Oct. 7, 1930. C. DERING 1,777,402

DRIER TRAY

Filed Dec. 9, 1929

Fig. 1

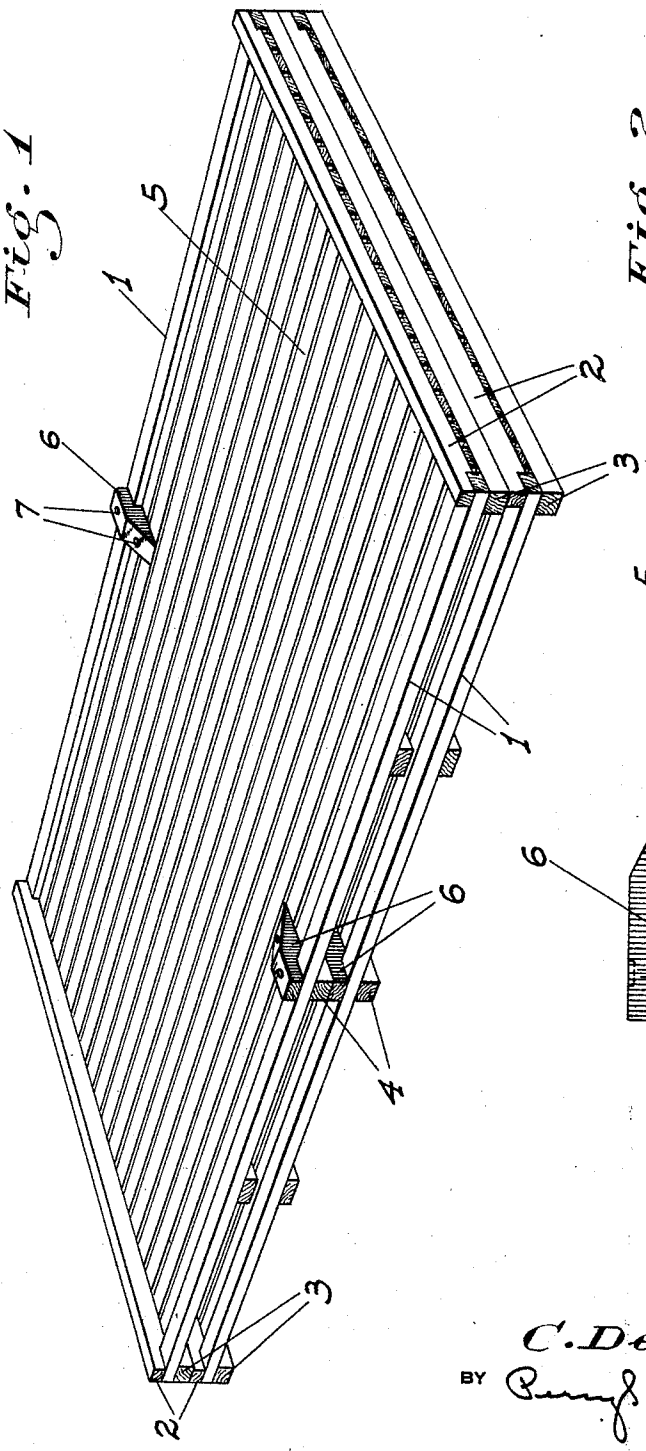
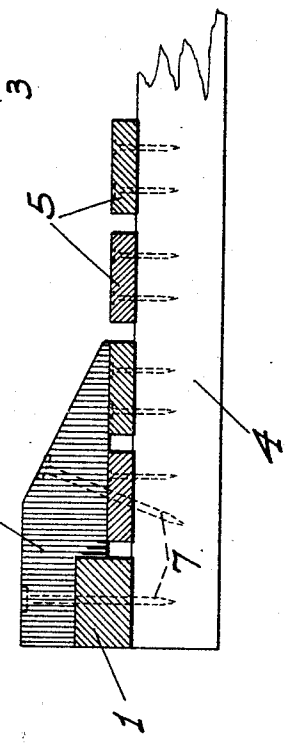


Fig. 2



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UNITED STATES PATENT OFFICE

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DRIER TRAY

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This invention relates to drier trays on which fruit to be dehydrated is spread, and particularly to the relatively long trays now being extensively used for this purpose. Such trays for obvious reasons must be relatively light so that they can be easily handled, and must also be constructed so as to be capable of being stacked one on the other without interfering with the free passage of air transversely between the trays. It is therefore impossible to make the trays so that their sides can contact with each other, and yet without some support intermediate their ends the trays tend to sag down considerably due to their length and to their relatively non-rigid character.

The principal object of my invention is to provide the necessary central support for the trays when stacked together so arranged that no interference with the free passage of air transversely of and between the trays is had, nor is the free scraping of the fruit from the tray interfered with; and which does not prevent any tray when not in use from resting flatly on the ground or other similar flat supporting surface.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

In the drawings similar characters of reference indicate corresponding parts in the several views:

Fig. 1 is a perspective elevation of a pair of trays showing my improved attachment or supporting means.

Fig. 2 is a fragmentary enlarged transverse section of a tray.

Referring now more particularly to the characters of reference on the drawings, the tray comprises side rails 1, end bars 2 and 3 at each end secured to and extending above and below the side rails in spaced relation to each other, and a transverse cleat 4 centrally between the ends of the tray under the side rails and secured to the same. The lower edges of the bars 3 and the cleat 4 are all on the same level so that the tray will rest firmly on a flat surface.

Extending from end to end of the tray in transversely spaced relation to each other are the fruit supporting slats 5. The ends of these slats fit between the end bars 2 and 3 with their lower edges on the level with the corresponding edges of the rails 1. The slats being considerably thinner than said rails the latter form upstanding side flanges for the fruit supporting area of the tray. When the trays are stacked the upper end bars 2 of one tray engage and support the corresponding lower end bars 3 of the tray above, as shown in Fig. 1, and the side bars of the trays are then firmly spaced from each other from end to end as they must be to permit of the necessary unobstructed flow of air transversely between the trays and over the fruit supported thereon.

The means I use to prevent sagging of the trays centrally between their ends comprises blocks 6 disposed immediately over the central cross cleat 4. These blocks are rabbeted with the side rails as shown in Fig. 2, so that they not only bear against the top surface of the side rails but also down the inner edges of the same as well, and also across the adjacent slats 5. The top surface of the blocks in the plane of the side rails is horizontal and on the same level as the top of the end bars 2; but inwardly of said bars the blocks preferably slope down to relatively thin edges at their inner terminations. Nails 7 are driven through the blocks and adjacent parts and into the cleat 4 thereunder and will firmly hold the blocks in place. The rabbet fit of the blocks with the side rails also tends to stiffen them and prevent any tendency to looseness developing in use, while enabling the said blocks to be made quite narrow as is desirable.

The blocks as above stated are kept narrow lengthwise of the tray so as not to interfere materially with the transverse passage of air between the trays. Said blocks also do not extend continuously across the tray, but only a relatively small distance, since this would seriously interfere with the ready placing of the fruit on and the removal of the same

from the tray. At the same time the length of the blocks is sufficient to enable at least a pair of nails to be used in securing each one of the same, as is of course desirable, without the danger of the nails splitting the block. The blocks being the same height as the upper end bars 2 the corresponding bars 3 and the central cleat of a superimposed tray, and which members are all on the same level, will rest firmly on said end bars 2 and blocks 6 without any sagging or teetering of the upper tray being had.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

1. A drier tray including side rails, end cross bars extending both above and below said rails, a cross cleat under and secured to the side rails intermediate their ends; the under surfaces of said cleat and the lower end bars being on the same level, and blocks narrow in the longitudinal plane of the tray secured on the side rails directly over the cross cleat; the top of said blocks being on the same level as the top of the upper end bars.

2. A drier tray including side rails, end cross bars extending both above and below said rails, a cross cleat under and secured to the side rails intermediate their ends; the under surfaces of said cleat and the lower end bars being on the same level, and blocks narrow in the longitudinal plane of the tray secured on the side rails directly over the cross cleat, and adapted to engage the cross cleat of a superimposed tray while the corresponding end bars of the trays are engaged with each other; the length of the blocks being greater than their width and extending transversely of the tray for short distances only inwardly of the side rails.

3. A structure as in claim 2, with securing nails, spaced longitudinally of the blocks, securing the same to the side rails and to the cross cleat therebelow.

4. A drier tray including side rails, end cross bars extending both above and below said rails, and spaced slats forming the supporting surface of the tray and of a lesser height than the side rails, and a cross cleat under and secured to the side rails and slats centrally of the length of the tray; the under surfaces of said cleat and the lower end bars being on the same level, and blocks narrow in the longitudinal plane of the tray disposed on the side rails directly above the cross cleat to support the cross cleat of a superimposed tray; said blocks being relatively short and extending transversely of the tray and their under sides being cut to follow and bear against the top and inner faces of the side rails, and the top surfaces of adjacent slats.

5. A structure as in claim 1 in which the top surfaces of the blocks slope downwardly to their inner ends from a short distance from their outer ends.

In testimony whereof I affix my signature.

CASSIUS DERING.