

F. RITCHIE.
Cooking Stove.

No. 106,208.

Patented Aug. 9, 1870.

FIG. 1

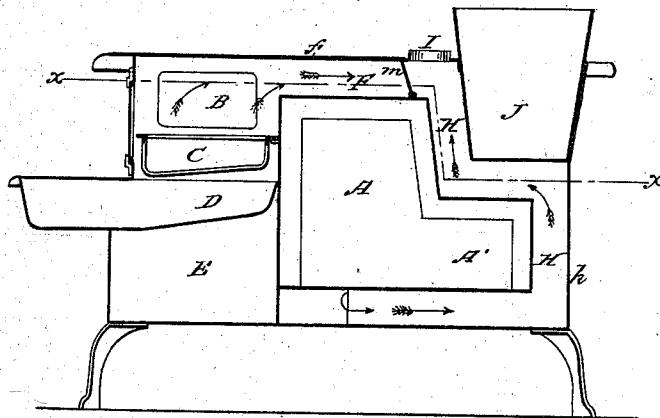


FIG. 2

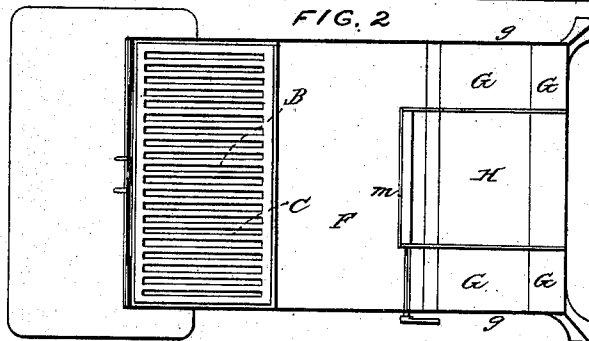
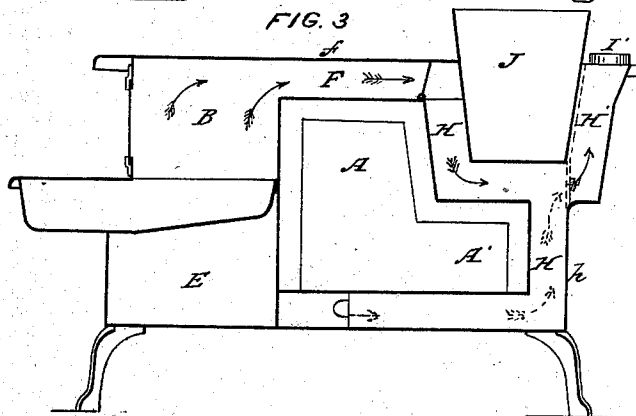


FIG. 3



WITNESSES:

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NEW YORK.

Letters Patent No. 106,208, dated August 9, 1870.

COOKING-STOVE.

The Schedule referred to in these Letters Patent and making part of the same.

I, FRANCIS RITCHIE, of the city of Troy, in the county of Rensselaer and State of New York, have invented certain Improvements in Cooking-Stoves, of which the following is a specification.

My improvements relate to an invention for which Letters Patent of the United States were granted to me June 29, and antedated June 15, 1869, the main feature of which invention consists in extending the lower part of the rear portion of the baking-oven backward beyond the upper portion, and in combining therewith a water-reservoir or other vessel supported over such rear extension.

The present invention consists—

First, in the arrangement with a baking-oven, provided with a rearwardly extended lower portion, of the flues and exit-passage, the latter being arranged in front of such rear extension, as hereinafter fully shown and described.

Second, in extending the top and side plates of the stove backward, and the rear plate of the oven extension upward, so as to inclose the space above such rear extension of the oven.

Third, in the arrangement of a warming-closet under the fire-chamber and in front of a baking-oven, arranged wholly in rear of such fire-chamber.

In the accompanying drawing—

Figure I is a central vertical section.

Figure II, a horizontal section in line *x x*, fig. I.

Figure III is a central vertical section showing a modification of my improved stove, with the exit-passage at the rear of the oven extension.

Like letters of reference designate like parts in each of the figures.

A is the baking-oven.

A', the rear extension of the lower portion.

B, the fire-chamber.

C, the fire-grate.

D, the ash-pit.

E, the warming-oven, arranged directly thereunder.

F, the boiler-flue.

m, the damper, arranged at its rear.

G G, the two side or diving-flues passing down at the rear of the main portion of the oven, and thence backward over the top, and down at the rear of extension A' thereof, as clearly shown.

H is the return and up-cast flue, terminating at the exit-passage I, made through the top plate *f* of the stove, immediately at the rear of the damper *m*, and in front of the reservoir J, arranged over the oven extension, all as shown in fig. I.

The top plate *f* and side plates *g g* of the stove I extend backward, and the outer plate *h*, at the rear of

the oven extensions A', upward, so as to inclose the space over such oven extension and surround the water-reservoir J, when the latter is arranged over the extension A', as represented in the drawing.

This extension of the outer plates forms an outer casing for the water-reservoir, and obstructs, to a certain extent, the radiation of the heat therefrom. It enables the place at the top of the stove occupied by the reservoir to be used for other purposes, when required, by simply removing the latter and closing the hole in the top plate by a suitable cover, provided with smaller holes to receive kettles or other vessels. It also preserves the usual and regular form and external appearance of the stove.

The warming-oven is cast with and forms part of the stove proper, and, being arranged directly under the fire-chamber and ash-pit, is subjected to a greater heat than when it is arranged under the projecting hearth, and made separate from the rest of the stove.

Fig. III represents a modification of my invention, in which the up-cast flue is shown, at H', as passing upward as a projection from and back of the rear plate of the stove, and opening into the vent or exit-passage I, also arranged at the rear, as represented.

The direction which the draught takes is obvious, and is represented by the arrows in the drawing.

The arrangement of the flues, damper, and exit-passage enables the front portion of the stove to be used when required without heating the back portion, as the opening of the damper *m* permits the draught to pass directly into the vent I, without coming in contact with the rear of the oven or the extension thereof.

What I claim as my invention is—

1. The arrangement with the baking-oven A and rear extension A', of the lower portion thereof, of the flues F H G G, damper *m*, and exit-passage I in front of the extension A', all as hereinbefore set forth.

2. In combination with the baking-oven A, provided with a lower rear extension, A', the extension of the outer top, rear, and side plates, *f*, *h*, and *g g*, till they intersect each other, so as to inclose the space over the extension A', as and for the purpose hereinbefore set forth.

3. The arrangement of the warming-oven E under the fire-chamber B, and in front of the oven A, arranged wholly in rear of such fire-chamber, and separated from the warming-oven, all as hereinbefore shown and described.

FRANCIS RITCHIE.

Witnesses:

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