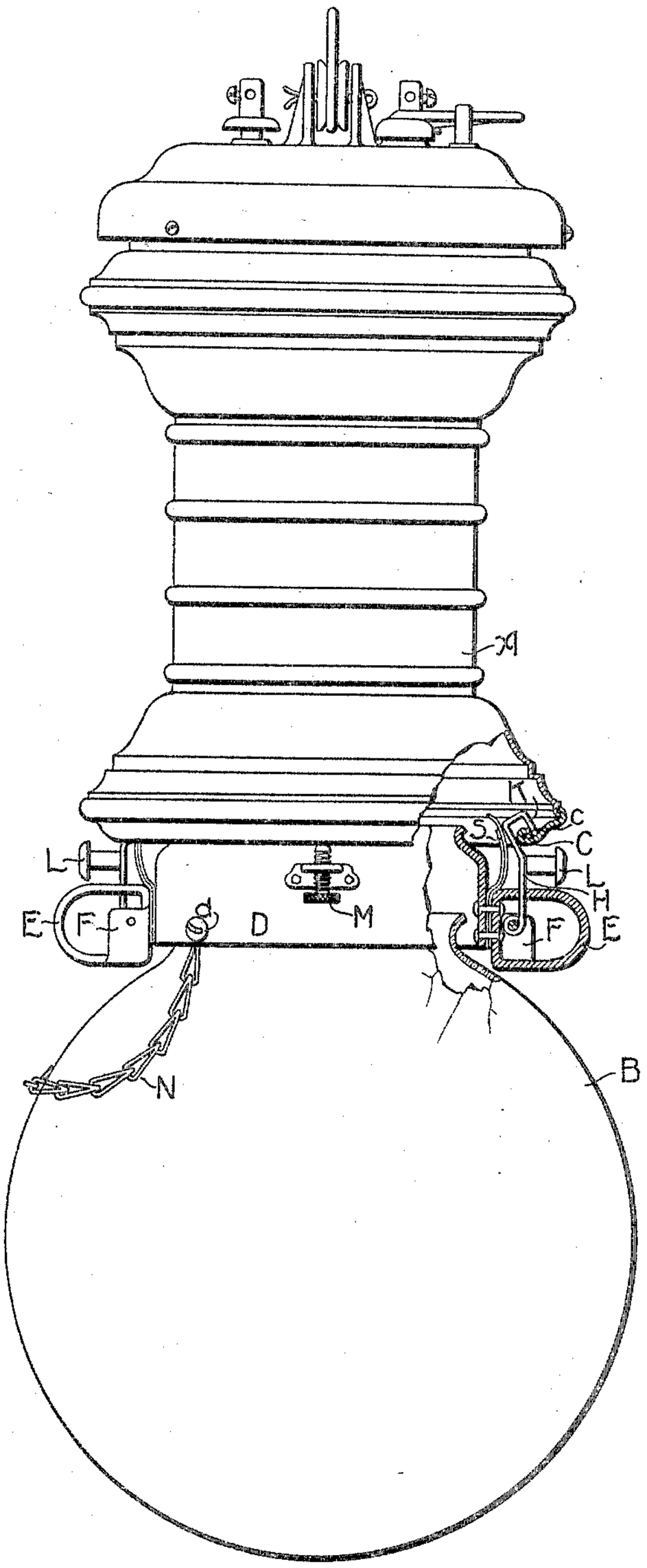
No. 789,540. PATENTED MAY 9, 1905.

C. E. HARTHAN.

GLOBE HOLDER.

APPLICATION FILED FEB. 9, 1903.



Witnesses:

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No. 789,540. Patented May 9, 1905.

UNITED STATES PATENT OFFICE.

CHARLES E. HARTHAN, OF LYNN, MASSACHUSETTS, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

GLOBE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 789,540, dated May 9, 1905.

Application filed February 9, 1903. Serial No. 142,449.

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 invented certain new and useful Improvements in Globe-Holders, of which the following is a specification.

This invention relates to means for securing the outer globe of an inclosed arc-lamp to its support. Its object is to provide mechanism which will permit of pushing the globe into place with one hand in any position around the supporting-casing and which will hold the globe securely against rattling and swinging. In accomplishing these objects I form a flange or ring on the lower end of the casing by turning the sheet metal of the casing under and then over a wire. To the flange at the open end of the inclosing globe is attached a metallic band. On this metallic band I pivot two hooks, each provided with a spring adapted to press the hook outwardly away from the axis of the lamp to a substantially vertical position. The hooks are formed with slanting heads, and when the globe is raised and the hooks pressed outward by the springs the slanting heads are in line with the ring on the bottom of the casing. By this construction when the globe is pushed into position the heads of the hooks bear on the ring and are pressed in against the tension of the springs, and when the hooks get above the ring they are sprung outward, catching on the ring and holding the globe in place. As the globe does not have to be adjusted about the vertical axis of the lamp, it is obvious that it can be pushed into place with one hand, as an upward movement is all that is necessary.

To hold the globe firmly against vibration, I mount a thumb-screw on each side of the band, midway between the locking-hooks, in such a position that when screwed up the ends bear on the ring of the casing. These thumb-screws draw the band down until the hooks catch tightly on the ring, so that the globe is held securely to the casing at four points about its center.

To withdraw the globe, the thumb-screws are loosened, the globe raised slightly, and the hooks pressed in by means of studs mounted thereon. It can then be lowered until it uncovers the inner globe, in which position it hangs by a chain.

My invention therefore consists of means for securing a globe to its support by spring-positioned hooks adapted to catch on a flange formed on the globe-support and means for holding the globe securely in position.

I have illustrated an embodiment of my invention in the accompanying drawing, which shows an elevation of a double-globe arc-lamp of ordinary construction broken away in part.

Referring to the drawing, A is the lamp-casing, and B the outer globe. The lower edge of the casing is turned under at C and over a wire hoop *c*, so that the casing and hoop form a stiff substantial flange or ring at the base of the casing. A metallic band D is secured to the open end of the globe B by screws *d* bearing on the neck of the globe. Secured to the outer side of the band D at diametrically opposite points by rivets passing through the band are two looped metallic holders E E, and between the holders and the bands are the lower ends of springs S S, also held in place by the rivets. The holders are provided with side pieces F F, in which are pivoted the hooks H H. The springs S S at their upper ends bear on the inner sides of the hooks H H. In the position shown the springs do not exert any force against the hooks; but when the hooks are pressed back they tend to return them to this position. The hooks are provided with a slanting end, as at K, and their distance apart is such that when the globe is raised into position these slanting ends will bear on the ring C of the casing. Each hook is provided with a stud or push-pin L L for pressing the hook in against the tension of the spring. Mounted on each side of the band D, equidistant from the hooks, are thumb-screws M, which when turned up bear on the lower side of the ring C. Connected to the band and to the lamp-casing by suitable

screws is a chain N of sufficient length to allow the globe when released to hang free of the inner globe and the lower-carbon holder.

The operation of the device is as follows: The lower globe is raised until the slanting ends K K of hooks H H hit on ring C. When the globe is pushed up, springs S S and hooks H H are pressed back, and when the ends of the hooks are above the ring the springs press them outward. The globe can then be released, as it is held in place by the hooks catching on the flange. It is obvious that raising the globe into place thus can be done by one hand, as it is only an upward movement of the globe, no adjustment about the vertical axis being necessary on account of the fact that the hooks can catch on the ring at any point. The thumb-screws M are then turned up until they bear on the ring C, thus holding the globe securely in position. To remove the globe, the thumb-screws M are loosened. The globe is then raised slightly by the holders E E, with the first fingers through the loops in the holders and the thumbs on the studs L L. The hooks are then pressed back against the action of the springs S S and the globe lowered.

It is obvious that various changes in arrangement or the substitution of equivalent parts can be made in any device without departing from the spirit of my invention.

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

1. In an arc-lamp, a globe, a support, and means for securing the globe to its support consisting of an inturned flange on one member and spring-pressed hooks secured to the other.

2. In an arc-lamp, a casing, a globe, a flange on the casing, and spring-hooks secured to the globe and adapted to be sprung over the flange to hold the globe in position.

3. In an arc-lamp, a globe, a band secured to the open end thereof, hooks pivotally mounted on said band, and springs for positioning the hooks.

4. In an arc-lamp, a casing, a globe, a band secured to the open end thereof, spring-positioned hooks mounted on said band and adapted to be sprung over the lamp-casing by an upward movement, and thumb-screws also mounted on the band and arranged to bear against the casing.

5. In an arc-lamp, a casing, a globe, spring-hooks carried by the globe and adapted to be sprung over the lamp-casing by an upward movement, and means for facilitating the unlatching of the hooks.

6. In an arc-lamp, the combination with the lamp frame or casing, of a globe, a band secured to the open end thereof, a looped metallic piece mounted on the band, a hook pivotally mounted on said metallic piece and adapted to be sprung over the casing by an upward movement, and a spring for positioning the hook.

7. In an arc-lamp, an incurled casing, a globe, pivoted catches mounted on the globe at opposite points, and springs for positioning the catches.

In witness whereof I have hereunto set my hand this 6th day of February, 1903.

CHARLES E. HARTHAN.

Witnesses:

HENRY C. SPINNEY,

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