R. M. BEARD.

ELECTRIC LIGHT FIXTURE.

APPLICATION FILED SEPT. 20, 1919.

1,421,382. **Patented July 4, 1922.**

Fig. 1.

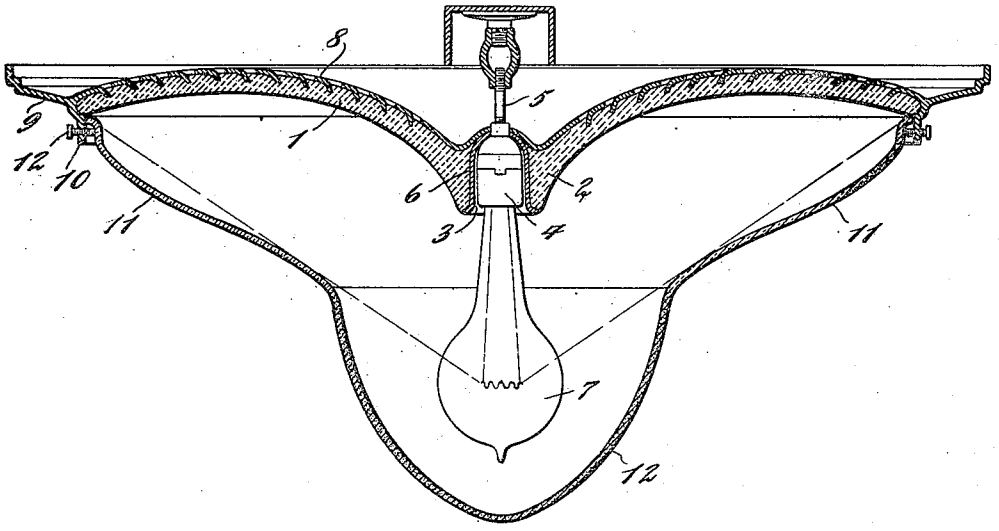
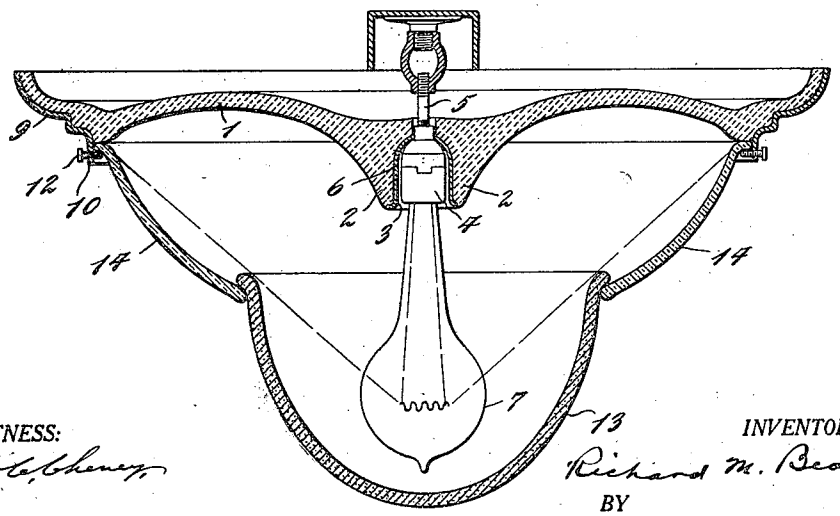


Fig. 2.



WITNESS:

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ELECTRIC-LIGHT FIXTURE.

1,421,382. Specification of Letters Patent. Patented July 4, 1922.

Application filed September 20, 1919. Serial No. 325,148.

To all whom it may concern:

Be it known that I, RICHARD M. BEARD, a citizen of the United States, residing at the city of New York, in the borough of Manhattan and State of New York, have invented certain new and useful Improvements in Electric-Light Fixtures, of which the following is a full, clear, and exact description.

This invention relates to indirect and semi-indirect electric lighting fixtures, and is partly in the nature of an improvement on the devices shown in my prior Patent No. 1,243,481, dated Oct. 16, 1917, and my applications Nos. 196,579 and 283,574, filed October 15, 1917, and March 19, 1919, respectively.

In prior constructions, a relatively broad, reflector of a plaster composition such as those having plaster of Paris as a principal ingredient, has a centrally depending boss with a recess therein for the reception and concealment of a lamp support. The reflector is supported from the lamp support and an inverted translucent bowl or shade is centrally placed in spaced relation below the lamp and reflector. I have found that the inner surface of the inverted shade, the reflecting surface of the reflector, and the lamp all collect dust and diminish the effectiveness of the light that is normally produced by the fixture. I have also found that in shipping the fixture, the peripheral edge portions of the reflector which is of a plastic composition very often become broken in spite of extreme care in packing.

An object of my invention is to provide a lighting fixture of this kind which has few surfaces exposed for the collection of dust, which is so constructed that those surfaces which are exposed are easily accessible for cleaning, and are so placed as to be unlikely to collect a great amount of dust.

Another object is to provide a device of this kind which is entirely enclosed, neat and attractive in appearance, simple in construction, and of low cost of production.

Another object is to provide a device of this kind in which the peripheral portions of the reflector are more durable and less likely to become broken or damaged in shipment.

Other objects and advantages will appear from the following description.

In carrying out my invention I provide the peripheral portion of the reflector with a metallic or other durable rim or flange, which not only protects and strengthens the peripheral portion but also serves as a convenient means of support for the enclosing means. I provide an enclosing means in which the usual translucent shade is below or surrounding the lamp while the upper or outer part which covers and protects the reflector is transparent to avoid obstructing the rays reflected by the latter. This enclosing means entirely covers the reflector and lamp to protect them from the accumulation of dust and may be of one integral piece, or of two pieces, in which latter case the lower part is supported from the upper.

Fig. 1 is a sectional view showing one embodiment of my invention wherein the enclosing means is of one integral piece, and

Fig. 2 is a sectional view of a modification of the embodiment shown in Fig. 1 and wherein the enclosing means is of two separable pieces, the lower or central portion being supported at its periphery from the upper or outer portion.

Referring particularly to Fig. 1 the fixture comprises a ceiling reflector 1 which is preferably circular in shape, and slightly concaved so as to provide a depending central boss 2 having a recess 3 therein. Substantially concealed within this recess is a lamp socket 4, carried by the supporting fixture 5, in turn supported from the usual outlet box in the ceiling. The boss 2 carries in its recess, a cup-shaped member 6 which fits over and is supported by the socket 4, whereby the reflector is supported from the outlet box through the medium of the lamp socket. A lamp 7, such as the well known nitrogen lamp, is carried by the socket 4.

The reflector may be made of a plaster composition such as those with plaster of Paris as the principal and active ingredient or other suitable material having similar properties and may have a reinforcing back 8 of metal or other suitable material. The peripheral portion of the reflector has a protecting band 9 which may or may not be integral with the back 8, and the band 9 has a depending flange 10, adapted to support the enclosing means 11 through the medium of any suitable fastening means such as screws 12, for example.

The lower or central part 12 of the enclosing means is translucent and the remainder is transparent. The enclosing means is of glass, and the translucency may be obtained by enameling or by flashing opal thereon, or

by any other suitable means, and the upper or transparent part is of clear glass. The translucent portion preferably extends upwardly or outwardly until intersected by straight lines drawn from the filament to the outer edge of the reflecting surface.

In Fig. 2 is shown a modification, differing mainly from the structure shown in Fig. 1 by the making of the enclosing means of two parts, the lower translucent part 13 being supported at its periphery from the upper or transparent part 14. In this modification I have not shown the reinforced backing 8, and it is to be understood that this backing may or may not be used with either modification, or any other suitable reinforcing means for the reflector may be used if desired.

In use, that portion of the light rays from the lamp which do not pass through the translucent portions of the enclosing means are either reflected thereby upwardly toward the reflector 1, or else pass directly thereto. The reflector 1 then reflects them to pass downwardly through the transparent portion of the enclosing means.

It will be observed that the reflecting surfaces and lamp are entirely enclosed to prevent the accumulation of dust thereon with the consequent impairment of the reflecting qualities and that the only portion exposed to possible dust accumulation is the outer or downward surface of the enclosing means and this surface being a depending one will not readily catch settling dust, but can be easily cleaned to remove any dust which might accumulate thereon without opening or removal of the enclosing means.

The band 9 also acts as a protector for the outer edges of the reflector to prevent chipping or cracking thereof, due to jars, received when being shipped.

It is obvious that various modifications may be made in the construction of my device as illustrated in the drawings and above particularly described, within the principle and scope of my invention.

I claim:

1. In an electric lighting fixture, a relatively broad plaster composition reflector having a depending neck portion, a protecting and reinforcing band carried by the reflector at its periphery, means for supporting the reflector solely at the neck portion, and depending enclosing means supported entirely from the band.

2. In an electric lighting fixture, a relatively broad plaster composition reflector having a peripheral reinforcing and protecting band supported entirely from the peripheral portion of the reflector, said band having shade supporting means as a part thereof, and means for supporting the reflector solely at its central portion.

In witness whereof, I subscribe my signature.

RICHARD M. BEARD.