

(No Model.)

J. I. JOHNSON.
HANGING LAMP.

No. 424,712.

Patented Apr. 1, 1890.

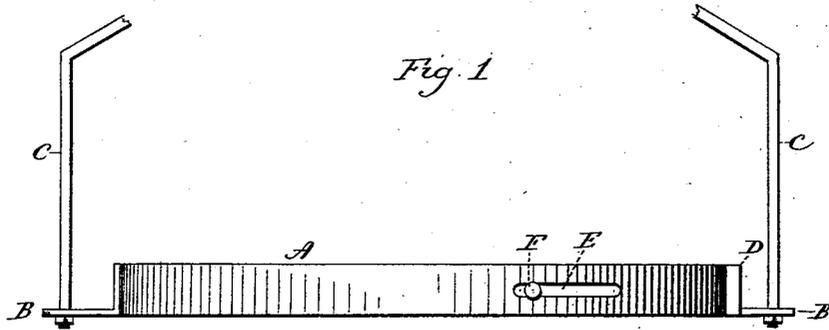


Fig. 1

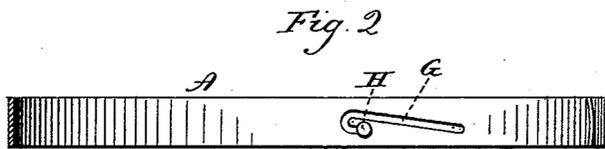


Fig. 2



Fig. 3

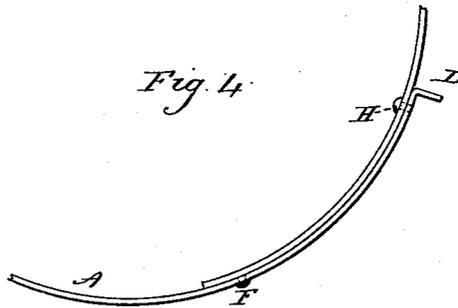


Fig. 4

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UNITED STATES PATENT OFFICE.

JOHN I. JOHNSON, OF MERIDEN, CONNECTICUT, ASSIGNOR TO EDWARD MILLER & COMPANY, OF SAME PLACE.

HANGING LAMP.

SPECIFICATION forming part of Letters Patent No. 424,712, dated April 1, 1890.

Application filed January 6, 1890. Serial No. 336,079. (No model.)

To all whom it may concern:

Be it known that I, JOHN I. JOHNSON, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Hanging Lamps; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view of my improved adjustable ring in side elevation, taken so as to show the straight guiding-slot formed in one of its ends, and also showing the lower portions of the side pieces of the "harp" or frame; Fig. 2, a detached sectional view of the ring in its contracted adjustment, and showing the inclined and curved locking-slot; Fig. 3, a similar view showing the ring in its expanded adjustment and showing the said locking-slot and also a portion of the guiding-slot; Fig. 4, a detached broken plan view showing the ends of the rings.

My invention relates to an improvement in the adjustable rings for the frames or harps of hanging lamps, the object being to produce a ring of simple and cheap construction, easy of manipulation, and safe and reliable in operation.

With these ends in view my invention consists in an adjustable ring having one of its ends provided with a straight guiding-slot receiving a headed pin mounted in the other end of the ring, which is provided with an inclined slot having its inner end extended downward and then outward under the main portion of the slot to form a locking extension, and receiving a headed pin mounted in that end of the ring having the straight guiding-slot, and as will be more fully hereinafter described.

The ring A consists of a flat band of metal, and is provided at opposite points with perforated ears B B, which receive the lower ends of the side pieces C C of the frame. In the respects mentioned the ring is of ordinary construction. The ends of the ring are lapped beyond each other, and the outer end, which I will hereinafter call the "operating end," is bent outward at its extreme end to

form a finger-piece D. This end of the ring is provided with a long guiding-slot E, which receives a headed pin F, mounted in the other end of the ring, which is located within the operating end of the ring aforesaid. The said inner end of the ring is provided with an inclined slot G, the inner end of which is extended downward and outward to form a locking-extension. This locking-slot receives a headed pin H, mounted in the operating end of the ring. These two slots and two headed pins couple the two ends of the ring together with a capacity for longitudinal adjustment, so as to permit the ring to be contracted, in which adjustment it holds the fount, and to be expanded, in which adjustment it permits the fount to be let down through it.

In operating the ring to expand it its operating end is drawn inward by means of its finger-piece and then thrown upward to clear the headed pin from the locking-extension of the locking-slot. This done, the resiliency of the metal band of which the ring is formed will operate to expand the ring until it is stopped by the engagement of the headed pins with the opposite ends of the two slots. To contract the ring its outer end is again engaged by its finger-piece and the said end drawn inward until the headed pin in the locking-slot reaches the inner end thereof, when the said end of the ring is pushed downward, after which the resiliency of the ring will carry the pin into the extreme end of the slot. The ring is now locked against circumferential or lateral displacement and cannot be unlocked to permit the fount to escape by any ordinary usage of the hanging frame, of which the ring forms a part.

It will be understood that rings of this character are intended for lamp-founts having an annular rim which rests upon the upper edge of the ring, the portion of the fount below the rim receding to the base, and that the internal diameter of the ring when contracted corresponds to the external diameter of the fount immediately below the rim, and so that when the fount is in position and the ring engaged in the contracted or closed position it cannot be disengaged or opened until the fount is raised, so as to permit the ring to be still more contracted, and so that the pin H

can pass from the locking-extension of the slot G into the main portion of the slot, which permits the ring to be opened.

I am aware that adjustable rings for the
5 frames or harps of hanging lamps have heretofore been provided with bayonet-slots, which are objectionable in that they do not lock the ends of the ring against vertical displacement, which my locking-slot does by having its locking
10 end carried not only down, but also outward under the main portion of the slot.

Having described my invention, what I claim, and desire to secure by Letters Patent,
is—

15 An adjustable ring for the frame or harp of

a hanging lamp, having one end provided with a straight guiding-slot receiving a pin mounted in the other end of the ring, the said other end of the ring being provided with an inclined slot having its inner end extended
20 downward and then outward under the main portion of the slot and receiving a headed pin mounted in that end of the ring having the straight guiding-slot, substantially as and for the purpose described.

JOHN I. JOHNSON.

Witnesses:

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