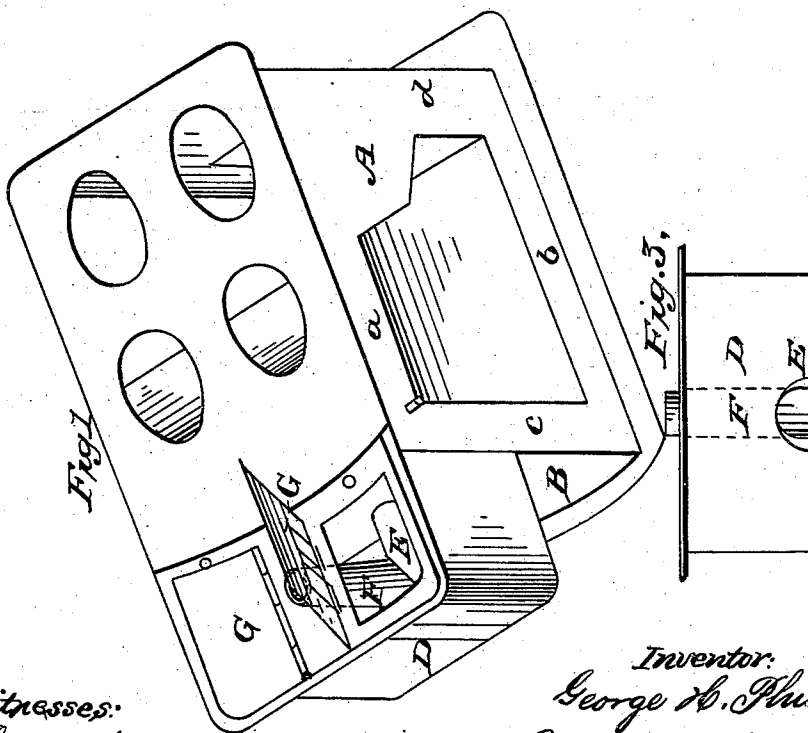
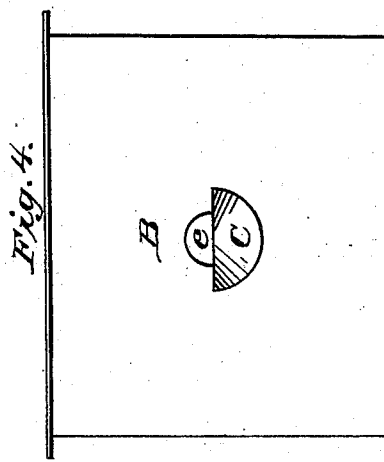
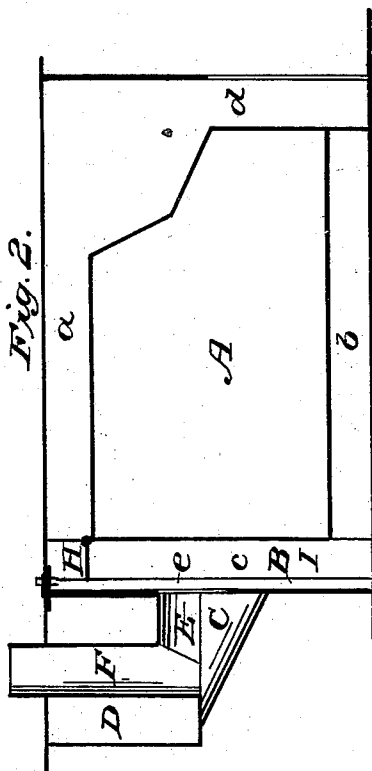


G. H. PHILLIPS.

Cooking Stove.

No. 86,585.

Patented Feb. 2, 1869.



Witnesses:
D. Curran
M. F. Hancock

Inventor:
George H. Phillips
 By *Alex. J. C. Hancock*
attorneys



GEORGE H. PHILLIPS, OF TROY, NEW YORK.

Letters Patent No. 86,585, dated February 2, 1869.

RESERVOIR COOKING-STOVE.

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

To all whom it may concern:

Be it known that I, GEORGE H. PHILLIPS, of Troy, in the county of Rensselaer, and State of New York, have invented a new and useful Improvement in Cooking-Stoves; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 is a perspective view of my improved cooking-stove;

Figure 2 is a longitudinal central vertical section of the same;

Figure 3 is a detached elevation of the water-reservoir on the back of the stove; and

Figure 4 is a rear elevation of the stove, the water-reservoir being detached.

Like letters of reference indicate like parts in the several figures.

The nature of my invention consists in the construction of the water-reservoir at the back of a cooking-stove, in such a manner as to form, together with a peculiarly-shaped projection or hollow shaft on the rear plate of the stove, the exit-flue and stove-pipe of the same.

A, in the drawing, represents a cooking-stove of that class in which a flue passes entirely around the bake-oven, forming an upper flue, *a*, a lower one, *b*, a rear one, *c*, and a front one, *d*.

The rear plate B of the stove is slightly curved, and about its centre is provided with a circular opening, *e*, below which, on the outside, is formed a hollow shelf, or projection, C, which in form resembles the section of a cone, in a central line from its apex to its base, the line of section being parallel with the centre of the opening *e*.

Bolted on to, or otherwise secured to the rear of the top plate of the stove, is the reservoir D, its front end being curved to conform to the shape of rear plate B, and resting with its bottom on the hollow shelf C.

In the bottom and front side of this reservoir D is formed, by casting or otherwise, the one half of a horizontal flue, E, ending in an elbow and vertical pipe, F, which passes through the centre of reservoir D, and out through its top, the lower half of the horizontal flue being formed by the hollow shelf C.

The reservoir D is provided with lids G, and is intended to be filled with water to be heated.

H is a damper, between partitions I, which, when in a horizontal position, allows the direct draught to be used in connection with the down or lower draught

through flue *b*, both passing through the reservoir, and thus keeping up an even heat at all times. When, however, the damper H is in a vertical position, the direct draught is shut off, and only the lower draught passes through the reservoir.

The advantage of the construction of my improved cooking-stove is, that the exit-flue and stove-pipe, being formed so as to pass through the reservoir, and the draught passing on one side and the bottom of the same, the water is not only heated from the exit-flue and stove-pipe, but also at the bottom and front side of the reservoir; and that a more even heat can be obtained, as both the direct and the lower draught have to pass through the reservoir.

And by this construction of the reservoir and shelf, sufficient room is left for a warming or hot closet at the rear of the stove and under the reservoir.

I am aware that the stove-pipe of cooking-stoves has been passed through water-reservoirs, when the latter are secured on the top plate of the stove; also, that the exit-flue and stove-pipe have been passed around the reservoir, the latter being even with the top plate of the stove. This I do not claim, for in the latter case the construction of a stove is much more expensive and difficult, especially in casting; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. A water-reservoir, the top of which is even with the top plate of the cooking-stove, with one half of the horizontal and the whole of the vertical exit-flue passing through the reservoir, in such a manner that the water in the latter entirely surrounds the vertical flue, and covers the upper part of the horizontal one, substantially as described.

2. In combination with the above, the shelf C, when constructed to operate as described.

3. A water-reservoir, the top of which is even with the top plate of the cooking-stove, and through which the exit-flue passes, when the stove-pipe is attached to the collar on the reservoir, formed by the upper end of the vertical part of the exit-flue passing through the reservoir, in such a manner that the products of combustion pass out through the top of the reservoir, instead of the top plate of the stove, substantially as described.

GEO. H. PHILLIPS.

Witnesses:

J. M. HOWK,
LEONARD H. GILES.