2 Sheets—Sheet 1.

J. LAUBACH.

Cooking Stove.

No. 4,373. Patented Feb. 10, 1846.

Fig. 2

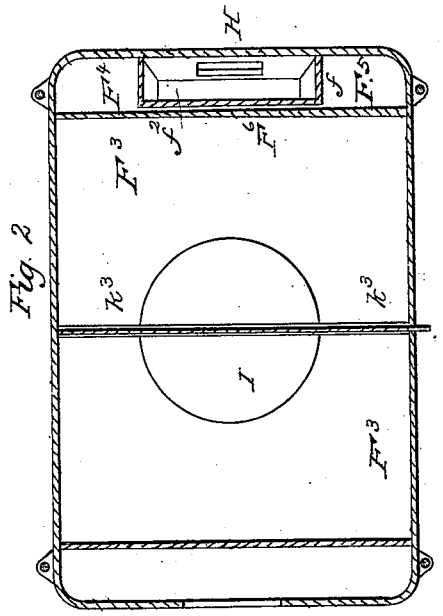


Fig. 3

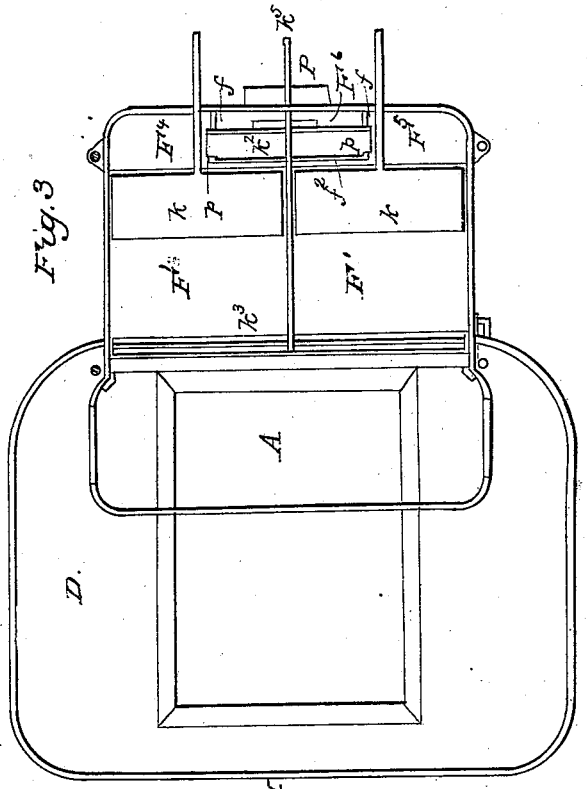


Fig. 1.

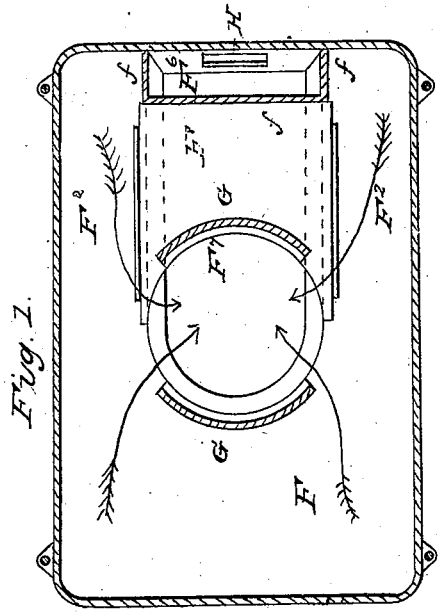
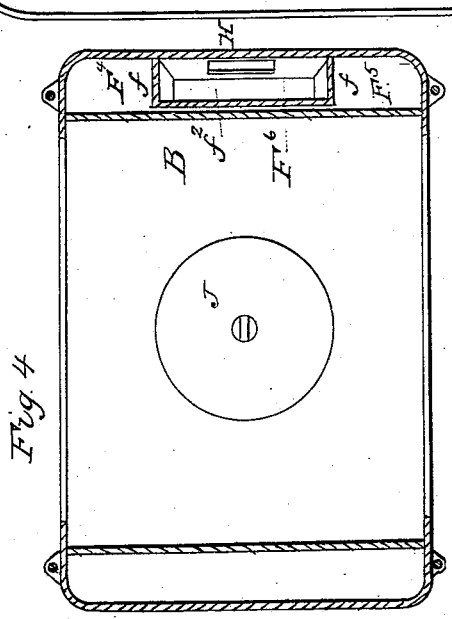


Fig. 4



2 Sheets—Sheet 2.

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Fig. 5

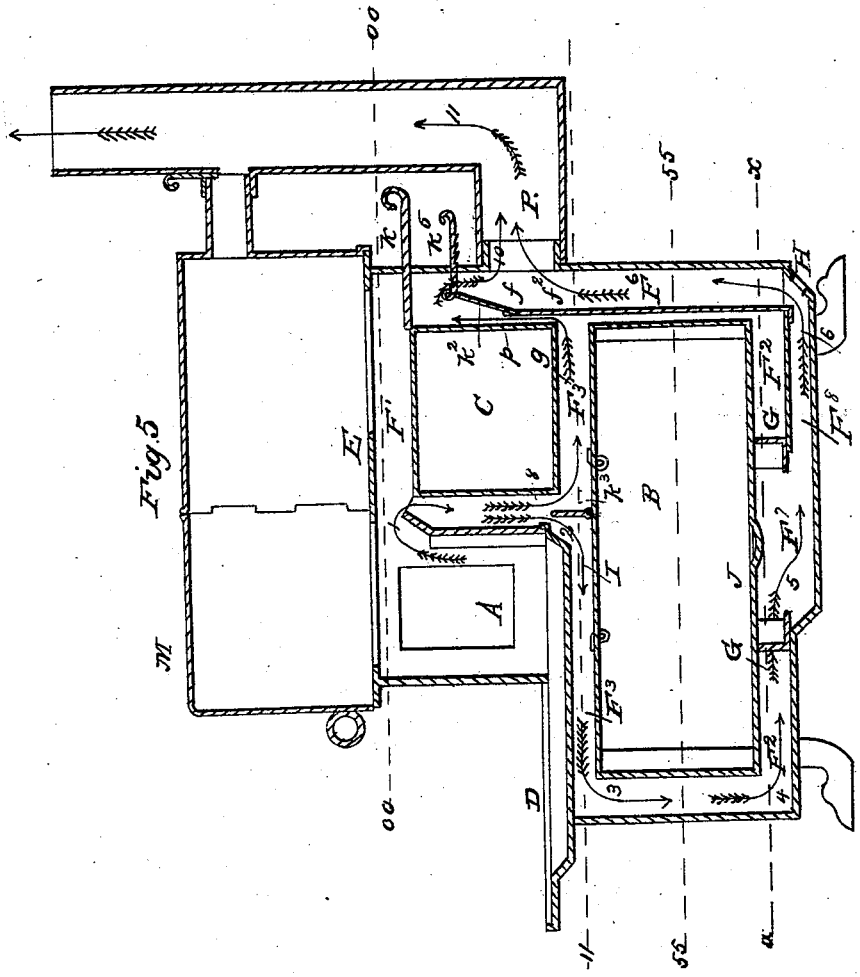
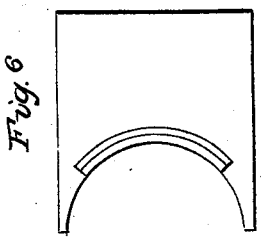


Fig. 6



UNITED STATES PATENT OFFICE.

JOSEPH LAUBACH, OF HARRISBURG, PENNSYLVANIA.

COOKING-STOVE.

Specification of Letters Patent No. 4,373, dated February 10, 1846.

To all whom it may concern:

Be it known that I, JOSEPH LAUBACH, of Harrisburg, in the county of Dauphin and State of Pennsylvania, 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 horizontal section through the lower flue at the line *x x* of Fig. 5. Fig. 2 is a horizontal section through the central flue at the line " " of Fig. 5. Fig. 3 is a horizontal section through the upper flue at the line *o o* of Fig. 5. Fig. 4 is a horizontal section through the large oven at the line 5, 5, of Fig. 5. Fig. 5 is a vertical longitudinal section of the stove through the middle of the same.

A is the fire place arranged above the large oven as in other stoves.

B is the large oven. C is a small oven arranged at the rear of the fire place and above the large oven.

D is the hearth plate. E is the top plate filled with boiler holes.

F′ is the top flue. F^2 is the bottom flue.

F^3 is the middle flue.

F^4 F^5 are the two rear corner flues.

F^6 is the central rear ascending flue.

F^7 is a central circular diving flue constructed in the bottom plate of the stove.

G G are segment plates for directing the heat and smoke to the said central flue F^7.

F^8 is a horizontal central flue leading from the circular flue to the middle ascending flue.

H is an opening made in the bottom plate for cleaning said horizontal central flue.

I is a circular plate placed over a corresponding circular opening in the bottom of the central flue F^3 between the ovens B and C and top plate of the large oven for cleaning the same.

J is another circular plate placed in a corresponding opening made in the bottom plate of the large oven directly over the flue F^7 aforesaid. When the central flue becomes foul the circular plates I and J are removed from their corresponding openings. A scraper is then applied through the interior of the large oven and aperture closed by the plate I to the aforesaid central flue F^3 and the accumulated dirt is drawn through the circular opening covered by the plate I and made to fall through the circular opening in the bottom plate of the large oven into the circular flue F^7. From this flue the dirt is drawn through the opening H by a scraper or other suitable article.

K K are two horizontal sliding dampers for closing the corner flues F^4 F^5 each damper closing one of the corner flues and half of the central flue F^6 and causing the draft to pass around the large oven B and under the small oven C. By closing the dampers K K and partly opening the dampers K^2 K^3 so as to divide the heat at K^3 and cause part of it to pass around the large oven B in the direction of the arrows 1, 2, 3, 4, 5, 6, 7 and part around the small oven C in the direction of the arrows 8, 9—10, 11.

K^2 is a hinged damper arranged in the rear central vertical flue above the smoke pipe P, for causing the heat (when this damper is closed) to pass around the large oven for baking, by dividing the heat at K^3 and causing part to pass in the direction of the arrows 1, 2, 3, 4, 5, 6, 7, 8, and part through the flue F^2 down the corner flues F^4 F^5 through flues F^2 F^7 F^8.

K^3 is a hinged damper, arranged in the space between the fire chamber A and small oven C for causing the draft to pass over the front part of the large oven B, down at the front end thereof, under the same, and into the circular flue F^7 and along the central flue F^8 to the central ascending flue F^6. This effect is produced when said damper is in the position represented in Figs. 2 and 3 and 5 by which the draft is caused also to divide at the said damper and a portion of the smoke and heat to pass between the two ovens B and C and down the corner flues F^4 F^5 to the side horizontal flues F^2 F^2 and thence to the circular flue F^7 when the two drafts are united and carried off through the flue F^8 to the central vertical flue F^6, the aforesaid segment plates G having the effect of changing the direction of the drafts and causing them to pass along the sides of the bottom flue F^2 before passing to the center in order to heat the sides of the oven.

M is a movable hinged cover and pipe for confining the vapors, &c., arising from the culinary vessels during the operation of cooking, and conducting them to the smoke pipe P^2.

The heat may be caused to circulate around the sides of the large or small oven

by turning the damper K^3 to the right or left from a vertical line so as to close either side of the middle flue F^3.

The circular diving flue F^7 is formed by making a depression in the bottom plate of the stove from the middle to the rear side of said stove, having the end next the center made the segment of a circle, or semi circular. Over the part of said depression having the sides straight and parallel is placed a plate having three of its sides straight and one side made with a semi-circular piece taken from the side next the center, as shown in Fig. 5 where this plate is represented as separated from the stove. The heat passes under this plate in diving through the central flue F^7 and passing into the part of the flue marked F^8 in going to the rear vertical flue F^6.

The hinged damper K^2 for closing the upper end of the flue F^6 is arranged at the top of said flue on pivots p p inserted into round holes in the sides f f of said flue F^6 against the upper edge of the vertical plate f^2 of said flue F^6 so that when said damper is let down in order to close it (which is effected by raising the notched bar K^5) the edge thereof to which the notched bar is attached will rest against the rear vertical plate of the stove.

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

The arrangement of the circular diving flue F^7 in combination with the segment plates G for causing the heat to pass under the sides of the large oven and thence to the central diving flue F^8 in the manner and for the purpose above set forth.

JOSEPH LAUBACH.

Witnesses:

WM. P. ELLIOT,

A. E. H. JOHNSON.