Oct. 1, 1940. C. D. McCANN 2,216,444

LIGHT FIXTURE

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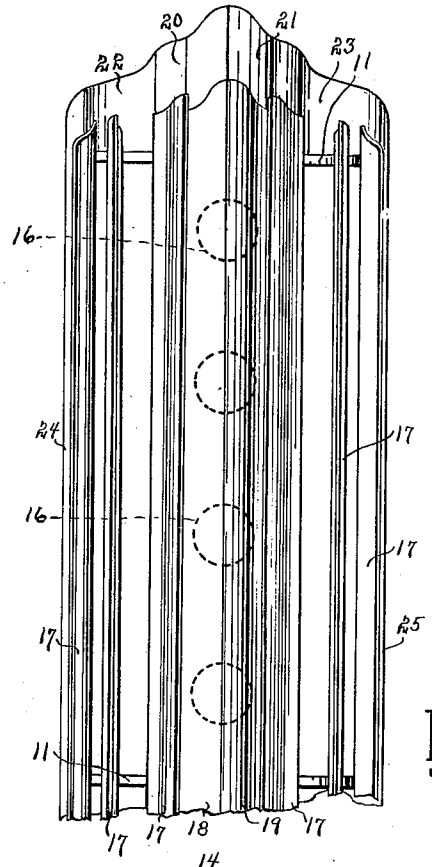


Fig. 1.

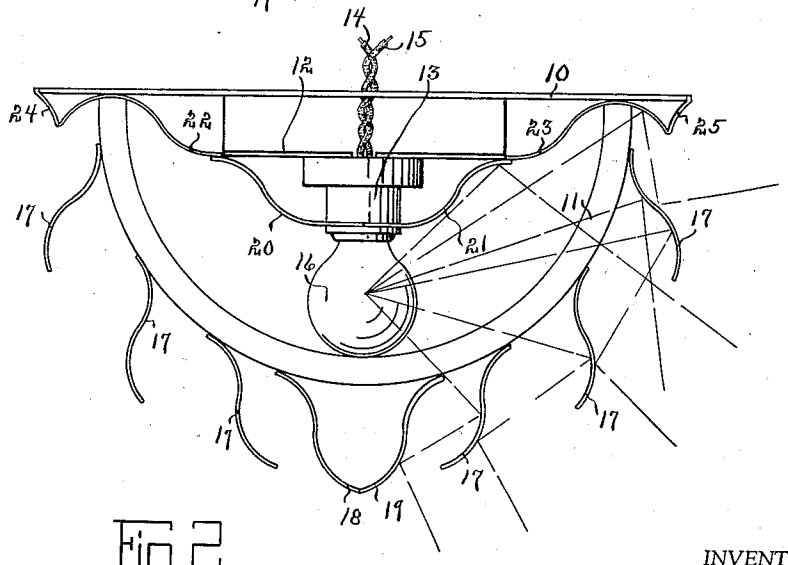


Fig. 2.

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LIGHT FIXTURE

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2 Claims. (Cl. 240—73)

The principal object of this invention is to provide an indirect light fixture that gives the optical illusion of possessing glass or translucent light deflecting vanes or louvers.

More specifically, the object of my invention is to provide a light fixture of the indirect light type that has metal light baffling members that are so shaped, constructed and arranged that the same are substantially undetectable from translucent light diffusing elements.

A still further object of my invention is to provide a light fixture of the indirect lighting type that is substantially non-breakable, easily cleaned and highly efficient.

A still further object of this invention is to provide an indirect light fixture that is highly attractive, economical in manufacture and durable in use.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawing, in which:

Fig. 1 is a front sectional view of my light ready for use.

Fig. 2 is a top plan view of my light fixture and more fully illustrates its construction.

Referring to the drawing, I have used the numeral 10 to designate the flat base of my device. The numeral 11 designates two spaced apart half circle bracket rings operatively rigidly secured to the base 10 and extending forwardly from the base 10 as shown in Fig. 2. The numeral 12 designates a longitudinal bar on the front dead center face of the base board 10 having its forward surface some distance forward of the plane of the base board 10. This member 12 is designed to hold and support a plurality of incandescent light sockets 13 in spaced relationship along its center front. These sockets 13 may be of the usual type, each having the usual electric lead wires 14 and 15. These wires 14 and 15 are each designed to be in communication with a source of electric energy when the fixture is in lighted use. In practice the plurality of sockets 13 may be wired in series or may be wired in a single electric circuit. The numeral 16 designates an electric light bulb in each of the sockets 13. For different color lighting effects, these lamps 16 may be of different colors. When the lamps 16 are in place, the fixtures are so designed that they will form a longitudinal line within the center plane of the ring brackets 11 as shown in Fig. 2. The parts of the fixture thus far described provide the framework of my device. The principal feature of my lamp fixture, however, is the elongated vanes or louvers arranged longitudinally on the framework of the fixture. These louvers are of metal or other suitable material incapable of light rays passing through them. All of the louvers of my device are S-shaped in cross section as shown in Fig. 2. I have used the numeral 17 to designate the spaced part louvers secured to the circular brackets 11. I have used the numerals 18 and 19 to designate the two louvers on the center front of the two bracket rings 11. These vanes or louvers are secured at their rear marginal edges by any suitable means such as by spot-welding, soldering or like to the bracket rings 11. All of these louvers thus far described extend in a curved line first forwardly and outwardly and then forwardly and inwardly as shown in Fig. 2. The louvers 17 and the rear edge portions of the louvers 18 and 19 are so arranged and spaced apart from each other that the forward marginal edge portion of one louver always over-laps the rear marginal edge portion of the louver just ahead of it. By this arrangement, no straight radial line can be drawn from any of the lamps 16 forwardly and outwardly without striking one of the louvers. As the vanes 17, 18 and 19 are incapable of passing light through them, an observer cannot directly see the lamps 16 from a point in front of the fixture. The louvers 18 and 19 have their outer marginal edges joined as shown in Fig. 2 and the louvers 17 extend from each side of these members 18 and 19 in spaced relationship toward the base board 10. The progression of these louvers, due to the circular brackets 11, proceed in a like circular path arrangement. The louvers 17, 18, and 19 are duplicates and may be painted or plated in any desired color. To achieve combinations of color I, however, recommend that these louvers 17, 18 and 19, and the other reflecting louvers of the device, be either of bright metal or else be painted or plated in a white or cream color and used with differently colored lamps 16 to obtain the desired color effect. The reflecting board directly back of the lamp 16 may be made from two louvers or vanes which I have designated by the numerals 20 and 21. These louvers 20 and 21 are also S-shaped in cross section having the same contours as the louvers or vanes 17 and these S-shaped louvers, extend outwardly from the center portion of the lamp, are then curved rearwardly and thence outwardly. At the

outer side of each of the louvers 20 and 21 is a second louver 22 and 23 also S-shaped in cross section and extending outwardly and curving rearwardly and thence curving outwardly and forwardly as shown in Fig. 2 of the drawing. A filler vane 24 may extend between the outer edge of the vanes 22 and the back board 10. A similar filler vane 25 may extend between the outer edge of the vane 23 and the back board 10.

From the foregoing it will readily be seen that the vanes 17, 18, 19, 20, 21, 22 and 23 are all substantial duplicates and S-shaped in cross section. The vanes 20, 21, 22, and 23 provide a reflecting back board of the lamps 16. Due to this resultant reflecting board being of wave construction in cross section, light will be reflected at a variety of angles to the forward vanes 17, 18 and 19. Certain of the light rays from the lamps 16 will directly strike these forward vanes 17, 18, and 19 and be deflected to an observer in front of the fixture. However, a great number of light rays will strike some of the forwardly arranged vanes and will be deflected on the other of the forwardly arranged vanes 17, 18, and 19. It is this reflection of light from some of these vanes to other of the forward vanes that gives the optical illusion that all of the vanes are made of translucent material, when as a matter of fact, they are of metal or like material and light cannot pass through them. The result is a highly desirable efficient lighting fixture of the indirect light type. All observable light is indirect and by the light being directed indirectly to the outer side of each of the forwardly arranged vanes 18, and 19, there will be no "dark spots" in the entire fixture, but on the other hand the fixture will be a glow of light radiating from its entire surface. By the use of these louvers, S-shaped in cross section and in arrangement as shown in Fig. 2, it will be noted that either direct or reflected light will be at all points on both sides of all of the louvers 17, 18 and 19.

Although I have described my fixture as one being vertically arranged on a wall or like, it is obvious that it can be placed transversely on the wall or it may be placed on a ceiling or the like.

Some changes may be made in the construction and arrangement of my improved light fixture without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. In a device of the class described, a base member, a lamp on said base member, a plurality of straight longitudinally extended spaced apart opaque vanes arranged forward of said lamp; said vanes being S-shaped and so designed and arranged that each vane reflects the rays from said lamp on to the outward surface of the next succeeding vane and no light rays can pass in a direct line between any two vanes from said lamp, and a plurality of consecutively extending S-shaped members on said base for reflecting the rays from said lamp on to said S-shaped vanes.

2. In a device of the class described, an elongated base member, a reflecting surface forward of said base member consisting of a plurality of S-shaped elongated elements, a lamp on said base member extending forwardly of said reflecting surface, spaced apart bracket rings secured to said base member, and a plurality of spaced apart straight opaque vanes S-shaped in cross section secured to said bracket rings and arranged about said lamp; said vanes so designed and arranged as to directly reflect light rays from said lamp on to the outer sides of each other and no light rays can pass in a direct line between any two vanes from said lamp.

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