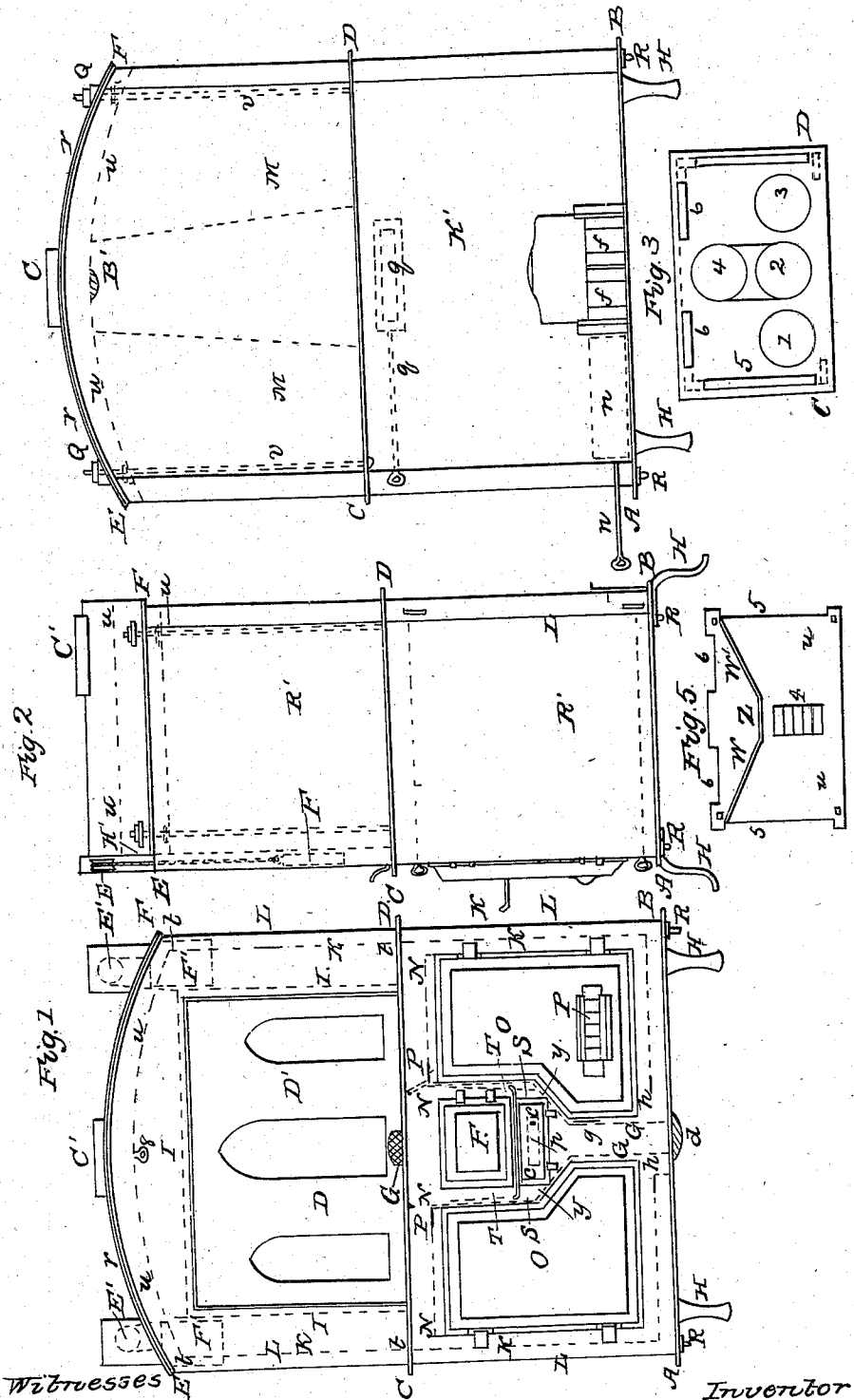


M. GILMORE.
Cooking and Heating Stove.

No. 47,713.

Patented May 16, 1865.



Witnesses
John Taylor
Ben Ebbitt

Inventor
Milton Gilmore

UNITED STATES PATENT OFFICE.

MILTON GILMORE, OF MORNING SUN, IOWA.

COOKING AND HEATING STOVE.

Specification forming part of Letters Patent No. 47,713, dated May 16, 1865.

To all whom it may concern:

Be it known that I, MILTON GILMORE, of Morning Sun, in the county of Louisa and State of Iowa, have invented a new and Improved Cooking and Heating Stove Combined; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists, first, in building the stove, as seen in the drawings, of the following dimensions, the scale of which is laid down to one-eighth of an inch to the inch or one and one-half inches to the foot.

The bottom A B is forty-one inches in length and twenty-six inches in width, in rectangular shape, of cast-iron one-half inch in thickness, having grooves cast thereon one inch from each edge, to admit of the front, back, and side plates to fit into, and an opening across the center of two inches in width by sixteen inches in length, with grooves cast around the edges of said opening to admit the plates G G on the sides and a short sloping plate, X, on the back. On the bottom of this plate A B the heretofore old manner of dovetailed projections to admit the feet H H. The middle plate, C D, cast the same size and thickness of the bottom plate, and shaped as represented in Figure 4 on the drawings, (which figure is drawn on a scale of three-fourths inch to the foot,) having the four openings for cooking utensils, as shown on drawings, three in front and one in the center, back, each circular opening eight inches in diameter, with the detached center between the holes 2 and 4, this plate having also grooves cast thereon to receive the plates L L of the outside and K K of the inside flues, 5 5, and grooves at the back to receive the back plate and also the plates M M of the flues 6 6. This plate C D and the bottom plate, A B, are connected by the rods R R, containing between, as is following described, namely, the two ovens, O O—one on each side of the furnace F—consisting of cast-iron plates one-eighth inch in thickness, and supported in grooves in shape on the front and back as represented on the front plan, also the furnace F, supported by the plates G G, which extend from the top of the ovens at N and standing in the grooves before mentioned in the middle of the bottom

A B, the furnace-plates S S being capped on the top part to cover the joint of the oven-plates N N and the plates G G, and at their bottom resting in a projection made to receive them in the plates G G at the points *y y* and also in grooves made to receive them in back and front plates. These furnace-plates are cast heavy, in a fluted manner, having a projection at the points T T for the grate *a* to rest upon, which grate extends from back to front plates of stove, with projections on each plate to support it. This grate, forming the bottom of the furnace, consists of a number of bars in a deflected shape, cast one inch apart, each bar being heaviest at the lower point of deflection and tapering toward the sides, on which they are connected and resting.

The draft to the furnace is an opening in the front plate, as represented by the figure *b*, and opened or closed at will by the door *c c*, the ashes falling through between the plates G G and resting on the bottom or plate A B, from whence it can be removed by pulling out the slide *d*. In the right-hand plate, G, there is an opening at the point *g*, made to open and close by a slide worked on the inside of the right-hand oven, which oven is used for roasting purposes, by having a pan with grid-iron, grate, and bottom attached. The distance between the grate and bottom is made to suit the opening in the oven-door at P, which causes draft under the coals, having outlet for the same into the furnace through the plate G, as before described; also between these plates A B and C D are the extra flue-plates K K, extending from front to back in grooves made to receive them on those plates, and also on the under side of the plate C D, the bottom-plate of these flues extending to (from within one and one-half inches of the side of the stove) within two inches of the plates G G, with dampers at each end, as seen at *h h*, for the purpose of shutting off the outer draft, when required, thereby throwing all the draft to the opening between the inner and the outer back, as seen at *f f*, which opening is closed at will by the slide *n n*.

It will also be seen that the draft of both flues between K and L may be stopped by the dampers *p p*, made to fall over on small projections cast on the bottom of the plate C D, having a corresponding opening only through the inner back, as seen at *q q*, with slide in

like manner to open and close, as may be required.

The part of the stove C D E F is constructed on the plate C D over the flues 5 5 and 6 6, as seen in Fig. 4, the height of the sides C E and D F being twenty-two inches each, and the inner sides, *tt*, twenty-one inches each, covered by the top plate, *uu*, as seen in Fig. 5 on the drawings, and fastened down by the rods *vv* to the plates C D, still leaving the flues 5 5 and 6 6 open into the space between the plates *uu* and the top plate, *rr*, which space is divided by the partition-plates W W and the damper Z, which is worked on the inside of top, as seen at the Fig. 8 in the front view, which plates and damper are for the purpose of disconnecting the flues 6 6 from the flues 5 5 when the draft is so required. In this plate *uu* is also an opening, as seen at A', opened and closed by a slide, the end of which is seen at B', the top plate, E F, having no opening, only the pipe-hole C'. The door D' D' has three openings, as seen on front plan, which openings are set with mica or fire-proof glass lights, the door being balanced as a window-sash by the pulleys E' E' and the weights F F, inclosed in the boxing, as seen on the side view, and moved up or down by the handle G', the door sliding between the front casting, I I, and the plate H', as seen on the side view. The outside plates, L L and R' R', are sheet-iron, and also the outside back, K', which is two inches from the inner back, L', is also sheet-iron, riveted on

flanges cast on the front and back plates of the bottom part of the stove, and all the construction on top of the plate C D, with the exception of the front I I, is sheet-iron. The top plate, *rr*, is held down by the double set of nuts Q Q on the rods *vv*, which confine the whole top part to the plate C D.

What I claim in the construction of this stove is—

1. The flues leading from fire-pot F around ovens O O and between the plates forming the sides and top of the hood to exit-pipe, in connection with dampers *hh* and *pp*, in the manner and for the purposes set forth.

2. The manner in which the fire-pot is placed with grate and pit, as described.

3. The combination and arrangement, with fire-pot F, of apertures 2 and 4 and dampers *pp*, substantially in the manner and for the purposes described.

4. The hood of the stove, constructed and arranged with the flues wholly extending around side and top in connection with the dampers *hh*, substantially in the manner and for the purposes described.

5. The apertures A' in the top of a stove, with side and top flues and an illuminated sliding shield, D' D', in combination with the fire-pot F, in the manner and for the purposes set forth and described.

MILTON GILMORE.

Witnesses:

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