A. KETLER.

Cooking Stove.

No. 3,848.

Patented Dec. 7, 1844.

Fig. 1

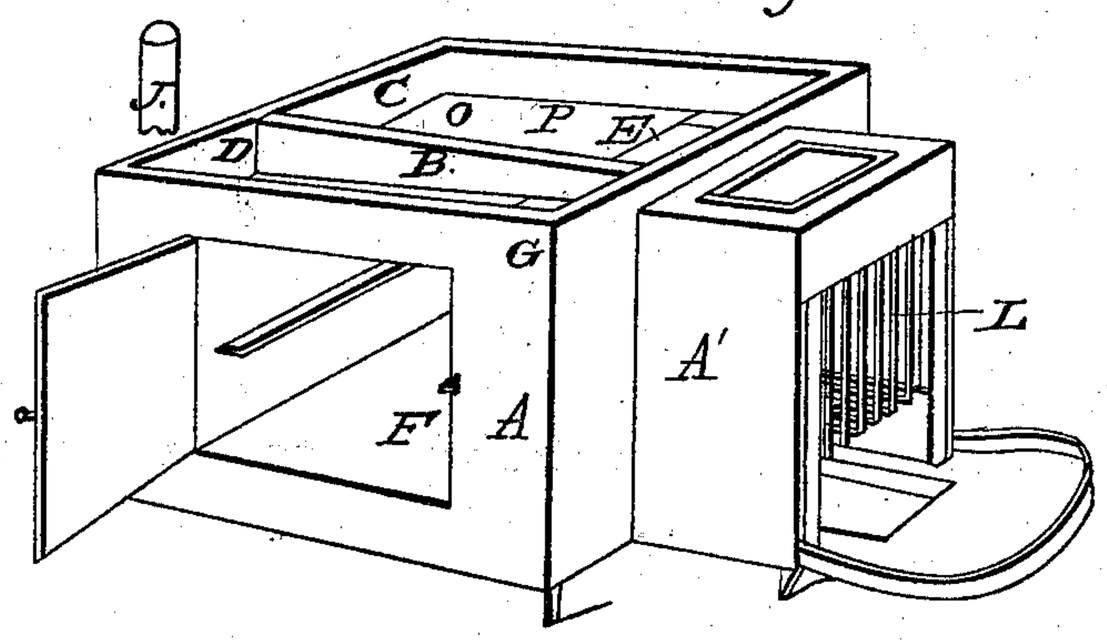


Fig. 2

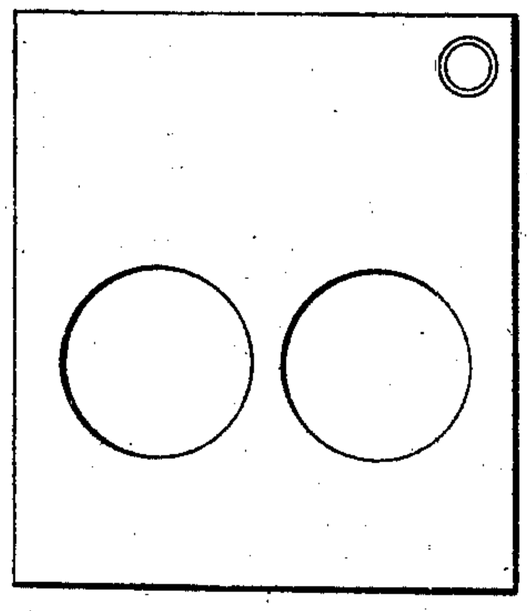


Fig. 3

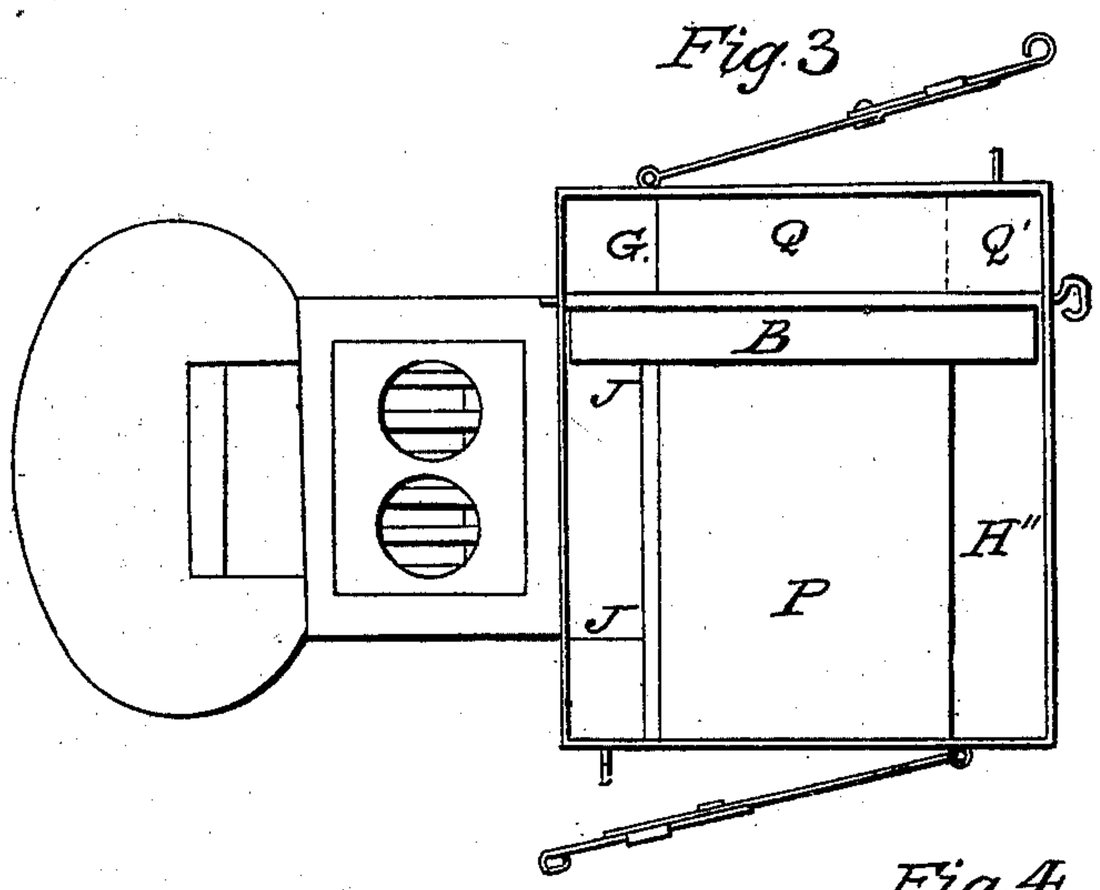
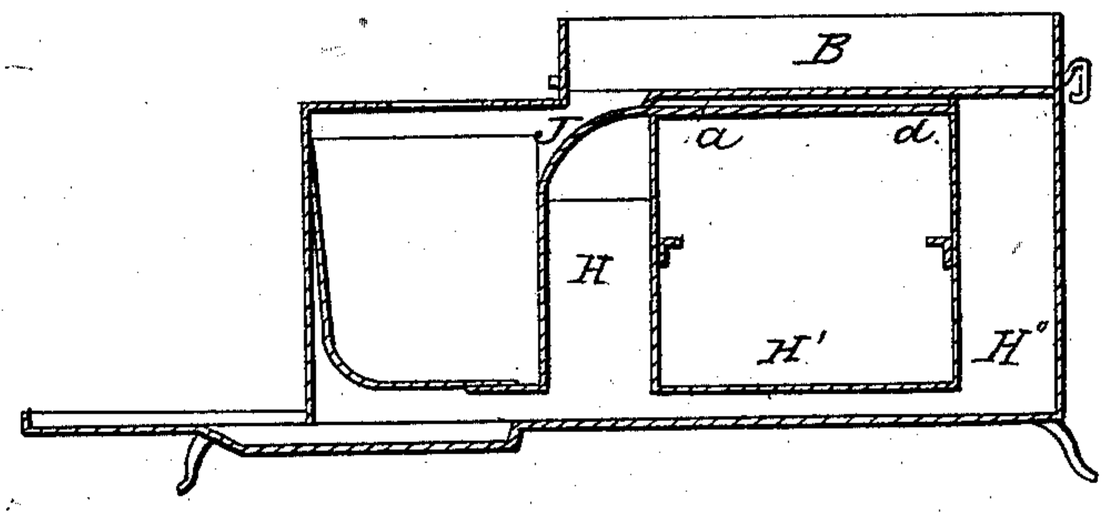


Fig. 4



UNITED STATES PATENT OFFICE.

ADAM KETLER, OF PHILADELPHIA, PENNSYLVANIA.

COOKING-STOVE.

Specification of Letters Patent No. 3,848, dated December 7, 1844.

To all whom it may concern:

Be it known that I, ADAM KETLER, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in the Manner of Constructing Cooking-Stoves; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawing, Figure 1, is a perspective view of my stove, with the top plate, Fig. 2, removed. Fig. 3, is a direct top view, also without the top plate. Fig. 4, is a vertical section of the stove, through the middle, from front to back. In each of these figures, where the same parts are represented they are designated by the same letters of reference.

A, A′, is the body of the stove, the part A′, being the fire chamber, which may be constructed for the burning of wood, or with a grate L, for the burning of coal.

F, is the oven, which stands immediately in rear of the fire chamber, and is to be covered by the top plate, Fig. 2.

B, is a partition plate which divides the flue space between the top plate of the stove and the oven, into two unequal compartments, P, and Q; the former being four, or five, times the size of the latter. The plate B, may be made to fall down when a direct draft is to be made to the exit pipe; or it may be furnished with a sliding damper, admitting a passage through it for that purpose.

H, is a flue space between the back plate of the fire chamber and the fore plate of the oven; H′, a like space under it, and H″, one in the rear thereof. The top of the oven has a double plate extending over the compartment, P, having a heated air space, *a*, *a*, between the two plates; there is not any draft through this space, but it serves to prevent the top plate of the oven from being too intensely heated. This space, as above noticed, extends only over the compartment, P, the top plate of the oven, at Q, being single, as the heated air will have passed under the oven before it arrives at this compartment.

G, is the flue space through which the draft ascends into the compartment Q, on its way to the exit pipe, I, at the rear end D, of said compartment. The flue space, H″, at the back of the oven extends from side to side of the stove, but it is inclosed at top in the rear of the compartment Q, by the continuance of the top oven plate over it, as at Q′. The flue space G, leads up from the fore and bottom flue spaces H, and H′.

In using this stove, the heated air from the fire chamber passes up through the opening J, in the ordinary manner, into the compartment Q, above the upper double oven plate, then down the rear flue H″, under the oven through H′, and up through the opening G, into the compartment Q, and along this to the exit pipe in the rear.

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

The particular combination and arrangement of parts by which the action and passage of the heated air from the fire chamber to the exit pipe, are governed as herein described; such combination and arrangement consisting in the dividing of the upper horizontal flue, above the oven, into two unequal parts, P, and Q; the part P, covering the large portion of the oven; in this part, being furnished with a double plate, the direct passage from the fire chamber being over it, and the compartment Q, being separated from the oven by a single plate, and admitting the heated air into it through a flue opening G, at its fore end, and along it to the exit pipe I, at its rear end; the whole combination being substantially the same with that herein set forth.

ADAM KETLER.

Witnesses:

W. M. RUFF,

JAS. G. GIBSON.