

G. E. MILLER.
HOODED ELECTRIC LAMP.
APPLICATION FILED MAR. 8, 1909.

953.425.

Patented Mar. 29, 1910.

Fig. 1.

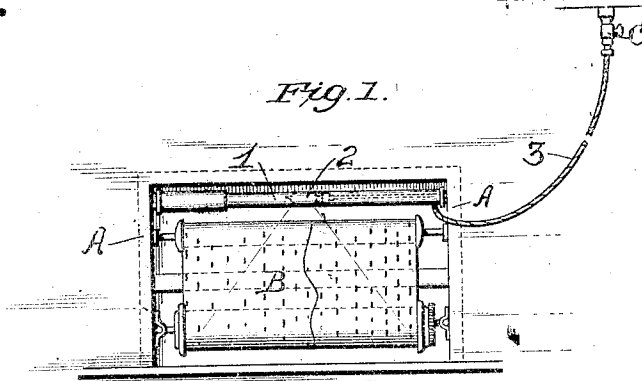


Fig. 2.

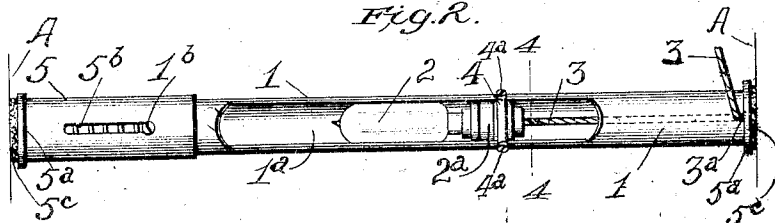


Fig. 3.

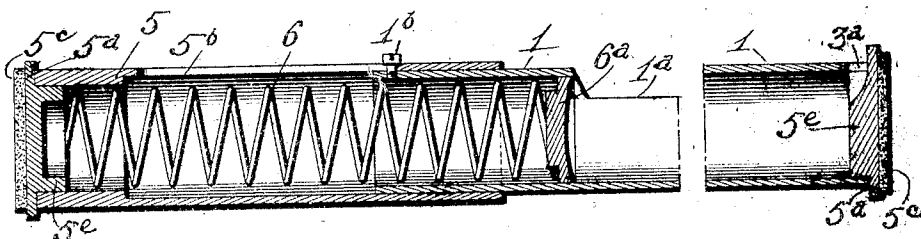


Fig. 4.

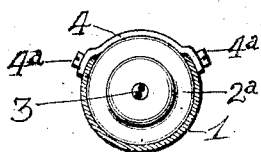


Fig. 5.

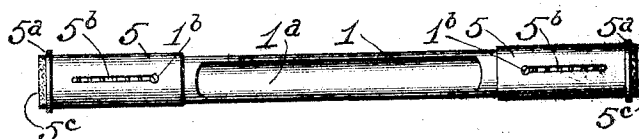
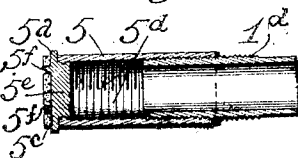


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

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HOODED ELECTRIC LAMP.

953,425.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed March 8, 1909. Serial No. 482,074.

To all whom it may concern:

Be it known that I, GEORGE E. MILLER, a citizen of the United States, and a resident of Takoma Park, in the District of Columbia, have invented a certain new and useful Hooded Electric Lamp, of which the following is a specification.

My invention relates to electric lamps of that type which are designed to illuminate a certain restricted area and which are hooded to prevent radiating light in other directions, as for instance toward the eyes of the observer or toward the surface from which it would be reflected in a manner to interfere with observation of the surface intended to be illuminated.

More specifically, my invention relates to a lamp of this type having self contained supporting means adapting it to be introduced between two opposed walls where it will support itself by friction with those walls.

My invention will be fully understood upon reference to the accompanying drawing in which,

Figure 1 is a view showing my lamp applied to one of the uses for which it is adapted. Fig. 2 is a plan view of the lamp seen from the side of its exposure opening. Fig. 3 is an enlarged axial section of the combined hood and support, an intermediate portion of which is omitted. Fig. 4 is a transverse section on the line 4-4 of Fig. 2 being in a plane immediately in rear of the lamp socket and looking toward the latter. Fig. 5 is a view corresponding to Fig. 2, but with the lamp omitted, showing a modification embodying a duplication of the sustaining means. Fig. 6 is a vertical axial section of one end of the support showing a modified construction of sustaining means.

The lamp comprises a combined hood and support 1 preferably of elongated tubular construction of relatively small diameter, constructed to receive and support an electric lamp 2, and having suitable means for increasing its length and developing sufficient end thrust or pressure to support it between two opposed walls or faces, such for instance as the sides A of the tracker-bar opening of a player-piano where it will illuminate the perforated music sheet, or between any opposed faces which happen to be associated in location with an area to be illuminated. By constructing the combined hood and support of proper length, the lamp

could obviously be located between the sides of the protecting casing around an oil painting, or be located over an archway or in the well of a desk, and in numerous other places.

The combined hood and support 1 is cut away to provide an exposure opening 1^a on one side through which the light of the lamp may be radiated, the remainder of the circumference of the tubular structure covering such portion of the circumference as may be desired, being retained to hood or shield the light and prevent its radiation, in directions which would be objectionable. The lamp 2, fed by the usual flexible cable 3 leading from an external supply connection C, may be secured in the support 1 in any suitable manner. I prefer to secure it by introducing it endwise into the tubular support and clamping it into position by a clip 4 secured to the support 1 by screws 4^a, which screws may impinge the lamp socket 2^a to hold it more firmly in position, the clip 4 serving to prevent spreading of the sides under the pressure of the screws thus imposed. Or the clip 4 may merely serve the purpose of tying together the walls of the exposure opening while the impingement of the screws 4^a hold the lamp firmly in position.

To make the lamp self supporting, the support 1 is provided with means, preferably in the form of an axially movable sleeve or sleeves 5 so combined with the support that outward thrust or pressure may be imparted to it, sufficient to firmly bind the heads 5^a of the support against two opposed walls and hold it there by friction. The preferred means for accomplishing this end is a spring 6 interposed between the telescoping parts 1 and 5. To limit the movement of the parts 1 and 5, they are respectively provided with a limiting stop 1^b and an engaging slot 5^b. The heads 5^a may be provided with any suitable means for increasing friction which will be selected according to the size and weight of the lamp to be supported, but I prefer to face the heads 5^a with a cushioning medium 5^c which may be of such character as to produce necessary friction and at the same time prevent disfiguring the surfaces between which the device is to be supported. The heads 5^a may be conveniently fitted in position by providing them with cylindrical extensions 5^d that fit the tubular members to which they are applied. The spring 6

abuts at its respective ends between a specially provided abutment 6^a and one of the heads 5^a. The sleeve 5 is preferably counter-bored for that portion of its length which telescopes with the support 1.

At that end of the support 1 at which the lamp is introduced, a recess 3^a is formed in the tube and in the head for the admission of the lamp cord, which recess extends to the end of the tube so that when the head 5^a is removed, the lamp with its cord can be wholly separated from the support.

It will be understood that the longitudinal extension of the support serves not only the purpose of developing end thrust which holds the lamp in position, but it adapts the device for use between walls of varying distances apart. In order to increase the range of application thus secured, the device may, if preferred, be provided with two extendible ends 5, as shown in Fig. 5.

I do not limit myself to the use of a resilient thrust-developing means as it will be understood upon reference to Fig. 6 that this result may be measurably realized (especially where special means are provided for increasing friction), by employing a screw threaded connection 1^a, 5^a between the sleeve 5 and the tube 1 as shown. In using the screw thread however, I would prefer to construct the head 5^a with spurs 5^b and to have the head 5^a rotatable in the sleeve 5 so that the spurs could be embodied in the sustaining wall by rotating the sleeve 5.

Having thus described my invention, what I claim as new therein and desire to secure by Letters Patent is:—

1. An adjustably self-supporting lamp for illuminating a restricted area comprising a tubular lamp inclosing and supporting member having a restricted exposure opening, and having means by which to develop endwise thrust adapting it to sustain itself in angularly adjustable position between two opposed faces.

2. An adjustably self-supporting lamp for illuminating a restricted area comprising a tubular lamp inclosing and supporting member having a restricted exposure opening, a lamp supported therein in position to emit its light through the exposure opening, a tubular member extensively mounted in telescoping relation to the lamp containing and supporting member, means for developing an endwise thrust of the extension member relatively to the lamp inclosing and supporting member, and abutting ends provided on the structure to adapt it to sustain itself in angularly adjustable position between two opposed faces.

3. In a lamp of the character described, the combination of a tubular support having an exposure opening, a lamp fitted in said support in position to emit its light through

the exposure opening, and means for frictionally supporting said lamp between opposed walls and permitting of its angular adjustment therein whereby to direct the rays of light emitted through the opening.

4. An adjustably self-supporting lamp comprising a main tubular lamp inclosing and supporting section having an exposure opening in one side thereof, a lamp supported in said section in position to emit its light through said opening, an extension member telescoping with said main tubular section, and means contained within the main tubular section and the telescoping extension, for developing end thrust.

5. An adjustably self-supporting lamp comprising a main tubular lamp inclosing and supporting section having an exposure opening in one side thereof, a lamp supported in said section in position to emit its light through said opening, an extension member telescoping with said main tubular section, and means contained within the main tubular section and the telescoping extension, for developing end thrust; said main tubular member being provided with a transverse wall separating the lamp containing portion from the portion which contains the thrust developing means and forming an abutment for the latter.

6. In a lamp of the character described, the combination of a main tubular section having an exposure opening in one side thereof, a lamp supported in said section in position to emit its light through said opening, and a spring pressed sleeve fitted on one end of said tubular section and coöperating with the other end thereof to hold the device in frictional engagement between opposed walls and permit of its angular adjustment, whereby to regulate the direction of the rays of light emitted through said opening.

7. A lamp support comprising a tubular body, a sleeve telescoping upon the end thereof, a spring abutment secured in the tubular body, a head secured in the sleeve, and a spring introduced between said abutment and head and forcing the sleeve outward relatively to the tubular body; said tubular body and sleeve being constructed with interengaging slot and pin limiting means.

8. In a lamp of the character described, the combination of a tubular support, a lamp carried by said support and adapted to enter the same from one end, and an end closure for the end of the support through which the lamp is introduced; said tubular support and end closure being provided with a recess to receive an electric conductor leading to the lamp.

9. A lamp of the character described comprising a tubular support having a circumferential exposure opening, a lamp fitted in the tubular support in position to emit its

light through the exposure opening, and means binding the lamp against displacement in the support, said means comprising a clip tying together the walls of the tube, and set screws introduced through the walls of the tube over a portion of the lamp.
The foregoing specification signed at

Washington D. C. this 19th day of February, 1909.

GEORGE E. MILLER.

Witnesses:

HERVEY S. KNIGHT,
HUGH M. STERLING.