(No Model.)

H. ELDRIDGE.

MAGNIFYING GLOBE FOR THE DIFFUSION OF ARTIFICIAL LIGHT. No. 483,482. Patented Sept. 27, 1892. Inventor Byhis Attorney Kigdon Skydon

## United States Patent Office.

HILLIARY ELDRIDGE, OF PURVIS, MISSISSIPPI, ASSIGNOR OF ONE-HALF TO P. C. GAGNE, OF HOUSTON, TEXAS.

MAGNIFYING-GLOBE FOR THE DIFFUSION OF ARTIFICIAL LIGHT.

SPECIFICATION forming part of Letters Patent No. 483,482, dated September 27, 1892.

Application filed November 2, 1891. Serial No. 410,556. (No model.)

To all whom it may concern:

Be it known that I, HILLIARY ELDRIDGE, of the city of Purvis, county of Marion, and State of Mississippi, have invented certain 5 new and useful Improvements in Magnifying-Globes for the Diffusion of Artificial Light, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

10 My invention relates to improvements in magnifying-globes for the diffusion of artificial light; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and desig-5 nated in the claims.

In the drawings, Figure 1 is a vertical longitudinal section of my complete invention, showing an incandescent lamp suspended therein. Fig. 2 is a horizontal cross-section 20 taken on the line x x of Fig. 1, and Fig. 3 is a detail sectional view of a cap for securing the parts together which I employ in carrying out my invention.

The object of my invention is to construct 25 a magnifying device for the diffusion and defraction of artificial light, and especially designed for a show-globe in stores.

I will give a further description of the use and object of my invention in connection 30 with a mechanical description thereof.

Referring to the drawings, 1 indicates an outer spherical globe constructed of glass or any other suitable transparent substance, the same being provided with a neck 2. Said 35 neck 2 is provided with a peripheral flange 3 and external screw-threads 4.

5 indicates a cap, for the purpose more fully hereinafter described, the same being provided with a flange 6, which flange 6 is pro-40 vided with internal screw-threads 7. Said cap 5 is adapted to be screwed upon the externally-screw-threaded neck 2 of the globe 1. Said cap 5 is provided with a hole 8 for the insertion and removal of the source of 45 light which is suspended within the magnifying device.

9 indicates an internally-located globe. Said globe 9 is double concave in a longitudinal section when viewed sectionally, and is cir-

cular in a cross or transverse section, and is 50 provided with a solid plano-concave end 10 that is, the end 10 is plane-concave when viewed externally or seen from a rear elevation when said globe is in its normal position. The globe 9 is provided with a neck 11, which 55 is adapted to tightly fit in the neck 2, so as to effect a water-tight joint. The upper portion of the neck 11 is provided with an external peripheral flange 12, which is adapted to fit on the upper edge of the neck 2, which 60

answers as a seat for said flange.

I will now proceed to give a description of the manner of constructing my invention. The aforesaid parts are made substantially of the form, as described. The internal globe 65 9 is suspended in the globe 1 with the flange 12 thereof resting on the edge of the neck 2, and then the cap 5 should be screwed onto the external screw-threaded neck 2, thus holding the globe 9 firmly and securely in its normal 70 position, as can be readily perceived by inspecting the drawings. It may be noted in this connection that the globe 9 is provided with an open upper end for the insertion and removal of the light. Of course in the prac- 75 tical operation and construction of my invention I first fill the globe 1 with any desired liquid substance before the globe 9 is suspended within the same. It can be readily perceived, by any one versed at all in the princi-80 ples of optics, that the light passing through the sides of the globe 9 will illuminate the contents of the globe 1 and produce an object of beauty to the observer.

In the drawings I have shown an ordinary 85 incandescent lampsuspended within the globe 9; but I desire to state in this connection that I may use any other source of light.

Having fully described my invention, what I claim is—

1. A show-globe having an outer spherical globe 1 and an inner receptacle or globe 9, being double concave in longitudinal section, circular in cross-section, and provided with an open upper end and a plano-concave lower 95 closed end, substantially as set forth.

2. A show-globe having an outer spherical globe 1, provided with a neck 2, an external

peripheral flange 3, formed thereon or secured [ thereto, external screw-threads 4, formed on said neck, a cap 5, provided with an internallyscrew-threaded flange 6, adapted to be screwed 5 on said neck, an inner receptacle or globe 9, double concave in longitudinal section, circular in cross-section, and provided with a planoconcave lower closed end 10 and an open up-

per end, and a flange 12, formed on or secured to said upper end, substantially as set forth. 10 In testimony whereof I affix my signature in presence of two witnesses. HILLIARY ELDRIDGE.

Witnesses:

W. J. Evans, R. L. GUEST.