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H. D'OLIER, Jr.

ELECTRIC LAMP ADJUSTER.

APPLICATION FILED MAR. 5, 1904.

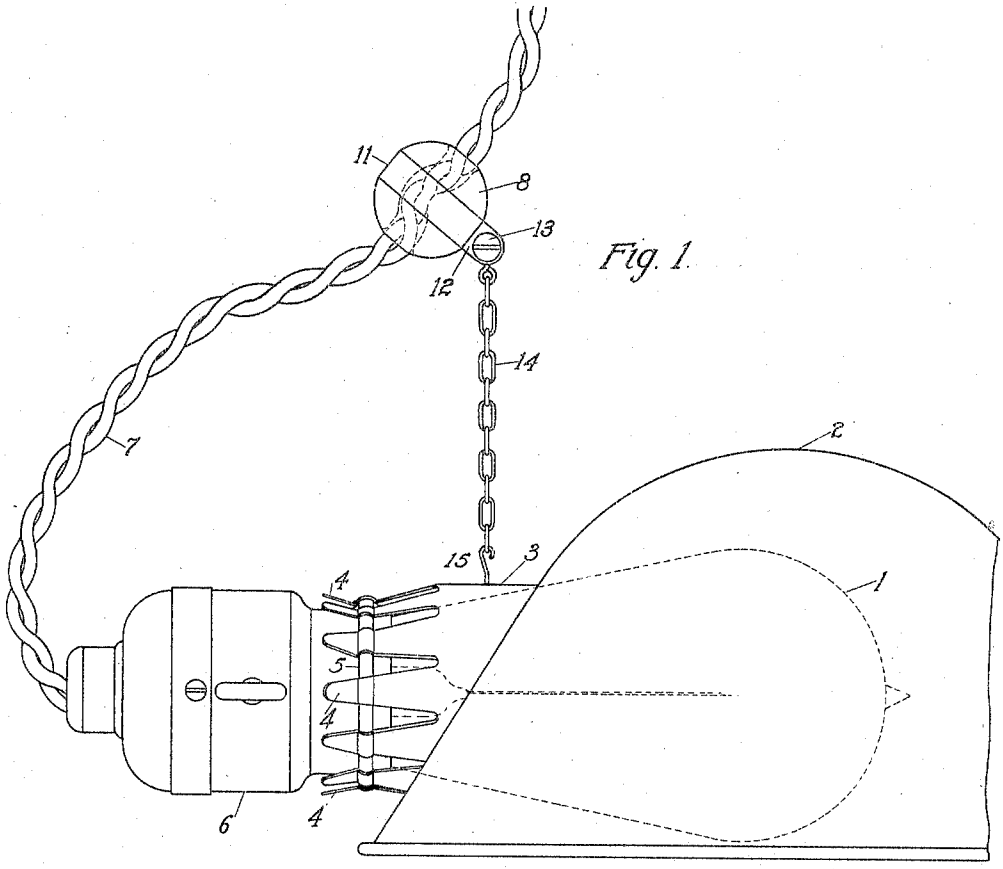


Fig. 1.

Fig. 2.

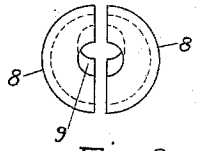


Fig. 3.

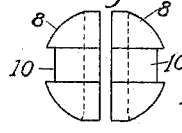


Fig. 4.

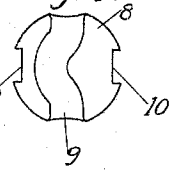


Fig. 5.

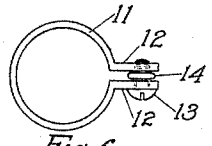
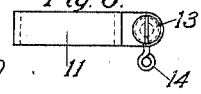


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY D'OLIER, JR., OF PHILADELPHIA, PENNSYLVANIA.

ELECTRIC-LAMP ADJUSTER.

SPECIFICATION forming part of Letters Patent No. 783,741, dated February 28, 1905.

Application filed March 5, 1904. Serial No. 196,640.

To all whom it may concern:

Be it known that I, HENRY D'OLIER, Jr., a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Electric-Lamp Adjuster, of which the following is a specification.

My invention relates to means for adjusting an incandescent lamp suspended by the usual drop-cord conductor.

My invention consists of means whereby an incandescent lamp may be so adjusted as to its position as to cause it to shed the greater portion of its light in a desired direction and whereby the lamp may be maintained at any desired position around its supporting-cord.

The usual mode of supporting an incandescent lamp is by a cord-drop consisting of the conductors which convey the current to and from the lamp, the lamp-axis being practically coincident with the vertically-hanging cord. It is found that an incandescent lamp so suspended and as extensively used in factories, machine-shops, and the like radiates the greater portion of the light in horizontal directions rather than vertically downward, the latter direction of radiation being most desirable where workmen require the lamp to be placed immediately over their bench or machine in order to illuminate their work in the most thorough manner. I have found by photometer tests that the vertically-hanging incandescent lamp if the illumination in horizontal directions is expressed by sixteen-candle power the illumination vertically downward, all conditions being the same, is expressed by 7.9 candle power. In other words, the ordinary incandescent lamp in order to cause the greatest illumination vertically downward must be turned through a right angle, so that its axis becomes practically horizontal. Workmen frequently do so turn the lamp by tying it up to some fixed object, and then they immediately find that due to the twisting tendencies of the drop-cord the lamp will assume undesired positions.

It is to gain the advantages of maximum downward illumination and to prevent the lamp from assuming undesired positions about the cord that my invention is adaptable.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a side view showing the adjuster applied to a cord-suspended electric lamp. Fig. 2 is a side view of the adjuster member. Fig. 3 is a plan view of the same. Fig. 4 is a side view of the inside of one-half of the adjuster. Fig. 5 is a side view of the clamping-collar. Fig. 6 is a plan view of the same.

Referring to the drawings, 1 represents the usual incandescent lamp, so held that its axis is approximately horizontal. It is in this position that the lamp gives a maximum illumination vertically downward, such maximum illumination being increased by the reflector 2, preferably parabolic in shape. The neck portion 3 of the reflector terminates in the fingers or clasps 4, which embrace and engage the bead 5, spun in the metal casing of the usual socket 6.

7 is the usual cord-drop, consisting of the insulated conductors.

8 represents the adjuster member, which may be of any desired shape, though here shown and preferred as approximately spherical. This adjuster is formed in two parts, as shown in Figs. 2 and 3, an irregular or tortuous channel 9 being formed in each part, the two channels corresponding in outline and register with each other. The two parts of the adjuster are placed together around the cord-drop 7 and the cord held in the channel 9. A channel 10 is formed around the peripheries of the parts of the adjuster member, this groove or channel 10 being adapted to receive the metallic collar 11, which serves to hold the two parts of the adjuster member together and in frictional engagement with the cord 7. The collar 11 may be revolved around the adjuster member by sliding in the channel 10, the adjuster member, however, remaining fixed to the cord-drop. The collar 11 has two lateral extensions 12 12, in one of which the screw 13 engages. The screw 13 is embraced by a link or hook of the chain 14, whose lower end engages the hook 15, secured to the neck 3 of the reflector 2 or to any other portion of the lamp system. The point of application of the hook 15 should be on a vertical line passing through the center of gravity of the com-

bined socket, lamp, and reflector, or lamp system. In other words, the socket, lamp, and reflector are balanced about the hook 15, thus insuring the lamp assuming a horizontal position, as shown. The results of these constructions are as follows: The adjuster member, being clamped to the cord 7, so that there is frictional engagement between them, permits the collar member 11 to be rotated around the cord 7 and member 8 to such position that the lamp 1 will extend in the desired direction. In other words, after finding the normal position of the cord 7 the collar member 11 and the lamp 1 may be rotated in a horizontal plane to any desired position and will there remain, because the twisting tendency of the cord is *nil*. Similarly the adjuster member 8 may be moved up and down on the cord to secure different elevations of the lamp, which is still maintained in the horizontal position. Furthermore, the lamp is maintained in a horizontal position—its most effective one—by the chain or other connector 14, about which the lamp system is balanced.

What I claim is—

1. In combination, a lamp and its attachments, an adjuster comprising a plurality of segments having a channel therethrough and having a groove, a collar serving to unite said segments, and a member depending from said adjuster and secured approximate the middle of said lamp and its attachments, whereby said lamp is supported in approximately horizontal position, said collar being movable in said groove, whereby said lamp is rotatable with respect to said adjuster.

2. In combination, an adjuster comprising a plurality of segments having a channel therethrough and having a groove, a collar engaging in said groove and serving as means for uniting said segments about a lamp-cord, a lamp and its attachments, and a member depending from said collar and secured approximate the middle of said lamp and its attachments, whereby said lamp is supported in approximately horizontal position, said collar being movable upon said segments, whereby said lamp may be rotated to desired position about said cord.

3. In combination, a lamp-cord, a plurality of segments having a channel, a collar serving to clamp said segments to said cord, a lamp and its attachments, a member depending from said collar and secured approximate the middle of said lamp and its attachments, whereby said lamp is supported in a position approximately at right angles to said cord, said collar being movable upon said segments, whereby said lamp is rotatable with respect to said lamp-cord.

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Witnesses:

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