

Fruit Drier.

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Witnesses:
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WILLIAM VOGEL, OF CHELSEA, MICHIGAN.

IMPROVEMENT IN FRUIT-DRIERS.

Specification forming part of Letters Patent No. 43,354, dated June 28, 1864.

To all whom it may concern:

Be it known that I, WILLIAM VOGEL, of Chelsea, in the county of Washtenaw and State of Michigan, have invented a new and Improved Device for Drying Fruit; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a vertical section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate the same parts.

This invention consists in arranging in a novel way a series of shelves or drawers within a case containing a stove or heater, and having the latter covered by a plate and the case provided with a ventilator, all being arranged in such a manner that the heat is made to pass all around the shelves and drawers and upward through the centers of the same, whereby the fruit may be dried very expeditiously and in a perfect manner, and with but very little labor and trouble on part of the attendant.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a case, which may be of any suitable dimensions and of rectangular or other form. In the lower part of this case there is placed a stove or heater, B, the front of which projects through the case to admit of the stove being supplied with fuel from the outer side of the case. The case just above the front of the stove B is provided with two doors, C, which extend nearly or quite the whole width of the case, and within the latter there are placed at two opposite sides horizontal cleats, *a* to sustain a series of shelves or drawers, D, said cleats being attached to up-rights *b*. The cleats *a* are not in contact with the sides of the case, a space, *c*, being allowed between, (see Fig. 2,) and the cleats are sufficiently shorter than the case to admit of spaces *d* at their ends, between them and the front and rear of the case. (See Fig. 1.) Spaces *d* are also allowed between the several shelves or drawers. These shelves or drawers have their bottoms formed of parallel slats, and they have perforated sides *g*. At the

center of the bottom of each shelf or drawer D there is a broad slat or strip, which is perforated, and has an opening, *h*, at the center. These openings *h* are all in line with each other, and form a passage for the heated air centrally upward through the shelves or drawers, as shown in both figures. The stove B is provided with a smoke-pipe, E, which extends up through the top of the case A, as shown clearly in Fig. 1, and in the top of the case A, about at its center, there is a ventilator, which may be composed of a damper or valve, G, placed at the lower part of a chamber, F, having openings *i* in its sides or top. Directly over the stove B there is placed a metal plate, I, having an opening, *j*, at its center. This plate I is rather wider than the stove, and it may be provided with inclined sides and ends. The lower part of the interior of the case A may be protected by a sheet-metal lining, J, the sides and ends of which may be inclined. The fruit to be dried is placed on the shelves or drawers D, a fire kindled in the stove B, and the doors C C closed. The heat, it will be seen, passes up all around the shelves or drawers, and also through the central openings in the same, as indicated by the red arrows. The moisture or steam all passes out of the case through the ventilator at the top of the same. The plate I serves to deflect the heat to the sides and ends of the shelves or drawers, while its central opening, *j*, admits of the upward current of heated air through the openings *h* of the shelves or drawers.

The shelves or drawers may be drawn out from and placed in the case A with the greatest facility, and in consequence of the fruit being encompassed on all sides by currents of heated air the fruit is quickly dried, and during the process of drying perfectly protected from injury.

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

The combination of the stove B, flue E, guard-plate I, sliding shelves D D D, door C, and hot-air passages *j h c d*, when constructed, arranged, and operating in the manner and for the purposes herein specified.

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Witnesses:

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