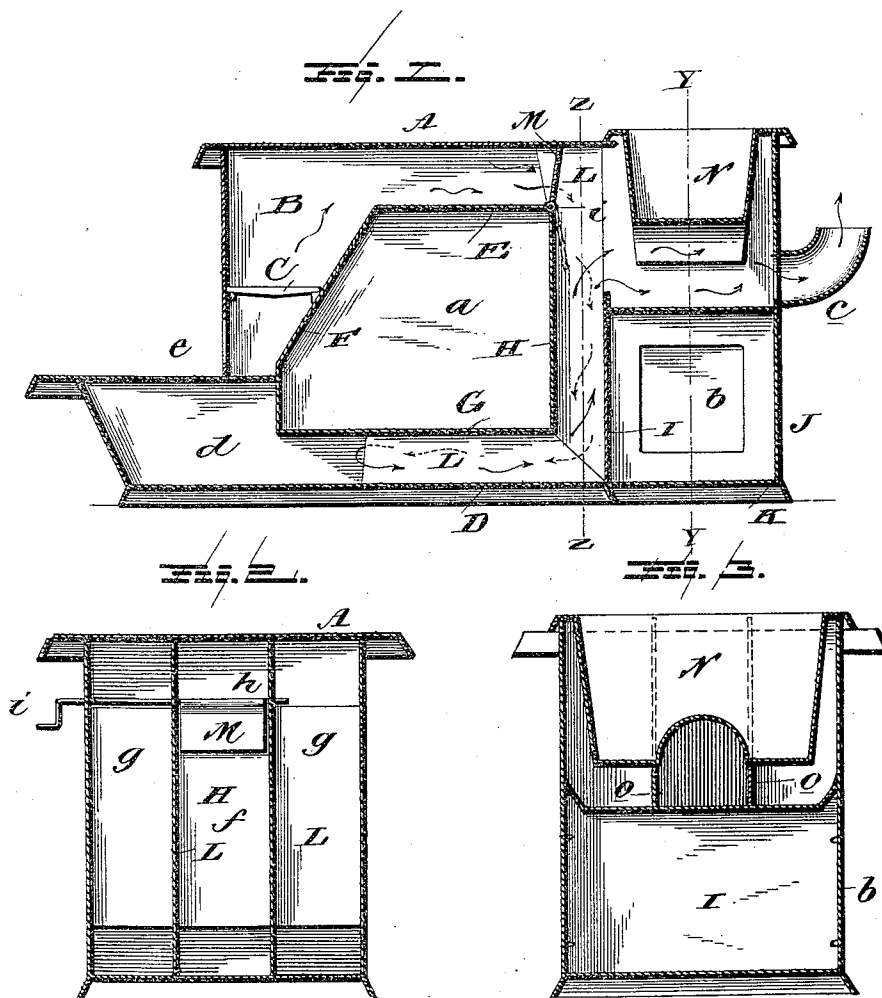


(No Model.)

J. WHITE.
RESERVOIR COOKING STOVE.

No. 461,538.

Patented Oct. 20, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN WHITE, OF MEMPHIS, TENNESSEE.

RESERVOIR COOKING-STOVE.

SPECIFICATION forming part of Letters Patent No. 461,538, dated October 20, 1891.

Application filed January 29, 1891. Serial No. 379,526. (No model.)

To all whom it may concern:

Be it known that I, JOHN WHITE, a citizen of the United States, residing at Memphis, in the county of Shelby, State of Tennessee, have
5 invented certain new and useful Improvements in Reservoir Cooking-Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.
10 This invention relates to certain new and useful improvements in reservoir cooking-stoves; and it has for its objects, among others, to provide an improved stove of this character wherein the products of combustion are
15 compelled to pass directly under the reservoir and not permitted to collect and fill the sides under and around the reservoir, where they would impede the draft of the stove, but are confined in the reservoir-flue formed by the
20 bottom of the reservoir and reservoir-flue strips, which latter serve also as supports for the reservoir or reservoirs. I so construct these reservoir-flue strips that they conform to the shape or configuration of the bottom of
25 the reservoir, whether round or flat. I provide strips which divide the combustion-passage into three separate compartments, the course of the products of combustion being controlled by a single damper; but in all
30 cases being under the reservoir. I provide a strong draft beneath the reservoir, so that the products of combustion will all be carried out of the stove and up the chimney, whereby the stove will not have to be cleaned out; but I
35 arrange the reservoir so that it may be readily removed when necessary for repairs or other purposes. When the oven is not in use, the damper is thrown, so that the products of combustion starting from the fire-box will pass
40 over the top oven-plate to the middle back flue through the opening controlled by the damper, down the middle back flue to the reservoir-flue confined between or formed by the reservoir-flue strips to the collar, and into the
45 chimney. When using the oven, the damper is placed in the other position, so that the products of combustion will be forced from the fire-box over the top oven-plate, down the side back flues (the middle back flue being closed
50 by the damper) to the bottom side flues, under the oven to the bottom middle flue, back to the back middle

flue to the reservoir-flue, through the said flue under the reservoir, and through the collar to the chimney.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical section from front to rear through a stove embodying my improvements. Fig. 2 is a vertical cross-section through the line *z z* of Fig. 1. Fig. 3 is a similar section taken on the line *yy* of Fig. 1.

Like letters of reference indicate like parts throughout the several views in which they occur.

Referring now to the details of the drawings by letter, A designates the top of the stove; B, the fire-box; C, the grate; D, the bottom of the stove; E, the top oven-plate; F, the front oven-plate; G, the bottom oven-plate; H, the back oven-plate; I, the middle back; J, the extension back, and K the closet bottom.

a is the oven, and *b* the warming-closet, the latter formed in the extension, as seen in Fig. 1.

c is the collar on the extension back and designed to be connected with the chimney. (Not shown.)

The fire-box is separated from the passage-way *d* beneath the same by the hearth-plate *e*, as seen in Fig. 1.

Lare strips arranged between the oven-back and the middle back and extended horizontally between the bottom of the stove and the bottom of the oven to nearly the front end of the oven, as seen in Fig. 1, dividing the space into three flues, a middle flue *f* and two side flues *g*, as seen in Fig. 2. These flue-strips extend to the top of the stove, as seen in Figs. 1 and 2, and the opening *h* at the upper end of the center one, which communicates with the flue beneath the reservoir, is controlled or covered and uncovered by the damper M, provided with a suitable handle *i*, which extends through the side wall of the stove, as seen in Fig. 2. When the damper is closed, as seen in Fig. 1, the course of the products of com-

bustion will be through the side flues, down the back of the oven, and along the side flues at the under side thereof, and thence through the middle bottom flue and up the central back flue, and thence out beneath the reservoir through the collar, and out the chimney. The course of the products of combustion is indicated by arrows in Fig. 1. When the damper is open, as shown by dotted lines in Fig. 1, the course of the products of combustion will be direct through the opening in the central flue, through beneath the reservoir, and out the collar into the chimney.

N is the reservoir, which is provided with a flange at the top, by which it is supported upon the top of the stove, as seen in Figs. 1 and 3, and is provided centrally with a passage-way for the products of combustion.

O are reservoir-flue strips, which are arranged in the extension above the warming-closet, and upon these strips the reservoir is supported, as seen in Fig. 3, the strips being so arranged that they completely close the space upon each side of the flue beneath the reservoir, as seen in Fig. 3, so that the ashes and smoke cannot get into the space upon each side of the flue beneath the reservoir. This flue beneath the reservoir communicates with the interior of the collar, as seen in Fig.

1. This flue beneath the reservoir enables me to utilize the heat of the products of combustion to heat the water, increasing the heating-surface, as will be readily understood. The reservoir-flue strips prevent the products of combustion from getting beneath the res-

ervoir upon the sides of the said flue, and hence the stove is rendered more durable, and the ashes cannot settle and accumulate to prevent or impede the draft, being carried out by the draft through the reservoir-flue.

What I claim as new is—

1. The combination, with the stove having an extension, of the reservoir-flue strips and a reservoir supported upon said strips and having a passage-way for the products of combustion therethrough horizontally from front to rear, as set forth.

2. The combination, with a stove having an extension, of the reservoir-flue strips in said extension and dividing the same into three separated flues and the reservoir resting upon said strips with horizontal communication through one of the compartments with the others closed from the same, as set forth.

3. The combination, with the stove, of the strips forming middle and side flues along the back of and beneath the oven, the removable reservoir having horizontal passage beneath the same and extending from front to rear, and a damper arranged within the stove to regulate the passage of the products of combustion through either the central or the side flues, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN WHITE.

Witnesses:

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F. Z. MONTEVERDE.