

(No Model.)

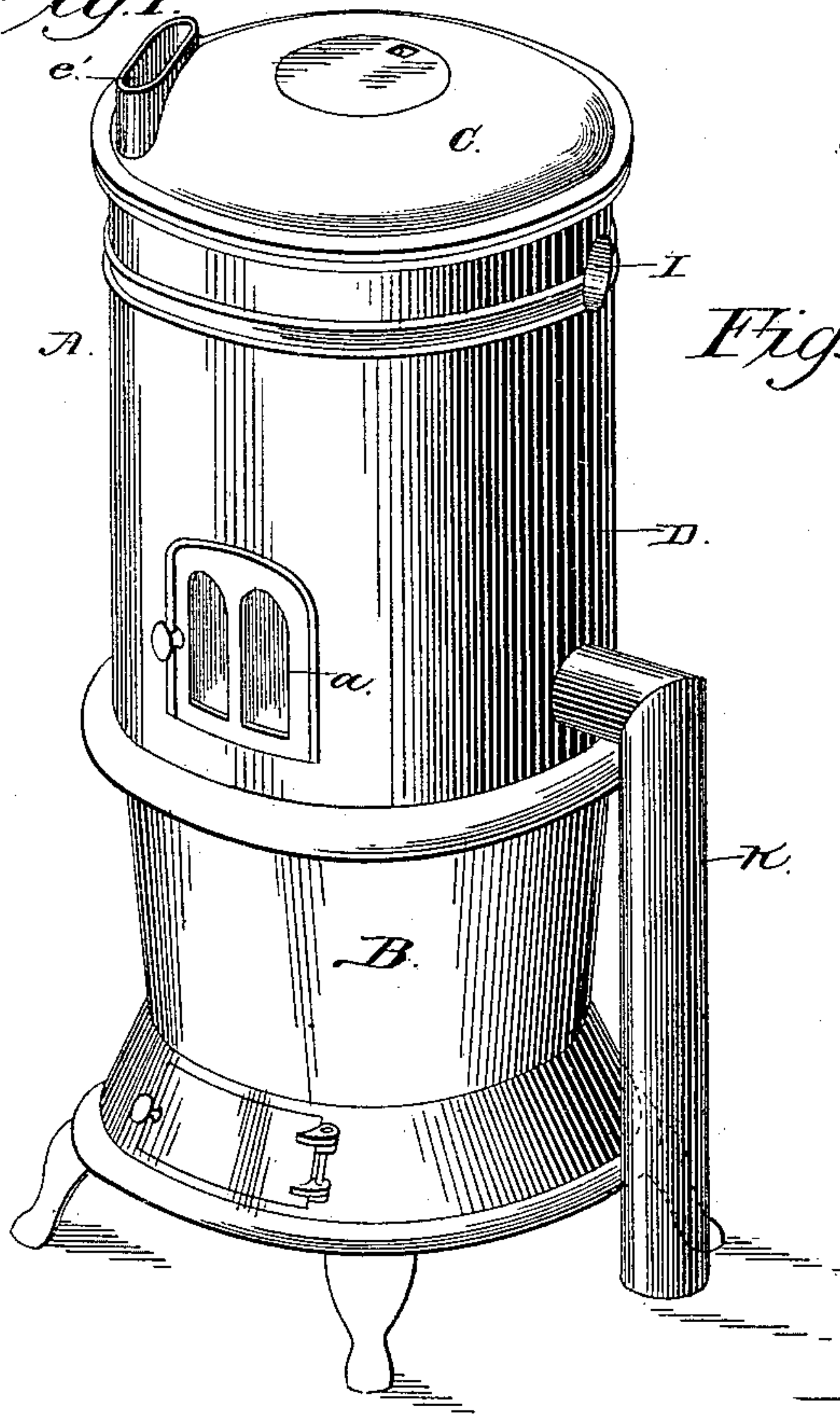
J. M. LAUBE.

STOVE.

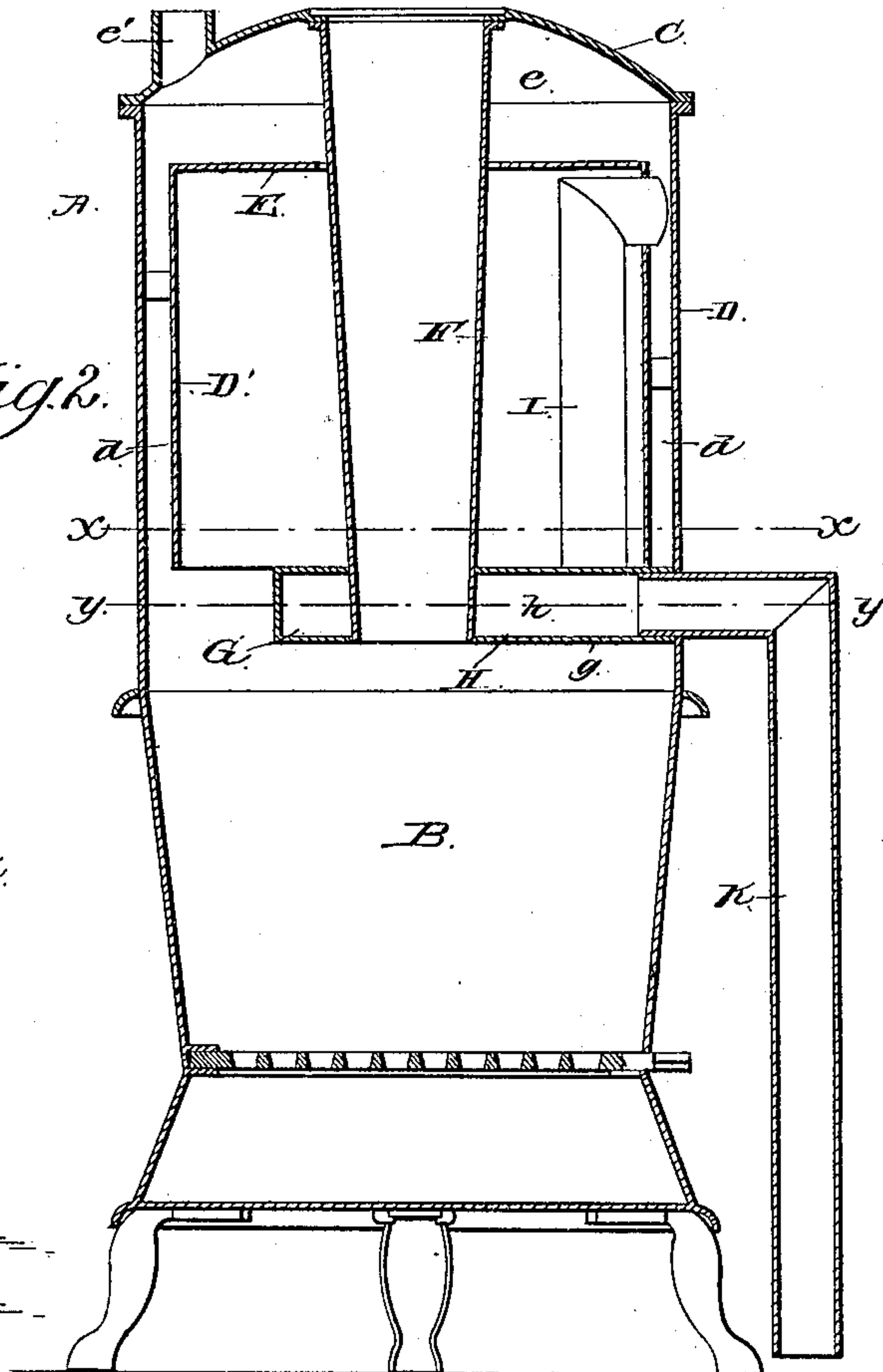
No. 371,465.

Patented Oct. 11, 1887.

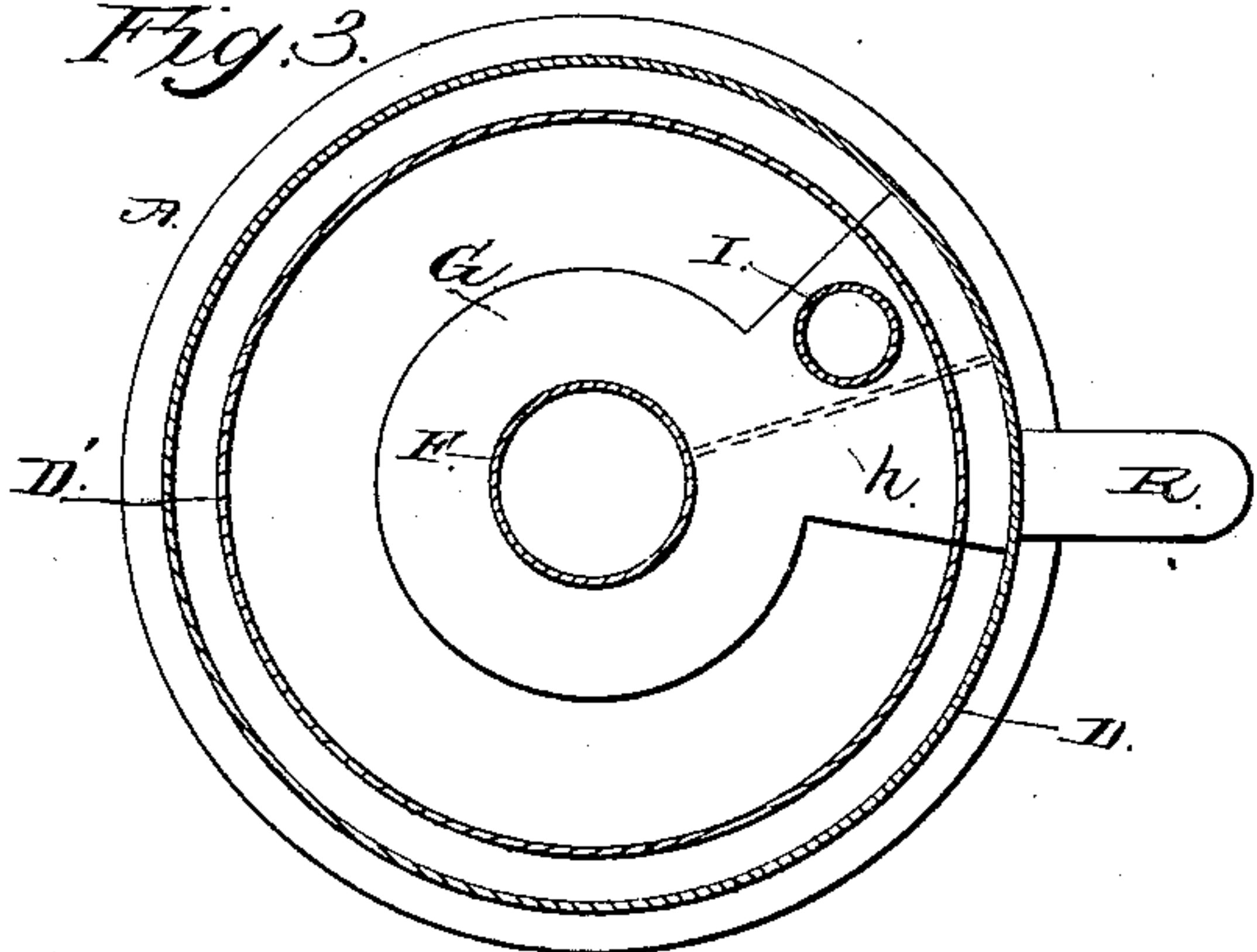
*Fig. 1.*



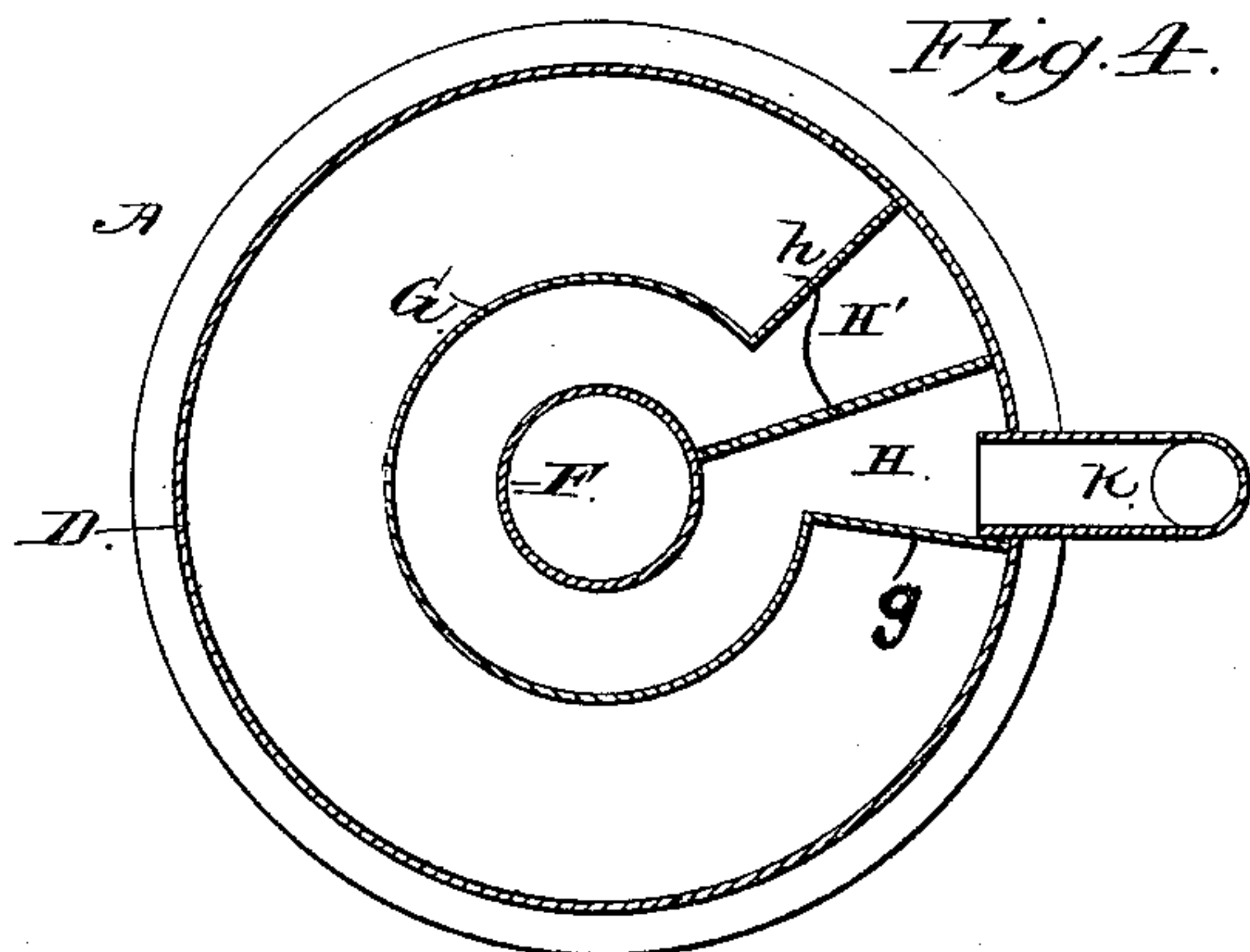
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses

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*E. G. Siggers*

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By *his* Attorneys,

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# UNITED STATES PATENT OFFICE.

JOSEPH M. LAUBE, OF BRODHEAD, WISCONSIN.

## STOVE.

SPECIFICATION forming part of Letters Patent No. 371,465, dated October 11, 1887.

Application filed April 19, 1887. Serial No. 235,404. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH M. LAUBE, a citizen of the United States, residing at Brodhead, in the county of Green and State of Wisconsin, have invented new and useful Improvements in Stoves, of which the following is a specification.

My invention relates to improvements in stoves, the objects being to produce a more rapid radiation of heat from the shell of the stove and to cause hot air from the immediate vicinity of the fuel to ascend into the room. These objects I accomplish by means of an air-heating chamber and a circumferential hot-air space constructed and arranged substantially as hereinafter described, embraced in the appended claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a stove embodying my invention. Fig. 2 is a central vertical section of the same through the air-heating chamber and flues opening therein. Fig. 3 is a horizontal section on line *x x* of Fig. 2. Fig. 4 is a horizontal section on line *y y* of Fig. 2.

The stove may be formed to burn different kinds of fuel, the one shown and described being arranged to burn coal.

In the drawings, A designates the stove-cylinder, B the fire-box, and C the top plate, *a* being a door of usual construction opening into the cylinder immediately above the fire-box.

The cylinder A is provided with the outer shell, D, and the inner shell, D', concentric with and but a short distance from the outer shell, and forming therewith a narrow air-space, *d*, open above and below. The shells are connected by narrow strips on each side of the door.

E is a plate closing the upper end of the cylinder, formed by the inner shell, D', which plate forms with the top plate, C, a chamber, *e*, for hot air and the products of combustion, provided on the top plate with the pipe-collar *e'* for the escape of said products.

F is a self-feeding tube of ordinary construction, which passes through the top plate and plate E.

G is an annular air-heating chamber surrounding the lower end of the feeding-tube

immediately above the fire-box. The said chamber is provided with the neck *g* on one side, which neck is divided longitudinally into two compartments or flues, H H', respectively, by the partition *h*, which passes across the interior section of the annular chamber, so that the flue H communicates with said chamber on one side of the partition, and the flue H' communicates therewith on the other side thereof.

I is a flue extending upward from the flue H' to a point just below the plate E, and under which it bends horizontally, and, passing through the shell D D', opens outside of the stove.

The casing or shell D' acts in the capacity of a heating-drum. Having the bottom thereof left open, as shown, the heat enters the same, and is deflected downward on the top portion of the annular air-heating chamber G. The closed top E of said casing aids in the downward deflection of the heat, and also of the retention of the heat within the said casing.

The flue H opens outside the stove, but has preferably connected to its orifice a tube or flue, K, the open lower end of which is near the floor.

In a stove arranged to burn wood the air-heating chamber is preferably cylindrical.

In operation the cold air flows up through the tube K and through the flue H into the chamber G, and is intensely heated while passing around inside the latter. It then flows out through the flue H' and up through the flue I and escapes into the room, so that the heat therein is equalized, currents being formed upward and downward in the room. The air-space between the shells D D' causes the hot air and products of combustion inside the stove to be directed against the outer shell, D, as they pass up to the stove-pipe. The said shell is consequently heated more than in stoves of ordinary construction, and therefore radiates more heat into the room.

Having described my invention, I claim—

1. In a stove, the combination, with the outer shell of a stove-cylinder, of the inner shell or casing, D', having the upper closed top, E, and the open bottom, the annular chamber G, having the neck *g*, the divisional partition *h*, internally arranged in said neck

*g*, and forming the flues H and H', and the pipes K and I, substantially as described.

2. The combination, with the stove-cylinder, of the casing D', the annular chamber G, having the neck *g*, the divisional partition *h*, dividing said neck into two flues, H and H', and the pipes K and I, connecting with said flues, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH M. LAUBE.

Witnesses:

J. W. STUART,  
JAMES D. DAVIS.