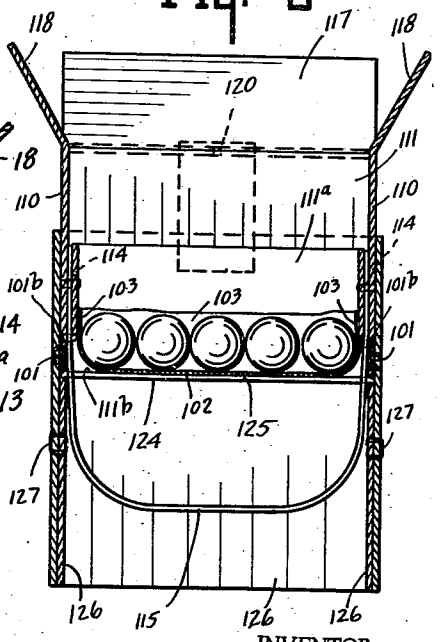


FIG. 6



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METHOD AND PACKING STRUCTURE FOR HIGH PACKING HANDLED BASKETS WITH FRUIT

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6 Claims. (Cl. 226—17)

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This invention relates to the packing of fruits, vegetables and the like, and is a continuation-in-part of the prior copending application, Serial No. 345,077, filed July 12, 1940, now Patent Number 2,382,891, dated August 14, 1945, entitled "Shipping and display high pack container."

The chief object of the invention is to obtain a high, even face without crushing or bruising the contents of a container such as fruits, berries, vegetables and the like. Contents so packed will hold up longer and will not bruise, deteriorate or mold in packing, transit and/or storage, as compared to like contents packed in boxes or baskets until overfull with the lid crushed down on the contents.

The chief feature of the present invention resides in packing such a container in inverted position while the bottom thereof is open, and when packed closing the bottom and inverting the container. The lid may be applied before filling or after inversion as desired.

It is to be noted the inverted packing permits of face packing, wherein the subsequent top layer, which later is exposed upon lid removal, may be of uniform choice character. Since this layer is not bruised, etc., by lid crushing application, the container contents command a premium over the similar contents packed in the conventionel manner.

This method of packing distinguishes from the so-called "Hiatt system" wherein the fruit is face packed in inverted position in a liner positioned within a shell over which the container is applied in inverted position, and upon inverting, the shell is removed and the container shaken to settle the contents and liner to container conformation. The "Hiatt system" utilizes a closed bottom container applied after the contents are assembled and packed. The invention herein provides for initially packing an open bottom container in inverted position, permitting of face packing with all its advantages. Thereupon the container bottom is closed, and the face packed container is inverted with or without the lid thereon. In the latter instance the lid may be subsequently applied without damage to the face exposed contents.

This system reduces the number of operations heretofore required as in the "Hiatt system," and eliminates the necessity of using a container liner. It also eliminates the necessity of utilizing a special facing plate, the container lid or cover herein serving that purpose if desired. When omitted, the cover or lid can be readily applied after the basket is packed and ready for transit,

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etc., all without crushing injury to the contents as has heretofore been the case when a full pack has been made in the conventional manner and the lid or cover last applied.

This system also readily lends itself to the packing of handled baskets or boxes, particularly those of the inverted U-shape handle type, impossible of use in the "Hiatt system" and with Hiatt or similar instrumentalities.

The invention also relates to the packing form or container support for a container with or without a handle. However, since the system may best be disclosed in connection with a handled basket and the packing form or support therefor, reference will first be had to such structure.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims:

In the drawings Fig. 1 is a perspective view of an uncovered handled container, similar to a conventional grape basket with its contents, intended to be fully and face packed therein, omitted for clearness.

Fig. 2 is a perspective view of the form utilized herein.

Fig. 3 is a similar view of the basket in the form prior to packing.

Fig. 4 is a central longitudinal sectional view of the form and associated unpacked basket, dotted lines indicating the closed bottom position; after full packing has been effected.

Fig. 5 is a central transverse sectional view taken at right angles to Fig. 4 and of the same parts, dotted lines again indicating the closed bottom position.

Fig. 6 is a view similar to Fig. 5 and of a modified form of structure suitable for high pack operation, the facing layer only also being shown.

Fig. 7 is a view similar to Fig. 5 and of the same basket and form, the basket being shown provided with a cover C for small fruit, etc., retention.

In the drawings there is shown a container in the form of a basket wherein 10 indicates a pair of side walls and 11 a pair of end walls. Said walls are sequentially connected together in any desired manner, usually being integral and crease scored except for one corner where a tape 12 may be used as a connector. Each wall carries a cuff forming flap, all having a common width and being coextensive with the supporting walls to which they are connected by crease scores forming smooth edges. Said flaps are independent of each other and are designated by numerals 10a and

11a, the corresponding smooth edge connections being designated by numerals 10b and 11b. The connections 10b are slotted at 13 to pass the adjacent end 16 of the inverted U-shaped strap handle 15 which is conventional to grape baskets and the like. Staples 14 secure the cuff and handle to the walls 10.

Each wall includes a bottom forming flap integral therewith which is crease score connected thereto independent of each other. End walls 11 have flaps 17 thereon and side walls 10 have flaps 18 thereon. At least one pair of flaps each have a width approximately half of the bottom width, and all flaps have a length equal to the length of its supporting wall. Adjacent flaps lap each other as shown in Figs. 4 and 5, flaps 18 when closed down forming the bottom. These flaps are suitably secured together by adhesive between flaps 17 and 18 where lapped and/or by the adhesive tape 20 which laps the adjacent edges of flaps 18 and is anchored to the ends 11. This closure is effected only after the open bottom container is filled, any closing pressure being applied to the bottom layer of the container contents.

Reference will now be had to Figs. 2 to 5 wherein the packing form or support is illustrated. Herein four sequentially connected wall and leg portions 21 and 22 may be connected as by corner tape 23. When a lap joint connection is utilized, it is positioned externally to insure a smooth interior wall formation. Intermediate the top and bottom edges there is an internally positioned platform 24 which is slotted at 25 for receiving and nesting the container handle. This platform is integral with four leg forming flaps 26, the height thereof being sufficient to space the platform at an elevation at least sufficient to permit handle 15, when in slot 25, to clear the form supporting surface. The individual legs 26 of the platform may be secured to the wall and leg portions 21 and 22 by staples 27.

The top edge of the wall and leg portions 21, 22 is positioned above the platform 24 so that the container nested therein, when filled and bottom closed, may be reinverted to normal position with the faced upper layer of its contents undisturbed. In this position the form rests over and upon the packed container.

The form is then lifted from the container and inverted, whereupon another container, in open bottom condition, is applied thereto and packed in the manner above described. Whenever desired or required, see Fig. 7, particularly when fruit such as berries are being packed, the cover or lid C is first applied to the container before nesting it in the form. With this arrangement the lid serves as the facing plate and prevents small articles from dropping through the slot 25. When peaches, plums, tomatoes, grapes, etc., are to be packed, the cover may be applied after the container is filled. Since the faced layer is the one that is cover contacted and is selected and prearranged, it will present a choice uncrushed or unbruised pack when opened.

In Fig. 6 is illustrated a modified form of the invention. Like the form illustrated in Figs. 1 to 5 the board material may be corrugated, see Fig. 3. In Fig. 6 numerals similar to those utilized in Figs. 1 to 5 but increased by one hundred designate parts similar or identical to parts designated by the primary numerals.

Basically, herein, the distinction resides in providing a ledge 101 rigid with the tray sides and ends and substantially coextensive therewith and interiorly thereof. The basket top edges 10b and 11b bear upon the upper face 101b of ledge 101.

In this embodiment the basket weight is carried by said ledge, portion 124 and inner lower walls or legs 126. The fruit to be packed, in the packing and facing, is retained by the basket side and end walls and supported by portion 124. The slot 125, of course, permits the handle 115 to seat therein and project therebeneath.

Herein, for example, a "Cellophane" sheet or other flexible cover net, etc., is positioned in the basket before any filling or packing occurs. Herein 102 indicates such a sheet and 103 the inturned basket retained edges thereof. When the fruit is packed thereon, naturally it is "face" packed, and a bulge or high pack results, that is the subsequent top layer projects above the top edge of the basket and the edges 103 of sheet 102 remain tucked in the basket when inverted and ready for shipment. This modification has the additional advantage when no cover is to be used, that no fruit ever engages plate 124. Hence, danger of mold transfer, etc. is eliminated. Except for the distinctions just mentioned, operation herein is as previously set forth.

While the invention has been illustrated and described in great detail in the drawings and foregoing description, the same is to be considered as illustrative and not restrictive in character.

The several modifications described herein as well as others which will readily suggest themselves to persons skilled in this art, all are considered to be within the broad scope of the invention, reference being had to the appended claims.

The invention claimed is:

1. The method of packing fruits, vegetables, and the like in a handled container having bottom forming portions, consisting in inverting the container and nesting it in a receiving and supporting form of a depth at least as great as the height of the container handle, and apertured for handle reception, the container having its bottom opened when nested in said form and its handle extending through the aperture therein, packing said container through the open bottom thereof and while in inverted position, closing the portions and securing them in closed bottom position over the pack, inverting the form and packed container nested therein, and then removing the form from the packed container.

2. The method defined by claim 1, including the step of applying a cover to the container prior to nesting it in the form to provide the facing plate for receiving and supporting the pack before inversion and removal of the form.

3. The method defined by claim 1, including the step of applying a cover to the face packed container after removing the form therefrom.

4. The method of packing a handled basket having bottom forming portions disposed in open position, consisting in inverting the basket with its bottom portions in open position, nesting the inverted basket in a form with the handle thereof extending downwardly therein, said form being provided with a facing plate supporting the basket, packing said basket through its open bottom with the contents faced and supported by said facing plate, closing and securing the bottom portions of the basket after the packing thereof, inverting the basket and form and lifting the form from the basket.

5. A packing structure including a basket to be packed having a handle secured at opposite ends

to opposite sides of the basket and portions disposed in open bottom position, a supporting form for receiving said basket in inverted position, said supporting form having side and end walls, and a slot including facing ledges secured within said walls intermediate the top and bottom thereof, said ledges providing a facing support for the contents of said basket when packed through the open bottom thereof and the handle of said basket being received by the slot therein.

6. The method as defined by claim 1 including the step of applying to the container a covering for the open top thereof prior to packing the container, and of a size greater than the container top area, surplus covering being positioned within the container adjacent the top thereof and retained therein by the subsequently packed fruit and the like, the face packing initially projecting

beyond the container tops for bulge pack formation.

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