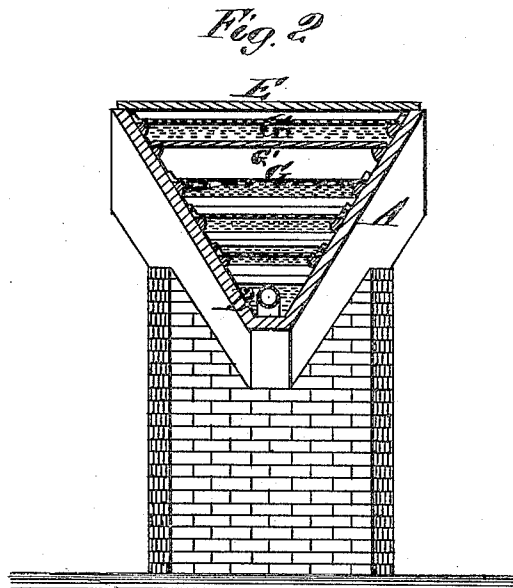
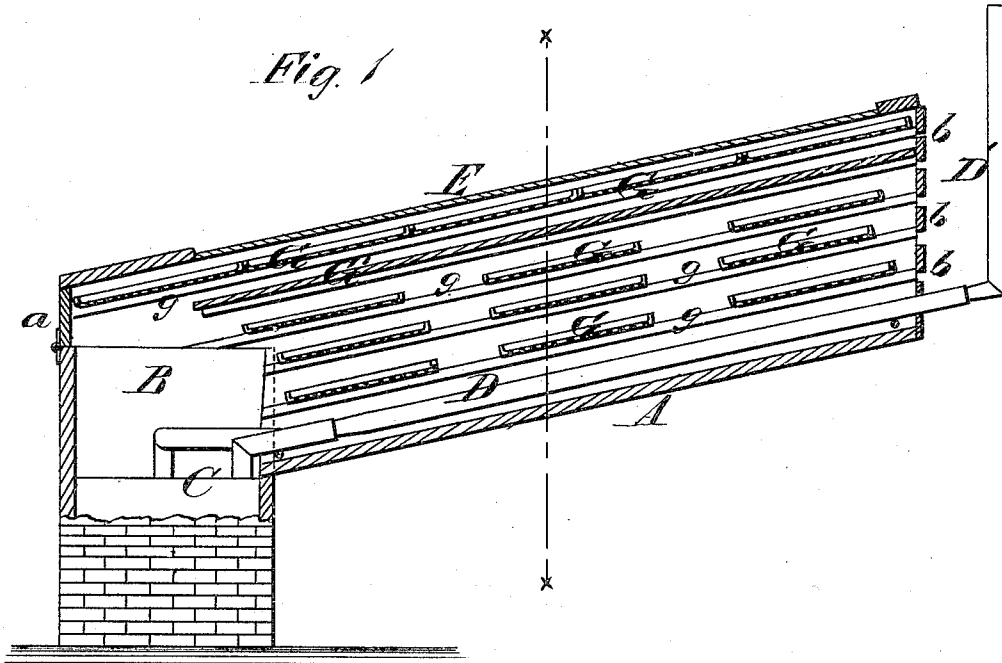


G. A. DEITZ.  
FRUIT-DRIER.

No. 172,398.

Patented Jan. 18, 1876.



WITNESSES

*Robert Emmett*  
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INVENTOR

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# UNITED STATES PATENT OFFICE.

GEORGE A. DEITZ, OF CHICO, CALIFORNIA.

## IMPROVEMENT IN FRUIT-DRIERS.

Specification forming part of Letters Patent No. 172,398, dated January 18, 1876; application filed July 10, 1875.

*To all whom it may concern :*

Be it known that I, GEORGE A. DEITZ, of Chico, in the county of Butte and State of California, have invented a new and valuable Improvement in Fruit-Driers; 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, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my fruit-drier, and Fig. 2 is a transverse vertical sectional view of the same.

My invention has relation to means for drying fruit; and it consists in an inclined chest, which in cross-section is triangular, and which opens at one end in a furnace-chamber, in combination with a heat-radiating pipe and a transparent cover, as will be hereinafter explained.

In the annexed drawings, A designates a triangular case of suitable capacity, which is mounted at one end on a structure of masonry forming a furnace-chamber, B, in which a furnace, C, is applied. The case A is inclined, as shown in Fig. 1, and along its bottom is a smoke-flue, D, which communicates with the interior of the furnace C and discharges the smoke through a chimney, D'. This flue D radiates heat into the drier-case below the shelves therein. At the front end of the case A is a hinged door, *a*, and at the rear end of this case are slots *b*, which allow free circulation of heated air therein. E designates a transparent cover for the case A, which is preferably made of glass, and which is designed to allow sunlight through it for facilitating the drying process. The object of mak-

ing the drier-case A triangular in shape is to allow it to be enlarged or contracted laterally, as circumstances may require. On the inside of the case A, and secured to the inclined sides thereof, are horizontal ledges *g*, which support several tiers of shelves, G, on which the fruit to be dried is put. These shelves are reticulated for the purpose of allowing a free circulation of heated air through them, and they are removable from the case A for filling them and removing the dried fruit. In practice, I shall employ a radiating drum or a coil of pipes, and arrange the same on top of the furnace C, the outlet from which radiator may lead into the pipe D. Between the lower tiers of perforated shelves and the highest tier of these shelves is an imperforated partition, G', which divides the heated currents in the case and allows the currents of heated air which rise to the highest point of the case at its front part to circulate uniformly beneath and through the said highest tiers of shelves.

I am aware that a fruit-drier consisting of an inclined chest, a furnace, a flue, and perforated shelves is not new, and I therefore do not claim such invention broadly; but

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

The combination of the inclined triangular chest A, opening at one end in a furnace, B, the heat-radiating pipe D, imperforate partition G', and the transparent cover E, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEO. A. DEITZ.

Witnesses:

C. H. JACKSON,  
GEORGE J. BOURNE.