

R. G. COCHRAN.

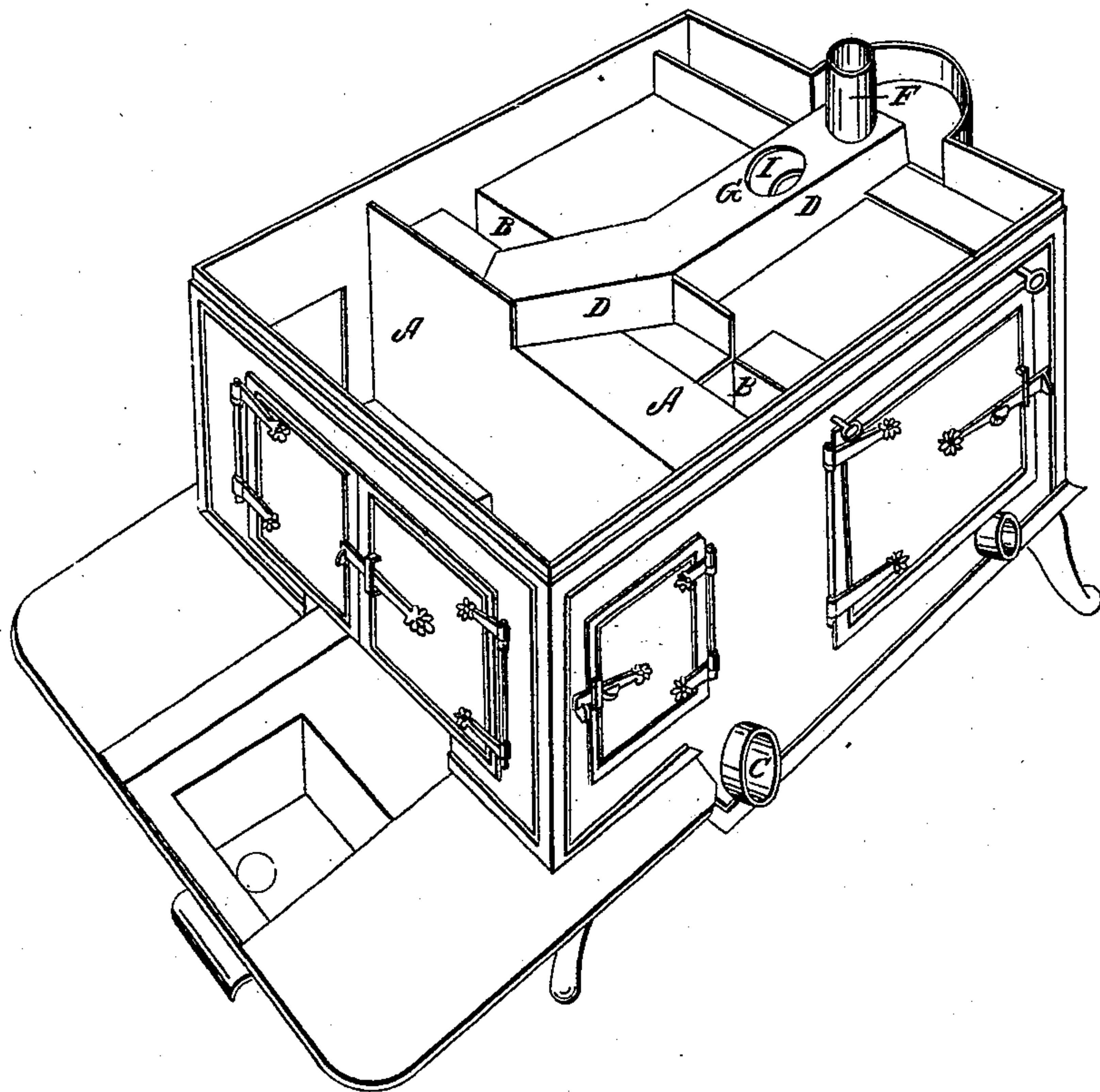
Heating Drum.

2 Sheets—Sheet 1.

No. 1,814.

Patented Oct. 10, 1840.

Fig: 1.



2 Sheets—Sheet 2.

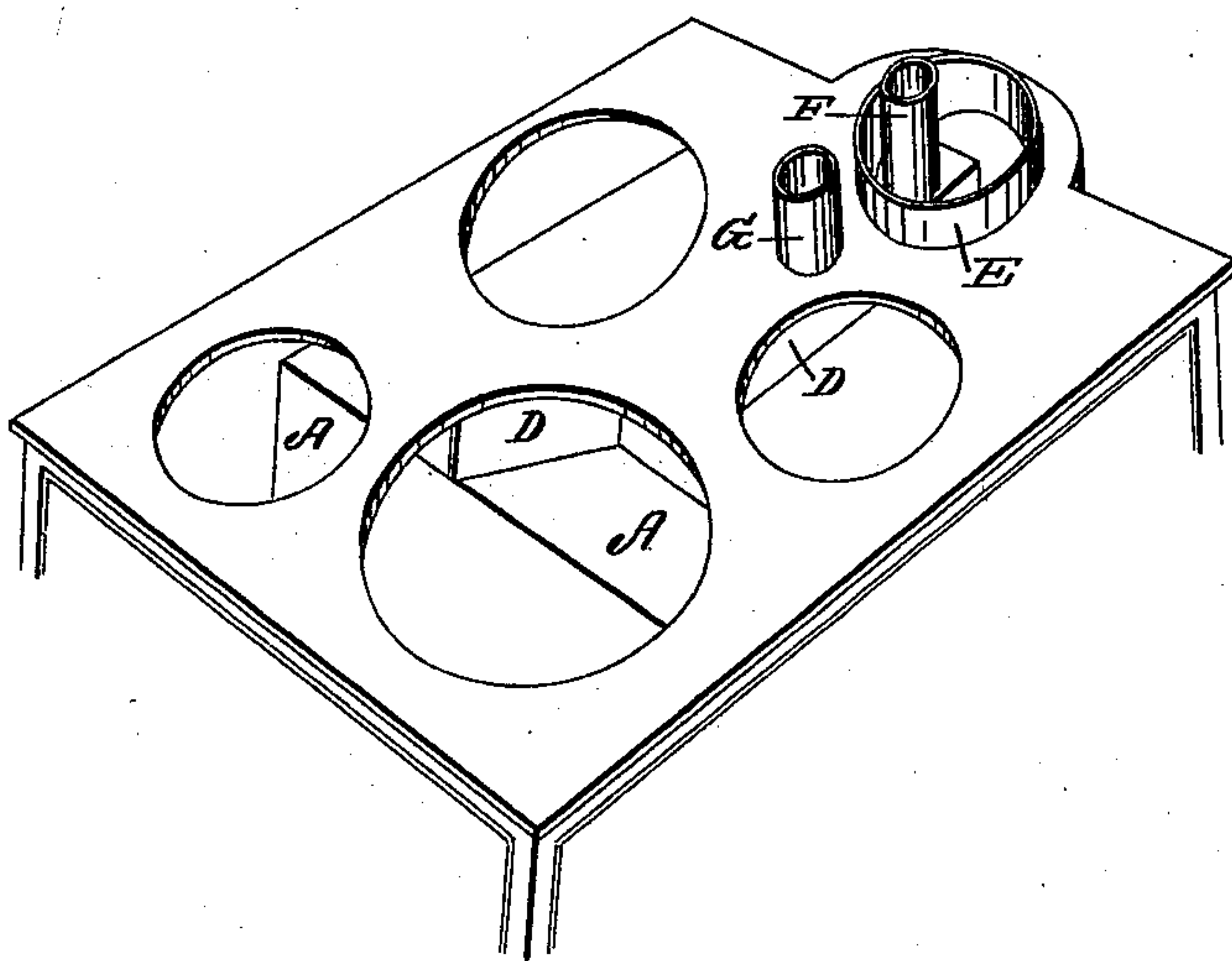
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Fig: 2.



UNITED STATES PATENT OFFICE.

R. G. COCHRAN, OF FRANCISTOWN, NEW HAMPSHIRE.

COOKING-STOVE.

Specification of Letters Patent No. 1,814, dated October 10, 1840.

To all whom it may concern:

Be it known that I, R. G. COCHRAN, of Francistown, in the county of Hillsboro and State of New Hampshire, have made certain improvements in the manner of constructing a cooking-stove, by which it is adapted to the heating of air and to the conveying of the air so heated for the warming of apartments in dwellings in a manner not heretofore practised; and I do hereby declare that the following is a full and exact description thereof.

My improvement may be applied to stoves of various forms, and I do not intend, therefore, to limit it to one of the particular construction which I have represented in the accompanying drawing; nor do I intend to claim the said stove, or any part thereof, as of my invention, with the exception of the particular devices, or manner of arrangement, exhibited in the apparatus for heating the air to be conveyed wherever it may be wanted.

Figure 1, is a perspective view of a cooking-stove containing my apparatus for heating air, the top plate of the stove being removed for the purpose of exhibiting these parts distinctly.

A, A, is an air chest, or hollow box, situated between the fire chamber and the front oven flue B, B; which flue descends in front of the oven, extends under it, and passes up at the back to the exit, or smoke-pipe; there being a flue also over the oven, and valves operating so as to govern and regulate the draft, in the ordinary mode.

C, is an opening leading into this air chest, to which opening a pipe is to be attached, to conduct air from without the apartment into the air chest. In the drawing, the opening C is represented at the side of the stove, but it will in most cases, be found most convenient to make it through the bottom.

D, D, is a tube, or trunk, for conveying the heated air from the air chest to the pipe, or pipes, by which it is to be distributed. Fig. 2, is a view of the top plate of the stove, with the holes for cooking utensils.

E, is the collar to receive the stovepipe.

F, is a heated air tube, shown also in Fig.

1. This tube is represented as rising from the trunk, or tube, D, D, within the stove-pipe, along which it may be continued to any required distance, and pass thence to any apartment to be heated. If desired, the heated air may be conveyed directly from the trunk D, as through a pipe G, which is supposed to lead from the opening G, Fig. 1.

In combination with the foregoing arrangement of the air-chest and its appurtenances for heating air, I constitute the oven a secondary air chest, to be so employed when not used for the purpose of baking.

H, Fig. 1, is an opening leading into the interior of the oven, and connected with a pipe conveying air from without the room, in the same manner with the opening C. This opening also is shown at side, but will generally be made underneath, as it will then pass directly through the lower flue into the oven, while when introduced at the side it must form a knee within the flue. Through the top plate of the oven I make an opening into the trunk D, as seen at I, Fig. 1. To this opening I adapt a valve, or sliding shutter, as I also do to the respective tubes for the conveyance of cold, and of heated air, by which valves the passage through them is completely governed.

Having thus fully described the nature of my improvement and shown the manner in which I carry the same into operation, what I claim as constituting my invention, and desire to secure by Letters Patent, is—

The manner in which I have combined and arranged the air-chest for heating air with a cooking-stove, rendering the oven, or ovens, of such stoves auxiliary thereto, by converting them into air-heating chambers, and connecting them with the air chamber first named, in the manner and for the purpose herein set forth; the whole apparatus being constructed, and operating, substantially as described, with such variations only as may be rendered expedient by the particular construction of the stove used.

R. G. COCHRAN.

Witnesses:

THOS. P. JONES,
M. E. JONES.