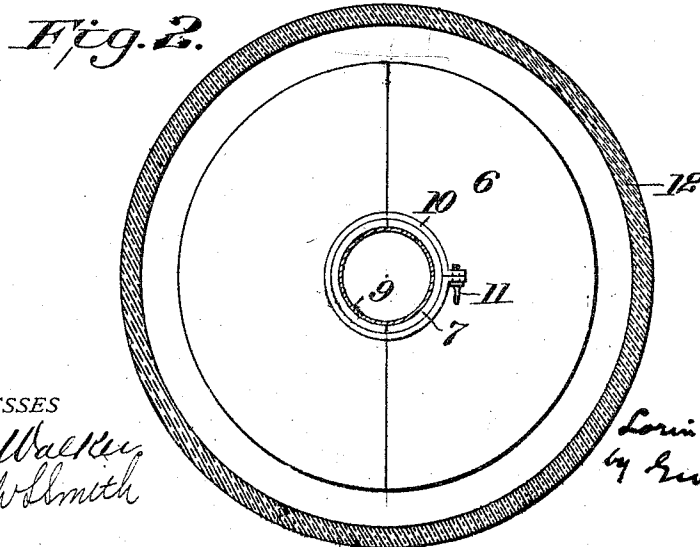
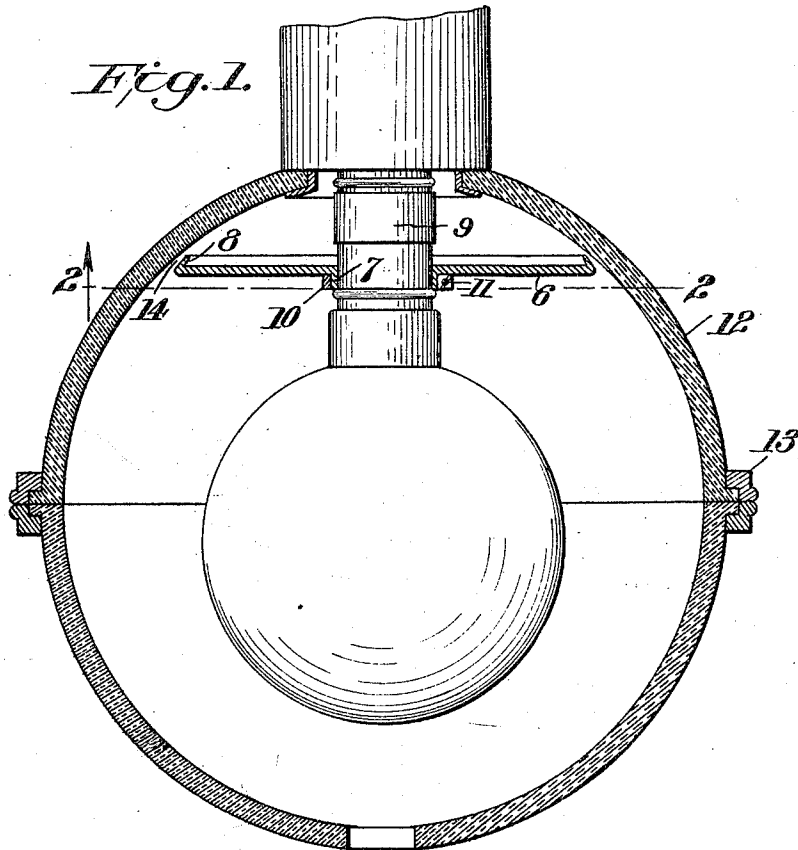


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DUST COLLECTOR FOR LAMP GLOBES.  
APPLICATION FILED NOV. 2, 1911.

1,030,371.

Patented June 25, 1912.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

LORIN W. YOUNG, OF NEW YORK, N. Y.

DUST-COLLECTOR FOR LAMP-GLOBES.

1,030,371.

Specification of Letters Patent.

Patented June 25, 1912.

Application filed November 2, 1911. Serial No. 653,193.

*To all whom it may concern:*

Be it known that I, LORIN W. YOUNG, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Dust-Collectors for Lamp-Globes, of which the following is a specification.

This invention relates to dust caps for lamp globes, and especially to such globes used in connection with electric lighting.

Where a lamp is inclosed in a glass envelop or sphere the defect exists that owing to the openings at the top of this globe, which openings must be made as large as possible, in order to give proper ventilation, so that the life of the lamp will not be jeopardized. Dust particles fall through this opening and lodge on the inner surface of the envelop or globe, gradually reducing the efficiency of the glass in transmitting light.

The object of the present invention is to remedy this defect by the provision of a cap or collector, located within the globe or envelop, and arranged so that all particles of dust falling within said envelop or globe, must lodge on this collector or cap, thus keeping the envelop free from particles of dust and maintaining the efficiency of the glass in question.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is a vertical section of a lamp and globe fixture provided with the improvement. Fig. 2 is a section on the line 2—2 of Fig. 1.

The dust collector comprises a plate made in two or more parts 6 with an inner depending flange at 7, around a hole at the middle, and an upwardly projecting rib 8 at the outer rim. The hole is of proper size to receive at a close fit the socket 9 of an electric lamp, to which the dust collector is clamped by a band 10 around the flange 7 and a thumb screw 11 at the ends of the band. The outer globe is indicated at 12 and is supported by means which need not be described here, the globe being made in upper and lower halves as usual, joined by a ring 13.

When the parts are assembled as shown the dust collector is located in the upper part of the globe with a small space 14 between the rim of the collector and the globe. The hot air generated by the lamp causes a flow

upwardly, around the edge of the dust collector, or through the space 14, and this draft prevents all dust particles falling otherwise than in the collector, above referred to. It will be understood that the supporting devices for such globes must be so arranged as to leave as great an opening as possible at the top of said globe, through which the hot air generated by the lamp may pass out, and where large lamps are used, it is absolutely necessary to have a small opening in the bottom of the globe in question, thus causing a draft to circulate around the lamp, cooling the interior and thus saving the lamp from becoming excessively heated and turning black. This dust collector made in different parts and joined to the socket allows the removal of same without the necessity of removing the lamp. When used in connection with tungsten electric lamps, this is a great advantage as the filament of the tungsten lamp being delicate, any handling of the lamp increases the risk of breakage of these filaments, so that the device in question not only insures the cleanliness of the globe but minimizes the breakage of the lamp. This dust cap not only applies as above specified, but also when made of prismatic glass or polished and bright metal, acts as a reflector, throwing most of the light downward, which is an essential feature of the equipment herein mentioned.

I claim:

1. The combination with a suspended electric lamp bulb and its socket, and a globe inclosing the same, of a dust collector comprising a plate attached to the socket above the bulb and inclosed within the globe, said plate projecting at its outer edge toward the globe and forming an air draft space between said edge and the inner surface of the globe.

2. The combination with a suspended electric lamp bulb and its socket, and a globe inclosing the same, of a dust collector comprising a plate attached to the socket above the bulb and inclosed within the globe, said plate projecting at its outer edge toward the globe and forming an air draft space between said edge and the inner surface of the globe, the outer edge of the plate having an upwardly projecting rim to hold dust collected on the plate.

3. The combination with a suspended elec-

tric lamp bulb and globe, of a dust collector comprising a plate made of material having a reflective surface, mounted upon the lamp above the bulb and within the top part of the globe, the edge of the plate being spaced  
5 from the side of the globe to form an air passage between the outer edge of the globe and the inner surface of the globe, the plate

acting as a dust collector, and also as a reflector of light.

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

LORIN W. YOUNG.

Witnesses:

F. M. EGAN,  
JAMES E. LITTLE.