

(No Model.)

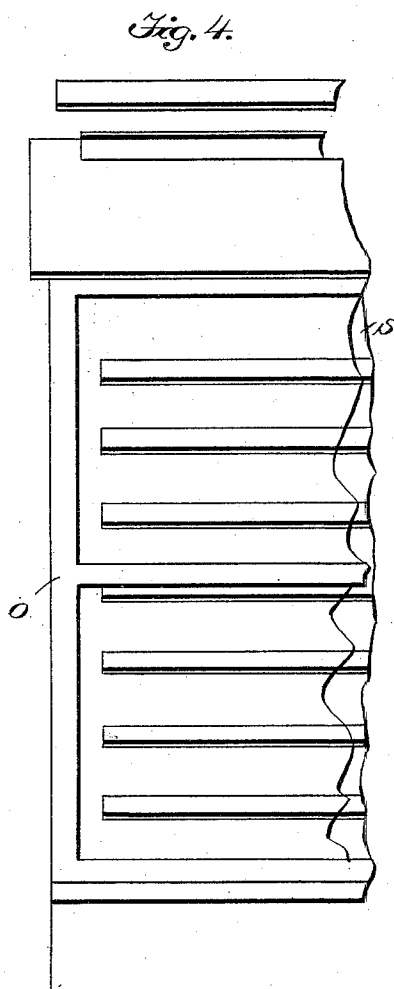
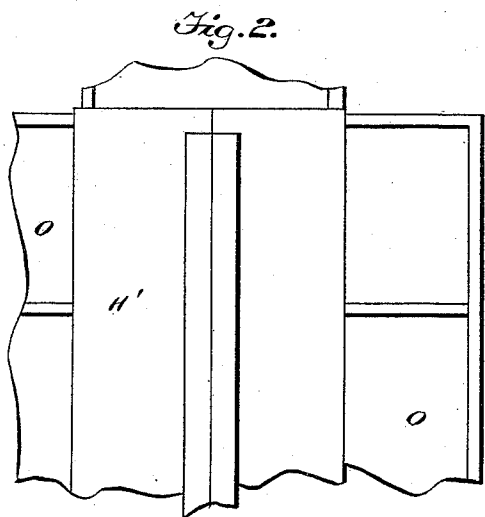
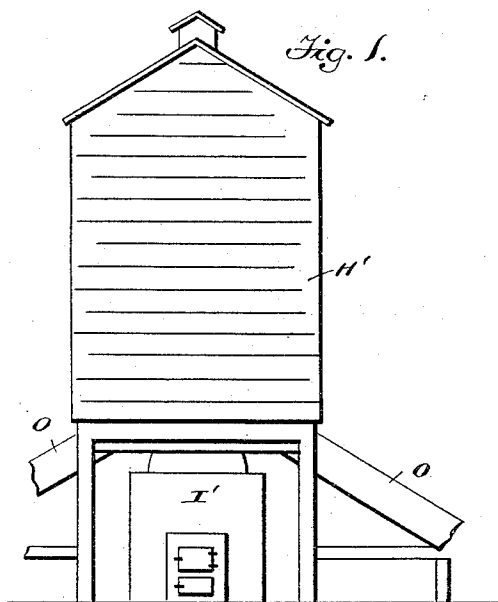
2 Sheets—Sheet 1.

H. H. TAYLOR.

DRIER FOR FRUITS AND OTHER MATERIALS.

No. 430,762.

Patented June 24, 1890.



Witnesses:

W. A. Ashieen
D. E. Dupin.

Inventor:

Horace H. Taylor
By James Shuey
Asso. Attorney.

(No Model.)

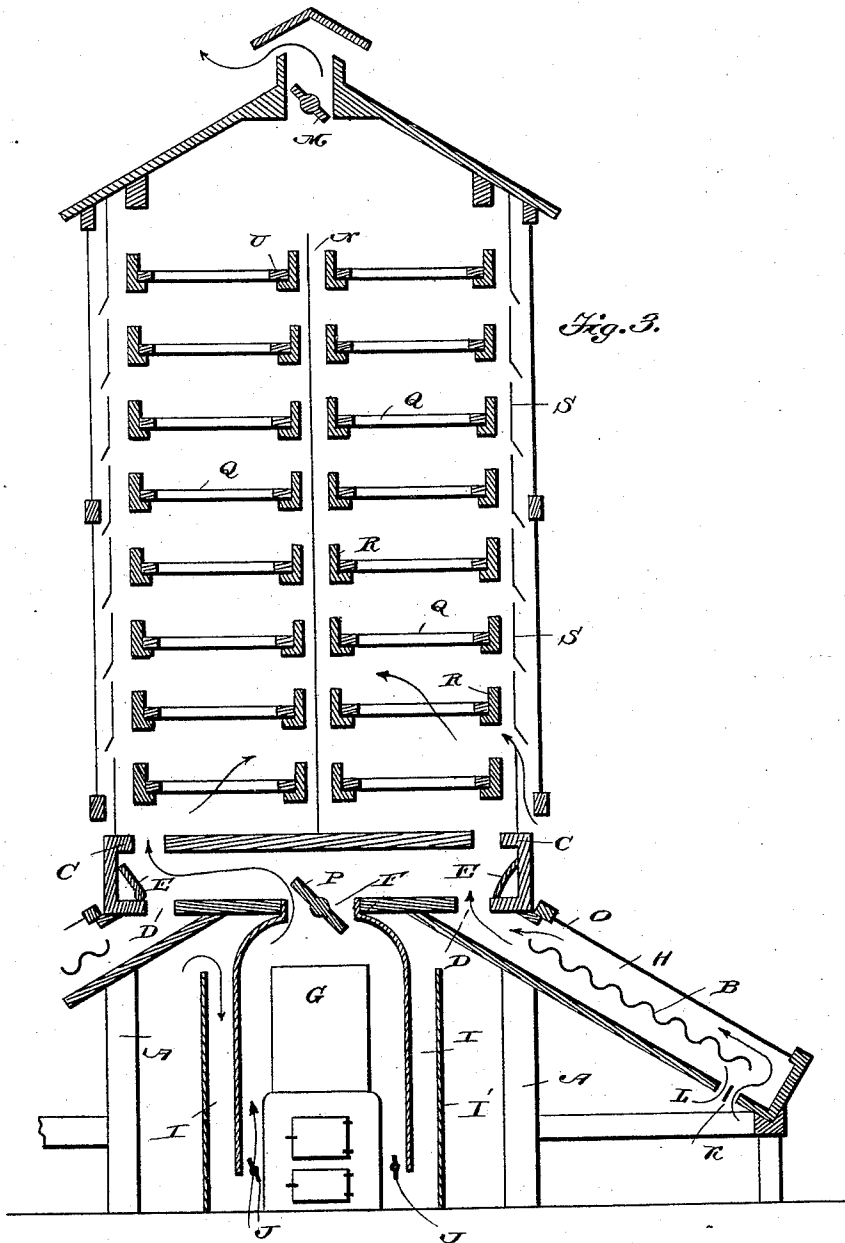
2 Sheets—Sheet 2.

H. H. TAYLOR.

DRIER FOR FRUITS AND OTHER MATERIALS.

No. 430,762.

Patented June 24, 1890.



Witnesses:

W. H. Schell
E. D. Simpson

Inventor:

Horace H. Taylor.

By *James Sheehy*
Attorney.

UNITED STATES PATENT OFFICE.

HORACE H. TAYLOR, OF SANTA ROSA, CALIFORNIA, ASSIGNOR TO HIMSELF
AND CHARLES R. WHELOCK, OF SAME PLACE.

DRIER FOR FRUITS AND OTHER MATERIALS.

SPECIFICATION forming part of Letters Patent No. 430,762, dated June 24, 1890.

Application filed October 18, 1888. Serial No. 288,521. (No model.)

To all whom it may concern:

Be it known that I, HORACE H. TAYLOR, a citizen of the United States, residing in the town of Santa Rosa, county of Sonoma, and State of California, have invented a new and useful Improvement in Driers for Fruit and other Materials, of which the following is a specification.

My invention relates to improvements in driers for fruit and other materials. It will be understood by reference to the accompanying drawings and the letters referring thereto.

In the drawings, Figure 1 is a side elevation of my improved drier with parts broken away. Fig. 2 is a plan view with parts broken away. Fig. 3 is a vertical sectional view, and Fig. 4 is a side elevation of a portion of the drier-frame.

A represents the main supporting-frame of the drier; B, the corrugated heat receiver and radiator; C, the heat-equalizing box; D, the openings connecting the heat-equalizing box with the heat-generating chamber; E, the valve-doors to the openings D for regulating the supply of heated air; F, the opening leading from the furnace to the drying-chambers; G, the furnace; H, the solar-heat-generating chambers; I, the hot-air-draft-supply passages; J, the draft-valves; K, the cold-air-supply openings; L, the valve of the cold-air-supply opening; M, the valve to the main air-discharge passage; N, the main air-discharge passage; O, the glass frames or sash, which form the covers as well as admit the rays of the sun, and P the valve for the heat-passage F, to close the same when not required to supply heated air to the drier.

S represents the main side heat absorbing and radiating ventilators.

The following is the construction of my improved drier: I form the main supporting-frame A of wood, the absorbing and radiating ventilator S of black sheet-iron, and the heat-absorbing corrugated sheet B also of black sheet-iron. I form the outer side walls of the three sides of the drier which receive the sun's action of sash set with glass to receive the rays of the sun. I form the central partition U of sheet metal. I generally form the back or north side and the roof of sheet metal.

The following is the operation of my im-

proved drier: I place the fruit in the trays or drawers Q, which are of the ordinary construction to allow the air to pass freely up through the same. When the sun is shining, I close the valve P, thereby closing the passage F, and open the valves or doors E. The solar-heat-generating box H, which quickly produces a considerable amount of heat in the heat-absorbing plate B, and the valve L being opened, a current of heated air is quickly established, which is at all times regulated by operating the valves L and M. The rays of the sun are absorbed by the black sheet-iron of the ventilating sides S and the plate B, and the air is thoroughly heated, but perfectly manageable by means of the valves and air-passages.

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

1. The fruit-drier described, composed of the heat-absorbing ventilators S, arranged one above another at the sides thereof, the glass-frames O, the main air-discharge passage N, arranged between the division strip U and the tiers of trays and adapted to carry off moist air rising from the fruit, the valve M, arranged at the base of the outlet-flue, the valves E, for controlling the heat rising from the solar-heat chambers H, the said solar-heat chambers, the corrugated plates B, arranged therein, the valves P, arranged in the deflecting-plate above the furnace and adapted to govern the heat thereof, the furnace G below the drying-chamber, the air-passages I, for the admission of cold air, and the air-passages J, leading from said furnace to drier, all adapted to operate substantially as and for the purpose specified.

2. The combination of the drier provided with the radiating ventilators S and fruit-drawers Q, the passage F beneath the drier-body, provided with the valve P to regulate the passage of the heat, the outer passages D, having valves E for a similar purpose, the sashes O, the solar-heat-absorbing plates B, and the valved inlets K in the bottom of the same, substantially as specified.

HORACE H. TAYLOR.

Witnesses:

G. A. HOCKER,
W. J. EARDLEY.