

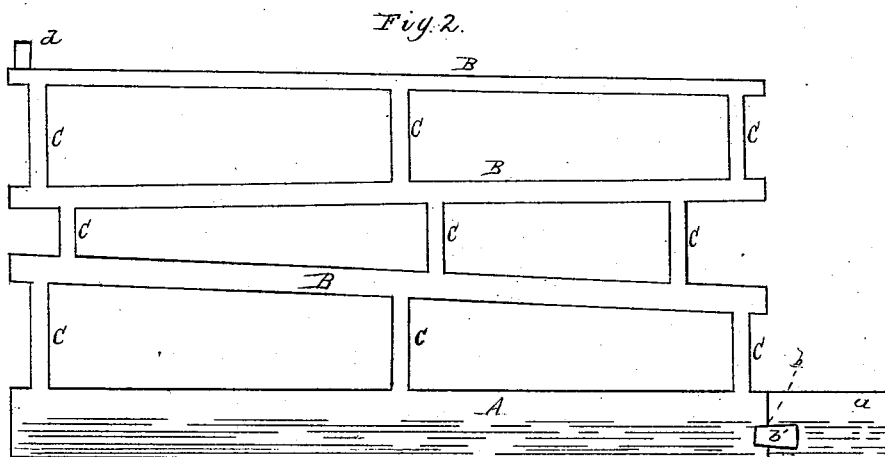
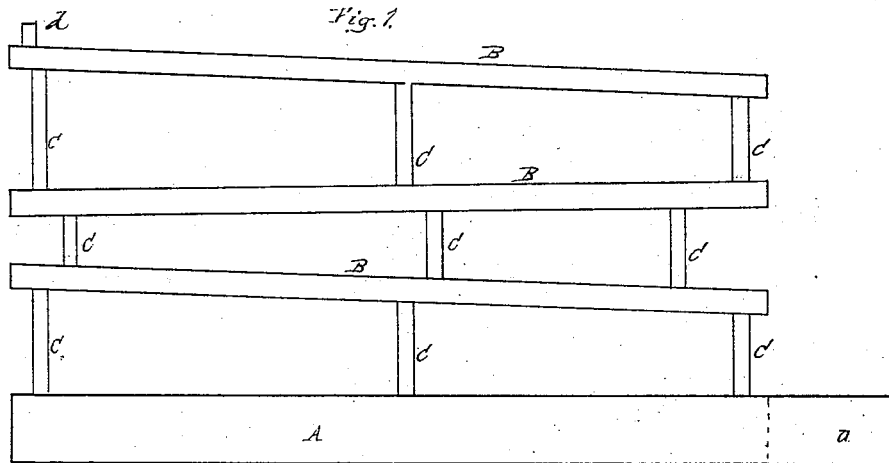
(No Model.)

A. R. GAYHART.

FRUIT DRIER.

No. 261,220.

Patented July 18, 1882.



Attest:
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UNITED STATES PATENT OFFICE.

ALONZO R. GAYHART, OF CHICAGO, ILLINOIS.

FRUIT-DRIER.

SPECIFICATION forming part of Letters Patent No. 261,220, dated July 18, 1882.

Application filed April 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALONZO R. GAYHART, of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Fruit-Driers; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

The nature of this invention relates to certain new and useful improvements in the construction of devices designed for drying or evaporating fruit; and the invention consists in the peculiar construction of rectangular steam-flues, which are placed in inclined horizontal positions serially above each other, and are connected together by vertical steam-flues at various points, whereby the steam is compelled to pass through into and heat the rectangular flues; and in the peculiar construction, arrangement, and combination of the various parts, all as more fully hereinafter set forth.

Figure 1 is a side elevation of my improved device. Fig. 2 is a vertical section of the same.

In the accompanying drawings, A represents a suitable reservoir or tank, provided at its front end with an open supplemental tank, *a*, communication between the two being had through the opening *b*, which is designed to be closed by a proper plug, *b'*.

B represents a series of rectangular flues, mounted upon the reservoir A, being supported and separated from each other by the vertical flues C, each of which opens into each of the flues between which they are situated; and it will be observed that these flues C are not situated directly one above the other in lines, but are irregular in their placements, so that the steam passing first from the reservoir A through the lower series of vertical flues impinges against the top wall of the first or lower rectangular flue, B, which compels it to spread out and fill such flue, from whence it passes through the next series of vertical flues and into the next succeeding rectangular flue, and so on until it reaches the upper one, from whence it passes out through suitable pipes, *d*. The flues B incline slightly in different di-

rections, so that the water of condensation in each of them may be returned to the reservoir.

In practice this device is designed to be set upon the top of a stove for family use, and water is put into the reservoir A, and the opening *b* is plugged up, while a quantity of water is retained in the supplemental reservoir. As the water in the reservoir is heated it expands and creates steam, which passes, as hereinbefore described, up through the various flues surmounting such reservoir and heats them, and the fruit to be dried, having first been sliced or properly prepared, is placed upon the top of the reservoir and the various flues above it, the heat radiating from the flues evaporating or drying the moisture from the fruit. As the water in the reservoir A necessarily diminishes in quantity by its creation into steam and passing off, it becomes necessary that such reservoir be supplied with a fresh quantity. At this time I remove the plug *b'* from the opening *b*, when the water from the supplemental reservoir passes into it in a heated condition, as it must necessarily have been heated from its standing upon the stove, when I again stop the opening and fill the supplemental reservoir with fresh water. By this means I am enabled without difficulty to supply my reservoir with heated water at such times as it may be necessary, and not be compelled to introduce cold water for the purpose, which checks the operation of the device.

I am aware of Patent No. 213,233, of 1879, in which the vertical steam-pipes and standards alternate and the reservoir is fed with cold water, and also of Patent No. 206,864, wherein no differentially-inclined flues nor vertical connecting-tubes are shown. My invention is designed as an improvement upon these patents, and essentially combines the important features of each, while it adds the new feature of having all the flue-supports serve as steam-communications in one direction and a course for the gravitating water of condensation in the other.

What I claim is—

1. The fruit-drier herein described, consisting of the reservoir A, the flues B, inclined in different directions, and the pipe-supports C, arranged in different vertical lines and serving

as steam-connections for the flues B, substantially as and for the purpose specified.

2. The fruit-drier herein described, consisting of the reservoir A, connected water-warming reservoir a, flues B, inclined in different directions, and the pipe-supports C, arranged in different vertical lines, and serving as steam-

connections for the flues, the whole constructed, arranged, and combined to serve as and for the purpose specified.

ALONZO R. GAYHART.

Witnesses:

H. S. SPRAGUE,
E. SCULLY.