W. H. SPENCER & J. T. HOLMES.

ELECTRIC LAMP.

APPLICATION FILED DEC. 30, 1915.

1,206,477.

Patented Nov. 28, 1916.

4 SHEETS—SHEET 1.

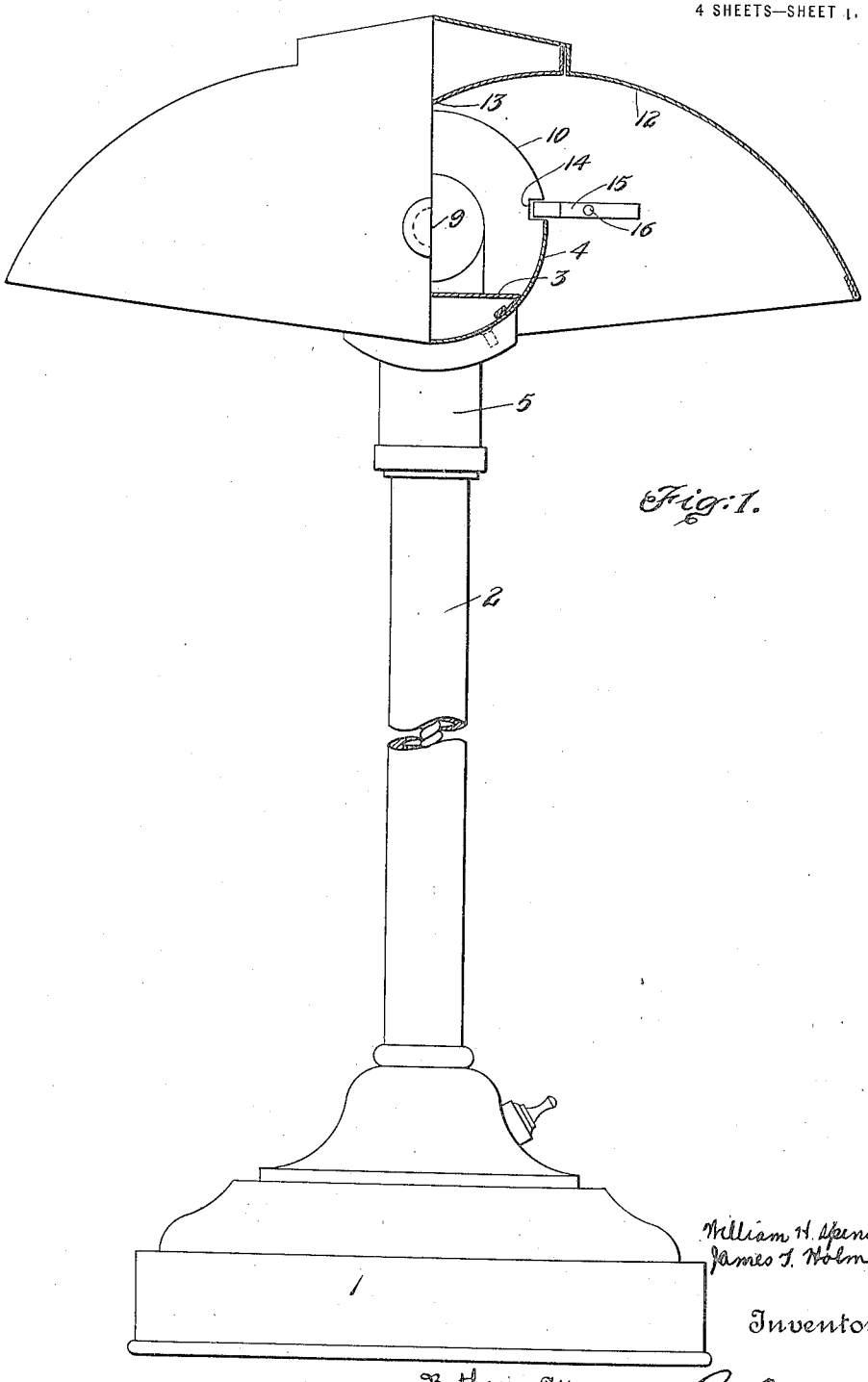


Fig. 1.

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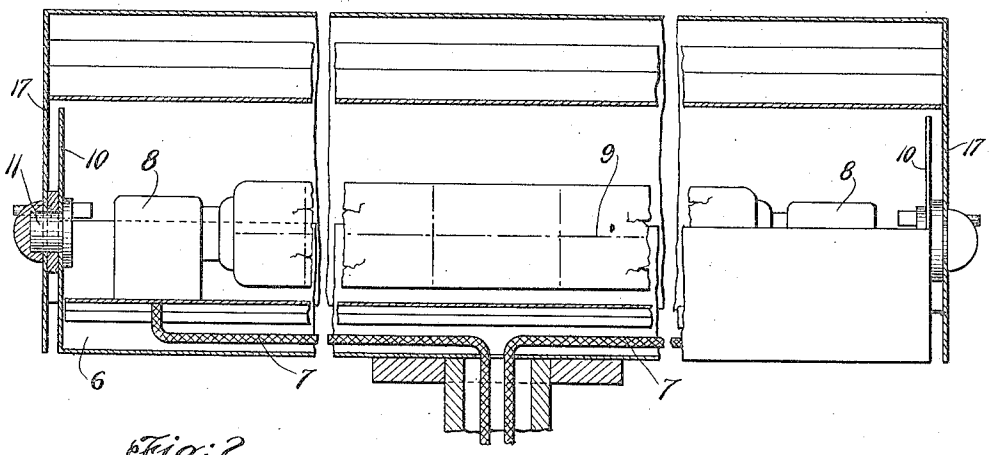


Fig: 2.

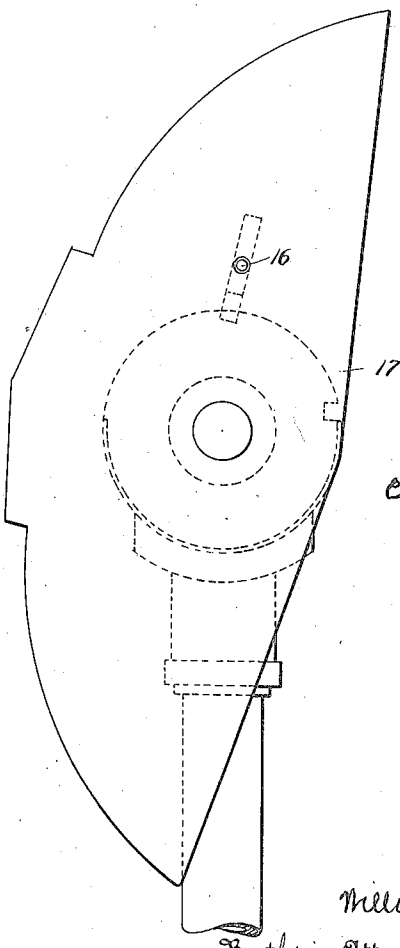


Fig: 3.

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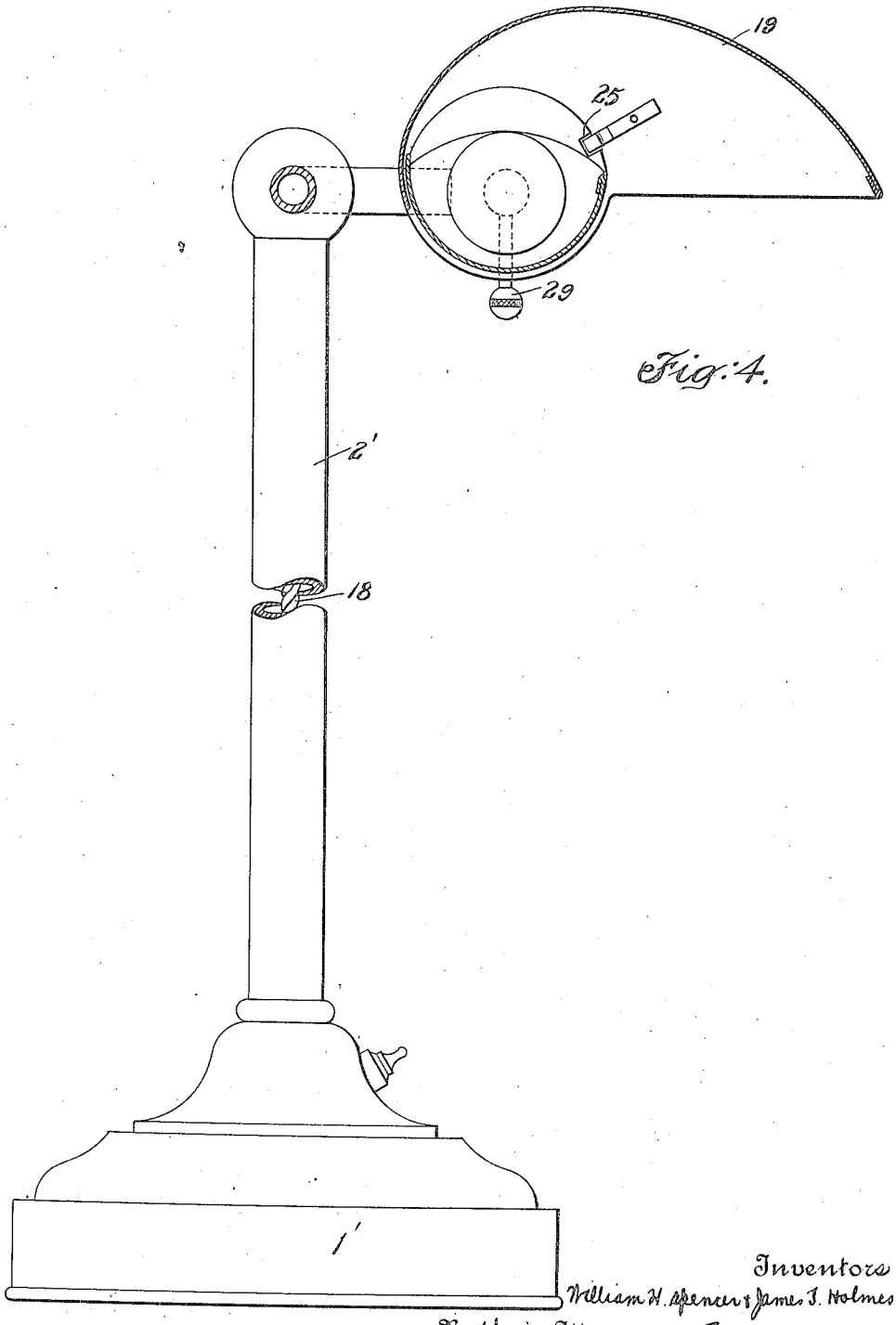


Fig. 4.

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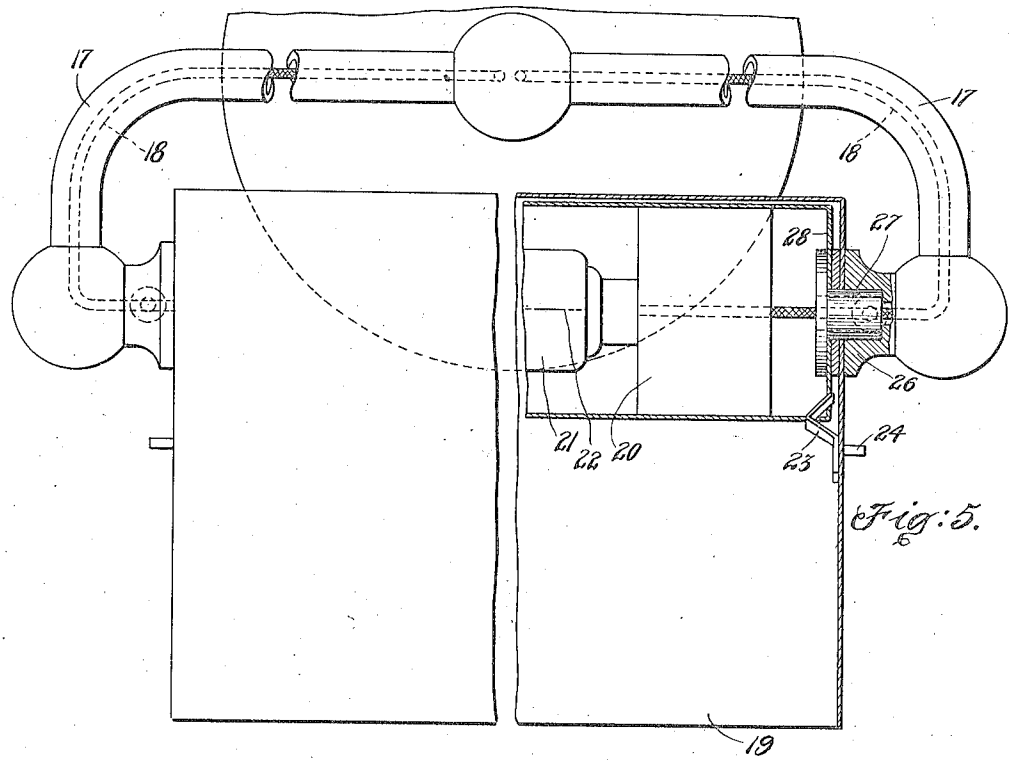


Fig: 5.

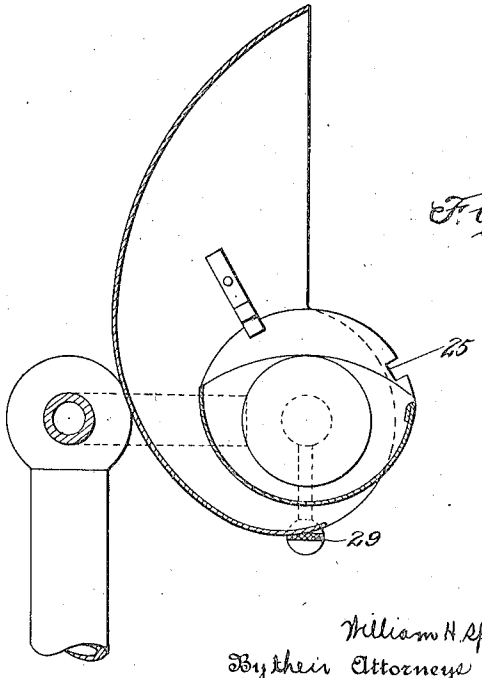


Fig: 6.

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UNITED STATES PATENT OFFICE.

WILLIAM H. SPENCER, OF NEW YORK, AND JAMES T. HOLMES, OF BROOKLYN, NEW YORK, ASSIGNORS TO GEORGE FRINK SPENCER, OF NEW YORK, N. Y.

ELECTRIC LAMP.

1,206,477. Specification of Letters Patent. Patented Nov. 28, 1916.

Application filed December 30, 1915. Serial No. 69,404.

To all whom it may concern:

Be it known that we, WILLIAM H. SPENCER and JAMES T. HOLMES, citizens of the United States, residing in the borough of Manhattan, city, county, and State of New York, and Brooklyn, county of Kings, State of New York, respectively, have invented certain new and useful Improvements in Electric Lamps, of which the following is a full and clear specification.

This invention relates to electric lamps which illuminate by indirect lighting and has for its primary object to provide an improved construction, combination and arrangement of parts for materially increasing the serviceability of lamps of this character.

One of the objects of the present invention is to provide an improved lamp for use at tables, desks and like places and which avoids the reflection of direct rays from the illuminated area which at the same time effectively shuts off the direct rays from the eye of the user.

Other and further objects will appear in the specification and be pointed out in the appended claims, reference being had to the accompanying drawings in which:—

Figure 1 is an end elevation of one embodiment of our invention, parts being broken away and parts shown in section. Fig. 2 is an ordinary section of the same, parts being broken away and parts shown in elevation. Fig. 3 is an end elevation of the same showing a reflector or hood in a different position. Fig. 4 is a transverse section of another embodiment, parts being broken away and parts being shown in elevation. Fig. 5 is a top plan view of the same, parts being broken away and parts being shown in section. Fig. 6 is a fragmentary view similar to Fig. 4, showing the reflector or hood in a different position.

Referring more particularly to the drawings and first to the embodiment shown in Figs. 1, 2, and 3, the lamp support includes a weighted base 1, which serves to mount a tubular standard 2, which carries at its upper end a part-cylindrical housing 4, the opposite sides of said housing constituting light intercepting walls. As shown best in Figs. 1 and 3, the lamp housing is mounted on the upper end of the column or support 2 by means of a suitable fitting 5. Spaced from the bottom wall of said housing, is a plate or partition 3 which forms with the housing 4 a longitudinal channel 6 through which the cords 7 extend in opposite directions from the column 2. Said cords are connected to suitable lamp sockets 8 which are mounted upon the plate 3 adjacent opposite ends thereof. These sockets are adapted to receive the ends of a lamp which in the present embodiment includes an elongated filament 9. Projecting upwardly from either end of the plate 3 is an upright in the form of a flat wall 10, the reflector presently to be described, being trunnioned on short studs 11 which are mounted in the end walls 10. As shown best in Fig. 1 the reflector comprises oppositely extending portions 12 which meet at 13 in a line parallel to and above the filament 9.

One of the end walls 10 of the lamp housing is provided with a notch 14 which is adapted to inter-engage with a latch 15, said latch being provided with a pin 16 which projects through an opening in the end wall of the reflector 12. As shown in Figs. 1 and 2, the end walls 17 of the reflecting hood have their lower edges inclined outwardly to the lateral edges of the reflector portions 12. By inspection of Fig. 1, it will be seen that the light intercepting walls 4 extend upwardly above the horizontal plane through the filament 9 so that the plane tangent to the outer edge of the reflector portion 12 and the upper edge of the wall 4, passes above the incandescent filament 9, thus making it impossible for a direct ray of light to pass from the filament to the eye of the user. At the same time all rays from the filament 9 are projected outwardly on to the illuminated area, thus avoiding the undesirable reflection of direct light rays from the illuminated area. The reflector surfaces 12 are suitably formed to produce the most desirable light distribution for the illuminated area.

In the embodiment shown in Figs. 4, 5, 6, substantially the same principle of construction is embodied in a lamp which projects light outward on one side only. In this embodiment the standard 2′ which projects upwardly from the base 1′, carries oppositely extending hollow branch arms 17, through which extend lighting cords 18 from the standard 2′. As shown in Fig. 5, each of the cords 18 passes through the end wall of the reflector or hood 19 and termi-

nates in a socket 20. The sockets 20 are spaced longitudinally and are adapted to receive the opposite ends of a lamp 21, having an elongated filament 22. The latch 23 mounted on the inner face of one of the end walls of the reflector hood 19, is provided with an outwardly projecting pin 24 which makes it possible to release the latch 23 from engagement with the notch 25 and thus permits the reflector to be swung upwardly into the position shown in Fig. 6. This permits ready access to the lamp for cleaning purposes or in case it is necessary to renew the same. As shown in Fig. 3, the same movement is made possible in the first embodiment. The heads 26 (see Fig. 5) which are mounted on the arms 17 for carrying the lamp in the second embodiment, serve to mount pins 27 upon which the end walls of the reflector 19 are journaled. In addition to this movement the lamp may be adjusted angularly about the pins 27 by reason of its end walls 28 being also journaled within the heads 26. As shown in Figs. 4 and 6, the thumb screws 29 are threaded into the heads 26, and serve to clamp the pins 27 in any adjustable position for holding the lamp in that position.

We claim:

1. The combination with a support, of a lamp housing carried thereby, said housing being provided with flat end walls, a reflector trunnioned in the flat end walls of said housing, sockets spaced longitudinally of said housing, said sockets being coaxially arranged with respect to each other and with respect to the trunnioned axis of said reflector, and a lamp mounted in said sockets.

2. The combination with a support, of an elongated housing mounted thereon, coaxially arranged lamp sockets adjacent opposite ends of said housing, an elongated filament lamp mounted in said lamp sockets, said housing being provided with opaque walls along opposite edges thereof, and a reflector arranged opposite to said housing on the other side of said lamp, said reflector being extended to intercept the light rays from the filament of the lamp which pass the edges of said opaque walls.

3. The combination with a line filament incandescent lamp provided with coaxially arranged sockets at opposite ends thereof, means for supporting said sockets, and a reflector for said lamp movably connected to said supporting means to swing about an axis coinciding with the line filament of said lamp.

4. The combination with a support, of an elongated housing mounted thereon, coaxially arranged lamp sockets adjacent opposite ends of said housing, an elongated filament lamp mounted in said lamp sockets, said housing being provided with opaque walls along opposite edges thereof, and a reflector arranged opposite to said housing on the other side of said lamp, said reflector being extended to intercept the light rays from the filament of the lamp which pass the edges of said opaque walls, said reflector being movable relatively to said housing, and means releasably interengaging between the housing and reflector to hold them in normal positions of service.

5. The combination with a support, of an elongated plate carried thereby, sockets coaxially arranged on said plate, a lamp mounted in said sockets, said plate being provided with uprights adjacent opposite ends thereof and a reflector for said lamp journaled in said uprights.

6. The combination with a support, of an elongated plate carried thereby, sockets coaxially arranged on said plate, a lamp mounted in said sockets, said plate being provided with uprights adjacent opposite ends thereof and a reflector for said lamp journaled in said uprights on an axis coinciding with the axis of said sockets.

7. The combination with a support or standard, of a housing carried thereby, a plate or partition spaced from the bottom wall of said housing to form a chord channel, coaxially arranged lamp sockets spaced longitudinally of said plate or partition, an elongated filament lamp mounted in said lamp sockets, and a reflector movably mounted on said support to swing about the axis of said lamp sockets.

8. The combination with a support or standard, of a housing carried thereby and extending in opposite directions therefrom, said housing having flat end walls, a plate or partition arranged within said housing to form a chord channel between it and the bottom wall of said housing, lamp sockets mounted on said plate or partition adjacent opposite ends thereof, said sockets being connected with chords extending through said channel, a line filament lamp mounted in said lamp sockets, and a reflector comprising portions extending oppositely from a line parallel to the filament of said lamp and flat end walls normal to said oppositely extending portions of the reflector, the flat end walls of said reflector being pivotally connected to the flat end walls of said housing.

9. The combination with a hollow standard, of an elongated housing carried by said standard or support, coaxially arranged sockets mounted adjacent opposite ends of said housing, an elongated filament lamp mounted in said sockets, circuit wires extending through said standard and connected respectively to said sockets, an opaque wall arranged below and extending part way around said elongated filament lamp, and a reflector arranged above and overhanging sufficiently to intercept the direct

light rays which emanate from said lamp above said opaque wall.

10. The combination with a standard, of a lamp housing carried thereby, coaxially arranged sockets in said lamp housing, said lamp housing being provided with flat end walls, a reflector trunnioned in said flat end walls, said reflector being provided with flat end walls, and means interengaging between an end wall of the housing and an end wall of the reflector for holding said reflector against movement.

11. The combination with a standard, of a lamp housing carried thereby coaxially arranged sockets in said lamp housing, said lamp housing being provided with flat end walls, a reflector trunnioned in said flat end walls, said reflector being provided with flat end walls, and means interengaging between an end wall of the housing and an end wall of the reflector for holding said reflector against movement, said holding means being mounted within said reflector and having a part projecting through the wall thereof to be accessible from the outside.

12. The combination with a support or standard, of a housing carried thereby and extending in opposite directions therefrom, said housing having flat end walls, a plate or partition arranged within said housing to form a chord channel between it and the bottom wall of said housing, lamp sockets mounted on said plate or partition adjacent opposite ends thereof, said sockets being connected with chords extending through said channel, a line filament lamp mounted in said lamp sockets, and a reflector comprising portions extending oppositely from a line parallel to the filament of said lamp and flat end walls normal to said oppositely extending portions of the reflector, the flat end walls of said reflector being pivotally connected to the flat end walls of said housing on an axis coincident with the filament of said lamp.

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