

P. EMMITT.
Cooking Stove.

2 Sheets—Sheet 1.

No. 3,138.

Patented June 14, 1843.

Fig. 1

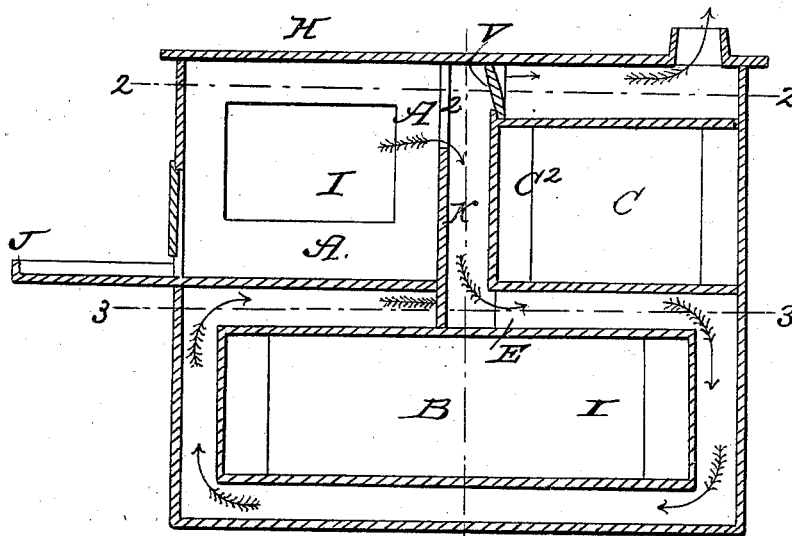
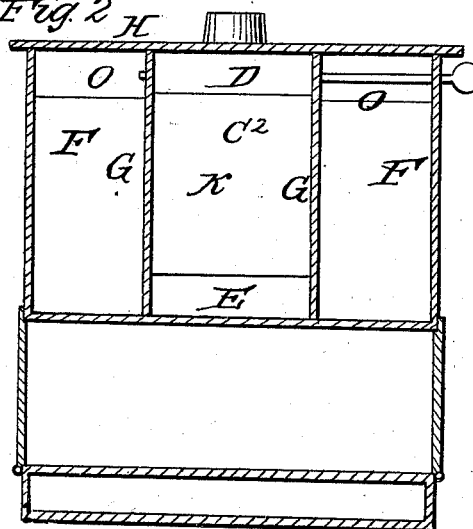


Fig. 2



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Fig. 4

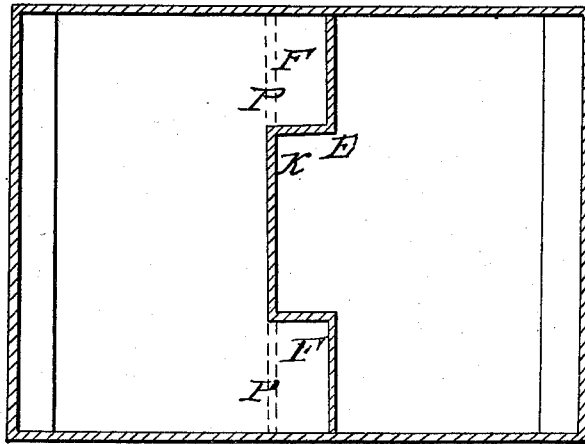


Fig. 3

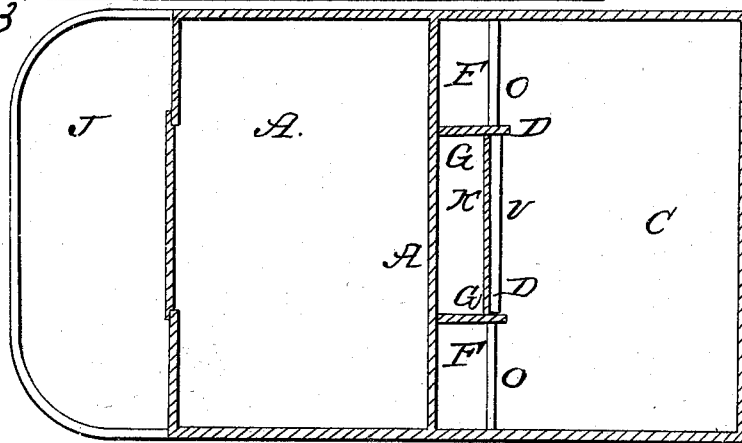
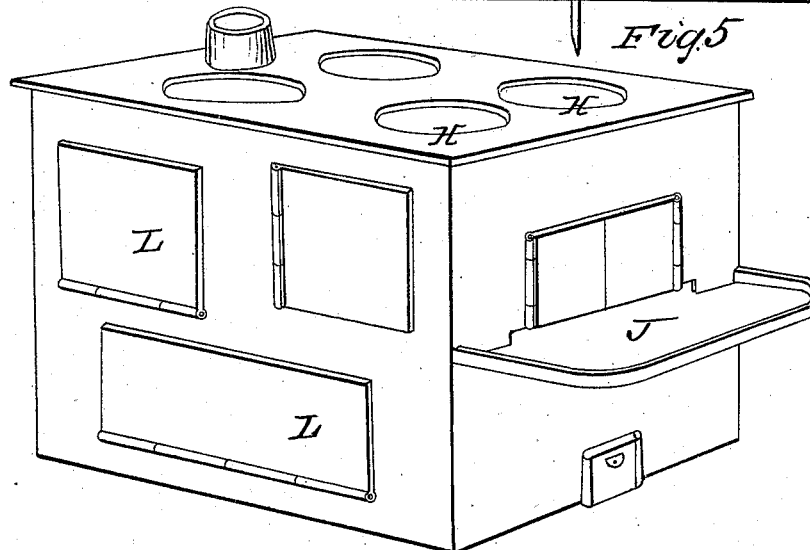


Fig. 5



UNITED STATES PATENT OFFICE.

PITNER EMMITT, OF YORK, PENNSYLVANIA.

COOKING-STOVE.

Specification of Letters Patent No. 3,138, dated June 14, 1843.

To all whom it may concern:

Be it known that I, PITNER EMMITT, of the borough of York, in the county of York and State of Pennsylvania, 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 longitudinal section through the center of the stove. Fig. 2 is a transverse section at line 1 1 of Fig. 1. Fig. 3 is a horizontal section at line 2 2 of Fig. 1. Fig. 4 is a horizontal section at line 3 3 of Fig. 1. Fig. 5 is a perspective view.

Similar letters refer to corresponding parts.

The stove generally, may be made like my double oven stove, or any similar stove in use, with a fire chamber A, in front over the large oven B and a small oven C in the rear of the fire chamber, over the back portion of the large oven.

The improvement that I have made in the stove consists in so constructing it as to cause the draft to pass first vertically down between the fire chamber and the middle of the small oven and through an aperture in the center of the front oven plate; then back horizontally between the two ovens, the whole breadth of the same; then down vertically against the back of the oven; then horizontally forward from rear to front, under the large oven; then vertically upward against the front of the large oven; then horizontally back to the middle of the stove, through a flue between the bottom of the fire chamber and the top of the large oven, the whole breadth thereof, and through side apertures in the back plates of the fire chamber to two vertical central flues each about $\frac{1}{4}$ the breadth of the stove, arranged on either side of the first mentioned vertical descending flue, between the fire-chamber and the small oven; then into a broad horizontal flue over the small oven, the whole length and breadth of the same, and thence into the smoke pipe in the top of the stove leading to the chimney or other place, a valve being placed over an aperture in the front plate of the small oven forming the first mentioned central flue, which on being opened will turn the draft directly from the fire-chamber to the smoke pipe without performing the before described circuitous route, and on being again closed will cause the draft to pass in that direction.

The combination of vertical descending and ascending flues at the middle of the stove, over the center of the larger oven, for producing the aforesaid circuitous draft over and under the ovens, is produced by placing a parallel vertical transverse plate C², forming the front of the upper or small oven about 3 inches from the back plate A² of the fire chamber, said plate extending from the top plate of the stove to the top of the oven, being perforated at the middle with two oblong apertures D E one on a line with the upper flue, over the small oven, in which the aforesaid valve V, is placed, and the other aperture E on a horizontal line with the flue under the small oven, and also perforated with two rectangular openings O O at the upper corners, the back plate A² of the fire chamber being also extended from the top plate of the stove to the top plate of the large oven and perforated with two oblong apertures P P, one near one side of the plate and the other on the opposite side leading into the side flues F F from the front, between which parallel vertical perforated plates are placed at right angles to the same two vertical parallel plates G G as wide as the flue or space they occupy between the fire chamber and small oven and as long as the space between the top plates of the stove and the top plate of the large oven made solid.

The stove is provided with the usual boiler holes H, oven doors L, hearth J, and other appendages.

The back plate of the fire-chamber (which is generally very hot) forming the front plate of the aforesaid central vertical flues rarifies the air therein, increases the draft thereby and increases the temperature of the smoke as it passes through said flues by its contact with said heated plates which produces a greater heat in the upper flue over the small oven by the passage of the smoke thus reheated to the smoke pipe.

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

The arrangement of the vertical side ascending flues F F in combination with the central descending flue K and the flues passing around the ovens in the manner and for the purpose set forth.

PITNER EMMITT.

Witnesses:

DANIEL BALL,
EDMUND MATHER.