No. 819,570. PATENTED MAY 1, 1906.

Z. MATLOWSKY.

REFLECTOR.

APPLICATION FILED OCT. 7, 1905.

Fig. 1.

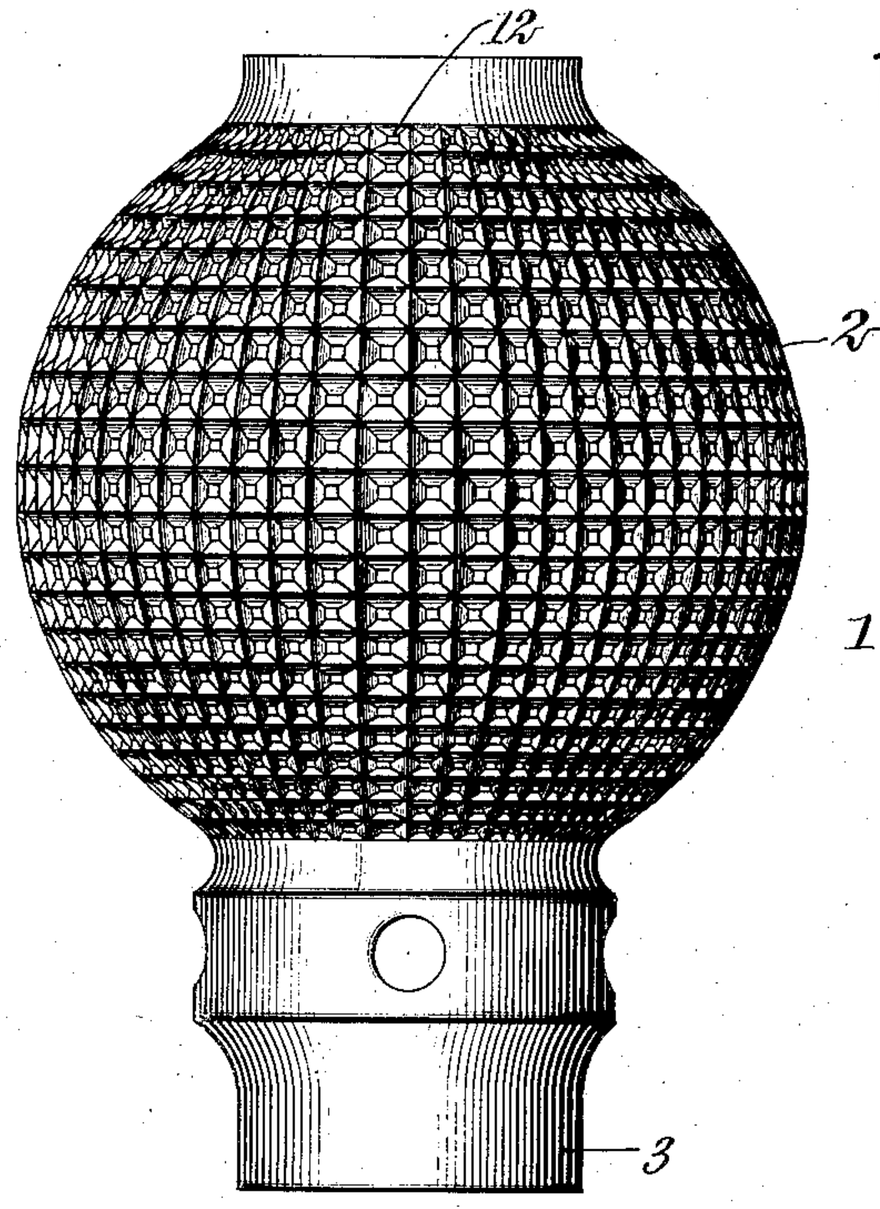


Fig. 2.

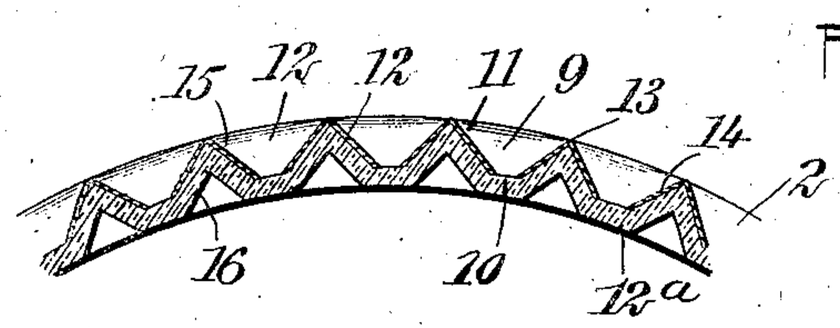
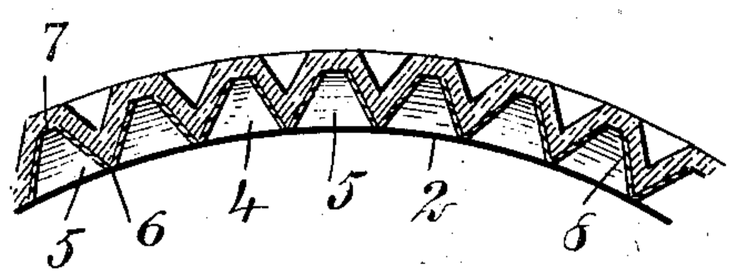


Fig. 3.



WITNESSES:

INVENTOR

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BY

ATTORNEYS

UNITED STATES PATENT OFFICE.

ZEELIG MATLOWSKY, OF NEW YORK, N. Y.

REFLECTOR.

No. 819,570. Specification of Letters Patent. Patented May 1, 1906.

Application filed October 7, 1905. Serial No. 281,776.

To all whom it may concern:

Be it known that I, ZEELIG MATLOWSKY, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Reflector, of which the following is a full, clear, and exact description.

This invention relates to reflectors made of glassware or porcelain and used with lights or lamps; and the object of the invention is to produce an improved form for the surface of such parts as will benefit their reflecting qualities.

The invention consists in the construction and combination of parts to be described more fully hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a lamp-globe constructed according to my invention. Fig. 2 is a cross-section showing a portion of the wall of a globe and illustrating clearly a form which its surface may take; and Fig. 3 is a view similar to Fig. 2, but representing a different construction of the surface of the globe.

Referring more particularly to the parts, 1 represents a lamp-globe, which may have a substantially spherical body 2 and a reduced neck 3 therebelow, as shown. It should be understood that in practice the source of illumination will be located at substantially the center of the body 2. In forming a globe according to my invention I provide its surface with a plurality of cavities 12 of substantially pyramidal form, the same preferably being arranged in horizontal and vertical rows, as indicated. I prefer to form these cavities 12 on the outer side of the globe, so that pyramidal projections 12^a are formed on the inner side, as indicated in Fig. 2. These cavities are arranged in horizontal and vertical rows, presenting sharp edges 13 on the outer side between the cavities. The inclined faces 14 of the cavities do not meet below, but are connected by flat surfaces 10.

On the inner face of the globe recesses 16 are formed which are in alinement with the edges 13, said recesses presenting inclined faces substantially parallel with the faces 14.

Having given the exterior of the globe the form described, I dispose upon the inclined faces 14 a coating 15 of a highly-reflecting substance, such as mercury. In this way the faces referred to are subjected to what is popularly known as the "silvering" process. This coating 15, however, is not applied to the surfaces 10, so that these surfaces are highly translucent. From this arrangement the light being located at the central portion of the globe the rays which fall upon the inclined faces are reflected through the translucent surfaces 10. In this way the light coming from the illuminated point is diffused, so that the entire globe appears to be aglow.

In practice the cavities 12 are so small relatively to the size of the globe that the effect is produced of myriads of illuminated points. Instead of forming the cavities on the outer side of the globe, as indicated at 4 in Fig. 2, I may form them on the inside, as indicated in Fig. 3. The principle applying in this case, however, is the same as before. Referring to this figure, the cavities 4 are formed with substantially flat bottoms 7. A reflecting-coating 8 is applied to the inclined side faces 5 of the cavities, but is not applied to the surface 7. With this form the inclined faces 5 meet in sharp edges 6 on the inner side of the globe, as shown.

While I have described the invention as applied to a globe and prefer that the globe shall be constructed of glass, in practice I may make the reflecting body of any form desired. Thus I may form the surfaces on chimneys in the manner described above.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A reflector adapted to surround an illuminated point and having upon its surface a plurality of cavities presenting inclined faces coated with a reflecting substance, said cavities having uncoated bottoms through which the reflected light may pass.

2. A reflector having in its surface a plurality of cavities formed in rows and presenting substantially flat surfaces at their bottoms, with inclined side faces, said inclined faces having a coat of a reflecting substance adapted to reflect light through said bottom faces.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ZEELIG MATLOWSKY

Witnesses:

F. D. AMMEN,

JNO. M. RITTER.