

(No Model.)

L. HENKLE.
GAS BURNER.

No. 586,085.

Patented July 6, 1897.

Fig. 1.

Fig. 2.

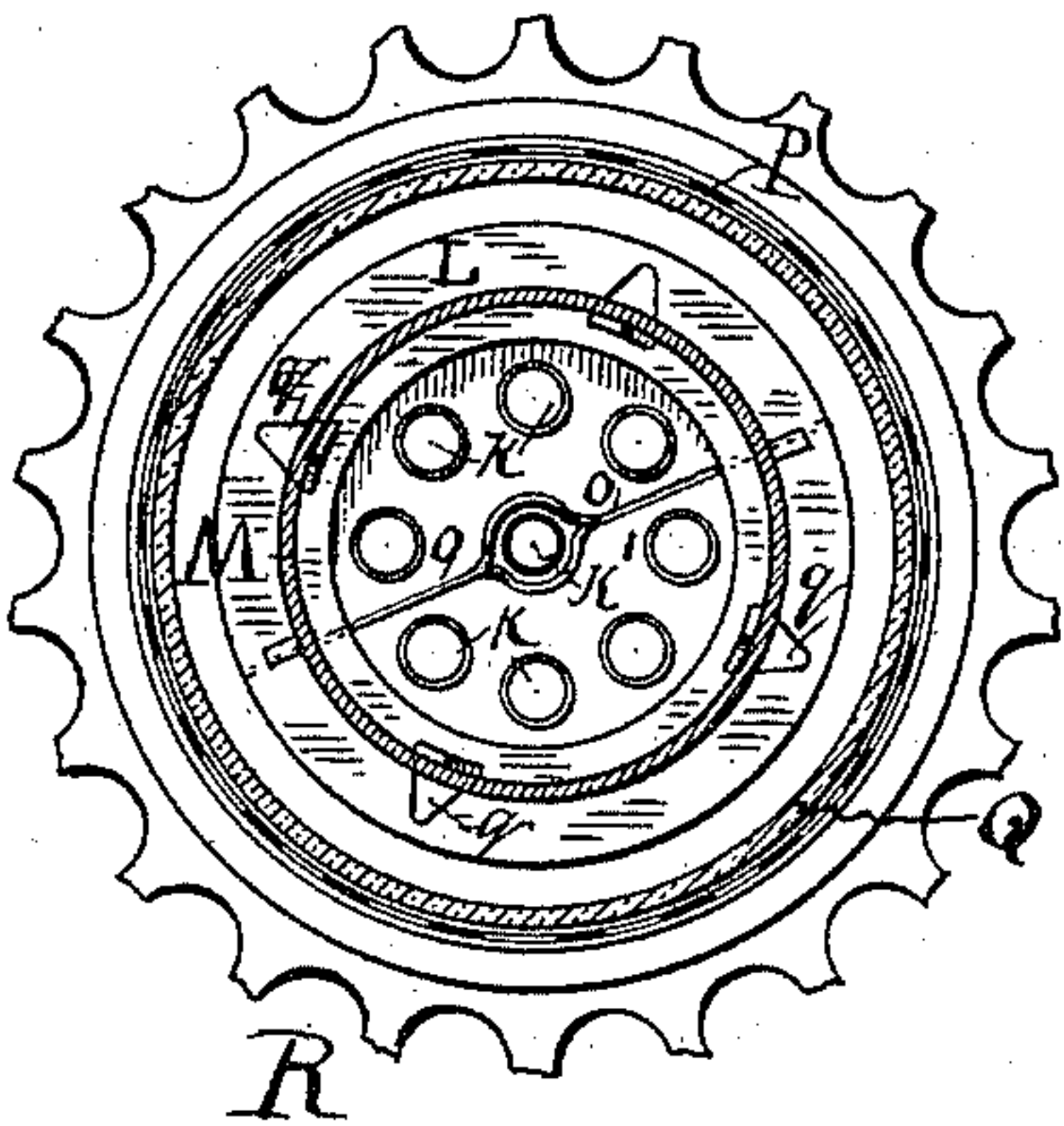


Fig. 5.

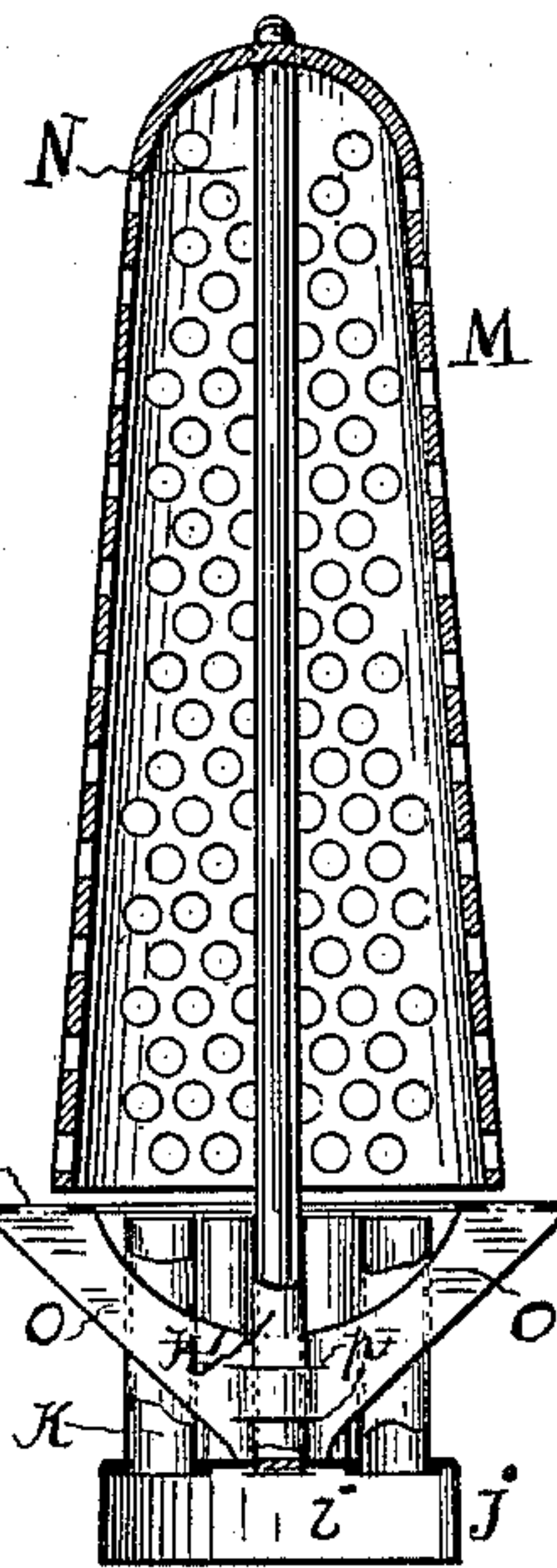


Fig. 3.

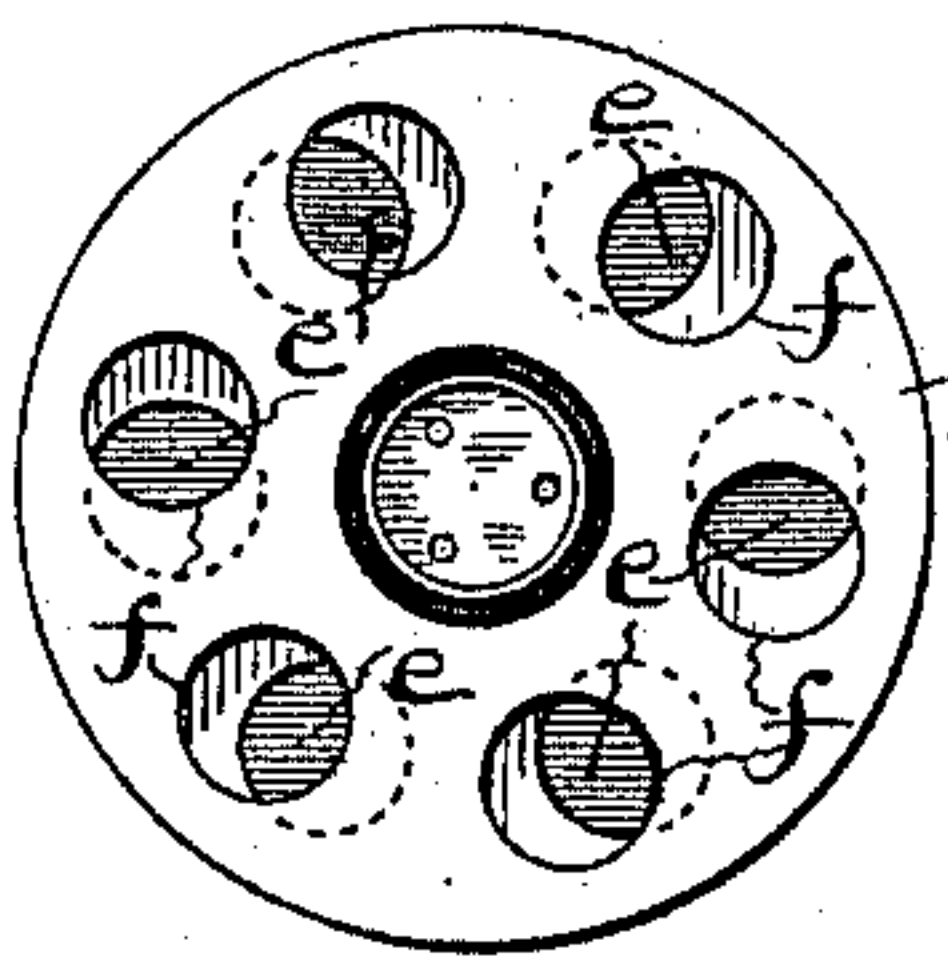
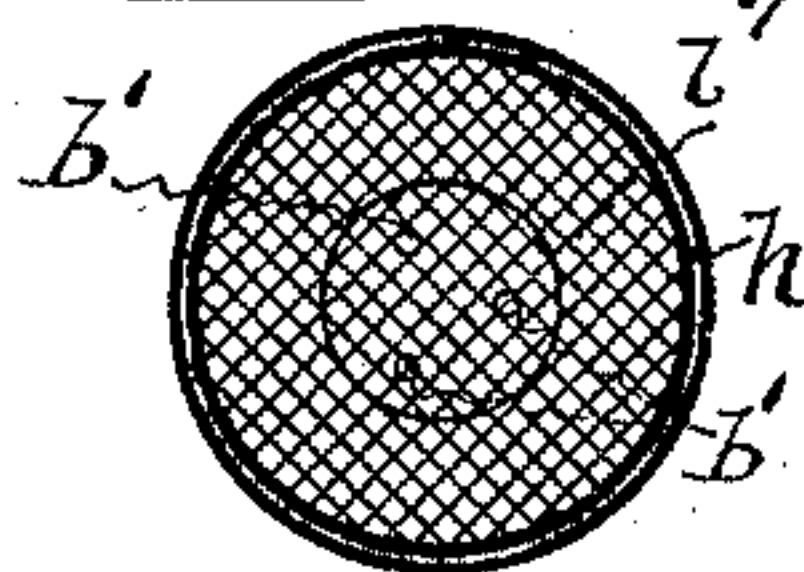


Fig. 4.



Witnesses
Chas. Hanemann
R. F. Osgood

By his Attorney
Leonard Henkle
Walter Brown

UNITED STATES PATENT OFFICE.

LEONARD HENKLE, OF ROCHESTER, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE CONSOLIDATED STERLING INCANDESCENT GAS LAMP COMPANY, OF NEW JERSEY.

GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 586,085, dated July 6, 1897.

Application filed May 5, 1896. Serial No. 590,288. (No model.)

To all whom it may concern:

Be it known that I, LEONARD HENKLE, a citizen of the United States, and a resident of the city of Rochester, Monroe county, State of New York, have invented certain new and useful Improvements in Gas-Burners, of which the following is a specification.

My invention relates to improvements in gas-burners, especially of that kind which is used in connection with incandescing mantles.

Referring to the drawings which accompany the specification to aid the description, Figure 1 is a vertical section of the burner and showing the mantle and chimney in position. Fig. 2 is a section on the line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a section on the line 4 4 of Fig. 1. Fig. 5 is a vertical section of the burner-head and mantle and showing how an infusible rod for supporting the mantle may be arranged.

The burner is constructed as follows:

A is the mixing-chamber, approximately spheroidal in shape; *a*, the nozzle, which threads on the gas-pipe *a'*. The diaphragm *b*, which may be formed integral with the bottom plate *d* of chamber A, is perforated with fine holes *b' b'*. Top *c* and bottom *d* of said chamber A are preferably of thin sheet-brass and are united by turning the edge of the top *c* under the edge of the bottom *d*, as shown, and in said top *c* are holes *e*. The valve D is a dished plate shaped to fit on the top *c*, the flange *f'* holding said valve concentric to the chamber A. Openings *f* in said valve D in one position, Fig. 1, register with the said holes *e* and admit air. By turning the said valve the holes *e* will be closed by the solid part of the valve. Said valve D is fixed on the lower end of the tube *g*, the upper end of which flares out to form the head *h*. A wire mesh *i'* is secured at the bottom of the said head *h*. A cap-plate *i*, with flange *j*, fits on the top of the head *h* and is provided with a number of burner tubes or tips *k*. The central tube *k'* is preferably closed at the bottom and serves merely as a support for the annular plate L, on which

the mantle M may rest, Fig. 1, or as a socket for the infusible supporting-rod N, Fig. 5.

In the arrangement of Fig. 1 the plate L is equipped with a Y-shaped bracket *o*, which is riveted to said plate L. Two slits *p*, Fig. 5, are made in the lower part of the bracket and a loop is formed by bending the metal, as shown in Fig. 2. This loop fits over the tube *k'*. Points *q q* are turned up from the plate L to center the mantle M, as indicated in Fig. 1. The burner is provided with the usual filigree clamp P for the chimney Q and latticed globe-holder R.

When it is desired to use an infusible rod, as N, Fig. 5, the lower end of said rod is inserted in the tube *k'* and the mantle hangs in the usual manner in the crotch at the top of the rod.

Now, having described my improvements, I claim as my invention—

1. The combination in an incandescent gas-burner of a mixing-chamber, a gas connection thereto, air-inlets through a wall of said mixing-chamber, a perforated valve centered and rotating on said wall and controlling said air-inlets, an eduction-tube carried by said valve, an enlarged head on said tube, and a plurality of gas and air delivery tubes on said head, substantially as described.

2. The combination in an incandescent gas-burner, of a mixing-chamber, a gas connection thereto, air-inlets through a wall of said mixing-chamber, a perforated valve centered and rotating on said wall and controlling said air-inlets, an eduction-tube carried by said valve, an enlarged head thereon, a plurality of gas and air delivery tubes on said head, a blind tube on said head, and an annular support for a mantle carried by said blind tube, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 29th day of April, 1896.

LEONARD HENKLE.

Witnesses:

R. F. OSGOOD,
F. B. HUTCHINSON.