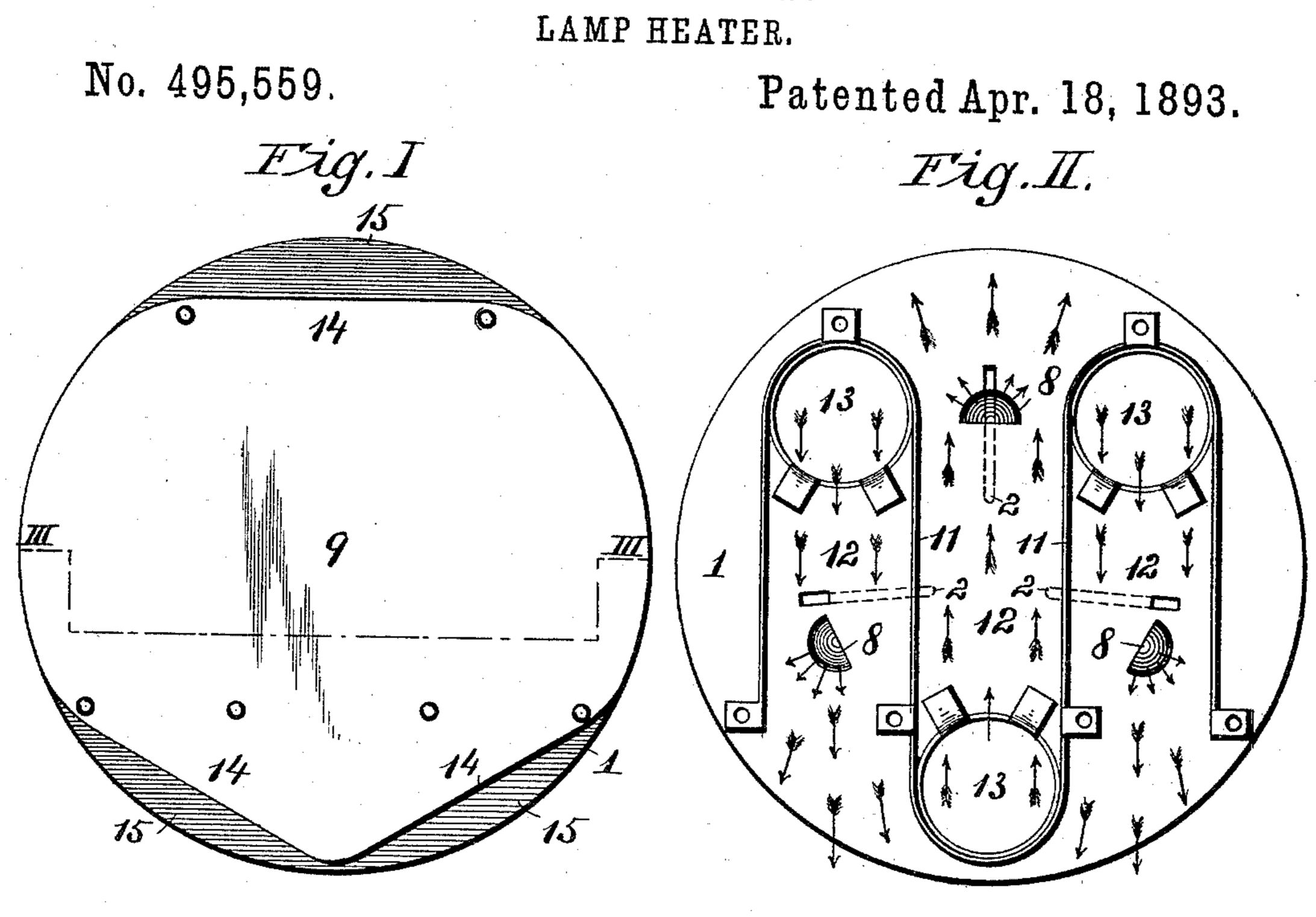
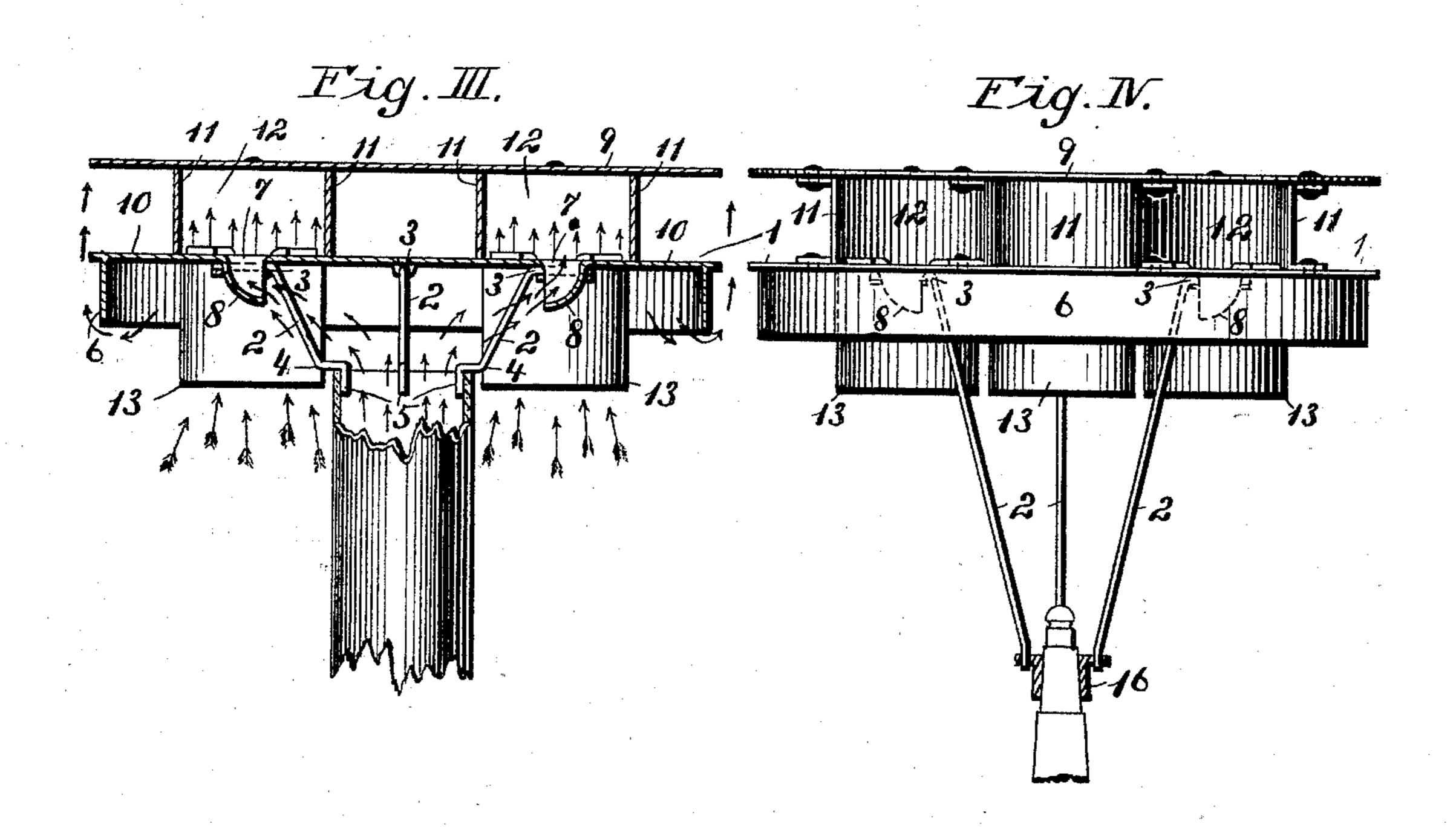
(No Model.)

W. MASTERS. LAMP HEATER.

Patented Apr. 18, 1893.





Witnesses!

Inventor: Wm. Masters.

United States Patent Office.

WILLIAM MASTERS, OF KANSAS CITY, MISSOURI.

LAMP-HEATER.

SPECIFICATION forming part of Letters Patent No. 495,559, dated April 18, 1893.

Application filed May 31, 1892. Serial No. 435,011. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MASTERS, of Kansas City, in the county of Jackson and State of Missouri, have invented certain new 5 and useful Improvements in Lamp-Heaters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to a certain new and useful device to be attached to a lamp chimney, gas jet or other heating device for radiating the heat; and my invention consists in certain features of novelty hereinafter de-15 scribed and pointed out in the claims.

Figure I, represents a top view of my improved device. Fig. II, is a top view the upper plate being omitted. Fig. III, is a section taken on line III—III, Fig. I, showing the de-20 vice supported by a chimney. Fig. IV, represents a side elevation showing the device supported by the gas jet.

Referring to the drawings: 1, represents a deflecting plate having legs 2, secured to the 25 same at 3, said legs converging toward each other at their lower ends, and being provided with horizontal portions, 4, whereby the plate is supported on the top of the chimney, and with vertical portions 5, pressing against 30 the inner side of the chimney in order to hold the plate in the proper position over the chimney.

The deflecting plate 1, is provided near its periphery with a vertical pendent flange 6, 35 which confines the heat arising from the lamp or other heating device, causing the heat particles to pass downward, as shown by arrows, Fig. III, the heat particles then passing up-

ward on the outside of said flange.

The plate 1, is provided with a series of apertures 7, through which a portion of the heat arising from the lamp or other device is permitted to pass, said aperture 7, having hoods 8, in connection therewith, said hoods extend-45 ing downwardly from the under side of the plate i, the purpose of said hoods being to direct portions of the heat atoms through the aperture 7, said hoods having concave surfaces for this purpose.

9, represents an additional deflecting and radiating plate, situated some distance above the plate 1, leaving a space 10 between the

same. The plate 9, is connected with the plate 1, by means of a division strip 11, said strip dividing the space 10, into a series of 55 divisions 12.

13, represents tubes connected with the plate 1, and extending down a short distance from said plate, the purpose of said tubes being to conduct the surrounding or unheated 60 air, up through the plate 1, into the space 10, between the plates 1 and 9, the heated air arising from the lamp causing a suction between the two plates, thus drawing the air through said tubes 13, as shown by arrows, 65 heating the same and discharging it from between the plates, as shown by arrows in Fig. II.

The object of the division strip 11, is to divide the space 10, into a series of divisions or flues 12, thereby directing the currents of heat 70 from each of the flues 12, to the outside of the plate 9, from whence it escapes into the room.

The upper plate, 9, is not a complete circle; but is provided with portions 14, of less radius than the remaining portions of the plate, 75 and have less radius at these points than the plate 1. The spaces 15, caused by this reduction permit the heated air passing from the flues 12, to ascend freely without coming in contact with the deflected air passing around 80 and upward from the lower plate 1, and flange 6.

I do not confine myself to any particular construction of division 11, or to any number of tubes 13, as more or less tubes may be used 85 if found to be desirable, and the divisions between said tubes may be differently construct-

ed, if found to be best.

In Fig. IV, the device is applied to a gas fixture, the legs 2, being connected with a collar 90 16, which fits over the nipple, and is supported by the gas fixture.

I claim as my invention—

1. In a lamp heater, the combination of a suitable support, a deflecting plate; down- 95 wardly extending tubes in connection with said plate, and a flange extending around the outer portion of said plate; substantially as and for the purpose set forth.

2. In a lamp heater, the combination of a 100 deflecting plate; and tubes connected with said plate, through which a portion of the heat atoms pass; substantially as and for the pur-

pose set forth.

3. In a lamp heater, the combination of a deflecting plate; tubes surrounding openings in said plate, and extending downwardly; openings in said plate alternating with the tube openings, and hoods in connection with said alternating openings; substantially as set forth.

4. In a lamp heater, the combination of a lower plate, and upper plates; tubes extending through said lower plate; division walls dividing the spaces between said plates and additional openings in the lower plate for per-

mitting a direct flow of heat through the same into said divided spaces; substantially as and for the purpose set forth.

5. In a lamp heater, the combination of a lower plate, an upper plate; and divisions between said plates, said upper plate being of less radius at certain points than said lower plate; substantially as set forth.

WILLIAM MASTERS.

Witnesses:

JAS. E. KNIGHT, FRANCIS A. LEACH.