A. LAZERSON.

LIGHTING FIXTURE.

APPLICATION FILED JAN. 26, 1920.

1,351,255.

Patented Aug. 31, 1920.

2 SHEETS—SHEET 1.

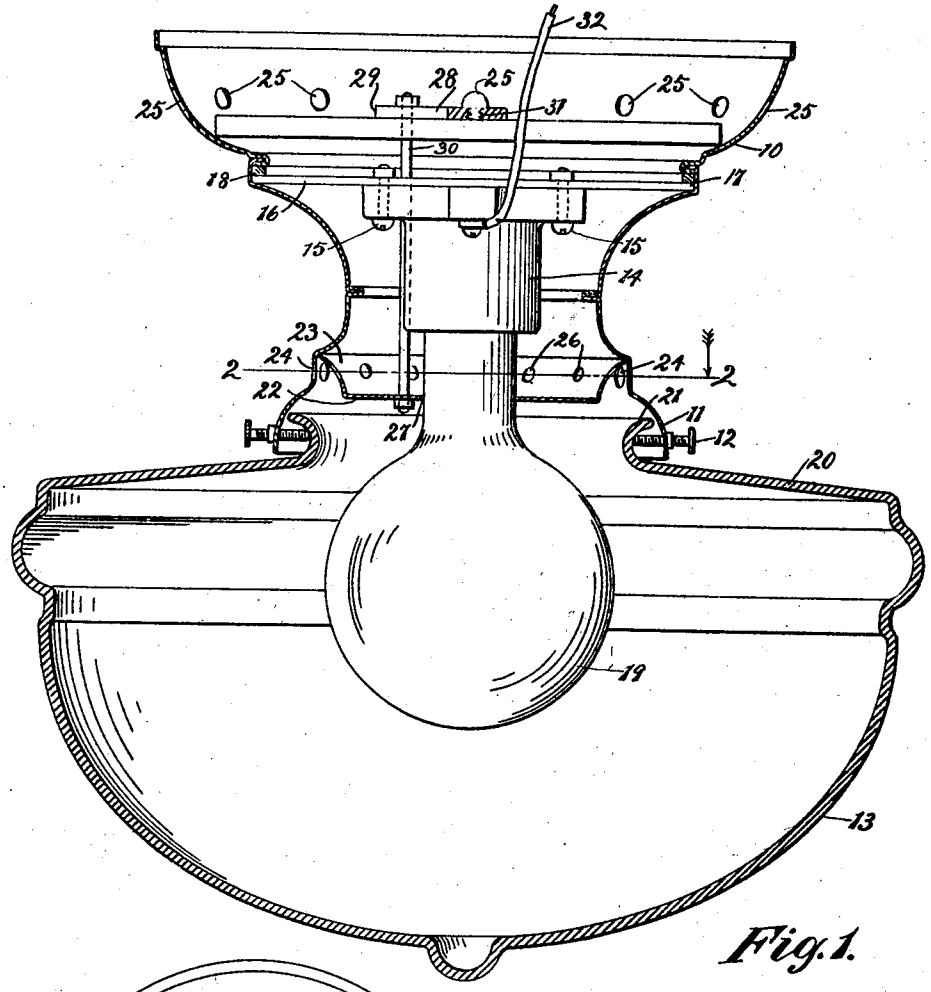


Fig. 1.

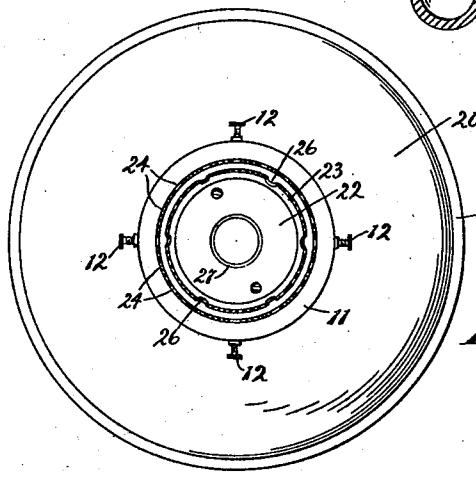


Fig. 2.

Inventor:
Abraham Lazerson
By Lilleron & Lilleron
Attys.

A. LAZERSON.

LIGHTING FIXTURE.

APPLICATION FILED JAN. 26, 1920.

1,351,255.

Patented Aug. 31, 1920.

2 SHEETS—SHEET 2.

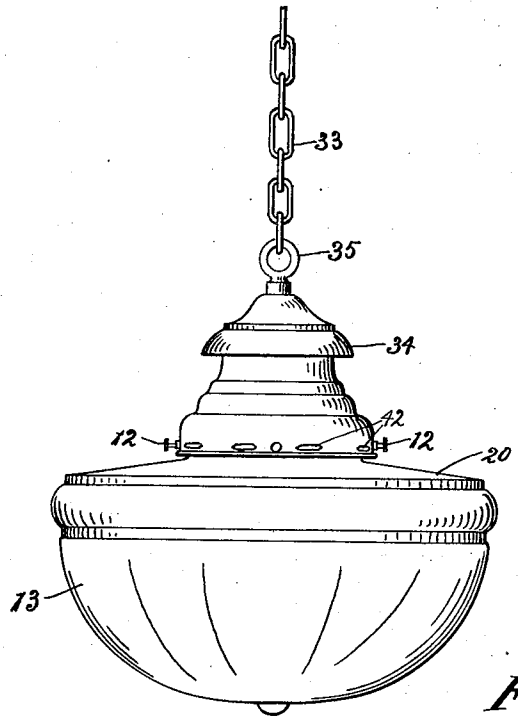


Fig. 3.

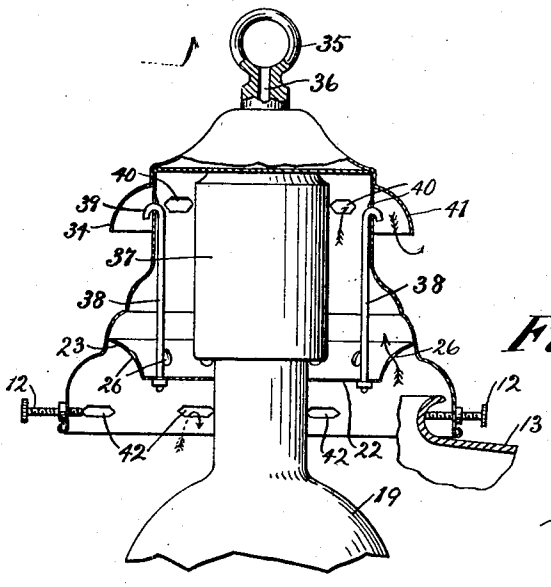


Fig. 4.

Inventor:
Abraham Lazerson
By Fellows & Fiedler
Attys.

UNITED STATES PATENT OFFICE.

ABRAHAM LAZERSON, OF CHICAGO, ILLINOIS, ASSIGNOR TO SOLAR ILLUMINATING CO., A CORPORATION OF ILLINOIS.

LIGHTING-FIXTURE.

1,351,255. Specification of Letters Patent. Patented Aug. 31, 1920.

Application filed January 26, 1920. Serial No. 353,964.

To all whom it may concern:

Be it known that I, ABRAHAM LAZERSON, a citizen of the United States, and resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Lighting-Fixtures, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

The invention relates to lighting fixtures and has as an object the provision of a fixture that will direct a large part of the light downwardly. A further object of the invention is the provision of a fixture which is well ventilated.

Illustrative embodiments of the invention are shown in the accompanying drawings, in which:

Figure 1 is a central vertical section through a fixture, parts being shown in elevation;

Fig. 2 is a horizontal section on line 2—2 of Fig. 1;

Fig. 3 is a side elevation of a modification, and

Fig. 4 is a central vertical section of the modification of Fig. 3 drawn to an enlarged scale, parts being shown in elevation.

As shown in Figs. 1 and 2, the fixture comprises the usual canopy 10, carrying a collar, as 11, provided with set screws 12 for support of a globe, as 13. A porcelain socket or receptacle 14 is shown supported in a usual manner as by screws 15 engaging with a strap 16 permanently secured at its ends to the canopy, as at 17, 18.

For the purpose of directing downwardly a large part of the light emitted by a bulb, as 19, there is provided a globe, as 13, shown as substantially hemispherical, provided with a flat frusto conical plate, as 20, at its upper side, the body and plate being preferably formed integral at their juncture. The globe 13 including the plate 20 is desirably formed of opalescent glass. The plate portion 20 may, if desired, be coated on its exterior with some opaque material. The plate 20 is shown as provided with the usual roll 21 for engagement with the set screws 12. Since a large part of the rays from the bulb 19 which impinge upon the plate 20 will strike them at an angle in excess of the "critical angle" the most of the light which strikes the plate will be reflected in a direction below the horizontal. This effect is assisted by making the globe or at least the plate 20 of a material having a glazed surface.

For the purpose of reflecting downwardly the light which would otherwise pass upward into the interior of the canopy, a plate, as 22, is provided, shown as formed with an upwardly flaring rim 23 extended to meet the inner surface of the canopy. For ventilation holes, as at 24 and 25 may be provided in the canopy and also holes in rim 23, as at 26. For more efficient reflection of light the lower surface of the plate 22 is desirably painted or enameled white, or the plate is formed of a white material. The plate 22 is perforated as at 27 for passage of the neck of the electric bulb 19.

For the purpose of securing the plate 22 in position, a bar, as 28, may be placed across the upper portion of the interior of the canopy 10, may rest upon a shoulder thereof, as at 29, and may be caused to support plate 22 by bolts, one of which is shown at 30, passed through holes in the bar 28 and in the plate 22. The bar 28 may be provided with a screw threaded opening, as 31, for reception of a fitting, not shown, for support of the entire fixture.

The flat surface of the plate 22 being substantially as large as the opening in the center of the frusto conical plate 20 results in the provision of a downwardly directed reflecting surface over substantially the entire area of the upper inclosure of the globe 13, and combined with these reflecting surfaces is provisions for efficient ventilation without which such a closed globe would not be used with a large capacity electric bulb. One of the wires for the fixture is indicated at 32.

The modification of Figs. 3 and 4 illustrates the embodiment of the invention in a fixture adapted to be suspended by a chain, as 33, with which chain the electric wires, not shown, may be intertwined, as is common. In this modification the metal bell 34 is shown as provided with a ring 35 for engagement with the chain 33 and is shown as supporting a globe 13, in all respects like the form illustrated in Figs. 1 and 2, by means of set screws 12. Electric wires, not shown, may pass through opening 36 in the neck of the ring 35 to the socket 37, supplied with bulb 19.

A plate 22 constructed as already de-

scribed in connection with the modification of Figs. 1 and 2, may be secured in place by means of bolts 38 provided with hooks at their upper ends, as 39, shown as passed through ventilating openings 40. The depending skirting 41 is provided to conceal the openings 40 and the ends of the hooks 39. Lower ventilating openings 42 are shown as well as the openings 26 in the rim of plate 22, the latter as above described.

The relation of the globe 13 and the reflecting surface in the modification of Figs. 3 and 4 is in all respects similar to that of Figs. 1 and 2.

I claim as my invention:

1. A lighting fixture comprising, in combination, a canopy having a collar adapted to engage with a globe and carrying means to secure a globe in place, a plate having a reflecting surface on its lower side, said plate of the same shape as and slightly less in diameter than said collar, said plate having an opening for passage of source of light parts, an outwardly flaring rim on said plate adapted to contact with the interior of the canopy, said rim having ventilating openings.

2. A lighting fixture comprising, in combination, a canopy having a collar adapted to engage with a globe and carrying means to secure a globe in place, a plate having a reflecting surface on its lower side, said plate of the same shape as and slightly less in diameter than said collar, said plate having an opening for passage of source of light parts, an outwardly flaring rim on said plate adapted to contact with the interior of the canopy, said rim having ventilating openings, and a substantially closed globe having a flattened upper wall adapted to reflect light downwardly and having an opening at its center to pass over a source of light and engage with said collar.

3. A lighting fixture comprising, in combination, a globe having a substantially flat upper wall integral therewith, a canopy supporting said globe having inlet ventilating openings in its circumference adjacent its plane of engagement with the bowl, a plate fitting within said canopy having an opening for a source of light element, a plane central portion and an upwardly and outwardly flaring rim contacting with said canopy above said openings, said rim having ventilating openings and outlet ventilating openings in said canopy above said plate.

ABRAHAM LAZERSON.