(No Model.)

M. N. KIMBLE.

HEATING DRUM.

No. 334,075. Patented Jan. 12, 1886.

Fig. 2.

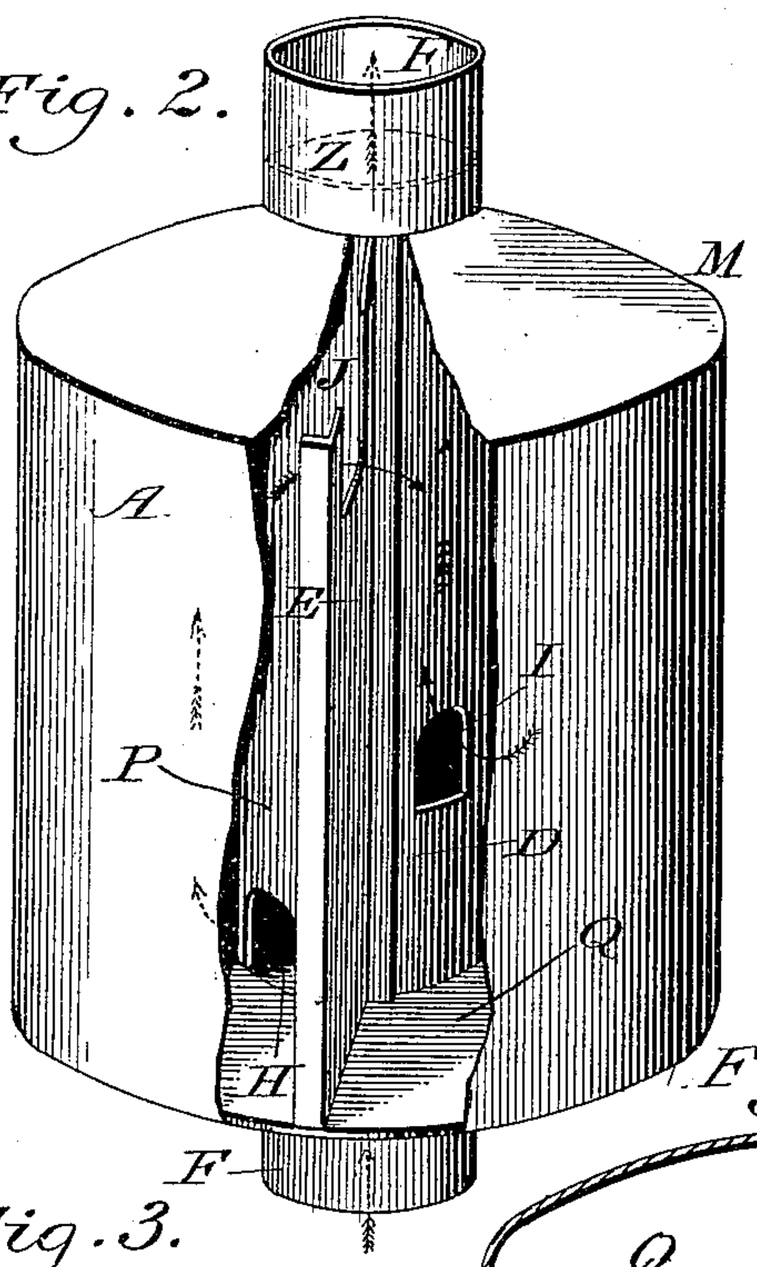


Fig. 3.

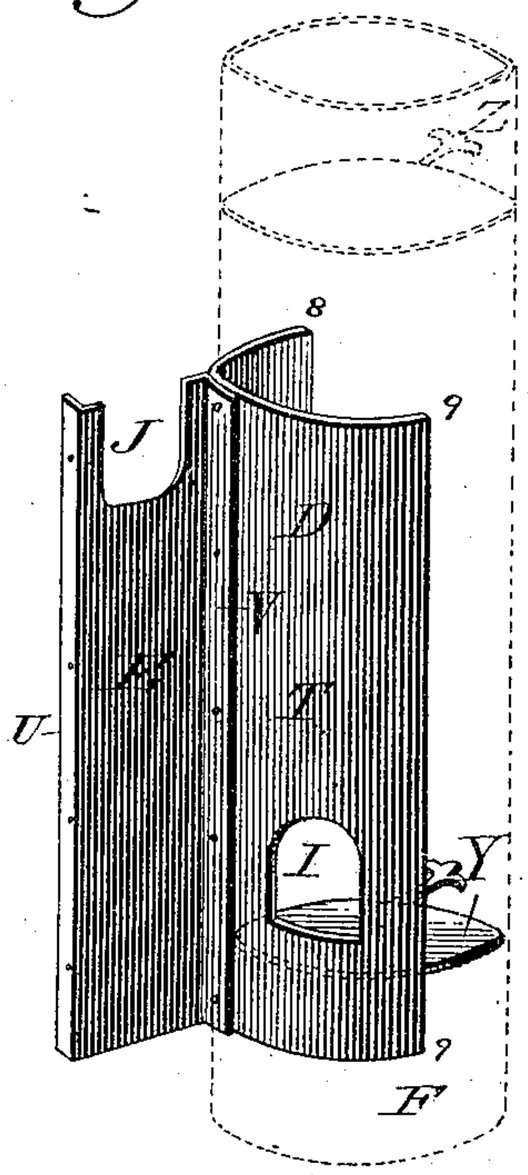


Fig. 1.

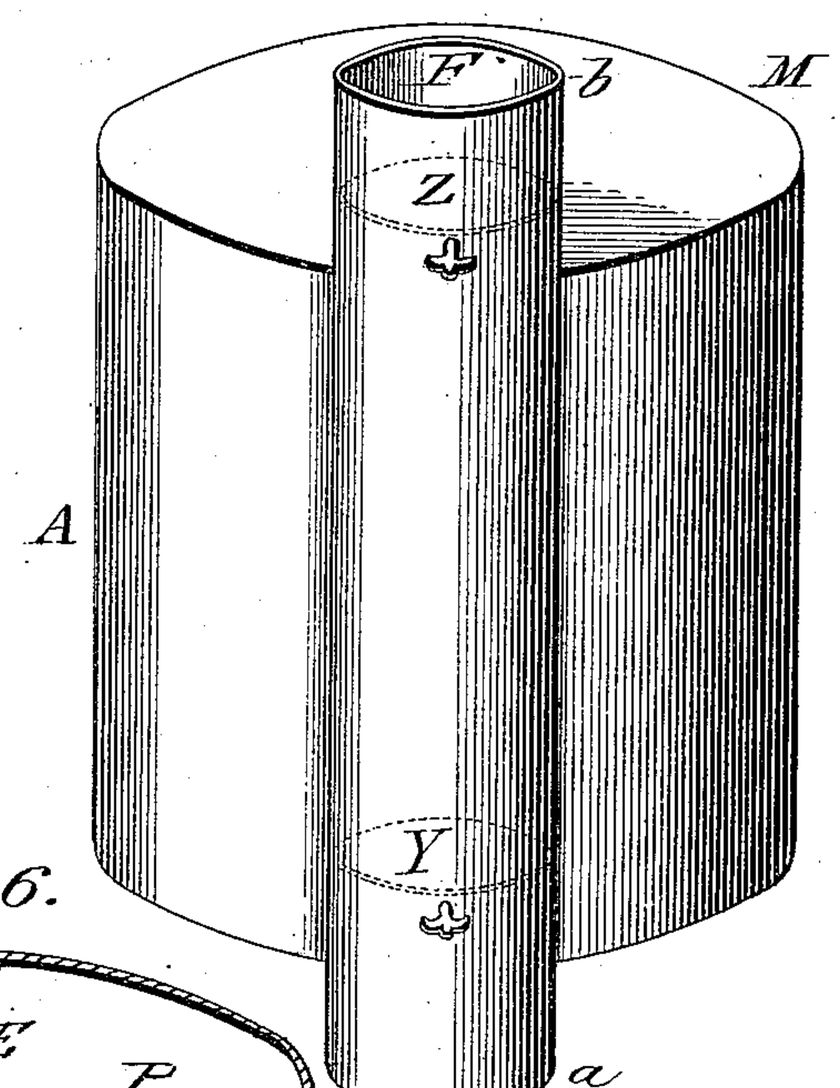


Fig. 6.

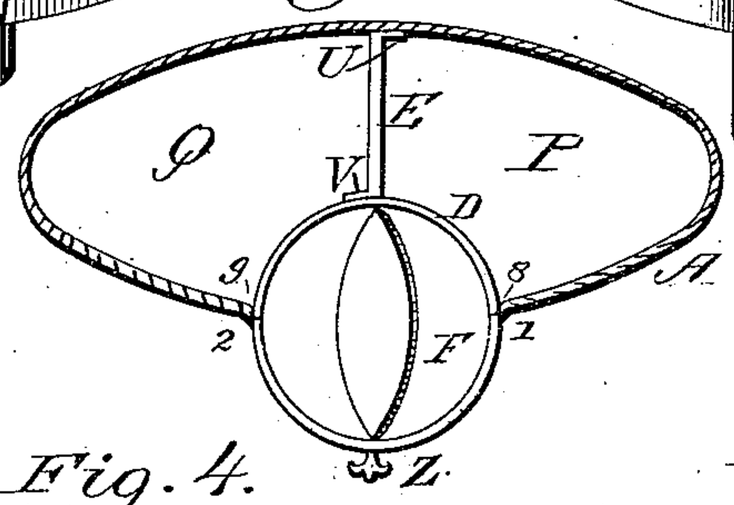
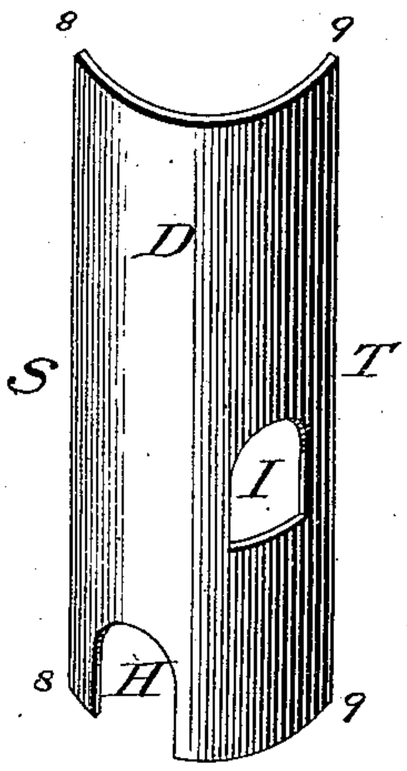
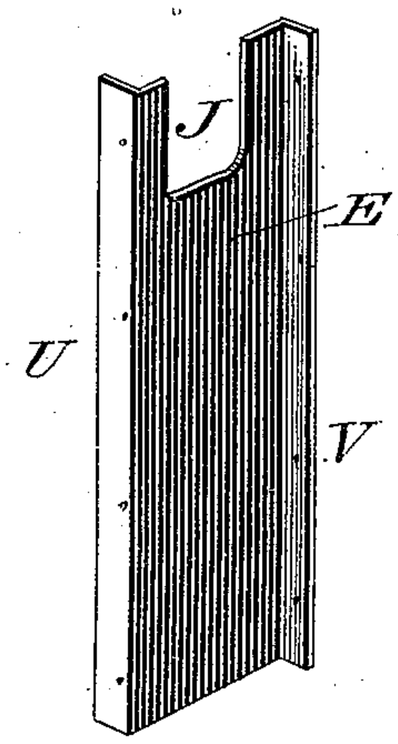


Fig. 4.

Fig. 5.





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UNITED STATES PATENT OFFICE.

MARCUS N. KIMBLE, OF LIMA, NEW YORK.

HEATING-DRUM.

SPECIFICATION forming part of Letters Patent No. 334,075, dated January 12, 1886.

Application filed June 29, 1885. Serial No. 170,201. (No model.)

To all whom it may concern:

Be it known that I, MARCUS N. KIMBLE, a citizen of the United States, residing at Lima, in the county of Livingston and State of New York, 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 same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my invention; Fig. 2, a similar view, partly in broken section, to show the interior construction of the drum. Figs. 3, 4, and 5 are detail views of my invention, and Fig. 6 a horizontal section through the drum.

My present invention has relation to certain new and useful improvements in heating-drums; and the object thereof is to control and govern the ascending heat-current, so as to cause a more perfect combustion of the fuel and more perfect and uniform radiation from the stove. These objects I attain by the construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the metal case, preferably of elliptical or oval form, beginning at the angle 1 and extending around to the angle 2, as shown in Fig. 6. The case A is provided with a flue, F, to the ends *a b* of which are attached the sections of pipe, said flue having dampers Y Z. The case A is provided upon its interior with the flue-plates D E, connected together, as shown in Fig. 3, the plate D being preferably concavo-convex in form and having openings H I, and the plate E, which is flat, has opening J. These openings are for the passage of the heated current, which is forced therethrough by means of the damper Y, which is located on a plane between the openings H I, the ascending heated current striking the damper and turned from its direct course through the opening H into chamber P, thence ascending and passing over plate E through opening J into chamber Q, thence downward and passing through the opening I into main flue F above the damper Y, as shown in Fig. 3, where it is under perfect control by the damper Z, said damper being located in the flue above the top of the casing. The top M of the case A may be in the form of a cover, if preferred, to obtain access to the interior of the case for repairs or other purposes. The plate E is formed with flanges U V, for riveting or otherwise attaching it to the plate D and to the interior side of the case A, the plate E forming a partition to divide the case into the two compartments P Q. The semicircular plate D and the plate E, after being riveted together, are placed inside of the case and riveted thereto or otherwise secured in any suitable manner, the plate D being fastened at the angles 8 and 9 to the angles 1 and 2.

It should be understood that the drum or case A only partially encircles the pipe or flue F, the plate D forming that portion thereof located within the drum.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of pipe or flue and a heating-drum partially encircling the same with a division-plate within the drum extending from the pipe or flue to the side of said drum and provided with an opening near one end, the said pipe or flue being provided with two openings on different horizontal planes, one on each side of the division-plate, and a damper in the pipe or flue between the openings therein, substantially as and for the purpose set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

MARCUS N. KIMBLE.

Witnesses:

MAURICE SCOTT,

JEWETT LAWRENCE.