

(No Model.)

G. E. SHARP.

STOVE.

No. 356,381.

Patented Jan. 18, 1887.

Fig. 1.

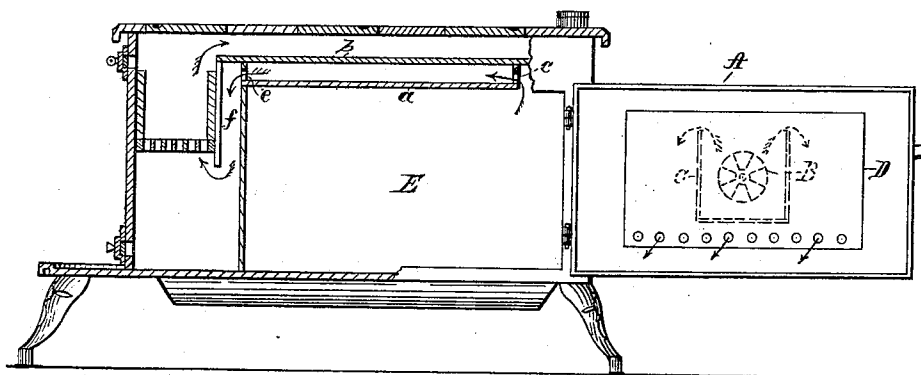


Fig. 2.

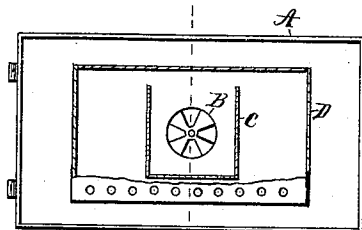
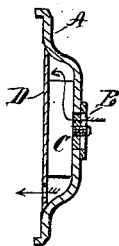


Fig. 3.



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GEORGE E. SHARP, OF STEUBENVILLE, OHIO.

STOVE.

SPECIFICATION forming part of Letters Patent No. 356,381, dated January 18, 1887

Application filed March 25, 1886. Serial No. 196,459. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. SHARP, a citizen of the United States, residing at Steubenville, in the county of Jefferson and State of Ohio, have invented certain new and useful Improvements in Stoves; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the construction of stoves and in attachments thereto, whereby a uniform and perfect ventilation of the oven may be secured and maintained at all times, and a continuous current of air admitted to the oven, heated therein, and deflected to the bottom of the fire beneath the grate to insure a complete combustion or hot-blast of the fuel; and my improvements consist, essentially, in providing the door of the stove with a novel register for admitting air to the oven, and in the construction and arrangement of the walls of the oven for deflecting the heated air from said oven to the bottom of the fire beneath the grate, all as will be hereinafter fully described, and specifically designated in the claims.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section of a stove, with the door in an open position, embodying my improvements; and Figs. 2 and 3, detail sectional views thereof.

Similar letters of reference occurring on the several figures indicate corresponding parts.

In carrying out my invention the central part, preferably, of the stove-door A is provided with a suitable register or air-supply opening, B, extending through the casting, as shown. Upon the inner side of the stove-door A, and projecting around the sides and bottom of said register or air-opening B, is provided a metallic flange or division-wall, C, which is covered by the inner lining or face-plate, D, having a series of perforations at or near the bottom thereof, the arrangement of the said inner lining or face-plate, D, with relation to the division walls or flange being

such that a closed space is secured at the center and upon all sides of the said division-walls, except where said inner lining or face-plate is perforated at the bottom, the construction generally being such that the air is admitted through the register or opening B, passing up over the division-walls down to the perforations in the lower end of the lining or face-plate, and from thence out into the oven.

The oven E is provided at its upper part with a second or under plate, a, leaving a suitable space or recess between the same and the upper or fire plate, b, of the oven, as shown in the drawings. The rear end of the second or under plate, a, is provided with a suitable opening or air-passage, c, while the upper part of the front oven-plate, d, is provided with perforations or air-outlets e, opening from the recess between the top plates of the oven into a vertical recess or passage, f, between the fire-wall and the front plate of the oven, as fully shown in Fig. 1. By means of this construction the heated air in the oven E passes up through the opening c in the rear of the second or under plate, a, into the recess between the two top plates of the oven, thence out through the perforations e in the upper part of the front plate, d, of the oven, into the vertical recess or passage f, and from thence to the bottom of the fire beneath the grate, furnishing a continuous supply of heated air to facilitate and insure a perfect combustion of the fuel, and at the same time securing a perfect and uniform ventilation of the oven.

It will be observed that when the stove is in operation the air becomes more or less heated during its passage around the division-walls of the register and inner lining prior to entering the oven, thereby securing a nearly uniform temperature of the oven while cooking or baking.

Having thus described my invention, what I claim as new and useful is—

1. The stove-door A, having a suitable register or opening, B, provided with division-walls C, and an inner lining or face-plate, D, having perforations at its lower end, whereby a current of air is drawn partially heated into the oven of a stove, substantially as and for the purpose specified.

2. The oven E, having an under or second
plate, *a*, provided at its rear end with air-
passage *c*, leading into the air-space between
the plates *a* and *b*, the air-outlets *e* in front
5 oven-plate, *d*, leading from said air-space be-
tween the plates *a* and *b* into the vertical re-
cess *f*, whereby a current of hot air is taken
from the oven E and carried to the bottom of

the fire beneath the grate, substantially as and
for the purpose specified. 10

In testimony whereof I affix my signature in
presence of two witnesses.

GEORGE E. SHARP.

Witnesses:

JOSEPH B. DOYLE,
FRED MOSEL.