

M. ROBERTS.
Heating-Stove.

No. 168,289.

Patented Sept. 28, 1875.

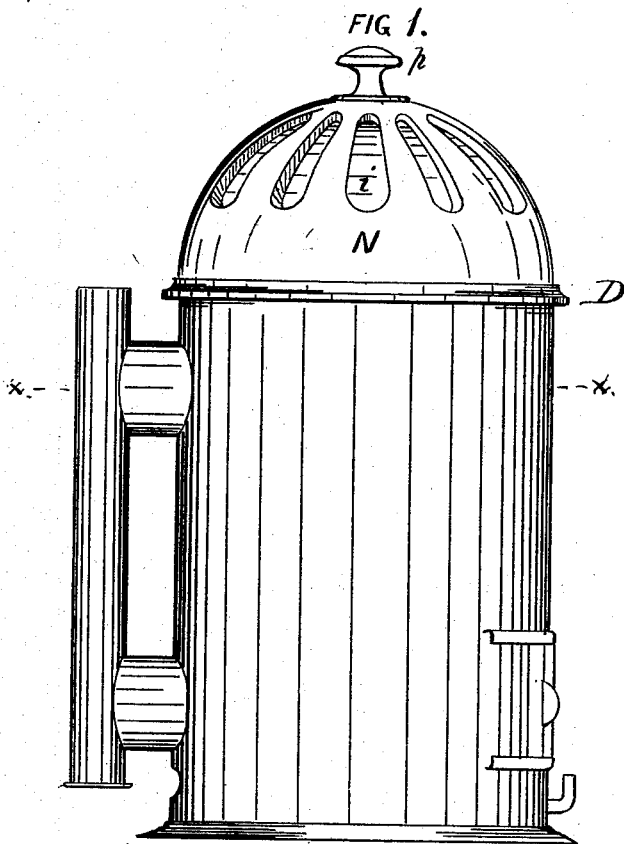
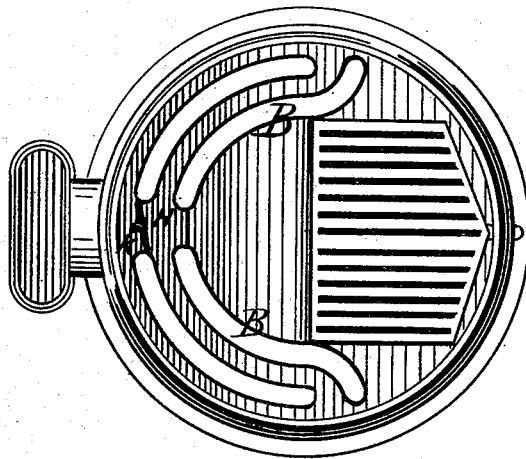


FIG 2.



Witnesses
Benjamin Pole
A. Harris

Inventor
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FIG. 3.

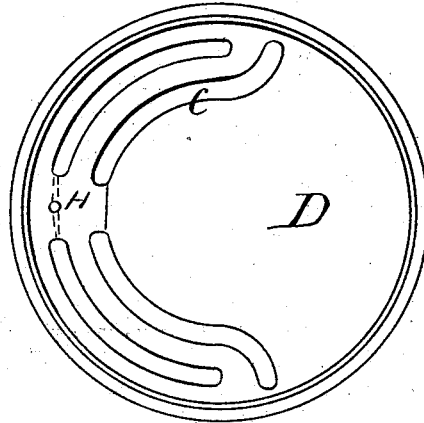
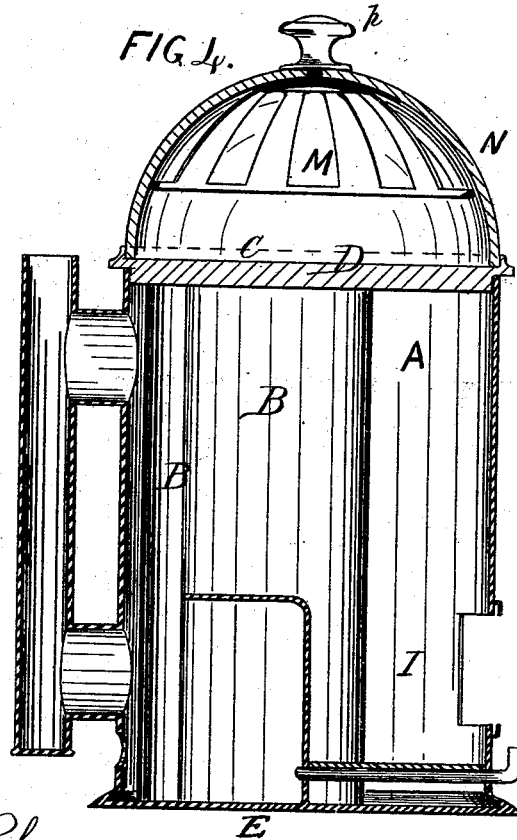


FIG. 4.



Witnesses
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 W. H. H. H. H. H.

UNITED STATES PATENT OFFICE.

MALCOM ROBERTS, OF NORTH MADISON, OHIO.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **168,289**, dated September 28, 1875; application filed March 16, 1875.

To all whom it may concern:

Be it known that I, MALCOM ROBERTS, of North Madison, county of Lake and State of Ohio, have invented certain Improvements in Stoves and Furnaces, called Pocket-Furnaces.

The following description, taken in connection with the accompanying plate of drawings hereinafter referred to, forms a full and exact specification, wherein are set forth the nature and principles of the invention, by which the same may be distinguished from others of a similar class, together with such parts thereof as are claimed as new and are desired to be secured by Letters Patent of the United States.

My invention relates to that class of stoves which are made use of for heating purposes, and the nature thereof consists in certain improvements in the details of the construction of the same, hereinafter shown and described.

In the accompanying plate of drawings, in which corresponding parts are designated by similar letters, Figure 1 is a view of the exterior of the stove. Fig. 2 is a transverse horizontal section on the line *xx*, Fig. 1. Fig. 3 is a view of the top plate. Fig. 4 is a vertical section through the upper part of the stove.

Within the casing A of the stove are arranged a series of curvilinear passages, B, which extend from the openings C in the top plate D to corresponding openings E in the bottom plate of the stove. H designates a damper, which may be so turned as to cause the products of combustion to flow directly to the exit-pipe from the fire-box I, or so placed as to close the opening K between the air-passages B, and thereby cause the products

of combustion to pass entirely away from the said air-passages, as indicated by the dotted line, before reaching the exit-pipe. The air rises through the said passages from the bottom of the stove and is discharged into the space M under the dome N. The said dome is provided with a series of openings, C, under which is arranged a damper actuated by the knob *p* in such a manner that the heated air may be retained within the space M or discharged into the room.

The object of this construction is to secure the greatest amount of heat from a constant circulation of air within the hot air-passages, whereby the cold air from the bottom of the chamber is constantly caused to rise upward.

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

The combination of the following elements, when relatively arranged, as and for the purposes described: The casing A, curvilinear passages B, top plate D, provided with elongated curvilinear openings C, bottom plate, provided with curvilinear openings E, damper H, opening K, dome N, provided with a damper, and space M.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of January, 1875.

MALCOM ROBERTS.

Witnesses:

W. B. COOK,
A. T. MATTESON.