

G. W. LOVE & J. E. PRUDEN.  
Heating Stoves.

No. 153,356.

Patented July 21, 1874.

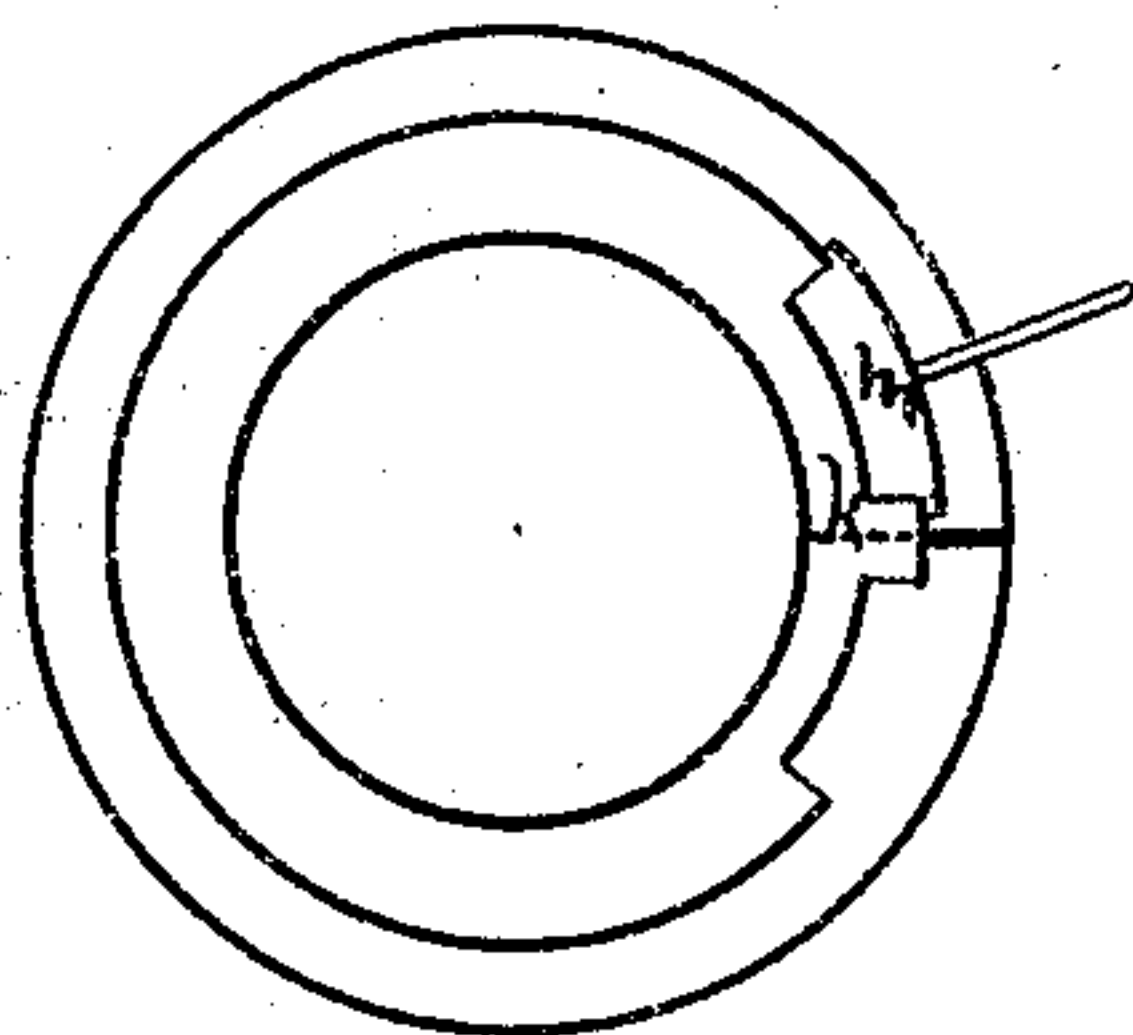
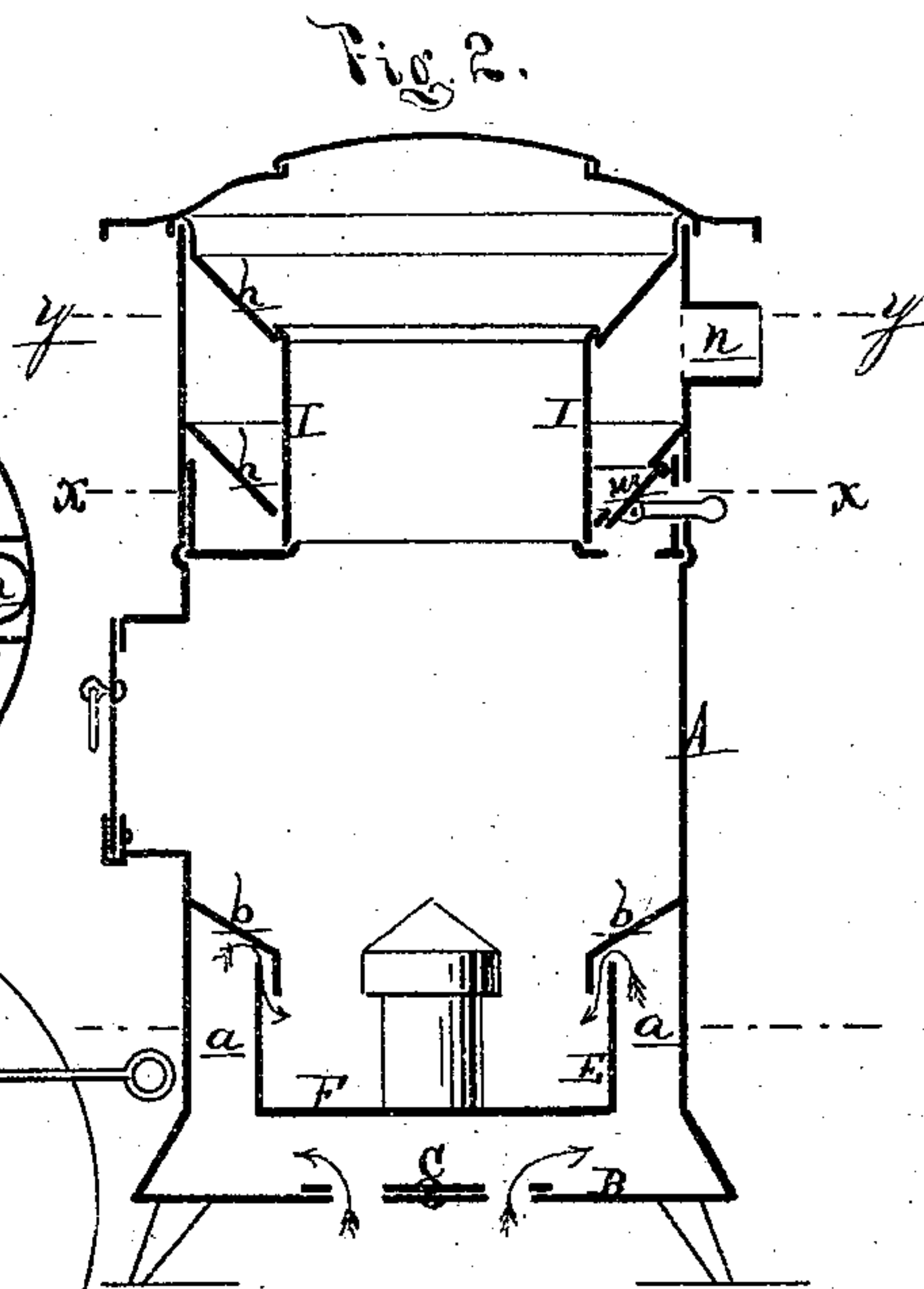
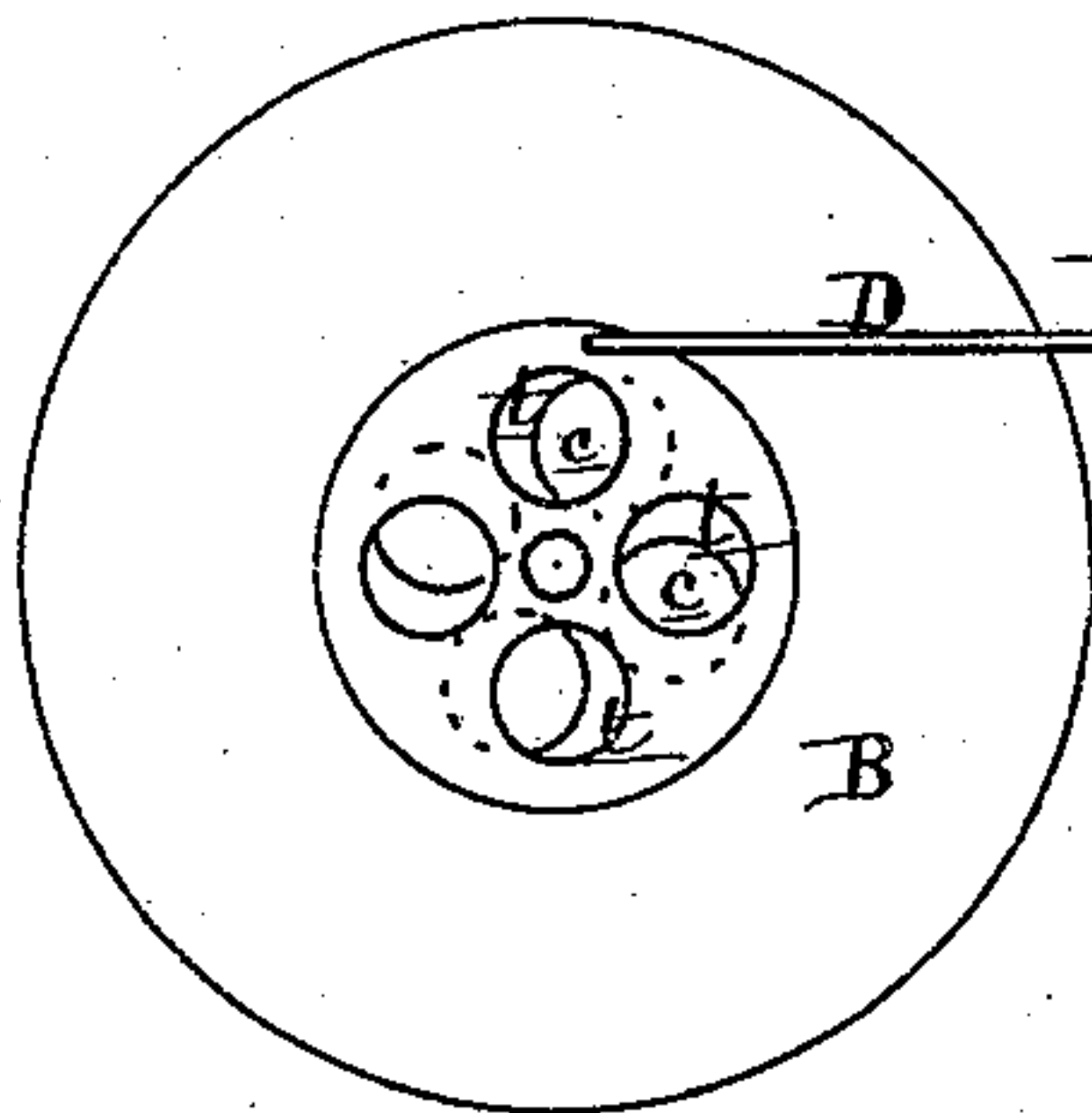
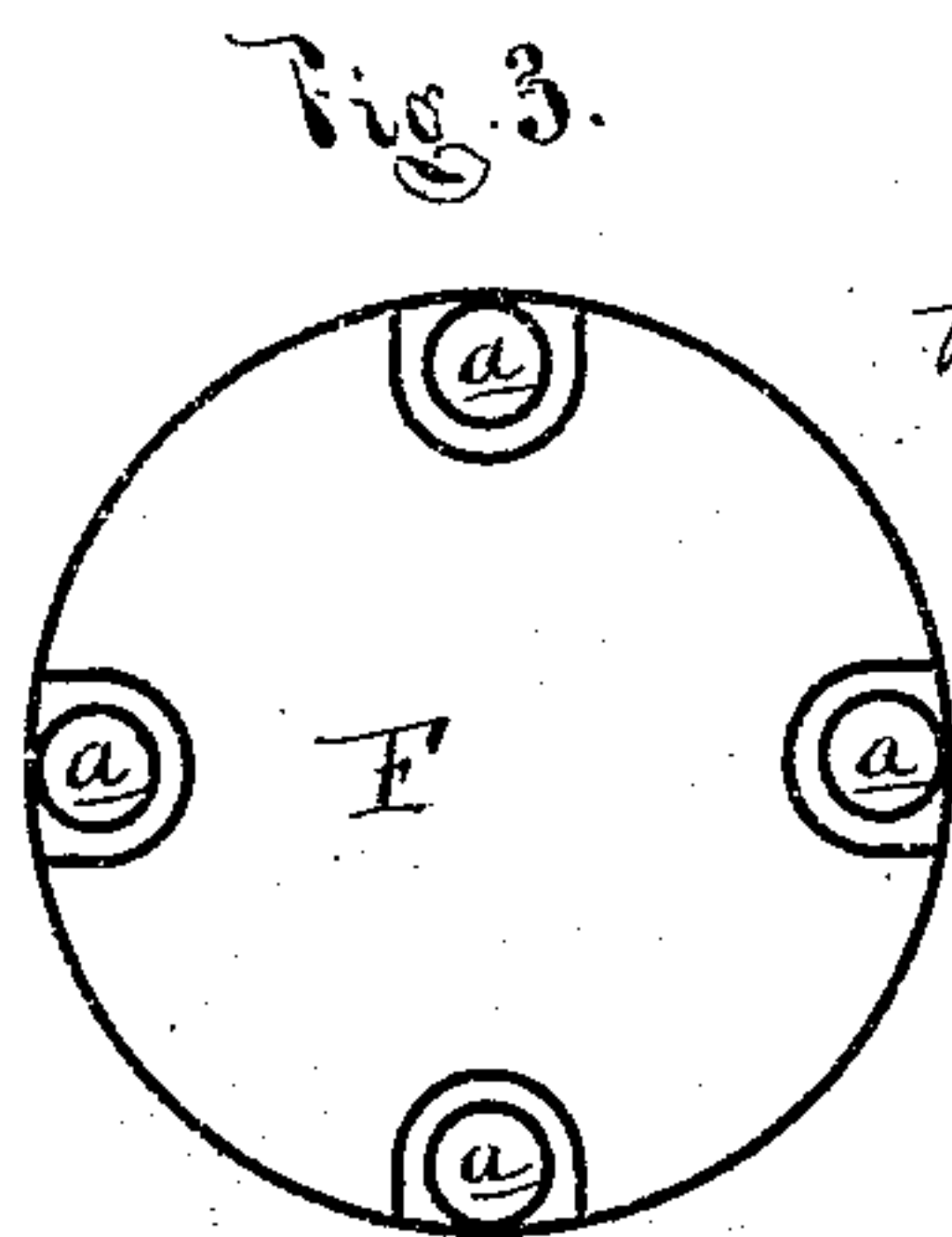
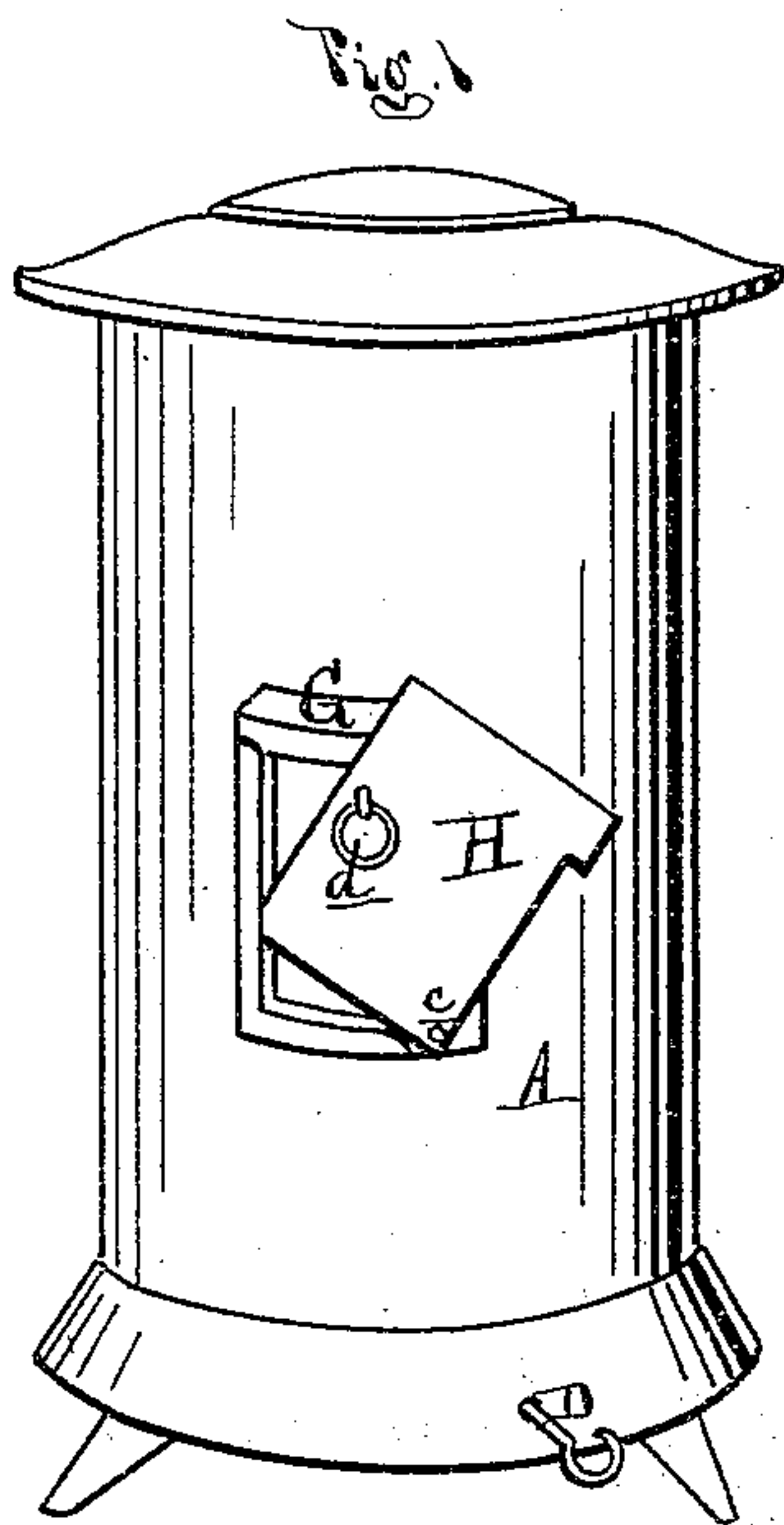


Fig. 5.

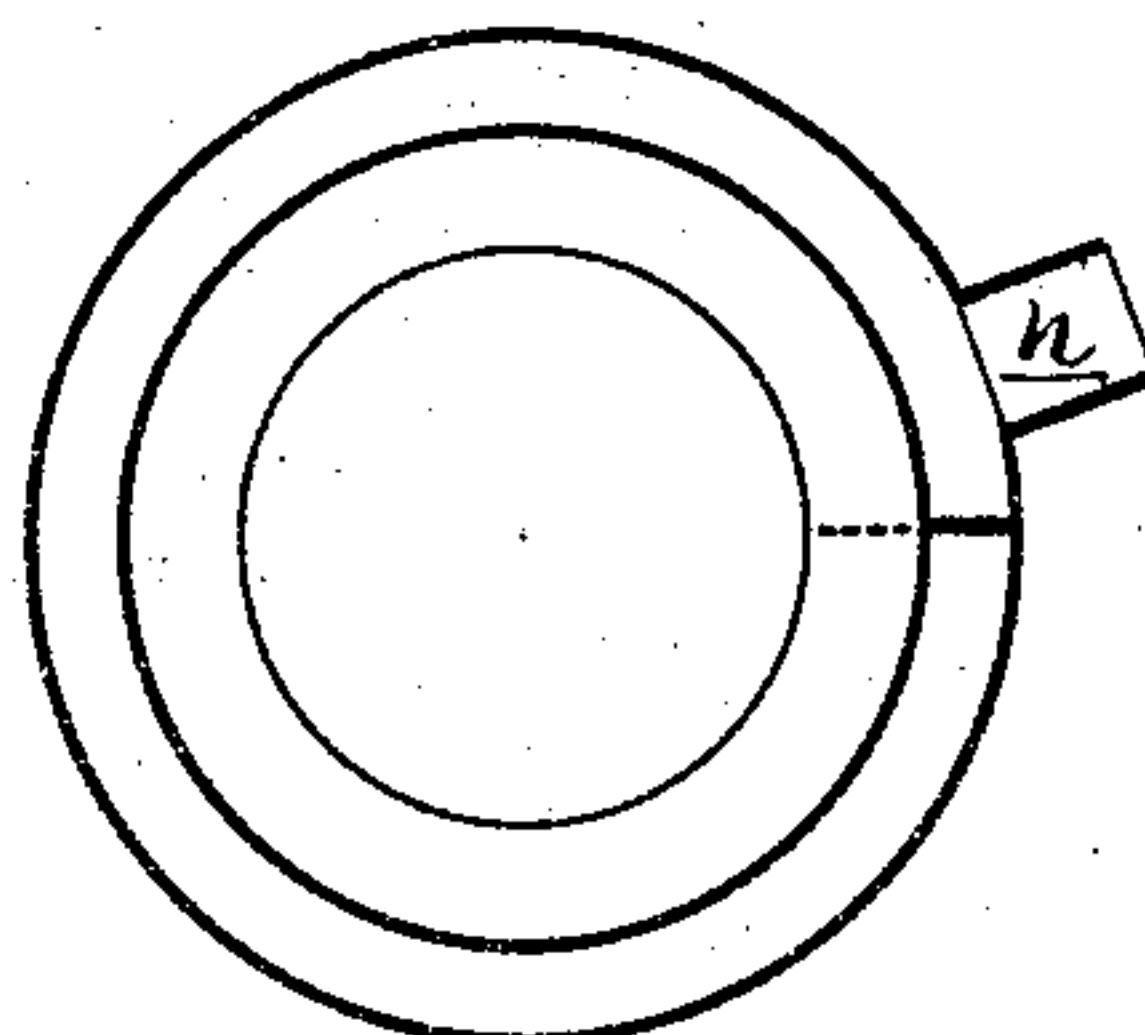


Fig. 6.

ATTEST:

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# UNITED STATES PATENT OFFICE.

GEORGE W. LOVE, OF CHIPPEWA FALLS, WISCONSIN, AND JAMES E. PRUDEN, OF LAKE CITY, MINNESOTA.

## IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **153,356**, dated July 21, 1874; application filed February 2, 1874.

*To all whom it may concern:*

Be it known that we, GEORGE W. LOVE, of Chippewa Falls, in the county of Chippewa and State of Wisconsin, and JAMES E. PRUDEN, of Lake City, in the county of Wabashaw, in the State of Minnesota, have invented an Improvement in Heating-Stoves, of which the following is a specification:

The nature of this invention relates to improvements in that class of heating-stoves designed for burning wood more especially, although said improvements are equally valuable in coal-burning stoves; and the invention consists in placing near the top of a stove deflecting-rings divided by a partition, a damper, and a removable wall, the whole constructed and arranged as more fully hereinafter set forth.

Figure 1 is a perspective of the improved stove. Fig. 2 is a vertical section through the center. Fig. 3 is a cross-section on a line just above the bottom of the combustion-chamber. Fig. 4 is a plan of the bottom plate of the stove, showing the openings for draft, and damper to regulate the same. Fig. 5 is a cross-section on the line *x x*, showing the lower deflector, the smoke-passages in the same, the damper, and the partition. Fig. 6 is a like view on the line *y y*, showing the upper deflector, the partition, and the exit-flue.

Like letters indicate like parts in each figure.

Near the top of the stove are secured deflect-

ing-rings *h*, one above another, the lower one being provided with two openings, divided by the partition *k*. One of these openings is provided with a damper, *m*, so arranged as to be operated from the outside of the stove, and, when this damper is opened, a direct draft is obtained into the exit-flue *n*.

When the damper is closed, the smoke passes through the fellow opening on the other side of the partition, clear around to the exit-flue. The spaces between these deflectors are converted into circular flues by means of the circular wall *I*, which is designed to slip in and form an inner wall to such flues.

This circular wall may be inserted in such a way that it may be removed, in order to clean out the flues, if required.

These circular flues, by obstructing the draft, compel the products of combustion to radiate the greater part of their heat before reaching the exit-flue.

What we claim as our invention, and desire to secure by Letters Patent, is—

In combination with a stove, the deflecting-rings *h*, damper *m*, partition *k*, and removable wall *I*, constructed and arranged substantially as described, and for the purposes set forth.

GEO. W. LOVE.  
J. E. PRUDEN.

Witnesses:

HENRY B. COLEMAN,  
JOS. HESKETH.