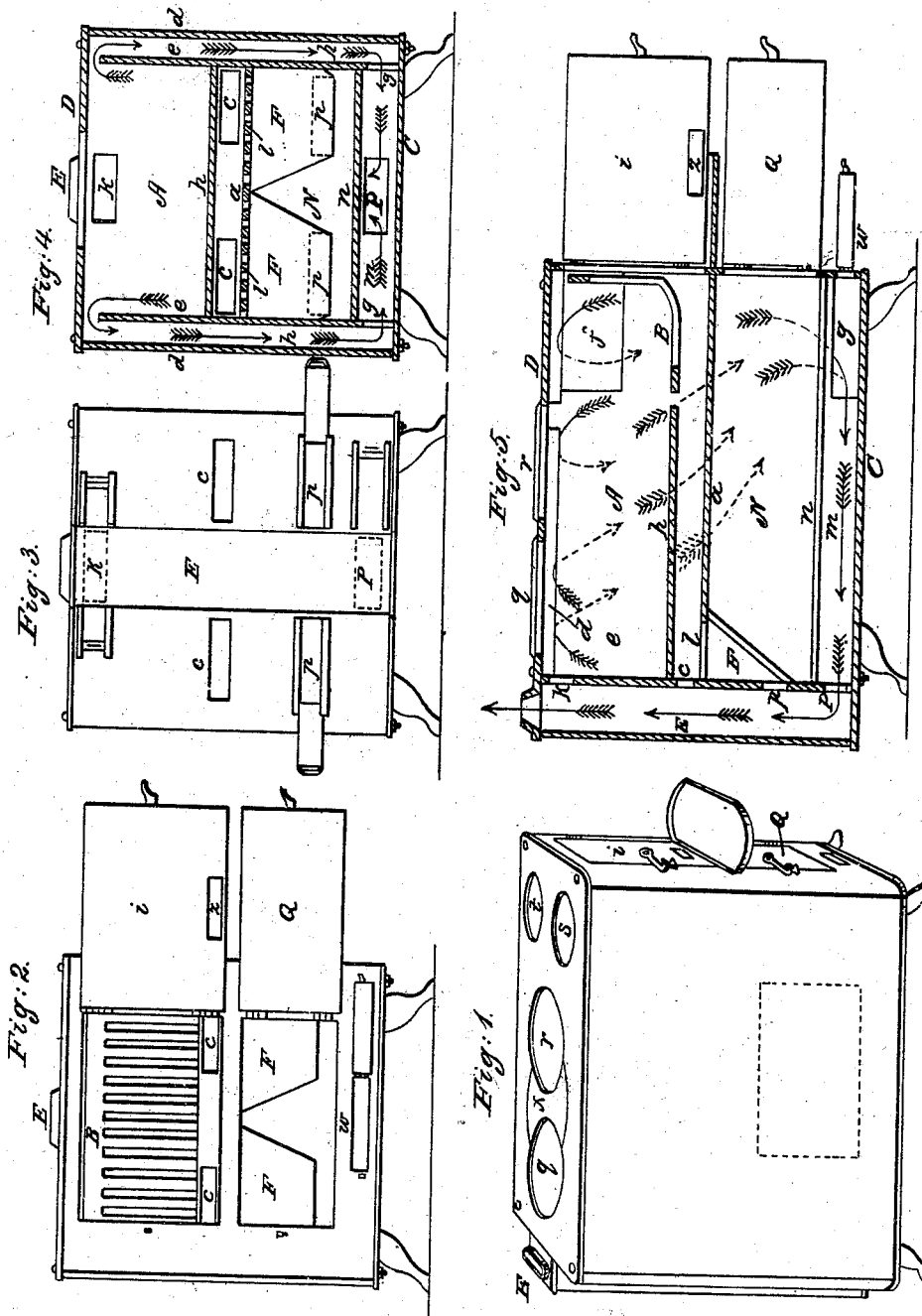


A. LELAND.

Cook Stove.

No. 3,526.

Patented April 4, 1844.



UNITED STATES PATENT OFFICE.

ABNER LELAND, OF MILTON, PENNSYLVANIA.

COOKING-STOVE.

Specification of Letters Patent No. 3,526, dated April 4, 1844.

To all whom it may concern:

Be it known that I, ABNER LELAND, of Milton, in the county of Northumberland and State of Pennsylvania, have invented a new and useful Improvement in Cooking-Stoves, and that the following is a full and exact description of the construction and operation of the same.

In the annexed drawings, Figure 1 is a perspective view of the stove; Fig. 2, the elevation of the front and Fig. 3 of the back of the stove; Fig. 4 is a transverse vertical section through the ash-grate; and Fig. 5 a vertical section lengthwise through the center of the stove.

The same letters refer to the same parts in all the figures.

A, is the fire-chamber, with a movable grate B, which may be taken out.

a, is the bottom or hearth plate, which also forms the top plate of the oven, N.

b, is a loose plate used in connection with the grate for the purpose of conveying the draft from the two openings or air-holes c, c, in the back plate of the stove, this plate is removed when wood is used instead of coal; d, a, are the side plates; e, e, the inner side plates which extend from the bottom plate C, to within an inch or two of the top plate D, of the stove, each inner plate forming with the outer a double side with a space h, between. These inner plates have two small movable plates f, f, opposite the grate, which are taken out when the grate is used, but are left in when wood is employed for fuel; they are likewise notched out at their lower front corners g, g, so as to make a communication between the side spaces h, h, and the space or flue, m, under the bottom plate, n, of the oven.

i, is the door of the fire chamber having an air-hole at z, and, k, is the upper draft-hole which communicates with the smoke-funnel E, and is furnished with a damper for closing it. The back end of the hearth plate is pierced with opening at l, l, through which the ashes when pushed back fall into the shoots F, F, and are conveyed away through the openings p, p, in the back plate, which being furnished with dampers, also serve the purposes of draft holes; by this means the hearth may be kept free from ashes, which is a great advantage in baking in the oven below, as they would prevent the heat from passing through the plate, and thus defeat the operation of baking a good crust on the bread, &c.

P, is the lower or dipping flue, Q the oven door, and w, a hole immediately under it in the front plate for removing the soot, it should be closed with a door, which may have a regulating valve in it which would sometimes be found convenient to check the draft under the oven.

q, r, s, t, are circular openings in the top to receive the pots and other utensils. They are furnished with covers to close them when not in use, and the two q, r, have a loose section x, which can be removed so as to throw them into one for the purpose of using a large elliptical boiler.

When it is designed to use the top of the stove the damper k, is opened, through which the draft after heating the pots passes direct into the smoke funnel, fresh air being supplied through the openings e, e, in the back of the stove and (if necessary) through the ash-tubes F, F.

To use the oven the damper at k, is closed tight, and that at P opened, the effect of which is to turn the heat and draft over the tops of the inner side plates e e, and through the openings f, f, down the sides of the stove through the openings g, g, into the bottom flue, m, and through the draft hole P, into the smoke funnel, as indicated by the arrows in the two sectional drawings (Figs. 4 and 5) thus diffusing the heat equally around the oven.

The degree of heat is regulated either by the damper k, or the small valve in the door at w. When the fuel used is wood, the grate B, and loose plate b, are removed and the small side plates f f, are replaced. The oven door instead of being placed in front may be made in the side as shown by the dotted lines in Fig. 1.

Now what I claim as new and as my invention in the above described stove for which I ask Letters Patent of the United States, is—

The open space between the fire-chamber and oven, and in combination therewith the ash tubes with their grate for discharging the ashes.

Given under my hand this 15th day of March A. D. 1844.

ABNER LELAND.

Witnesses:

W. THOMPSON,
WM. T. STEIGER.