

J. S. MARSH.
Cooking Stove.

No. 8,040.

Patented April 15, 1851.

Fig. 1

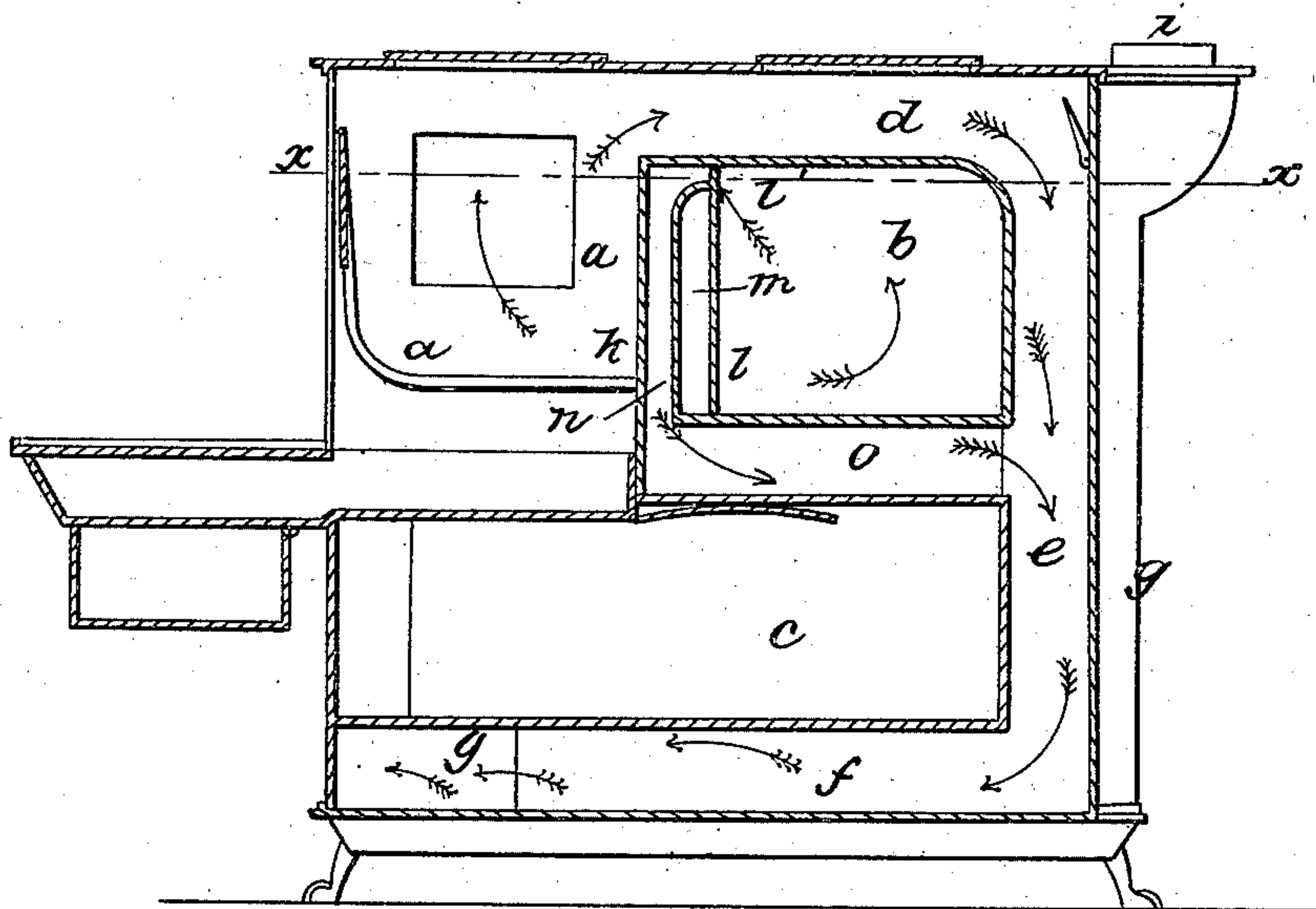
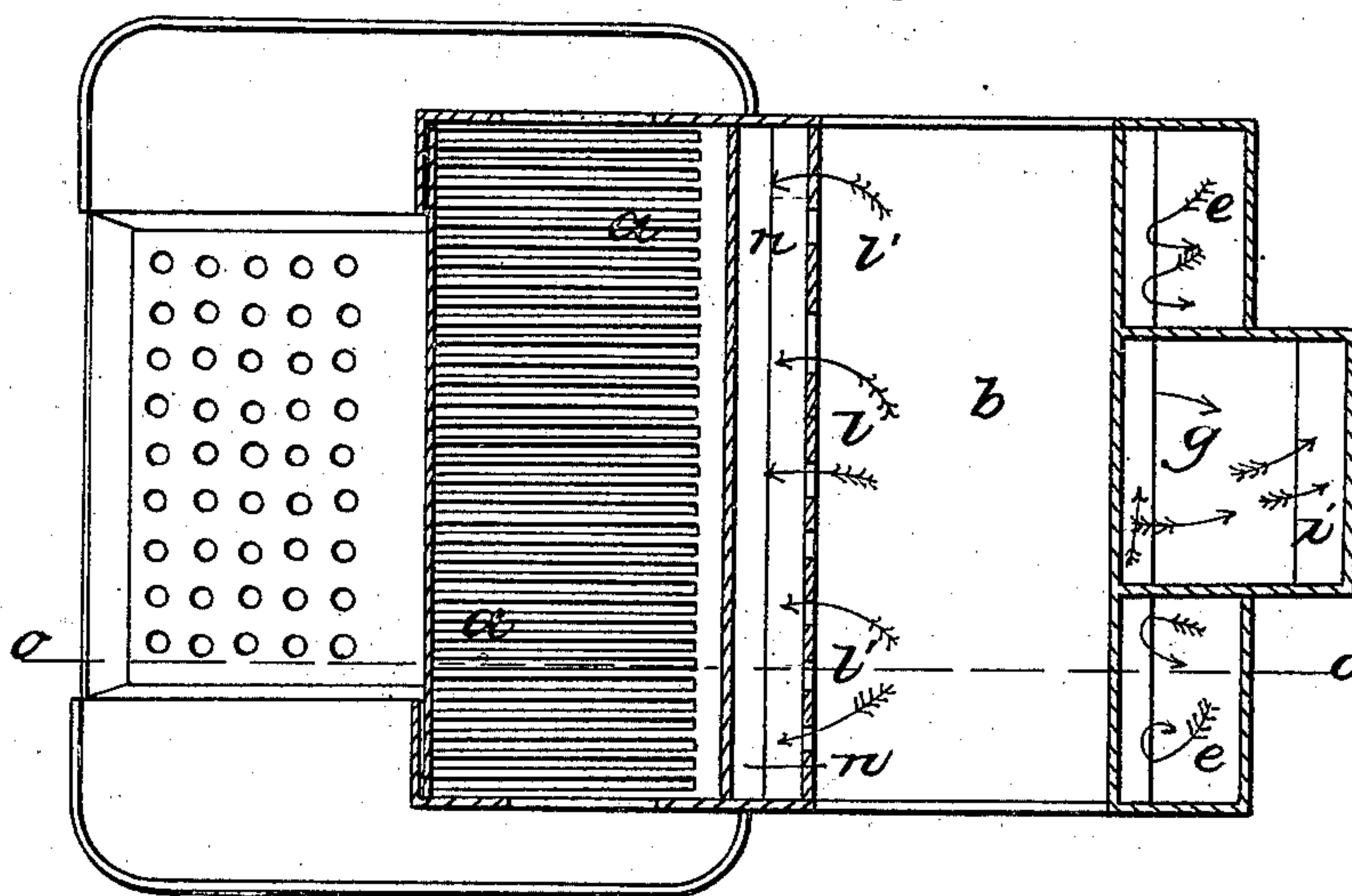


Fig. 2



UNITED STATES PATENT OFFICE.

JAMES S. MARSH, OF LEWISBURG, PENNSYLVANIA.

COOKING-STOVE.

Specification of Letters Patent No. 8,040, dated April 15, 1851.

To all whom it may concern:

Be it known that I, JAMES S. MARSH, of Lewisburg, in the county of Union and State of Pennsylvania, have invented certain Improvements in Cooking-Stoves, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawings, in which—

Figure 1, represents a sectional view taken in the line *e, e*, Fig. 2; Fig. 2, a view through *x, x*, Fig. 1.

In stoves having upper and lower ovens, the former is very liable to be overheated by its close proximity to the fire chamber, while the lower oven is deprived by the upper of its proper proportion of heat.

The design of my improvements is to effect the more equal distribution of the heat in the two ovens, by conveying the surplus heat from the upper oven to the flues which surround the lower one; and also by withdrawing the air from the upper oven it is ventilated at the same time its surplus heat is removed.

In the drawing (*a*) is the fire chamber, (*b*) the upper oven, and (*c*) the lower oven. The smoke and heated air from the fire pass as shown by arrows; first, over the top of the upper oven by the flue (*d*), down the back by the corner flues (*e*), under the bottom by outer flues (*f*), and from thence by the center bottom and back flue (*g*) to the chimney (*i*). Between the back plate (*h*) of

the fire chamber (*a*), and the front plate (*l*) of the upper oven, is a plate (*m*), the space between which and the front oven plate (*l*) is filled with fire clay, to prevent too great a radiation in that direction. In the upper edge of the plate (*l*) at (*l'*) is a row of holes which open into the space (*n*) through which the air and surplus heat from the oven (*b*) pass to the passage (*o*) between the two ovens, and from thence join the smoke in the flues (*e*) in its passage to the chimney. Thus the air surcharged with heat, over what is necessary for baking, and also steam arising from the articles while cooking, escape from the oven (*b*) and while passing through the space (*n*) receive an access of heat from the back of the fire chamber; and from thence passing by the passage (*o*) and the flues which surround the lower oven (*c*), its heat added to that from the smoke, is imparted to the lower oven.

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

The apertures (*l'*) and the passages (*n* and *o*), by which the air containing the surplus heat from the oven (*b*) is conveyed to the back of the fire chamber, where it receives an access of heat, and afterward to the flues (*e*), by which arrangement the heat is equalized between the two ovens, and the upper one is ventilated, as set forth.

JAMES S. MARSH.

Witnesses:

JOHN B. HAWTHORNE,
MARTIN HANN.