

G. A. DEITZ.

DRIER.

No. 185,672.

Patented Dec. 26, 1876.

Fig. 2.

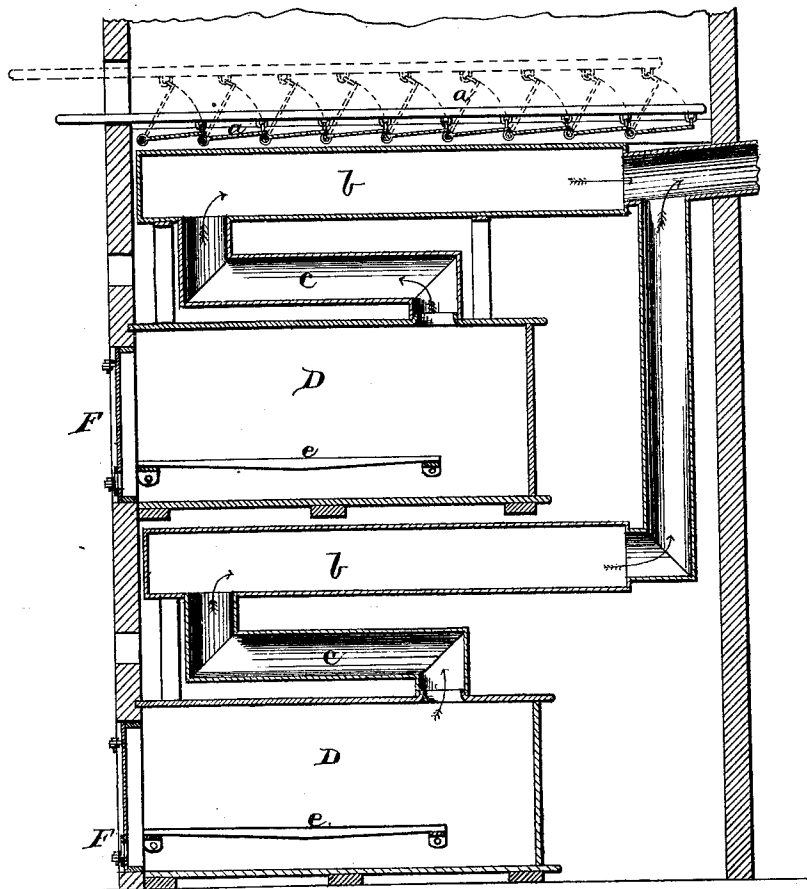
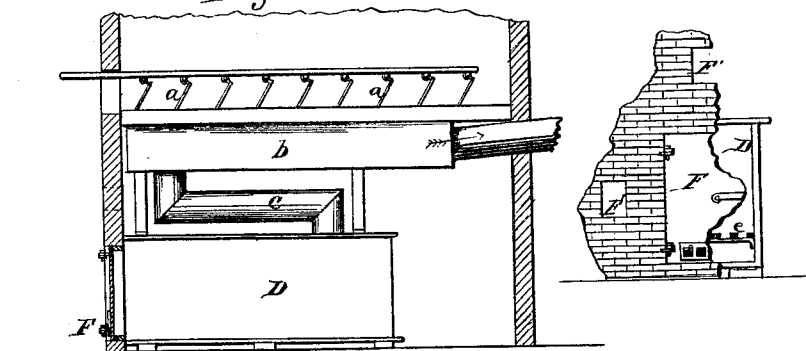


Fig. 1.



Witnesses  
A. B. Folger  
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# UNITED STATES PATENT OFFICE

GEORGE A. DEITZ, OF SACRAMENTO, CALIFORNIA.

## IMPROVEMENT IN DRIERS.

Specification forming part of Letters Patent No. **185,672**, dated December 26, 1876; application filed January 28, 1876.

### *To all whom it may concern:*

Be it known that I, GEORGE A. DEITZ, of Sacramento city, in the county of Sacramento and State of California, have invented a new and Improved Means of Heating Air for Drying and Desiccating Purposes, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention (which is an improvement on Patent No. 172,398, granted me January 18, 1876) is to rapidly heat air and cause a draft thereof at the least possible expense, for use in connection with any curing or drying machine. It consists in the use of a box-stove, grate, pipe, drum, and fan or regulator, attached as shown in Figure 1.

D is the box-stove, with a grate inside of it. C is the pipe. b is the drum; a, the fan or regulator; F F, air-holes, and the arrows represent the course of the smoke. The stove D is placed with its front in the front wall of the chambers, and opening is provided to admit air to the fire. Openings F' F', at each side and above the stove, admit air to the chamber to be heated.

One or more stoves may be used, either by placing them side by side, or by placing one above the other, as shown in Fig. 2. The stove or stoves, whether one or more be used, must be inclosed within walls of stone, brick, or iron, leaving sufficient space between the walls and stove for the circulation of air.

The fan or regulator is supported on bars in the upper part of the stove-chamber, above the drum, and is made adjustable, to direct the ascending hot air into the drying-chamber at different planes. The grate is placed in the lower part of the stove, horizontally, but is yet surrounded with space on all sides, to allow free access of air. The drums C are made flat, and, together with the stoves are inclosed in a chamber situated below and at the front of the drying-chamber.

The stove or stoves when thus arranged and heated, cause a current of cold air to be drawn in through the air-holes F' F', which, circulating around the stove, pipe, and drum, is rapidly heated and passed up through the drying-machine, causing the evaporation of all moisture, and the speedy drying and curing of fruit, vegetables, meat, hops, or other substances capable of being cured and preserved by heat.

What I claim as my invention is—

The combination of the stove, grate, pipe, drum, and heating-chamber, all located as described, and the adjustable regulator, substantially as and for the purpose set forth.

GEO. A. DEITZ.

Witnesses:

A. C. FREEMAN,  
D. S. LUSK.