

S. RICHMOND.

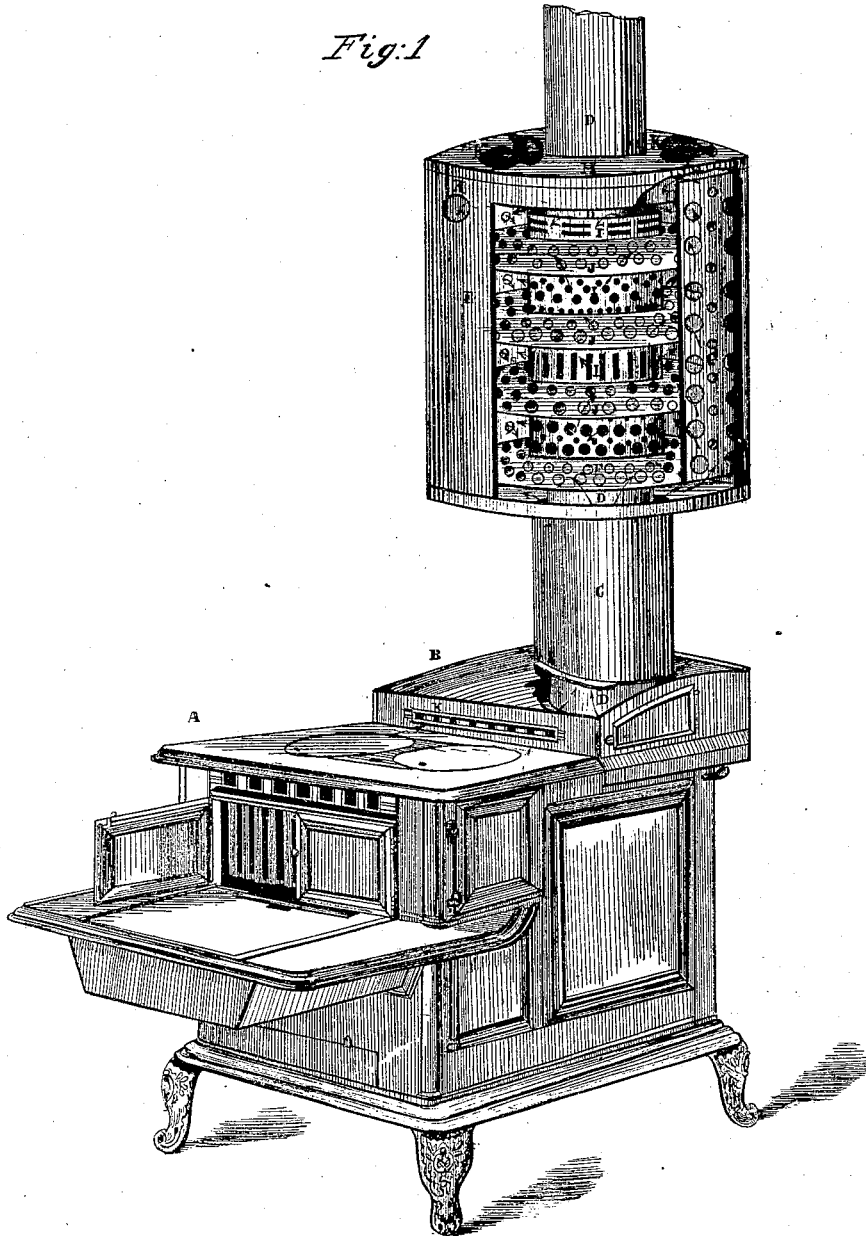
2 Sheets—Sheet 1.

Fruit Dryer.

No. 112,963.

Patented Mar. 21, 1871.

Fig:1



Witnesses:

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S. H. Richmond

Inventor

Salys Richmond
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Attorney.

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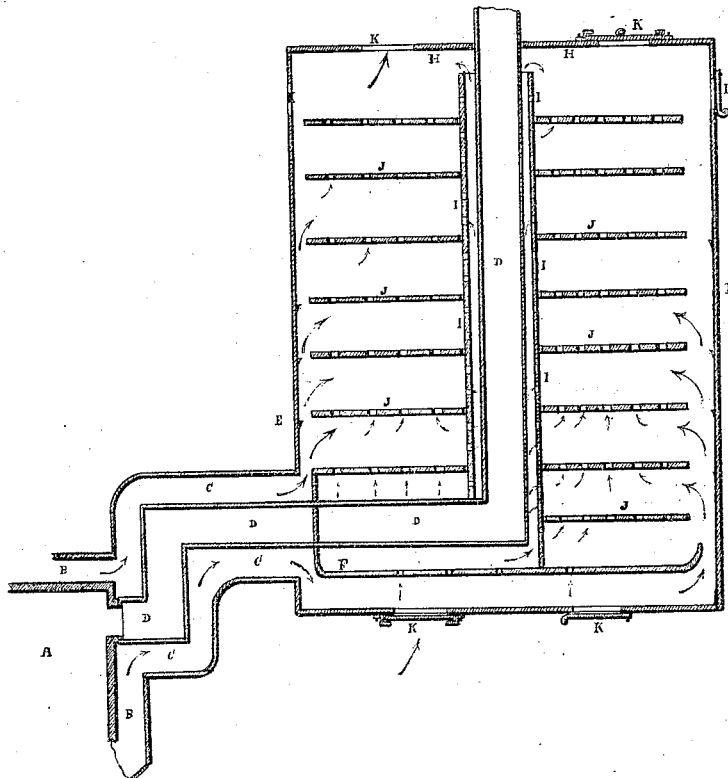
2 Sheets—Sheet 2.

Fruit Dryer.

No. 112,963.

Patented Mar. 21, 1871.

Fig. 2.



Witnesses:

Ellen A. Dickson

Emma M. Rice

Inventor:

Seelye Richmond,
per Jos. Edgar Dickson
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UNITED STATES PATENT OFFICE.

SEELYE RICHMOND, OF ANNAPOLIS, MARYLAND, ASSIGNOR OF ONE-HALF
HIS RIGHT TO JOSEPH E. DICKSON, OF SAME PLACE.

IMPROVEMENT IN FRUIT-DRIERS AND FOOD-WARMERS.

Specification forming part of Letters Patent No. **112,963**, dated March 21, 1871.

To all whom it may concern:

Be it known that I, SEELYE RICHMOND, of Annapolis, in the county of Anne Arundel and State of Maryland, have invented a new and Improved Fruit-Drier and Food-Warmer; and I do hereby declare that the following is a full and exact description of the same, sufficient to enable others skilled in the art to which my invention appertains to make and apply my invention, reference being had to the accompanying drawings, which make part of this specification.

Nature and Objects of the Invention.

The nature of my invention consists in a new and useful combination of hot-air chambers and flues, which are so constructed and combined, in the manner hereafter described, that by means of an ordinary stove, cooking-stove, or other stove to which my invention may readily be applied, a cheap and simple apparatus is obtained, consisting of a convenient and suitable inclosure or convenient and suitable inclosures for hot air or hot-air chambers, which, the temperature therein being regulated by dampers and the necessary apertures that may readily be formed, may be advantageously used for drying fruit, warming food, or preserving it in a warm or hot state when recently cooked, and for other purposes.

Description of the Accompanying Drawings.

Figure 1 is a perspective view of a fruit-drier and food-warmer embodying my invention combined with a cooking-stove. Fig. 2 is a vertical section of my improved fruit-drier and food-warmer attached to a cylinder-stove or furnace.

Description.

The perspective drawing represents my improved fruit-drier and food-warmer attached to the ordinary cooking-stove A.

B represents a hot-air chamber, or what may be described in general terms as a box or false oven, made of sheet-iron, tin, or any suitable material, and of any convenient or advantageous shape and size, and so constructed as to cover the whole or any part of the top of the stove A, the top of the stove A forming the bottom of the false oven or hot-air cham-

ber B, or otherwise, as may be found most convenient or advantageous; or the hot-air chamber B may be so constructed as to cover the whole or any part of the top of the stove A, and extending outward and beyond the top of the stove A, one or more sides of the hot-air chamber B extending either downward alone, or downward and inward, thus inclosing any portion of the stove A in such a manner that the heat radiating from the surface of the stove thus inclosed will be, in a measure, intercepted, reflected, and thus collected within the chamber B, formed in the manner described, from which the hot or warm air passes into the flue C, which is made of any suitable material and connected with the chamber B in manner most advantageous for the transmission of heat, and likewise in such a manner that it may readily be detached from the chamber B, so as to facilitate the attachment of the invention to or its detachment from the stove. For this purpose, likewise, the hot-air chamber B may have its top and one or more sides movable upon hinges, the various parts, when properly adjusted, being fastened together in any suitable manner.

The flue C is cylindrical or otherwise, and incloses the ordinary funnel or stove-pipe D, thus forming a passage outside of the stove-pipe D for the warm or hot air which is radiated and collected within the chamber B, and likewise that which radiates from the funnel or stove-pipe D, which is inclosed by the outer flue, C, through the flue C into the hot-air chamber E, which is made of sheet-iron, tin, or any other suitable material, and of any desirable size and shape, and so constructed, either in one piece or a body, or in parts or sections, which are hinged and fastened in any suitable manner, that when placed in position for use, which can readily be done, it will completely inclose the funnel or stove-pipe D, receiving and retaining in quantities as may be desired the heat radiated from the stove-pipe D, thus inclosed for this purpose, and likewise the hot or warm air transmitted from the hot-air chamber B directly into the chamber E through the flue C.

For the proper diffusion of the heat thus created and transmitted within the hot-air chamber E, the chamber E is furnished with

a flange or false bottom, F, against which the hot air or warm air strikes as it passes from the hot-air chamber B through the flue C, and is, in part, deflected and transmitted thereby to the sides of the chamber E, between which and the flange or false bottom there is space for the purpose of allowing the warm or hot air to pass upward and inward; or attached to this flange or false bottom F may be an inner chamber, G, of which the flange F forms the bottom, the space between the sides of the inner and the outer chambers forming a flue or passage for the warm or hot air passing from the hot-air chamber B by means of the flue C, which air will be diffused by passing through apertures in that which forms the sides of the inner chamber, or, passing upward, is deflected by the top H of the hot-air chamber E downward and inward; and within the hot-air chamber E the funnel or stove-pipe D is inclosed by the outer cylinders, I, provided with open spaces or holes, which serve to transmit and diffuse the heat radiated from the stove-pipe D, and likewise to protect the fruit, food, or whatever is placed within the hot-air chamber E, from immediate contact with the stove-pipe D.

The hot-air chambers are provided with the necessary dampers and apertures K, provided with slides, &c., for the purpose of regulating the degree of heat and the volume of warm or hot air.

The chamber E is likewise furnished with

the slides, shelves, or grates J, the spaces or holes in which facilitate the passage of the warm or hot air for the support or accommodation of the fruit, food, or whatever is placed therein. The shelves or grates J, being made of any suitable material, when placed in their proper positions rest at convenient and advantageous distances from each other upon shoulders or stays, or are otherwise fastened.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The oven or chamber E, constructed as described and shown, and combined, as described and shown, with the stove-pipe D or any hot-air flue or cylinder passing from the stove A, all substantially as and for the purposes set forth.

2. The combination of the hot-air chamber E with the stove-pipe D, or any hot-air flue or cylinder passing from the stove A, and the flue C, substantially as described, and for the purposes set forth.

3. The oven or chamber B, when constructed as described and shown, and used in combination, as described and shown, with the stove A, the stove-pipe D, or any hot-air flue or cylinder passing from the stove A, the flue C, and the oven or chamber E, all substantially as and for the purposes set forth.

SEELYE RICHMOND.

Witnesses:

JULIUS C. HALL,
T. H. RICHMOND.