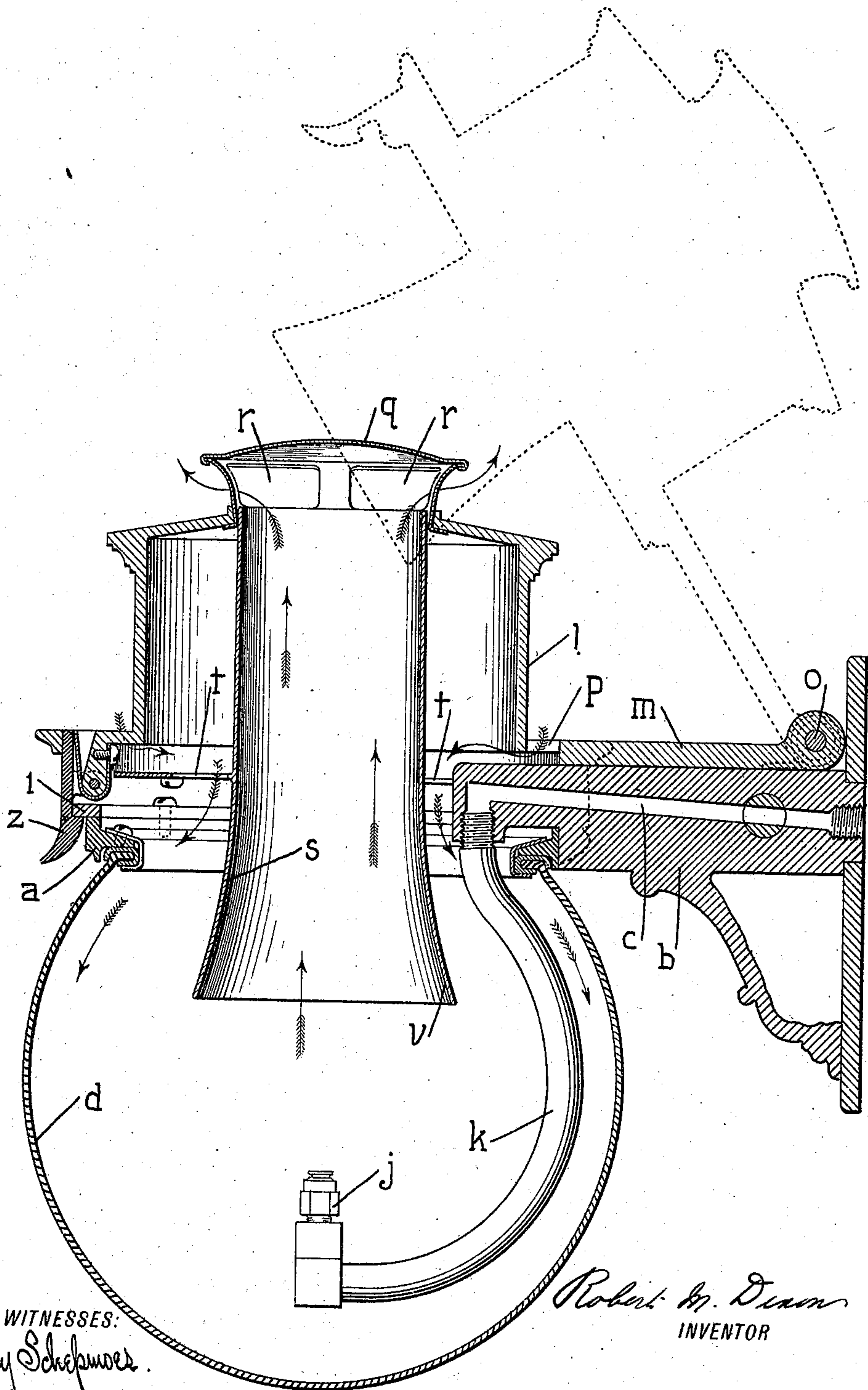


No. 881,666.

PATENTED MAR. 10, 1908.

R. M. DIXON.  
GAS LAMP.

APPLICATION FILED AUG. 4, 1904.



**WITNESSES:**

Lindley Schepmeyer.  
Wm. J. Macaulay

*Robert M. Dixon*  
INVENTOR

BY

Kennison, Smiley & Paulmier  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

ROBERT M. DIXON, OF EAST ORANGE, NEW JERSEY, ASSIGNOR TO THE SAFETY CAR HEATING & LIGHTING COMPANY, A CORPORATION OF NEW JERSEY.

## GAS-LAMP.

No. 881,666.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed August 4, 1904. Serial No. 219,497.

*To all whom it may concern:*

Be it known that I, ROBERT M. DIXON, a citizen of the United States, residing at East Orange, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Gas-Lamps, of which the following is a specification.

My invention relates to gas lamps and is shown in the present instance as embodied in a gas lamp of the side bracket type although the invention is applicable to lamps generally and will be hereinafter described by way of illustration and essential features thereof claimed.

In the accompanying drawing, I have shown a transverse vertical section of a lamp in which my invention is embodied and have shown in dotted lines the position assumed by the hood when the same is lifted clear of the other parts of the lamp.

In the drawing, *a* indicates the ring which is supported by a bracket *b* having a gas-way *c*. A globe *d* closed at the bottom is removably attached to the ring *a*. The preferred means of securing the globe *d* in operative relation to the supporting ring *a* comprises a metallic member secured to the latter and having an outwardly extending lip taking under the inwardly projecting portion of the globe as shown in the drawing. Contained within the globe is a gas burner *j* connecting by a gas-way tube *k* with the gas-way *c* of the support.

The hood containing the air delivery, reflecting and exhaust devices will next be described.

An external casing *l* is shown as connected to an arm *m* pivoted at *o* to the support. This external casing is provided at the bottom with air inlet apertures *p* and at the top supports a ventilator *q* and apertures *r* which receive the products of combustion from a draft tube or chimney *s* which is or may be supported from the external casing *l* by arms *t*. The lower end *v* of the draft tube *s* may be of a flaring form, the air entering will by virtue of such flaring form and the shape of the globe be deflected so as to bring the air to the flame along the inner face of the globe. The burner *j* is located beneath the draft tube *s* and the space around the same is practically unobstructed except for the gas pipe *k*. The hood comprising the external

casing *l*, and the draft tube or chimney is supported above the ring *a* of the burner and the whole structure may be swung upward into the position shown in dotted lines turning upon the axis *o* as a pivot. A suitable latch *z* engaging a ring *1* may be employed to retain the hood in its lowered position. The air enters the lamp through the apertures *p* beneath the casing *l*, passes downwardly over the outer face of the draft tube or chimney *s*, and thence along the inner face of the globe to the burning point whereupon the products of combustion pass directly upward to the burner through the draft tube or chimney *s* and out by the apertures *r* of the ventilator. The course of the air and of the products of combustion is indicated by the arrows appearing on the drawing.

Having described my invention, what I claim and desire to secure by Letters Patent is:—

1. In apparatus of the class described, in combination, a globe, means upon which said globe is supported, a burner within said globe, means mounted adjacent said supporting means and adapted to swing with reference thereto, and a draft tube adapted normally to project within said globe and in operative relation to said burner and mounted upon said last-mentioned means whereby said tube may be swung away from said burner.

2. In apparatus of the class described, in combination, a globe, supporting means having said globe mounted thereon, a burner within said globe, supporting means mounted above said globe and adapted to swing with relation thereto, a casing upon said last-mentioned means, and a draft tube mounted within said casing and adapted normally to project within said globe and in operative relation to said burner.

3. In a gas lamp, the combination of a depending globe, an unobstructed draft tube provided with a lower end terminating within said globe and at a distance from the walls thereof whereby a clear passageway for the incoming air is provided, a burner within said globe and positioned symmetrically with respect to said tube whereby the products of combustion will be deflected by the lower walls of said tube and caused to pass therethrough, a gas conduit leading exte-



riorly of said tube to said burner means for supporting said globe, and means for supporting said tube.

4. In a gas lamp, the combination of a burner, a bracket maintaining said burner against displacement, an unobstructed draft tube, and an arm normally holding the lower end of said tube within said globe and above said burner and adapted to be independently actuated whereby said tube may be temporarily displaced from the aforesaid normal position.

5. In a gas lamp, the combination of a vertical clear draft tube having an outlet at its upper end and provided with a funnel-shaped lower end which incrementally flares downwardly and outwardly from the normal bore of said tube to the lower edge thereof, a hinged bracket carrying said tube, a burner substantially coinciding with the central axis of said tube whereby the products of combustion therefrom will be deflected by said flaring end and pass through said tube, a stationary support carrying said burner, and a conduit leading exteriorly of said tube to said burner.

6. A gas lamp comprising, in combination, a vertical clear draft tube having an outlet at its upper end and provided with a lower end flaring outwardly and downwardly in a funnel shape, a burner positioned centrally with respect to said lower end whereby the products of combustion will be received by said tube and discharged at its upper end, a conduit leading exteriorly of said tube to said burner a burner support, a tube support, said supports being relatively movable, and a globe containing said burner and the lower end of said tube.

7. In apparatus of the nature disclosed comprising in combination, a globe, a support therefor, a burner within said globe, a draft tube having its lower end directly overlying said burner, and a swinging support on said draft tube whereby the latter may be readily displaced to afford access to said burner and to enable said draft tube to be cleaned.

ROBERT M. DIXON.

Witnesses:

F. E. KESSINGER,  
ELMER E. ALBEE.