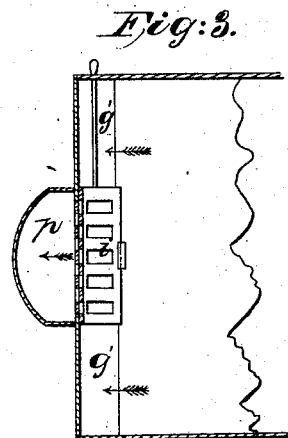
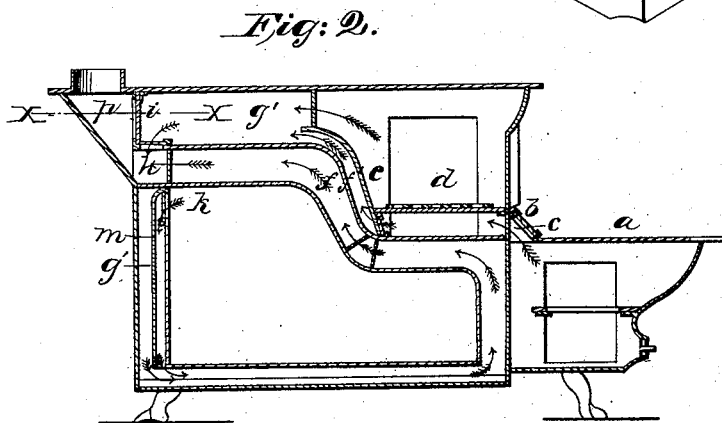
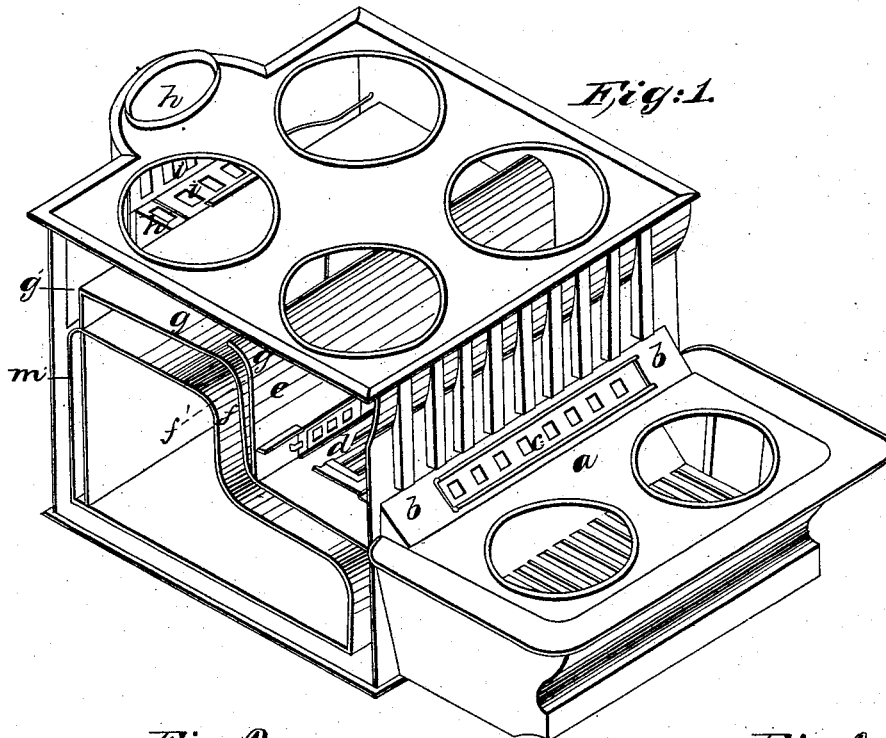


J. T. DAVY.

Cook Stove.

No. 5,324.

Patented October 9, 1847.



UNITED STATES PATENT OFFICE.

JNO. T. DAVY, OF TROY, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 5,324, dated October 9, 1847.

To all whom it may concern:

Be it known that I, JOHN T. DAVY, of Troy, in the county of Rensselaer and State of New York, have invented new and useful
5 Improvements in Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the manner of making,
10 constructing, and using the same, reference being had to the accompanying drawing, making part of this specification, in which—

Figure 1 is an isometrical view of the stove with one side removed, Fig. 2 a vertical section, and Fig. 3 a horizontal section of a part
15 of the stove taken at the line *xx* of Fig. 2.

The general construction of the outside of my improved stove and the arrangement of the flues are like the one I formerly patented, in which I make the following improvements: The hearth plate (*a*) or top of the summer arrangement has a valve or damper (*c*), in the inclined piece (*b*), which
20 forms a part of the flue that conducts off the smoke. This damper serves to regulate the draft by admitting any quantity of air into the flue over the lower fire, which also serves to increase the draft to the upper fire chamber (*d*) so that by it both fires can be
30 regulated. To facilitate this, the smoke from the lower fire is made to pass under the grate of fire chamber (*d*), and up behind it. This is effected by forming a flue behind said chamber (*d*) and between it and the plate (*f*) of a return flue hereafter
35 named; in this flue (*f'*) the air is rarefied by the heat from the upper fire, so as to cause sufficient draft to carry off the smoke from the lower fire, as it would be difficult to
40 create a sufficient draft otherwise in the lower fire when the upper fire chamber was filled with coal. This flue (*f'*) joins the flue (*g*) that runs from the upper fire horizontally to the back of the stove where it connects with a descending flue (*g'*) that is divided at that point by a flue (*h*) which
45 crosses it to enter the pipe (*p*). There is a

damper or valve (*i*) at this junction that when open permits a direct exit for the smoke and heat to the pipe (*p*) from the
50 flue (*g*) without its passing down through flue (*g'*) around the oven; when this is closed the smoke descends the flue (*g'*) on each side of the flue (*h*) as above named, passes around under the oven to the front
55 thereof and thence up the front to the ash pit of the upper fire chamber, and thence follows the shape of the top of the oven under the flues (*f*) and (*g*) to the back of the stove, where it crosses the flue (*g'*) into
60 the pipe (*p*) at (*h*).

In the back plate of the oven there is a row of holes (*k*) near the top, constituting a ventilator for the oven, which can be closed by a damper if necessary; outside this plate
65 there is another plate (*m*) parallel with it, that has its top edge curved in so as to touch it just above the holes—this last named plate (*m*) terminates near the bottom of the back plate of the oven, and forms a flue between
70 the oven and back flue (*g'*) through which the gases from the oven are drawn off with the smoke, this flue formed by plate (*m*) is necessary to draw the gases from the oven and prevent the admission of smoke.
75

What I claim as my invention and desire to secure by Letters Patent is—

1. The combination of the flue (*f'*) (between the fire chamber (*d*) and the return flue) with the summer arrangement in the
80 manner set forth, and constructed substantially as herein described.

2. I also claim the employment of the flue formed by the plate (*m*) in combination
85 with the ventilator to the stove oven.

3. Lastly I claim the damper (*c*) in the inclined piece connected with the upper and lower fire or summer arrangement for the purposes above described.

JOHN T. DAVY.

Witnesses:

WILLIAM TALBOT,
P. L. JONES.