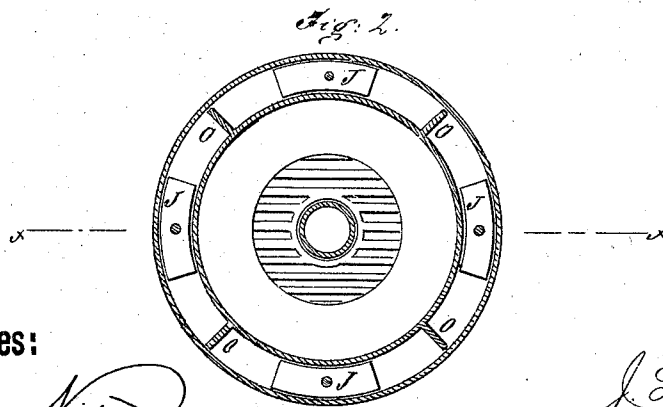
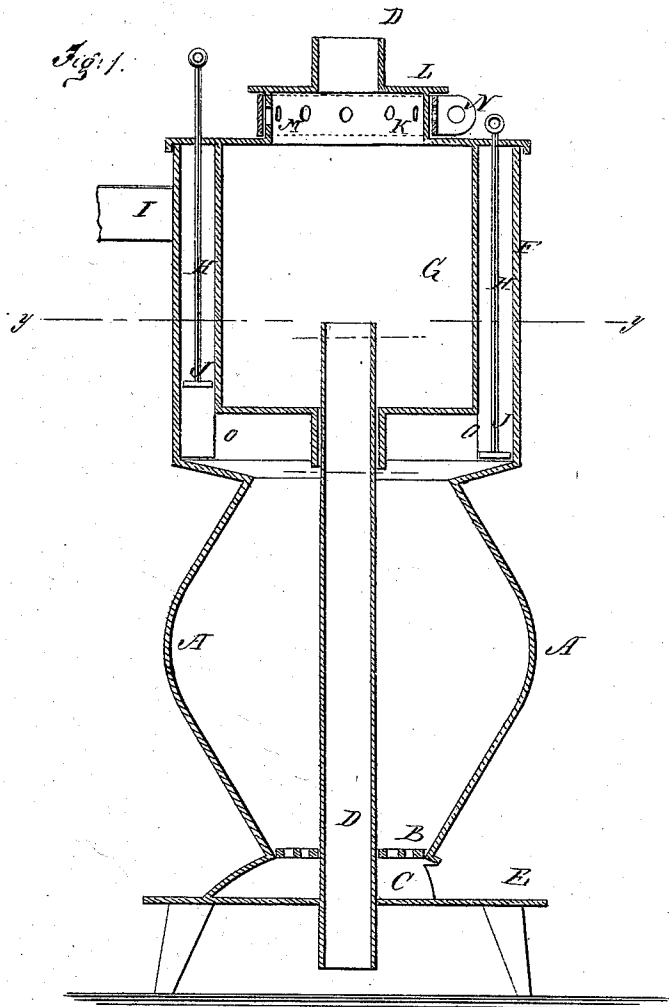


J. L. RING.
Heating Stoves.

No. 140,843.

Patented July 15, 1873.



Witnesses:

Chas. Nida
W. H. Quinn

Inventor:

J. L. Ring
Per *Wm. H. Quinn*
Attorneys.

UNITED STATES PATENT OFFICE.

JACOB L. RING, OF MT. PULASKI, ILLINOIS.

IMPROVEMENT IN HEATING-STOVES.

Specification forming part of Letters Patent No. **140,843**, dated July 15, 1873; application filed March 29, 1873.

To all whom it may concern:

Be it known that I, JACOB L. RING, of Mt. Pulaski, in the county of Logan and State of Illinois, have invented a new and useful Improvement in Stoves for Heating Purposes, of which the following is a specification:

My object in this invention is to improve the means now in use for heating buildings, and to economize fuel. The invention consists in a novel mode of combining the main parts of a heating-stove, as hereinafter described and pointed out in the claim.

In the accompanying drawing, Figure 1 represents a vertical central section of Fig. 2 taken on the line *x x*. Fig. 2 is a horizontal section taken on the line *y y*.

Similar letters of reference indicate corresponding parts.

A is the fire-box or furnace. B is the grate. C, the ash-pit. D is a central upright tube, which extends from beneath the stove-hearth E into the hot-air chamber, as seen in the drawing. F is the drum. G is a hot-air chamber, surrounded by the drum, leaving a space or flue, H, between the two, from which the smoke and gaseous products of combustion escape through the pipe I to the chimney. J represents scrapers, in this flue H, for cleaning the outer surface of the hot-air chamber G. On top of the air-chamber is a perforated cylinder, K, covered by the cap L, surrounded by a perforated ring, M. N is a lug or handle, on this ring, by means of which it is turned to allow of the discharge of air from the chamber G. The air-tube D may extend up from the

hot-air chamber and conduct a current of heated air to any part of the dwelling. It is surrounded by the fuel in the fire-box, and an active current through it, and through the chamber, is produced by the intense heat to which it is exposed.

Cold air may be conducted from the outside into this tube, so that the air discharged may be pure and uncontaminated. The current of cold air drawn into this tube protects it from the heat, so that it is as durable as any part within the drum.

O represents ribs on the outer surface of the hot-air chamber, which in width are each sufficient to fill the flue-space H; but they do not extend to the top of the chamber, and the smoke and gases pass over them to reach the chimney-pipe I.

The hot-air chamber, it will be seen, is exposed to the heat of the furnace on its bottom and sides, while a current of hot air is constantly poured into it by the tube D, and discharged, as before described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of combustion-chamber A, pipe D, hot-air chamber G having register at the top, the circumjacent drum F and exit-pipe I, constructed and relatively arranged as and for the purpose described.

JACOB L. RING.

Witnesses:

MILTON PATTERSON,
JOHN MEITH.