2 Sheets. Sheet. 1.

D. C. Colby,

Fruit Drier.

No. 30,105. Patented Sept. 18. 1860.

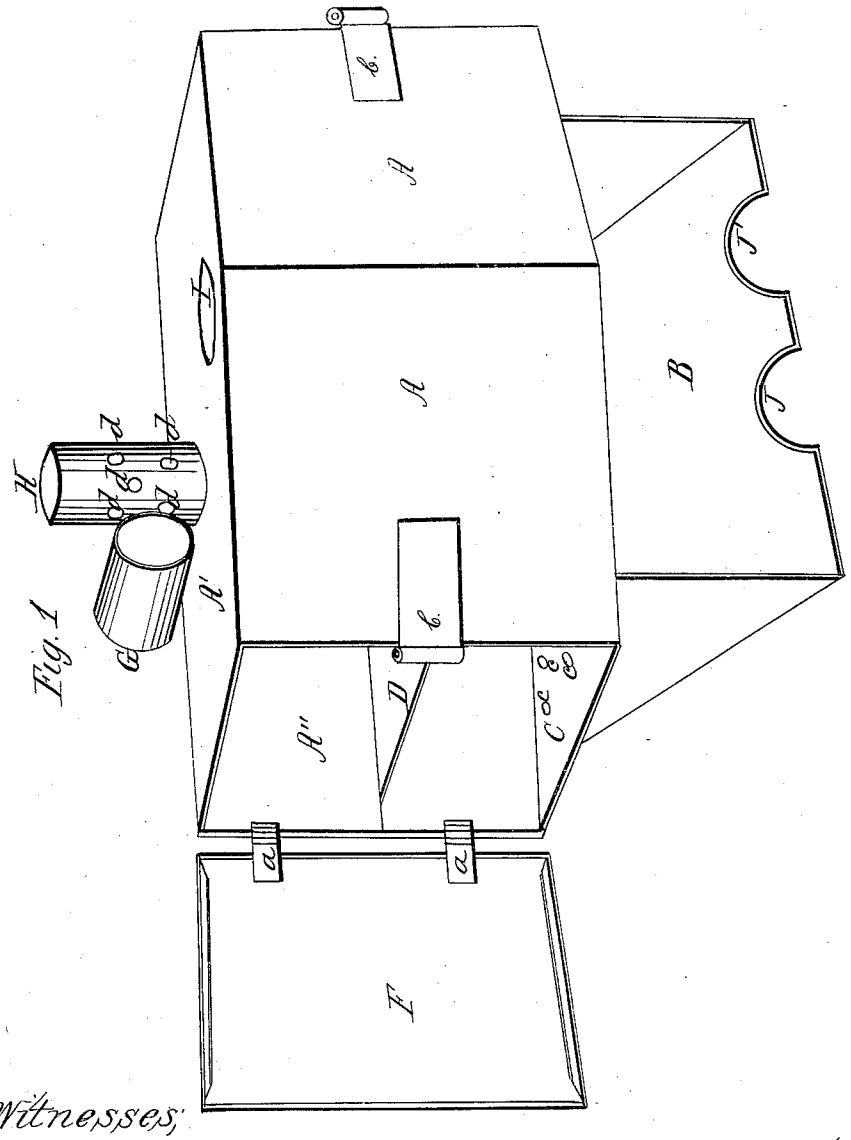


Fig. 1

Witnesses;
Goodlin Burke
Frances M. Burke

Inventor;
Daniel C. Colby

THE NORRIS PETERS CO., WASHINGTON, D. C.

2. Sheets. Sheet. 2.

D. C. Colby,

Fruit Drier.

No. 30,105. Patented Sept. 18. 1860.

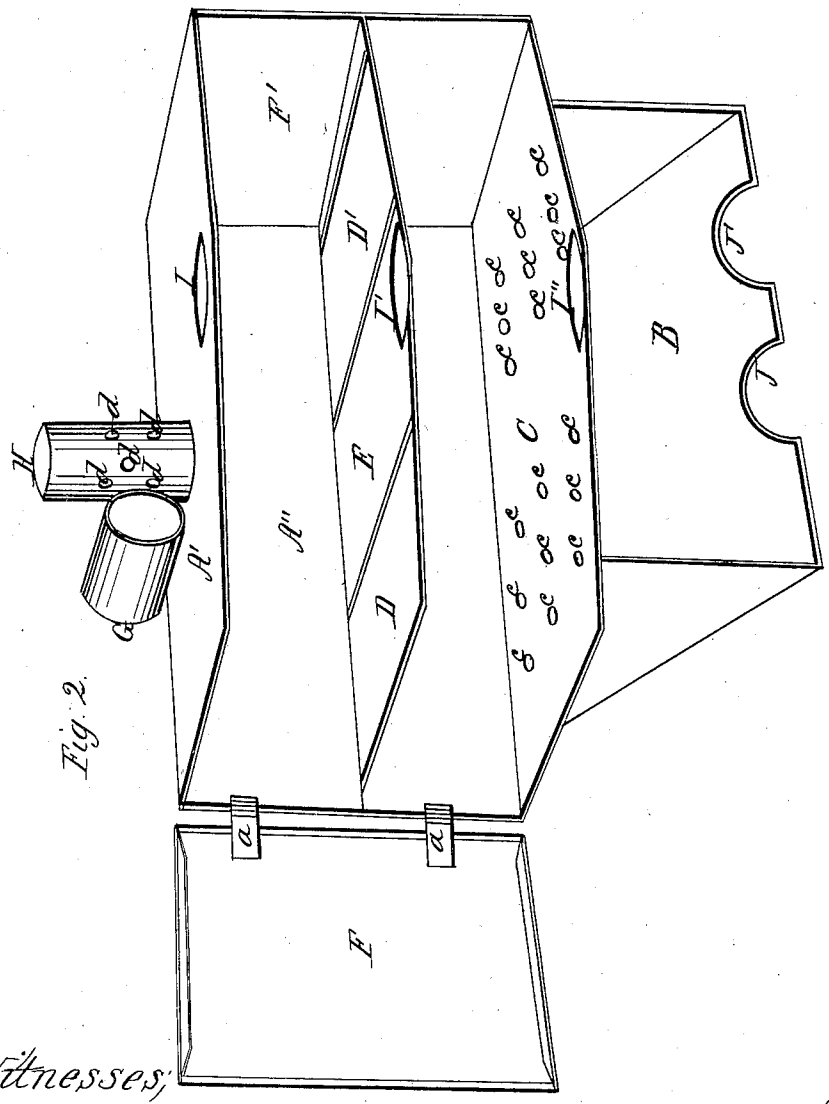


Fig. 2.

Witnesses;
Gratia Burke
Francis M. Burke

Inventor;
Daniel C. Colby

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DANIEL C. COLBY, OF NEWPORT, NEW HAMPSHIRE, ASSIGNOR TO HIMSELF AND EDMUND BURKE, OF NEWPORT, NEW HAMPSHIRE.

FRUIT-DRYING ATTACHMENT TO COOKING-STOVES.

Specification of Letters Patent No. 30,105, dated September 18, 1860.

To all whom it may concern:

Be it known that I, DANIEL C. COLBY, of Newport, in the county of Sullivan and State of New Hampshire, have invented a new and useful Apparatus for Warming and Drying, which I denominate "Colby's Extra Oven and Fruit-Dryer;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the entire apparatus, with one of its doors open and displaying a view of the interior of the same, and Fig. 2 is a view of the interior of said apparatus, the front side or wall thereof being removed.

The same letters in the different figures represent corresponding parts of the same apparatus.

A, A, represents the front side or wall of the oven, which may be constructed with a plane, curved, or angular surface (as seen in Fig. 1,) to accommodate it to the different stoves to which it may be attached.

A′, is the top plate, and A″, the back wall or side, of said oven.

B, is a chamber for the reception of the heated air which is generated by radiation from the stove, and for its conduction into the interior of the oven.

J, J′, are orifices in the lower part of chamber B, for the admission of air from the outside, more of which orifices may be added, or they may be made in any other form, as convenience may suggest.

C, is the bottom plate, or partition of the oven, containing perforations *c*, *c*, &c., for the admission of the heated air into the oven.

The central partition or shelf of the oven is composed of three separate plates D, E, D′, of which the central plate E, is permanent, and the plates D, D′, are movable, and can be taken out from their places at pleasure. The two last mentioned plates do not extend to their respective ends of the oven, thus leaving apertures at each end for the diffusion of the heated air in the lower chamber of the oven, and its admission into the upper chamber.

F, F, are doors at each end of the oven, being hung on hinges *a*, *a*, and confined by clasps *b*, *b*.

H, is a flue with perforations *d*, *d*, &c., for the escape of the heated air from the oven.

G, is a cap for covering and regulating the escape of the heated air, and for preventing it entirely when necessary to secure its accumulation in the oven for the purpose of baking.

I, I′, I″, are orifices for the passage of the stove funnel.

The object of my improved oven is, to intercept the heat which radiates from the stove, and which passes off into the room, and apply the same to the purposes of warming and drying. It is a well known fact that, as the heat radiates from the surface of a stove or other heated body, it ascends. I avail myself of this fact, and intercept this ascending heat, by the apparatus above described, which I place upon the top of a stove, and confine it there by means of the stove funnel which passes through the orifices I, I′, I″, the receiving chamber B, being fitted as closely as practicable to the side of the stove, to receive the heat radiated from the stove, and the air passing through the orifices J, J′. In the chamber B, the air received through the orifices J, J′, becomes heated, and thence passes through the perforations *c*, *c*, &c., in the partition C, into the lower chamber of the oven. It is there diffused through the lower chamber by means of the middle partition composed of the plates D, E, D′, and thence passes through the apertures above described at the ends of the plates D, D′, into the upper chamber of the oven, and thence it passes out through the escape flue H.

I construct my oven of tin, or sheet iron, or other suitable metal, and vary its form as may be necessary to adapt it to the different stoves to which it may be attached, without interfering with the principle which it embodies. The plates D, E, D′, composing the middle partition, may be made of wire gauze.

My oven may be used for a great variety of purposes in the culinary department of the kitchen, and is of very great convenience. It may be used for warming plates, and cooked food, or other articles, and for light baking such as custards and the like, and for drying fruits such as berries, sliced apples, pumpkins, squash, green peas, herbs, &c. When used for baking the doors should be

closed, and the cap G, placed upon the escape flue H, so as to cover the top of the same, and more or less of the perforations *d*, *d*, &c. When used for drying fruits, &c., and when it is desirable that there should be a free circulation of the air in the oven, the cap G, may be removed, wholly or partially, from the escape flue H and its perforations *d*, *d*, &c., and the doors F, F′, may be opened, more or less, if necessary. By means of the doors F, F′, the escape flue H, and the cap G, the circulation of the heated air in the oven may be regulated at pleasure.

Having above described the construction of my said invention, and its mode of operation, what I claim and desire to secure by Letters Patent, is—

The receiving chamber B, the perforated partition C, the central partition composed of the plates D, D′, and E, and the escape flue H, in combination with the box composed of the wall plates A, A, the top plate A′, and the doors F, F′, constructed and arranged as above set forth.

DANIEL C. COLBY.

Witnesses:

GRATIA BURKE,

FRANCIS M. BUBKE.