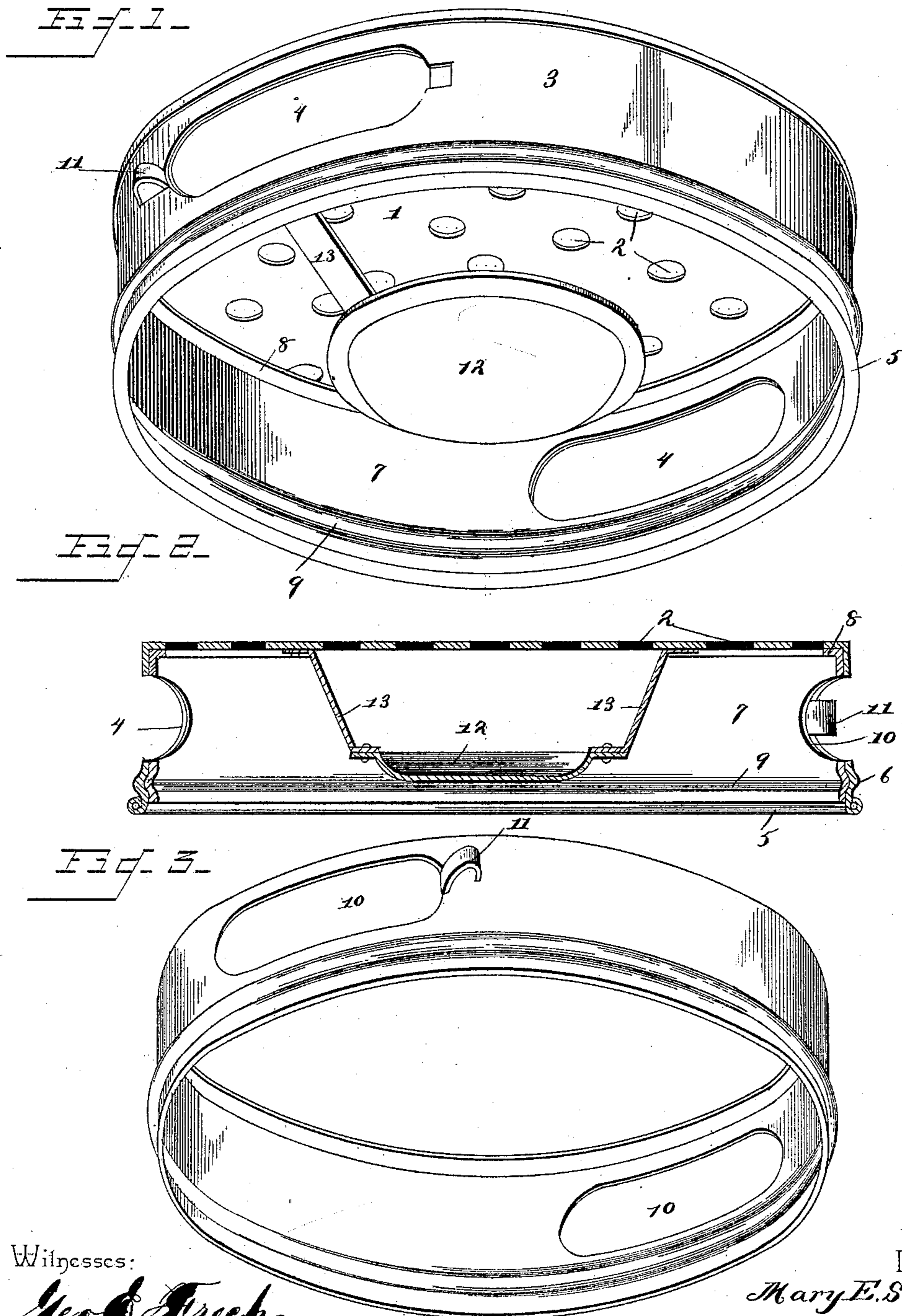


(No Model.)

M. E. SMITH.  
HEAT RADIATOR FOR OIL STOVES.

No. 418,244.

Patented Dec. 31, 1889.



Witnesses:

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# UNITED STATES PATENT OFFICE.

MARY E. SMITH, OF SCHUYLER, NEBRASKA.

## HEAT-RADIATOR FOR OIL-STOVES.

SPECIFICATION forming part of Letters Patent No. 418,244, dated December 31, 1889.

Application filed March 18, 1889. Serial No. 303,812. (No model.)

*To all whom it may concern:*

Be it known that I, MARY E. SMITH, a citizen of the United States, residing at Schuyler, in the county of Colfax and State of Nebraska, have invented a new and useful device for Heat-Radiators for Oil-Stoves, of which the following is a specification.

My invention has relation to heat-radiators for gasoline and other vapor stoves.

Among the objects in view are to provide a radiator adapted to be applied over the burner of a vapor-stove to diffuse the heat arising from the burner and to distribute the same more evenly and over a larger area, whereby vessels the bottoms of which are exposed to the action of heat are not liable to an early burning out in one place, but by reason of a greater portion of the bottom being exposed to the action of the heat the burning out is more uniform and slower.

A further object of the invention is to provide for a regulation of the heat by the admission of the heat-intensifying drafts.

With these general objects in view the invention consists in a perforated disk having an annular flange depending from its periphery, a damper-ring located and adapted to revolve within the flange and adapted for opening or closing either wholly or partially draft-openings in said flange, and in a depending disk-supporting deflector supported by legs secured to the under surface of the disk, said deflector being designed to rest upon the burner and to deflect and radiate the heat therein generated.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 represents a perspective of a heat-radiator constructed in accordance with my invention. Fig. 2 is a transverse section of the same, and Fig. 3 a detail and perspective of the damper-ring.

In practicing my invention I may construct the device hereinafter described, either in whole or in part, of Russia-iron or sheet or other metal, as desired; but prefer the first mentioned, as the same is best adapted for the purposes to which the invention is applicable.

1 represents a circular radiating-disk, which is provided with a series of heat openings or perforations 2. The periphery of the disk is provided with a depending annular flange 3, having at diametrically-opposite points draft-openings 4, the lower edge of the flange terminating in an annular bead 5, and above the bead provided with a parallel countersunk groove 6.

7 represents the damper-ring, which is circular and of a diameter to loosely fit within the depending flange and between the lower bead thereof and the under surface of the radiating-disk 1. The upper edge of the damper-ring is inwardly flanged, as at 8, and the lower edge thereof is provided with a superficial annular rib 9, which rides in the countersunk annular groove of the flange. Diametrically-opposite openings 10 are formed in the ring, and by thumb-lugs 11, projecting from the exterior surface of the ring and through the draft-openings, the openings of the ring and flange may be made to wholly or partially register for the purpose of inducing draft under the table.

12 represents a central circular disk or deflector convexed upon its lower surface and adapted to be removably seated upon or arranged over the vapor-burner of a stove. From diametrically-opposite points of the upper surface of the disk or deflector there arises a standard 13, the upper ends of which are secured to the under surface of and thus support the disk 1.

The operation of my invention will be at once understood from the above description, but may be briefly stated as follows: The heat generated by the flame passing from the burner is by the deflecting-disk radiated evenly to all portions of the space inclosed by the annular flanges and is distributed from the disk through the perforations therein evenly over the entire surface of the bottom of the vessels. By revolving the damper-ring through the medium of the lugs 11 a draft of air may be induced to enter and commingle with the vapor, and thus the intensity of the heat increased or diminished, as may be desired.

Having thus described my invention and its operation, what I claim is—

1. The combination, with the perforated

disk provided with a right-angularly-disposed depending flange having a series of draft-openings, and the convexed deflector surrounded by the flange and supported by legs  
5 depending from the disk, of the damper-ring mounted for movement in the flange and having openings adapted to be thrown into register with those of the flange, substantially as specified.

10 2. The combination, with the concave circular radiating-disk, of the upwardly-disposed supporting-legs, the perforated circular radiating-disk supported by the legs above

the disk, the depending flange encircling the table, perforations formed in the flange, and 15 a groove formed near the edge of the flange, and the circular damper-ring mounted to revolve within the flange and having openings adapted to register with those of the flange, and thumb-lugs projecting outside of the 20 flange, and an annular bead for riding in the groove, substantially as specified.

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Witnesses:

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