

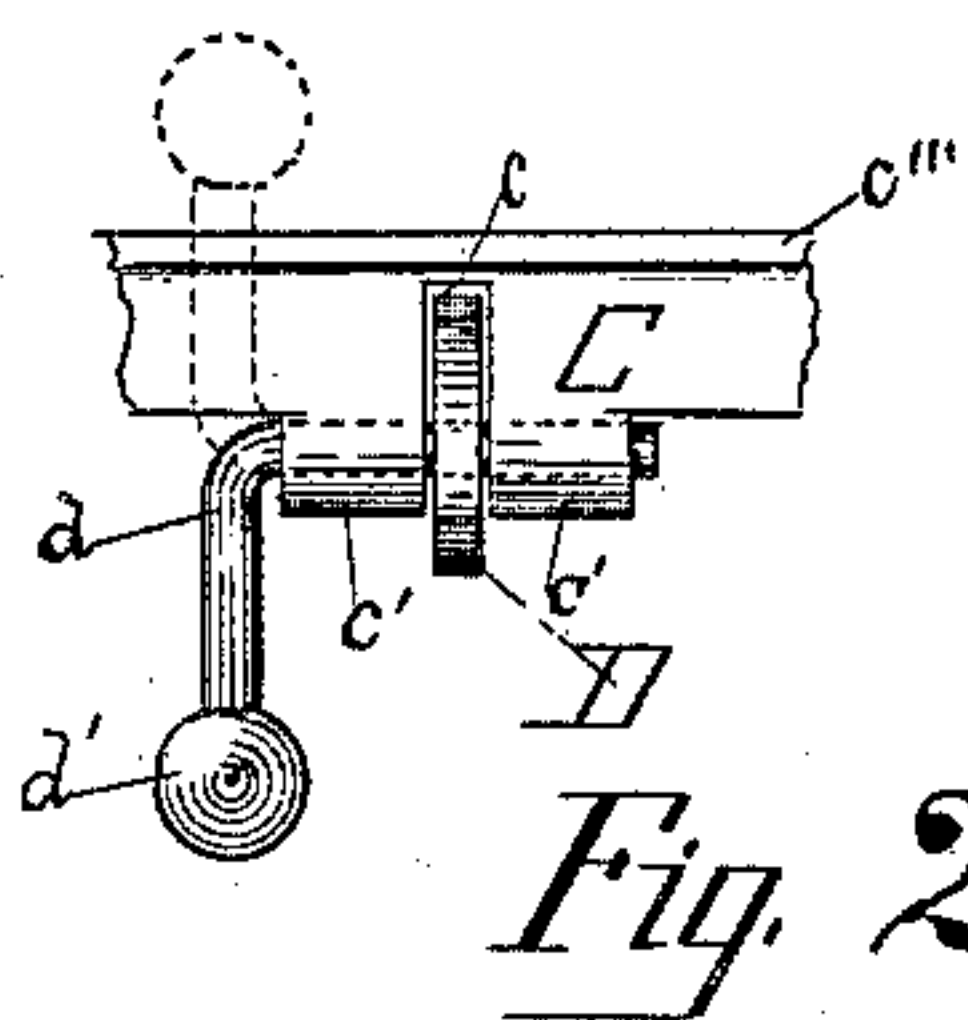
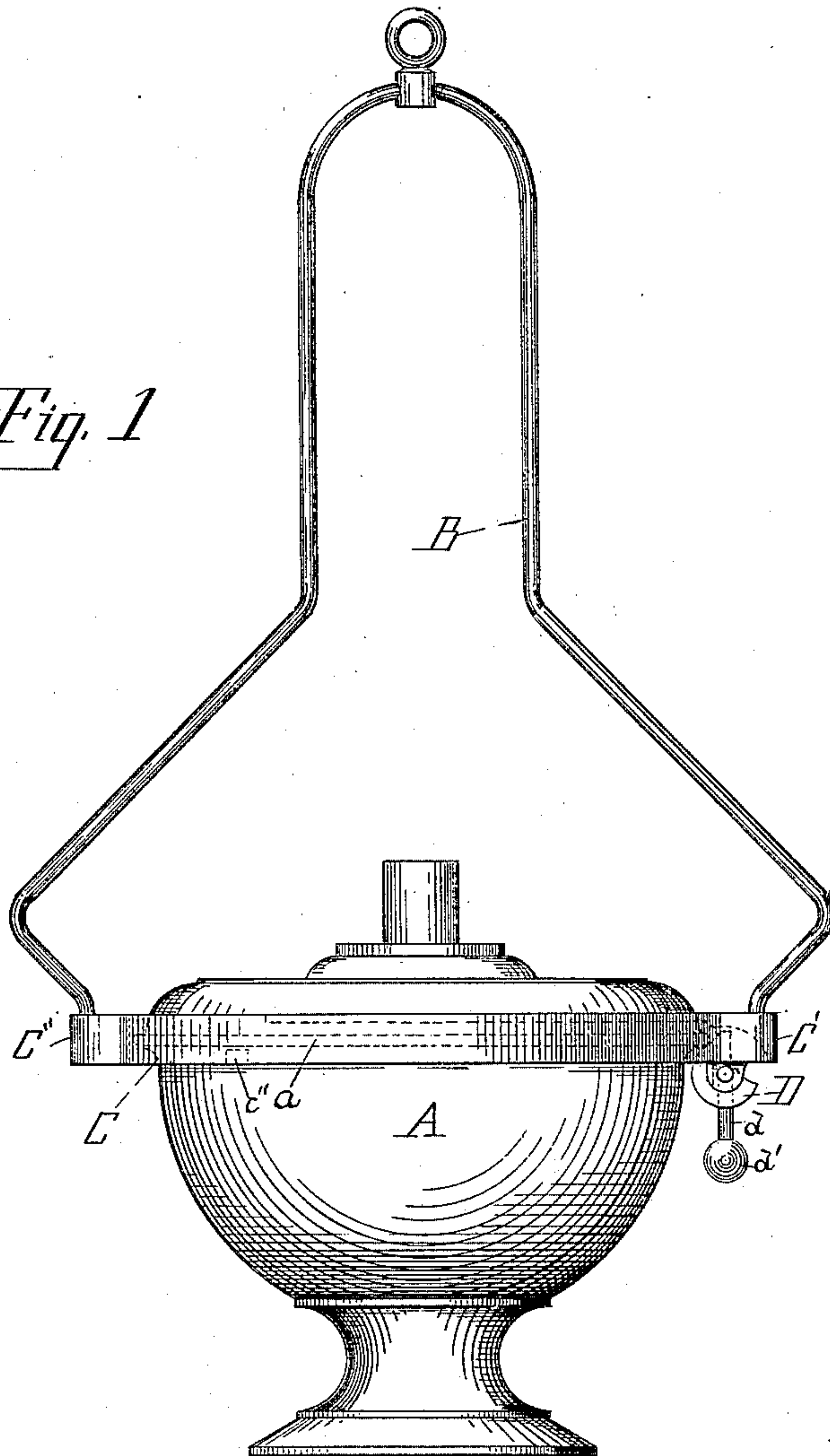
(No Model.)

W. C. HOMAN.  
SUSPENSION DEVICE.

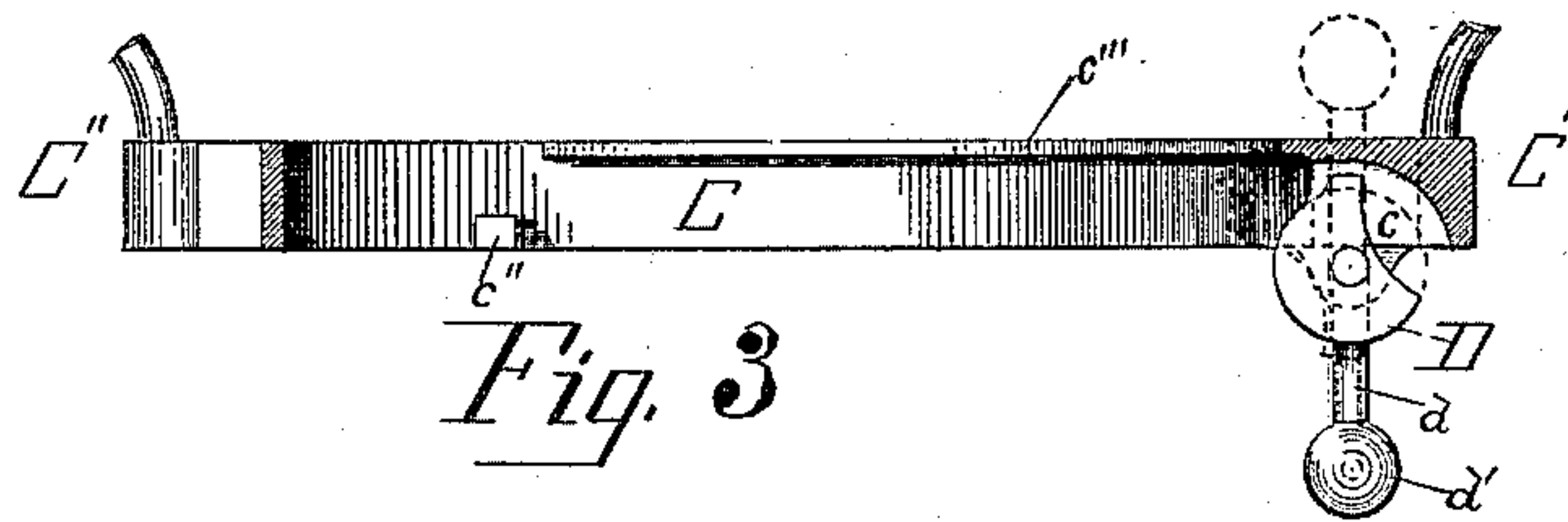
No. 401,781.

Patented Apr. 23, 1889.

*Fig. 1*



*Fig. 2*



*Fig. 3*

WITNESSES.  
J. B. Miller.  
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INVENTOR.  
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# UNITED STATES PATENT OFFICE.

WILLIAM C. HOMAN, OF MERIDEN, CONNECTICUT, ASSIGNOR TO EDWARD MILLER & COMPANY, OF SAME PLACE.

## SUSPENSION DEVICE.

SPECIFICATION forming part of Letters Patent No. 401,781, dated April 23, 1889.

Application filed December 5, 1888. Serial No. 292,716. (No model.)

*To all whom it may concern*

Be it known that I, WILLIAM C. HOMAN, a citizen of the United States, residing at Meriden, New Haven county, Connecticut, have  
5 invented an Improvement in Suspension Devices for Lamps and Similar Articles, of which the following is a specification.

My invention relates to that class of suspension devices in which a lamp or similar  
10 article is supported within a ring, and is intended to facilitate the introduction or removal of the lamp to or from the ring.

In the accompanying drawings, Figure 1 represents in perspective a lamp-support embodying my invention. Fig. 2 is a view of a  
15 portion of the ring from within. Fig. 3 is a partial vertical section of the ring, showing in detail the construction of my device.

Similar letters refer to like parts in the several views.

A designates a lamp; *a*, an annular bead on the lamp A; B, a "harp" or lamp-supporting frame; C, a ring in which the lamp A rests; C' C'', ears or lugs on the ring C; *c*, a slot or  
25 groove in the ear C'; *c'* *c'*, lugs on the ear C', projecting below the bottom of the ring C; *c''*, a lug or projection on the interior of the ring C; *c'''*, an inwardly-projecting rim or flange on the ring C; D, a rotary disk; *d*, a  
30 bent lever, one arm of which forms the axis of the cam D; *d'*, a button or weight at the end of the other arm of the lever *d*.

In the example of my invention shown in the drawings the construction and operation  
35 are as follows: The lamp A, of convenient size and form, is formed with an annular horizontal bead, *a*. The harp B may be of any desired pattern, and is connected at its ends to the ears C' C'' of the ring C. The ear C' of  
40 the ring C is slotted, as at *c*, and is provided with downwardly-projecting lugs *c'* *c'*, drilled horizontally to form a bearing for the axis *d* of the cam D. The ring C is also provided with two interiorly-projecting lugs, *c''*, at the  
45 lower edge of the ring C and equidistant from and relatively near to the ear C'. The ring C is further provided at its upper edge with an interiorly-projecting flange, *c'''*, on that side of the ring nearest the ear C',  
50 and preferably extending nearly to the lugs *c''*. The disk D, here shown as crescent-

shaped, is mounted on the horizontal arm of the bent lever *d* as an axis in the slotted ear C' and normally projects into the ring C. The vertical arm of the bent lever *d* is provided with a weight or button, *d'*, by means  
55 of which the disk is retained in its normal position, as shown in the drawings. When it is desired to place the lamp A in the ring C, the disk D is given a semi-rotation, as shown  
60 in dotted lines, Figs. 2 and 3. The lamp is then introduced from below, the bead *a* resting on the lugs *c''*, and the upper edge of the bead resting against the flange *c'''*. The disk D is then returned to its normal position, when  
65 the lamp will be securely supported by its bead *a* resting upon three points of support—the two lugs *c''* and the disk D. When the lamp A and harp B are provided with means of vertical adjustment, as a spring-balance,  
70 the advantage of the flange *c'''* is apparent, as the lamp is thereby prevented from being accidentally lifted out of the ring. The use of the flange *c'''* is not, however, essential to my device, as the lamp may be safely supported  
75 on the lugs *c''* and the disk D, the flange simply serving to prevent the displacement of the lamp by an upward movement. To remove the lamp from the ring, it is necessary to give the disk D nearly a semi-rotation,  
80 when the side of the lamp nearest the disk is released and the lamp may be easily disengaged. It will be seen that in this construction the harp may be made much shorter and more compact than if it were required to lift  
85 the lamp up out of the ring, and that the operations of removing and replacing the lamp are much facilitated.

I am aware of various constructions in which a lamp is supported by a bead resting  
90 on projecting lugs and prevented from disengagement by a spring-actuated bolt or by a screw. In the first of these devices the breaking or sticking of the spring is a frequent cause of accident; in the second it often happens  
95 that a careless operator fails to turn the screw into positive engagement with the lamp. It will be seen that in my device the force of gravity is relied on to return the disk D to its normal position, and that as the disk forms  
100 one of the necessary points of support of the lamp it is impossible for the operator to leave



the lamp temporarily supported, but liable to accidental displacement.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is as follows:

1. In a ring for the support of a lamp or similar article, the combination of an interiorly-projecting lug or lugs and a rotary cam-shaped disk also normally projecting into said ring, substantially as described.

2. In a ring for the support of a lamp or other article, the combination of an interiorly-projecting lug or lugs, a rotary cam-shaped disk also normally projecting into said ring, and an interiorly-projecting flange in a plane above that of said lugs and said disk, substantially as described.

3. In a ring for the support of a lamp or similar article, the combination of an interiorly-projecting lug or lugs and a cam-shaped

disk also normally projecting into said ring and capable of rotation in a vertical plane, substantially as described.

4. In a ring for the support of a lamp or similar article, the combination of an interiorly-projecting lug or lugs, a rotary cam-shaped disk also normally projecting into said ring, and an axle on which said disk is secured, one end of which is bent to form a lever or thumb-piece, substantially as described.

5. In a ring for the support of a lamp or similar article, the combination of lugs  $c''$ , slotted ear  $C'$ , bearings  $c'$ , disk  $D$ , lever  $d$ , and weight  $d'$ , substantially as described.

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Witnesses:

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