

No. 617,823.

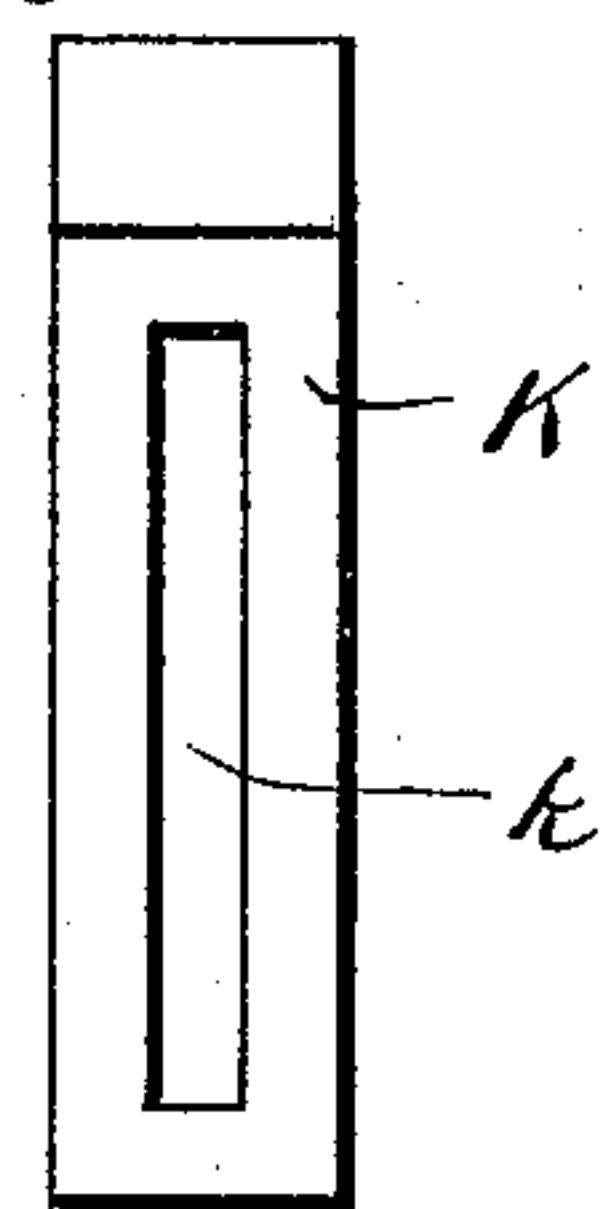
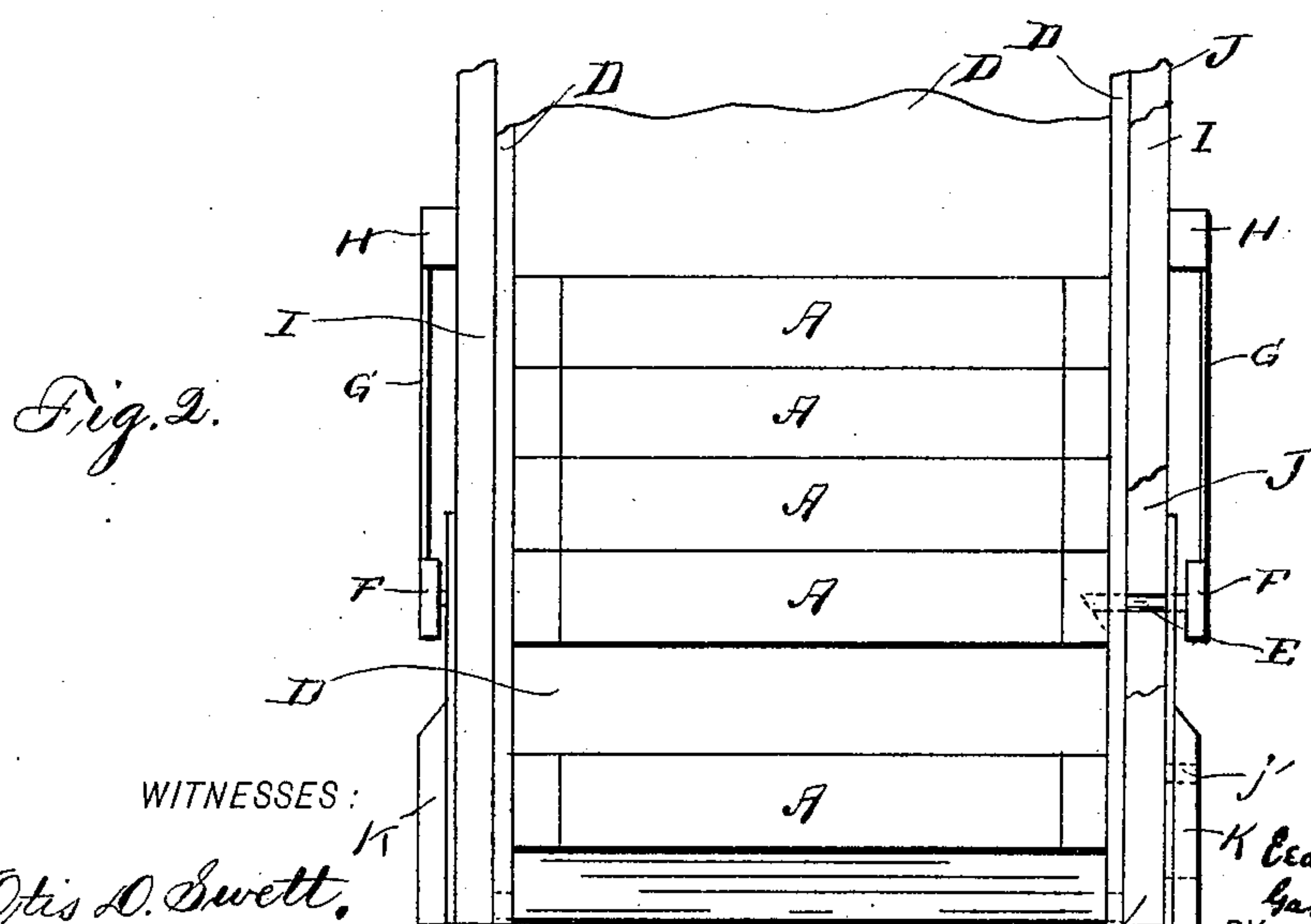
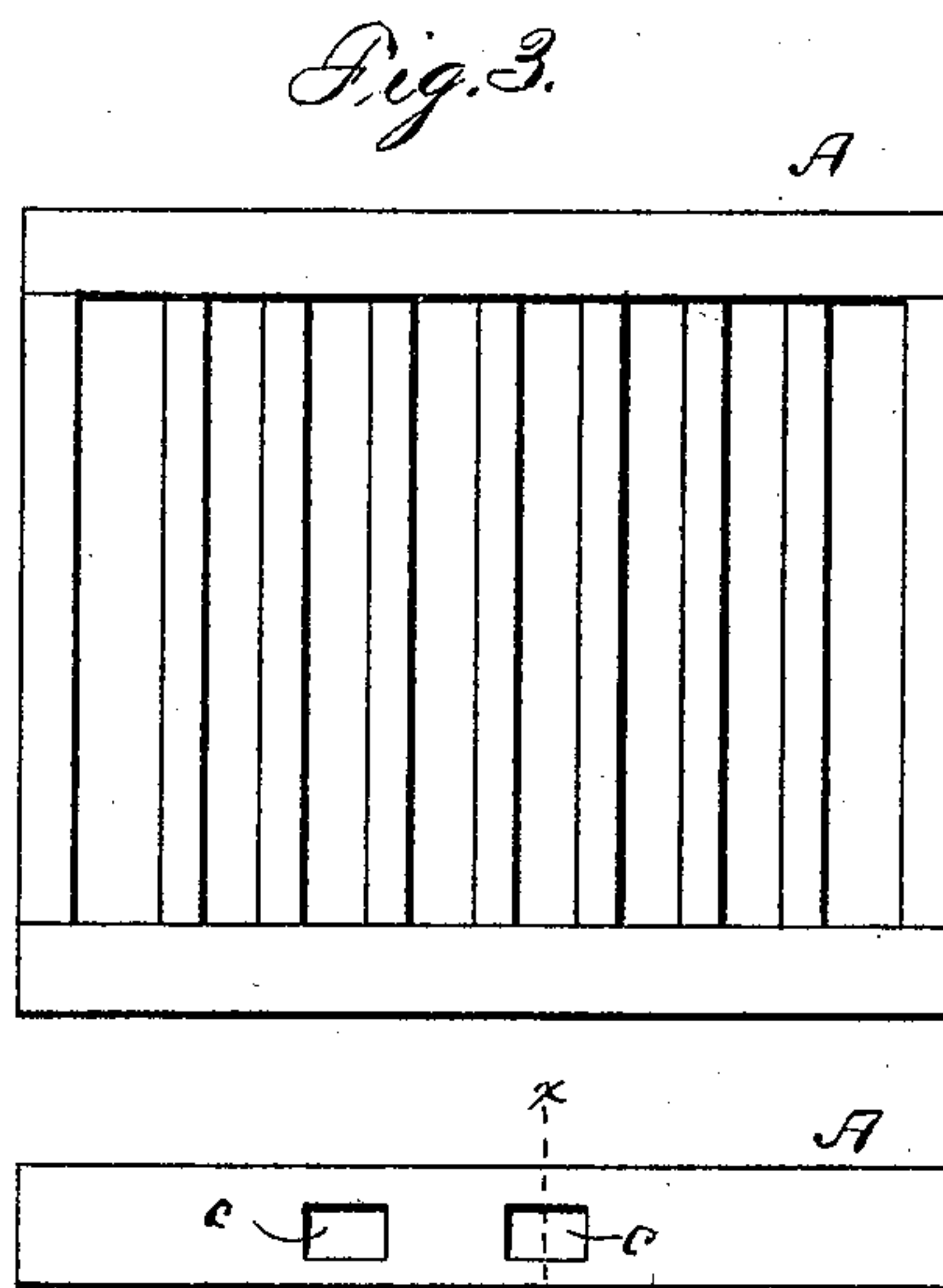
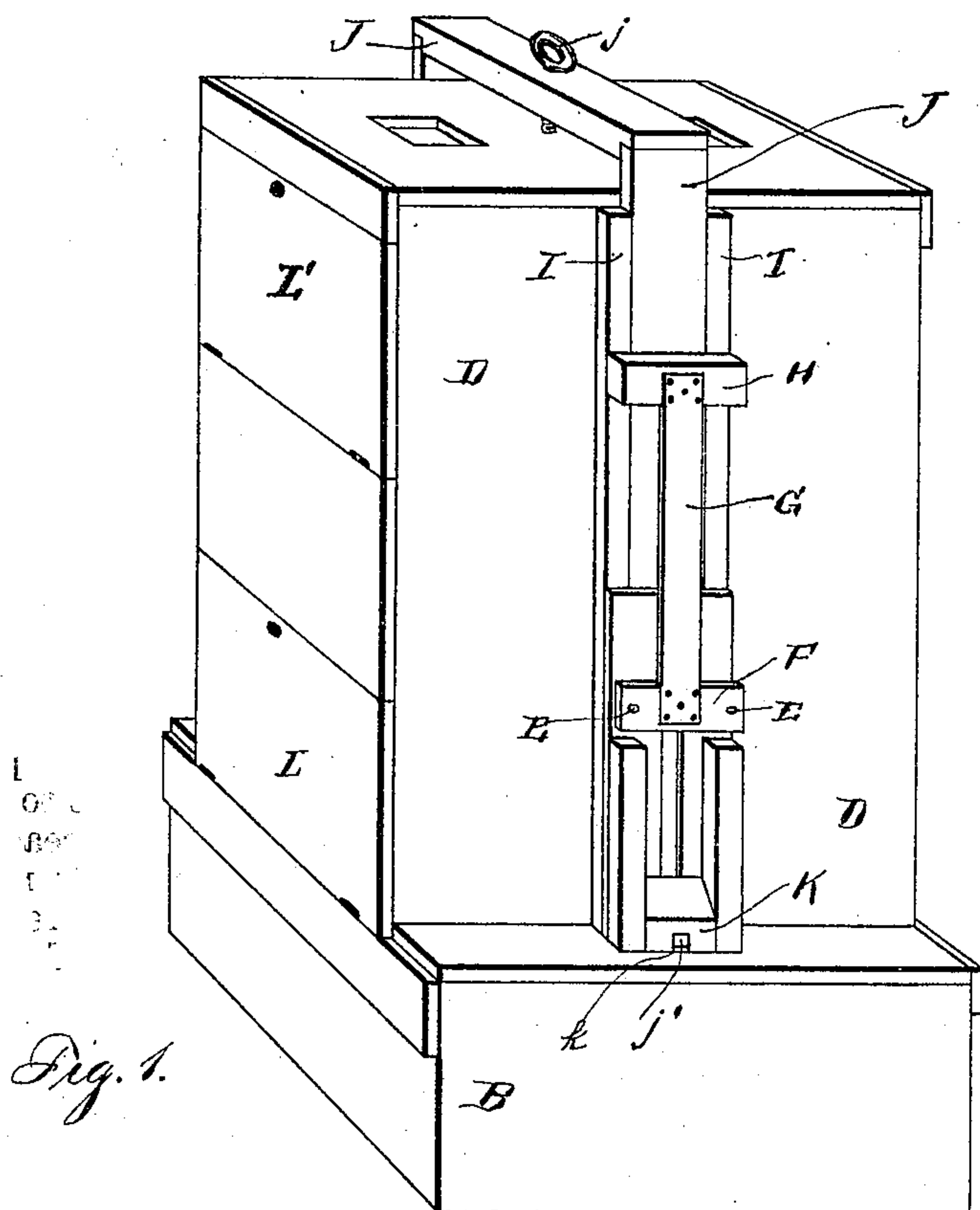
Patented Jan. 17, 1899.

E. N. THOMAS & G. L. THOMPSON.

FRUIT DRIER.

(Application filed Feb. 5, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ERASTUS N. THOMAS AND GAMALIEL L. THOMPSON, OF JEFFERSON,
OREGON.

FRUIT-DRIER.

SPECIFICATION forming part of Letters Patent No. 617,823, dated January 17, 1899.

Application filed February 5, 1898. Serial No. 669,185. (No model.)

To all whom it may concern:

Be it known that we, ERASTUS N. THOMAS and GAMALIEL L. THOMPSON, citizens of the United States, residing at Jefferson, in the county of Marion and State of Oregon, have invented certain new and useful Improvements in Drying Fruit; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The special object of the invention is to improve fruit-driers, so as to prevent dripping and the consequent loss of the aromatic juices of the fruit, the latter being necessary to give to each kind of fruit its distinguishing flavor.

The invention consists in first applying a limited degree of heat and gradually increasing it until the fruit is satisfactorily dried; also, in the particular means employed to change the position of the fruit-trays until they are removed.

Figure 1 of the drawings is a perspective view of the drier which is preferably used; Fig. 2, a detail interior view of the same; Fig. 3, a plan view of the fruit-compartment; Fig. 4, an end elevation showing the recesses in which the supporting-pins are received; Fig. 5, a detail sectional view on dotted line $x-x$ of Fig. 4 to show the said recesses, and Fig. 6 a detail view of the slotted wedge.

In the drawings it will be seen that separately-movable frames A are employed, which may vary in number and are arranged one above another in a hot-air chamber B. In each compartment is placed one or more trays of the fruit, each tray being first placed in a top compartment, while the said compartment is gradually transferred to successively lower compartment places until the bottom is reached, when it is removed from the drier. In order to make these changes in the compartments, the hollow vertical case D, in which the trays A will fit loosely, is arranged over the hot-air chamber B upon suitable supports E. The latter have horizontal pins

or studs which enter holes c in the sides of the trays A and are fast on the cross-bars F, that are suspended from vertical plate-springs G, attached at their upper ends to a cross-bar H, which is rigid on the vertical bars I I.

J is a yoke on whose top cross-bar we preferably place a finger-handle j , by which it may be moved up and down in the guide-bars I. This yoke has a screw j' near the bottom, which is moved up and down in the slots k of two plates K K on opposite sides of the case. The bottom of the yoke is so shaped as to support one compartment exactly opposite a bottom hinged door L, so that it may be readily removed by hand, its dried contents removed, and after being supplied with fresh fruit put through the top opening closed by the door L'. When the yoke is raised, it raises its bottom up to the lowest compartment and at the same time the screws j' to the top of the slots k . The next movement causes the plates K to raise the cross-bars F and withdraw the pins or studs E from the lowest compartment. Then on the downward movement of the yoke the lowest compartment goes down with the bottom of yoke, while the one next above is caught by the pins E. Thus it will be readily seen that each compartment occupies successive positions, each nearer to the hot-air chamber, so that the fruit is dried without destroying its flavor.

What we claim as new is—

In a fruit-drier, the case having doors L L', the loose trays A arranged one above another in a hot-air chamber, the supports E, the cross-bars F with pins that enter holes in the sides of trays, the springs G on cross-bars H, the guide-bars I and the adjustable finger-yoke J, all combined, constructed and arranged substantially as shown, to operate together in the manner described.

In testimony whereof we affix our signatures in presence of two witnesses.

ERASTUS N. THOMAS.
GAMALIEL L. THOMPSON.

Witnesses:

T. M. WITTEN,
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