Sept. 6, 1960 R. COLE 2,951,935

PORTABLE LAMP

Original Filed Feb. 13, 1956

Fig. 1.

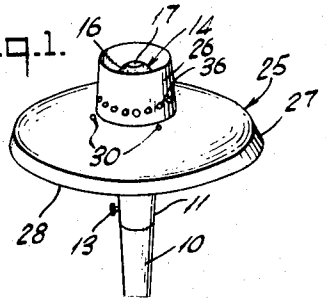


Fig. 2.

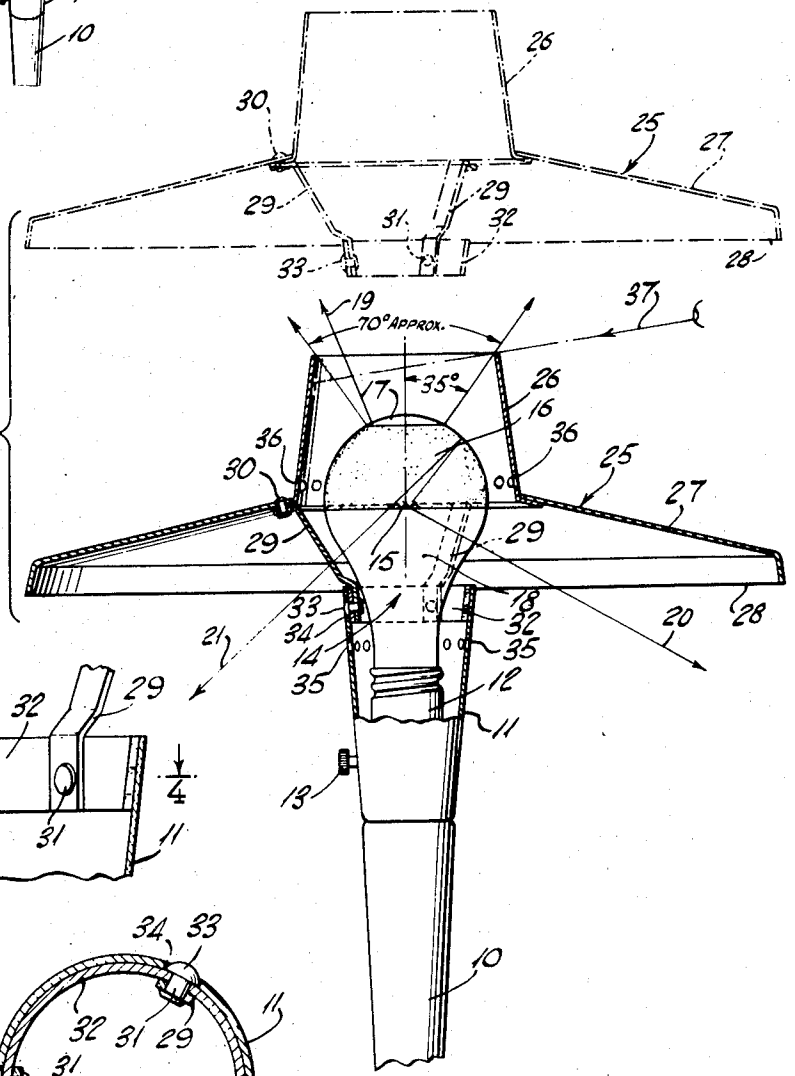
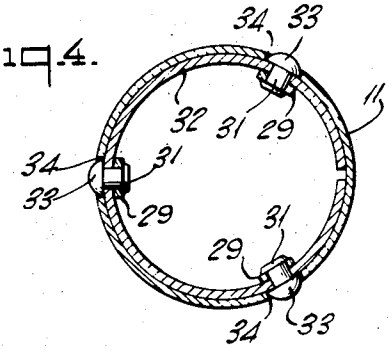


Fig. 3.

Fig. 4.



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United States Patent Office 2,951,935
Patented Sept. 6, 1960

2,951,935

PORTABLE LAMP

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Continuation of application Ser. No. 565,053, Feb. 13, 1956. This application Feb. 11, 1959, Ser. No. 792,523

6 Claims. (Cl. 240—108)

This invention relates to portable lamp assemblies and is more particularly directed toward portable lamp assemblies for use with lamps having a single upwardly extending incandescent lamp bulb.

The invention contemplates portable lamp assemblies particularly well adapted for use with lamp bulbs operated with the socket in a downwardly position and with the lamp filament coordinated with cooperating shade or reflector elements to provide shielded downlight and shielded upward illumination.

According to the present invention the portable lamp assembly has an opaque shade with a relatively steep, small diameter portion extending upwardly and inwardly from about the level of the light source in the bulb to a distance far enough above the bulb to screen the bulb against observation at ordinary angles of view and to permit the upward component of light to escape for ceiling illumination. The shade also has a downwardly and outwardly flaring portion which cuts off view of the lamp bulb from horizontal directions while allowing the escape of wide angled direct and reflected light.

The present invention also contemplates the simplified construction for supporting the shade from a socket cover or husk and the utilization of a band of reflecting material about the light source and coordinated with the lamp filament and shade.

The accompanying drawings show, for purposes of illusrating the present invention, one embodiment in which the invention may take form, it being understood that the drawings are illustrative of the invention rather than limiting same.

In the accompanying drawings:

Figure 1 is a perspective view of the potrable lamp assembly;

Figure 2 is a vertical, sectional view showing the parts in normal position in full lines and with the shade separated from the socket cover in dotted lines;

Figure 3 is a fragmentary, vertical, sectional view at enlarged scale; and

Figure 4 is a section taken on the line 4—4, Figure 3.

In the drawings a suitable column or standard is indicated at 10. This may be of a length to support the lamp as a table lamp, or to support it as a floor lamp. It carries a socket cover 11 in which is mounted a conventional lamp socket 12 controlled by switch 13. The socket 12 is adapted to carry an incandescent lamp bulb 14. As shown, the lamp bulb, which may be a 100–150 watt bulb, has a lamp filament at 15 and may include a reflecting coating 16 which extends from about 35″ from zenith to the horizontal plane through the light source. The lamp bulb has a clear or frosted portion at the top, indicated at 17, and a clear or frosted portion 18 below the reflecting coating. The lamp bulb resembles the conventional silver bowl lamp, except for the bare spot at the top. The lamp is adapted to send out direct rays such as indicated at 10 and 19 and reflected rays such as indicated at 21.

The shade is generally indicated at 25. It is preferably made of metal or opaque material and has an upper conical portion 26 of relatively small diameter and a relatively flat, lower portion 27 which flares downwardly and sharply outwardly, as indicated. Its lower edge 28 is approximately at the level of the upper end of the socket cover 11.

The parts 26 and 27 are secured together and to straps 29 by rivets indicated at 30. The lower ends of the straps 29 are secured by rivets 31 to a split ring 32 of a size when compressed to be received in the upper end of the socket cover 11. The rivets 31 have heads, or bumps 33 received in holes 34 near the upper edge of the socket cover 11. Ventilation holes are indicated at 35 and 36.

In use, it will be seen that the lamp bulb is completely screened against observation in all regions above the lower edge 28 of the shade and below the widest angle direct light which can escape through the upper opening of the portion 26 of the shade. It will also be apparent that one observing the lamp at low angles above the horizontal, as for example, in the direction of the line 37, does not see a brightly lighted surface on the chimney-like portion 26 of the shade.

In placement of the lamp within the shade it is preferable to maintain the filament 15 at or in the vicinity of the plane of intersection of the upper and lower shade positions 26 and 27 respectively. In this way a conventional lamp which may be provided with only an inside or outside frosting affords excellent light distribution characteristics and maximum eye shielding, with the inside surface of the shade having white or other reflective coatings high efficiency glare free operation is afforded. The reflective coating or other equivalent means may be used to increase the proportion of downlight relative to upwardly directed light.

This application is a continuation of my application Serial No. 565,053 entitled Portable Lamp and filed February 13, 1956, now forfited.

Since it is obvious that the invention may be embodied in other forms and constructions within the scope of the claims, I wish it to be understood that the particular form shown is but one of these forms and, various modifications and changes being possible, I do not otherwise limit myself in any way with respect thereto.

What is claimed is:

1. A portable lamp having a vertical incandescent lamp bulb mounted base down and provided with a downwardly acting reflecting coating extending from substantially 35° from the zenith to the horizontal through the light source in the bulb, the lamp having an upwardly and inwardly converging opaque screen about the bulb from substantially the level of the source to a distance above the bulb to substantially coincide with the lowest direct rays escaping above the reflecting coating.

2. A portable lamp having a vertical incandescent lamp bulb mounted base down and provided with a downwardly acting reflecting coating, extending from substantially 35° from the zenith to the horizontal, through the light source in the bulb, the lamp having an upwardly and inwardly converging opaque screen about the bulb from substantially the level of the source to a distance above the bulb to substantially coincide with the lowest direct rays escaping above the reflecting coating, the lamp also having an opaque shade extending downwardly and outwardly from the bottom of the screen, said reflecting coating directing the major portion of reflected rays downwardly and outwardly away from the bulb base and the upper uncoated bulb part providing for direct light rays upwardly and the escape of heat from the lamp.

3. A portable lamp comprising a vertical upwardly opening lamp socket, an incandescent lamp having a

lamp filament, a lamp bulb having a neck portion provided with a base received in the socket and a reflecting coating extending from substantially the horizontal plane through the filament upwardly to approximately 35° from the zenith so that direct and reflected light are emitted below the horizontal and a cone of direct light approximately 70° wide is emitted upwardly, a socket cover about the socket and the neck of the lamp, a shade having a downwardly and outwardly flaring portion extending from substantially the level of the filament to the level of the socket cover, and a second portion extending upwardly from the top of the first portion and open at the top to allow the escape of said upward cone of direct light, and supports connecting the socket cover and shade.

4. A portable lamp comprising a vertical, upwardly opening lamp socket, an incandescent lamp having a lamp filament, a lamp bulb having a neck portion provided with a base received in the socket and a reflecting coating extending from substantially the horizontal plane through the filament upwardly to approximately 35° from the zenith so that direct and reflected light are emitted below the horizontal and a cone of direct light approximately 70° wide is emitted upwardly, a socket cover about the socket and the neck of the lamp, a shade having a downwardly and outwardly flaring portion extending from substantially the level of the filament to the level of the socket cover, and a second portion extending upwardly from the top of the first portion and open at the top to allow the escape of said upward cone of direct light, and means to support the shade from the socket cover comprising downwardly extending shade carried straps and a split ring to which the straps are secured, the ring being deformable to fit inside the top of the socket cover, the ring and socket cover having cooperable bumps and bump receiving elements to interlock when the ring is in place.

5. A portable lamp having a vertical incandescent lamp bulb mounted base down and provided with a downwardly acting reflecting coating extending from a point spaced from the zenith to approximately a horizontal plane through the light source in the bulb, the lamp having an upwardly and inwardly converging opaque screen about the bulb from substantially the level of the source to a distance above the bulb to substantially coincide with the lowest direct rays escaping above the reflecting coating, the lamp also having an opaque shade extending downwardly and outwardly from the bottom of the screen, said reflecting coating directing the major portion of reflected rays downwardly and outwardly away from the bulb base and the upper uncoated bulb part providing for direct light rays upwardly and the escape of heat from the lamp.

6. A portable lamp having a vertical incandescent lamp bulb mounted base down and having a filament therein, a socket cover member enclosing the bulb mount and at least part of the bulb, a shade surrounding said lamp bulb having a downwardly and outwardly flaring portion extending from a plane spaced above the upper edge of said socket cover member and terminating in a narrow peripheral flange extending sharply downwardly with the lower edge of said peripheral flange terminating in substantially the plane of the upper edge of said socket cover member, said shade further having an upwardly and inwardly extending portion affixed to the upper edge of the first said flaring portion and extending substantially above the upper end of said lamp bulb, a bracket support for said shade having at least three equally spaced legs and a ring member secured to the lower end of said legs, cooperating means on said ring and socket cover members for holding the ring member in engagement with the socket cover member, said cooperating means including at least one projecting pin element carried by one of said members and pin element receiving and holding means on the other of said members, and means on the upper ends of said legs for carrying said shade.

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