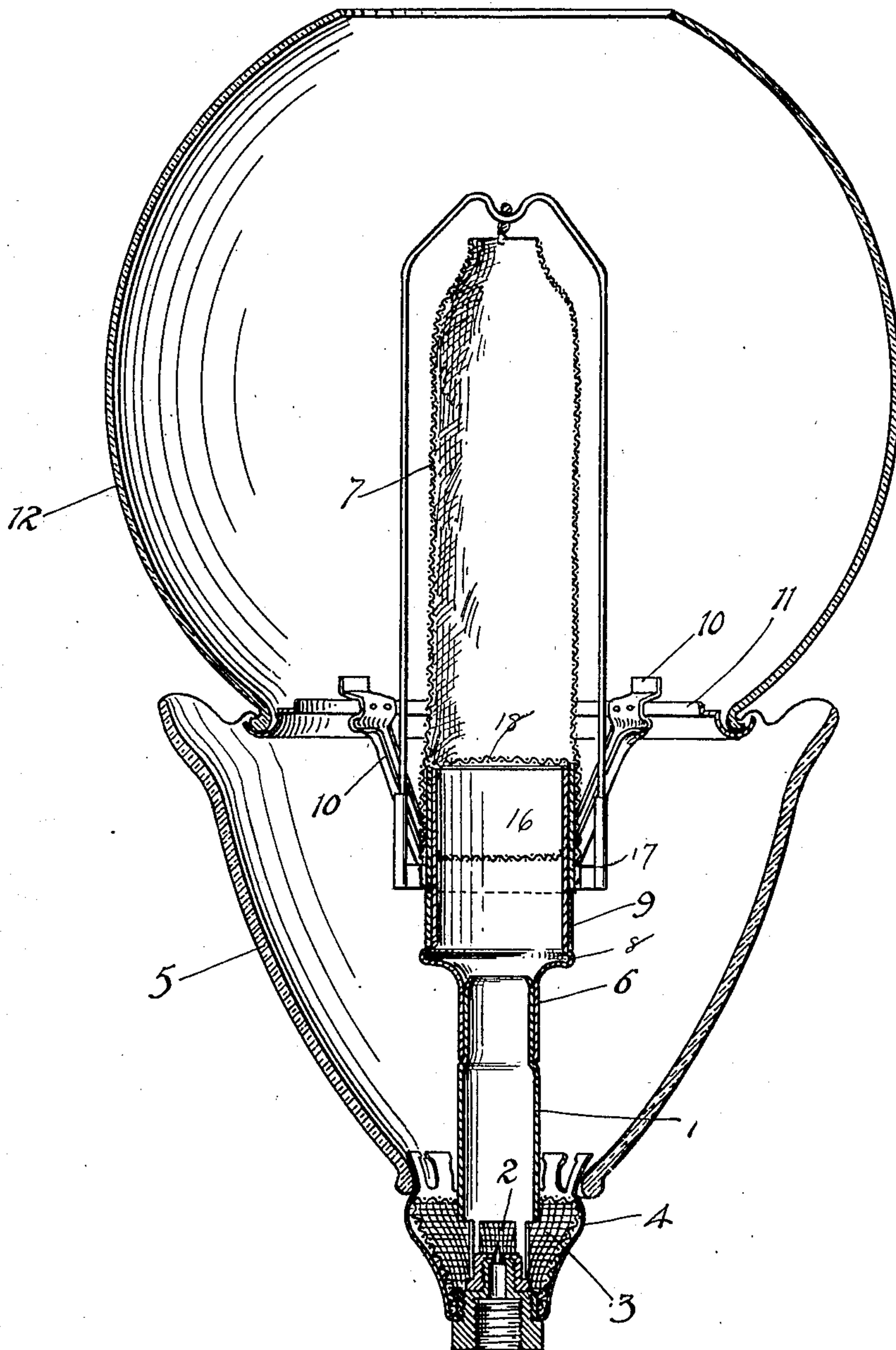


No. 885,495.

PATENTED APR. 21, 1908.

E. N. LEBWOHL.  
LAMP.

APPLICATION FILED JULY 29, 1907.



WITNESSES:

*Grafting Holt.*  
*H. Keating*

INVENTOR,

*E. N. Lebwohl,*

BY

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# UNITED STATES PATENT OFFICE.

EMIL N. LEBWOHL, OF SAN FRANCISCO, CALIFORNIA.

## LAMP.

No. 885,495.

Specification of Letters Patent.

Patented April 21, 1908.

Application filed July 29, 1907. Serial No. 385,958.

*To all whom it may concern:*

Be it known that I, EMIL N. LEBWOHL, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Lamps, of which the following is a specification.

This invention relates to improvements in supports for globes, chimneys or other glassware of lamps, and especially incandescent gas lamps. With prior supports used for this purpose breakage of the lamp chimneys, globes or glassware has frequently occurred by reason of the fact that, owing to a defect in the mantle or for other causes, the flames would be directed outwards and thus impinge upon the glass chimney or globe.

The object of the present invention is to prevent such frequent breakage, by causing the flames to be directed upwards, instead of against the lamp chimney.

In the accompanying drawing, the figure is a vertical section of an incandescent gas lamp equipped with my invention.

Referring to the drawing, 1 indicates the Bunsen tube of an incandescent gas burner, of usual construction. Around the air holes 2 leading to said tube 1, there is provided a dust protector 3, of wire gauze bent into a frusto-conical form and incased within a cage 4. Said cage 4 also serves as a support for the lower shade 5. Upon the tube 1 is supported the reduced portion 6 of the mixing chamber 16. Around said tube, and resting upon a shoulder 8 formed thereon, is a collar 9. Upon said collar is supported the usual cap 17 having the gauze top 18, and immediately surrounded by the bottom of the mantle, forming a guide or lateral support for the bottom thereof. From said collar extend arms 10, to the upper ends of which is secured a globe ring 11, upon which is supported a globe or chimney 12.

The novel feature of my invention consists in the level of the lower edge of this globe or chimney relative to the top of the mixing chamber 16. In prior forms of globe supports, so far as my knowledge extends, the globe has been supported at such a level that the lower edge thereof is considerably, one inch or more, below the level of the top of the mixing chamber.

My improvement consists in raising the globe support, so that the lower edge of the globe is at substantially the same level as the top of the mixing chamber. By the word

"substantially" it is here meant that said globe edge would not be more than one-quarter of an inch below the said level, and not more than one inch above said level except for lights of unusual size.

The above I consider to be the limits within which my invention may be practiced, although the height at which the lower edge of the globe should be supported to the best advantage will depend upon the pressure of the gas, the style or form of glassware or other substance forming a protection against the direct light, and upon other conditions, and may therefore be varied within the above limits without departing from the scope of my invention. The advantage resulting from this construction is that the air which flows up around the mantle within the globe is caused to pass into the globe in such volume and force as to prevent the flames from impinging against the globe and causing breakage of the same. When the mantle becomes ragged or broken, the effect is to cause the flames, instead of burning in the mantle, to emerge with considerable volume and force, and impinge upon and break the globe. By raising the height of the lower edge of the globe, the draft of air causes these flames to be confined to a direction close to the mantle, and consequently such breakage does not occur.

The shade 5 not only serves to diffuse the light coming from the lamp in a downward direction so that no shadow is cast thereby, and also, in conjunction with the globe, assists in warming the air passing into the globe, but when the screen is closed outside also serves to protect any metal which may be above the light from oxidation and for regulating the air flowing to the side of the burning part of the light.

It is of importance that the bottom of the glass globe should be located at a sufficient distance from the mantle to provide a large air passage and also to prevent the glass of the globe being cracked or broken by the heat of the mantle, if the latter is cracked.

I have found that with mantles of the usual diameter to fit over a one inch cap, it is necessary that the support for the glass should be not less than two and one-quarter inches internal diameter; otherwise the space of the globe is liable to become cracked by the heat of the mantle if cracked. By providing a tall globe, and also by making the globe of very superior glass, it may be pos-



sible to reduce the internal diameter of the ring to two inches, but it should certainly not be less than twice the diameter of the mixing chamber; and moreover should be free and  
5 unobstructed except for the arms which hold the globe support.

I claim:—

1. In combination with a lamp, means for supporting a chimney, comprising outwardly  
10 extending arms, and arranged to support the chimney so that its lower edge is substantially at the level of the lowest part where combustion takes place; and of a diameter not less than twice the outside diameter of  
15 that part of the burner where combustion commences, the space between said part and supporting means being substantially unob-

structed except for said arms, substantially as described.

2. In combination with a lamp, a globe, a 20 support therefor, and a shade for diffusing the light directed downwards from the lamp, the upper edge of said shade and the lower edge of said globe being arranged substantially at the level of the lowest part where 25 combustion takes place, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EMIL N. LEBWOHL.

Witnesses:

FRANCIS M. WRIGHT,  
D. B. RICHARDS.