Sept. 18, 1934. G. C. LYNCH 1,974,077

SHADE HOLDER

Filed April 14, 1931

Fig. 1.

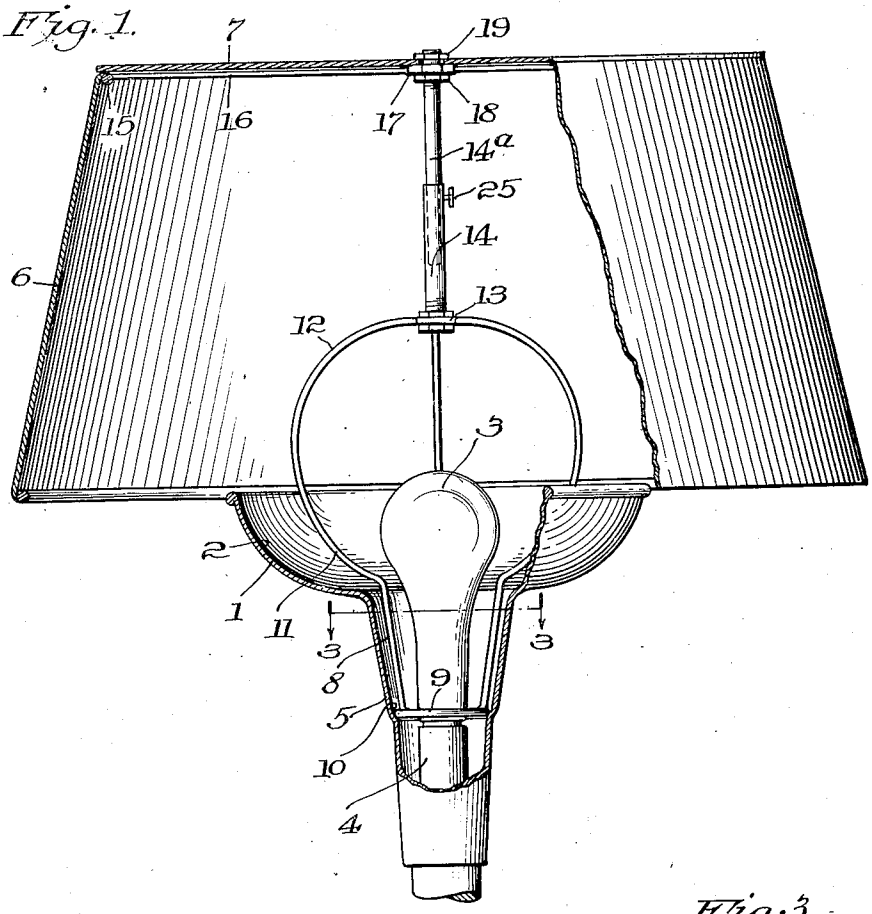


Fig. 2.

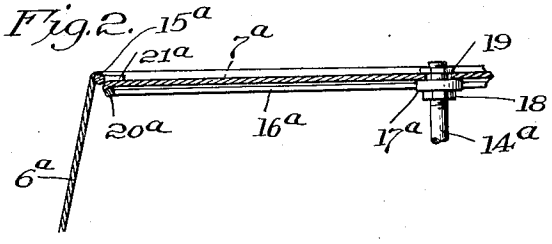
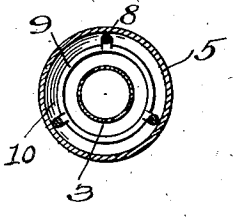


Fig. 3.



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SHADE HOLDER

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Application April 14, 1931, Serial No. 530,007

12 Claims. (Cl. 240—81)

This invention is a holder for the shade of a lighting device, and is particularly applicable to that type of illuminating device wherein a reflector is disposed beneath an illuminant and a shade surrounds the illuminant above the reflector; so that relatively bright but non-glaring light is reflected downwardly by the shade beyond the outer periphery of the reflector, and the remainder of the light is transmitted through the shade so as to create a soft glow of desired color and decorative effect.

It is the object of the invention to provide a holder which will create no appreciable shadow due to its substantial radial spacing from all parts of the shade, while at the same time insuring ample space for the illuminant at the axis of the shade.

It is a further object of the invention to provide for conveniently mounting the holder, preferably on the reflector of the lighting device, with the holder preferably readily removable but securely held in operative position against accidental displacement.

It is a still further object of the invention to adapt the holder for ready adjustment of the shade, and to also provide for interchangeable mounting of various shades on the holder.

Further objects of the invention will be readily understood from the following description of the accompanying drawing, in which:

Fig. 1 is a side elevation of a lighting device embodying the improved holder and shown partly in axial section.

Fig. 2 is a fragmentary axial section showing a modified means for mounting the shade on the holder.

Fig. 3 is a transverse section on the line 3—3 of Fig. 1.

The invention is herein illustrated in connection with that type of lighting device in which a reflector is disposed beneath an illuminant and a shade surrounds the illuminant above the reflector, with the annular wall of the shade radially spaced beyond the periphery of the reflector so that a portion of the light is reflected downwardly by the shade beyond the periphery of the reflector, and the remainder of the light is transmitted through the shade as a soft glow.

As an instance of this arrangement an opaque transverse member 1 may form a reflector 2 at its upper surface, with an illuminant, shown as a usual electric lamp globe 3, mounted at the axis of the reflector, preferably with the socket 4 for the lamp globe received in a depending cup-shaped depression 5 at the center of the transverse opaque member, so that the lamp globe is radially spaced from the wall of cup 5 and projects some distance above the reflector 2.

A shade is mounted above the reflector, and comprises a canopy 6 surrounding the illuminant preferably in radially spaced relation beyond the periphery of opaque member 1, with a light screen 7 preferably spaced above the illuminant and extending across the top of the shade to the surrounding canopy. The canopy 6 and screen 7 are preferably adapted for non-glaring reflection of a portion of the light rays striking the same so as to direct said rays downwardly beyond the outer periphery of opaque member 1, thereby providing relatively bright but non-glaring illumination below the lighting device for reading purposes and the like; and the canopy 6 and screen 7 are preferably adapted to transmit the remainder of the light striking the same so as to diffuse merely a soft glow of any desired color and decorative effect.

For this purpose canopy 6 may be translucent, as for example parchment suitably tinted or colored at its inner and outer surfaces, so that its inner surface forms a non-glaring reflector for a portion of the light and its outer surface is adapted to modify and suitably color those rays which are transmitted through the canopy; and the screen 7 may also be translucent, parchment for example suitably tinted or colored, so that its inner surface forms a non-glaring reflector for a portion of the light and its outer surface modifies and colors those rays which are transmitted through the screen. A screen of this type, operatively mounted with relation to a reflector, is described and claimed in my copending application Ser. No. 530,008, filed April 14, 1931.

The shade is supported by a holder which may be readily mounted on opaque member 1 so as to clear the illuminant 3 and at the same time so space the holder from the shade as to avoid any appreciable shadow.

For this purpose circumferentially spaced supports shown as wires 8 may extend upwardly from an annular hoop 9 so as to define a structure adapted for sliding reception in cup 5, with the hoop 9 preferably adapted to rest upon an internal shoulder 10 of the cup, and the wires 8 diverging upwardly for yieldable binding engagement in the cup. The holder is thus received in the annular space between the stem of light globe 3 and the surrounding wall of cup 5; and above the reflector 2 the wires 8 are bowed outwardly as shown at 11 so as to clear the light globe while still appreciably radially spacing said wires from canopy

6, with the upper ends of the wires then curving inwardly as shown at 12 so as to meet at a washer 13 in alinement with the axis of globe 3 but longitudinally spaced therebeyond.

A standard is mounted on the bowed wires, and is shown as projecting upwardly from washer 13 and adapted to support the shade for the lighting device. As an instance of this arrangement the standard may comprise cooperating rods 14—14*a* telescopically adjusted by a set screw 25, with an annular hoop 15 at the upper edge of canopy 6 having inwardly projecting arms 16 terminating in a central washer 17 which is adapted for reception on the rod 14*a*. The rod 14*a* may be threaded for reception of a nut 18 on which washer 17 is adapted to rest so as to support the canopy 6, and the screen 7 may be supported on the arms 16 and washer 17, with a retaining nut 19 threaded onto rod 14*a* for securing the parts in assembled relation.

The shade is thus adapted for longitudinal adjustment with relation to globe 3 by telescopic adjustment of rods 14—14*a*; and various screen elements 7, as well as various canopies 6, may be readily interchangeably employed in connection with the lighting device. It will also be noted that the screen element 7 is readily removable with the canopy 6 retaining its operative position; in which event light is reflected and transmitted by the canopy as previously described, while light projected substantially straight upwardly is non-obstructed and may strike an overlying ceiling for indirect lighting.

If it is desirable to change the canopy 6 without disturbing the screen 7, the modified construction shown in Fig. 2 may be employed. In this construction screen 7*a* is fixed relative to a peripheral hoop 20*a* which has radial arms 16*a* and a central washer 17*a*, with the washer adapted for support on rod 14*a* as previously described; and the hoop 15*a* of canopy 6*a* is provided with inwardly projecting lugs 21*a* adapted to rest upon screen 7*a* for detachably supporting the canopy.

The invention thus provides extremely simple but practical means for supporting a shade with relation to an illuminant so as to avoid shadows and permit ready adjustment and interchanging of shades; and the invention also provides a supporting means particularly applicable to that type of lighting device in which a reflector underlies an illuminant with a shade surrounding the illuminant above the reflector so that the shade is adapted to create a relatively bright but non-glaring downwardly directed light beyond the periphery of the reflector, together with merely a diffused light or glow of any desired color emanating in all directions through the shade.

I claim:

1. In combination, an illuminant, a support for the illuminant, a shade including a canopy surrounding the illuminant and a transverse light screen longitudinally spaced beyond the illuminant and extending to the wall of the canopy, a holder for the shade adapted to eliminate shadows and mounted on the support so as to clear the illuminant and appreciably spaced from the surrounding wall of the canopy, said holder including a standard projecting longitudinally beyond the illuminant coaxially therewith, and a frame for the shade including a transverse spider comprising circumferentially spaced arms adapted for upward projection of light rays between said arms, the spider being adapted for mounting on the standard at the axis of the spider and supporting the canopy at the outer periphery of the spider, and the light screen being adapted to overlie the spider and detachably supported thereon.

2. In combination, an illuminant, a support for the illuminant, a shade for the illuminant above the support, a holder for the shade adapted to eliminate shadows and mounted on the support so as to clear the illuminant and appreciably spaced from the surrounding wall of the shade, said holder including a standard projecting longitudinally beyond the illuminant coaxially therewith, a frame for the shade including a transverse spider comprising circumferentially spaced arms adapted for upward projection of light rays between said arms, the spider being adapted for mounting on the standard at the axis of the spider, and means on the shade for releasably suspending the same from the outer periphery of the spider.

3. In combination, a reflector having a central depression with a shoulder in the bore of the depression, a lamp globe adapted for mounting in the depression and radially spaced from the wall of the depression, the lamp globe projecting above the depression for projecting light rays against the reflector, a holder comprising an annulus adapted for removable reception in the depression so as to seat on the shoulder and having upwardly projecting circumferentially spaced supports adapted for yieldable binding engagement against the wall of the depression and bowed around the lamp globe so as to clear the same, and means for supporting a shade carried by the bowed supports above the lamp globe.

4. In combination, a reflector having a central depression, a lamp globe adapted for mounting in the depression and radially spaced from the wall of the depression, the lamp globe projecting above the depression for projecting light rays against the reflector, a holder comprising an annulus adapted for removable reception in the depression and having upwardly projecting circumferentially spaced supports adapted for yieldable binding engagement against the wall of the depression and bowed around the lamp globe so as to clear the same, and means for supporting a shade carried by the bowed supports above the lamp globe.

5. In combination, a reflector having a central depression, a lamp globe adapted for mounting in the depression and radially spaced from the wall of the depression, the lamp globe projecting above the depression for projecting light rays against the reflector, a holder comprising circumferentially spaced supports adapted for removable reception in the depression for yieldable binding engagement against its wall and bowed around the lamp globe so as to clear the same, and means for supporting a shade carried by the bowed supports above the lamp globe.

6. In combination, an upright standard, a transverse frame mounted on the standard, a shade including a transverse light screen and a depending canopy mounted on the frame, and means for detachably suspending the canopy from the frame.

7. In combination, an upright standard, a transverse frame mounted on the standard, a shade including a transverse light screen and a canopy mounted on the frame, and means for detachably supporting the light screen on the frame.

8. In combination, a support having a central depression, a lamp globe adapted for mounting in

the depression and radially spaced from the wall of the depression, a holder comprising circumferentially spaced supports adapted for removable reception in the depression for yieldable binding engagement against its wall and bowed around the lamp globe so as to clear the same, and means for supporting a shade carried by the bowed supports above the lamp globe.

9. In combination, a reflector having a central depression with a shoulder in the bore of the depression, a lamp globe adapted for mounting in the depression and radially spaced from the wall of the depression, the lamp globe projecting above the depression for projecting light rays against the reflector, and means for supporting a light intercepting means above the reflector, said supporting means including an annulus adapted for removable reception in the depression of the reflector so as to seat on the shoulder and having upwardly projecting circumferentially spaced supports adapted for yieldable binding engagement against the wall of the depression and bowed around the lamp globe so as to clear the same.

10. In combination, a reflector having a central depression, a lamp globe adapted for mounting in the depression and radially spaced from the wall of the depression, the lamp globe projecting above the depression for projecting light rays against the reflector, and means for supporting a light intercepting means above the reflector, said supporting means including an annulus adapted for removable reception in the depression of the reflector and having upwardly projecting circumferentially spaced supports adapted for yieldable binding engagement against the wall of the depression and bowed around the lamp globe so as to clear the same.

11. In combination, a reflector having a central depression, a lamp globe adapted for mounting in the depression and radially spaced from the wall of the depression, the lamp globe projecting above the depression for projecting light rays against the reflector, and means for supporting a light intercepting means above the reflector, said supporting means including circumferentially spaced supports adapted for removable reception in the depression for yieldable binding engagement against its wall and bowed around the lamp globe so as to clear the same.

12. In combination, a support having a central depression, a lamp globe adapted for mounting in the depression and radially spaced from the wall of the depression, and means for supporting a light intercepting means above the support, said supporting means including circumferentially spaced supports adapted for removable reception in the depression for yieldable binding engagement against its wall and bowed around the lamp globe so as to clear the same.

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