May 27, 1924. 1,495,391

F. C. BAKER

COMBINED READING AND INDIRECT ROOM LIGHTING LAMP

Filed June 7, 1922

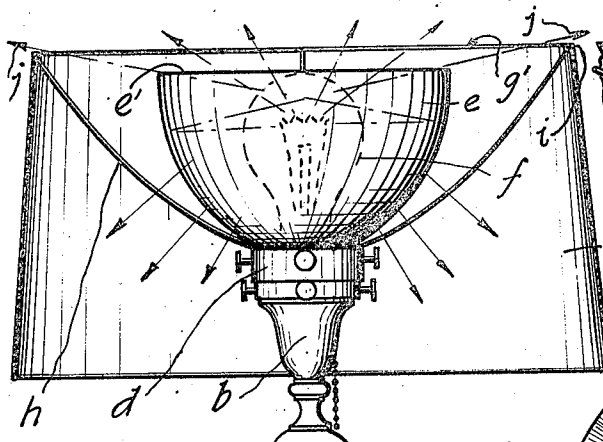


Fig. 1.

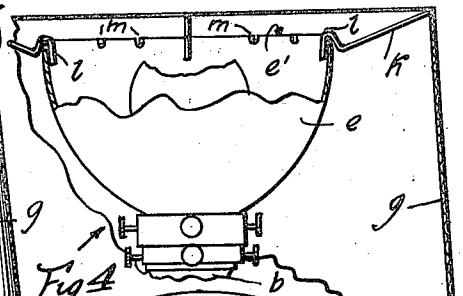


Fig. 4

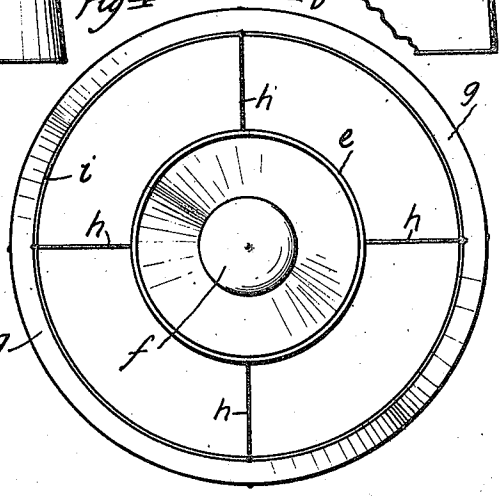


Fig. 3.

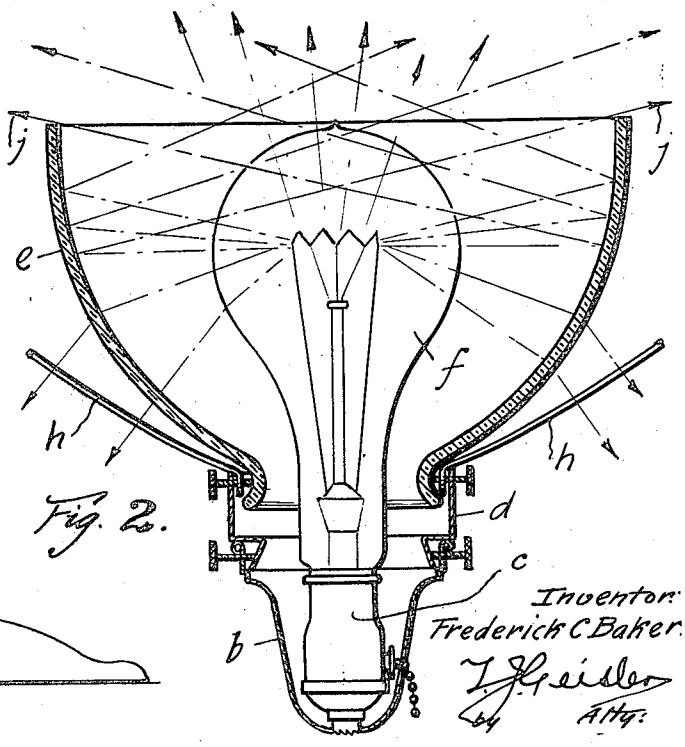


Fig. 2.

a

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UNITED STATES PATENT OFFICE.

FREDERICK C. BAKER, OF PORTLAND, OREGON.

COMBINED READING AND INDIRECT ROOM-LIGHTING LAMP.

Application filed June 7, 1922. Serial No. 566,531.

To all whom it may concern:

Be it known that I, FREDERICK C. BAKER, a citizen of the United States, and a resident of Portland, county of Multnomah and State of Oregon, have invented a new and useful Improvement in Combined Reading and Indirect Room-Lighting Lamps, of which the following is a specification.

The object of my invention is to provide a reading lamp which will also serve to illuminate substantially the whole room.

In order to attain these results I have concluded that the reading light should be transmitted thru a translucent shade or bowl of semi-spherical form, preferably of glass, so as to remove all tiring glare; and the interior surface of this shade must function as a reflector for throwing the light rays upward against the ceiling and broadcasting them laterally, thus bringing about the indirect illumination of the whole room. The translucent bowl encompassing the light globe I encompass by an outer semi-translucent annular shade, which is made of semi-translucent material, preferably fabric, and may be more or less ornamented. The latter shade screens the translucent bowl from all persons in the room, so that the diffused indirect illumination of the room will not be interfered with; that is to say, all bright rays from the lamp will be screened from the eyes of all persons in the room some distance from the lamp.

Furthermore the outer semi-translucent shade should preferably flare downwardly, and be of such diameter that its walls are spaced a substantial distance from the walls of the translucent bowl, so as not to contract the circle of upwardly, nor the downwardly projected light rays, which contraction would tend to render the lamp inefficient for the efficient indirect lighting of the room, as well as for reading purposes. Furthermore, the outer shade must be of such height as to conceal or screen completely the translucent bowl, that is, extending a substantial distance below, and slightly above the latter, in this way, as mentioned, effectively screening all bright rays from those in the room not using the lamp for reading, and at the same time rendering the indirect illumination of the room more effective. An advantage of my lamp is that a high power lamp globe may be used, thus providing an efficient source for indirect illumination of the room at the same time reducing the downwardly projected rays by the construction referred to, to an evenly diffused soft light directly around the lamp, as is desirable for reading purposes.

My lamp is arranged as illustrated in the accompanying drawings, in which:

Fig. 1 represents a stand lamp embodying my invention, the rays of light emitted being represented by the arrows;

Fig. 2 is a vertical section taken thru the lamp socket and supporting parts of the latter, the translucent bowl of my lamp also showing in part the radial arms constituting a part of the frame supporting the outer shade of my lamp, and the directions of the light rays are indicated by the arrows;

Fig. 3 is a top view of my lamp; and

Fig. 4 is a fragmentary side elevation of an alternative means for supporting the auxiliary shade.

On the stand *a* is mounted a socket *b* containing the light socket *c*. In the socket *b* is secured a ring *d* and in the latter is secured the base of the translucent bowl *e*; said base being provided with a concaved rim as shown in Fig. 2. *f* represents an electric light globe of any convenient power. The translucent bowl *e* is of semi-spherical form and its interior surface may be glazed so as to be better adapted to reflect the light rays upwardly and laterally as diagrammatically indicated by the arrows in Figs. 1 and 2. The translucent bowl *e* and the light bulb *f* are so relatively arranged to each other that the former screens the light but permits the projection of light rays at wide angles over the top of the bowl. *g* is a second or outer shade. This is preferably made of semi-translucent material for example fabric which may also be more or less ornamental. The outer shade is supported by a frame fixed on the base of the translucent bowl *e* and consists of radial arms *h* connecting at the top with a ring *i*; the top of the auxiliary shade being secured to the top of the ring *i*.

But this frame can be made and attached in many other different ways, one of which is shown in Fig. 4. The skeleton frame *k* is made with fingers *l* adapted to fit over the top or upper edge *e'* of the bowl *e*. The upper edge *e'* may be fluted or notched as at *m* in which the fingers *l* can be firmly seated.

The outer shade *g* is made of such height as to extend a substantial distance below

the bowl *e* and a sufficient distance above the latter so as to conceal or screen the bowl completely but not to intercept any of the light rays which are projected over its top. Furthermore the concentric walls of the bowl and the outer shade should be spaced a substantial distance apart, or in other words, the outer shade *g* made of such diameter as not to contract the circle of the upwardly or downwardly projected light rays which are to be utilized for indirect lighting of the room or reading purposes.

A convenient and efficient arrangement of the parts is shown by Fig. 1 from which it will be noted that the top or upper edge *e'* of the translucent bowl *e* extends above the source of light, the top or upper edge of said shade *g* extends above the bowl, and the source of light lies slightly below any line grazing the upper edge of the bowl and the upper edge of the shade. Such cooperative relation of said elements assures that the light rays laterally projected over the top of the bowl *e*, as indicated by the arrows *j* in Fig. 1, will not be intercepted. In other words, the parts are so relatively arranged that all light rays which pass laterally over the top of the translucent bowl *e* will also be permitted to pass freely over the top of the outer shade *g*. The function of the latter shade is to screen the stronger light from all persons in the room not using the lamp for reading purposes and thus sitting approximately under the lamp in this way enhancing the indirect diffused illumination produced by the light rays upwardly and laterally projected against the ceiling of the room.

In the operation of my lamp it has been customary to use a translucent bowl that allows about one fourth of the light of the light bulb to filter thru downwardly and the other three fourths to be reflected upwards. In many installations it has been found that by my lamp it is possible to eliminate overhead chandeliers because of the very efficient ceiling reflection obtained by my lamp.

I claim:

A lamp comprising a semi-spherical translucent bowl, a source of light located axially within said bowl and completely concealed by the latter, the downwardly projected rays of such light being intercepted by and transmitted through said bowl, a semi-translucent shade spaced from and encompassing concentrically said bowl, and completely concealing the latter, the top of said bowl extending above the light source, the top of said shade extending above the bowl, and the source of light lying slightly below any line grazing the upper edge of the bowl and the upper edge of the shade.

FREDERICK C. BAKER.