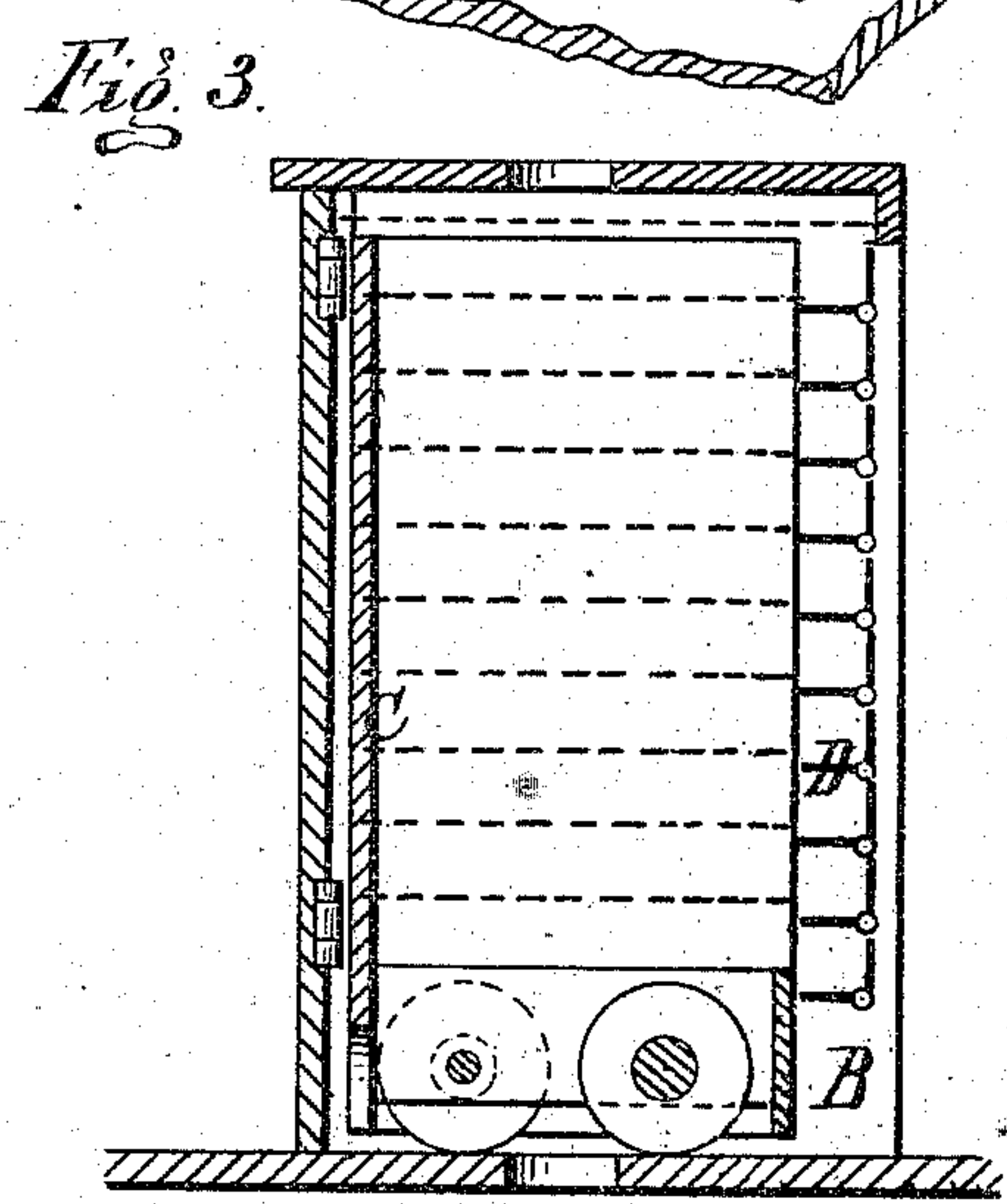
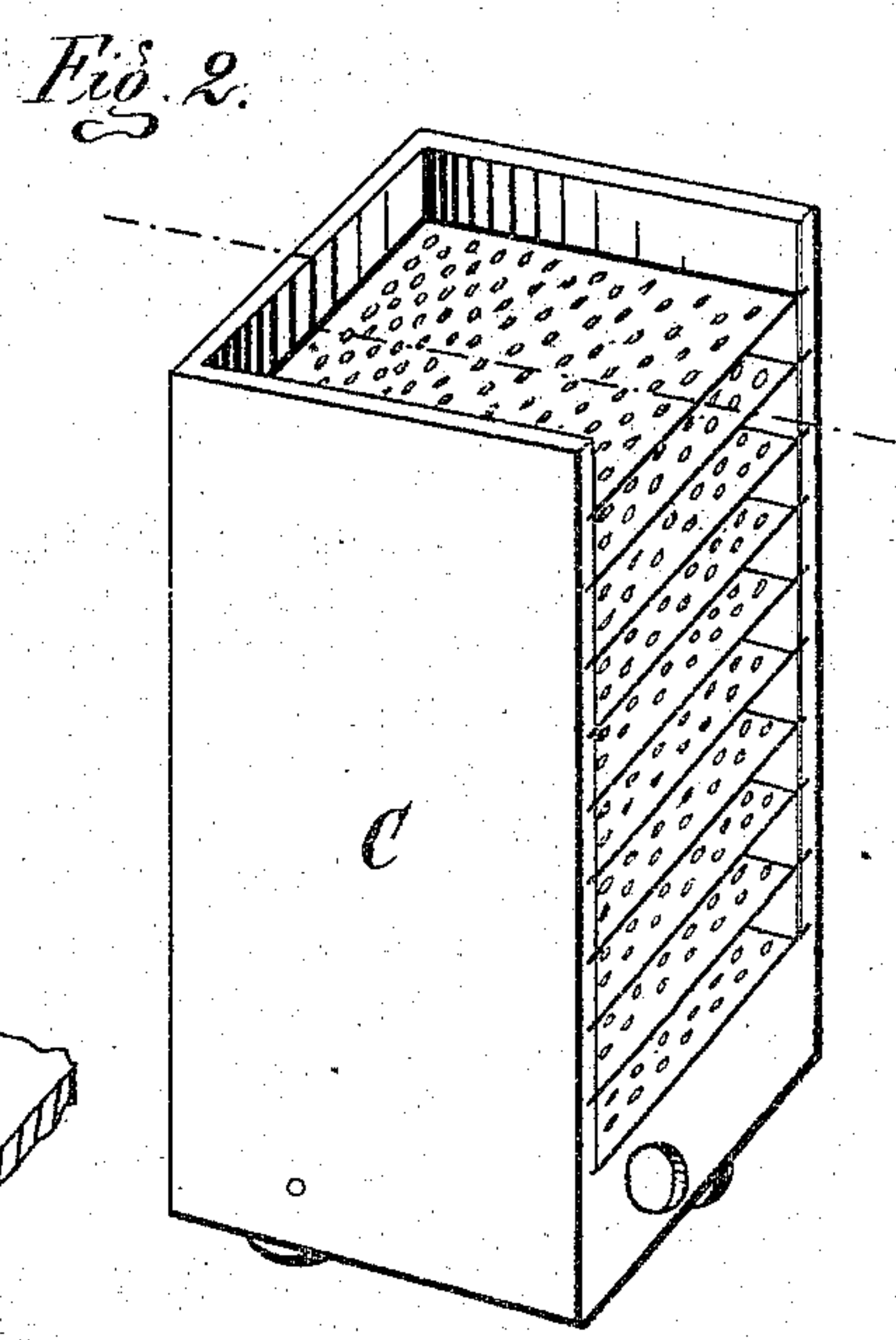
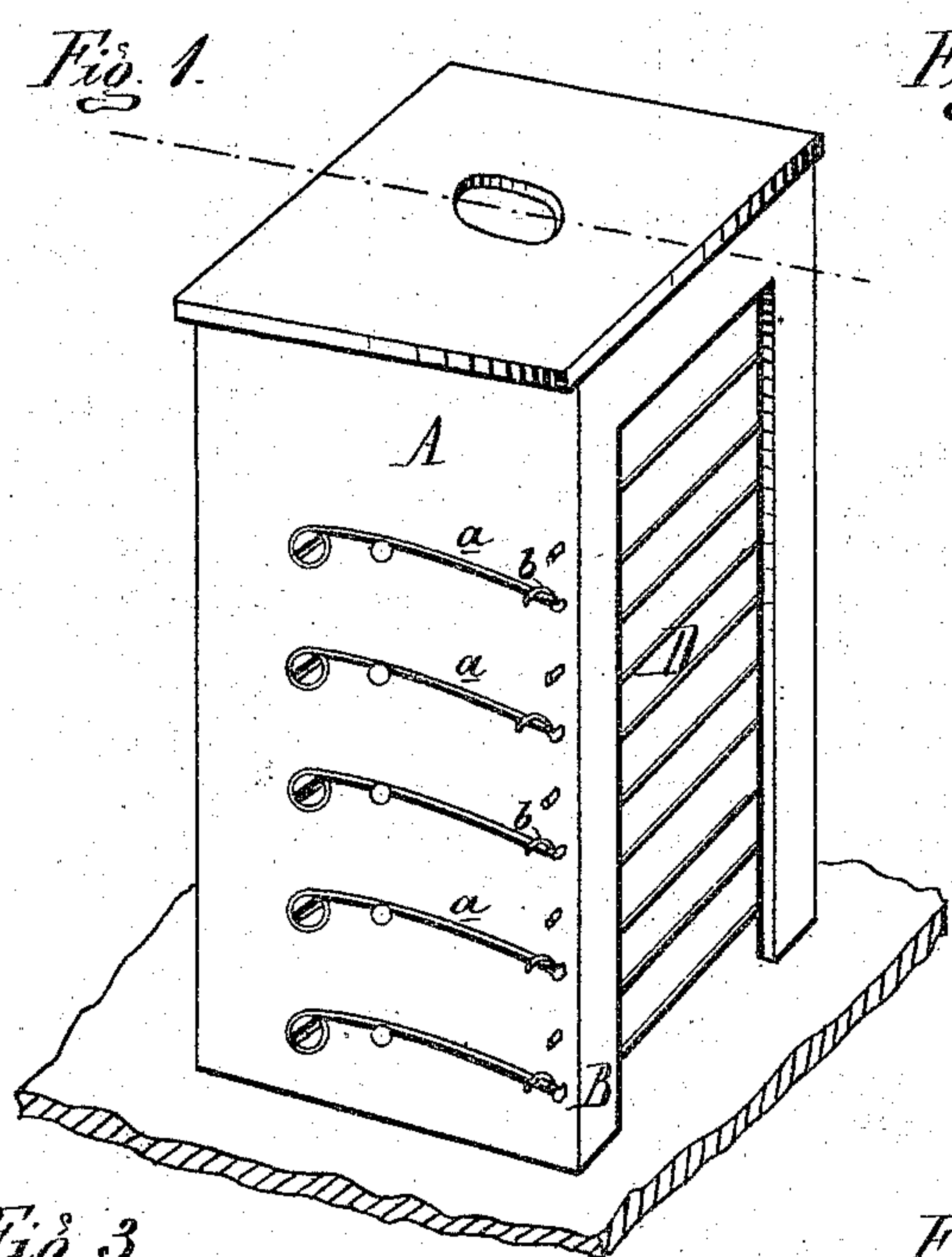


E. A. & C. W. JONES.

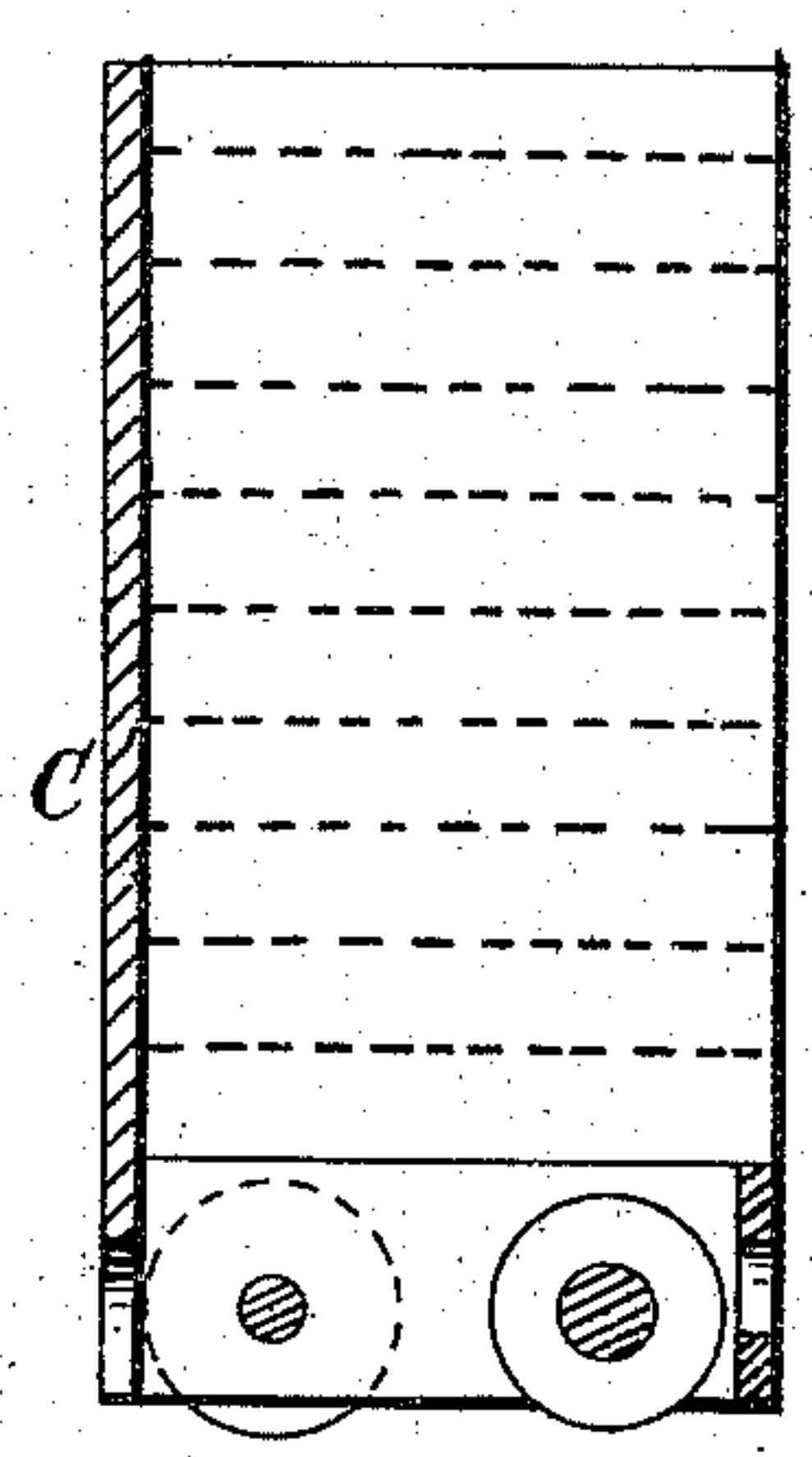
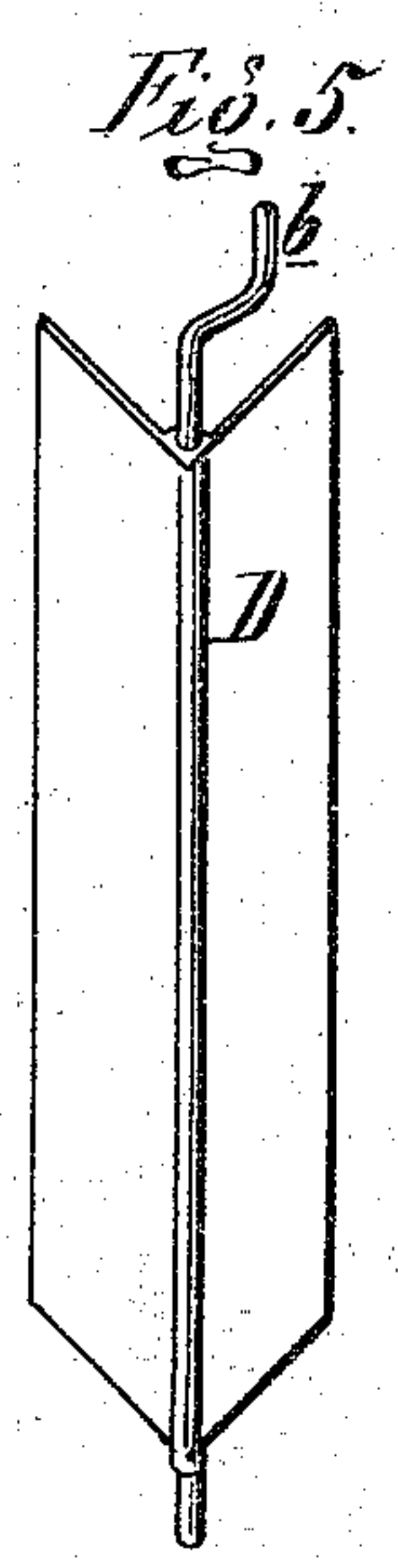
Fruit-Driers.

No. 158,499.

Patented Jan. 5, 1875.



*Fig. 4.*



Attest:  
Edward Barthel.  
C. E. Huetts.

Inventor:  
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C. W. Jones  
By Attorney  
Thos. S. Sprague



# UNITED STATES PATENT OFFICE.

EDGAR A. JONES, OF STURGIS, AND CHARLES W. JONES, OF CENTREVILLE,  
MICHIGAN.

## IMPROVEMENT IN FRUIT-DRIERS.

Specification forming part of Letters Patent No. **158,499**, dated January 5, 1875; application filed  
August 28, 1874.

*To all whom it may concern:*

Be it known that we, EDGAR A. JONES, of Sturgis, and CHARLES W. JONES, of Centreville, in the county of St. Joseph and State of Michigan, have invented an Improvement in Fruit-Preserving Apparatus, of which the following is a specification:

The nature of this invention relates to certain improvements designed to be used for drying or preserving fruits, meats, vegetables, and other articles, where said drying is effected by evaporating the moisture contained in the articles to be preserved.

In the process the fruit or vegetables are sliced and placed on screens or platforms, perforated so that the air can pass through them. These platforms or screens are then placed in the drying or evaporating chambers one by one, thereby causing a loss of heat, to a certain extent, every time the chamber is open.

The object of this invention is to construct a peculiar chamber, closed on all sides, except as hereinafter described, within which the screens or platforms may be arranged on a car or truck without opening the doors, said chamber being supplied, through its floor, with hot air from any convenient source, and when the car or truck is filled the door of the chamber may be opened, the car or truck run out and into a drying or evaporating chamber, more fully as hereinafter specified. This improvement is more especially designed as an improvement upon the fruit-drier described in a patent to E. A. & C. W. Jones, issued June 30, 1874.

Figure 1 is a perspective view, from the front, of the filling-chamber, which is designed to stand upon the same floor with, and in close proximity to, the evaporating-chambers. Fig. 2 is a perspective view, from the front, of a truck or car filled with fruit-screens. Fig. 3 is a vertical cross-section, from front to rear, of the chamber with truck in place. Fig. 4 is a like view of the truck removed. Fig. 5 is a detached perspective view of the slat-valves which close the front of the chamber.

Like letters refer to like parts in each figure.

In the drawings, A represents the side walls of

a chamber, provided with a tightly-fitting door on its rear side, and, in building, left entirely open on the front side, B. The interior of this chamber should be of the same form and area as the drying or evaporating chambers in connection with which it is designed to be used. C is a screen or platform truck, placed on wheels, and with its sides grooved, slatted, or otherwise arranged to receive a series of screens or platforms, upon which the fruit is placed. The two sides and rear of this car or truck are closed. This car is run into the chamber, so that its open side is presented to the front of said chamber when the door is closed.

The fruit is placed upon the screens, and these screens are inserted into the grooves or on the slats of the car-sides, filling the cars, and commencing with the top, and so on down, until the car-body is full of screens. Hot air is admitted into the bottom of the chamber from any convenient source, and an opening in the top of the chamber allows the hot air to escape, so that the fruit is exposed to an evaporating process as soon as the screens containing it are placed in the car.

As hereinbefore remarked, in building the chamber the front is left open; but this must be closed before the screens and fruit are placed within the chamber and on the truck. In order to accomplish this a series of L-shaped slats, D, are placed in the front of said chamber to close it. These slats correspond in number to the number of screens to be placed in the truck. The slats are pivoted like bell-cranks into the sides of the chamber, so that they hang as shown in Fig. 3, and are held in that position by means of springs *a*, or other equivalent devices, the outer ends of the pivot-pins terminating in small cranks *b* for that purpose. The width of the slats corresponds with the space between the screens, and the openings, which are as slight as possible between the slats, are coincident with the grooves or slats upon which the screens are to rest. The lower flange of the slats projects inwardly, and prevents the currents of hot air from passing upward between the front of the screens and the front of the chamber, and compels them to pass up through the screens. After the car is filled the rear door is opened, the truck run

out and into a drying or evaporating chamber, where it remains until the fruit is ready for removal.

It will be seen that with a chamber constructed as herein described the fruit is placed upon the car within a chamber filled with hot air, and, while the car is being filled, the process of evaporation has commenced.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a fruit-drier, the hot-air chamber, permanently closed on two sides, with a door to admit a car, and having its front closed by L-shaped slats, provided with suitable means for

retaining them in proper position, as and for the purpose set forth.

2. The combination, with the hot-air chamber A, of the car or truck C, closed on three sides, and provided with fruit-screens, and having its open front closed by the L-shaped slats on the front of said chamber, corresponding in number to said screens, as and for the purpose set forth.

EDGAR A. JONES.  
CHARLES W. JONES.

Witnesses:

C. E. HUESTIS,  
H. S. SPRAGUE.