Aug. 19, 1941. E. A. MULLER 2,253,443

PHOTOFLOOD LIGHT REFLECTOR

Filed Dec. 27, 1938

Fig. 1.

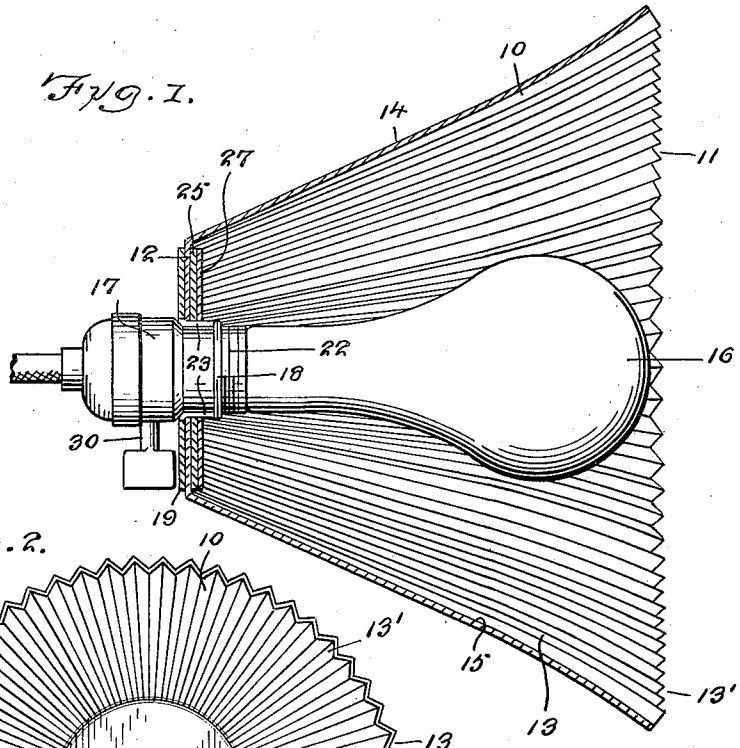


Fig. 2.

Fig. 3.

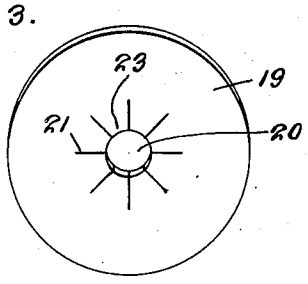


Fig. 4.

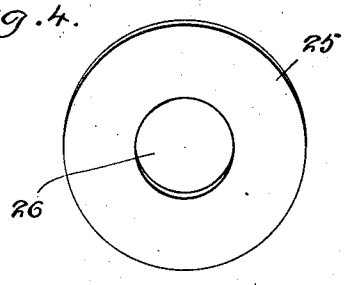
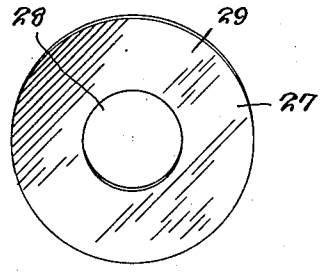


Fig. 5.



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WITNESS

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PHOTOFLOOD LIGHT REFLECTOR

Edward A. Muller, Long Island City, N. Y.

Application December 27, 1938, Serial No. 247,885

4 Claims. (Cl. 240—108)

The present invention relates to new and improved photo-flood reflectors and more particularly to a means of attaching the same to a flood lamp or the like.

An important object of the invention is to provide a reflector primarily adapted for photographic purposes that is preferably constructed of laminated paper stock having corrugated side walls permitting changing the angles of the reflector for more or less concentration of light on the subject being photographed.

A further object of the invention is the provision of novel means for attaching the reflector to a portion of the lamp socket whereby it is firmly held thereon, the attaching means being also preferably formed of paper material thus aiding in maintaining the cost of the article to a minimum.

A still further object of the invention is to provide a reflector having the above mentioned characteristics, and further including a metallized interior surface which will give a diffused light reflection having a tendency to break down direct light beams, thereby correcting a fault which is common in reflectors as now being manufactured.

As as well known, amateur photographers have long been in need of a relatively inexpensive reflector that can be used in-doors for photographing still and motion pictures. In view of the fact that the herein described reflector is formed of paper material it can be cheaply manufactured, thus meeting one of the important requirements of the amateur photographer. The strength and durability of the reflector is increased by forming the same of laminated layers of paper. Special care and attention must be given to the mode of attaching the reflector to the lamp, and since the reflector according to the present invention is fabricated of paper-like material, due care must be exercised to avoid fire hazards. The improved attaching means, according to the present invention, permits attaching the reflector to the lamp socket and firmly holding the same thereon without direct contact with the lamp.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawing which forms a part of the application.

In the drawing:

Figure 1 is a vertical sectional view illustrating the reflector attached to a photo-flood lamp socket by the novel means forming a part of the invention;

Figure 2 is a fragmentary front elevational view of the reflector removed from the lamp socket; and

Figures 3, 4 and 5 are perspective views of the discs employed for attaching the reflector to the lamp socket.

Referring to the drawing for a more detailed description thereof wherein there is illustrated the preferred embodiment of the invention, the numeral 10 illustrates a frustum-shaped body constituting a reflector which is formed with an open bottom 11, apertured top 12, and fluted skirt 13, forming the side walls of the reflector. The reflector 10 is constructed of laminated paper stock in accordance with the teachings of my copending application, Serial Number 229,592, filed September 12, 1938 and issued as Patent No. 2,218,291. According to my pending application the outer side 14 of the skirt is formed with a layer of lacquered foil and the inner side 15 is also formed with a layer of foil, which layer has, however, been coated with aluminum to form an inner reflecting surface when secured about the electric lamp bulb 16.

During fabrication, the body 10 is formed with radially extending folds 13' to present a fluted or corrugated appearance. In view of the fact that the reflector is fabricated of paper, the angularity of the folds or corrugations of the side walls can be changed for increasing or decreasing the reflection of light for concentration on an object to be photographed. Changing of the angularity of the folds can be accomplished by manually stretching the bottom edge 11 of the reflector to decrease the angularity or, compress the folds along the bottom edge of the reflector to increase the angularity of the folded edges.

Referring particularly to Figure 1 of the drawing, the photo-flood lamp 16 is shown supported on a screw type socket 17, which socket is formed with a conventional bead 18 preferably disposed near the open end thereof. In order to attach the reflector to the socket 17, the electric lamp bulb 16 is first removed. The supporting disc 19 which is formed with a centrally disposed aperture 20, is provided with a series of slits 21 extending radially from, and communicating with the aperture 20, and is adapted to be disposed over the open end 22 of the socket 17. During the positioning of the disc 19, the fingers 23, formed between the radial slits 21, will be forced to extend at substantially right angles to the disc and be caused to engage in back of the bead 18. The fingers 23 thus form a supporting and gripping surface for the front end 12 of the

reflector, which end is also formed with a central opening 24 substantially equal in diameter to the socket 17. Thus the circumferential area of the opening 24 when disposed over the socket 17 will rest upon the extending fingers 23. A locking disc 25 is next disposed, by means of the central opening 26, over the front end of the socket 17 and is brought into close engagement with the end 12 of the reflector 10 and serves to securely lock the reflector in position over the fingers 23. The interior area of the reflector is then completed by positioning the disc 27 through the central opening 28 over the socket. The front surface 29 of the disc 27 is coated with aluminum to conform with the interior surface of the reflector thereby presenting a complete reflecting surface.

After positioning the reflector as indicated above, the lamp bulb 16 is screwed in the socket and current supplied thereto and controlled by means of the switch 30. The reflector thus held can be effectively worked upon to change the angularity of the folded or corrugated edges in the manner previously described.

Also it will be understood, of course, by those skilled in the art that variations in the hereinabove described device involving the substitution of substantial equivalents for the devices described are intended to be comprehended within the spirit of the present invention and that the invention is capable of extended application and is not confined to the exact showing of the drawing nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed is:

1. A reflector and means of attaching the same to a lamp socket comprising, a substantially frustum-shaped body having an apertured top wall, a disc having a central aperture adapted to be slidably disposed over a lamp socket and formed with radial slits communicating with said aperture to provide fingers having gripping engagement axially of said socket, the apertured end of said top wall slidably disposed over said fingers and in abutting relation with said disc, and means for holding said top wall in engagement with said disc.

2. A photo-flood reflector and means of attaching the same to a lamp socket comprising, a substantially frustum-shaped body having a fluted skirt and centrally apertured top wall formed of laminated layers of paper material, a disc having a central aperture adapted to be slidably disposed over a lamp socket and formed with radial slits communicating with said aperture to provide fingers having gripping engagement axially of said socket, the apertured end of said top wall slidably disposed over said fingers, and a member slidable over said socket for locking said top wall to said disc whereby to supportingly condition said reflector on said socket.

3. In a reflector construction, a reflector body having a supporting wall fashioned with an opening for receiving a lamp socket, a disc without said wall and fashioned with a radially slit section extending through said opening, and a member carried on said section for urgently engaging the radially slit section into appressed relation with said socket for locking said body to said disc whereby to supportingly condition said wall on said socket.

4. A reflector and means of attaching the same to a lamp socket comprising, a body having an apertured top wall, a disc having a central aperture adapted to be slidably disposed over a lamp socket and formed with radial slits to provide fingers extending axially of said socket and adapted to be held in appressed relation thereon, the apertured top wall of said body being in abutting relation with said disc and that part of said wall defining the aperture encompassing and appressing said axially disposed fingers, and means for holding said top wall in abutting relation with said disc and in firm engagement with said fingers.

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