

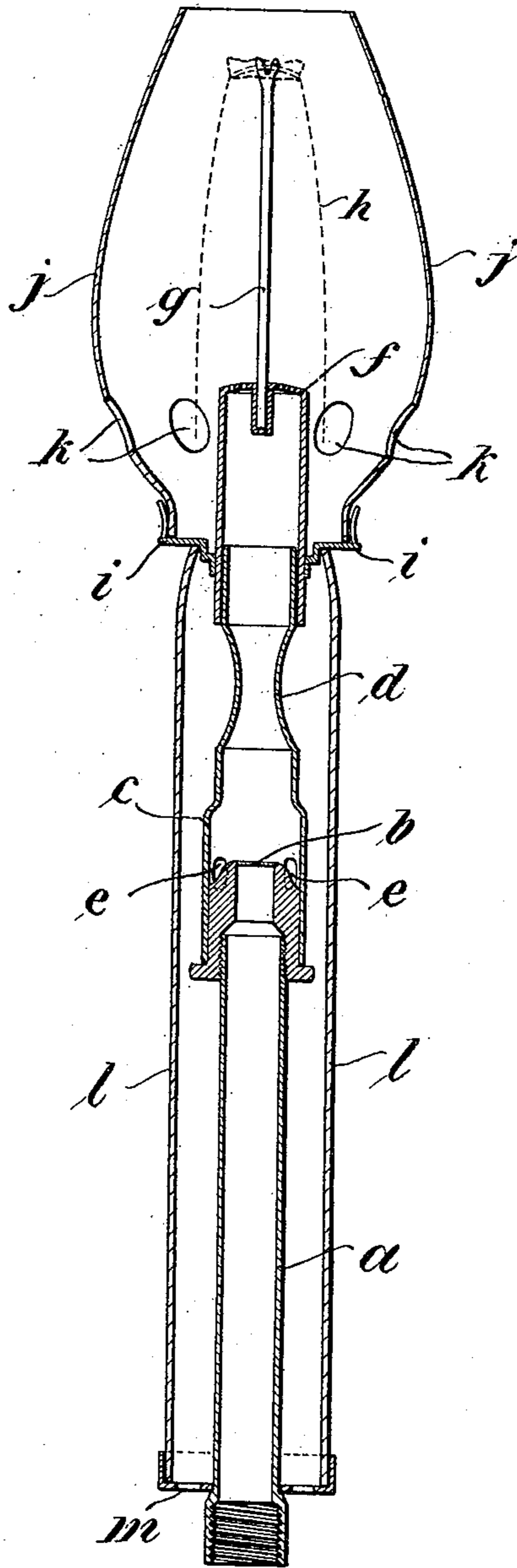
No. 712,731.

Patented Nov. 4, 1902.

E. SEILER.
INCANDESCENT GAS BURNER.

(Application filed Apr. 14, 1902.)

(No Model.)



Witnesses:-
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UNITED STATES PATENT OFFICE.

EUGEN SEILER, OF BERLIN, GERMANY.

INCANDESCENT GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 712,731, dated November 4, 1902.

Application filed April 14, 1902. Serial No. 102,829. (No model.)

To all whom it may concern:

Be it known that I, EUGEN SEILER, merchant, a citizen of the Kingdom of Prussia, and a resident of Berlin, Germany, (whose post-office address is Gneisenaustasse 107,) have invented certain new and useful Improvements in Incandescent Gas-Burners, of which the following is a specification.

My present invention relates to a new form of an incandescent gas-burner imitating the form of an ordinary or electric candle, which imitation was heretofore impossible to realize by means of incandescent gas-burners. The burner, which preferably is of reduced dimensions, is partly or wholly hidden within a tube or mantle having the form and appearance of a candle, this tube protecting the burner at the same time from dust and currents of air.

The accompanying drawing shows the new burner in vertical section through the axis.

a is a short tube screwed to the gas-supply tube and terminating at its upper end into a nozzle *b*. This nozzle may be either next to the supply-pipe or some distance apart from same.

c is a piece of tube screwed over said nozzle, said tube being contracted in its middle at *d* and bearing in its lower part lateral openings *e*, through which fresh air is sucked in by the jet of gas sallying forth through nozzle *b*, air and gas mixing in the contracted part of tube *c*. To the upper end of said tube *c* is put the burner proper, *f*, the form of same being substantially that in general use in incandescent burners. Said burner is provided with a support *g* for the incandescent mantle *h* and with a gallery *i* for the chimney *j*, which is preferably pear-shaped. Its form may also imitate that of the flame of a candle or the bulb of an electric candle, &c. The gallery may or may not be perforated. In the latter case, which is shown in the drawing, the chimney being provided with lateral openings *k*, through which air enters to the flame, *l* is a wide tube inclosing tubes *a* and *c*, resting with its lower end on a gallery *m*, the upper end reaching up to the gallery *i*. If the latter is closed, the tube *l* may remain open at the top; but when the former is open the walls of tube *l* are inwardly bent, so that only a small central opening remains, through which

the burner just passes. The exterior of the tube, which may be made of glass, porcelain, metal, &c., preferably imitates the appearance of a candle.

By inclosing tubes *a* and *c* in the tube *l* and by separating the interior of the latter from the burner by either employing a closed gallery or by bending the upper end of said tube inwardly or by closing the upper end of tube *l* by means of a wire screen the rebounding of the flame from the burner to the nozzle *b* in igniting the flame is rendered impossible, and no dust can enter and soil the burner, and drafts of air cannot cause the flame to flicker. As no rebounding of the flame to the nozzle *b* can take place, no bursting of the enveloping tube *l* from the heat of the flame at the nozzle *b* is to be feared. As the parts inclosed are protected from contact with the air, they are considerably heated by transmission of the heat from the flame through the metallic parts, the gas and air passing through said parts are considerably heated, and therefore the temperature of the flame is also increased.

By employing a number of small flames of relatively small individual illuminating power instead of one powerful flame the distribution of light over the room may be rendered completely uniform, and by employing chimney-shades of colored tissues or papers, such as have heretofore been employed in connection with electric lights, the appearance may be rendered still more pleasant and the light may be thrown directly downward.

What I claim is—

1. An incandescent burner for gas comprising a tube adapted to be applied to the supply-pipe, a nozzle at the upper end thereof, a tube supported on said nozzle and contracted near its mid-height and having lateral openings near the upper end of the nozzle, a burner attached to the upper end of said tube and a tube inclosing said outer tube and nozzle and contracted tube and a gallery supported on the lower end of the inner tube and supporting the outer tube, substantially as described.

2. An incandescent burner for gas comprising a tube adapted to be applied to the supply-pipe, a nozzle at the upper end thereof, a tube supported on said nozzle and con-

tracted near its mid-height and having lateral
openings near the upper end of the nozzle, a
burner attached to the upper end of said
tube and a tube inclosing said outer tube and
5 nozzle and contracted tube and a gallery sup-
ported on the lower end of the inner tube and
supporting the outer tube, a gallery supported
by said burner and outer tube, a mantle sup-
port carried by said burner and a chimney on

said gallery having lateral openings near the
upper end of said burner.

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

EUGEN SEILER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.