

67. ILLUMINATING BURNERS,

Gaseous fuel burners,

Incandescent, Mantle support,

Inverted.

103

No. 818,032.

PATENTED APR. 17, 1906.

M. KOBLENZER.

INCANDESCENT GAS MANTLE.

APPLICATION FILED APR. 28, 1905.

Fig.1

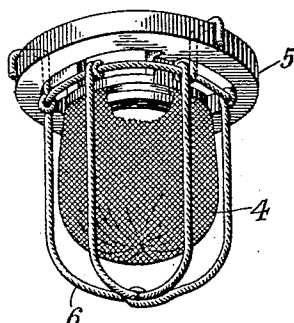


Fig.2

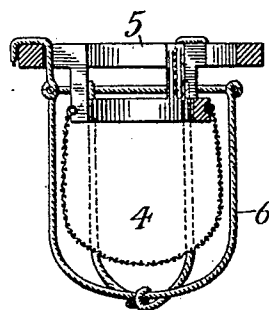
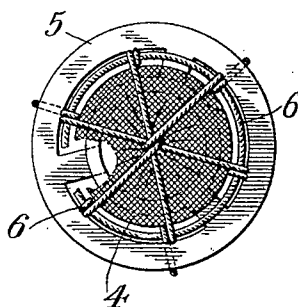


Fig.3



Witnesses:
Raphael Ketter
Frederick H. Davis.

Martin Koblenzer, Inventor
by William C. Messimer, Atty

UNITED STATES PATENT OFFICE.

MARTIN KOBLENZER, OF VIENNA, AUSTRIA-HUNGARY, ASSIGNOR TO
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INCANDESCENT GAS-MANTLE.

No. 818,032.

Specification of Letters Patent.

Patented April 17, 1906.

Application filed April 29, 1905. Serial No. 258,089.

To all whom it may concern:

Be it known that I, MARTIN KOBLENZER, a subject of the Emperor of Austria-Hungary, residing in Vienna, Austria-Hungary, have invented certain new and useful Improve-
5 ments in Incandescent Gas-Mantles, of which the following is a specification, reference being had to the drawings accompanying and forming part of the same.

10 My invention has for its object to provide an incandescent gas-mantle which can be used for lighting in places—such as railway-cars, bridges, &c.—where it has heretofore been impossible owing to the severe charac-
15 ter of the service. For this purpose I find that a small mantle is the most desirable, as it may be made stronger; but in order to get the necessary amount of illumination from such a small mantle it is desirable to invert
20 it, thereby encountering new difficulties, which I have solved by providing a protecting and surrounding basket or cage, as shown in the drawings, in which—

25 Figure 1 is a perspective view of a mantle embodying my invention. Fig. 2 is a vertical central cross-section, and Fig. 3 is a plan view looking up from the bottom of the mantle.

30 4 is the inverted mantle, which is attached to the holder 5 in any desired manner, preferably, however, directly attached thereto, which holder is provided with a central opening to permit the heating-flame to bring the mantle to incandescence. A convenient form
35 of holder is illustrated in the drawings and comprises an annular base having a series of radial rectangular arms connected at their lower extremities by a second annulus concentric with the base and provided with a peripheral groove engaged by the edge of the
40 mantle 4 to support said mantle. I also attach to the holder 5 a basket or cage 6 in such a manner as to surround and envelop the mantle without coming in contact therewith,
45 and composed of any material which will withstand the heat of the Bunsen flame, preferably a thin wire covered with asbestos. This latter material is strong and durable and may be fine enough so as not to inter-
50 fere to any appreciable extent with the light-rays from the mantle. This surrounding basket or cage 6 serves the purpose of protecting the mantle when it is being handled

and the further and highly important purpose of maintaining the mantle in contact with
55 the flame from the Bunsen burner should it happen to become detached from the holder or break. This latter function is highly important, because the mantle is used as an inverted mantle, and if such additional precau-
60 tion were not taken the least fracture in the mantle would cause the entire mantle to drop away from the heating-flame, and thus put out the light.

The basket or cage 6 may be conveniently
65 constructed of a series of longitudinal filaments united at a central point at the bottom and secured to an upper filamental ring surrounding the base 5, certain of the longitudinal filaments being prolonged beyond their
70 attachment with the ring and bent in hook form to pass over the base of the holder to securely support the cage or basket in proper relation with respect to the mantle.

Having described my invention, what I
75 claim is—

1. The combination of an inverted incandescent gas-mantle and a surrounding cage
80 out of contact with the mantle to protect the same, substantially as described.

2. The combination of an inverted gas-mantle directly attached to a holder therefor and a surrounding cage also attached to said
85 holder and out of contact with the mantle, substantially as described.

3. The combination of an inverted incandescent gas-mantle mounted on a holder
90 therefor and a cage surrounding the mantle, but out of contact therewith, substantially as described.

4. The combination of an inverted incandescent gas-mantle and a cage of refractory
95 material surrounding and out of contact with the mantle for protecting the same, substantially as described.

5. The combination of an inverted incandescent gas-mantle and a cage of refractory
100 material surrounding the same, said cage comprising a series of filaments united at a common point, and a ring to which said filaments are attached, said cage being out of
contact with the mantle; substantially as described.

6. The combination of an inverted incandescent gas-mantle, a holder therefor com-
105 prising two concentric connected annuli, and

a cage of refractory material surrounding said mantle and connected to said holder; substantially as described.

7. The combination of an inverted incandescent gas-mantle, a holder therefor comprising an annular base and a second annulus connected to said base, and a cage of refractory material surrounding the mantle, said cage comprising a series of centrally-connected filaments, a ring secured thereto, and

hooked extensions on certain of said filaments engaging the annular base; substantially as described.

In witness whereof I have hereunto set my hand, in the presence of two witnesses, this 15 2d day of May, in the year 1904.

MARTIN KOBLENZER.

Witnesses:

HILLARY C. MESSIMER,
C. L. MATTHEWS.