

J. Allen. Fruit Dryer.

117029

PATENTED JUL 18 1871

Fig. 1.

Fig. 2.

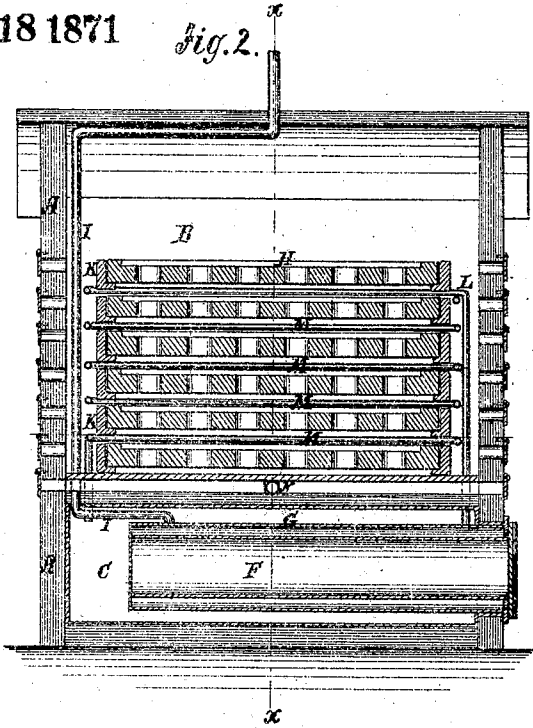
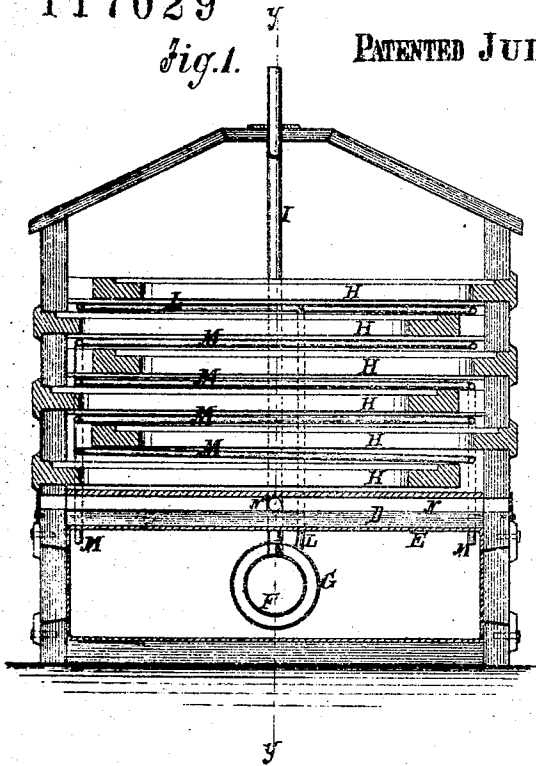
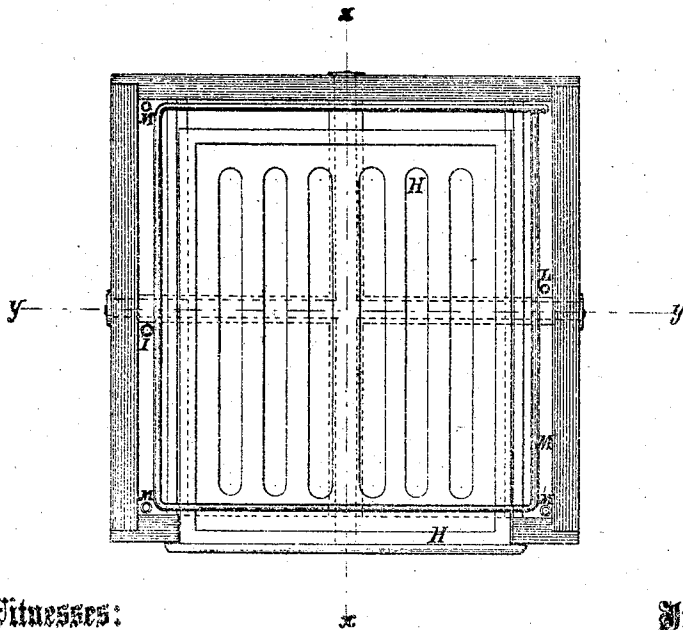


Fig. 3.



Witnesses:

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PER

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UNITED STATES PATENT OFFICE.

JUDSON ALLEN, OF EVERETT, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM H. CROTSEY, OF AUSTIN, MISSOURI.

IMPROVEMENT IN FRUIT-DRIERS.

Specification forming part of Letters Patent No. 117,029, dated July 18, 1871.

To all whom it may concern:

Be it known that I, JUDSON ALLEN, of Everett, in the county of Cass and State of Missouri, have invented a new and Improved Fruit-Drier; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to improvements in fruit-driers; and it consists in a novel arrangement of a heater, hot-air-conducting pipes, and fruit-drawers, in a wooden case having a heat-generating compartment, and another for distributing the heat over the fruit contained in the drawers, all as hereinafter described.

Figure 1 is a sectional elevation of my improved drier taken on the line *x x* of Fig. 3. Fig. 2 is a section on the line *y y* of Fig. 2, and Fig. 3 is a horizontal section.

Similar letters of reference indicate corresponding parts.

A is a strong closely-made wooden case, having two compartments, B and C, divided horizontally by a partition, D. The lower one, C, is lined with thin sheet metal, and has a heat-generating stove or cylinder, F, having an inclosing-jacket, G. The upper compartment is nearly filled with fruit-holding drawers H, one above another, and drawing out of the case on two opposite sides alternately. The drawers are intended to have the bottoms formed of thin pieces of wood, set on edge at suitable distances apart, to admit a free circulation of the heat. The smoke-pipe I rises up at the side from the rear end of the heater, between the drawer-supports *k* and the side of the case, to the space above the upper drawer, and extends over it to the center,

where it passes out through the roof. A hot-air pipe, L, rises up at the other side of the case to the top of the second drawer from the top, and is coiled around the case thereat to impart its heat to this and the upper drawer. M represents a pipe rising up in each corner of the case from the compartment C, one of which is arranged with each of the remaining drawers below the second drawer from the top in the same way that pipe L is, the whole arrangement of smoke and heating-pipes being such that the heat will be distributed in the most equal and uniform manner. All the hot-air-conducting pipes are to have small perforations to allow the air to escape into chamber B containing the drawers. N represents two tubes or air-passages extending through the case from side to side at the center in the partition D for admitting cold air to prevent the drier from being heated up too much; said passages have dampers for regulating the amount of air admitted. All the hot-air pipes, as well as the smoke-pipe, will have dampers for regulating the heat. The wood case is employed in preference to any other on account of the heat-retaining qualities of the wood.

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

The wooden fruit-drier case, containing the heater in a metal inner compartment, C, and the drawers in the compartment B above, and having the hot-air pipes, the smoke-pipe, and the cold-air pipes N, all arranged substantially as specified.

JUDSON ALLEN.

Witnesses:

J. R. CLURE,
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