A. VERNON.

FRUIT DRYING TRAY.

APPLICATION FILED NOV. 26, 1917.

1,287,145. Patented Dec. 10, 1918.

Fig. 1.

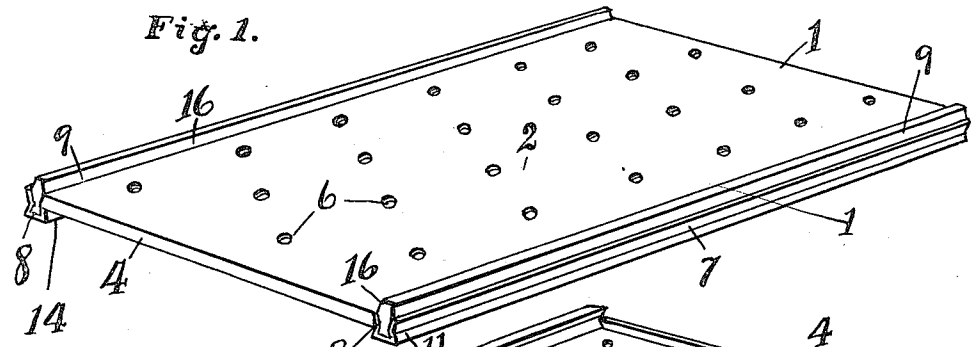



Fig. 2.

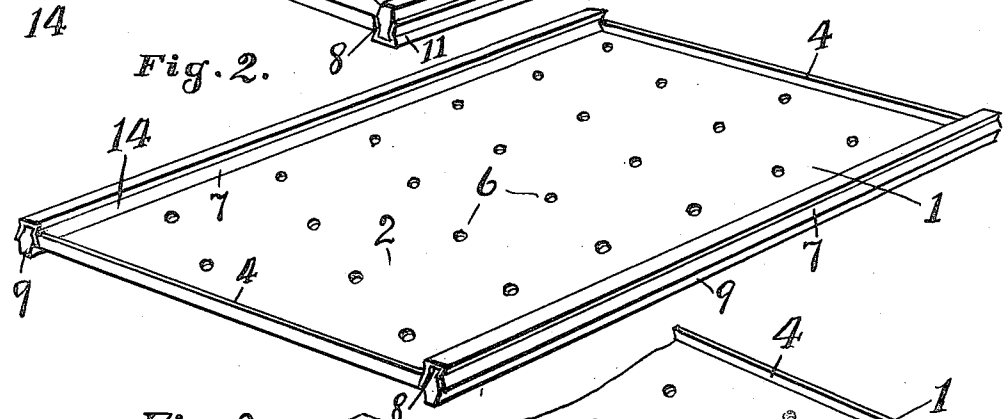



Fig. 3.

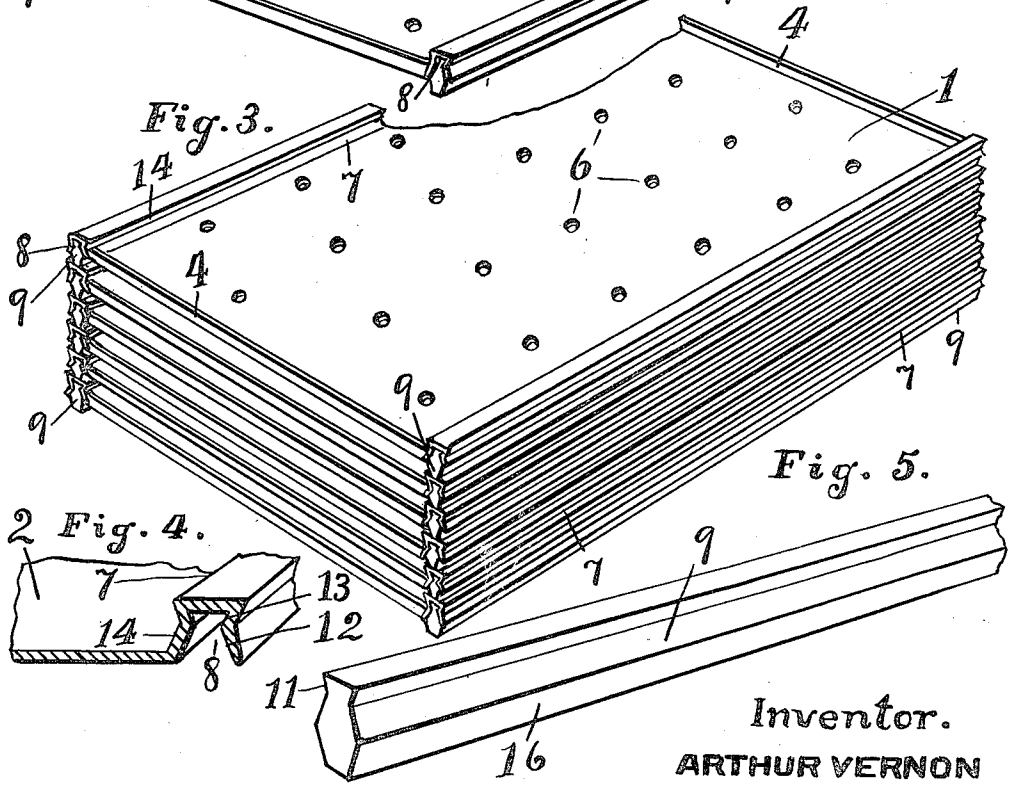



Fig. 5.




2 Fig. 4.




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## FRUIT-DRYING TRAY.

1,287,145. Specification of Letters Patent. Patented Dec. 10, 1918.

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*To all whom it may concern:*

Be it known that I, ARTHUR VERNON, a citizen of the United States, residing at Fresno, in the county of Fresno and State of California, have invented new and useful Improvements in Fruit-Drying Trays, of which the following is a specification.

The present invention relates to an improved tray for drying fruit.

Trays at present in use for the above purpose are made of short wooden boards secured to cleats, which are at the edges of the trays. These boards are exposed to moisture and the heat of the sun, and are, therefore, liable to become much warped and the fastening nails loosened, so that, after being used a comparatively short time, they are apt to be loosened from the cleats, and the whole tray either falls to pieces or is no longer fit for use. Of course, after the boards have thus become warped, it is practically impossible to restore them to their original form or condition.

The object of the present invention is to provide a fruit drying tray which will be free from the above objections.

In the accompanying drawing, Figure 1 is a perspective view showing one side of my improved fruit drying tray; Fig. 2 is a similar view showing another side thereof; Fig. 3 is a similar view showing a number of such trays stacked one upon another; Fig. 4 is an enlarged sectional view of a portion of a tray, a supporting strip being omitted; Fig. 5 is a detail perspective view of a supporting strip.

Referring to the drawing, 1 indicates my improved fruit drying tray, which is formed of strongly compressed wood pulp, by which is meant pulp obtained from wood or any vegetable fiber. It comprises, all in one piece, a rectangular sheet 2, the ends of which are raised to form low end walls 4. The sheet is perforated, as shown at 6, at sufficiently close intervals to permit rain, or any other liquid, that may fall upon the upper side of the sheet, to drain therefrom.

At its long edges the tray is formed with walls 7 extending both upwardly and downwardly from the sheet, said walls being formed in the following manner. The sheet is pressed, while still wet, to form channels 8 at its long edges, and there are contained in said channels supporting strips or rods 9 of strongly compressed pulp and of the same length as the tray. Each strip is thickest at the middle portion of its height and diminishes in thickness both upwardly and downwardly therefrom. The downward taper of the strip extends to its bottom, but upwardly the strip, after diminishing in thickness to a point not far from its upper surface, then expands, as shown at 11. The upper portion of the channel 8 likewise first contracts upwardly, as shown at 12, and then expands, as shown at 13, to receive the expanding portion 11 of the strip. When the strip has been pushed into the channel, it is held therein by the contracted portion 12 of the channel, and in addition glue or other cement is interposed between the strip and the inner surface of the channel, to hold the two together.

The channel and strip thus extend both above and below the sheet to form side walls 14, 16, but the walls 14 above the sheet are higher than the walls 16 below the same.

The tray is placed with the lower walls 16 uppermost. The fruit is then spread out upon the tray. Then, when the fruit is sufficiently dry, another similar tray is placed on the first-named tray so as to have the same side uppermost, and its higher walls 14, now depending from its lower surface, resting upon the lower walls 16, of the first-named sheet. The sheets are then both inverted. When the sheets are being inverted, the low walls 4 at their ends sufficiently prevent the fruit from escaping at the ends, while the walls 14 and 16 prevent it from escaping from the sides. A number of sheets in the inverted position, having fruit thereon, are stacked one upon the other, as shown in Fig. 3, and allowed to dry. They are then subjected to the sulfuring process, by which is meant exposure of the fruit to the fumes of burning sulfur, which has the effect of destroying germs on the surface of the fruit and also bringing the sugar in the fruit nearer to its surface. During this process, the high walls 14 of one sheet and the low walls 16 of the sheet immediately above it, space the sheets sufficiently far apart so that the fruit between the sheets is not crushed thereby. At the same time, the sheets are sufficiently spaced by the walls 14, 16, to leave a sufficient space at the ends between each sheet and the walls 4 of the adjacent sheet, to permit the free circulation of the sulfur fumes between the sheets to obtain access to the surface of the fruit thereon.

A sheet constructed as above described possesses marked advantages over the fruit drying trays at present in use. Being made of strongly compressed wood pulp, it is not liable to warp through heat, and therefore it is very durable and never requires repairs. As compared with wooden trays, it is more sanitary, and it is lighter and therefore more convenient to handle. The perforations 6 permit of good drainage. The walls 4, 14, and 16 serve the purposes of permitting it to be made light and strong, of spacing the sheets apart so that the fruit is not crushed thereby, of providing a circulating space for exposing the fruit to the fumes of burning sulfur, and of rendering it easy to turn the trays without dislodging the fruit from its position thereon.

The provision of the channels 8 and strips 9 in said channels enables the tray to be made cheaply and by simple compression of the wood pulp. The strips 9 enable the trays to support the great weight of many superincumbent trays and the fruit supported thereby.

I claim:—

1. A fruit drying tray formed of compressed pulp and comprising a rectangular perforated sheet having along two of its parallel edges comparatively low walls and along the other two parallel edges comparatively high walls.

2. A fruit drying tray comprising a rectangular sheet of compressed pulp having channels along two of its parallel edges and supporting strips fitting snugly in said channels, said strips in such position extending partly above and partly below said sheets.

3. A fruit drying tray comprising a rectangular sheet of compressed pulp having channels along two of its parallel edges and supporting strips fitting snugly in said channels, said strips in such position extending both above and below said sheets, said channels and strips having contracted portions, and being enlarged in width on each side of said contracted portions to retain the strips in the channels.

4. A fruit drying tray comprising a rectangular sheet of compressed pulp having channels along two of its parallel edges and supporting strips fitting snugly in said channels, said strips in such position extending both above and below said sheets, to form side walls, said strips extending from one side of the sheet being higher than those extending from the other side.

5. A fruit drying tray comprising a rectangular sheet of compressed pulp having channels along two of its parallel edges and supporting strips fitting snugly in said channels, said strips in such position extending both above and below said sheets, to form side walls, the walls extending from one side of the sheet being higher than those extending from the other side, and the sheet having end walls extending on the same side of the sheet as the higher side walls.

6. A fruit drying tray comprising a rectangular sheet having on one side, along two of its parallel edges, comparatively low walls, and along the other two parallel edges comparatively high walls, and having on the other side, along the first-named edges no walls, and along the last-named edges comparatively low walls.

ARTHUR VERNON.