

(No Model.)

P. K. McMINN.
HEATING STOVE.

No. 310,904.

Patented Jan. 20, 1885.

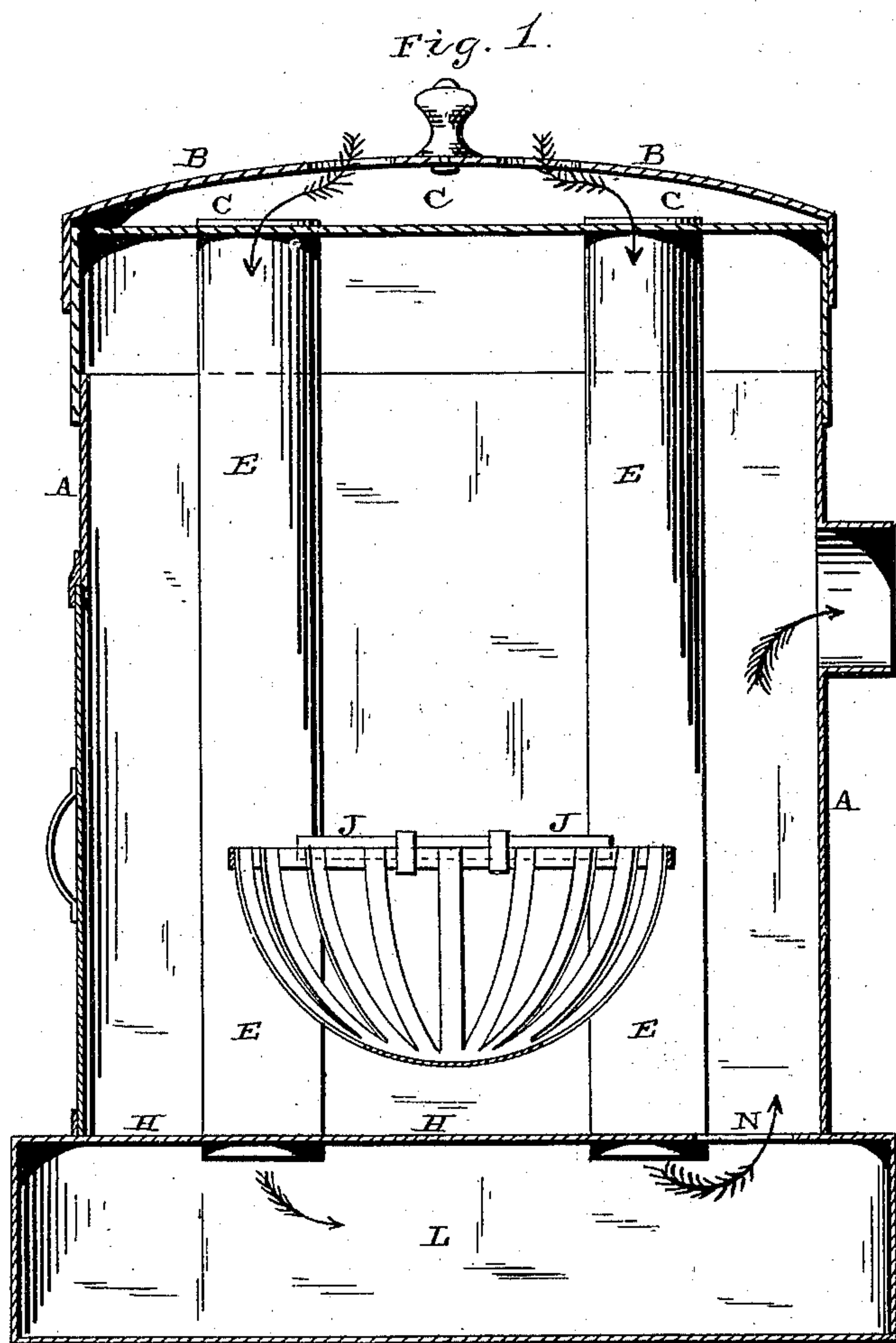
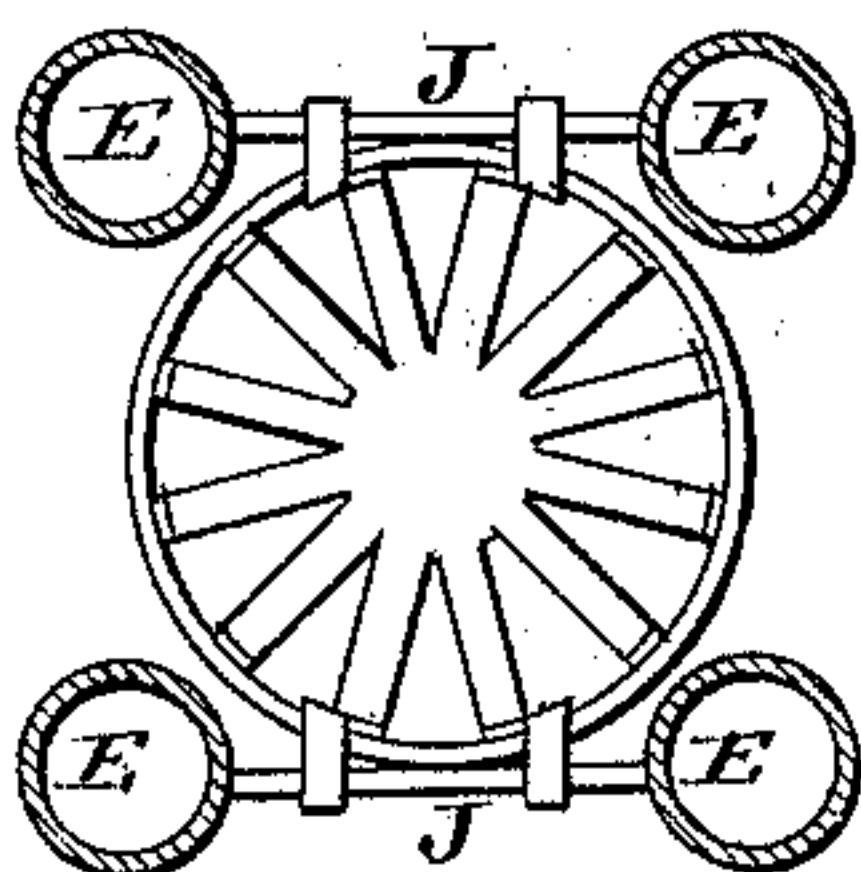


Fig. 2.

—Witnesses—

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per
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att'y.

UNITED STATES PATENT OFFICE.

PRESTON KING McMINN, OF BEMENT, ILLINOIS.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 310,904, dated January 20, 1885.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, P. K. McMINN, of Bement, in the county of Piatt and State of Illinois, have invented certain new and useful
5 Improvements in Heating-Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it
10 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in heating-stoves; and it consists in the combination of a chamber which is formed upon the
15 top of the stove itself, and through which the air to feed combustion is passed, a suitable number of vertical pipes which connect with this chamber and which pass down through the fire-chamber and the hot-air chamber in
20 the base of the stove, and from which chamber the air escapes into the fire-chamber for the purpose of feeding combustion, all of which will be more fully described hereinafter.

25 The object of my invention is to heat the air very thoroughly before it is fed to the fire, and thus cause a more perfect combustion than can be obtained where the air is fed in cold.

30 In the accompanying drawings, Figure 1 represents a vertical section of a heating-stove embodying my invention. Fig. 2 is a detail view showing how the basket is supported.

35 A represents the body of the stove, which will be of any desired size, shape, or construction that may be preferred, and upon the top of which is placed the cap or cover B. This cap or cover extends a suitable distance above
40 the top of the stove itself, so as to form an air-chamber, C. Through the top of this cover B are made a suitable number of perforations through which the air passes. Secured to the perforated top of the stove are a suitable
45 number of hot-air pipes, E, which pass down through the fire-chamber and through its bottom H. These pipes serve the double pur-

pose of conveying the air which is to support combustion through the fire-chamber, where it will become highly heated, down into the
50 base of the stove, and forming supports for the grate in which the fire is built. Suitable cross-bars, J, extend across from pipe to pipe, and upon these cross-bars J the grate is suspended. This grate being placed between
55 these pipes and almost in contact with them, they are kept heated as long as there is any fire in the grate, and thus made to heat the air which is passing through them. The air passes into the chamber L in the base of the stove,
60 and from thence passes through the opening N back into the fire-chamber, under the grate, for the purpose of feeding combustion. The air passing up under the grate in a highly-heated condition produces a much more perfect
65 combustion than can take place where the air is fed as has been heretofore proposed. By thus feeding hot air to the fire not only is a more perfect combustion produced, but the same stove can be made to burn hard and soft
70 coal, wood, or fuel of any kind.

I am aware that a heating-drum for the incoming air has been placed inside of the stove, and that pipes have been connected to the
75 drum, passed through the sides of the stove, and connected at their lower ends to the chamber in the base of the stove, and this I dis-

claim.

Having thus described my invention, I
80 claim—
In a heating-stove, the combination of the body A, the perforated cap B, the chamber C, and the hot-air pipes which pass down through the fire-chamber and into the chamber in the
85 base of the stove to supply air beneath the grate, the parts being combined and arranged to operate substantially as set forth.

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

PRESTON KING McMINN.

Witnesses:

S. K. BODMAN,
T. J. MITCHELL.