

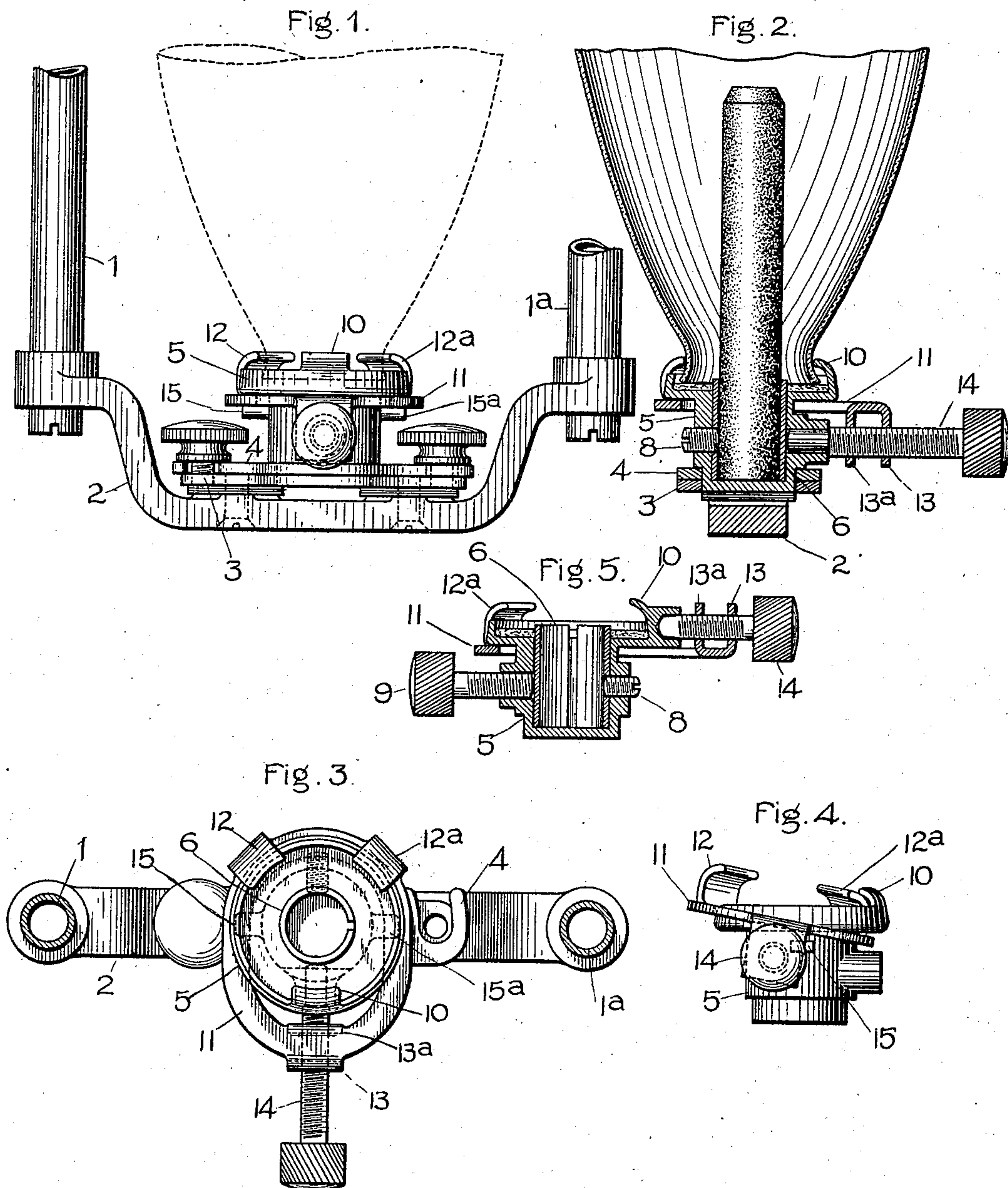
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PATENTED APR. 14, 1903.

C. E. HARTHAN.  
GLOBE HOLDER FOR ARC LAMPS.

APPLICATION FILED OCT. 7, 1899.

NO MODEL.



Witnesses:  
*Lowell Bell*  
*Benjamin B. Hill*

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Atty.



# UNITED STATES PATENT OFFICE.

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GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

## GLOBE-HOLDER FOR ARC-LAMPS.

SPECIFICATION forming part of Letters Patent No. 725,442, dated April 14, 1903.

Application filed October 7, 1899. Serial No. 732,844. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. HARTHAN, a citizen of the United States, residing at Lynn, county of Essex, State of Massachusetts, have  
5 invented certain new and useful Improvements in Globe-Holders for Arc-Lamps, (Case No. 1,363,) of which the following is a specification.

This invention relates to globe-holders for  
10 arc-lamps. Its object is to simplify and cheapen the construction and permit the globe to be readily removed or clamped in position.

The invention is particularly adapted for  
15 employment with the inner globes of inclosed arc-lamps.

In carrying out the invention I provide a cast-metal support for the bottom of the globe having a recess in the top to receive a packing-washer of fireproof material to make an  
20 air-tight joint with the bottom of the globe and a cylindrical recess to form a socket for the negative carbon or electrode. The central portion of the support is provided with a set-screw to clamp a split metal sleeve which  
25 lines the recess forming a socket for the negative electrode. The bottom of the support is provided with a slotted extension to permit clamping it to the yoke of the lamp-frame. I provide also a clamping-ring made of sheet  
30 metal and adapted to be slipped over the support, said ring being provided with one or more inwardly-projecting clamping-toes bent up from the body of the blank and cooperating with one or more cooperating clamping-toes on the support to lock the globe fast  
35 thereto. The clamping-ring is also provided with a pair of ears bent up at right angles threaded to receive an adjusting-screw, by which the clamp may be regulated to release  
40 or fasten the globe.

The several features of novelty of my invention will be hereinafter more specifically pointed out and will be definitely indicated in the claims.

45 In the drawings, Figure 1 is a side elevation of a device embodying my improvements, the globe being indicated in dotted lines. Fig. 2 is a sectional view on a plane at right angles to that indicated in Fig. 1. Fig. 3 is  
50 a top plan view. Fig. 4 shows the manner of

assembling the clamp and support, and Fig. 5 is a sectional view of a modification.

1 and 1<sup>a</sup> represent the side rods of an arc-lamp frame, and 2 an insulated yoke connecting the same. In the central portion of  
55 the yoke is mounted a metal plate or plate-form 3, provided with two adjusting-screws which engage slotted extremities of the plate 4, the two ends of which are slotted on opposite sides, as indicated in the drawings. This  
60 plate forms part of the globe-support 5 and may be made of stamped sheet metal and fixed in any suitable way thereto. The globe-support 5 is a casting flanged at the top and provided with a recess the rim of which over-  
65 hangs the bottom, as indicated in Fig. 2. The support is centrally recessed and lined with a split tube 6, by which the negative electrode may be clamped in the socket. The  
70 split-sleeve may be sprung firmly against the carbon by an adjusting-screw 8, and an independent thumb-screw may be provided, if desired, as indicated at 9 in the modification shown in Fig. 5. The cast-metal sup-  
75 port is provided with an overhanging clamping-toe 10, adapted to engage the contracted neck of the globe. I provide a sheet-metal clamping-ring 11, having a substantially  
80 elliptical opening carrying one or more bent clamping-toes 12 12<sup>a</sup> and two lugs 13 13<sup>a</sup>, bent at right angles to the plane of the ring and threaded to receive an adjusting-screw  
14, the end of which turns freely in a socket formed in a body portion of the support, as  
85 indicated in Fig. 2. The body portion may be of such a diameter as to permit the clamping-ring to be slipped over the flanged top of the support, or the body portion may be  
90 grooved to permit the assembling. The two parts are assembled as indicated in Fig. 4, one side of the clamping-ring being placed  
over the flanged top of the support and pushed toward its axis and the other side lowered  
until the ring occupies a plane below the bottom of the flange. The adjusting-screw 14  
95 is then inserted in the socket in the body portion and the ring adjusted laterally, being guided by two diametrically opposite lugs cast integrally with the body of the support,  
as indicated at 15 15<sup>a</sup>, Figs. 3 and 4.



In the modification shown in Fig. 5 the lugs which receive the adjusting-screw are bent upwardly instead of downwardly, and the adjusting-screw plays into a socket formed in the flanged top of the support.

In using the clamp the adjusting-screw is turned until the clamping-toes free the edge of the globe and the latter may be lifted away. The entire globe and clamp may be removed from the lamp-frame by releasing the plate 4.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A globe-holder for an arc-lamp, comprising an air-tight support for the bottom of the globe, a clamping device, and an adjusting device for bodily shifting it toward or from the axis of the globe.

2. A globe-holder for arc-lamps comprising a globe-support provided with a clamping-toe above the plane of the globe-seat, a laterally and bodily adjustable clamp-ring, guides supporting the same below said support and clamping-toes carried by said ring extending above the globe-seat.

3. A globe-holder for arc-lamps comprising a globe-support provided with a seat for the bottom of the globe, a laterally-movable clamp-ring supported in guides below the globe-seat, said ring having clamping-toes extending above the seat and an adjusting device for the ring.

4. A globe-holder for an arc-lamp comprising a globe-support provided with a seat for the bottom of the globe, packing to render

the joint air-tight, an adjustable clamp-ring movable laterally in guides on the support, said ring having clamping-toes extending above the joint to engage the globe.

5. A globe-holder for an arc-lamp, comprising a globe-support having a flanged head to engage the bottom of the globe, a laterally-adjustable ring supported in guides on said support, and cooperating clamping-toes carried by the support and ring.

6. A globe-holder for an arc-lamp, comprising a globe-support flanged at the top and provided with an overhanging clamping edge, a laterally-adjustable ring mounted on said support, and a cooperating clamp on said ring overhanging the top of the support.

7. A globe-holder for an arc-lamp, comprising a flanged support for the globe-bottom, and a clamping-ring supported below the flange and laterally adjustable to clamp or release the globe, said ring having one diameter greater than another to permit removal from the support.

8. A globe-holder for an arc-lamp containing a globe-support, guide-lugs thereon, and a laterally-movable clamp-ring supported in said lugs having clamping-toes projecting above the plane of the globe-seat.

In witness whereof I have hereunto set my hand this 5th day of October, 1899.

CHARLES E. HARTMAN.

Witnesses:

DUGALD MCKILLOP,  
CHARLES B. BETHUNE.