Aug. 28, 1923. 1,466,484

N. ROSEN

LAMP REFLECTOR

Filed Aug. 25, 1922

Fig. 1.

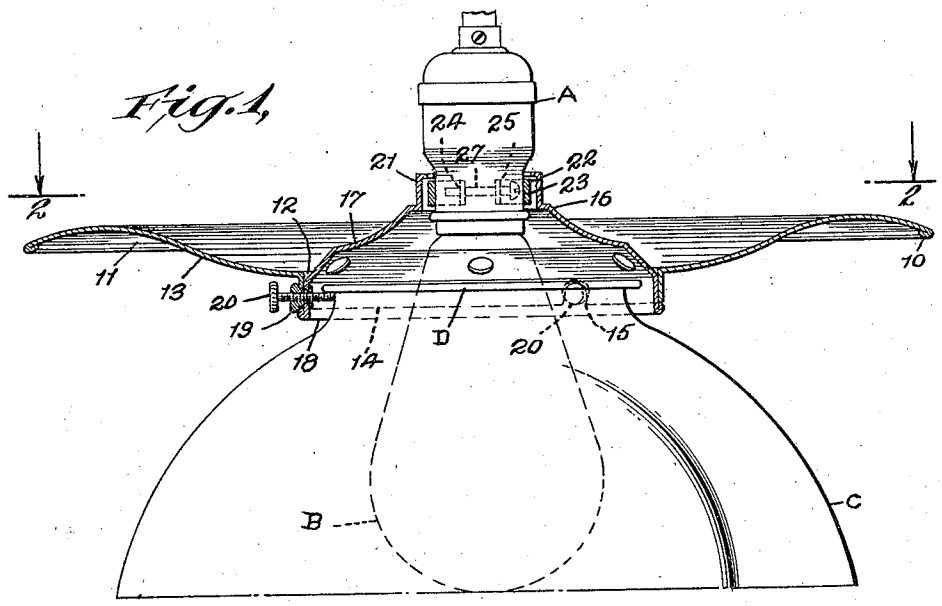
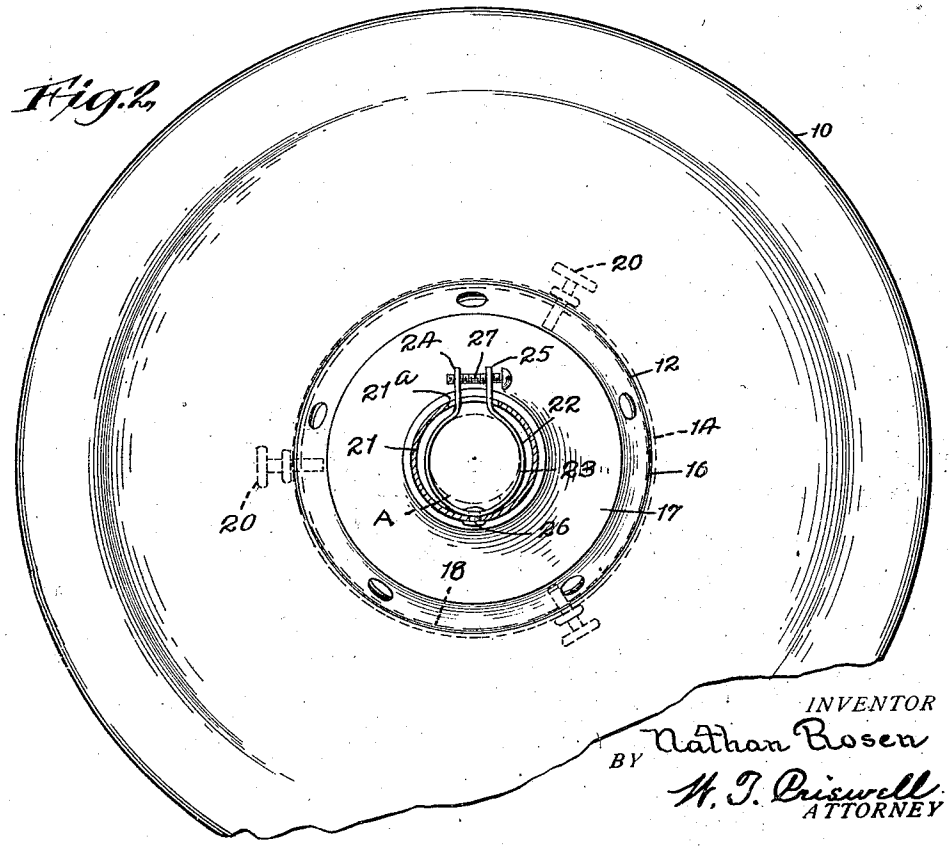


Fig. 2.



INVENTOR
Nathan Rosen
BY
H. T. Priswell
ATTORNEY

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NATHAN ROSEN, OF NEW YORK, N. Y.

LAMP REFLECTOR.

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To all whom it may concern:

Be it known that I, NATHAN ROSEN, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in a Lamp Reflector, of which the following is a full, clear, and exact specification.

This invention relates to a class of devices adapted to be used in conjunction with lighting apparatus.

My invention has for its object primarily to provide a reflector designed to be employed especially in conjunction with an electrically lighted lamp when supported at a height whereby the rays of light will be radiated in downward directions, in order that the rays which are usually diffused upwardly may be utilized for lighting the desired area more effectually. The invention consists essentially of an opaque plate with a reflecting surface on its underside, and having a central opening which may be surrounded by a depending flange with spaced notches in its lower edge. This reflecting plate is adapted to be detachably supported by a cap or other suitable means on the fixture carrying one or more electrically lighted lamps so that the plate will be positioned in encircling fashion above the lamp, in order that the reflecting surface of the plate will radiate downwardly the rays when the lamp is lighted, thereby enabling avoidance of waste of the rays of light which are ordinarily directed upward.

A further object of the invention is to provide a lamp reflector of a simple, efficient and durable construction which may be made of appropriate material in any suitable shape and size.

With these and other objects in view, the invention will be hereinafter more fully described with reference to the accompanying drawing forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views, and will then be pointed out in the claims at the end of the description.

In the drawing, Figure 1 is a detail sectional view, partly fragmentary, taken through one form of reflector embodying my invention and which shows the device applied to an electric lamp, and

Fig. 2 is a fragmentary view, showing a plan, partly in section, taken on the line 2—2 of Fig. 1.

The device or lamp reflector has a plate 10 which may be of any suitable size and shape though the form of the plate shown is circular, and the plate may be made of polished opaque glass or porcelain or metal coated with polish to provide a reflecting surface 11 on its underside. In the central part of the reflecting plate 10 is an opening, as 12, which may be circular in shape, and the portion of the plate between this central opening and its outer edge may be concentrically curved in a concavo-convex shape, as at 13. On the edge of the opening 12 is a depending annular flange 14, and in the lower edge of this flange may be a number of spaced notches, as 15.

In practice the reflecting plate may be detachably mounted by any suitable means to the fixture, as A, carrying one or more electric lamps, as B, though when it is desired to inclose the lamp in a translucent globe, as C, I prefer to employ a form of cap, as 16, for removably supporting the globe as well as for removably supporting the reflecting plate 10. The cap 16 has a circular top plate 17 which may be substantially cone-shaped of a maximum diameter slightly less than the diameter of the opening 12 of the plate 10. On the outer edge of the top plate of the cap 16 is a depending annular flange 18 which is of a diameter so that the annular flange 14 of the plate 10 snugly fits removably thereover. Protruding exteriorly from spaced holes in the flange 18 of the cap are interiorly threaded bosses 19. The number of these bosses correspond to the number of the notches 15 of the flange 14 of the reflecting plate 10, and the bosses are somewhat smaller than the notches so that when the flange 14 of the plate 10 is positioned accordingly over the flange 18 of the cap the bosses will be seated in the notches for removably holding the reflecting plate on the cap. In each of the bosses 19 is threaded a thumb screw 20, and these screws are rotatably adjusted interiorly of the cap into engagement with the rim, as D, provided on the edge of the entrance of the globe C for removably mounting the globe over the lamp and to the device.

In the central part of the top plate 17 of the cap 16 is an opening through which the lamp fixture A is removably disposed, and on the edge of this opening of the top plate may be an upwardly extending annular flange 21 which may be somewhat larger than the fixture A. In part of the flange 21 may be an elongated opening 21ª, and serving to detachably fasten the device and the globe to the fixture, within the flange 21 is provided a catch, as 22. The catch 22 may be of any appropriate type, though the form of the catch illustrated, has a strip 23 of spring metal which is of a partial ring-like shape having its ends in spaced relation, and this ring is of a smaller diameter than the diameter of the flange 21, while being normally larger than the diameter of the electric fixture A. The spring ring is arranged within the flange 21 of the cap edgewise so that its spaced ends terminate at the opening 21ª of the flange 21 of the cap, and protruding from the ends of the ring strip are two spaced lugs 24, 25 which extend through the opening 21ª of the flange 21. The central part of the ring strip is secured, as as 26, to the flange 21 of the cap so that by adjustably moving the lugs 24, 25 toward and from each other the diameter of the ring strip will be yieldingly varied. In the free end parts of the lugs 24, 25 are registered threaded holes with a screw 27 therein which when rotated accordingly will cause the ring strip 23 to be expansibly adjusted to allow the ring strip to be passed over the fixture A after removal of the lamp B. By then tightening the screw 27 the ring strip will be clamped to the fixture for removably mounting the reflector thereon so that when the lamp is refitted in the fixture and the globe C is fastened to the device, as above explained, the reflecting surface 11 of the plate 10 will radiate downwardly the rays of light of the lamp which would ordinarily be directed upwardly when the lamp is lighted.

In the foregoing description, I have embodied the preferred form of my invention, but I do not wish to be understood as limiting myself thereto, as I am aware that modifications may be made therein without departing from the principle or sacrificing any of the advantages of this invention, therefore, I reserve to myself the right to make such changes as fairly fall within the scope thereof.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A lamp reflector comprising a cap with an apertured top plate having a central opening with an upwardly protruding flange on its edge and on its outer edge having an annular depending flange with spaced holes therein provided with interiorly threaded bosses, a separate plate with a reflecting surface on its under side having a central opening surrounded with a depending flange in which the flange of the cap removably fits, said flange of the plate being provided in its free edge with spaced notches somewhat larger than the bosses of the flange of the cap and adapted to be removably fitted therein.

2. A lamp reflector, comprising an opaque plate with a reflecting surface on its underside and having a central opening surrounded by a depending annular flange having in its lower edge spaced notches, and a cap having a central opening in its top plate and having an outer peripheral annular flange removably fitted in the opening of the reflecting plate, the flange of said cap having spaced holes with interiorly threaded bosses protruding from their edges exteriorly of the flange and the bosses being removably seated in the notches of the flange of the reflecting plate.

3. A lamp reflector, comprising an opaque plate with a reflecting surface on its underside and having a central opening surrounded by a depending annular flange having in its lower edge spaced notches, a cap having a central opening in its top plate and having an outer peripheral annular flange removably fitted in the opening of the reflecting plate, means on the flange of the cap, removably supporting the flange of the plate, and a catch in the central opening of the cap.

4. A lamp reflector, comprising a cap with an apertured top plate having a central opening, with an upwardly protruding annular flange on its edge and the cap having on its outer edge an annular depending flange with spaced holes having on the exterior of their edges protruding interiorly threaded bosses, and a separate opaque plate with a reflecting surface on its underside and having a central opening in which the flange of the cap removably fits.

5. A lamp reflector, comprising a cap with an apertured top plate having a central opening with an upwardly protruding annular flange on its edge and the cap having on its outer edge an annular depending flange with spaced holes having on the exterior of their edges protruding interiorly threaded bosses, a separate opaque plate with a reflecting surface on its underside and having a central opening in which the flange of the cap removably fits, and a catch on the flange of the central opening of the cap.

6. A lamp reflector, comprising a cap with an apertured top plate having a central opening with an upwardly protruding annular flange on its edge and the cap having on its outer edge an annular depending flange with spaced holes having on the exterior of their edges protruding interiorly threaded

bosses, a separate opaque plate with a reflecting surface on its underside and having a central opening surrounded with a depending annular flange in which the flange of the cap removably fits and the flange of said plate having in its free edge spaced notches in which the bosses of the flange of the cap are removably seated, and a catch on the flange of the central opening of the cap.

This specification signed and witnessed this 24″ day of August A. D. 1922.

NATHAN ROSEN.

Witnesses:
D. MAGUIRE,
J. FREDERICK CRYER.