A. E. CHAMBERLAIN & J. B. CROWLEY.

Cooking-Stove.

No. 132,711. Patented Nov. 5, 1872.

Fig. 1.

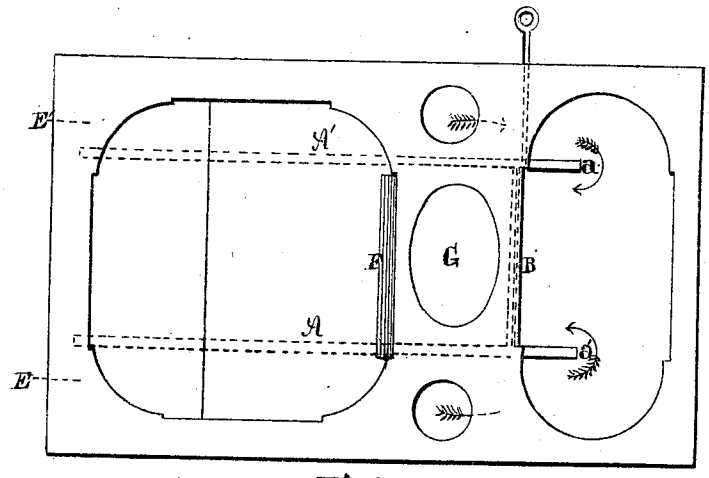
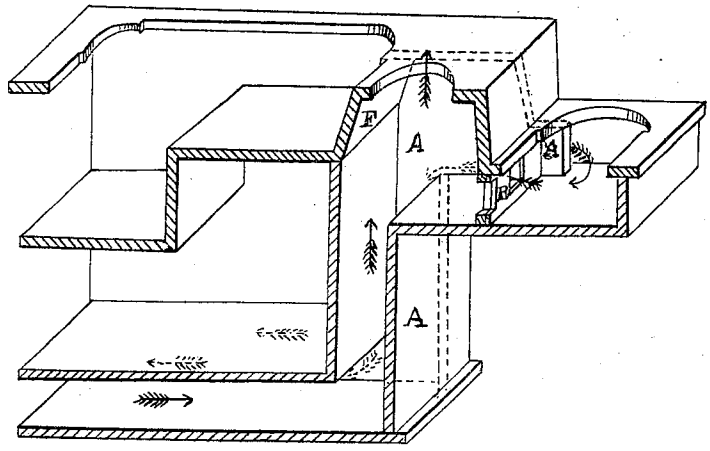


Fig. 2.



Attest,

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UNITED STATES PATENT OFFICE.

ADDIS E. CHAMBERLAIN AND JOHN B. CROWLEY, OF CINCINNATI, OHIO, ASSIGNORS TO CHAMBERLAIN & CO., OF SAME PLACE.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **132,711**, dated November 5, 1872.

To all whom it may concern:

Be it known that we, ADDIS E. CHAMBERLAIN and JOHN B. CROWLEY, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Cook-Stoves, of which the following is a specification:

Our invention relates to that class of cook-stoves using low-down reservoirs.

We are aware that a similar location of the reservoir relatively to the pipe as that shown and described, and which constitutes but a single element in our improvements, is used on extended-top stoves having elevated reservoirs; but their arrangement of flues is such that the damper must be placed in the front wall of the exit-pipe, and in consequence is subjected to the warping influence of the fire.

The advantage of low-down reservoirs over those elevated on the extended-top stoves in the convenience of replenishing them with water is obvious, yet a great objection to the former is that the side of the reservoir constitutes the rear wall of the stove, and the gases of combustion in passing down around the oven come first in contact with this side of the reservoir, which so absorbs their heat as to render it difficult and expensive to sustain a proper temperature in the oven for baking purposes. These defects our invention seeks to remedy, as set forth and shown in the general description and accompanying drawing, in which—

Figure 1 is a plan view, showing the direction of the gases when an ordinary heat in the ovens is desired. Fig. 2 is a central vertical section, in perspective, showing the direction of the gases in their descent around the oven and return to the exit-pipe.

A A′ are flue-strips, dividing the heated space around the oven into three alternately descending and ascending flues. *a a′* are extensions of these strips, which project into the recess under the boiler and cause a circuit in the current when the damper B is open, and thus expose a larger surface of the boiler to an immediate contact with the heated current. When the damper B is open the current passes as stated under the boiler, thence around the flue-strips, through the damper, to the center flue, and so out at the exit-pipe. When the damper B is closed the contact ceases between the boiler and the current, which is deflected into the side flues E E′, descending thence under the oven and up the central flue into the exit-pipe G without once coming into contact with the boiler, but keeping it at the same time sufficiently heated by radiation. The same result might be obtained by the use of two instead of the three flues above named and the resulting use of one flue-strip. F is the solid front wall of the exit-pipe G.

What we claim is—

1. The solid front F of the exit-pipe, in combination with the damper B in the rear of the exit-pipe, substantially as and for the purpose set forth.

2. The combination of the flue-strips A A′, solid front F, and damper B, substantially as and for the purpose specified.

A. E. CHAMBERLAIN.
J. B. CROWLEY.

Witnesses:
P. M. SHUEY,
JEREMIAH TWOHIG.