

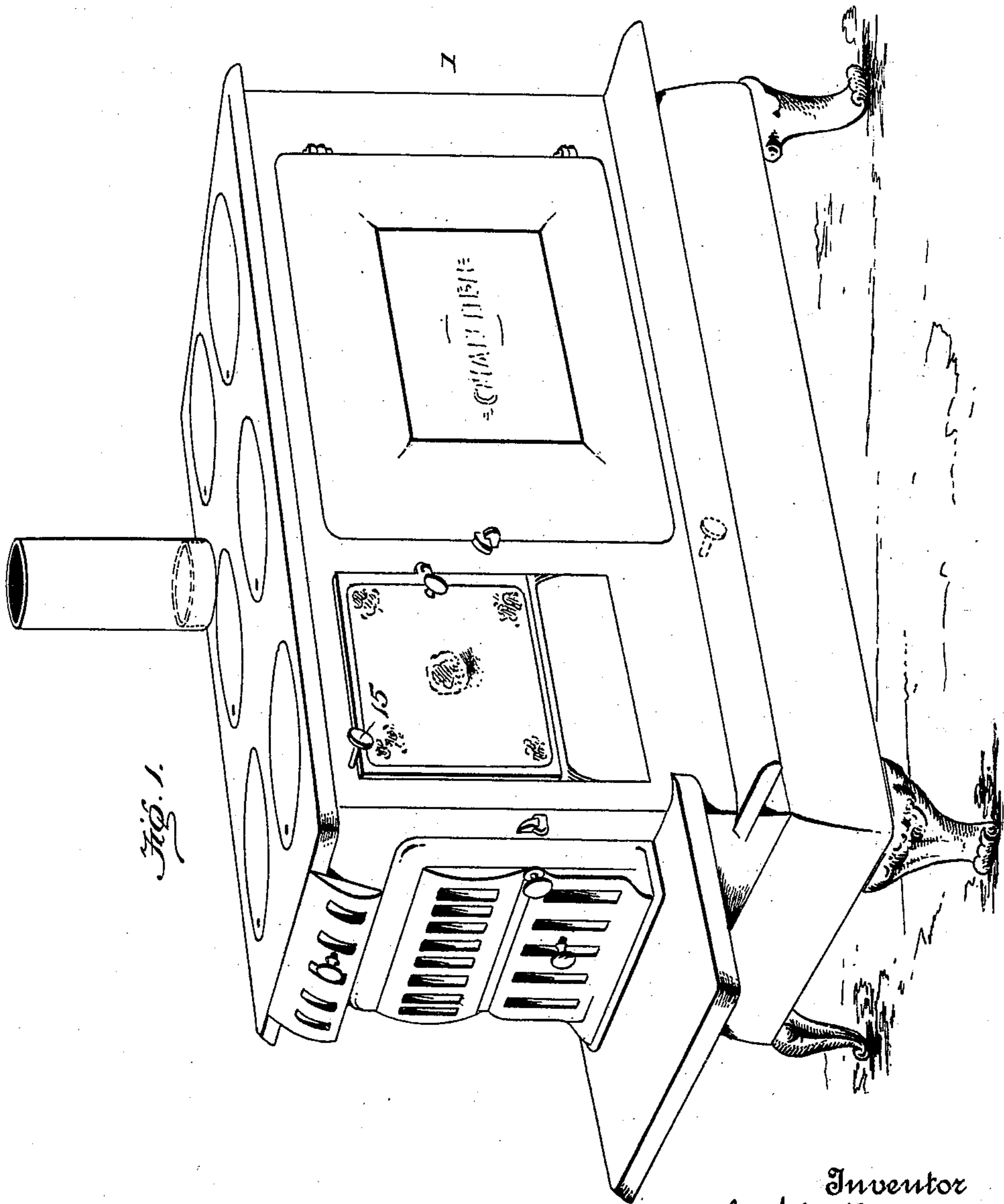
(No Model.)

4 Sheets—Sheet 1.

H. W. MASON.
STOVE OR RANGE.

No. 602,166.

Patented Apr. 12, 1898.



Witnesses

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(No. Model.)

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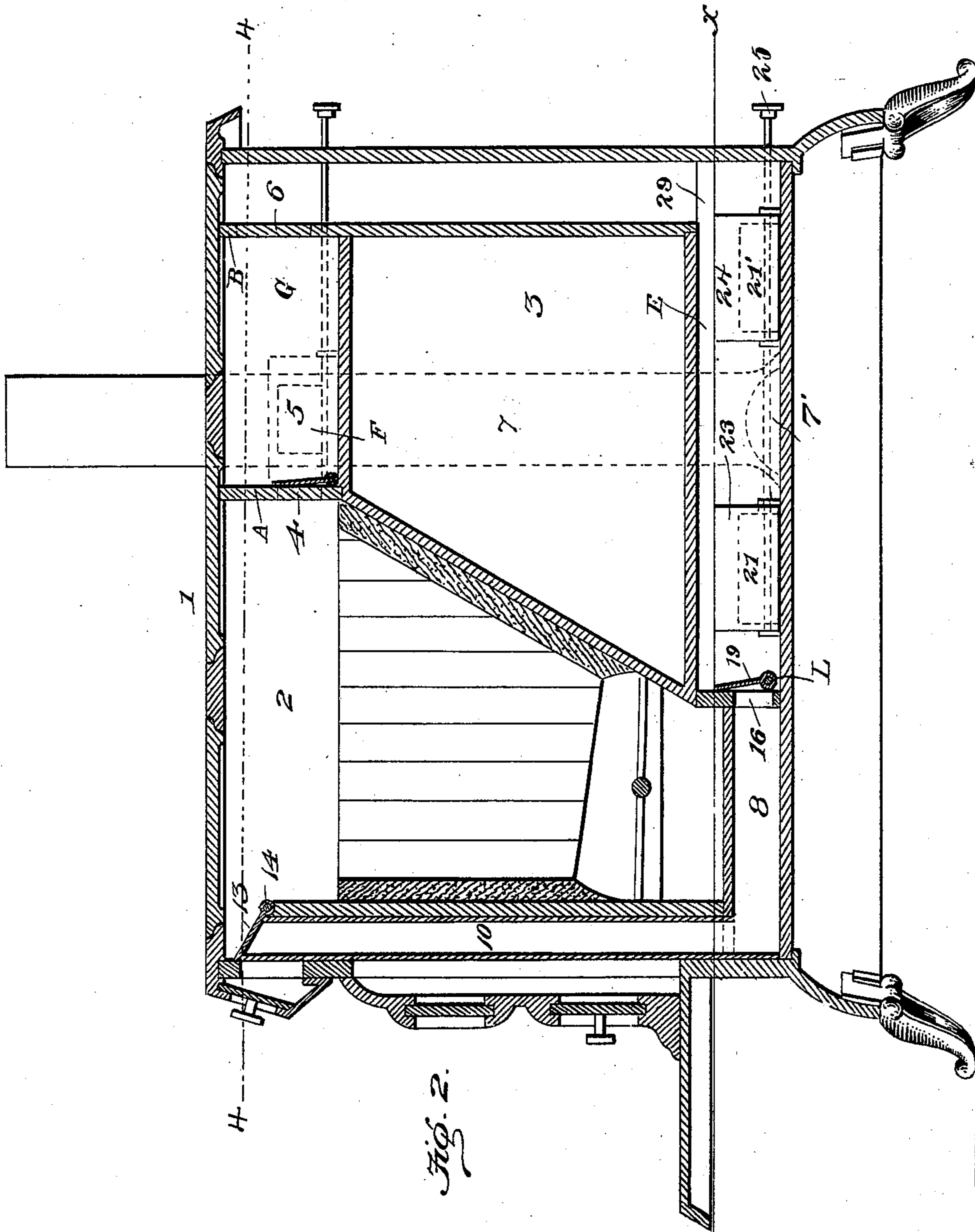


Fig. 2.

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(No Model.)

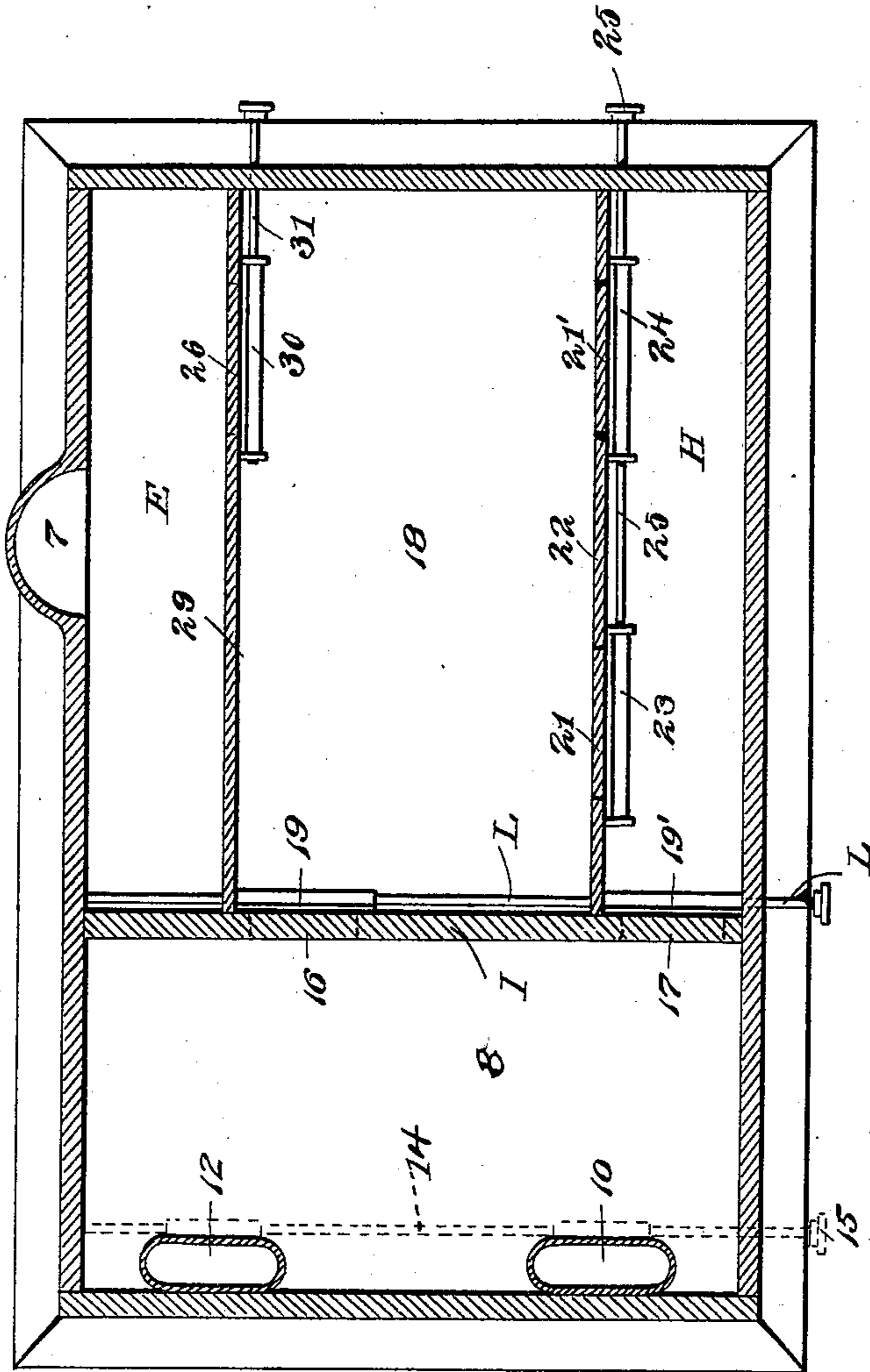
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Fig. 3.



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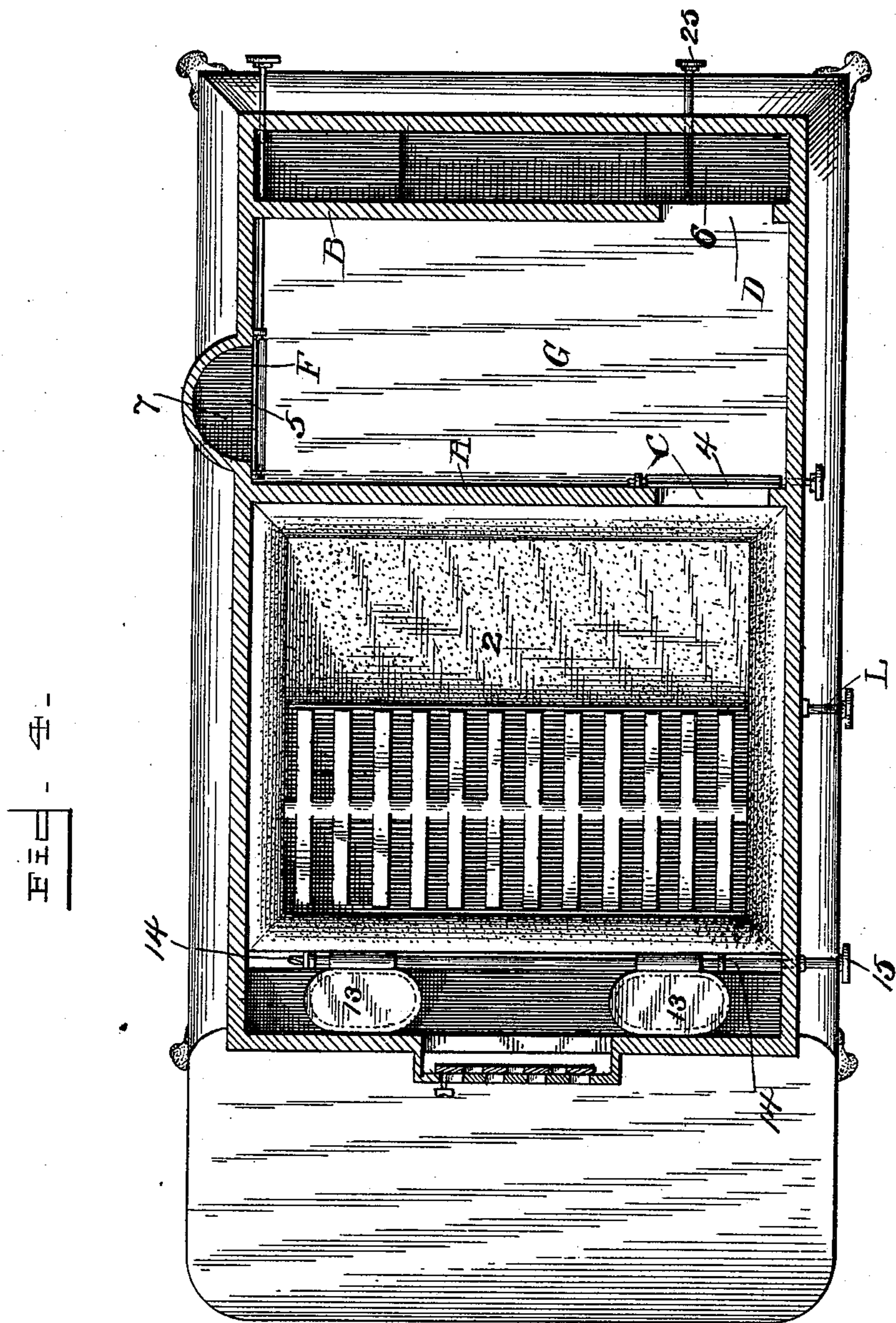
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No. 602,166.

Patented Apr. 12, 1898.



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UNITED STATES PATENT OFFICE.

HERBERT W. MASON, OF GLENS FALLS, NEW YORK.

STOVE OR RANGE.

SPECIFICATION forming part of Letters Patent No. 602,166, dated April 12, 1898.

Application filed December 10, 1896. Serial No. 615,179. (No model.)

To all whom it may concern:

Be it known that I, HERBERT W. MASON, a citizen of the United States, residing at Glens Falls, in the county of Warren and State of New York, have invented certain new and useful Improvements in Stoves or Ranges; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in cooking stoves or ranges, and more particularly to that class wherein the products of combustion may be made to pass over or under or both over and under the oven at will; and the object is to provide a simple and effective stove or range of this character.

To this end the invention consists in the construction, combination, and arrangement of the stove or range, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings like characters of reference indicate corresponding parts in the several figures.

Figure 1 is a perspective view of a cooking-stove embodying my invention. Fig. 2 is a longitudinal section. Fig. 3 is a horizontal section on the line $x x$ of Fig. 2. Fig. 4 is a similar view on the line 4 4 of Fig. 2.

1 represents the stove proper, 2 the fire-pot, and 3 the oven. That portion between the top of the oven and the top of the stove is provided with two vertical transverse partition-walls A and B, the former having a damper-orifice C, controlled by a damper 4, and the latter wall with an opening D, communicating with the vertical passage-way 6 between the back of the oven and the back of the stove and which opens into a horizontal passage-way 18 between the bottom of the oven and the bottom of the stove proper and separated from the side walls of the stove by the longitudinal partitions 22 and 29, the latter of which is provided with an opening 26, controlled by a damper 30.

7 represents the flue, extending vertically on one side of the stove and communicating at its lower end through an orifice 7' with the passage E under the oven and between the partition 29 and the adjoining side of the stove proper. The upper end of said flue is

also provided with an orifice F, which communicates with the passage G above the oven and between the partitions A and B, and said orifice F is controlled by a damper 5.

The longitudinal partition 22 is provided with two orifices 21 21', which establish communication between the passages H and 18, and these orifices 21 21' are simultaneously controlled by the dampers 23 24, fixed to the rod 25.

I represents a transverse partition located under the forward lower front end of the oven and the stove-bottom, and it is provided with an orifice 16, which communicates with the passage 8, located under the fire-pot, and the passage 18 under the center of the oven. A second orifice 17 is also formed in said transverse partition I, which establishes communication between the passage 8 and the passage H. Both of the orifices 16 and 17 are simultaneously controlled by the dampers 19 19', fixed on the rod L.

10 and 12 represent two vertical flues extending parallel between the inside of the front of the stove and the front wall of the fire-pot, their upper ends opening into the upper part of the fire-pot and their lower ends opening into the passage 8 under said fire-pot.

13 13 represent dampers fixed to a common rod 14, adapted to simultaneously control the draft through the flues 10 and 12.

When in use for ordinary cooking, all of the dampers are closed except 4 and 5, and then the products of combustion pass directly from the fire-pot, through the orifices C and F, over the oven to the flue 7, and while there is no outlet a sufficient amount of said products find an entrance through the orifice D into the passage 6 and thence into the passage 18 under the bottom of the oven.

In baking pies, cakes, and similar pastry, where it is desired to have the bottom of the article thoroughly done, the dampers 4 and 5 are closed and the dampers 13 13, 19 19', 23, 24, and 30 are opened, thus cutting off the products from the top of the oven and allowing said products to pass from the fire-pot, down through the vertical flues 10 12, into the passage 8 under the fire-pot, and thence through the orifice 16 into the passage 18 under the oven and also through the orifice 17 into the passage H, and from thence through

the orifices 21 21' into the passage 18, from whence the combined products pass through the orifice 26 into the passage E, where they escape into the flue 7 through the orifice 7'.

5 Of course it will be understood that by a proper manipulation of the dampers the products of combustion may be divided and a portion allowed to pass over and a portion under the oven where desirable.

10 Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as
15 clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States,
20 is—

A cooking stove or range, comprising the fire-pot 2, provided with a passage 8 located beneath said pot, vertical flues 10, 12, extending from the upper part of said fire-pot
25 and communicating with said passage, dampers 13, 13, fixed on a common rod 14 and arranged to simultaneously control said flues in combination with the oven 3, the partitions

A, B, extending from the top of the oven to the top plate of the stove and provided with 30 the orifices C and D and the damper 4 arranged to control the orifice C, the longitudinal partitions 22 and 29, provided with the orifices 21, 21', and the orifice 26, the dampers 23, 24, fixed on the common rod 25 and 35 adapted to simultaneously control said orifices 21, 21', and the damper 30 adapted to control the orifice 26, the transverse partition I extending between the sides of the stove and between the forward end of the oven and 40 the bottom plate of said stove, and provided with the orifices 16 and 17, the dampers 19, 19', fixed on a common rod L, and adapted to simultaneously control said orifices 16, 17, the vertical flue 7 formed with the orifice 7', 45 communicating with a passage beneath the oven and with an orifice F, communicating with a similar passage above said oven and a damper 5, adapted to control said orifice F, substantially as and for the purpose set forth. 50

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

HERBERT W. MASON.

Witnesses:

H. PRIOR KING,
CASS C. LAPOINT.