J. I. BOONE.

Fruit Drier.

No. 51,792. Patented Jan'y 2, 1866.

Fig. 1.

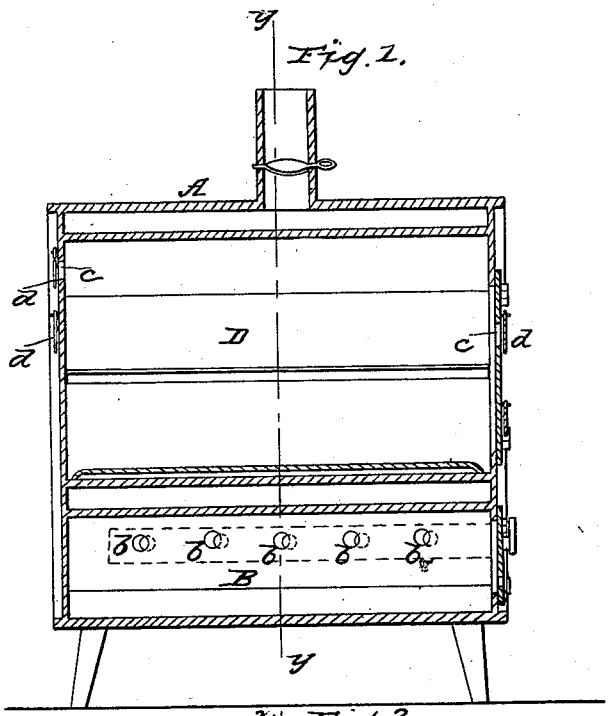
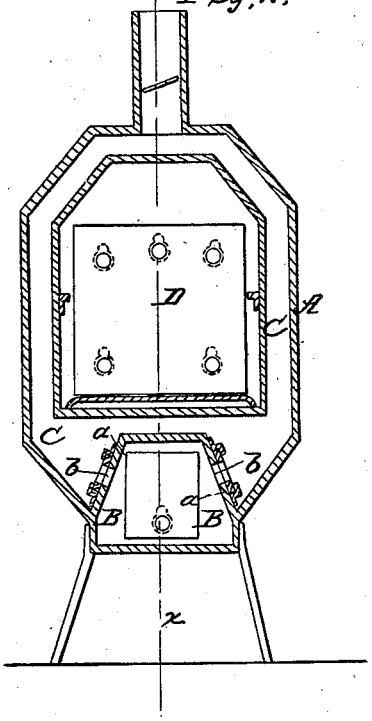


Fig. 2.



Witnesses:
Wm. Trewin
Thos Tusch

Inventor:
J. I. Boone
By Munn & Co
Attys

UNITED STATES PATENT OFFICE.

JOHN I. BOONE, OF WEST MILTON, OHIO.

FRUIT-DRIER.

Specification forming part of Letters Patent No. **51,792**, dated January 2, 1866.

To all whom it may concern:

Be it known that I, JOHN I. BOONE, of West Milton, in the county of Miami and State of Ohio, have invented a new and Improved Oven for Drying Fruit, Baking and Roasting Meats, and other Purposes; 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 drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section taken on the line *x x*, Fig. 2. Fig. 2 is a transverse section taken on the line *y y*, Fig. 1.

Similar letters of reference indicate like parts.

My invention consists in constructing an oven intended for drying fruits and for other purposes with a hollow chamber or space around its sides and top and bottom, so that the heat and products of combustion from the furnace, which is situated under the oven, will act on all sides of the oven during their passage to the flue.

It also consists in providing the oven with a number of ventilators, whereby the heat of the oven may be regulated, as desired.

To enable others to understand my invention, I will proceed to describe it.

A represents the outer casing of the structure, which contains the oven, and it consists of sheets of metal or other material put together in proper manner. In the present instance it is oblong in form. It may be built of brick or stone, if desired. In the lower part of this structure the furnace B is placed. The said furnace extends the entire length of the oven, and is larger at its bottom than at its top, and has sloping sides *a*, as shown clearly in Fig. 2. Through these sloping sides, and at suitable distances apart, there are made holes or openings *b*, to admit of the heat and products of combustion passing up in the chamber C around the oven. These holes serve the more perfectly to distribute the heat and products of combustion as they pass out of the furnace, and thus preventing them from rushing up in a body to the flue. This furnace is provided with a suitable door at its front for supplying it with fuel.

Inside of the casing A, and above the furnace B, the oven D is arranged. It is so suspended that a space is left all around it, except at its ends. The oven is provided with a suitable door to admit of the article to be dried or cooked to be placed therein and withdrawn therefrom, and it has grates or hooks on which to place or hang the articles to be cooked or fruit to be dried.

Through the door, and likewise through the back end of the oven, a number of holes, *c c*, are made, the same being provided with doors or slides *d* for closing them when it is desired to do so. These openings or holes are for ventilating the oven. Those in the door are arranged opposite those in the end wall of the oven. By these ventilations the heat of the oven can be regulated just as desired. If the lower ones be opened and the upper ones also, a current of cold air will rush in the oven through the lower ones and a current of the heated air will rush out of the upper ones, and thus any moisture or impure air will be prevented from settling at the bottom of the oven.

By constructing and arranging an oven as above described, it will be seen that the heated air and products of combustion will pass through the holes in the sides of the furnace and up through the chamber between the oven and the outer walls of the structure, and thus heat both sides, top, and bottom quickly and efficiently.

The oven can be used for ordinary household purposes, such as baking, roasting meats, &c., with as much advantage as for drying fruits. It can be quickly heated to an intense degree, and it will retain the heat for a great length of time.

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

The oven or dry-house herein described, consisting of the outer casing, A, furnace B, apertures *b*, interior chamber D, and surrounding space or flue C, all constructed and arranged to operate as and for the purposes specified.

JOHN I. BOONE.

Witnesses:

WILLIAM C. JOHNSTON,

R. R. CHASE.