

(No Model.)

T. C. COLLINS.
Coal Oil Cooking Stove.

No. 242,887.

Patented June 14, 1881.

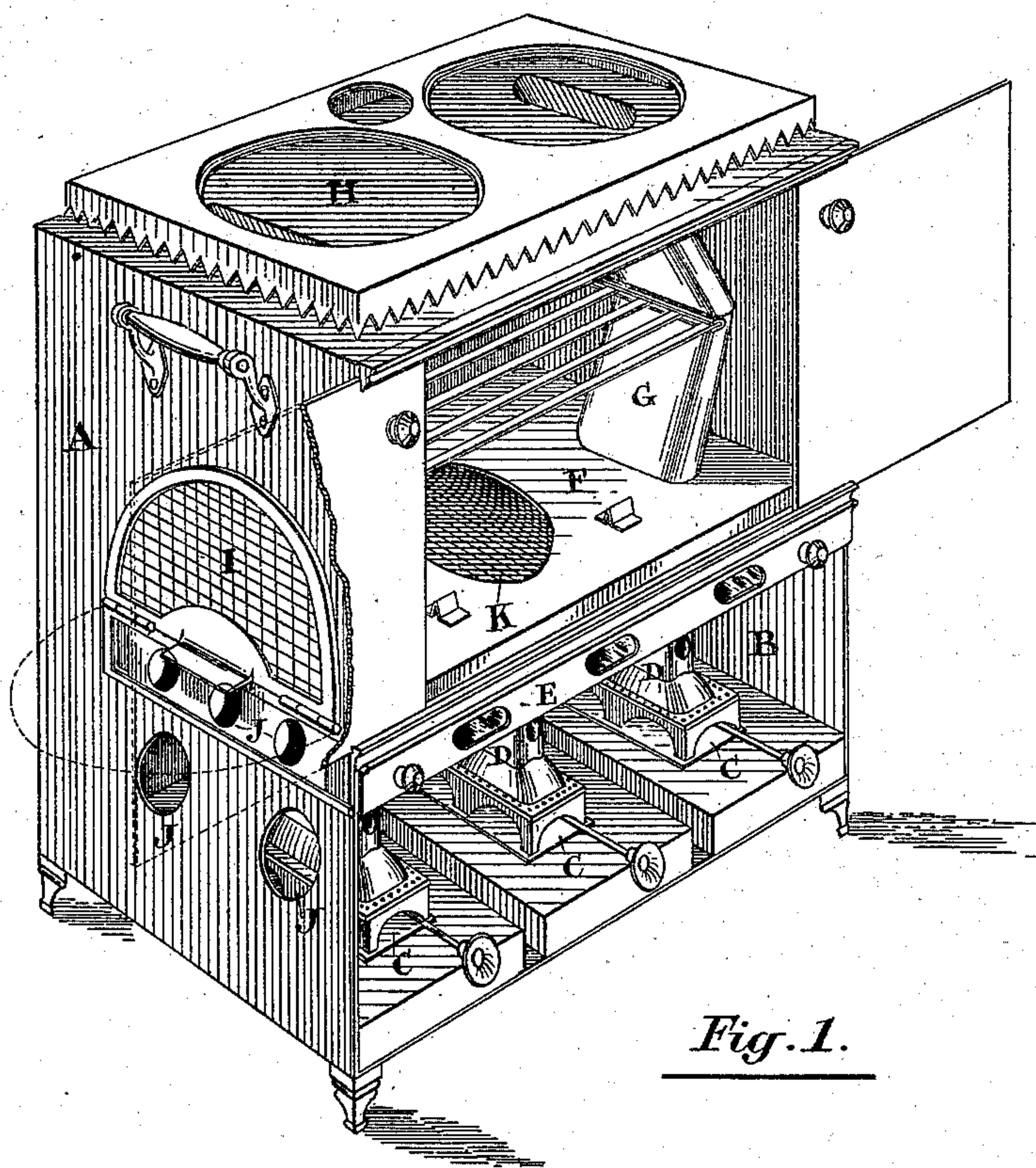
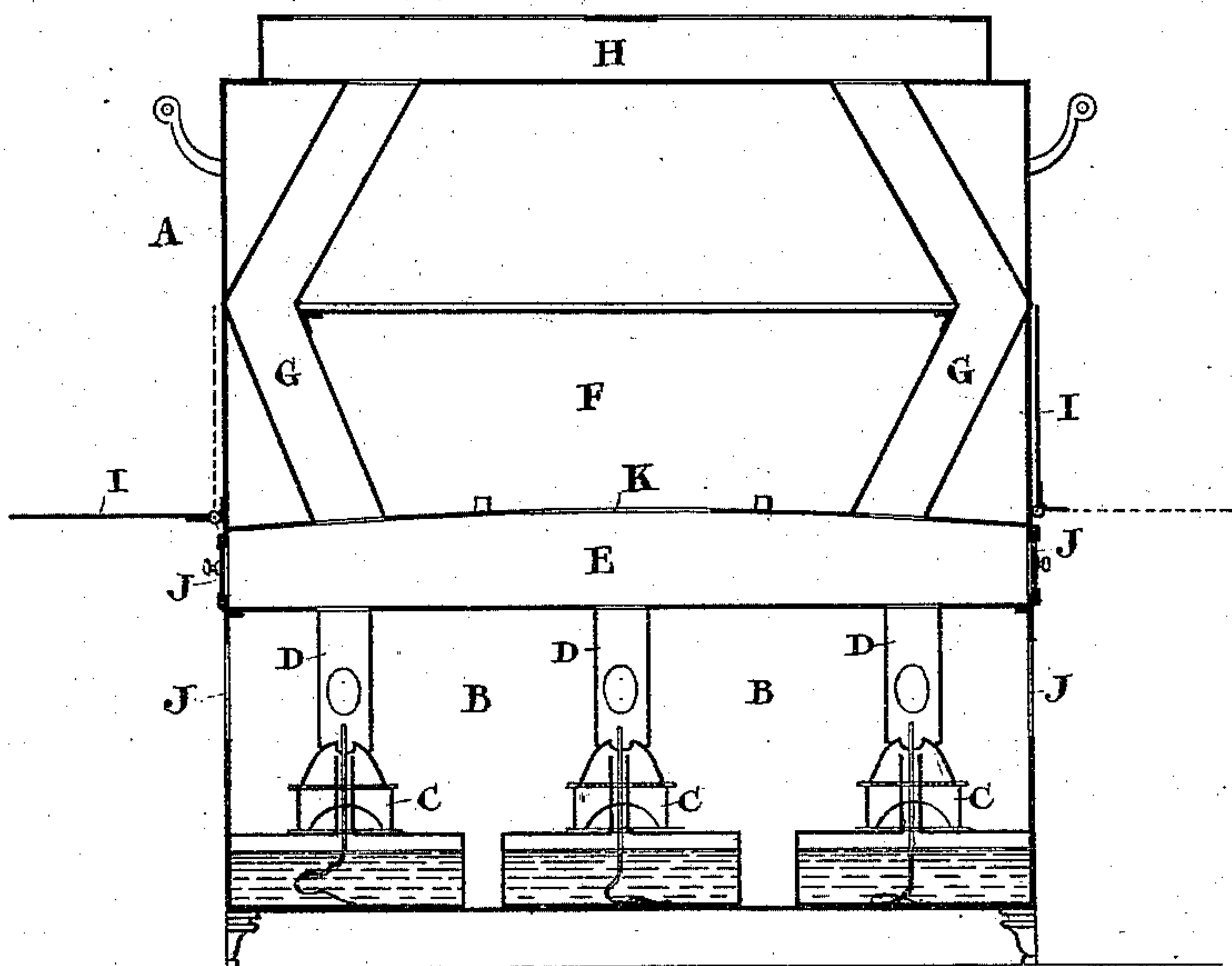


Fig. 1.



Witnesses.

Fig. 2.

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COAL-OIL COOKING-STOVE.

SPECIFICATION forming part of Letters Patent No. 242,887, dated June 14, 1881.

Application filed February 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, THOMAS COXON COLLINS, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, manufacturer, have invented certain new and useful Improvements in Coal-Oil Cooking-Stoves, of which the following is a specification.

The invention relates to certain improvements in that class of cooking-stoves in which the heat is derived from a coal-oil lamp or gas-burner, and it has for its object to utilize to the fullest extent the caloric produced by the coal-oil or gas burner; and it consists, essentially, in a heating-chamber situated above the burner and provided with corrugated or bent flues for carrying off the products of combustion arranged in connection with other attachments designed for accomplishing the purpose of my invention.

In the drawings, Figure 1 is a perspective view of my improved stove, showing the doors of the oven open and three lamps in position. Fig. 2 is a sectional elevation of my stove.

While the formation of the stove exhibited in the accompanying drawings is such as will, in my opinion, best carry out the object of my invention, it will, of course, be understood that the design of the stove can be considerably altered without affecting the invention.

In the drawings, A is a rectangular box or casing, forming the outside body of the stove. B is a lower chamber, arranged to contain the lamp C. The stove illustrated is designed for three lamps; but, of course, I do not confine myself to any particular number.

D are vertical tubes leading from the burner of each lamp to a heating-chamber, E, the top of which forms the bottom of the oven F. Leading from this chamber E will be noticed the bent flues G, which flues connect the chamber E with the top chamber, H. The flues G, it will be seen, are situated at each end of the stove, and are intended to convey the caloric from the chamber E to the chamber H, being opened, as shown, for the purpose of checking the draft, and in this way heat the flues G to the fullest extent, which, in their turn, radiate the heat thus obtained into the oven, through which they pass. While I think the bent shape shown will be found preferable, a corrugated form might be adopted which would answer

the purpose mentioned. The chamber H, as shown in the drawings, is pierced with three pot-holes, the smaller one of which is intended for a small kettle when the larger holes are otherwise occupied. In cases where these holes are not required they may be closed when the heat ascending through the flues G deflects from the top of this chamber to its bottom, which forms the top of the oven F, the draft being maintained through perforations in the side of the chamber, as represented.

On each end of the casing A, I provide a hinged bracket, I, for holding the kettle or other article when there is not room for it on any other part of the stove. In order to heat the articles supported on this bracket I make holes J in the end of the casing leading into the heating-chamber E, provided with a sliding damper of the usual construction, by which the holes J may be opened or closed, as circumstances require.

In the inside of the oven it will be noticed that I make a hole or aperture, K. This hole is provided with a cover when it is not required for use, its purpose being to obtain, when required, the direct effect of the heat within the heating-chamber E upon a kettle or other utensil, the contents of which it may be desirable to heat quickly. Frying and broiling, &c., may also be done on this chamber.

The effect of a stove constructed in this manner is, that the heat from the burners is utilized in the same manner as in stoves constructed for burning wood or coal, the smoke and heated gases from the burners being conveyed around the oven in such a manner that the fullest extent of the caloric will be obtained, while the gases created by combustion are kept away from the articles being cooked.

What I claim as my invention is—

1. In a lamp or gas stove, vertical tubes leading from the burners to a heating-chamber formed below the oven, the bottom of which constitutes the top of the heating-chamber, in combination with bent or corrugated flues leading from the heating-chamber, through the oven, to a chamber formed above the oven, for the purpose of utilizing to the fullest extent the heat produced by the oil or gas burners, substantially as described.

2. In a lamp or gas stove, vertical tubes lead-

ing from the burners to a chamber situated above them, in combination with a hinged bracket situated on the outside of the stove-casing above and close to holes provided with
5 a sliding damper and leading from the heating-chamber below the hinged bracket, substantially as and for the purpose specified.

3. In a lamp or gas stove, and in combination with the burners, vertical tubes, heating-
10 chamber, and oven thereof, the bent or cor-

rugated flues G, passing through the oven and conveying the products of combustion directly under openings in a top plate, said openings being adapted to receive cooking utensils, substantially as and for the purpose specified.

T. C. COLLINS.

Witnesses:

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