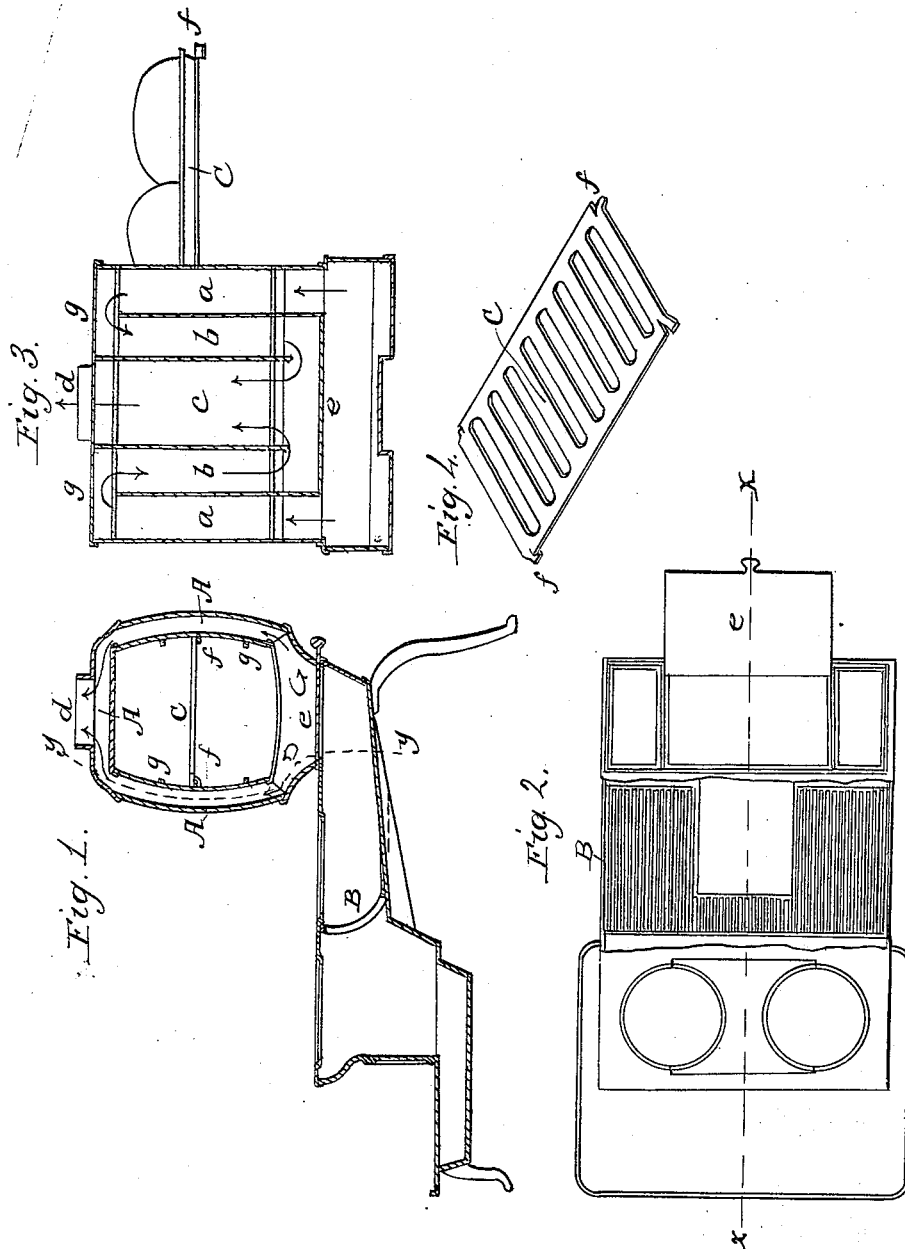


P. A. PALMER.

Cooking Stove.

No. 7,672.

Patented Sept. 24, 1850.



UNITED STATES PATENT OFFICE.

P. A. PALMER, OF LE ROY, NEW YORK.

HEATING ELEVATED OVENS.

Specification forming part of Letters Patent No. 7,672, dated September 24, 1850; Reissued September 13, 1859, No. 811.

To all whom it may concern:

Be it known that I, P. A. PALMER, of Le Roy, in the county of Genessee and State of New York, have invented new and useful
5 Improvements in Cook-Stoves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

15 Figure 1 is a vertical section through the stove from front to back, taken in the line *x, x*, of Fig. 2, which latter is a top view of the stove with the oven removed and a part of the top plate broken away; Fig. 3 a cross section through the line *y, y*, of Fig. 5 showing the arrangement of flues around the oven, and Fig. 4 a perspective view of the oven grate.

20 The same letters have reference to like parts in all the figures.

The nature of my invention consists in the arrangement of revertible flues in elevated ovens; secondly, in the arrangement
25 of a grate in the four boiler hole elevated oven stove so as to build the fire under the back boilers and nearer the oven for summer use requiring less fire to heat the oven and two boilers than when the fire is made in the front part; and lastly the manner of making oven grates so that they may be drawn
30 nearly out of the oven and support themselves with the weight of articles that may be placed upon them for baking.

35 The description is as follows: My stove has an elevated oven around which I arrange revertible flues for the retaining and more completely distributing the heat throughout the oven. I divide the flue space A, surrounding the oven into a number of flues,
40 *a, a, b, b*, and *c*, in front and back of the oven admitting the draft in the flues *a, a*, at the ends to the top of the oven, thence

down the flues *b, b*, and top *c* to the exit pipe *d*, as represented by the arrows. When the
45 oven is not in use the draft may be admitted directly to the pipe (*d*) through the flue *c*, by opening the damper *e*. The great advantage of this arrangement of flues is the retaining the heat around the oven a greater
50 length of time, constituting it a more perfect baker, and the leading the heat near the ends, bringing it directly under the boiler holes *g, g*, which have heretofore been inoperative from the fact that the heat is led directly to
55 the exit pipe, and away from the boilers on top of the oven.

When more than two boiler holes are formed in the lower part of the stove, I arrange a grate B, back of the front boiler
60 holes, the fire being built upon this grate, the heat is applied more directly to the oven and back boilers without heating the whole stove, and saving a great proportion of fuel in shortening the passage of heat.

My oven grate C, I construct and employ in the usual manner with hooks *f, f*, projecting below so as that they shall project
65 below the bearings of the grate *g, g*, and the grate may be drawn out and support itself with the articles being baked resting thereon
70 as represented in Fig. 3. Grooves may be formed on the edges of the grate, or other analogous devices operating in the same manner.

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

The arrangement and combination of revertible flues in elevated ovens of cook stoves
80 in the manner and for the purpose herein described and represented.

P. A. PALMER

Witnesses:

A. D. SIMPKINS,
J. C. BARBER.