Oct. 30, 1928. 1,689,832

H. L. JOHNSTON

GLOBE HOLDER

Filed Oct. 5, 1923

Fig. 1

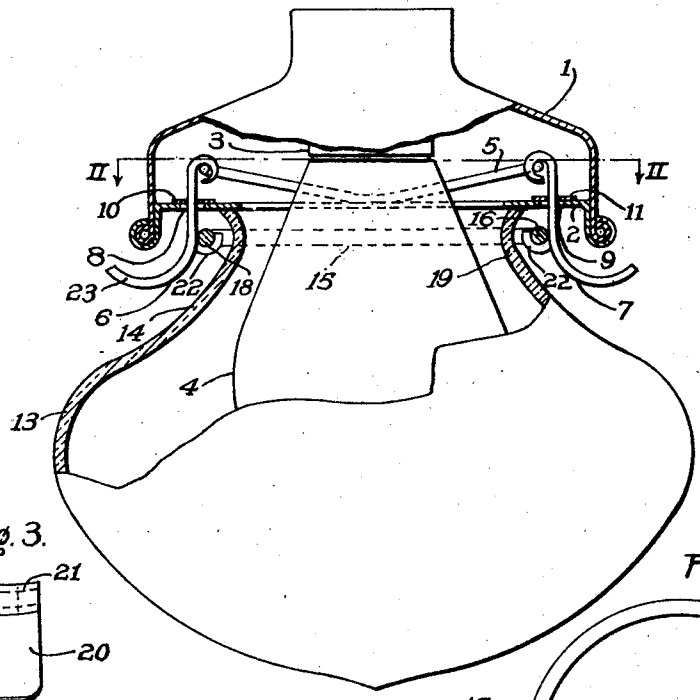


Fig. 3.

Fig. 4

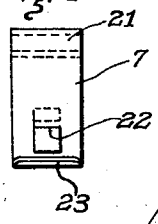


Fig. 5.

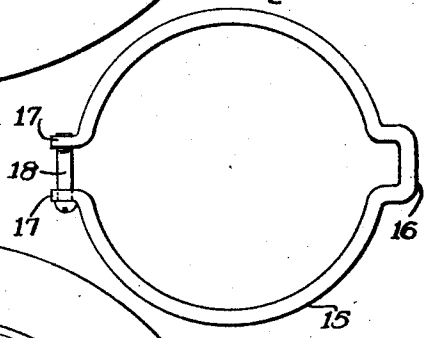
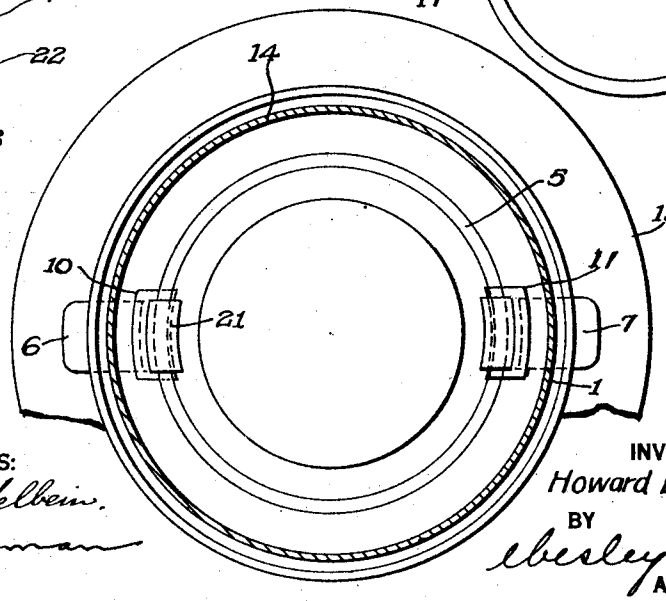


Fig. 2.



WITNESSES:

A. G. Schiefelbein.

H. C. Bierman

INVENTOR

Howard L. Johnston.

BY

Wesley G. Carr

ATTORNEY

Patented Oct. 30, 1928. 1,689,832

UNITED STATES PATENT OFFICE.

HOWARD L. JOHNSTON, OF FOREST HILLS, PENNSYLVANIA, ASSIGNOR TO WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, A CORPORATION OF PENNSYLVANIA.

GLOBE HOLDER.

Application filed October 5, 1923. Serial No. 666,697.

My invention relates to globe holding devices, more particularly to devices of the spring suspension type for holding globes which are used in connection with lighting fixtures.

Heretofore, in gas and electric lighting fixtures a three-point screw suspension device has been commonly used for holding the globe. Such devices accomplished their purpose satisfactorily for small globes but for globes of large diameter the weight of the globe is such that multi-point screw suspension is unsatisfactory because of the danger of the globe breaking due to too great a strain at the points of suspension.

It is among the objects of my invention to overcome the disadvantages of previous structures and to provide a globe holding means which shall be simple, compact and positive in operation.

It is a further object of my invention to provide a spring suspension globe holder having latches co-operating with an equalizing spring and the globe.

In practising my invention, I provide the usual socket base and employ therewith a globe seat upon which a spring member rests. I further provide latches which co-operate with the spring member and with a globe supporting ring to make dust proof contact between the globe opening and the globe seat.

In the accompanying drawings, constituting a part hereof and in which like reference characters indicate like parts,

Fig. 1 is a view, partially in section and partially in elevation illustrating one embodiment of my invention,

Fig. 2 is a sectional view taken along the line II—II of Fig. 1;

Fig. 3 is a plan view of one of the latches;

Fig. 4 is a side view thereof, and

Fig. 5 is a plan view of the globe holding ring.

The base member 1 has formed integrally therewith the globe seat 2, and has placed therein the usual socket 3 and lamp 4. Upon the globe seat or base 2 rests a spring ring 5. Co-operating with said spring member are the latches 6 and 7 which pass through openings 8 and 9, respectively, of the globe seat 2 and also through the washers 10 and 11, respectively, which cover said openings.

The globe 13 may be of the usual types employed. The opening of the globe has a flat ground portion 14 which adapts it to be seated against the globe seat 2 and thus make a dust proof contact therewith, the globe ring 15, having an offset portion 16 and lugs 17 opposite thereto for clamping bolt 18 along the upper portion 19 of the globe. There is thus provided a continuous engagement between the globe and the ring for its entire circumference.

The latches 6 and 7 comprise body portions 20 having ears 21 and 22 formed in the upper and lower parts thereof, respectively. The ends 23 provide means for actuating the same.

To assemble the structure, the ground surface 14 of the globe 13 is brought into contact with the seat 2. The latches 6 and 7 are inserted in position and ears 21 are caused to engage the spring ring 5. The ear 22 of latch 6 may then be inserted under offset portion 16 of ring 15 which holds globe 13. The ear 22 of latch 7 is sprung under bolt 18. The tension of spring ring 5 holds the globe in dust-proof contact with the seat.

To remove the globe, it is merely necessary to press down on handle 23 of one of the latches while supporting the globe with the hand. The globe is then released allowing it to swing about the other latch as a hinge. In this position, the globe may be cleaned or the lamp renewed and the globe then replaced. Or, the other latch may be released in a similar manner and the globe removed from the fixture.

My invention provides a globe holder which allows no dust to pass into the globe and settle therein, thus preventing the dimming or subduing of the light. The globe is easily detachable and, when desired, one of the latches may be used as a hinge member for the globe to facilitate cleaning or replacing of the lamp. The spring suspension provides for an equalizing of pressure at all points of contact between the globe and globe seat. The spring suspension also compensates for irregularities in the ground contacting portion of the globe and seat. The globe ring makes substantially even contact with the globe whether the globe is perfect in design and workmanship or has irregularities.

The device may be designed to hold large or small globes, it being particularly valuable for holding globes of large size and

weight without any danger of breakage because of strains. Because of the simplicity of the structure, the manufacturing costs are low.

It is obvious that my invention is susceptible of numerous changes and modifications and that I have shown and described but a single form thereof. For instance, it is equally well adapted for holding globes in other than the inverted position. The latches may be made an integral part of the spring or may be secured thereto. I desire, therefore, that no limitations shall be imposed on my invention except such as are indicated in the appended claims.

I claim as my invention:

1. A globe holder comprising a canopy, a base attached to said canopy, a plurality of suspension members, a globe ring, a resilient equalizing spring cooperating with said base connecting and supporting said suspension members, said suspension members cooperating with said ring, base and spring whereby dust-proof engagement is made between the globe and base.

2. A globe holder comprising a canopy, a base attached to said canopy, a plurality of suspension members, a globe ring, a resilient equalizing spring cooperating with said base connecting and supporting said suspension members, said suspension members being adapted to hingeably support the globe and cooperate with said ring to either support or release the globe.

3. A globe holder comprising a plurality of latches, an equalizing spring, said latches being pivotally secured to said spring, and means for securing a globe to said latches.

4. A globe holder comprising a plurality of latches, an equalizing spring, said latches being secured to said spring, and means for securing a globe to said latches.

5. A globe holder comprising a plurality of latches, an equalizing spring, said latches being pivotally secured to said spring, and a ring for securing a globe to said latches.

6. A globe holder comprising a base, a plurality of suspension members, a resilient equalizing spring cooperating with said base connecting and supporting said suspension members, means for securing a globe to said suspension members, said suspension members cooperating with said globe and spring whereby dust-proof engagement is made between the globe and base.

In testimony whereof, I have hereunto subscribed my name this 2nd day of October, 1923.

HOWARD L. JOHNSTON.