April 16, 1929. G. R. HARRIS 1,709,218

STREET LIGHTING FIXTURE

Filed Feb. 15, 1928

Fig. 1.

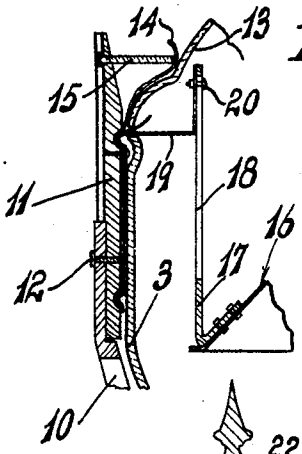


Fig. 4.

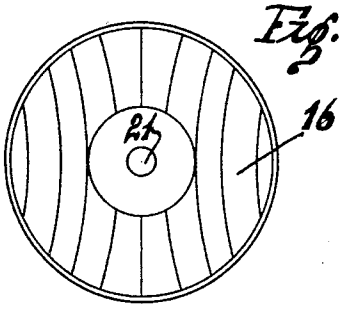


Fig. 2.

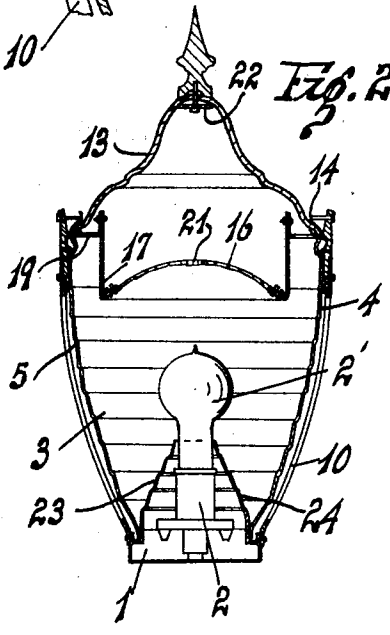


Fig. 3.

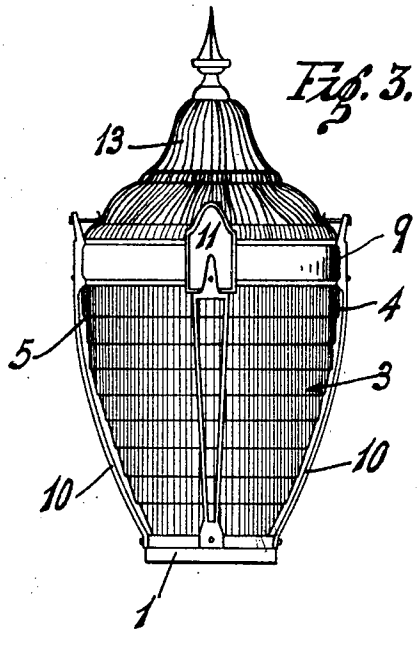
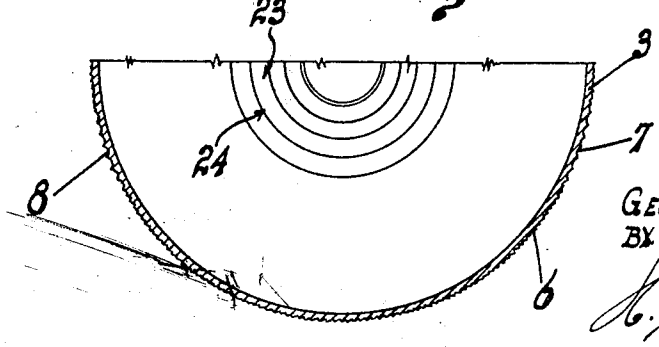


Fig. 5.



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UNITED STATES PATENT OFFICE.

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STREET-LIGHTING FIXTURE.

Application filed February 15, 1928. Serial No. 254,411.

This invention relates to a lighting unit particularly applicable for street lighting purposes.

An object of my invention is to provide a lighting unit in which the maximum amount of light is dispensed downwardly into the area about the light support.

Another object is to provide a lighting unit, the globe of which is so arranged that the light is directed up and down the street and a minimum of light is directed towards the adjacent private property.

Still another object is to provide a lighting unit in which the light from the electric bulb is reflected downwardly and outwardly and is thus prevented from being dispersed above the lighting unit where it does no effective good.

A still further object is to provide a lighting unit in which the light which is thrown downwardly from the electric bulb is reflected outwardly away from the supporting post.

An advantage of my invention is that more light is directed onto the street with a smaller candle power light bulb than was possible in lighting units heretofore in use.

Other objects, advantages, and features of invention, may appear in the accompanying drawings, the subjoined detailed descriptions, and the amended claims.

In the drawing—

Fig. 1, is a fragmentary longitudinal sectional view of the reflector mounting canopy, and exterior supporting arms.

Fig. 2, is a longitudinal sectional view of the lighting unit.

Fig. 3, is a side elevation of the same.

Fig. 4, is a plan view of the upper reflector.

Fig. 5, is a fragmentary transverse sectional view of the light globe and lower reflector.

Referring more particularly to the drawing, my invention comprises a base 1, which is adapted to be mounted upon a post or the like, depending on where the unit is used. An adjustable light socket 2, is mounted in the base 1, and an electric light bulb 2′ is positioned in the socket. A globe 3, rests on the base 1 and is provided with horizontal rings 4 formed on the exterior surface thereof, each succeeding ring being of less diameter, thus forming a ledge 5, over each ring. By means of this construction, the light is directed downwardly and also uniform light is thrown around the unit without the dark bands or the like.

In order that the necessary amount of light may be thrown up and down the street and also away from the adjacent private property, I provide on the exterior of the globe 3, vertically extending prisms 6, which prisms are so inclined that the rays of light are thrown in a direction up and down the street and away from the private property back of the light.

At two substantially diametrically opposed points 7, 8, the prisms 6 are flattened out so that the light passes directly through this zone and thus serving to better the illumination in the street. The prisms 6, are formed on the outer surface of the globe and are cast simultaneous with the horizontal bands. An exterior band 9, encircles the unit adjacent the top of the globe 3, and is supported on a plurality of arms 10 which are secured to the base 1, at the bottom thereof, and to a plate 11 at the top thereof.

A single bolt 12, secures the arm 10 to the plate 11. A canopy 13, rests on the top of the globe 3, within the band 9, and yieldable spring fingers 14, are forced against the canopy by a bolt 15, which extends through the plate 11 against the fingers.

The canopy 13 is provided with exterior prisms, similar in construction to those previously described for the globe 3.

A reflector 16, is adjustably mounted above the bulb 2′ to throw the light from the bulb downwardly and outwardly through the globe 3. This reflector may be of the zoned type or any other type which may be found more suitable.

A pair of arms 17, 17, are secured to the reflector 16, at either side thereof, and extend upwardly from the reflector. The arms are each provided with slots 18, the purpose of which will be further described.

A bracket 19, is secured between the globe 3, and band 9, and extends inwardly over the globe and a bolt 20, extends through the slots 18, into the bracket, thus adjustably mounting the reflector 16 in position.

It will be seen that the reflector may be raised or lowered or may be tilted at any angle which is found more desirable in actual use.

A central hole 21, is provided in the reflector 16, through which the light is adapted to pass, and the light thus directed through the hole is reflected from the flattened mirror 22, in the top of the canopy 13, this mirror serving to reflect the light for illuminating the canopy.

Resting on the base 1, and positioned around the light socket 2, I provide a reflector 23, which reflector may be of any desired type, but I have here shown it as provided with steps 24, corresponding to the ring in the globe 3. The purpose of the reflector 23 is to reflect the light outwardly which falls upon the light 2' and by this means I bring into effective use the light which is normally lost against the supporting post of the light unit.

Having described my invention, I claim:

1. In a lighting unit, a base, a light socket in the base, a light bulb in the socket, a globe rising from the base, a canopy mounted on the globe, a reflector positioned above the light bulb brackets extending inwardly from the globe, a pair of arms secured to the reflector, said arms having slots formed therein, and a bolt extending through each of the slots to the brackets thus adjustably mounting the reflector in position.

2. In a lighting unit, a base, a light socket in the base, a light bulb in the socket, a globe rising from the base, a canopy mounted on the globe, a reflector positioned above the light bulb brackets extending inwardly from the globe, a pair of arms secured to the reflector, said arms having slots formed therein, and a bolt extending through each of the slots to the brackets thus adjustably mounting the reflector in position, and a second reflector surrounding the light socket, said light bulb extending through the second reflector, the second reflector being so inclined as to throw the light outwardly through the globe.

3. In a lighting unit, a base, a globe rising from the base, a light bulb in the globe, a reflector in the globe above the light bulb, means adjustably mounting said reflector and a second reflector below the light bulb adapted to direct the light outwardly through the globe, said globe being formed with external horizontal bands, each succeeding lower band being of less diameter than the one above.

4. In a lighting unit, a base, a light socket in the base, a light bulb in the socket, a globe rising from the base, a canopy mounted on the globe, a reflector positioned above the light bulb, brackets extending inwardly from the globe, a pair of arms secured to the reflector, said arms having slots formed therein, and a bolt extending through each of the slots to the brackets, thus adjustably mounting the reflector in position, said globe being formed with external horizontal bands, each succeeding lower band being of less diameter than the one above.

5. In a lighting unit, a base, a light socket in the base, a light bulb in the socket, a globe rising from the base, a canopy mounted on the globe, a reflector positioned above the light bulb, brackets extending inwardly from the globe, a pair of arms secured to the reflector, said arms having slots formed therein, and a bolt extending through each of the slots to the brackets, thus adjustably mounting the reflector in position, and a second reflector surrounding the light socket, said light bulb extending through the second reflector, the second reflector being so inclined as to throw the light outwardly through the globe, said globe being formed with external horizontal bands, each succeeding lower band being of less diameter than the one above.

6. In a lighting unit, a base, a globe rising from the base, a light bulb in the globe, a reflector in the globe above the light bulb, means adjustably mounting said reflector and a second reflector below the light bulb adapted to direct the light outwardly through the globe, and said globe being formed with external horizontal bands, each succeeding lower band being of less diameter than the one above, and vertical prisms formed on the exterior surface of the globe, said prisms being so adapted and arranged that the light will be thrown in opposite directions along the diametrical line through the light bulb.

7. In a lighting unit, a base, a light socket in the base, a light bulb in the socket, a globe rising from the base, a canopy mounted on the globe, a reflector positioned above the light bulb, brackets extending inwardly from the globe, a pair of arms secured to the reflector, said arms having slots formed therein, and a bolt extending through each of the slots to the brackets, thus adjustably mounting the reflector in position, said globe being formed with external horizontal bands, each succeeding lower band being of less diameter than the one above, and vertical prisms formed on the exterior surface of the globe, said prisms being so adapted and arranged that the light will be thrown in opposite directions along a diametrical line through the light bulb.

8. In a lighting unit, a base, a light socket in the base, a light bulb in the socket, a globe rising from the base, a canopy mounted on the globe, a reflector positioned above the light bulb, brackets extending inwardly from the globe, a pair of arms secured to the reflector, said arms having slots formed therein, and a bolt extending through each of the slots to the brackets, thus adjustably mounting the reflector in position, and a second reflector surrounding the light socket, said light bulb extending through the second

reflector, the second reflector being so inclined as to throw the light outwardly through the globe, said globe being formed with external horizontal bands, each succeeding lower band being of less diameter than the one above, and vertical prisms formed on the exterior surface of the globe, said prisms being so adapted and arranged that the light will be thrown in opposite directions along a diametrical line through the light bulb.

In testimony whereof, I affix my signature.

GEORGE ROLLO HARRIS.