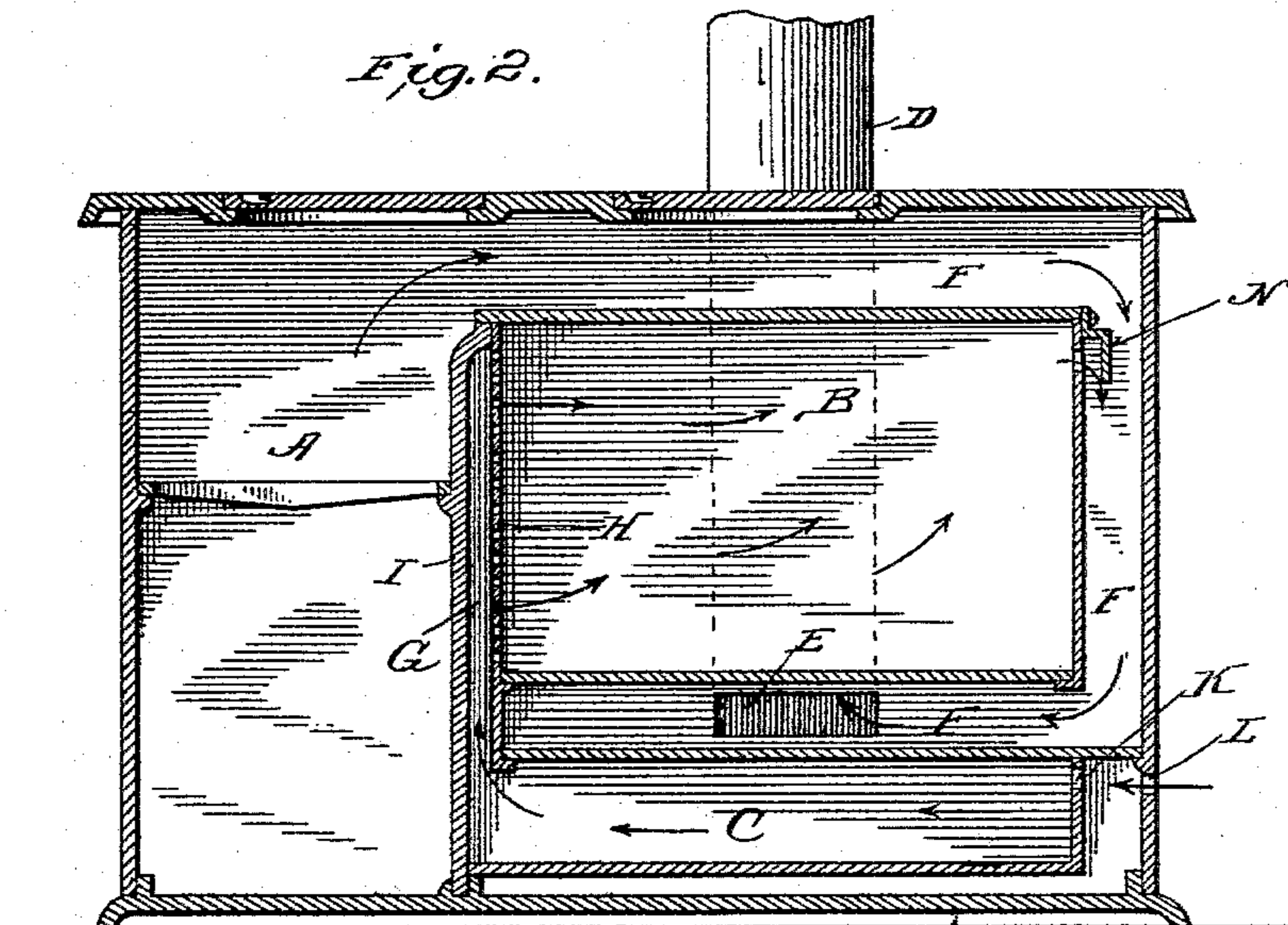
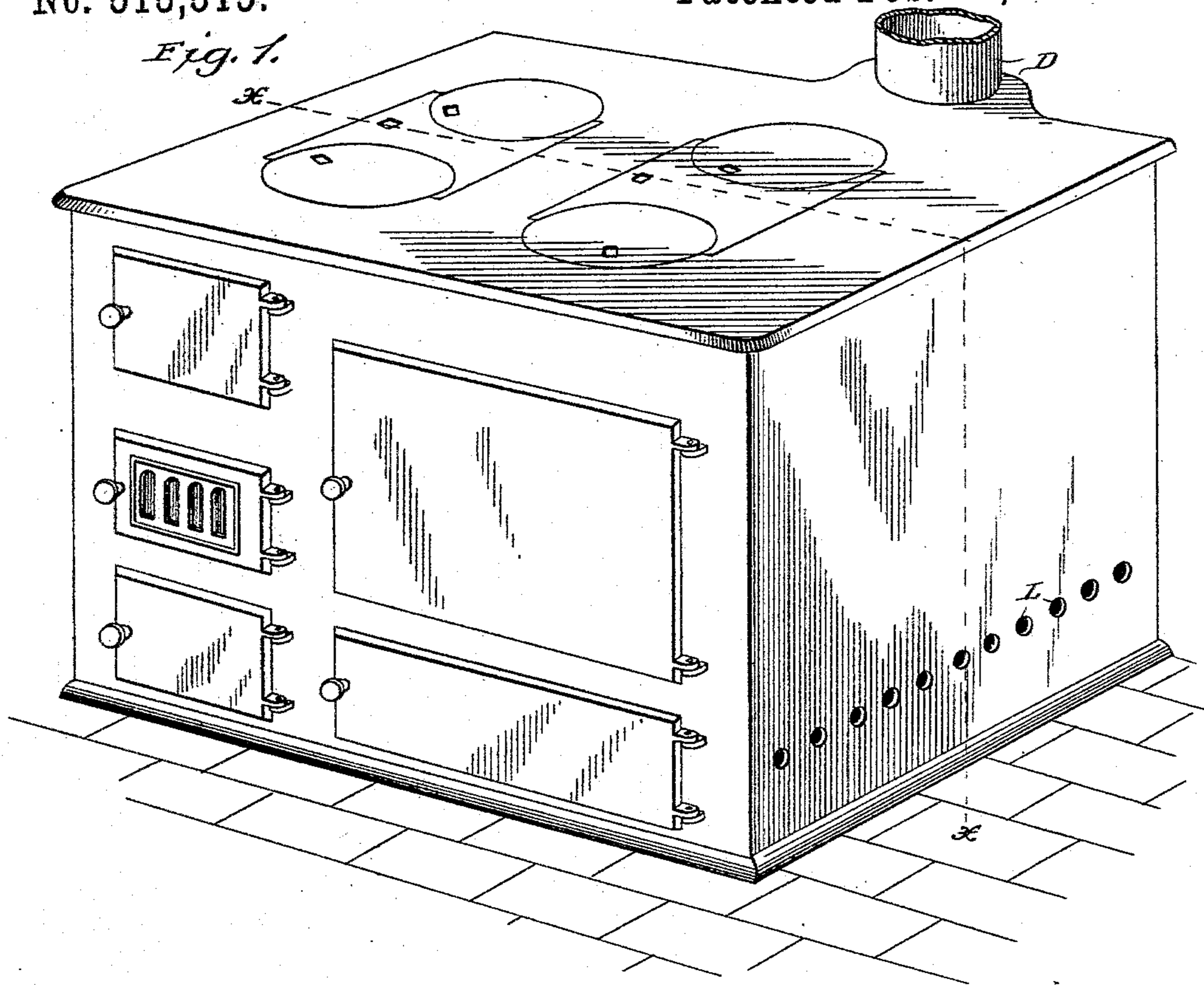


(No Model.)

W. L. BUTTS.
STOVE OR RANGE.

No. 515,515.

Patented Feb. 27, 1894.



witnesses:
Harry D. Rohrer.
O. Darley.

Inventor:
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Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM L. BUTTS, OF EVANSVILLE, INDIANA.

STOVE OR RANGE.

SPECIFICATION forming part of Letters Patent No. 515,515, dated February 27, 1894.

Application filed June 16, 1893. Serial No. 477,835. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. BUTTS, a citizen of the United States, and a resident of Evansville, in the county of Vanderburg and State of Indiana, have invented a certain new and useful Improvement in Stoves or Ranges, of which the following is a description.

My invention has reference to improvements in stoves and ranges whereby a ventilation of the oven is effected.

The object of the invention is to provide for a constant supply of fresh air to the oven without lowering the temperature of the oven to any appreciable degree. In securing this result it has been my aim to utilize the surplus heat of the stove, and to this end the invention consists in the novel construction and arrangement of parts, all as hereinafter fully set forth.

In the accompanying drawings illustrating the invention, Figure 1, is a perspective view of a stove in which is shown at the rear near its base a row of holes for the inlet of fresh air. Fig. 2, is a longitudinal vertical cross section taken through the stove on the line $x-x$ of Fig. 1.

The stove or range to which the herein described improvements are applicable may be of any desired form, that shown being the well-known form of cooking-stove or range having the fire-chamber A located in the upper forward part of the same.

The stove is provided as usual with the cooking-oven B, and the warming-oven C located at the base.

In the present instance the smoke-pipe D communicates with the interior of the stove through an opening E located in the chamber formed between the bottom of the oven B and warming-oven C, and by so locating the outlet of the products of combustion the heat units are caused to take the circuitous route shown before entering the smoke-pipe, thus thoroughly parting with their heat and uniformly heating the oven. The draft inclosing-chamber F formed between the oven B and the stove casing and between the two ovens is cut off at the lower forward end and a chamber G formed between the forward end

H of the main oven and the partition I, and communicating with the warming-oven C. The end-wall H of the oven is provided with perforations whereby to establish communication between the chamber G and the main oven, and a series of apertures K are formed in the rear end of the warming-oven to allow the entrance of fresh air from the inlet holes L in the stove casing. The rear end of the oven near its top is provided with a series of openings M protected by a hood N secured to the outer face of the end wall and extending down over said openings whereby to prevent any possibility of the entrance of smoke to the oven. The course of the draft effected by the above described construction and arrangement is clearly shown by the arrows; the draft of the smoke flue from the fire-chamber being over the top of the oven down at its rear end and thence under the same and out through the opening E; and the fresh air draft is from the opening L through the warming-oven where it becomes heated in its passage therethrough, and thence into the chamber G between the forward end of the main oven and the inner wall of the fire chamber and ash-pit where its temperature is brought to a still higher degree preparatory to entering the main oven through the perforations in its forward end. This draft of fresh air is brought about by the smoke draft through the communication in the upper portion of the rear end of the oven as will be readily understood.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a stove or range the combination with the cooking-oven having communication with the smoke flue at one end and at its other end communication with a hot air chamber, of a warming oven or chamber communicating with said hot air chamber provided with openings communicating with the outer air, as and for the purpose set forth.

2. In a stove or range, the combination with the cooking-oven and a warming-oven or chamber, of a hot-air chamber connecting the ovens, and a draft flue extending over the top of the cooking oven, down at its rear end and

between the bottom of said oven and the top
of the warming oven, having its exit located
in the space between the two ovens, said cook-
ing oven having communication with the draft
5 flue at its rear end, and the said warming-
oven having communication with the outer
air at its rear end, substantially as described.

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

WILLIAM L. BUTTS.

Witnesses:

JAMES G. OWEN,

A. L. BERRIDGE.