

No. 795,992.

PATENTED AUG. 1, 1905.

H. A. LE MAR.
DOMESTIC FRUIT DRIER.
APPLICATION FILED JUNE 1, 1904.

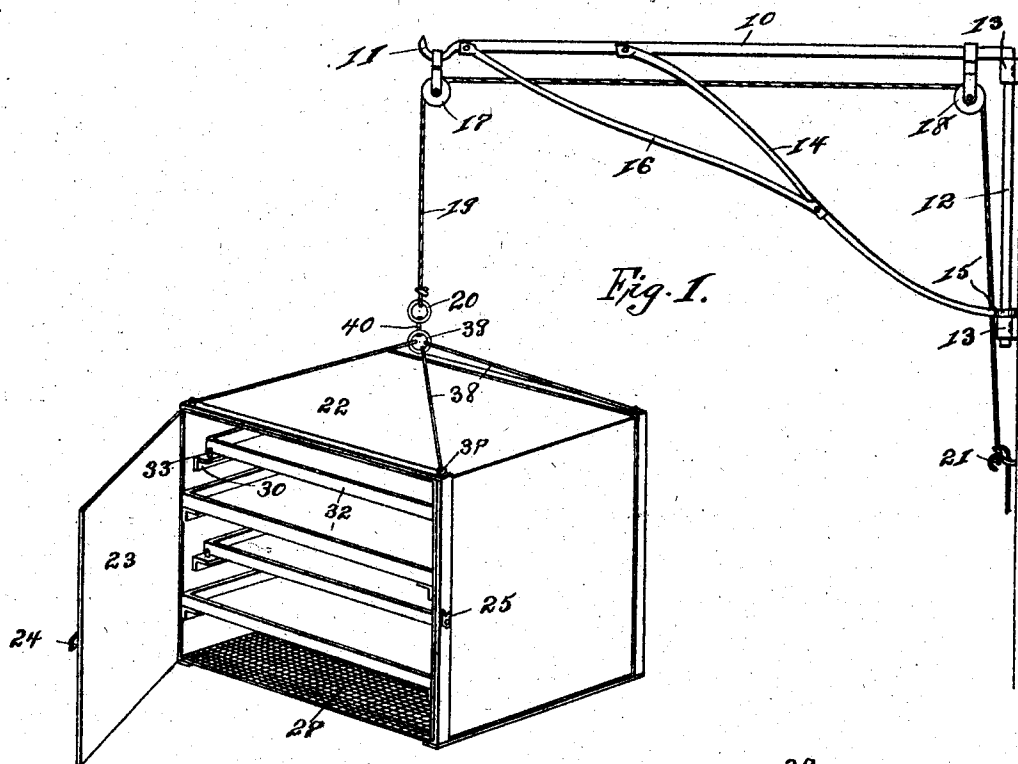


Fig. 1.

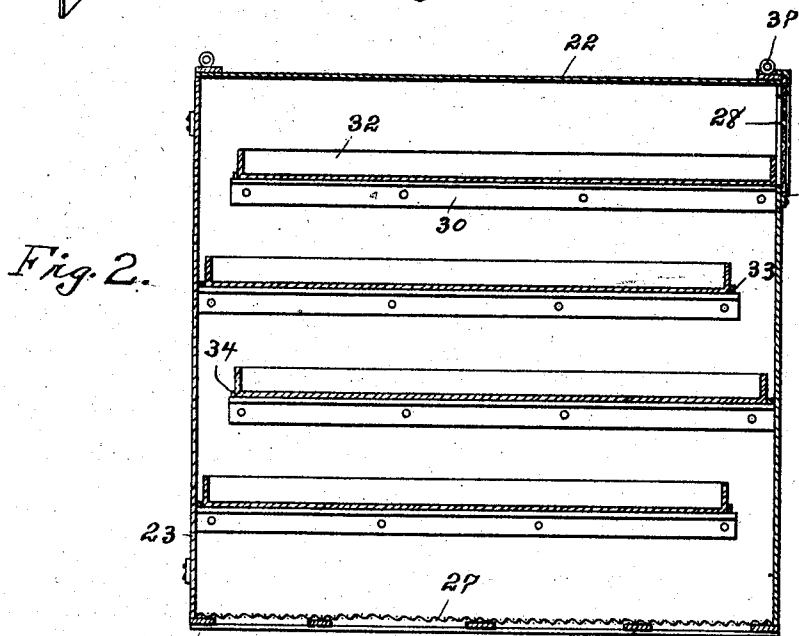
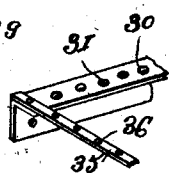


Fig. 2.

Fig. 3.



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HANNAH A. LE MAR, OF DES MOINES, IOWA.

DOMESTIC FRUIT-DRIER.

No. 795,892.

Specification of Letters Patent.

Patented Aug. 1, 1905.

Application filed June 1, 1904. Serial No. 210,684.

To all whom it may concern:

Be it known that I, HANNAH A. LE MAR, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Domestic Fruit-Driers, of which the following is a specification.

My objects are to provide a fruit-drier of simple, durable, and inexpensive construction designed to receive a number of trays containing fruit to be dried and so arranged that it may be suspended and vertically adjusted over a cooking or heating stove and the heat arising from the stove will be directed to traverse each tray successively before being discharged, to thereby dry the contents of the trays.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a perspective view of the completed drier with the front door open. Fig. 2 shows a central vertical sectional view of the body portion of the drier with the trays in position, and Fig. 3 shows a detail perspective view of the supporting-brackets for the trays.

Referring to the accompanying drawings, I have used the reference-numeral 10 to indicate the arm of the supporting-bracket, provided with a hook 11 at its outer end and with a right-angled portion 12 at its inner end, said right-angled portion designed to enter the loops 13, which may be fixed to a wall adjacent to a cooking or heating stove. The outer end of the arm 10 is supported by means of the brace 14, fixed near the outer end of the arm 10 and provided with a loop 15 at its inner end, designed to receive the lower end of the part 12.

The numeral 16 indicates a branch of the brace 14 fixed to the central portion of the brace and to the outer end of the arm 10.

Mounted upon the hook 11 is a pulley 17, and near the inner end of the arm 10 is another pulley 18. A rope 19 is passed over both of these pulleys, one end of which is attached to a ring 20 and the other end detachably and adjustably connected to a hook 21 beneath the loops 13. By this arrangement the arm 10 may be swung to position against the wall or project outwardly therefrom, as

desired, and the fruit-drier proper supported upon the ring 20 may be adjusted vertically as desired.

The fruit-drier proper comprises a sheet-metal casing open at its bottom, front, and the upper portion of its rear surface. The casing proper is indicated by the numeral 22, and the front thereof is provided with a hinged door 23, having a latch 24 to engage the hook 25. Projecting across the bottom of the casing is a number of metal cross-pieces 26, upon which a screen 27 is placed. This screen may be readily detached and removed through the opening in the front. The numeral 28 indicates a screen covering the opening at the upper rear portion of the casing, which screen is detachably supported in the sheet-metal strips 29, secured to the outer surface of the casing. On the interior of the casing I have secured a number of angle-iron brackets 30 to the sides of the casing, the horizontal portions of said angle-irons provided with drip-openings 31. The lower angle-iron 31 extends from the front of the casing to a point spaced apart from the rear end thereof, and the second angle-iron from the bottom extends from the rear of the casing to a point spaced apart from the front, and so on.

The reference-numeral 32 is used to indicate the fruit-drying trays, which are of ordinary construction, comprising a bottom and up-turned marginal edges shaped to rest upon the angle-bars 30 and of a length to extend from the rear of the casing to a point spaced apart from the front. These trays are first filled with fruit to be dried, and the lower one is placed in position near the front of the casing and spaced apart from the rear. A limiting-pin 33 is provided in the angle-bar 30 to determine the position of the lower tray. The next tray above is placed in position adjacent to the rear wall of the casing and extends to a point spaced apart from the front. A limiting-pin 34 is provided to determine the position of this second tray. The remaining trays are arranged alternately in the manner described. At the end of each tray that is nearest to the front or rear wall, as the case may be, I have provided means for preventing the heated air-currents from passing through and at the same time not interfering with the passage of the water of condensation, as follows: The numeral 35 indicates a narrow metal strip provided with openings 36. The ends of the strip are attached to the angle-bars 30, and said strip is placed between the end of

the tray and the wall of the casing adjacent to the tray. On top of the casing is a number of hangers 37, to which the supporting-irons 38 are attached. These irons converge above the casing and are attached to a ring 39, which is connected by a swivel 40 with the ring 20.

In practical use the trays 32 are first filled with fruit to be dried. The lower one is placed on the lower angle-bars 32, with its front end in engagement with the strip 35 and its rear end spaced apart from the rear of the casing. The second tray is placed with its rear end in engagement with the strip 35 and its front end spaced apart from the front of the casing. The remaining trays are arranged alternately in the same way as shown in the drawings. Then the front 23 is closed and latched, and the entire casing is then moved to position where it will receive the heated-air currents from a cooking or heating stove. The heated air will rise through the screen 27 and be forced rearwardly and pass up at the rear of the lower tray, then forwardly over the lower tray and upwardly in front of the second tray, and so on until it discharges through the screen at the upper rear end of the casing. The water of condensation that collects on the side or end walls of the casing may pass downwardly through the openings 31 in the angle-bars 30 or through the openings 36 in the strips 35 and will not be discharged into the tray. The screens 27 and 28 will prevent the entrance of insects into the casing, so that the fruit may be kept clean while being dried. The operator may readily and quickly adjust the position of the fruit-drier relative to the source of heat, so that a greater or less amount of heat will enter it by simply adjusting the rope 19.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. A fruit-drier comprising a solid walled casing open at its bottom and front and having a draft-opening near its top, a screen for the bottom, a screen for the opening near the top, a hinged door to cover the open front, a number of brackets on the side walls of the interior of the casing, trays having solid bottoms supported on said brackets, said trays of less length than the length of the interior of the casing and said brackets provided with stops alternately arranged near the front of the brackets for the lower tray and near the rear of the next tray above and so on to securely hold the trays in position to deflect heat backwardly and forwardly over and under the trays and to prevent the trays from becoming displaced.

2. A fruit-drier comprising a solid walled casing open at its bottom and front and having an opening in its back near its top, a detachable screen for the bottom, a solid hinged door for the front, a detachable screen for the opening in the back near the top, brackets secured to the side walls on the interior of the casing, said brackets perforated to permit water of condensation to pass through them, limiting-stops near the front of the brackets for the lower tray near the rear of the next brackets above and so on and fruit-drying trays having solid bottoms placed on said brackets, one end of each tray engaging the back or front of the casing and the other end of each tray engaging the limiting-stops.

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Witnesses:

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