No. 664,222. Patented Dec. 18, 1900.

W. R. KRUMWIEDE.

COVER OR SHADE FOR INCANDESCENT LAMPS

(Application filed Mar. 1, 1900.)

(No Model.)

Fig. 1.

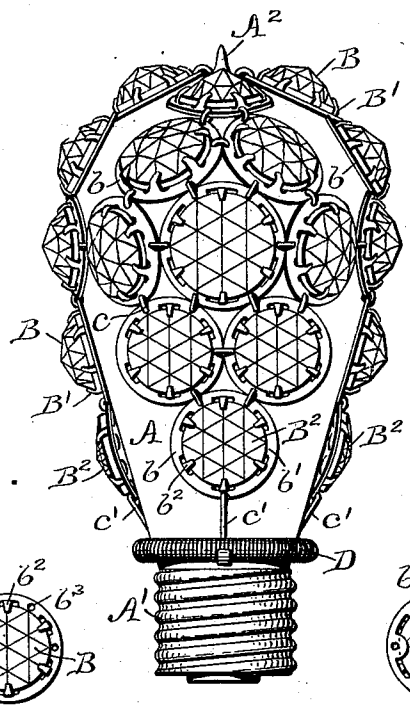


Fig. 2.

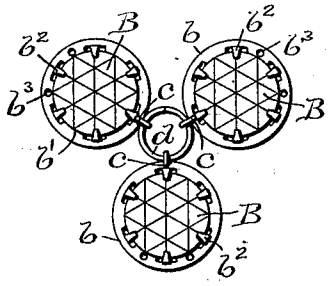


Fig. 3.

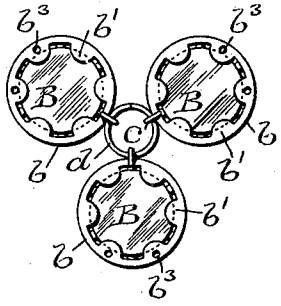
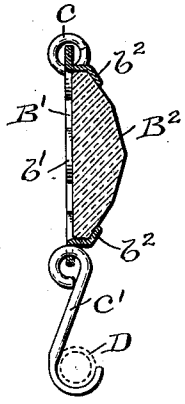


Fig. 4.



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UNITED STATES PATENT OFFICE.

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COVER OR SHADE FOR INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 664,222, dated December 18, 1900.

Application filed March 1, 1900. Serial No. 6,919. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. KRUMWIEDE, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Covers or Shades for Incandescent Lamps, of which the following is a specification.

This invention refers to a cover or shade for lamps, and is particularly designed for the globes of electric lights.

The invention consists in the peculiar and novel construction of the shade, whereby the same may be readily attached to or removed from the globe, as will be more fully set forth hereinafter.

It is desirable at times and under peculiar conditions to reduce the white glare of an electric light by partly shading the globe, and it is also at times desirable to change the white light transmitted by the globe to a more subdued colored light. When a colored globe is used, the same has to be removed and usually a white globe substituted to secure the effect of the white light, or vice versa. In incandescent lights the globes cannot be removed or exchanged, as they form an essential part of the lamp.

The object of this invention is to produce a shade composed of a series of prismatic lenses, which shade may be readily placed on or removed from the globe of an incandescent electric or other lamp.

Figure 1 is a side view of an incandescent electric lamp, the globe of which is shown as covered with the detachable flexible shade of my construction. Fig. 2 is a top view of the central portion of the shade, showing the settings for the prismatic lenses secured by wire rings to a central ring. Fig. 3 is a bottom view of the part of the shade shown in Fig. 2. Fig. 4 is a sectional view of one of the lenses, the setting of the lens, the wire ring connecting two lenses, and the hook by which the shade is secured.

In the preferred form I use in the construction of the shade round lenses, the outer surfaces of which are raised and faceted. These lenses may be all of one color or they may be of a variety of colors or of shades of colors to produce the desired effect.

I do not wish to confine myself to the use of round or faceted lenses, as other forms of lenses of any desired material may be used.

In the drawings, A indicates the globe of an incandescent electric lamp of the usual construction, and A′ the socket of the lamp. The globes of these lamps are pear-shaped, the upper part being semispherical, and usually have the point A^2 projecting from the apex. The lower part diminishes in diameter until it joins the socket A′.

The lenses B are secured in a setting B′, stamped from sheet metal. The peripheral rims b b extend around the lens, the parts b' b' form the seat of the lens, and the parts b^2 b^2 are bent up and over the face of the lens to secure the same to the setting B′. Into the margin of the setting B′ holes b^3 b^3 are made at predetermined points, so that the mounted lenses may be secured together by the wire rings c c, passed through the holes b^3 b^3 of two adjacent margins of the mounted lenses. If lenses are to be used provided with the marginal rims b, the holes b^3 may be made in the marginal rims and the lenses secured together by the rings c in the same manner as when the metal setting B′ is used.

In the subsequent description I use the terms "lens" or "lenses" for the lens secured in a setting and also for a lens provided with a perforated marginal rim.

In constructing the shade shown in the drawings I connect to the ring d, which is intended to pass over the point A^2 of the globe A, the three lenses, as is shown in Fig. 2, by means of the rings c c c. To each of these three lenses two lenses are secured by rings, and the lenses are also secured together by a ring c. To the two lenses are now secured three lenses, and all the lenses on this row extending around the largest diameter of the globe are preferably secured to each other by the rings c c. Two lenses are now secured to the last three and to each other, and then the bottom lens is secured to the last two. By this construction three diamond-shaped groups of lenses form the shade which incloses the larger portion of the globe A. This arrangement of the lenses may be varied to suit the form of the globe and secure the effect desired. To the lenses marked B^2 in

Fig. 1 the hook c' is secured, and when the shade has been placed onto the globe A the spring-band D is placed over the hooks to hold the shade in place. The so-constructed shade is so flexible that it will adapt itself to the shape of the globe. By releasing the spring-band D the shade may be removed and the light used in the usual and ordinary manner. The shade can be readily replaced, the upper part resting on the sémispherical end of the globe and the lower part secured by the spring-band. If desired, the lamp may be reversed, the spring-band firmly holding the shade in place by means of the hooks c'.

With faceted lenses of varying shades of color a brilliant effect is secured and the illumination of an apartment readily changed from a bright white-light effect to a subdued colored-light effect.

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

In a lamp-shade, a series of annular metal settings B′ perforated to receive the rings $c\,c$, the lenses B secured in the metal settings, the rings d connecting the settings together to form the shade, the hooks $c'\,c'$ each secured to one of the settings, and the spring-band D, whereby a flexible readily attachable and removable shade is secured by which the illuminating effect of the incandescent light may be changed, as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. R. KRUMWIEDE.

Witnesses:
J. A. MILLER, Jr.,
B. M. SIMMS.