July 5, 1932. E. F. GUTH 1,865,469

LIGHTING FIXTURE

Filed Aug. 26, 1930

Fig. 1.

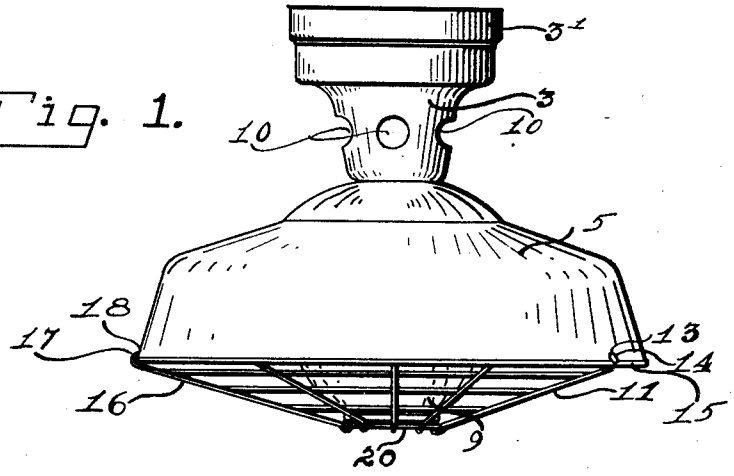
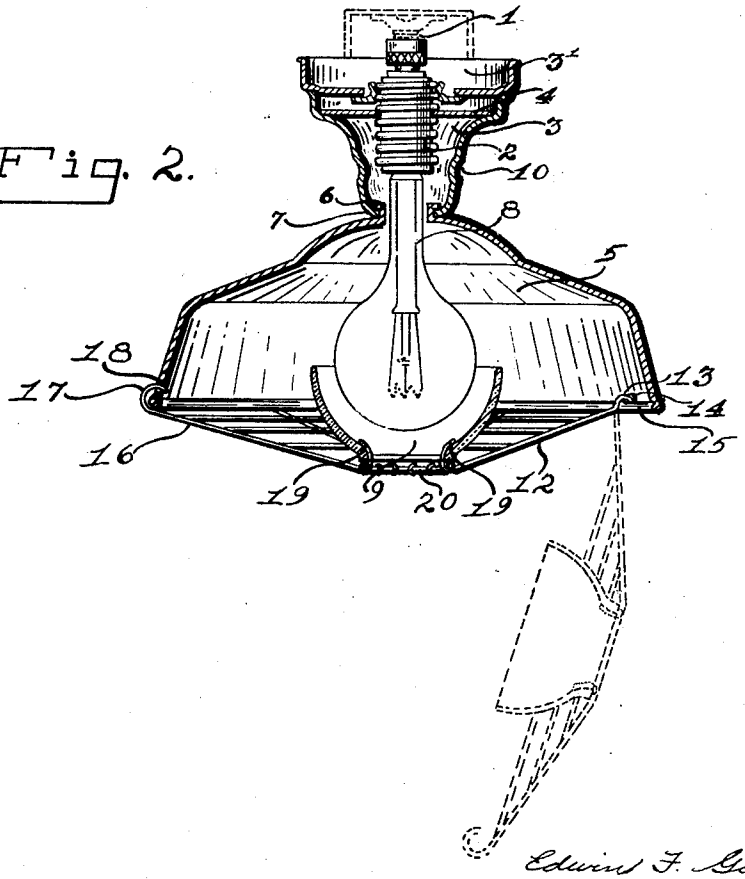


Fig. 2.



Edwin F. Guth

INVENTOR

BY Harvey Lea Dodson

ATTORNEY

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EDWIN F. GUTH, OF WEBSTER GROVES, MISSOURI

LIGHTING FIXTURE

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My invention relates to that class of units which are used principally in commercial installations. In units employed for this purpose with which I am familiar where an opaque reflector is used, the ceiling is in a very dense shadow.

When used in a factory where there is considerable shafting, belting, etc., it is for obvious reasons highly desirable to have some illumination above the fixture or unit.

It is also very desirable to provide for an enclosing bowl to surround the present day high powered gas filled lamps and so increase the efficiency of the unit. However these bowls are difficult to clean and also to remove when lamp replacement becomes necessary.

My invention has for its further object to provide a construction for my unit which, though employing a metal or opaque reflector, will permit of the illumination, to a degree, of the ceiling and at the same time provide for additional ventilation of the unit.

A further object is to provide a wire guard which will not only prevent the breakage of the diffusing bowl and lamp bulb, when used in hand ball or squash courts or other athletic fields when there is a possibility of such breakage occurring, but will serve as the supporting means for the said bowl and which will be easily detachable from the opaque reflector for the purpose of gaining easy access to the lamp bulb for replacement or other purposes.

My means of accomplishing the foregoing objects may be more readily understood by having reference to the accompanying drawing, which is hereunto annexed, and made a part of this specification in which:

Fig. 1 is a side view showing my improved unit; and

Fig. 2 is a vertical sectional view of the same. Similar reference numerals refer to similar parts throughout the entire description.

As shown in the accompanying drawing, the unit is shown suspended from the standard outlet plug 1 by a socket 2 to which is secured a canopy 3 by means of a stamped steel plate 4 which engages the threads on the socket 2 and is spot welded to the shoulder of the canopy or secured in any other suitable or convenient manner. I also provide a separate extension 3′ to the canopy 3, which is first screwed tight to the ceiling and which provides for the attachment of a pull switch (not shown) if one is desired. The opaque reflector 5 as illustrated, it is formed of metal, is provided with a lip 6, which is engaged by an inturned flange 7 spun or otherwise formed on the canopy 3. A lamp bulb 8 is mounted in the socket 2. The intense rays of the filament are shielded from the eyes of the user by a diffusing bowl 9 which is preferably constructed so as to protect the eyes but not otherwise interfere with the passage of the light rays directly to the reflector 5 thence to be transmitted to the working plane without the ampere loss due to the absorption thereof as they pass through the diffusing glass bowl 9.

In order to permit some of the light rays to reach the ceiling and also to obtain better ventilation of the unit, I provide a plurality of ventilation holes 10 which serve the purpose intended fully.

The glass bowl 9 is carried by and secured to a wire guard formed of a plurality of annular and radial wires. Two of the radial wires 11 and 12 have eyes 13 formed at their ends which are secured in holes 14 formed in the periphery of the reflector 5 adjacent its lower edge 15. The eyes 13 form a very practical hinge for the guard at the same time being far enough apart to hold the guard firmly in place. The opposite radial wire 16 has a hook 17 which is sprung into a hole 18 formed in the reflector adjacent its lower edge 15. The inner ends 19 of these radial wires 11, 12 and 16 are extended into the center of the annular wire 20 and by pressing them outwardly against the inside of the glass diffusing bowl 9 they serve to hold it securely in place even when the guard is unhooked and allowed to swing downwardly, as indicated by the dotted lines in Fig. 2, while the lamp is being replaced or the bowl 9 and reflector 5 cleaned which can be done without having to detach any part of the unit.

By carrying the radial wires beyond the outer annular wire, I furnish additional

strength to resist the impact caused by a ball, should one strike the guard, thus helps to prevent the guard being bent upwardly into the reflector and the lamp being broken.

Having described my invention what I regard as new and desire to secure by Letters Patent is:

1. The combination in a lighting unit, of a canopy, a reflector secured thereto, a socket mounted in the canopy, a lamp in said socket, there being a plurality of openings in the side wall of said canopy, a wire guard, formed of annular and radial wires, detachably secured to said reflector, a diffusing bowl having a central opening therein, a plurality of upwardly extending curved resilient fingers which extend into said central opening in said diffusing bowl, whereby said bowl is securely held by said wires.

2. The combination in a lighting unit, of a canopy, a reflector secured thereto, a socket mounted in the canopy, a lamp in said socket, there being a plurality of openings in the side wall of said canopy, a wire guard, formed of annular and radial wires, eyes formed on the outer ends of two of the radial wires, said eyes being mounted in holes formed in said reflector adjacent its lower edge, a hook on the radial wire diametrically opposite said eyes which engages a hole in said reflector, a diffusing bowl having a central opening therein, a plurality of upwardly extending outwardly curved resilient fingers which extend into said central opening in said diffusing bowl, whereby said bowl is securely held by said wires.

3. The combination in a lighting unit, of a canopy, a reflector secured thereto, a socket mounted in the canopy, a lamp in said socket, there being a plurality of openings in the side wall of said canopy, a wire guard, hinged to said reflector, a diffusing bowl which surrounds the lower part of the lamp secured to the center of said guard and a plurality of resilient fingers which engage the inner surface of said bowl, whereby it is securely held in position.

4. The combination in a lighting unit, of a canopy, a reflector secured thereto, a socket mounted in the canopy, a lamp in said socket, there being a plurality of openings in the side wall of said canopy, a wire guard, formed of annular and radial wires, a diffusing bowl having an opening in its center, the inner ends of said radial wires extending into said central opening and engaging the said bowl to hold it in position.

EDWIN F. GUTH.