

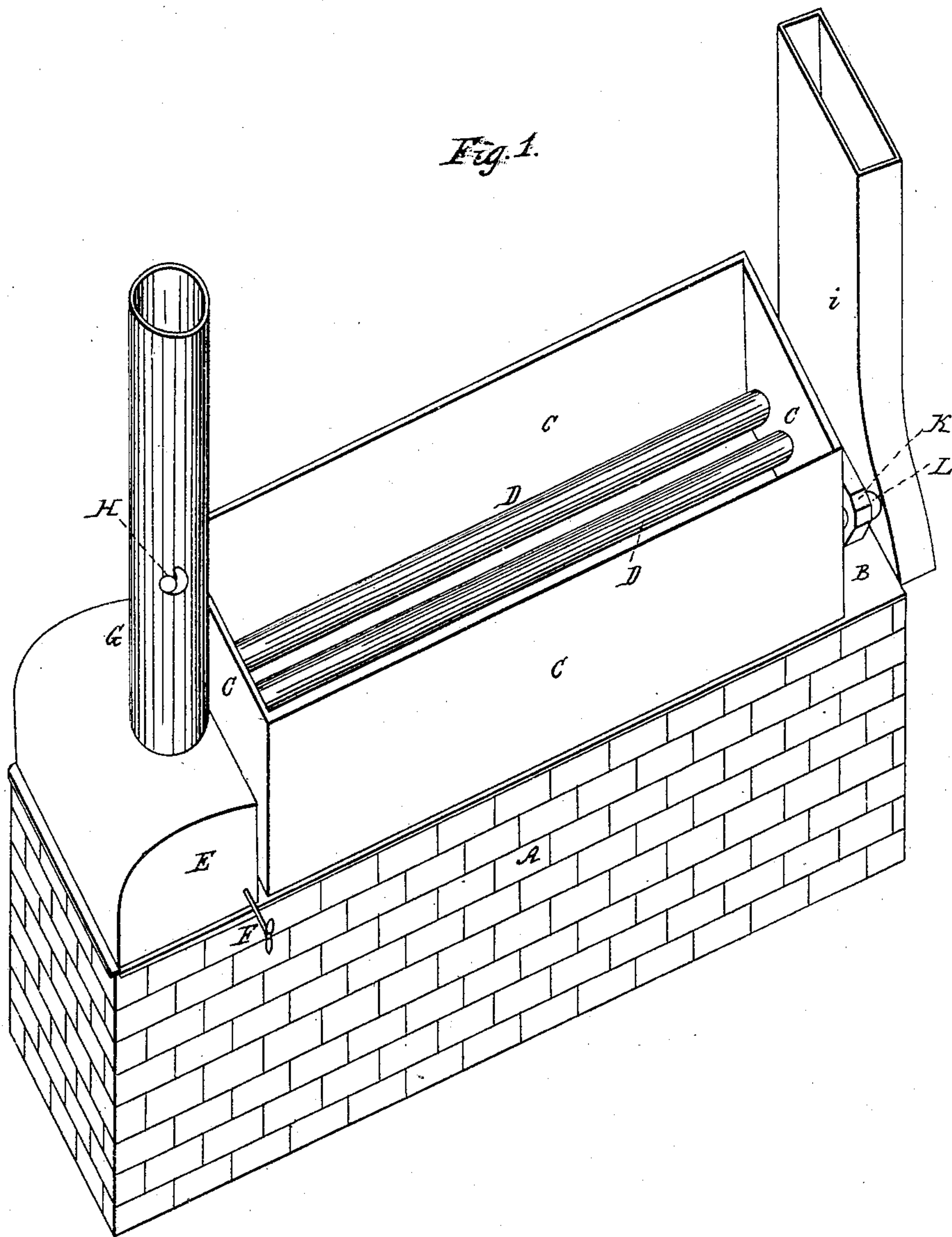
E. W. TAYLOR.

2 Sheets—Sheet 1.

Evaporator.

No. 56,464.

Patented July 17, 1866.



Witnesses:

Wm. Sullivan
Ans. L. Smithmeyer

Inventor:

Elmore W. Taylor

E. W. TAYLOR.

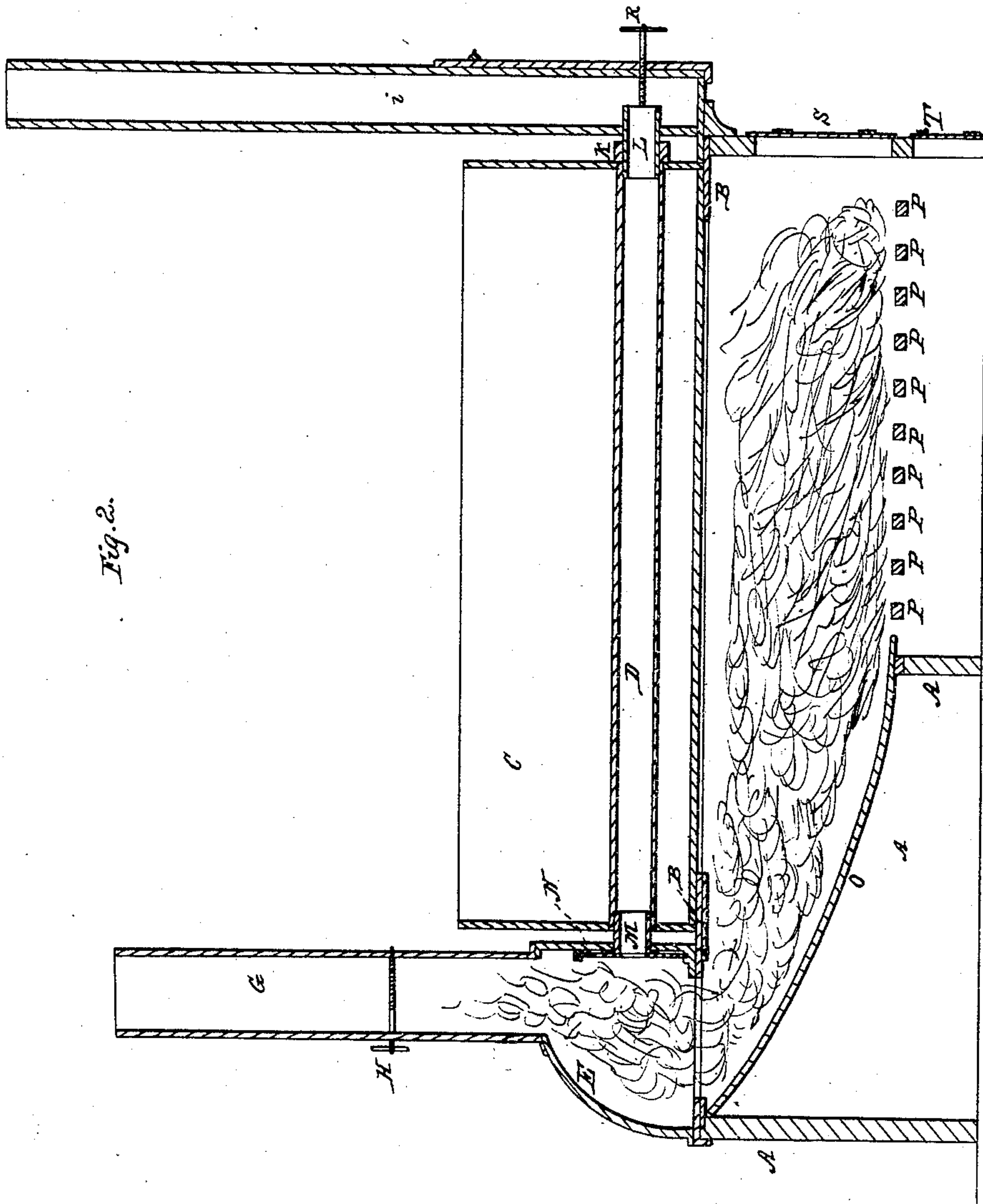
Evaporator.

2 Sheets—Sheet 2.

No. 56,464.

Patented July 17, 1866.

Fig. 2.



Witnesses:

H. Sullivan
Pro. L. Smith

Inventor:

Elmore W. Taylor

UNITED STATES PATENT OFFICE.

ELMORE W. TAYLOR, OF FRANKLIN, INDIANA.

IMPROVED EVAPORATOR.

Specification forming part of Letters Patent No. **56,464**, dated July 17, 1866.

To all whom it may concern:

Be it known that I, ELMORE W. TAYLOR, of Franklin, in the county of Johnson and State of Indiana, have invented a new and Improved Sorghum-Evaporator, called "Taylor's Evaporator;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of the same, of which—

Figure 1 is a perspective view, and Fig. 2 a section.

A represents the furnace; B, the iron plate on top of the furnace; C, the pan; D D, &c., are the flues running through the pan C. E is the drum, retaining the heat and making it pass through the flues D D, &c., into the smoke-flues *i* when the shut-off H is closed. G is the smoke flue to the drum, through which the heat and smoke pass when the shut-off H is open. K is the packing of the flues L L, &c., through which passes a movable fastener, R, by means of which the flues L L, &c., can be adjusted to the smoke-flue *i*. M M, &c., are stationary flues attached to the drum E. N is a shut-off at the end of the flues M M, &c. O is the fire-back. P P P, &c., are the grate, and S and T are the doors for the fire and ashes.

Fig. 2 shows that the fire plays directly upon the bottom of pan C, into which I place the juice for boiling. I then close the shut-off H in smoke-flue G and make the heat pass through the flues D D, &c., and out into the flue *i*. If the heat is getting too intense I shut it off by closing the flues D D, &c., with the shut-off N and let the heat pass out through the smoke-flue G. When the sirup is boiled sufficiently I draw the flues L into the smoke-flue *i*, and thereby disconnect the pan C with the flues, for the purpose of emptying the pan.

By this process I gain time in boiling, save fuel, and prevent the scorching of the juice.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The reversing of the heat from the furnace, which heat plays on the bottom of the pan and passes through the pan C by means of small flues.
2. The regulating of the heat by means of the shut-offs H and N.
3. The drum E and the movable connection-flues L L, &c., and the stationary ones M M, &c.

ELMORE W. TAYLOR.

Witnesses:

WM. SULLIVAN,

JNO. L. SMITHMYER.