O. S. STROM.

LIGHT REFLECTOR.

APPLICATION FILED SEPT. 27, 1915.

1,200,398. Patented Oct. 3, 1916.

Fig. 2.

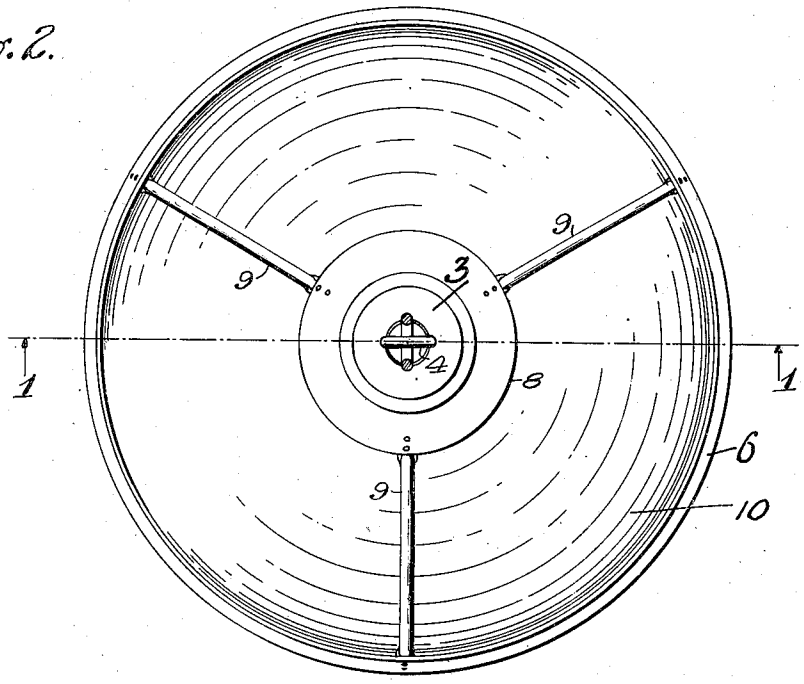
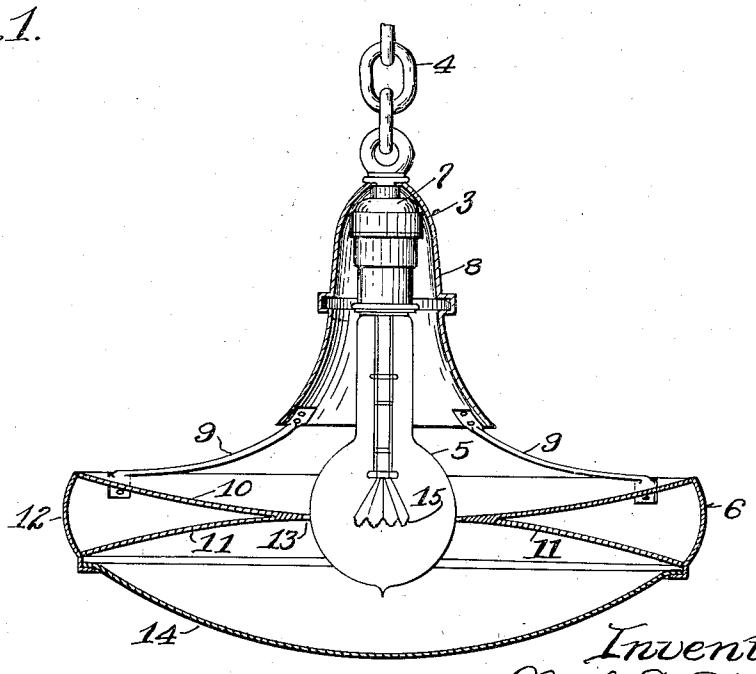


Fig. 1.



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UNITED STATES PATENT OFFICE.

OLAF S. STROM, OF LOS ANGELES, CALIFORNIA.

LIGHT-REFLECTOR.

1,200,398. Specification of Letters Patent. Patented Oct. 3, 1916.

Application filed September 27, 1915. Serial No. 52,778.

To all whom it may concern:

Be it known that I, OLAF S. STROM, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Light-Reflectors, of which the following is a specification.

This invention relates to a light reflector, and pertains especially to a light reflector of the semi-indirect type.

It is an object of this invention to provide a reflector which is adapted to be secured to any fixture and will uniformly distribute light by both direct and indirect illumination.

An embodiment of my invention is illustrated in the accompanying drawing, in which:

Figure 1 is a vertical section through a reflector with the lamp in elevation, and Fig. 2 is a plan view.

Referring more specifically to the drawing, 3 indicates a fixture supported by a link chain 4 and having a lamp 5 secured thereto. Supported from the fixture 3 is my improved reflector 6. The fixture comprises a lamp socket 7 to which is secured a canopy 8 of bell shape, and extending downwardly. The particular construction of the fixture is not a feature of my invention, and any type of fixture may be used to which my improved reflector may be attached.

Secured adjacent the mouth of the canopy 8 are wires or rods 9 having flattened ends and bent outwardly so that the ends may be secured to the reflector. Both ends of rods 9 are flattened and rivets, screws, or any other convenient fastening means may be used for securing the rods to the canopy and the reflector. It is preferable to use rods or wires in order that there may be very little obstruction to the passage of the light upward.

The reflector 6 is shown as comprised of two reflecting surfaces 10 and 11 of concave form, diverging from the center outward toward the peripheral edge and having an encompassing annular member 12 to which the outer edges of the reflecting walls are connected. Reflecting walls 10 and 11 are shown as intersecting adjacent the center and provided with an aperture 13 in which the bulb of the lamp 5 is adapted to be disposed. A glass bowl 14 is shown connected to the annular member 12. I do not wish, however, to limit myself to the use of a glass bowl or the use of any bowl. The bowl 14 is preferably transparent so that it will permit the rays of light to pass downwardly.

The reflector 6 should be so disposed with respect to the lamp 5 that the center of the filament 15 will be in the plane of the center of the apertures 13, thereby permitting some of the rays of light to pass directly upward without engaging the reflecting surface 10. Other of the rays will pass outwardly engaging the reflecting surface 10 and upwardly against the ceiling. Indirect lighting of the room is thereby produced. A portion of the rays from the lamp 5 will be thrown downwardly, some will strike the reflecting surface 11 and be reflected outwardly and downwardly. The reflecting surfaces 10 and 11 may be made with ribs or corrugations, if so desired. It is only essential to my invention that the reflecting surfaces be of a character such that light will be reflected therefrom away from the source, upwardly by one surface, and away from the source of light and downwardly by the other surface.

It will be noted that my reflector provides means for direct lighting of the space below and to the sides of the lamp, and that it also provides indirect lighting by reflection, and direct passage of the light upwardly, and outwardly against the ceiling and walls of the room. By means of the direct lighting no shadow is cast beneath the fixture which is a serious objection in the case of indirect lighting systems wherein a fixture is used with a reflector disposed below the source of light. The indirect light produces diffused and uniformly distributed light about the room, and the direct light illuminates the space below the source of light, thereby securing a uniform light distribution and a high efficiency.

What I claim is:

A fixture, comprising a lamp support, a reflector comprising a shallow member having an aperture substantially at its center, a lamp secured to said support and disposed with its light emitting element substantially

at the center of said aperture, said reflector provided with oppositely disposed dished surfaces diverging from the center for reflecting light away from said lamp in opposite directions, said surfaces being of relatively small curvature of relatively great lateral extent and offering substantially no obstruction to the direct rays of light having a small angle to the horizontal plane passing through said light emitting element.

In witness that I claim the foregoing I have hereunto subscribed my name this 20th day of August, 1915.

OLAF S. STROM.