

C. W. HERMANCÉ.

Cooking Stove.

No. 96,429.

Patented Nov. 2, 1869.

FIG. 1

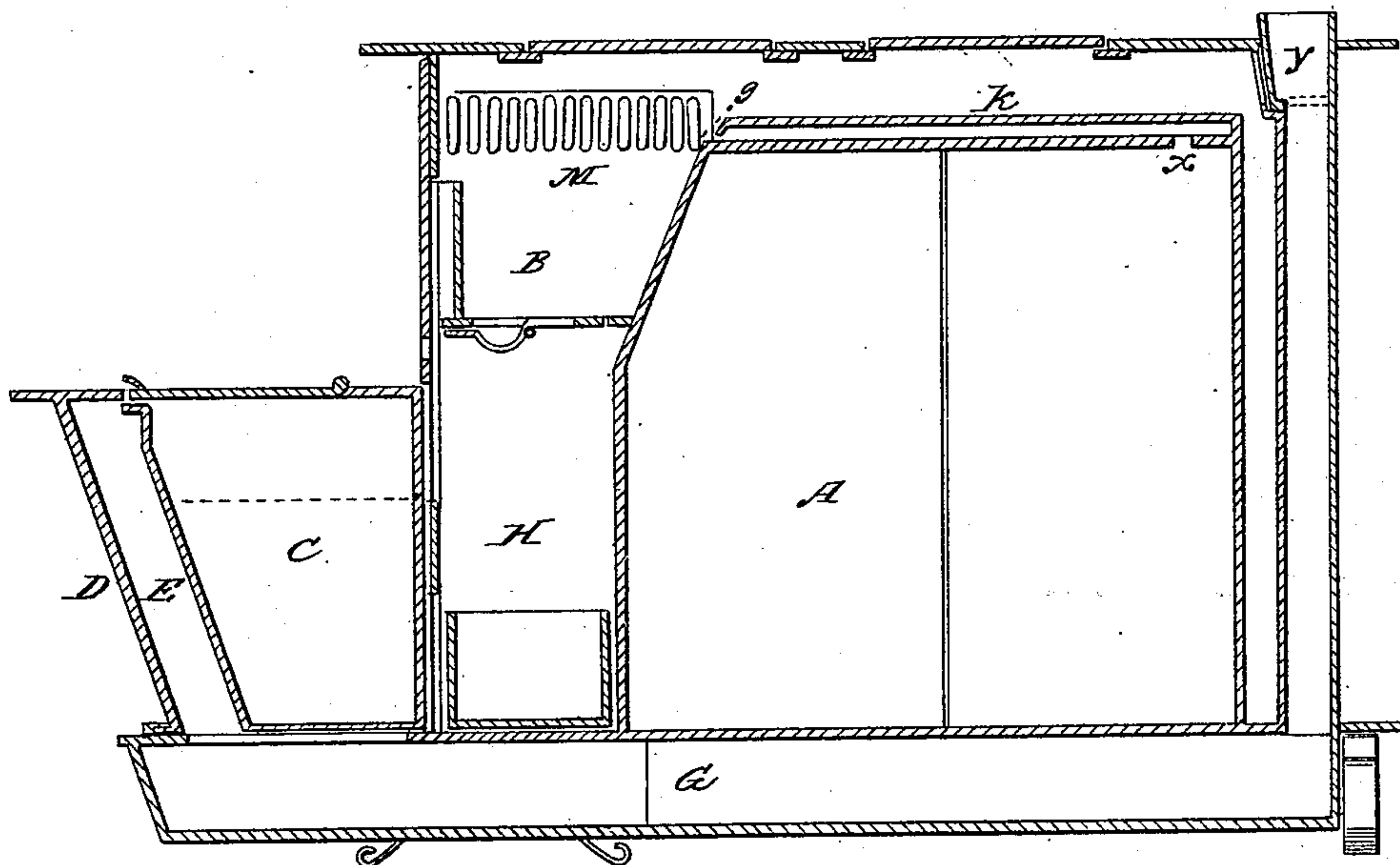
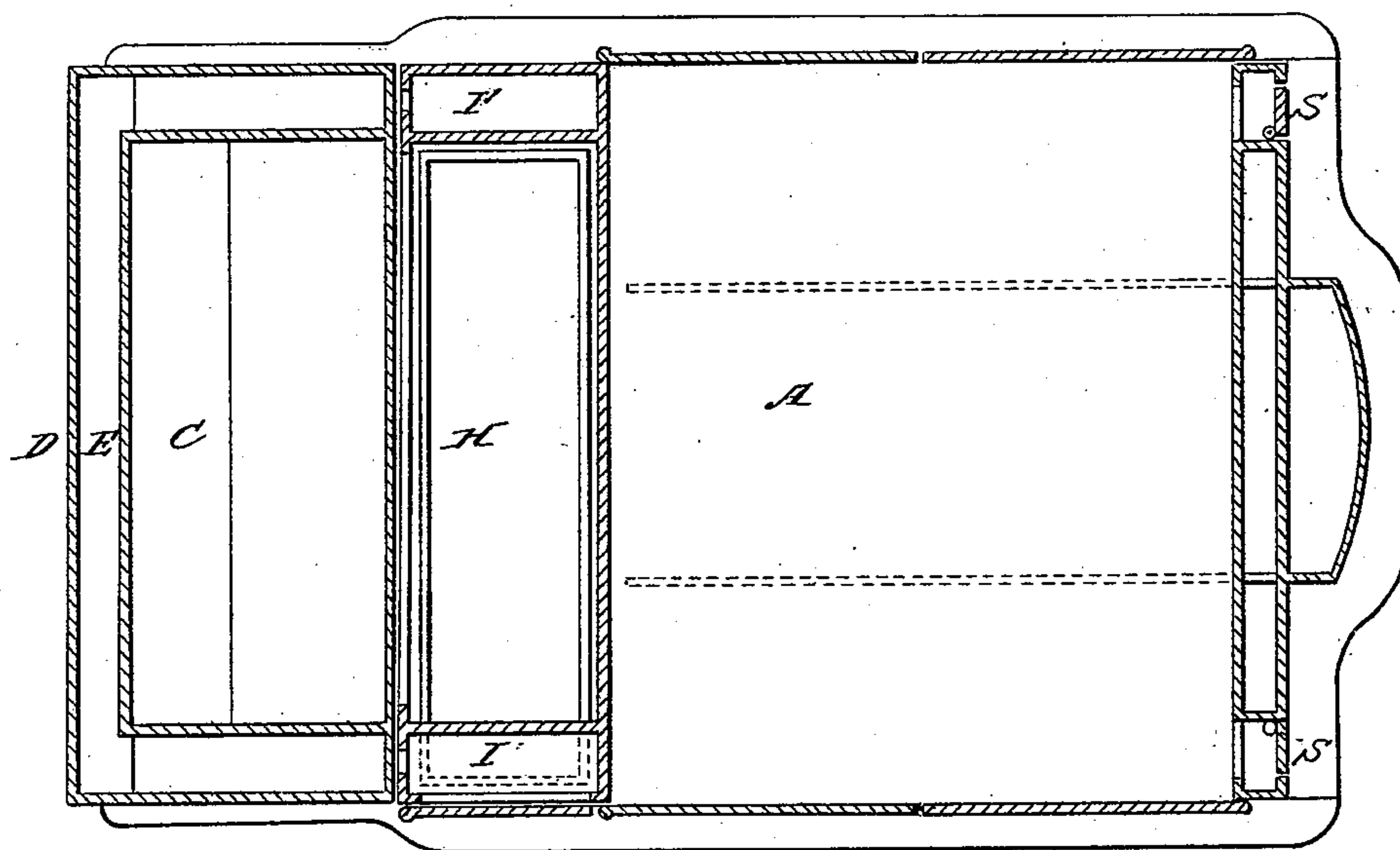


FIG. 2



WITNESSES:

C. L. Evert
A. R. Harr

INVENTOR:

Chas W Hermance
per
Alexander Meason
Att'y

United States Patent Office.

CHARLES W. HERMANCE, OF SCHUYLERVILLE, NEW YORK.

Letters Patent No. 96,429, dated November 2, 1869.

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, CHARLES W. HERMANCE, of Schuylerville, in the county of Saratoga, and in the State of New York, have invented a new and useful Improvement in Reservoirs for Cooking-Stoves; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the combination and attachment of a water tank, or hot-water reservoir to the front of a high-hearth cooking-stove or range, when said reservoir or water-tank is constructed or provided with a hot-air chamber or flues, as more fully hereinafter set forth.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal vertical section, and

Figure 2, a horizontal section of a cooking-stove, with my water-tank or reservoir attached.

A represents the oven of a cooking-stove or range, of which B is the fire-place.

C represents the reservoir or water-tank, which is constructed of cast-iron, and galvanized on the inside, and is connected with and surrounded by a cast-iron case or jacket, D, so as to form a hot-air space or chamber, E, around said reservoir or water-tank, and the whole, as shown, is combined and attached to the front of a cooking-stove or range.

The flues G of said stove or range are extended forward, and connected with the chamber E, surrounding the water-reservoir, in such manner as to carry the heat forward through said air-chamber, thereby greatly facilitating the heating of water.

There is also a hot-air space, ash-pit, or chamber, H, provided between the rear side of the reservoir C and the front plate of the oven A, thereby preventing the cold water that may be put in the reservoir from interfering at any time with the baking of the oven, which would surely occur were the reservoir and oven in direct contact with each other.

At each end of the ash-pit or chamber H, there is a chamber, I, (as seen in fig. 2,) which runs up either side of the fire-box B, and communicates with the same by means of a grating, or equivalent device, M, as shown in fig. 1.

The chamber I', upon one side of the fire-box and ash-pit, extends entirely down to the flue G, while the chamber I, on the other side, does not extend down that far.

Near the lower extremity of this latter chamber,

there is an opening made in the front of the stove proper, which communicates with the chamber E, around the reservoir C.

The chamber which communicates with the chamber G may also communicate with the chamber E, by an opening in the stove-front, as before described.

Upon the top of the oven A, there is an additional plate, K, elevated slightly from the oven-top, as seen in fig. 1, and perforated, g, at its front.

The oven-top has an opening, x, at its rear portion, which conveys the air directly within the oven A from the fire-box, through the perforations g, in front of the extra top plate, over the oven.

At each side of the flue in the back of the stove, to the entire height of the same, are two small doors S S, which open inward from the room to the oven. These doors are for the purpose of tempering the atmosphere in the oven, and cooling the extra top plate over the oven.

At the extremity of the flue, over the oven A, there is a damper, Y, for the purpose of closing the opening to the stove-pipe, and cause the products of combustion to circulate around the flues.

When this damper is closed, the hot air will pass more freely down the chambers at the side of the fire-box, and into the chamber E, around the water-reservoir, and the chamber G, under the oven, and the chamber-oven, and at the rear of the oven.

I do not wish to be understood as broadly claiming a water-reservoir on the front of a cooking-stove.

Having thus fully described my invention,

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

1. Attaching a water-reservoir upon the front of a high-hearth cooking-stove or range, and providing the same with an outer chamber or flue, substantially as specified.

2. In combination with a water-tank or reservoir, placed upon the front of a high-hearth cooking-stove, with the exterior chamber E, an interposed chamber between said reservoir and the front of the oven, substantially as set forth.

3. In combination with the fire-box B, chamber H, and reservoir C, the employment of one or more vertical chambers I I' on one or both sides of the fire-box and ash-pit, which communicate with the fire-box, and convey hot air to the chambers E and G, for heating the reservoir, substantially as set forth.

4. In combination with the reservoir C and its chamber E, the oven-bottom flue G, communicating with the flue or chamber E, substantially as specified.

5. The arrangement, on each side of the vertical flue on the rear of the oven A, of one or more ver-

tically-hinged doors S S, opening into the air, for the purpose of tempering the heat in the said oven, substantially as set forth.

6. The combination, in a high-hearth stove, of the fire-box B, chamber H, water-reservoir C, chamber E, chamber G, and oven A, with the various communicating-flues and parts, all constructed and arranged to operate substantially as described.

In testimony that I claim the foregoing, I have hereunto set my hand and seal, this 17th day of September, 1869.

CHAS. W. HERMANCE. [L. s.]

Witnesses:

ROBERT HERMANCE,
G. F. WATSON.