R. M. BEARD.

ELECTRIC LIGHTING FIXTURE.

APPLICATION FILED OCT. 15, 1917. RENEWED MAR. 16, 1921.

1,410,985. Patented Mar. 28, 1922.

Fig. 1.

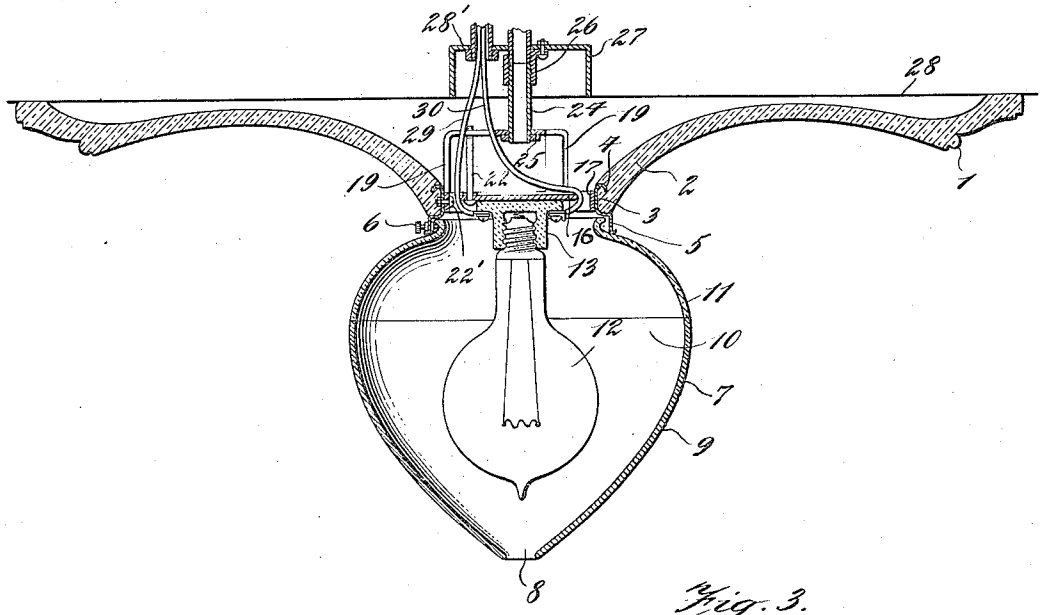


Fig. 2.

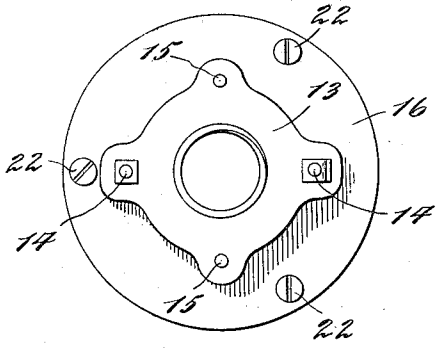


Fig. 3.

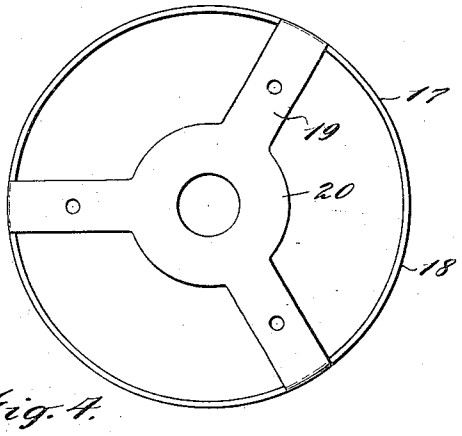
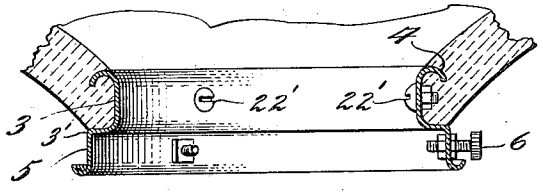


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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ELECTRIC LIGHTING FIXTURE.

1,410,985. Specification of Letters Patent. Patented Mar. 28, 1922.

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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 Lighting Fixtures, of which the following is a full, clear, and exact description.

This invention relates to electric lighting fixtures.

One of the objects of the invention is to provide an electric lighting fixture having a reflector composed of a plaster composition which is reinforced in such a manner that it may be readily supported in position against the ceiling.

Another object is to provide a fixture having a reflector of a plaster composition which may be readily attached to the part or parts utilized for holding the lamp and its socket in position.

A further object of the invention is to provide a fixture having a reflector of the type referred to, which is provided with convenient means for holding a globe or shade in position.

With these and other objects in view, the invention consists of the constructions and combinations which will be hereinafter set forth in conjunction with the accompanying drawings, and will be particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a central vertical section of a lighting fixture constructed in accordance with the principles of the invention;

Figure 2 is a bottom plan view of the receptacle for the lamp socket and its supporting plate;

Figure 3 is a top plan view of the reflector and lamp supporting element; and

Figure 4 is an enlarged detail showing the metallic reinforcement of the reflector.

The lighting fixture shown, as is usual with fixtures of this type, comprises a ceiling reflector 1 which is preferably of a circular shape and provided at its central portion with a frusto-conically-shaped portion or boss 2. This reflector is of plastic composition, such as "plaster of Paris," or any other suitable composition, and may be ornamented in any desired manner. The reflector is provided with a large central opening in the boss 2, and embedded within the walls of this opening is a metallic reinforcing strip or lining 3 which preferably has its upper embedded edge 4 curved, as shown, to rigidly unite the reinforcing strip to the reflector. Preferably the reinforcing lining is embedded in the reflector by casting the reflector around the strip in a suitable mold. The lower portion of the annular reinforcing strip 3 is provided with an annular flange 3′ which rests against the bottom edge of the boss 2 and carries a ring 5 having set screws which secure a globe or shade 7 in place, the ring 5 and set screws 6 constituting a type of shade holder in common use. The shade or globe 7 may be of any suitable shape and preferably has an opening 8 in the bottom thereof and has its lower surface 9 to the line 10 translucent and the upper portion 11 thereof transparent so that the direct rays of light passing through the part 9 will be diffused and the rays passing through the transparent portion 11 will be reflected downwardly by the reflector 1.

Mounted within the globe or shade 7 is an electric lamp 12 which fits into a socket or receptacle 13, the socket or receptacle being shown in Figure 2, and being provided with terminals 14 for the wires and holes or openings 15 for attaching it to a disk 16. This receptacle is the common type of porcelain receptacle used. A supporting member 17 which is disclosed in Figure 3, comprises an annular ring 18 having L-shaped converging arms 19 preferably three in number secured thereto, which arms are connected together by a disk 20, the ring, arms and disk constituting a cup-shaped spider. The disk 16 is supported from the spider by means of bolts or screws 22 passing through the arms 19, which screws may be adjusted to vary the position of the disk and hence the receptacle and lamp. The annular ring 18 of the spider is connected to the metallic reinforcing strip 3 by means of screws 22′. The spider therefore also serves as the supporting member for the reflector.

Passing through a central opening in the disk 20 is a standard or post 24 which is secured to the spider by means of a nut 25, the post 24 is carried by a coupling member 26 which is secured to an outlet box 27, which outlet box is preferably inserted in

a cavity in the ceiling, as is the usual construction, the ceiling line being indicated at 28. The electric wires which are attached to the terminals 14 of the receptacle pass into the outlet box through a pipe 28′, the wires being indicated 29 and 30, which wires are attached to the terminals of the receptacle.

The manner in which the fixture is assembled is obvious from the preceding description. The reflector is attached to the spider 17 by means of the screws 22′ and after the pipe 24 has been placed in position, the reflector is held against the ceiling and the nut 25 secured over the end of the post 24, the same being adjusted until the reflector is held tightly against the ceiling. The lamp receptacle 13 is attached to the disk 16 by screws passing through the openings 15 and these parts are then secured to the spider by means of the threaded bolts 22 which may be adjusted to vary the height of the lamp 12, which is threaded into the socket or receptacle 13. The globe or shade 7 is then placed in position and held by the set screws 6. It will, therefore, be seen that the fixture described is capable of being readily assembled and placed in position, after which the parts are rigidly held there, the important parts of the fixture for this purpose being the metallic reinforcing strip 3 and the shade and reflector supporting spider 17.

I claim:

1. In an electric lighting fixture, a reflector of a plastic composition having a central opening therethrough, a reinforcing metallic lining for said opening, and a shade holder attached to said metallic lining.

2. In an electric lighting fixture, a reflector of a plastic composition having a central opening therethrough, a reinforcing metallic lining surrounding said opening, an annular ring depending from said lining, and a fastening device for a shade attached to said ring.

3. In an electric lighting fixture, in combination with a supporting stem or the like, a reflector of plaster composition, a metallic supporting member for the reflector embedded in the reflector and attached to the stem, and means on the supporting member to carry a shade.

4. In an indirect or semi-indirect electric lighting fixture, in combination with a supporting stem or the like, a relatively broad reflector of plaster composition having a central opening surrounded by a depending boss or neck portion, a bracket attached to the stem, a supporting annulus of non-frangible material engaging the reflector at the neck portion and attached to the bracket, and a lamp socket carried by the bracket in said opening.

5. In an indirect or semi-indirect electric lighting fixture, in combination with a supporting stem or the like, a relatively broad reflector of plaster composition having a central opening surrounded by a depending boss or neck portion, a bracket device attached to and carried by the stem and including a supporting member for the reflector embedded in the reflector, and a lamp socket carried by the bracket device in said opening.

6. In an indirect or semi-direct electric lighting fixture, in combination with a supporting stem or the like, a relatively broad reflector of plaster composition having a central opening surrounded by a depending boss or neck portion, a bracket device attached to and carried by the stem and including a supporting member for the reflector embedded in the reflector, and a lamp socket carried by the bracket device in said opening, said supporting member being provided with means to carry a shade.

7. In an electric lighting fixture, a relatively broad reflector of plaster composition and having an aperture therein, a lining for said aperture embedded in the walls thereof, and shade supporting means carried by the lining.

8. In an indirect or semi-indirect electric lighting fixture, in combination with a supporting stem or the like, a relatively broad reflector of plaster composition having a central opening surrounded by a depending boss or neck portion, a bracket attached to the stem, a supporting annulus of non-frangible material engaging the reflector at the neck portion and attached to the bracket, a lamp socket carried by the bracket in said opening, and shade supporting means carried by the annulus.

9. In an indirect or semi-indirect electric lighting fixture, in combination with a supporting stem or the like, a relatively broad reflector of plaster composition having a central opening surrounded by a depending boss or neck portion, a bracket attached to the stem, a supporting annulus of non-frangible material engaging the reflector at the neck portion and attached to the bracket, and a shade supporting means carried by the annulus.

10. In an indirect or semi-indirect electric lighting fixture, in combination with an outlet member for supporting the fixture, a relatively broad reflector having a central opening surrounded by a depending boss or neck portion; a bracket element carried by the member and supporting the reflector at the lower end of the neck portion, and a lamp socket supported by the bracket element within the lower end of the neck portion of the reflector and having downwardly exposed connection terminals, said bracket element having passages therein through which the outlet wires may pass and be di-

rectly connected to the socket terminals from a point below the fixture with the fixture in position.

11. In an indirect or semi-indirect electric lighting fixture, a relatively broad reflector of plaster composition having a central opening surrounded by a depending neck portion, a bracket device attachable to a suitable support and having means for engaging and supporting the reflector at the bottom part of the neck portion and including bowl attaching means, a lamp socket attached to and carried by the bracket within the neck portion adapted to support a lamp below the reflecting surface, and a bowl opening upward enclosing the lamp and supported from the attaching means of the bracket device.

12. In an indirect or semi-indirect electric lighting fixture, a relatively broad reflector of plaster composition having a central opening surrounded by a depending boss portion, a bracket device embedded in and supporting the reflector from the neck portion, and shade supporting means carried by the bracket device.

In witness whereof I subscribe my signature.

RICHARD M. BEARD.