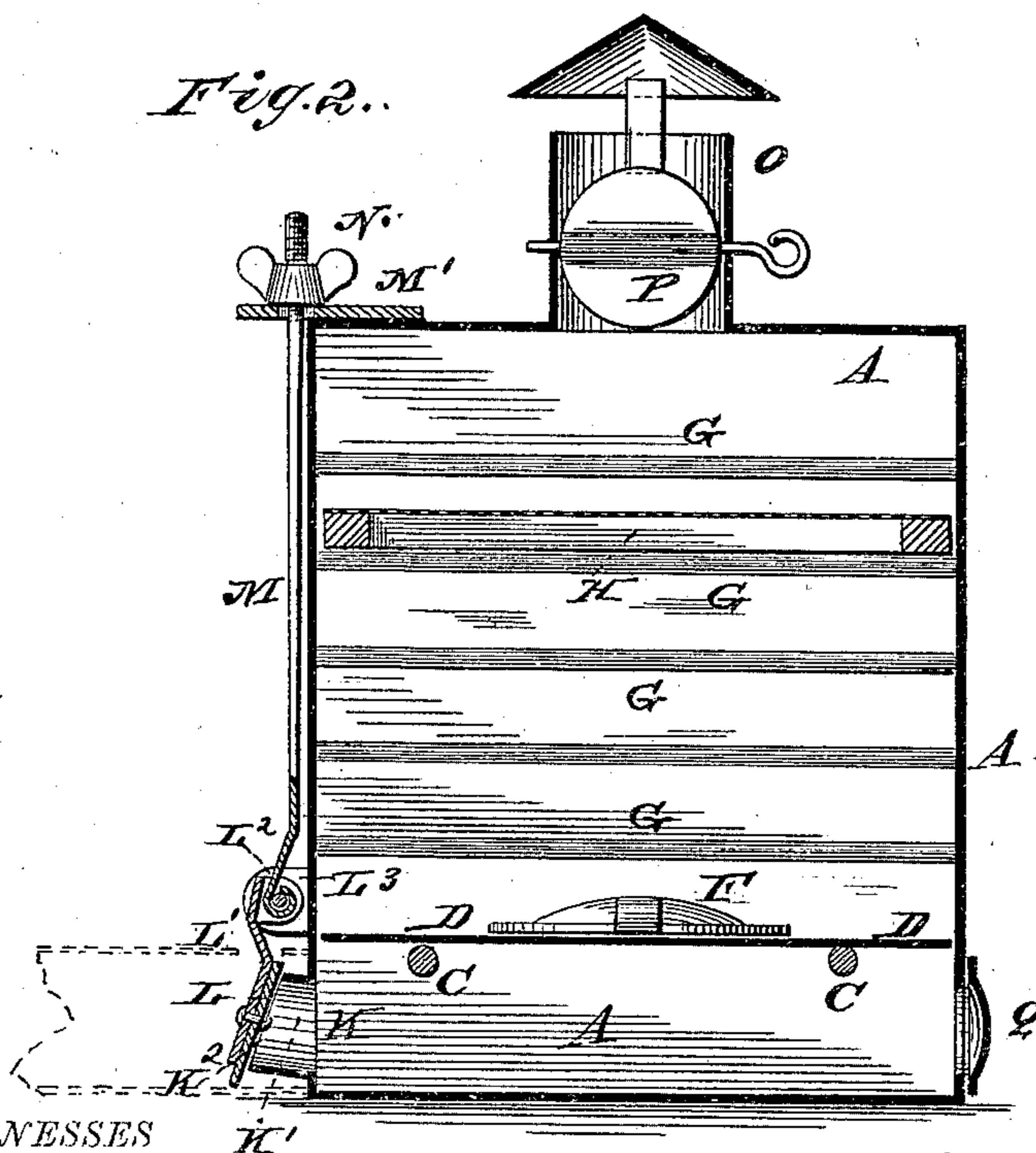
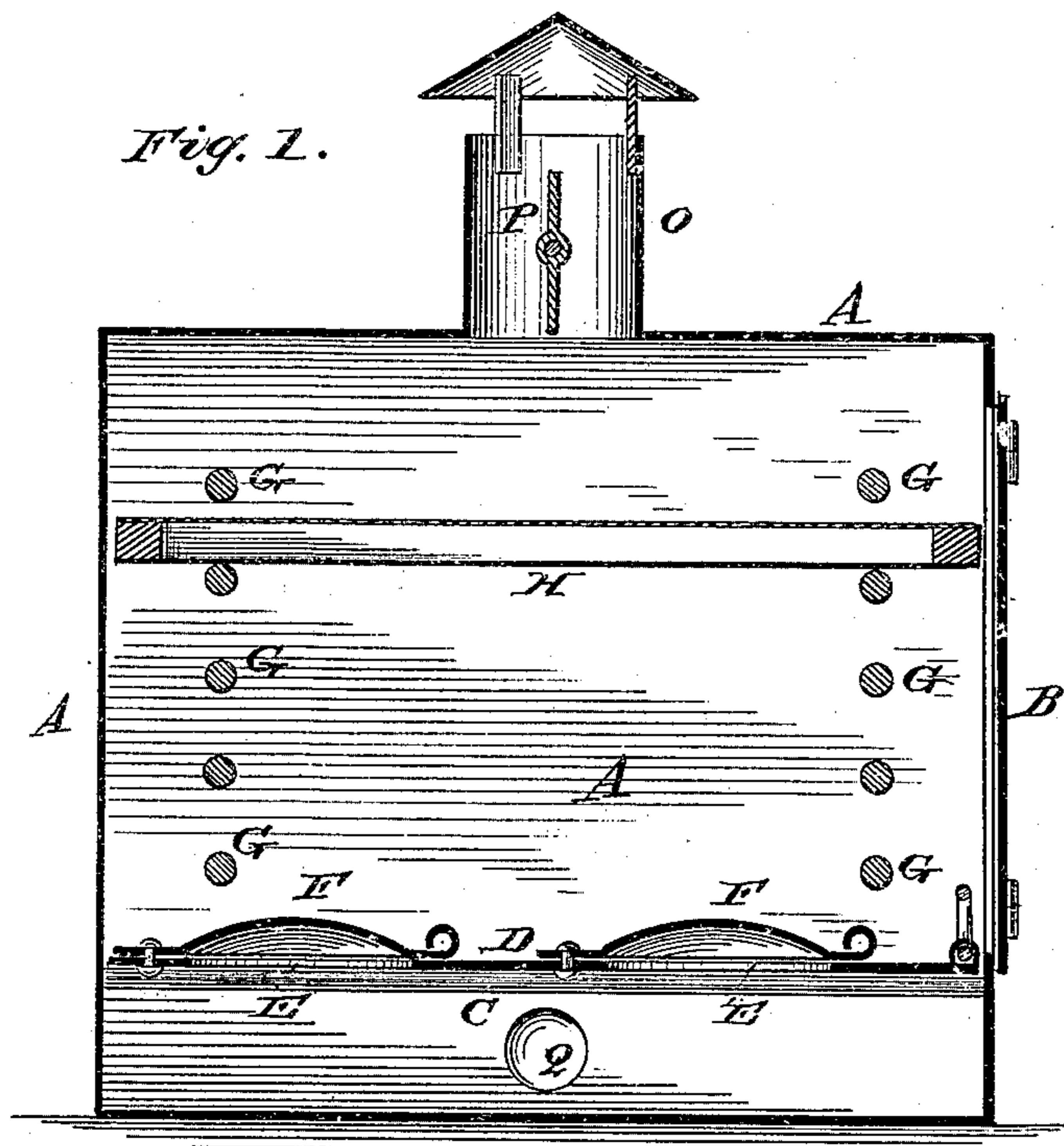


(No Model.)

H. C. GROVER.  
FRUIT EVAPORATOR.

No. 249,613.

Patented Nov. 15, 1881.



WITNESSES

K'

*Thos. G. Dietrich*  
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INVENTOR

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# UNITED STATES PATENT OFFICE.

HIRAM C. GROVER, OF NUNDA, NEW YORK.

## FRUIT-EVAPORATOR.

SPECIFICATION forming part of Letters Patent No. 249,613, dated November 15, 1881.

Application filed September 17, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, HIRAM C. GROVER, of Nunda, in the county of Livingston and State of New York, have invented certain new and useful Improvements in Fruit-Evaporators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a longitudinal vertical sectional view, and Fig. 2 is a transverse vertical sectional view, of my invention.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to fruit driers or evaporators; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represents a suitable casing, provided with a front door, B, and having a pair of longitudinal bars, C C, to support a false bottom, D, having one or more openings, E, covered by pivoted lids or vents F. Above the false bottom D the casing or box A is provided with transverse bars or gratings G, to support a series of drying pans or screens, H, upon which the fruit to be dried or evaporated is placed.

Heat is admitted into the casing primarily through an opening, K, arranged, as shown, below the false bottom D, and consisting of a tube, K', having a slanting mouth, K<sup>2</sup>, covered by a clap-valve, L, having an upward-projecting arm, L', provided with lugs L<sup>2</sup>, pivoted between lugs L<sup>3</sup> upon the side of the casing. M is a flat rod, threaded at its upper end, and adjustable to a bracket, M', at the upper end of the casing by means of a thumb-nut, N. The lower end of the flat rod or strap M is pivoted or connected, as shown, to the lugs L<sup>2</sup> of valve-arm L' a short distance in front of the

pivoting-point of the latter. It will thus be seen that the contraction or expansion of the flat rod or arm M, caused by the heat of the adjoining drying-kiln, serves to regulate the operation of the valve L, which may, moreover, be definitely regulated by means of the thumb-nut N.

Suitable openings are provided at the top and side of the casing for the escape of the heat and moisture, the one at the top being a chimney or thimble, O, having a valve or damper, P, while the one at the bottom is a simple opening formed in the side of the casing, and provided with a cover or valve, Q.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood. Heated air may be conveyed from a suitable furnace through a flue, which is shown in dotted lines, Fig. 2, to the opening K, said flue being provided with a slot for the stem L' of valve L, which may be operated, as above described, so as to admit or exclude heat, and which operates automatically by the expansion of rod M, so as to regulate the supply.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

As an improvement in fruit-driers, the casing A, having bottom D, provided with dampers F, thimble O, provided with damper P, damper Q, and slanting tube K', in combination with the damper L, operated by the adjustable and expansible rod M, so as to regulate automatically the amount of heat entering the casing, as herein described, for the purpose shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HIRAM C. GROVER.

Witnesses:

SAM. J. CRAIG,

ROBERT O'CONNELL.