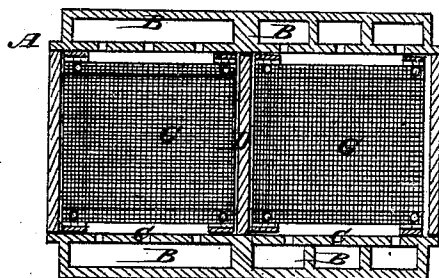
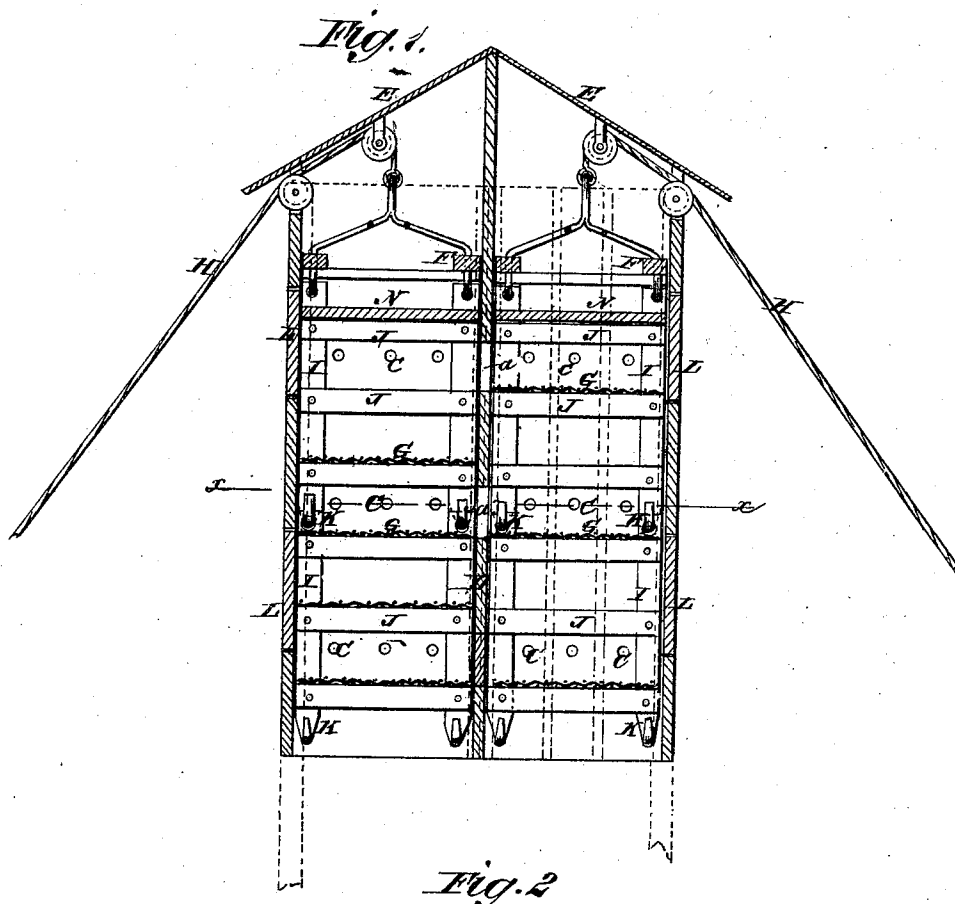


S. W. HOPE.
FRUIT-DRIER.

No. 179,921.

Patented July 18, 1876.



WITNESSES:

Francis McArdle
John Goethals

INVENTOR:

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BY

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UNITED STATES PATENT OFFICE.

SAMUEL W. HOPE, OF DOVER, DELAWARE.

IMPROVEMENT IN FRUIT-DRIERS.

Specification forming part of Letters Patent No. **179,921**, dated July 18, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, SAMUEL W. HOPE, of Dover, in the county of Kent and State of Delaware, have invented a new and Improved Fruit-Drier, of which the following is a specification:

The invention relates to a drying-chamber having two compartments, each provided with an elevator or hoisting apparatus, and communicating by means of an opening in the partition, through which trays of fruit may be slid from one elevator onto the other, and thus passed from the first compartment, in which the moisture is mainly eliminated from the fruit, to the second compartment, where the drying process is perfected. The invention further relates to the construction of the elevators in detachable sections, as hereinafter described.

Figure 1 is a sectional elevation of my improved drier, and Fig. 2 is a horizontal section taken on line *x x*.

A represents the drying-case; B, the tubes for carrying off the moist air; C, passage through the sides of the drier to the moist-air tubes; D, partition separating the drier into two compartments; E, tight cover to the drying-cases; F, frame for supporting the trays G by ropes or chains H; J, cleats on which the trays are supported from the frames, and which are suspended by uprights I, made in short pieces, and hooked to the frames, and also hooked together in sections at K to be detached. Doors L are provided in the sides, for convenience in putting in and taking out the trays, and the partition D also has suitable opening *a*, through which the trays are passed from the first compartment into the second. For this purpose it is obviously nec-

essary that the cleats J of one elevator shall be brought into the same plane with those of the other, as shown in Fig. 1.

The trays of fruit are first placed in the left-hand compartment, and when the moisture has been mainly eliminated they are slid into the second or right-hand compartment, where the drying process is carried to completion, in an atmosphere containing far less moisture than the first. When a section is to be added to the elevators, it is inserted in the compartment through door L, and attached to the hooks K.

N represents the tight cover to be used in the place of the upper tray to hold the heat down. When I want to take empty sections of the uprights and cleats off from next to the top frame F, or add extra sections, I will support the sections below loaded with fruit by slides or springs, and lower the frame, and hook it on the full sections after removing the empty ones, or raise the frame and add more sections, as needed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fruit-drier, the combination of two compartments, a partition, D, having openings *a*, and the elevators arranged one in each compartment, substantially as shown and described, to operate as specified.

2. The elevators or hoisting apparatus formed of the sections I J, each connected to the other by a detachable hook-and-eye joint, as shown and described.

SAMUEL W. HOPE.

Witnesses:

JOHN HAMAN,
C. B. HOPE.