

(No Model.)

2 Sheets—Sheet 1.

J. H. GORE.  
FRUIT EVAPORATOR.

No. 544,785.

Patented Aug. 20, 1895.

FIG. 1.

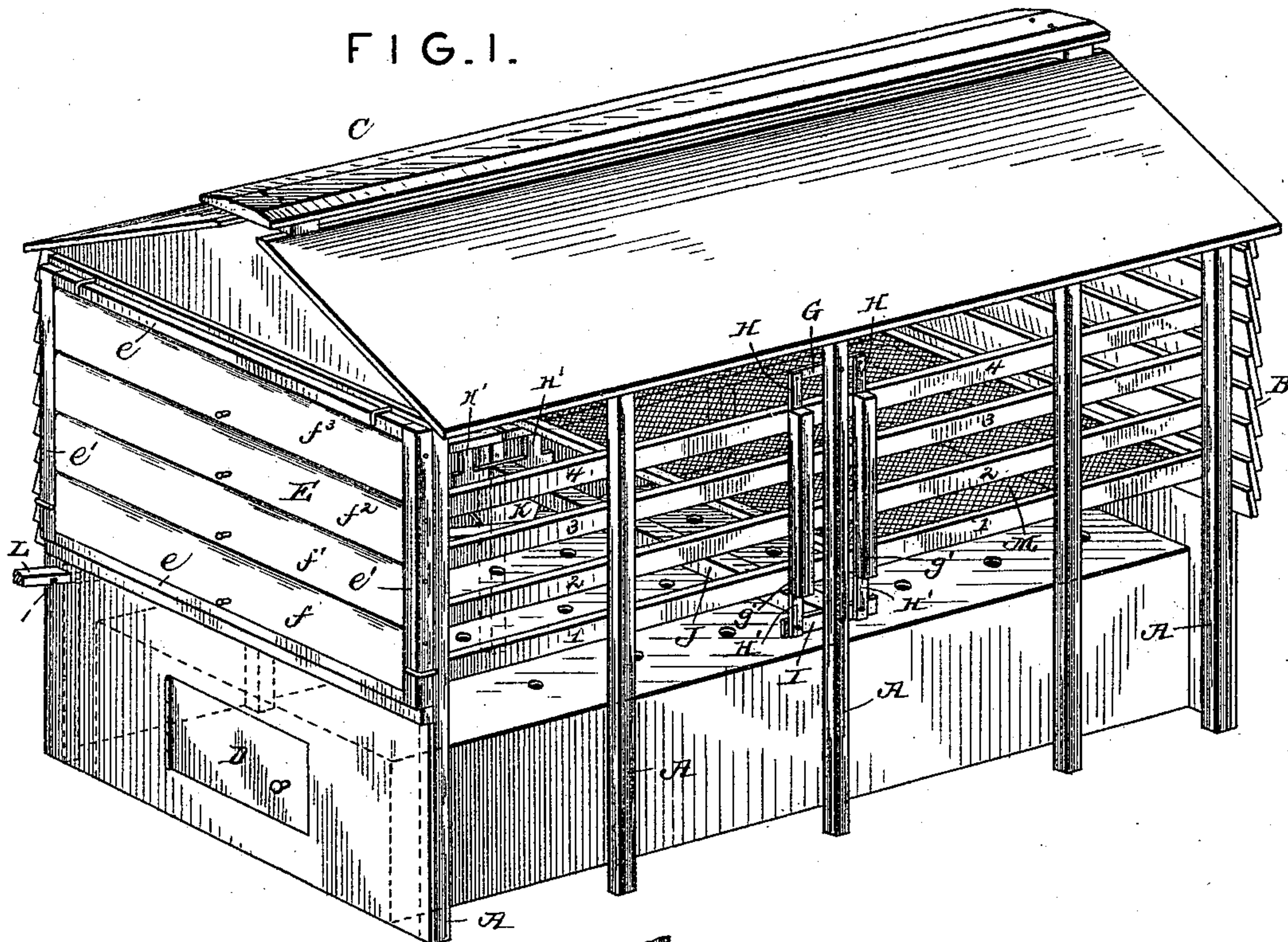
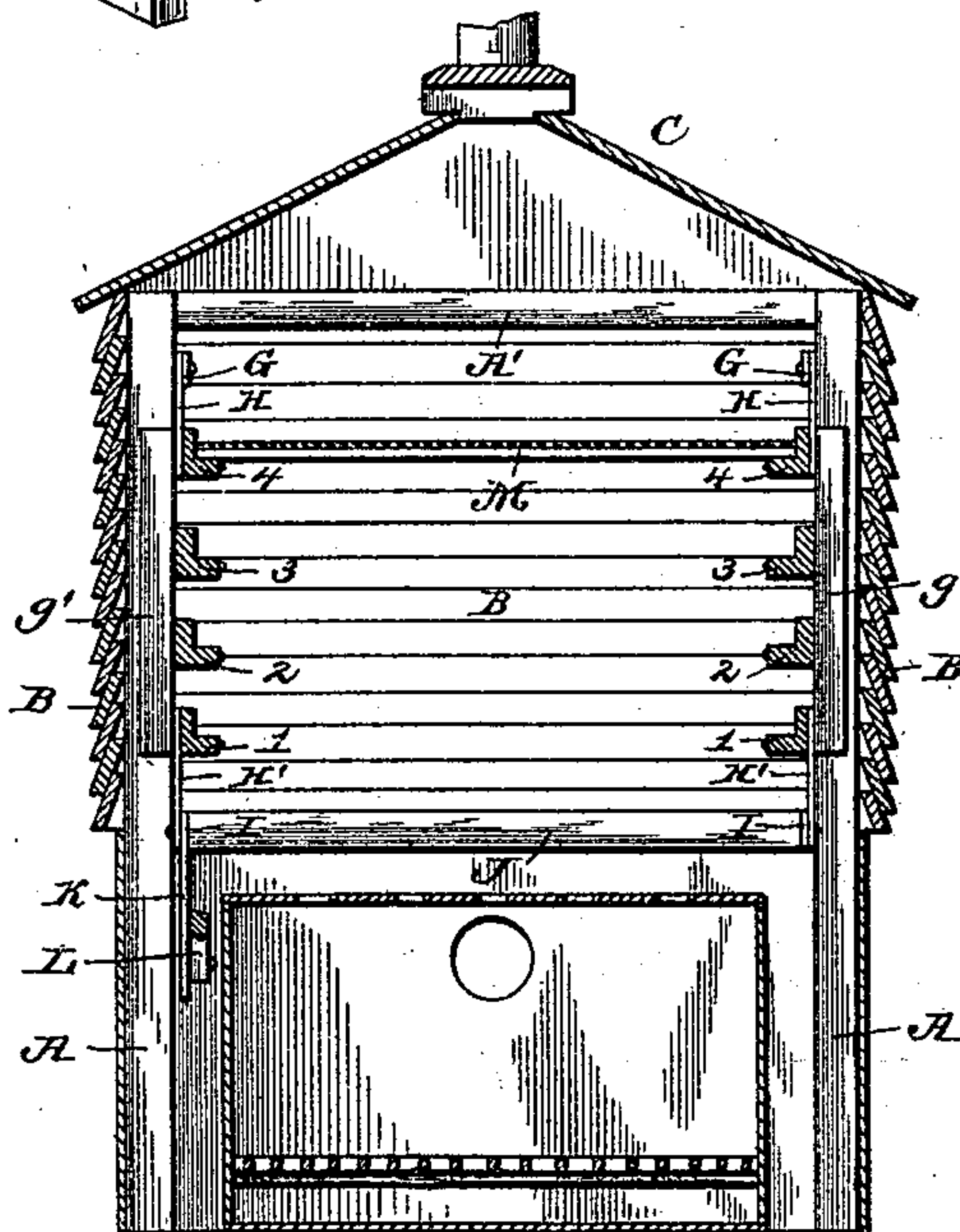


FIG. 4.



Inventor

Witnesses  
Harry L. Amer.  
R. M. Smith.

By His Attorneys.

John H. Gore.

Chas. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

J. H. GORE.  
FRUIT EVAPORATOR.

No. 544,785.

Patented Aug. 20, 1895.

FIG. 2.

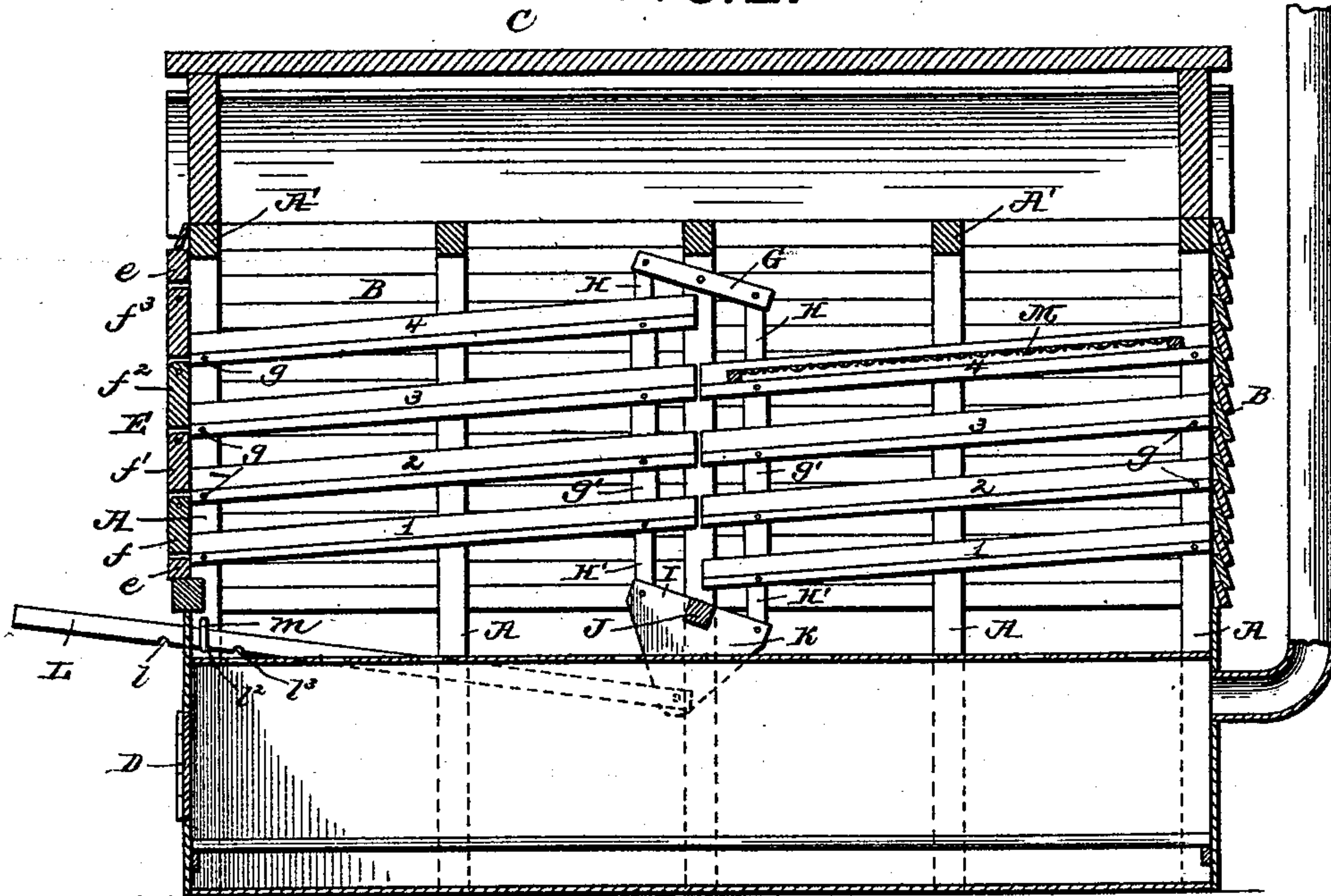
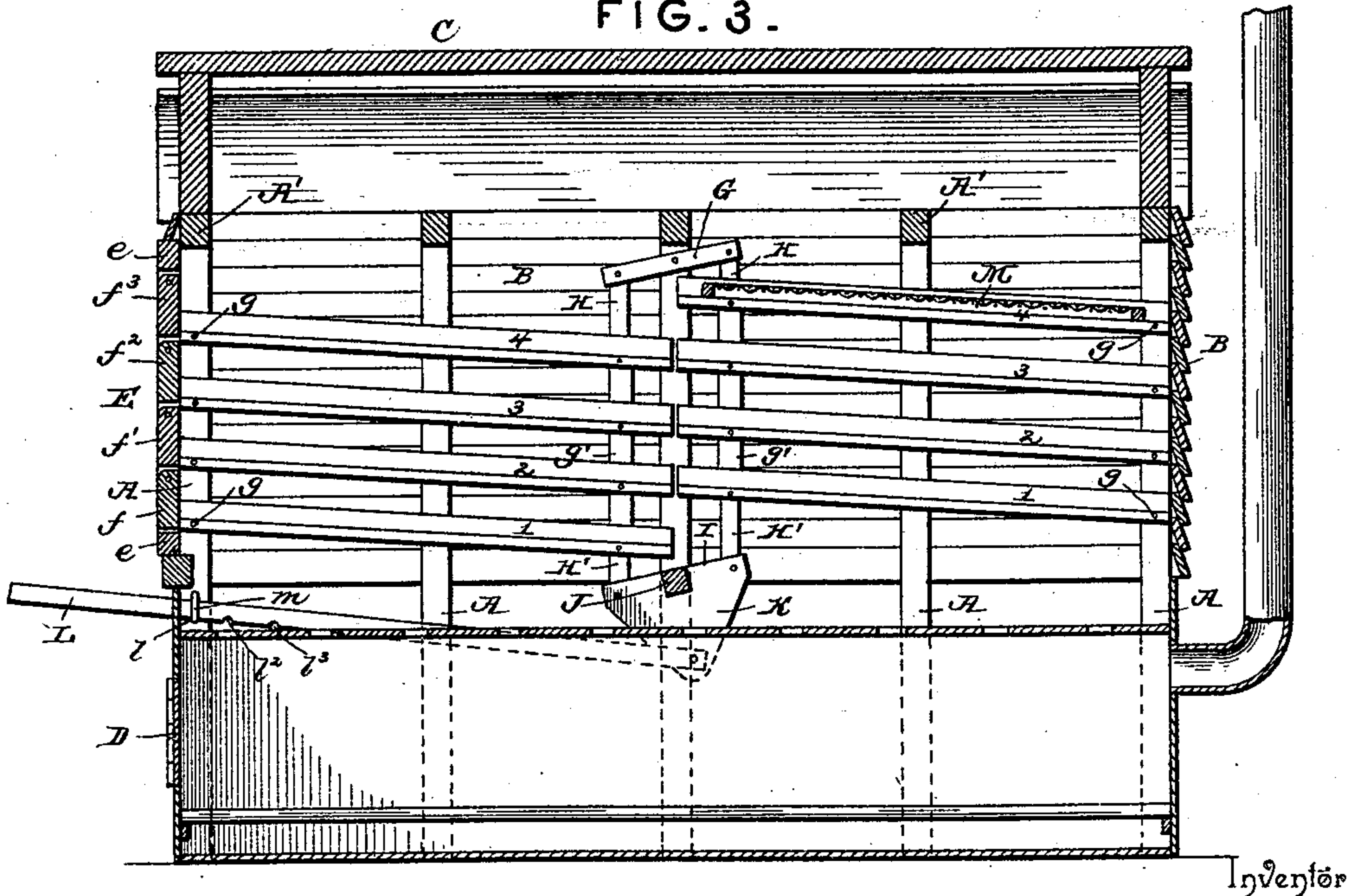


FIG. 3.



Inventor

Witnesses  
Harry L. Ames.  
R. M. Smith.

By His Attorneys.

John H. Gore.

C. A. Snow & Co.



# UNITED STATES PATENT OFFICE.

JOHN HENRY GORE, OF LINDER, ARKANSAS.

## FRUIT-EVAPORATOR.

SPECIFICATION forming part of Letters Patent No. 544,785, dated August 20, 1895.

Application filed February 21, 1895. Serial No. 539,272. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HENRY GORE, a citizen of the United States, residing at Linder, in the county of Faulkner and State of Arkansas, have invented a new and useful Fruit-Evaporator, of which the following is a specification.

My invention relates to an improvement in fruit-evaporators, and is especially designed to receive and hold the fruit-containing trays in such manner that they may be shifted in their position and moved upward or lengthwise for the purpose of carrying them to points more remote from a direct action of the furnace-heat.

The object of my invention is to construct a fruit-evaporator adapted to contain a series of fruit-holding trays, one above the other, and one in which the various trays may be shifted or moved upward, one or more at a time, without the necessity of withdrawing or removing said trays from the evaporator.

My invention consists in providing a fruit-evaporator with two series of independently pivoted slides or grooved ways or tracks, and in making the inner adjacent ends of each series adjustable up and down relatively to each other, whereby they may be thrown into and out of line or given an upward or downward inclination for the purpose of shifting the fruit-trays, in the means for operating or tilting the slides or ways and holding them to such an adjustment, and to certain other features and details of construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved evaporator complete, with one side thereof removed to show the arrangement of the slides or ways, fruit-trays, &c., and the means for operating and shifting the same. Fig. 2 is a vertical longitudinal section through the same, showing the adjustable slides or ways when adjusted to receive the fresh trays of fruit. Fig. 3 is a similar section illustrating the manner in which the slides or ways are inclined in an opposite direction for shifting the fruit-trays. Fig. 4 is a transverse vertical section through the evaporator, showing the general construction of the same.

Similar letters and numerals of reference

indicate corresponding parts in all the figures of the drawings.

The improved fruit-evaporator, which I will now proceed to describe, may be of any convenient size or dimensions. A convenient size for giving the proper access to the interior and for ease in inserting and removing the trays has been found, in practice, to be about eight feet in length, four feet in width, and five feet in height, although, of course, these dimensions may be varied to suit the desire of the manufacturer.

Referring to the drawings, A A indicate the vertical posts, uprights, or studs of the framework of my evaporator.

A' A' indicate the transverse horizontal timbers or stringers thereof.

B indicates suitable weather-boarding applied to the sides and ends of the evaporator, and C indicates the roof, constructed in any usual or preferred manner, and provided with a narrow space or ventilating aperture at the apex thereof, which is covered by a protecting board or strip in the usual manner. The lower part of the evaporator, instead of being weather-boarded, is covered to a height of, say, two feet, with sheet-iron extending downward to the floor or ground within the interior of the evaporator. In the lower portion thereof, protected by said sheet-iron, I locate the furnace, which may be of any preferred construction, but which I have shown in the form of a rectangular box extending from end to end longitudinally of the evaporator. A suitable door D may be cut through the sheet-iron at the front end of the evaporator for giving the proper access to the furnace, and suitable holes may be made in the various parts of the sheet-iron casing for the drafts, flues, &c. I prefer to pass the smoke-flue directly through the sheet-iron casing at the rear end of the evaporator and then carry the same upward by means of the usual elbow. This leaves the interior of the evaporator free for the other parts thereof, to be hereinafter described.

In the front end of the evaporator I place a rectangular frame which is adapted to be removed for giving access to the interior. This frame E is an open rectangular one, composed of upper and lower bars *e* and connecting end bars *e'*, and the same is held in



place by any suitable means, turn buttons or hooks being shown for that purpose. The frame E is provided with a series of doors or slats pivoted within the same and adapted to be rocked or opened independently of each other. The number of these doors corresponds with the number of slides, tracks, or ways for holding the fruit-trays. The doors  $ff'f^2f^3$ , just described, may be provided with suitable handles for lifting them and with catches for holding them closed in the usual manner.

1, 2, 3, and 4 indicate the grooved slides, ways, or tracks adapted to receive the fruit-trays. These slides are arranged in two series, one at the front end of the evaporator and the other at the rear thereof and in line with each other, each of the slides being independently pivoted at  $g$  at its outer end to the framework of the evaporator. The inner ends of the slides approach each other very closely, as shown in the drawings, and at a point near such adjacent ends the slides are pivoted to two separate and independent upright bars or posts  $g'$ , preferably of iron, on either side of the evaporator.

G indicates a centrally-pivoted rocking bar at or near the top of the central stud of the evaporator, one on each side of the evaporator. H H indicate links interposed between the pivoted bar G and the upright posts or bars  $g'$ , to which said links are pivoted. Other links H' connect the lower ends of the post  $g'$  with a centrally-pivoted lever or cross-head I, upon either side of the evaporator. The cross-heads I are secured to or formed in one piece with a transverse rock-shaft J, mounted in bearings secured to the evaporator-frame.

K indicates a downwardly-extending arm or lever attached to said rock-shaft J, and L indicates a pull-and-push rod pivoted to said arm K and extending forward to and beyond the front face of the evaporator. Said rod L is provided, preferably, with three depressions  $l, l',$  and  $l^2$ , which are adapted to engage a stirrup  $m$ , secured to the inner face of the forward stud of the evaporator-frame.

The operation is as follows: The trays M M, which may be of any suitable or preferred construction, are inserted through the front end of the evaporator by lifting one of the narrow doors or slats  $ff'$ , thus giving access to one pair of slides. One or more trays may be inserted in this manner and then pushed to the rear of the evaporator until they rest upon the rear series of slides, as indicated in the drawings, where they are exposed to the direct action of the heat from the furnace. Fig. 2 indicates the position the slides assume when the rod L is pulled out and the notch  $l^3$  caused to engage the stirrup  $m$ . By pushing the rod L inward until the notch  $l^2$  engages the stirrup  $m$ , the rock-shaft J is partially revolved and, acting through the lower links H', causes the slides or ways 1, 2, 3, and 4 to assume the horizontal position shown in Fig. 1. In order to move the trays to a higher

position or from the direct action of the heat from the furnace, the rod L is pushed inward until the notch  $l'$  thereof engages the stirrup  $m$ , when the parts are caused to assume the position shown in Fig. 3—that is, with the inner ends of the slides 1, 2, and 3 of the rear series in line with the inner ends of the slides 2, 3, and 4 of the front series. The trays resting on the rear series of slides may now be drawn forward upon the front series by means of a hooked rod or other suitable device in the hands of the operator. By pulling on the rod L and causing the slides to occupy the relation shown in Figs. 1 and 2, the trays may now be pushed backward upon the rear series of slides, where they will occupy a higher position than they did prior to the operation just described. It will be obvious that the number of slides may be increased at the option of the manufacturer and a larger number of trays thus provided for. It will thus be seen that the position of the trays may be shifted in a simple manner without removing the trays from the evaporator.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, I claim—

1. In a fruit evaporator, the combination of two independent series of slides, ways or tracks for the reception of the fruit trays, arranged in such relation, one to the other, that each is adapted to form an extension of the other, and means for adjusting the adjacent ends of both series for changing the angle of their relation, substantially as described.

2. In a fruit evaporator, the combination with two independent series of slides, ways or tracks, arranged in the same horizontal plane and pivoted substantially as shown and described, of a rock-shaft, connected with the swinging ends of the slides, for adjusting the height of the latter and varying the angle of the slides, and means for operating said rock-shaft, substantially as described.

3. In a fruit evaporator, two series of pivoted, independent slides, ways or tracks, arranged substantially in the same horizontal line, and hinged at their outer ends to the framework of the evaporator, in combination with suitable cross-heads or levers, connected with the inner swinging ends of said slides for lifting and lowering the latter and varying the angle thereof, and to cause the slides of one series to align with the slides of the other series, substantially as and for the purpose described.

4. In a fruit evaporator, two series of independently pivoted slides, ways or tracks, arranged so as to form, one an extension of the other, and hinged at their outer ends, in combination with vertical bars or posts, connecting the inner adjacent ends of the slides of each series, a rock-shaft provided with cross-heads or crank-arms, links interposed be-



tween said cross-heads or crank-arms, and connecting posts or bars, and means for operating said rock-shaft, substantially as described.

- 5 5. In a fruit evaporator, two series of pivoted, independent slides, ways or tracks, arranged substantially in the same horizontal line, and hinged, at their outer ends, to the framework of the evaporator, in combination  
10 with a centrally pivoted bar G, a similar bar or cross-head, I, two sets of pivoted links H,

and H', the posts  $g'$ , to which the slides are pivoted, the rock shaft J, for operating the post  $g'$ , and the adjusting rod L, for operating the rock-shaft J, substantially as described. 15

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

JOHN HENRY GORE.

Witnesses:

R. L. LATIMER,  
E. O. BRANNON.