

United States Patent Office.

ALEXANDER G. PATTON, OF TROY, NEW YORK.

Letters Patent No. 103,235, dated May 17, 1870.

COOKING-STOVE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, ALEXANDER G. PATTON, of Troy, in the county of Rensselaer and State of New York, have invented certain Improvements in Cooking-Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings making part of this specification, in which—

Figure 1 is a vertical longitudinal section of the stove.

Figure 2 is a top view thereof, showing the dampers for changing the direction of the escaping gases.

Corresponding letters represent corresponding parts in the several figures.

This invention relates to an improvement in cooking-stoves, and

It consists in a novel arrangement of a double-winged damper in the side flues in such a stove, through which the heated gases pass directly from the fire, to and around the water-reservoir.

A in the drawings represents a cooking-stove which may be of the same general form and construction of those previously patented by me, and bearing date October 13, 1868, except that, in those referred to, the water-reservoir or boiler was a constituent part of the stove, while in the present case such reservoir is so constructed as to be capable of being removed from the stove, and having its place supplied with another of different construction, if found desirable, for a purpose which will be more fully explained hereafter.

B represents a reservoir or boiler which is designed to fit the aperture formed in the top plate of the stove, in such a manner that, when in its place, and the damper C is turned up, the escaping gases will pass through the flue *a*, which conducts them over the front oven to the vertical flues *b* and *b'*, through which they descend to the horizontal flues *C C*, formed on the sides of the bottom plate, and upon its upper and inner surface, through which they travel forward to near the front end of the front or main oven, where the two currents unite and return toward the rear of the stove through the central flue *d* to the central vertical flue *e*, up which they travel to the termination of said flue, which is near the bottom of the reservoir, at which point they are turned

at a right angle and into the space or flue *e'* formed under the bottom of the reservoir, through which they pass to the space between the rear side of such reservoir or boiler and the rear or back plate of the stove, when they are free to surround said reservoir upon its sides or ends, or to be drawn off through the aperture *f* into a pipe to be supplied for that purpose.

When the damper C is in the position shown in fig. 1, the gases or products of combustion are at liberty to pass through the flue *a* above the front oven, and enter at once into the space which surrounds the boiler, and thence out through the aperture *f*.

C represents the dampers above alluded to, they being so arranged as that, when the boiler is in position, they will control the passage of the outgoing gases and direct them, in either of the paths above described, to the outlet provided for their escape.

D is a hot-closet in the rear end of the stove.

I am aware that stoves have been made with reservoirs which are a constituent part of the stove, and also that such reservoirs have been made detachable from the stove, and that the products of combustion have, by a series of flues, been conducted around such reservoirs. I do not, therefore, desire to be understood as claiming the construction of the stove, or of the reservoir, or any combination of these parts; but

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

The arrangement of the flues *a*, *b*, *b'*, *C C*, *d*, *e*, *e'*, and *f*, and dampers C C, as a consequence of which the heated gases may be directed around the oven previous to being caused to surround the water-reservoir, or may be guided directly to and around such reservoir on their way from the fire-box to the exit-passage *f* at the rear of the stove, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALEXANDER G. PATTON.

Witnesses:

EDM. F. BROWN,
D. P. HOLLOWAY.