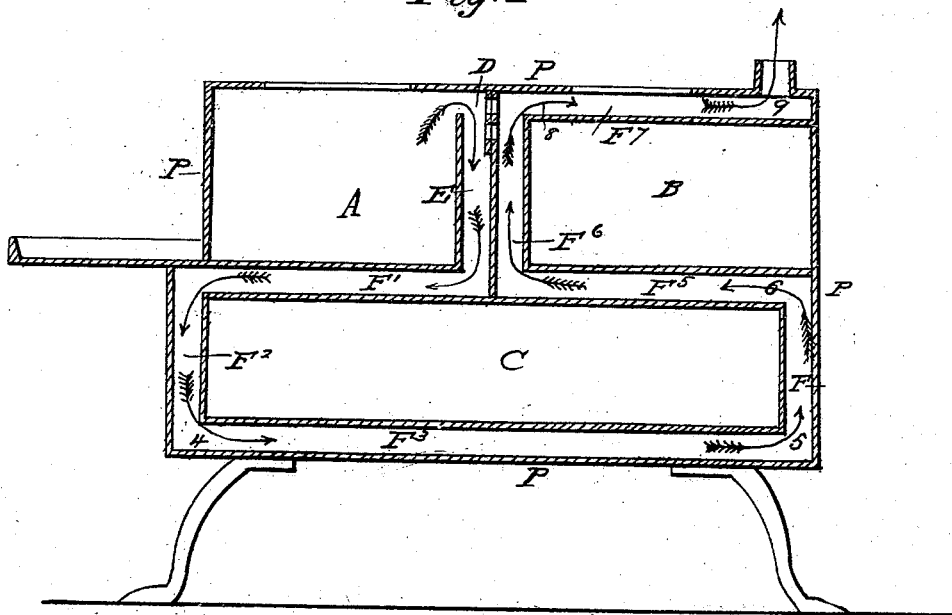


T. SMITH.
Cooking Stove.

No. 4,078.

Patented June 10, 1845.

Fig. 1



UNITED STATES PATENT OFFICE.

THEOPHILUS SMITH, OF GALWAY, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 4,078, dated June 10, 1845.

To all whom it may concern:

Be it known that I, THEOPHILUS SMITH, of the town of Galway, in the county of Saratoga and State of New York, have invented a new and useful Improvement in Cooking-Stoves, 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 through the center of the stove.

The fire box A, ovens B and C, and damper D, are made and arranged in the usual manner.

The improvement consists in the arrangement of the flues F, F¹, F², F³, F⁴, F⁵, F⁶, and F⁷ for the circulation of the heat around the ovens. These flues are combined and arranged as follows.

The external plates P are combined and arranged in the usual manner, forming a rectangular box, the top plate being perforated with the usual description of apertures for the insertion of the various kinds of culinary vessels, smoke pipe, &c. The front plate is perforated with the usual kind of rectangular openings for the doors. The interior of this box is divided by horizontal and vertical plates into a large oven C, which occupies the lower portion of the box, and extends from side to side, and from near one end to the other, having sufficient spaces to form the two vertical flues, F² and F⁴ and the ends—the bottom plate being raised above the lower plate of the box, sufficiently high to form the lower horizontal flue F³ passing under the oven—said oven being provided with the usual description of doors. The space above this large oven is divided again into two smaller spaces, A, B, by a vertical plate E, which extends entirely across the stove and reaches from the top of the large oven, to the top plate of the stove, being perforated with an oblong opening to admit a direct draft to the smoke pipe, when necessary, which opening is closed by a damper D, when the draft is

required to pass around the ovens. In one of these spaces is formed the fire chamber A—which is of the usual form and construction—by means of a horizontal plate placed a few inches above the top of the oven and turned at right angles at its rear end and extended upward to form the flue F, between it and the division plate E, and to within a few inches of the top plate, in order to form a flue over the upper edge thereof communicating with the flue F—the horizontal portion of said plate being extended beyond the front of the stove to form the usual hearth. The other space B over the large oven, and behind the fire box is occupied by a small oven B, extending from side to side of the stove and provided with the usual description of doors and extended from the back plate of the stove to within a few inches of the aforesaid vertical division plate E, by which arrangement the flue F⁶ is formed,—the flues F⁵ and F⁷ being formed by arranging the top and bottom plates of said small oven a few inches from the top plates of the stove and large oven. The other portions of the stove are made in the usual manner.

The draft (when the damper D is closed) will pass in the direction of the arrows 1, 2, 3, 4, 5, 6, 7, 8, 9 to the usual smoke pipe at the top and rear of the stove.

The object of causing the draft to pass first around the front of the large oven, is to heat that part more effectually, than has heretofore been done, in stoves of a different construction, and also to prevent the small oven becoming too much heated, by passing it around the large oven, as in some stoves.

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

The combination of the arrangement of the flues, with the division plate as set forth.

THEOPHILUS SMITH.

Witnesses:

EDMUND MAHER,
L. C. DOWN.