

Cooking Stove.

Patented Jan'y 30, 1849.



UNITED STATES PATENT OFFICE.

WILLIAM STEPHENSON, OF CINCINNATI, OHIO.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 6,080, dated January 30, 1849.

To all whom it may concern:

Be it known that I, WILLIAM STEPHENSON, of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in the Cooking-Stove, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a vertical longitudinal section of the stove through the center of the same. Fig. 2 is a vertical transverse section through the back flue. Fig. 3 is a horizontal section through the fire-chamber. Fig. 4 is a view of the inner side of one of the side plates of the oven containing the side flues. Fig. 5 is a view of the outside of said plate, showing the position of the side flues.

Similar letters in the several figures refer to corresponding parts.

My invention and improvement consists in constructing the stove with vertical ascending or descending side flues in the sides of the stove in which the oven-doors are usually placed and between the doors and corners of the stove through which the smoke and heat are caused to pass to a horizontal flue between the oven and fire-chamber and through a flue beneath the oven; also, in the arrangement of a sliding register-plate in the back flue of the stove, which, when open, will cause the draft to be from the fire-chamber down the back corner flues and up through said register-plate directly to the smoke-pipe. Likewise in the arrangement of a movable fire-back in the fire-chamber for the purpose of increasing or diminishing the capacity of the fire-chamber at pleasure by moving said back toward or from the front of the stove.

A is the main body of the cook-stove, which is made much after the ordinary mode of forming cook-stoves. B is the fire-chamber. C is the oven; D D, descending flues. E is the back flue. F is the bottom flue. G is the middle flue passing between the oven and fire-chamber. H is the front flue. I I are two descending flues in the side plates of the stove, opening into the bottom flue. J J are two ascending flues made in the same plates opening into the middle flue. K K are oblique plates for separating the corner flues from the central flue over the oven. L is a horizontal perforated plate on which the register-plate

slides. M is the register-plate. N is the handle for moving the register-plate. P is a turning damper for preventing the draft passing round the oven when said damper is closed. Q is an inclined cast-iron back with inclined supports on the same, said back being designed to be moved toward or from the front of the stove, as it may be designed to increase or diminish the size of the fire-chamber. R is a plate for dividing the central draft into two side drafts, *g g*, as it enters the smoke-pipe S at the rear of the stove.

When the register-plate M is closed the draft will be down the corner flues, D, into the back flue, E, thence through the bottom flue, F, up the front flue, H, to the middle flue, G, and thence to the two side flues, *g g*, at the junction of these flues with the smoke-pipe S, in the direction of the arrows 1, 2, 3, and 4, &c., and also at the same time the draft will be down through the rear side flues, I, to the bottom flue, F, and thence up through the front side flues, J, to the middle flue, G, where the drafts will unite with those above mentioned and passing in the direction of the arrows. When the register M is open, the draft will be direct from the fire-chamber, down the rear corner flues, and thence through the register to the smoke-pipe.

I do not claim forming chambers or spaces in the side plates of the oven for the admission of heated air; nor do I claim forming horizontal flues in connection with flues in the doors, as I believe these have been constructed; but

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

The arrangement of the vertical descending and ascending flues I J, constructed in the side plates of the oven between the oven-doors and the corners of the stove, in combination with the flues *g g*, leading from the middle flue, G, to the smoke-pipe S, and in combination with these the arrangement of the sliding register M, as described and set forth.

In testimony whereof I have hereunto signed my name, before two subscribing witnesses, this 20th day of June, 1848.

W. STEPHENSON.

Witnesses:

WM. P. ELLIOT,
A. E. H. JOHNSON.