

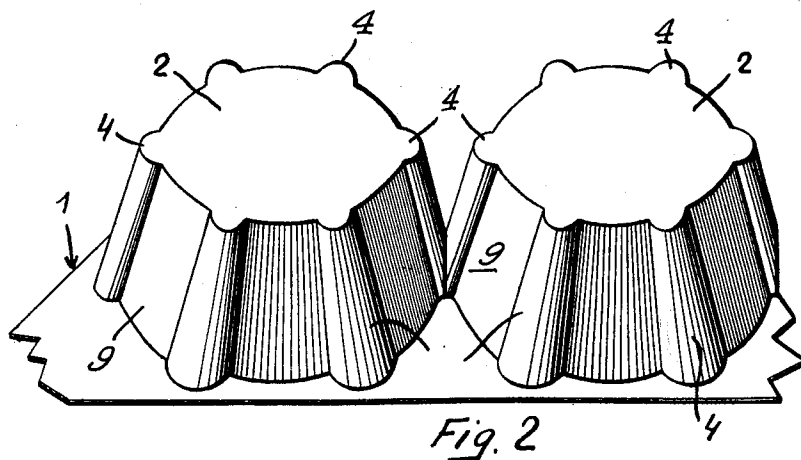
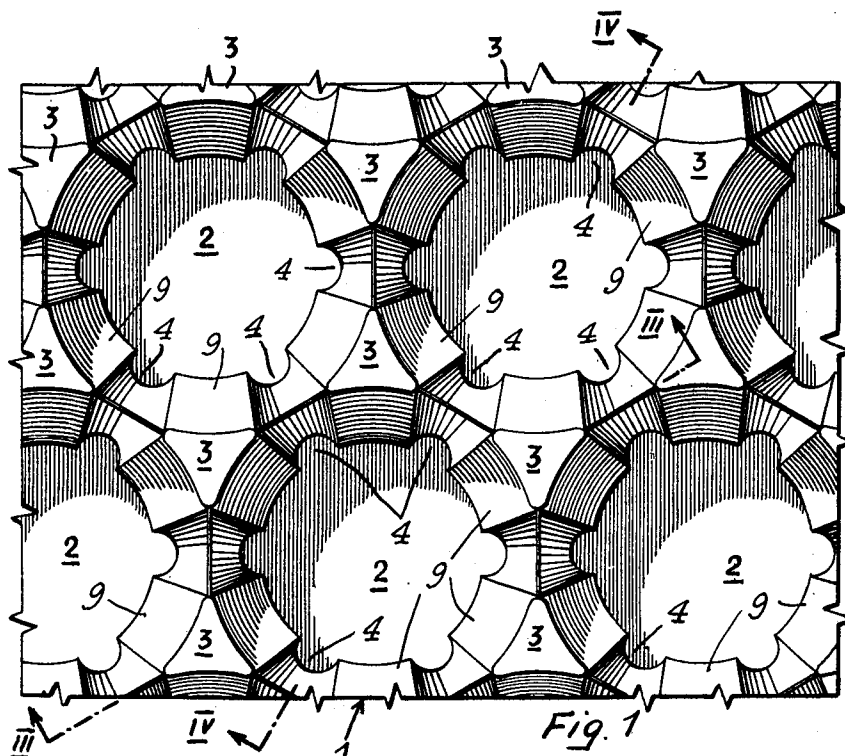
Jan. 22, 1963

G. MARTELLI ET AL
FRUIT-PACKING TRAYS

3,074,582

Filed Oct. 24, 1957

2 Sheets-Sheet 1



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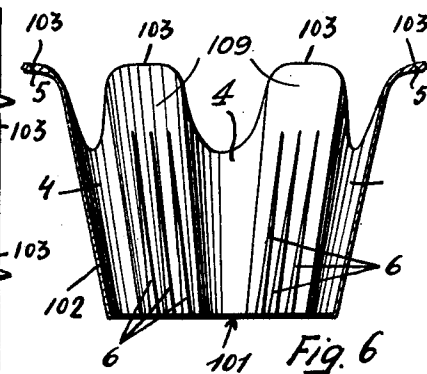
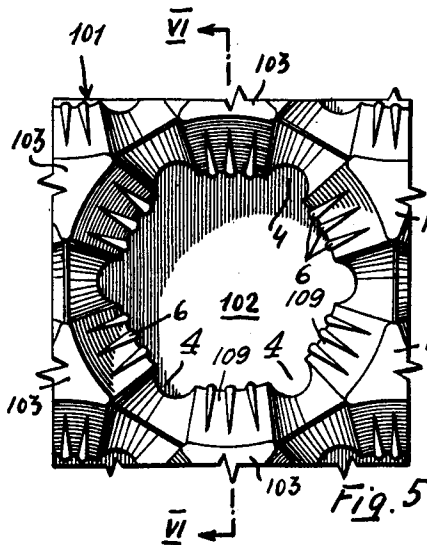
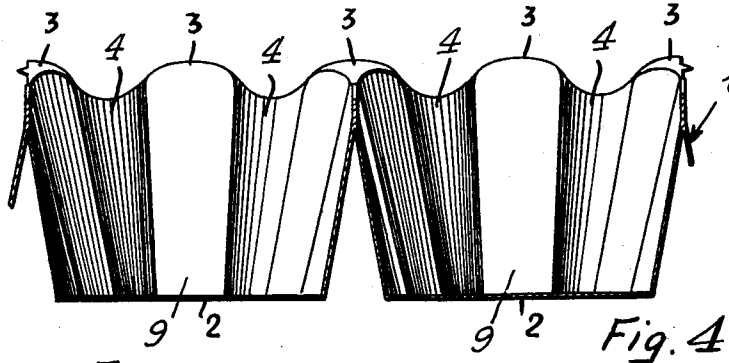
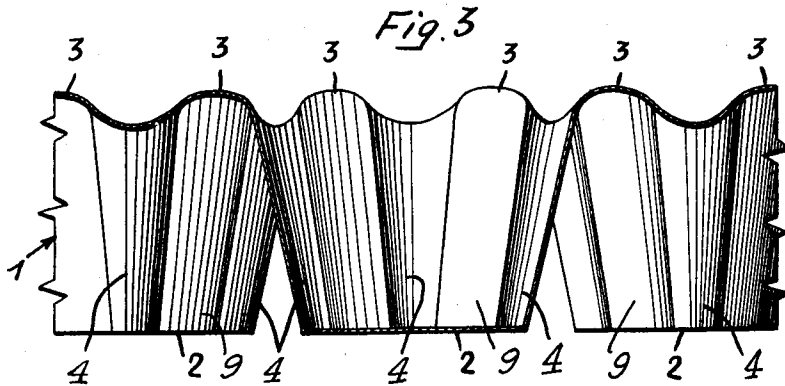
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3,074,582

FRUIT-PACKING TRAYS

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1 Claim. (Cl. 217—26.5)

This invention relates to fruit-packing trays made of yielding organic sheet material and particularly from sheets of a thermoplastic resin, such as vinyl or acrylic resins, having a thickness of the order of one to three tenths of a millimeter.

The main object of the invention is to provide a packing tray in which each fruit is firmly maintained within a seat bounded by substantially rigid post-like members.

Another object of the invention is to provide a packing tray which is easy to manufacture at small cost and in which the fruits are well separated from one another and which permits superposing many trays in a case, the weight of the superposed trays being borne by the post-like members which project above the top portions of the fruits inserted in their seats.

Another object of the invention is to provide fruit-packing trays in which said post-like members form a large part of the walls of frusto-conical pocket-shaped seats whose walls are provided with longitudinal channels, corrugations or the like, which impart to the pocket a springiness in radial direction which permits the insertion into each pocket of a fruit having a larger diameter than the diameter of the pocket at mid height, the fruits remaining thus gently clamped in their pocket-like seats.

Other objects and advantages will appear from the following specification made with reference to the annexed drawings, in which:

FIGURE 1 is a fragmentary top plan view of a fruit packing tray made of thin synthetic resin and provided with fruit-holding pockets.

FIGURE 2 is a perspective view of two of the pockets shown in FIGURE 1, viewed from below.

FIGURES 3 and 4 are vertical cross sections on lines III—III and IV—IV of FIGURE 1, respectively.

FIGURE 5 is a fragmentary top plan view of another embodiment of fruit-packing tray.

FIGURE 6 is a vertical cross section on line VI—VI of FIGURE 5.

According to the embodiment as shown in FIGURES 1 through 4, the packing trays 1 are made of thin thermoplastic synthetic resin sheets such as acrylic or vinylic resin sheets having a thickness of the order of 0.1 to 0.3 mm. and comprise a number of bowl-shaped or frusto-conical pockets 2 arranged in staggered relation, with their major bases or mouths substantially tangent to the mouths of two other pockets, so as to leave between each three pockets 2 a hollow post 3 formed by the arcuate, pocket sections, or webs 9 connecting a substantially triangular top part of the sheet with the bottoms of three adjoining pockets. In this embodiment, each pocket is surrounded by six of said posts 3. The side walls of the pockets are provided, preferably in positions offset from said posts 3, with deep longitudinal channels or furrows 4 which confer to the pocket side walls a substantial springiness, while the posts 3 are substantially rigid at their upper ends due to the greater thickness of their triangular tops which are preferably dome-shaped, as clearly shown in FIGURE 4.

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The height of the posts 3 is substantially equal to that of the pockets 2 but greater than the diameter of the fruits to be inserted in the pockets, while the diameter of the pockets at mid height is somewhat smaller than the diameter of the fruits to be inserted therein, so that each fruit, when inserted in a pocket, is gently but firmly clamped therein by the channel walls which yield somewhat and bulge under the pressure of said fruits, although they usually do not adhere all around the fruits, but leave some free space acting as flue channel which provides for a slight aeration.

According to the embodiment as shown in FIGURES 5 and 6, the posts 103 of the trays 101 are of substantially greater height than the pockets 102 and are stiffened at their tops, as shown at 5 in FIGURE 6, where they are shown of greater thickness, while their arcuate wall portions 109 present a number of longitudinal corrugations or riflings 6 which enhance their springiness and provide better clamping of the fruits, while the channels 4 of the pocket walls between the posts 103 provide an additional yielding action and the formation of aeration flues. According to this embodiment, the top portion of the fruits remains better aerated due to the fact that the pocket walls between the posts do not reach the post tops.

Although certain specific embodiments of the invention have been shown and described, it is obvious that many modifications thereof are possible insofar as is necessitated by the prior art and by the spirit of the appended claim.

We claim:

A packing tray for tender or fragile articles and the like, comprising a film of synthetic resin, a plurality of flexible cup-like pockets formed in said film, said pockets being greater in height than articles to be held therein, said pockets having side walls which taper upwardly and outwardly, said side walls each including six circumferentially spaced arcuate portions connected by outwardly disposed concave channels, the arcuate portions of adjacent pockets being adjoined and becoming thicker at their upper ends to form a post, the pockets lying within the peripheral rows of pockets of the tray having each arcuate portion forming a portion of a post, said posts having relatively thick tops disposed in a generally horizontal upper plane, whereby said upper horizontal plane of the tray is substantially rigid while the lower portion of the tray is flexible.

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