J. LAMB.

GAS HEATER.

APPLICATION FILED APR. 25, 1916.

1,223,182. Patented Apr. 17, 1917.

Fig. 1.

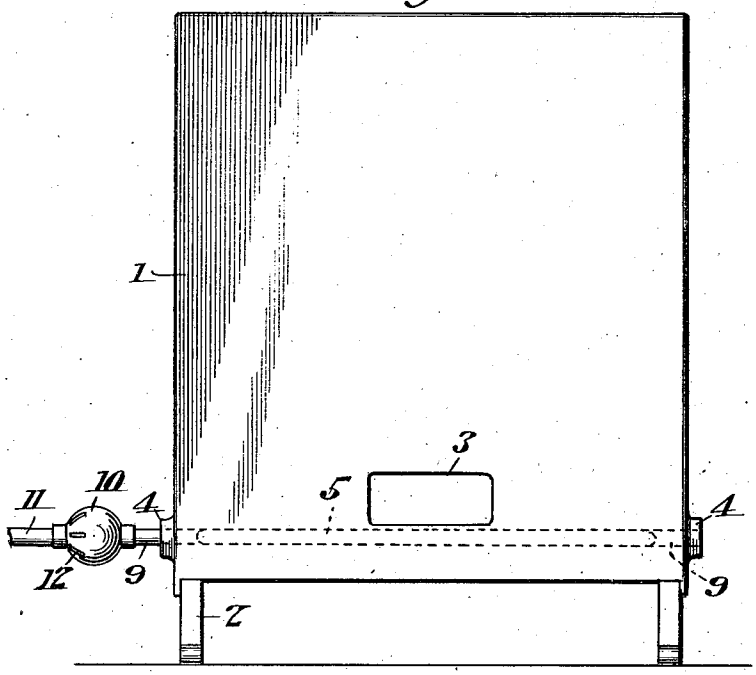


Fig. 2.

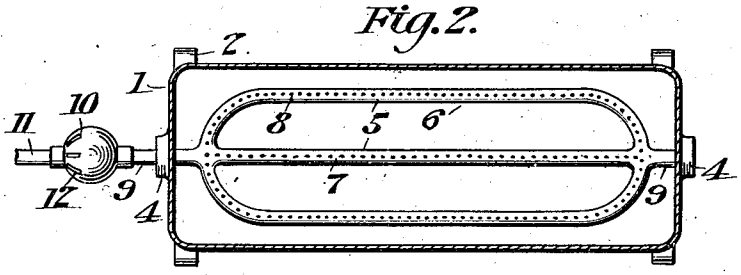


Fig. 3.

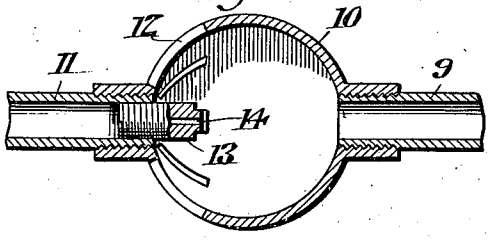
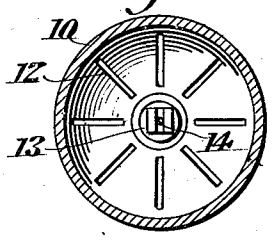


Fig. 4.



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UNITED STATES PATENT OFFICE.

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GAS-HEATER.

1,223,182. Specification of Letters Patent. Patented Apr. 17, 1917.

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To all whom it may concern:

Be it known that I, JOSEPH LAMB, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented new and useful Improvements in Gas-Heaters, of which the following is a specification.

This invention relates to certain novel and useful improvements in gas stoves.

In carrying out the present invention, it is my purpose to improve and simplify the general construction of gas stoves and to provide a stove wherein the gas will be fed to the burner at an even and uniform pressure and the air mixed with the gas thoroughly previous to the passage of the gas to the burner, thereby promoting combustion and enabling the maximum heat to be developed with a minimum consumption of gas.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter set forth in and falling within the scope of the claims.

In the accompanying drawing:

Figure 1 is a view in side elevation of a gas stove constructed in accordance with the present invention.

Fig. 2 is a horizontal sectional view therethrough.

Fig. 3 is a longitudinal sectional view through the mixing valve.

Fig. 4 is a cross sectional view through the same.

Referring now to the drawing in detail, 1 designates a vertical casing substantially rectangular in horizontal section and mounted upon legs 2. Formed in one side wall of the casing 1 adjacent to the bottom thereof is an air inlet opening 3, while formed on the opposite end walls of the casing adjacent to the bottom wall are outwardly projecting bosses 4 formed with openings alining with openings in the end walls of the casing.

Mounted in the casing 1 adjacent to the bottom thereof is a burner 5 in the form of an elongated round ended tube 6. Arranged centrally of this tube is a tubular section 7 having the ends thereof integral with and opening into the rounded end portions of the tube. The top portion of the tube 6 and the tubular portion 7 are formed with openings 8 through which the gas may issue to be ignited. Integral with the rounded end portions of the tube 6 are axially alining horizontal rods 9 that are passed through the openings in the end walls of the casing and the bosses 4 to support the burner in proper position in the casing. One of the rods 9 is hollow and in open communication with the burner and threaded onto such hollow rod is a spherical mixing chamber 10 connected, at a point diametrically opposite the rod 9, with a supply pipe 11. Formed in the spherical mixing chamber 10 adjacent to the supply pipe 11 are air inlet slots 12 through which air may pass into the chamber to mix with the gas so that the proper mixture will be supplied to the burner for ignition. Disposed in the pipe 11 at the point of connection between such pipe and the mixing chamber is a reducer 13 which, in the present instance, is in the form of a plug provided with a longitudinal relatively small opening 14 through which the gas may pass into the mixing chamber. By means of this small passage in the plug, the gas is supplied to the mixing chamber uniformly and evenly irrespective of variations in pressure in the supply pipe.

While I have herein shown and described the preferred form of my invention by way of illustration, I wish it to be understood that I do not limit or confine myself to the precise details of construction herein described and delineated, as modification and variation may be made within the scope of the claims and without departing from the spirit of the invention.

I claim:

1. A burner comprising an elongated round ended endless tube, and a second tube extending longitudinally of the first tube and having the ends thereof integral with the rounded end portions of the first named tube, the upper portions of said tube being perforated.

2. A spherical mixing chamber having inlet and outlet ports at diametrically opposite points and formed with air inlet slots around the inlet portion, and a reducer arranged in the inlet port and formed with a relatively small bore.

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

JOSEPH LAMB.

Witnesses:

VERDEN RICH,

FREDERIC W. COOPER.