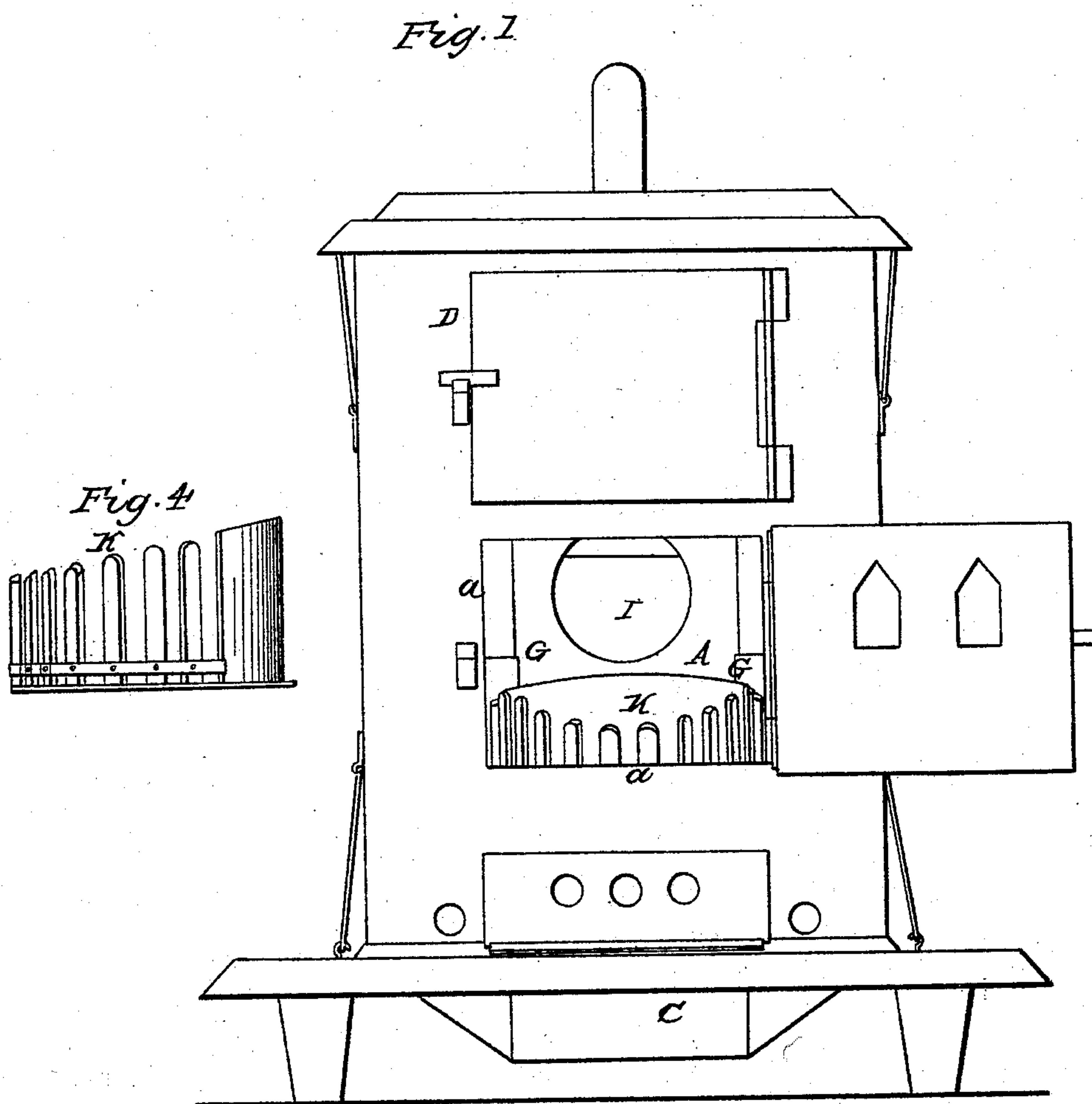


D. G. LITTLEFIELD.
Cooking Stove.

2 Sheets—Sheet 1.

No. 8,047.

Patented April 15, 1851.



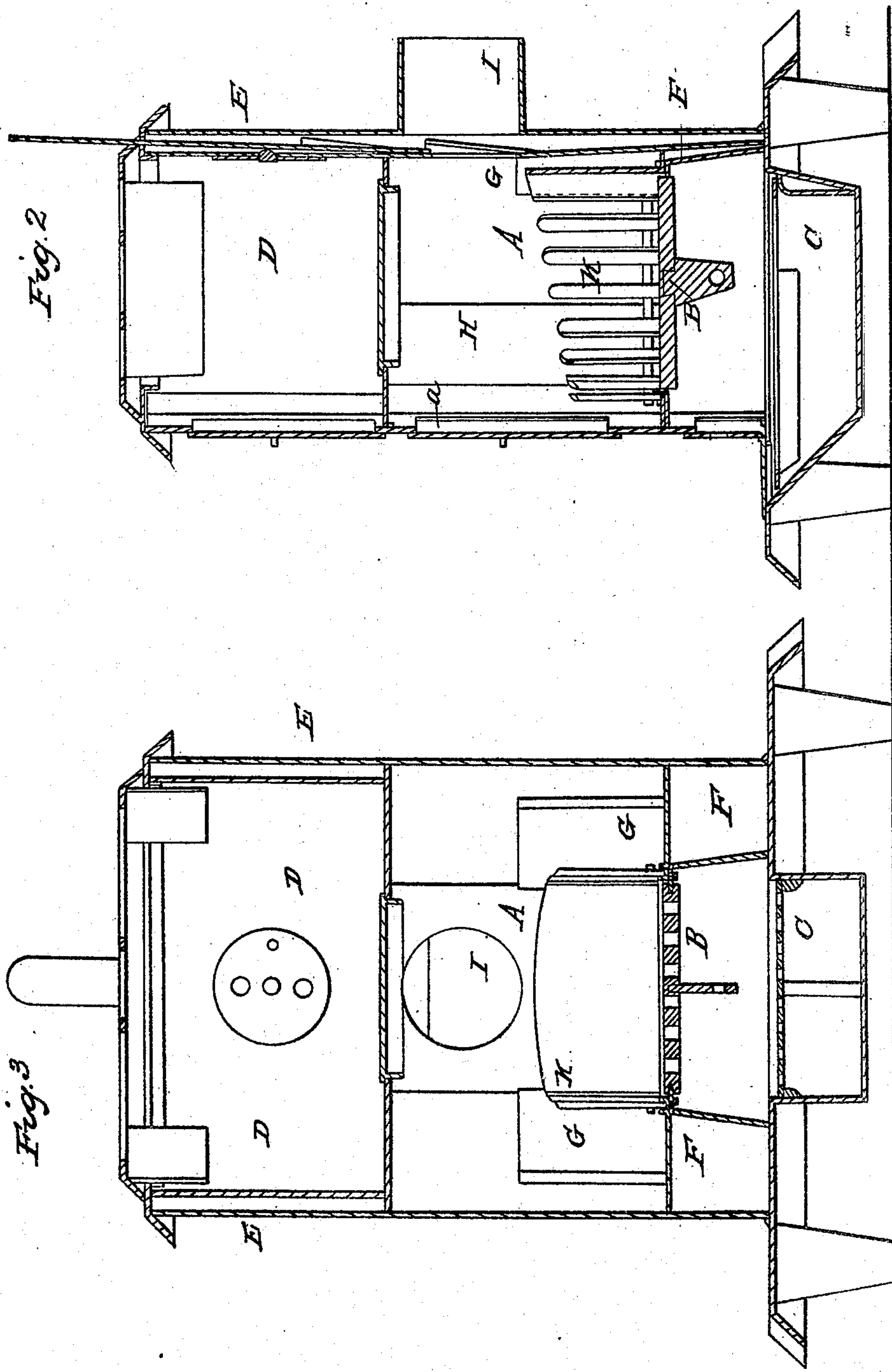
D. G. LITTLEFIELD.

2 Sheets—Sheet 2.

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Patented April 15, 1851.



UNITED STATES PATENT OFFICE.

DENNIS G. LITTLEFIELD, OF LOWELL, MASSACHUSETTS.

COOKING-STOVE.

Specification of Letters Patent No. 8,047, dated April 15, 1851.

To all whom it may concern:

Be it known that I, DENNIS G. LITTLEFIELD, of Lowell, in the county of Middlesex and State of Massachusetts, have invented
5 a new and useful Improvement in Stoves, by which They May be Adapted to the Combustion of Either Wood or Coal, as May be Desirable; and I do hereby declare that
10 the same is described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of the said drawing Figure 1 denotes a front elevation of a stove constructed with
15 my improvement, the fire place door being represented as thrown open. Fig. 2 is a transverse, central and vertical section of it. Fig. 3 is a vertical and central section taken in a plane supposed to be at right angles to
20 the plane of section of Fig. 2. Fig. 4 is a side elevation of the coal fender as removed from the fire chamber.

In the said drawings A represents the fire chamber, or place where the fuel is placed
25 and put in combustion. It is provided with a circular or other proper shaped stationary or turning grate B, which is arranged in the floor of the chamber and directly over an ash chamber C. An oven or air heating
30 chamber D is disposed directly over the chamber of combustion A, and is surrounded on its sides by a consecutive flue space E. On each side of the ash pit C, there is a lateral chamber F, which communicates with
35 the chamber A, by means of a descending flue G which leads from or near the top of the chamber A, downward into the rear part of the said chamber F. Out of the opposite or front part of each of the chambers F, a
40 vertical flue H, leads and enters or opens into the lower part of the flue space E, which partly surrounds the oven.

The discharge flue of the fire place is seen at I, and as placed at the back thereof
45 and between the two descending flues G, G. The flue space surrounding the oven opens into the said discharge flue, the fire place being made to open into it likewise, and to have a closing damper or slide by which the
50 communication may be cut off except through the descending flues, lateral chamber, ascending flues, and flue space around the oven, as described.

The chamber over the fire place may be
55 made and used as an oven for baking or it

may be conducted and employed as an air heating chamber, the air as heated in the same being suffered to escape therefrom through suitable openings or conductors made in the top or other proper part of the
60 said chamber.

The fire chamber should be of a size sufficient to receive sticks of wood of the ordinary size, say about two or three feet in length, while the door way or opening
65 should be made of a width greater than that of the coal fender or basket K, which is a circular or other proper shaped hoop or fence, made separate from the fire grate, and to rest upon the floor of the fire cham-
70 ber and to surround the grate. This fender or hoop fence is for the purpose of holding mineral coal, when such is used for fuel instead of wood. When wood is used, such
75 fender is to be removed from the fire place, the door way of such being made large enough to allow of either the removal or the insertion of the fender as circumstances may require.

In order that the basket may be easily
80 supplied with coal, and still be made to hold a large quantity I construct it higher in rear than it is in front as seen in Figs. 2 and 4. The bed or mass of coal lying in it when it is so made generally permits a sloped
85 surface on its top against which the coal while being supplied from a hod are usually thrown instead of being thrown directly against the back part of the fender. And
90 thus by such a construction of the fender, its back part is more or less preserved from injury by means of coals being thrown against it, when it is in a red hot or very heated state.

My improvement and what I claim—
95

Consists in the peculiar arrangement or manner of combining the fire place, the descending or diving flues, the ash pit, the lateral chambers, the ascending flues, the central discharge flue, the oven or air heat-
100 ing chamber and its surrounding flue space, all as represented in the drawings, and as hereinbefore specified.

In testimony whereof I have hereto set my signature this third day of December
105 A. D. 1850.

DENNIS G. LITTLEFIELD.

Witnesses:

A. R. BOYNTON,
A. T. JOHNSON.