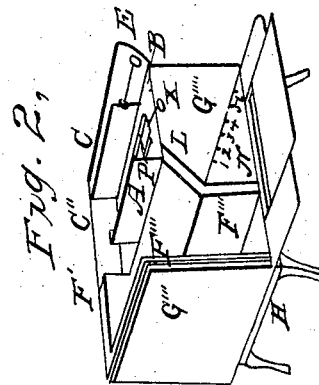
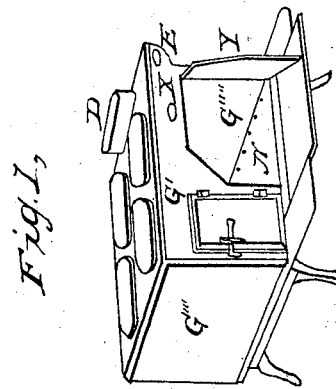
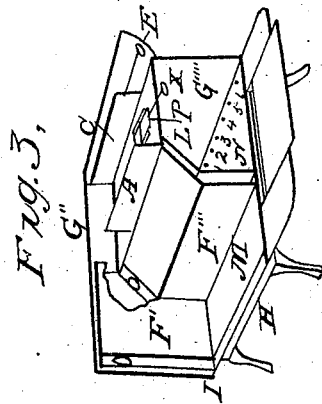


J. R. STAFFORD.
Cooking Stove.

Patented Dec. 28, 1846.

No. 4,910.



UNITED STATES PATENT OFFICE.

JAMES R. STAFFORD, OF CLEVELAND, OHIO.

COOKING-STOVE.

Specification of Letters Patent No. 4,910, dated December 28, 1846.

To all whom it may concern:

Be it known that I, JAMES R. STAFFORD, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes it from all other things before known and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of the stove; Fig. 2, a perspective view with the top and side plate removed; and Fig. 3, a perspective view with the top, side, and front plate removed.

The same letters indicate like parts in all the figures.

The nature of my invention consists in using double plates with an air space between them which communicates between them and the oven around the fire chamber, except on top, and one side to which is appended the door for the admission of fuel.

The fire obtains its exit to smoke pipe from the fire chamber, by first passing around the end of the plate (A), (Figs. 2, 3) and thence across plate (B, Figs. 2, 3), thence around either end of a movable plate (C Figs. 2, 3) to the pipe hole (D Fig. 1) at the back of the stove. Plate (C) is moved by a rod (F) attached to it as shown in Figs. 1, 2, 3. The inside plates (F¹, F², F³) (Fig. 2) and the outside plates (G², G³, G⁴, Fig. 2) and (G¹, Fig. 1) rest upon a sunk bottom plate (H), (Figs. 1, 2, 3). On the outside of plate (H) are placed plates of tile of sufficient thickness to prevent the radiation of the heat.

The peculiarity of this stove consists in the admission of cold air through apertures made in bottom plate (H) into the spaces between the outer and inner plates around the fire. The air first ascends between (F¹) and (G²), (Fig. 3) thence through apertures (K K), (Fig. 3) and between plates (G³) and (F²), and also between (F³) and (L) Fig. 2. The air between (G³) and (F²) finds its way into the oven by passing under the bottom plates (M) and (N) of the fire chamber and oven through apertures (1, 2, 3, 4, 5, 6, Figs. 2 and 3) shown in oven bottom (N). The air between (F³) and (L) passes under the oven bottom (N) and comes

into the oven by the same apertures described therein. For the purpose of creating a sufficient current to carry the air which has absorbed the heat in the spaces about the fire chamber into the oven, and from thence to let it pass into the smoke flue, an aperture is made in the top plate of the oven (B) which is closed and opened at pleasure by a slide (P), (Figs. 2 and 3) to which is attached a rod (x) as shown in (Figs. 1, 2, 3). The spaces between the double plates are intended to be about one inch (or sufficient to admit the free passage of air to the oven), excepting the space in (H) which is about two inches above tile to the bottom of plates (M) and (N). The outside plates (G², G³, G⁴) and oven door (Y, Fig. 1) are paneled and have tile placed in the panels to prevent the radiation of heat.

There may be an aperture in the bottom plate (H) to which may be affixed a pipe for the purpose of conducting the heated air to any apartment, or apartments in the house when the heat is not required in the oven, or without a pipe it may be used for heating the apartment containing the stove. If the apartment in which the stove is placed is close, a pipe may be attached to an aperture at (I) for the purpose of bringing in cold air from without the building.

I wish it to be understood I do not claim an air chamber for heating the oven of a cooking stove as that has before been done but

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

The combination with a cooking stove of an air chamber between double plates, placed or combined on the sides of the fire chamber opposite the oven in the manner and for the purpose described; the object of this air space being to prevent a radiation of the heat from the outer surfaces of the stoves on the sides to which are affixed the double plates and the air when heated therein by absorption, is then conducted under and into the oven for the purpose of heating the same, or it may be used for the purpose of heating apartments, when not needed in the oven, or for the purpose of increasing the draft of the stove.

JAMES R. STAFFORD.

Witnesses:

JOHN BARR,
ELIJAH PEET.