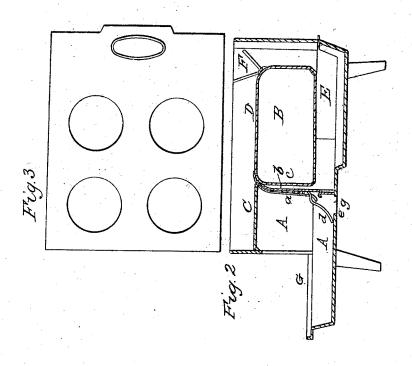
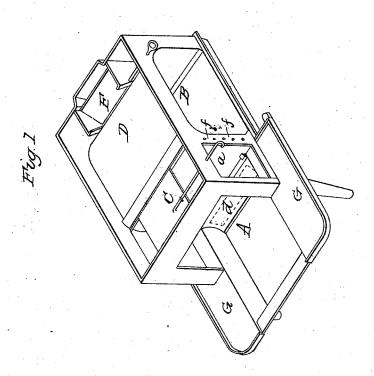
C. FULTON.
Cooking Stove.

No. 3,626.

Patented June 10, 1844.





UNITED STATES PATENT OFFICE.

CALVIN FULTON, OF ROCHESTER, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 3,626, dated June 10, 1844.

To all whom it may concern:

Be it known that I, Calvin Fulton, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Cooking-Stoves; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawing Figure 1, 10 is a perspective view of my stove, the top plate which is to receive the boilers, and the doors likewise being removed for the purpose of showing the interior. The top plate is shown separately in Fig. 3. Fig. 2 is a 15 section through the middle of the stove from

front to back. A, is the fire chamber, and B, the oven; between these two compartments I place

three distinct and separate plates, forming 20 two air spaces between them; these plates are marked a, b, and c, in the drawing. At the lower part of the plate a, which constitutes the direct fire back, there is a curved plate d, furnished with catches that hook into the lower edge of a, and that may be

lifted out at pleasure; this curved plate constitutes the lower part of the fire back, a large part of the ignited coals resting against it. By dividing the fire back in this manner

30 its tendency to warp and burn out is much diminished. It is also further protected by the free admission of cool air between the fire-back and the plate b; for this purpose an opening is made through the bottom plate 35 of the stove as at e, Fig. 2; its place is also

shown by dotted lines on the plate d, Fig. 1; there are also holes opening into the same space through each of the side plates, as shown at f, f, Fig. 1, thus establishing a free

40 current of air. The space between the plates b, and c, communicates with the flue space below the oven, so that the heated air in this flue space passes freely into it, and preserves a regular moderated heat in this part, an ef-

45 fect which could not be thus produced without the aid of the three plates.

Immediately over the fire chamber, and on a level, or nearly so, with the top plate D, of the oven, I place a sliding shutter C, 50 which rests upon ledges, and incloses about

one half of the space occupied by the upper part of the fire chamber; this shutter may be slid back and forth by means of a rod, so that it may occupy the middle space when

two boilers are to be acted upon; or by closing one half of the opening at one end of the fire chamber, the whole draft will be made

to act against the bottom of a single kettle, or boiler, thus rendering a small fire effective when one vessel only is to be used. I 60 sometimes divide the flue space above the oven into two parts by a partition plate along its middle, from front to back, and thereby confine the heat, in great part, to one side of this space; but this is not essen- 65 tial.

The rear flue is divided into three sections, by two partitions which are extended along toward the front, in the lower flue, as shown at E; and there is a valve at F, by 70 which the draft may be directed through these flues, or be allowed to pass immediately into the exit pipe. This arrangement is in all respects similar to that made in several other stoves.

For the purpose of giving a permanent support to the drop doors of the oven, I extend the lap, or hearth G, of my stove back, so as to reach the fore edge of the oven door, and when said door is opened, so as to stand 80 horizontally, it rests on the part G', of said lap, and the strain upon its hinge joints is thereby effectually taken off.

I give free admittance to the flue space under the oven, through an opening below 85 the plate b, which is furnished with a shutter or stopper g, that may be lifted out at pleasure; and as the plate d, may be readily unhooked from the plate a, the shutter g, may easily be removed, and the flue space 90 cleaned. This, however, will be rarely required, as it is advantageous to allow the bottom plate to be covered to some height with a bad conducting substance.

Having thus fully described the manner 95 in which I construct my cooking stove, what I claim as new and desire to secure by Letters Patent, is

1. The employment of three plates between the fire chamber and the oven; the 100 foremost of these plates being divided into two parts as shown at a, and d, these parts being connected together, and combined with the plates b, and c, and with the body of the stove, as set forth.

2. I claim, also, the manner of supporting the drop doors of the ovens by extending the lap, or hearth, back to them, as described.

CALVIN FULTON. [L.s.]

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Witnesses: THOS. P. JONES. EDWIN L. BRUNDAGE.