

(No Model.)

C. H. CHAPMAN.

HEATING DRUM.

No. 256,882.

Patented Apr. 25, 1882.

Fig. 1.

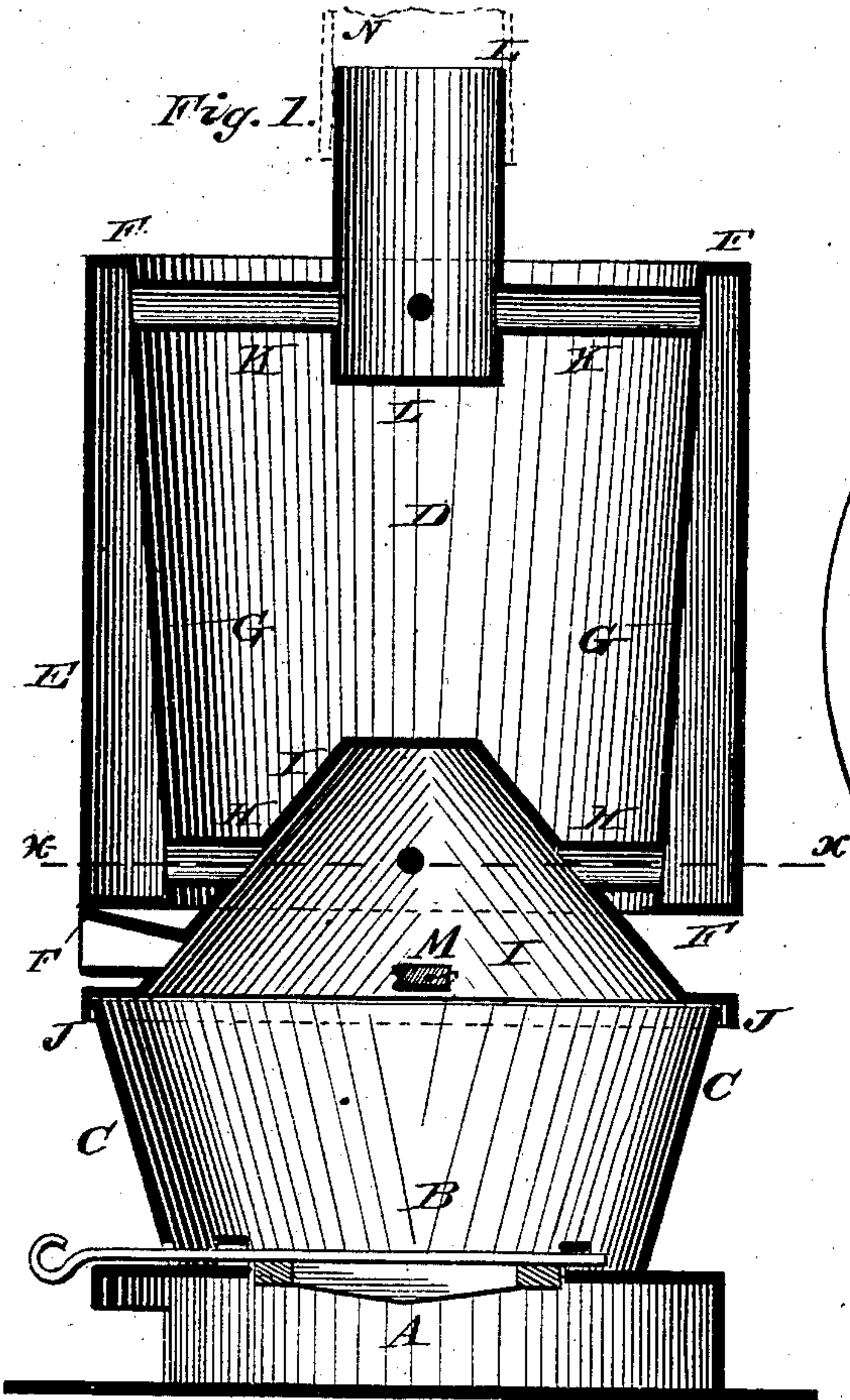


Fig. 3.

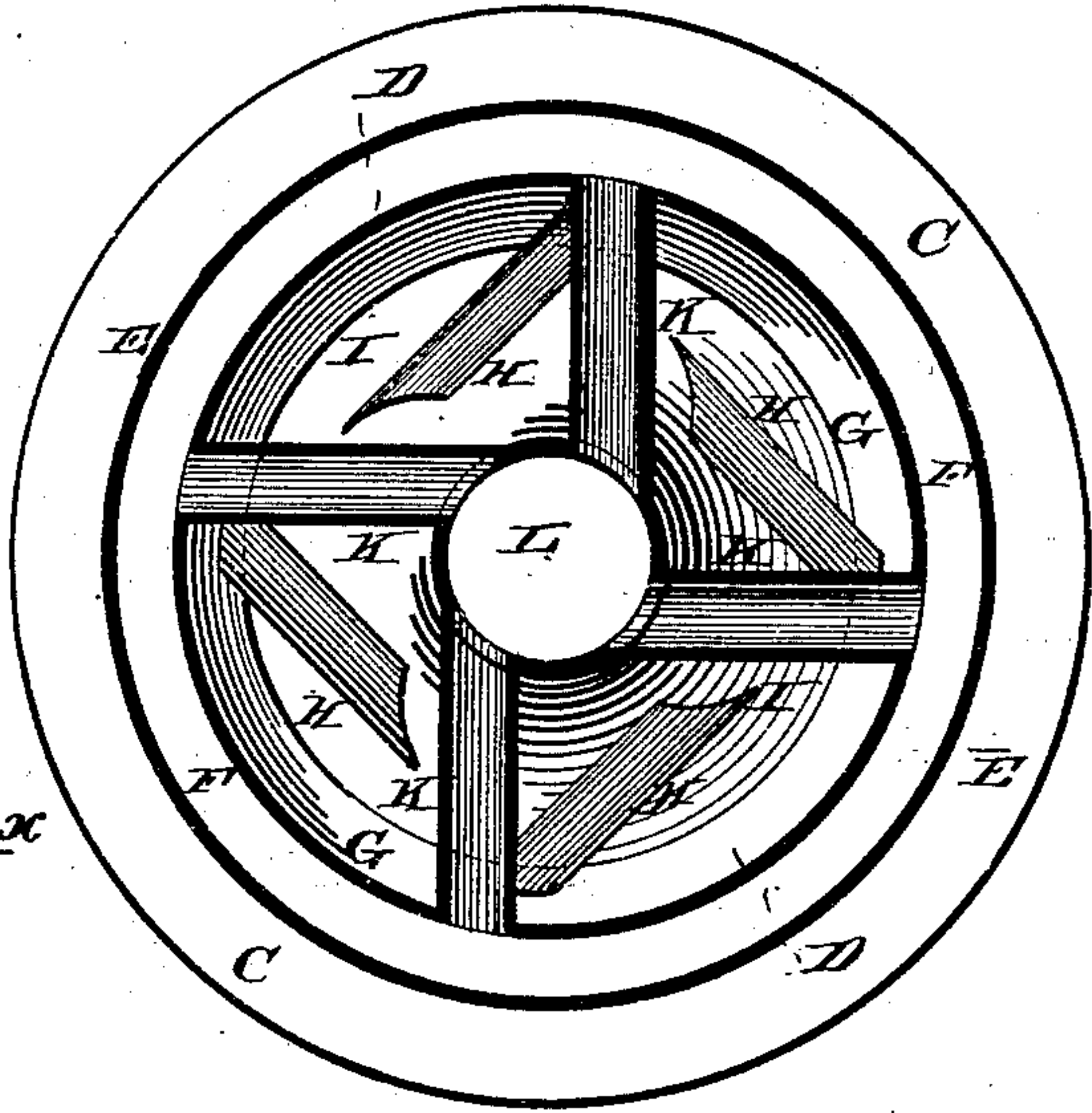
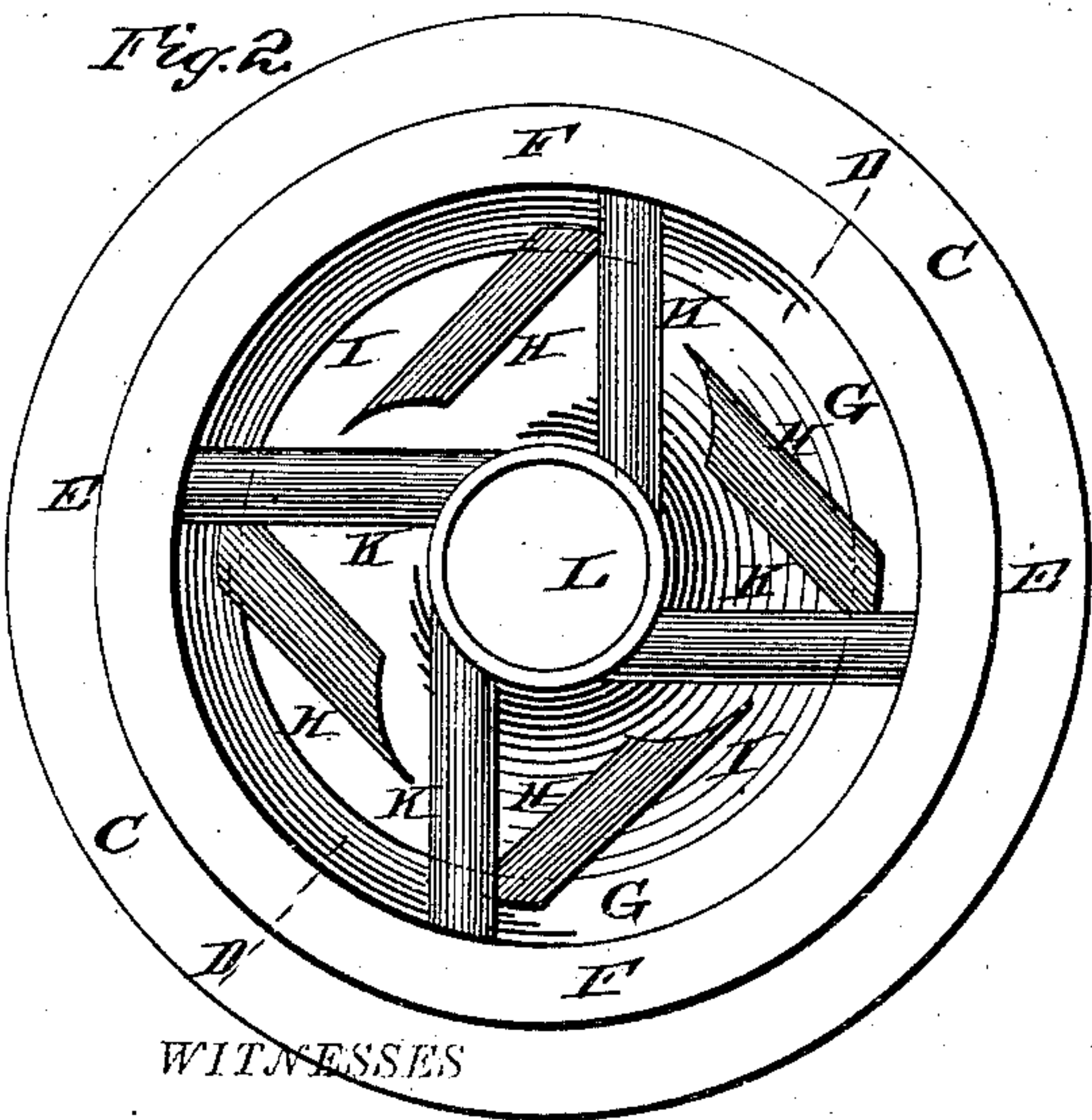


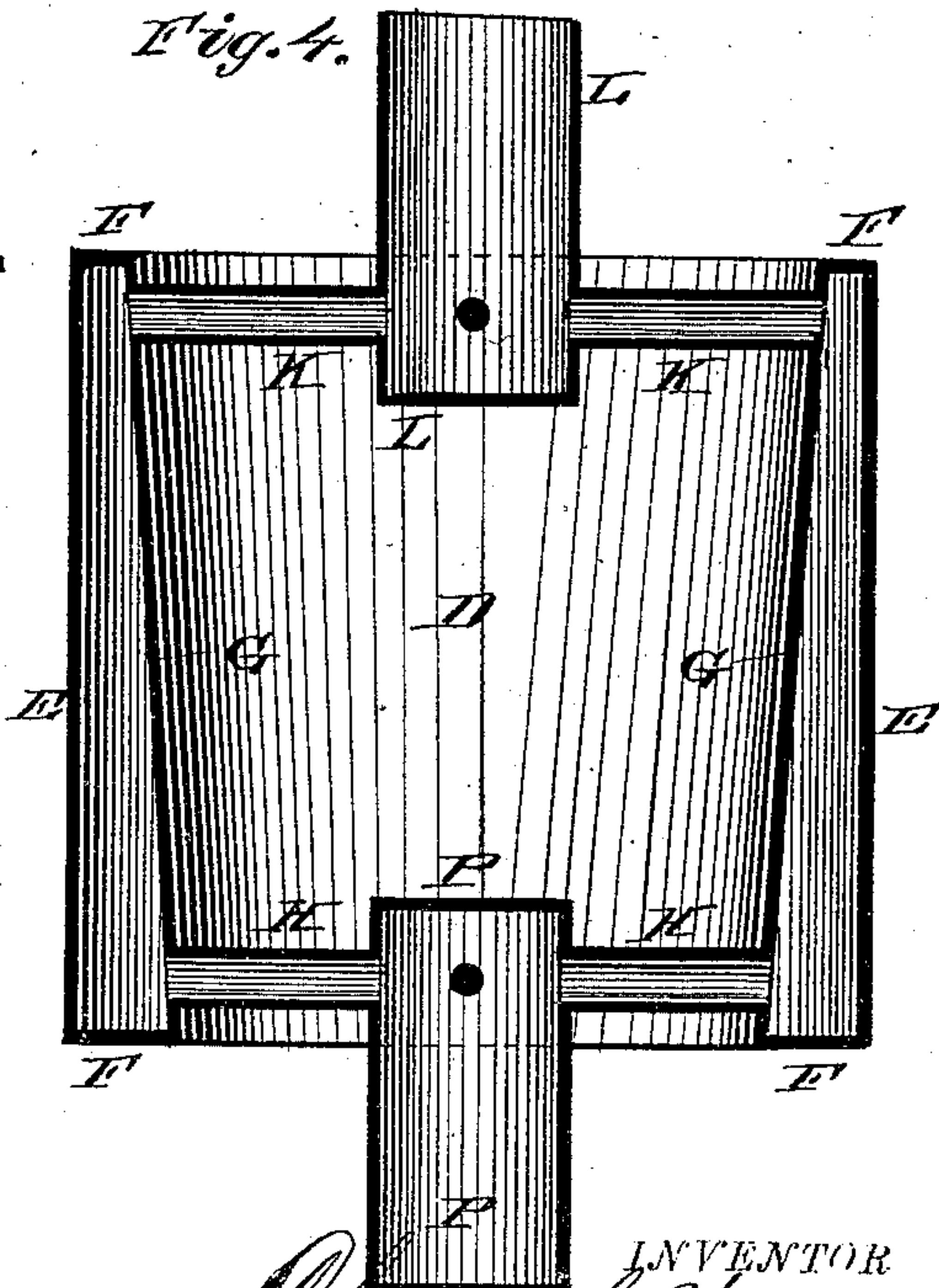
Fig. 2.



WITNESSES

Fred. L. Dieterich,  
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Fig. 4.



INVENTOR

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by Louis Baggett & Co., Attorneys



# UNITED STATES PATENT OFFICE.

CHARLES H. CHAPMAN, OF JOPLIN, MISSOURI.

## HEATING-DRUM.

SPECIFICATION forming part of Letters Patent No. 256,882, dated April 25, 1882.

Application filed September 15, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. CHAPMAN, of Joplin, in the county of Jasper and State of Missouri, have invented certain new and useful Improvements in Heating-Drums; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a vertical sectional view. Fig. 2 is a top plan. Fig. 3 is a horizontal sectional view through the plane indicated by line *x x* in Fig. 1; and Fig. 4 is a vertical sectional view, illustrating a modification of my invention.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to heating drums or cylinders for stoves and heaters; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claim.

In the drawings hereto annexed, A represents the grate, and B the fire pot or chamber, of an ordinary stove or heater, in the construction of which no novelty is claimed.

C represents the body of the said stove or heater, which in the drawings is shown to be considerably reduced in height, although in practice this is by no means necessary.

D is the heating-drum, which consists of a cylinder, E, connected by flanges F at the top and bottom with a funnel-shaped casting, G, connected near its lower end by tangential flues H with a conical shell or casting, I, having at its lower end a flange, J, which enables it to be fitted and supported upon the top of the body C of the stove or heater. Near its upper end the funnel-shaped casting G is connected by tangential flues K with a pipe, L, closed at its lower end, and of the same diameter as an ordinary stove-pipe, which is to be connected to its upper end in order to carry off the products of combustion.

The conical shell I is or may be provided

at or near its lower end with a door or draft-opening, M, for the admission of cold air, by which the draft may be augmented, when desired.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. My improved attachment being placed on top of the stove or heater, the flames and products of combustion will be carried by the draft through the flues H, taking a circular or spiral course through the drum D between the castings or casings E G, and finally escaping through the tangential flues K into the stove-pipe drum L, and from thence through the stove-pipe N into the chimney or flue.

In the modification shown in Fig. 4 of the drawings my invention is provided, in lieu of the conical shell I, with a simple cylindrical drum or stove-pipe P, enabling the device to be attached, as an ordinary heating-drum, upon an ordinary stove-pipe passing through any room or apartment, which may thus be conveniently and inexpensively heated.

My invention is simple, inexpensive, easily applied to any stove or heater of ordinary construction, and serves to distribute and utilize the heat in the most effective manner.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

The heating-drum herein shown and described, the same consisting of the exterior cylinder or casing, E, having flanges F, inside drum, D, cone I, having flange J, central pipe, L, and tangential flues K and H, connecting the annular chamber between casing E and drum D with respectively pipe L and cone I, the whole constructed and combined as specified, for the purpose set forth.

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

CHARLES H. CHAPMAN.

Witnesses:

FRANCIS M. WEIR,  
HORACE F. HAWKINS.