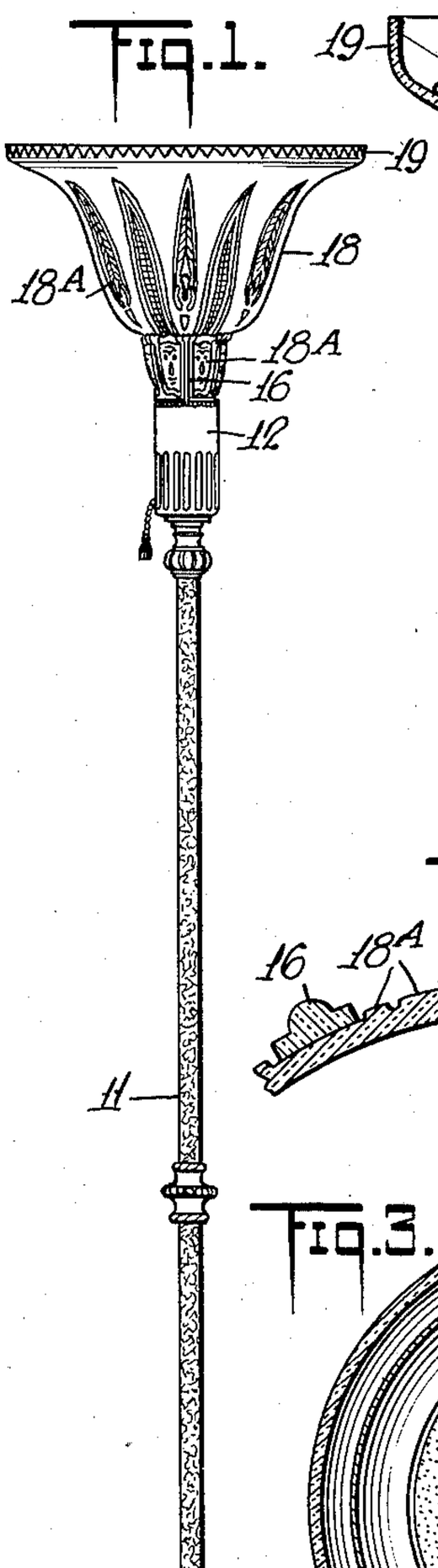
Oct. 7, 1930. J. H. BLITZER 1,777,824

LIGHTING FIXTURE

Filed June 19, 1930

Fig. 1.



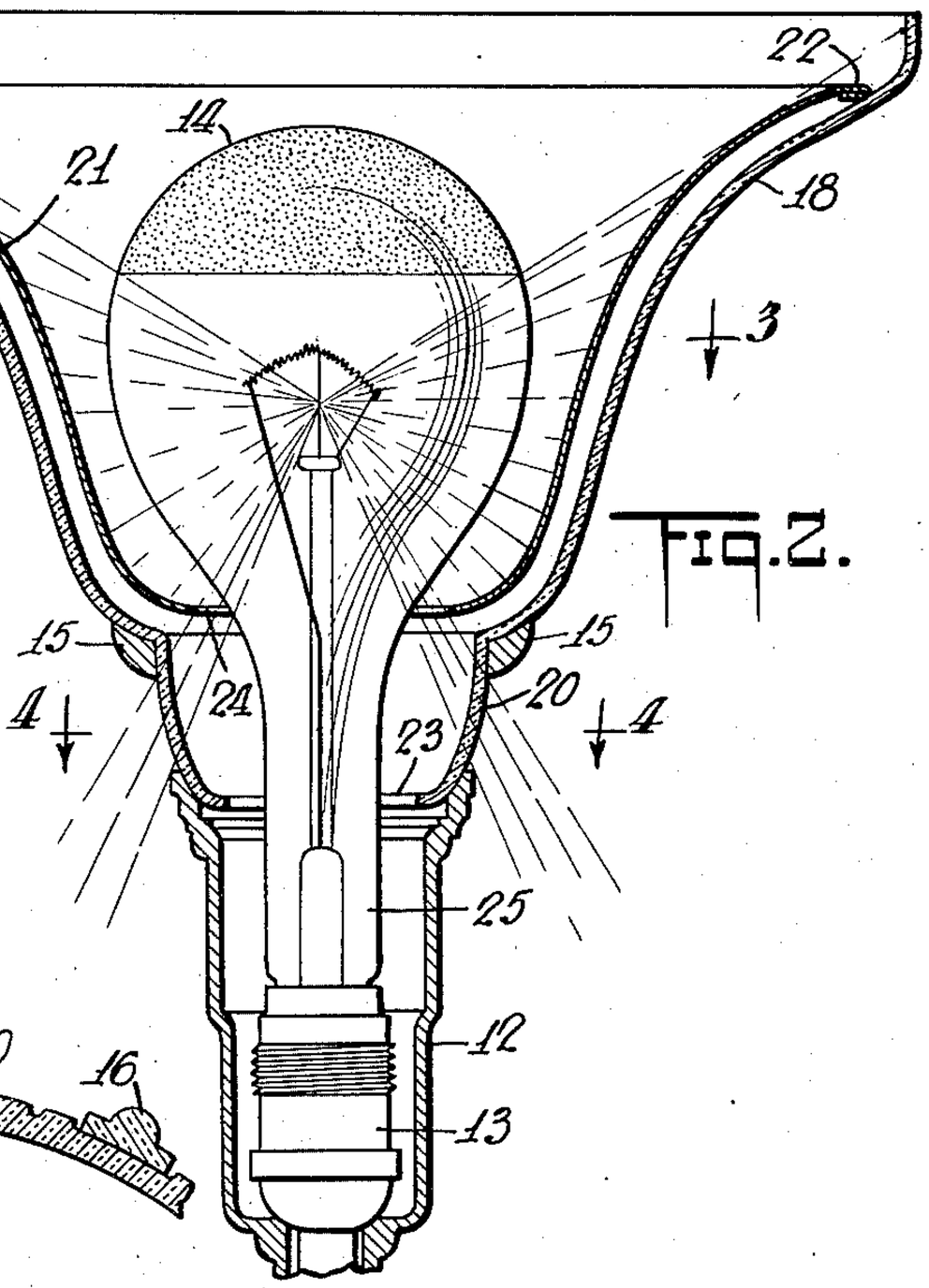


Fig. 2.

Fig. 6.

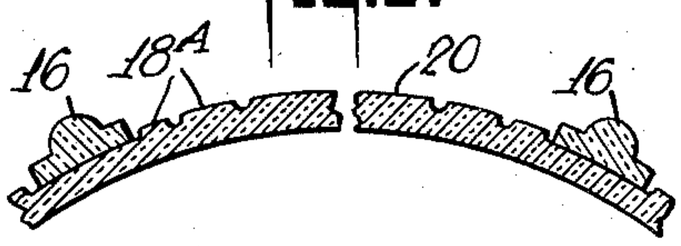


Fig. 3.

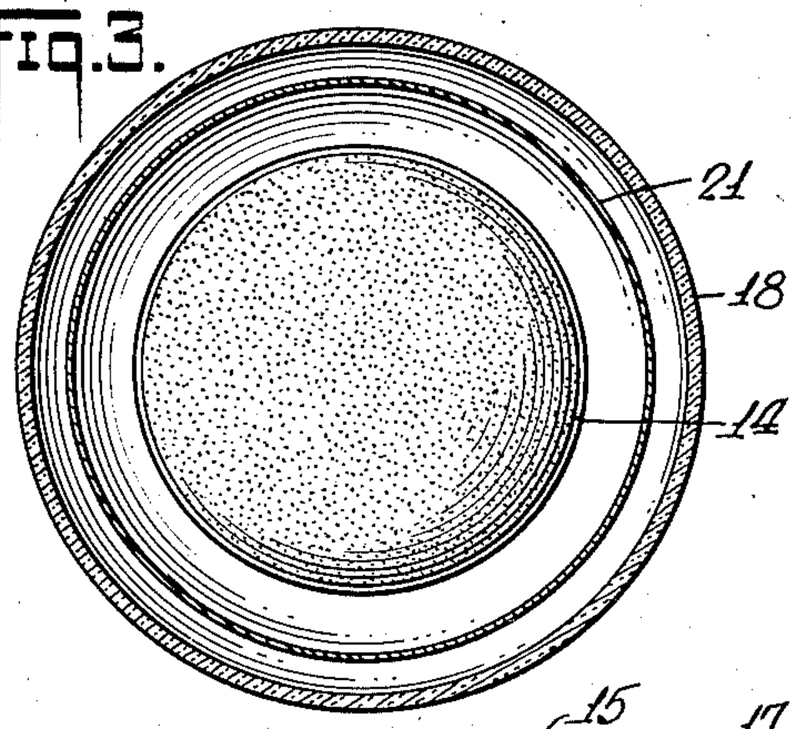
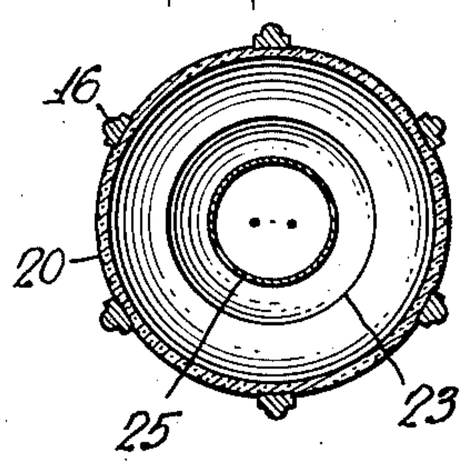


Fig. 4.



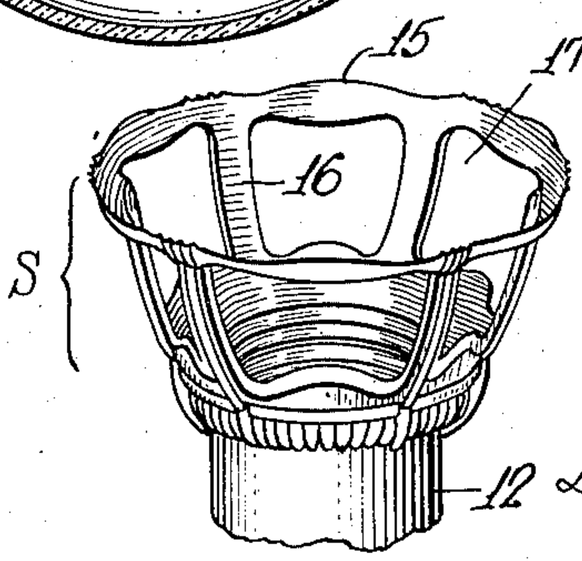


Fig. 5.

INVENTOR
Jacob H. Blitzer
BY
Dean, Fairbank, Nisbet & Foster.
ATTORNEY

Patented Oct. 7, 1930

1,777,824

UNITED STATES PATENT OFFICE

JACOB H. BLITZER, OF NEW YORK, N. Y., ASSIGNOR TO LIGHTOLIER CO., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK

LIGHTING FIXTURE

Application filed June 19, 1930. Serial No. 462,179.

While particularly applicable to floor lamps and torchères, the broader principles of my present invention are useful in other relations.

It is among the objects of the invention to provide a fixture of few parts, simple and inexpensive construction, which may be assembled with the utmost facility to afford a highly ornamental appearance.

Another object is to provide a lighting fixture of the above type, all of the exposed elements of which contribute to a highly ornamental and decorative effect, yet inherently perform the various mechanical supporting and attaching functions for maintaining the composite parts in assembled relation, all without the need for supporting framework that would necessitate special concealing instrumentalities.

Another object is to provide a fixture of the above type, the assembly of which requires no clamping rings or screws and no delicate adjustment, but in which the constituent parts need merely be placed in position and are thereby supported in secure and properly centered relation.

Another object is to provide a lighting fixture of the above type, in which the use of but a single incandescent bulb, striking composite illumination effects are produced at the lamp shade, which effects may include ornamentally spaced translucent areas shining by transmitted light and intervening relatively darker areas which may, however, be much more faintly illuminated by reflected or diffused light, the bulk of the illumination being, however, projected for maximum illuminating effect.

More specifically it is an object to afford an indirect lighting fixture in which the major portion of the illumination is cast upon the ceiling instead of being transmitted through the translucent shade, said shade however being directly exposed for transmission of light therethrough at ornamentally disposed windows and preferably also at the outer rim of the shade for a brilliant corona effect.

A feature of the invention is the use of a translucent ornamental shade encircling a light reflector means therein which intercepts the light otherwise transmitted through the shade, and casts the light against the ceiling or otherwise, the conformation of the reflector relative to the shade being such, however, as to expose portions of the shade for transmission of light therethrough to afford ornamental effects.

Another feature is the mechanical coordination of the shade, the reflector and the lamp. Preferably the standard, pedestal or other support is provided with an ornamental socket in which is sustained the reduced bell shaped hub of the shade.

In a preferred embodiment, the brilliant corona effect is produced by the protrusion of the shade rim beyond the rim of the reflector.

Preferably the shank of the electric lamp bulb extends through axial apertures in the reflector and in the shade and is threaded into a lamp socket in the standard. The shade support socket in a preferred embodiment is perforated to afford an open work latticed, or lantern effect for direct transmission of light therethrough from below the reflector.

In the accompanying drawings, in which is shown one of various possible embodiments of the several features of the invention:

Fig. 1 is a side elevation of an indirect lighting floor lamp formed in accordance with the present invention.

Fig. 2 is a vertical section through the illuminating assembly of the lamp shown in Fig. 1.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 2.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2.

Fig. 5 is a perspective view of the shade receiving socket, and

Fig. 6 is an enlarged fragmentary view of the section shown in Fig. 4 showing the relation of the embossing with respect to the socket windows.

While a preferred indirect lighting fixture in a floor lamp or torchère embodiment is shown and described, the invention in its broader aspects may be satisfactorily embodied in a wide variety of lighting fixtures

using various illumination sources and various shading and reflecting means.

In that form of the invention here shown the lamp includes a pedestal including a supporting base 10 and a vertical rod 11, of any desired artistic design.

Mounted as by screw threading or the like upon the upper end of the stand 11, a supporting and enclosing ornamental housing 12 is provided within which is mounted the lamp socket 13, which is preferably of the pull chain switch socket type and which receives an illumination source such as the partially frosted incandescent lamp bulb 14.

The upper end of the housing 12 is flared outwardly and the side walls are apertured, thus to provide an apertured cup shaped socket as shown in Fig. 5. The configuration of the socket is such as to provide an outer ring 15 joined to the body of the housing 12 by spider like connecting struts 16 which form therebetween ornamental windows 17.

Supported by the socket there is provided a translucent light diffusing shade 18, which is preferably substantially bell shaped, and may have a substantially upstanding rim flange 19. The base or hub of the shade is of reduced bell shaped configuration as at 20, and is received within and embraced by the socket, whereby the interfitting of the shade within the socket constitutes a sufficient and complete support therefor.

The rim 15 of the socket which constitutes the support for the shade is substantially segment shaped in cross section, the outer curved face being preferably ornamented to conform with the artistic theme of the shade and housing. The inner faces of the rim are both slightly circular, the upper one constituting a support for the shade by receiving thereon the lower portion thereof just adjacent the hub 20 thereof. The substantially vertical face is also curved to conform with the curved surface of the hub. Thus while the upper surface sustains the weight of the shade, the inner surface embraces the side of the hub to prevent lateral movement of the hub within the socket.

The shade 18 is suitably embellished by decorative work as indicated at 18A, such decoration preferably extends outwardly from the surface of the shade and is received within the windows 17, as shown in Fig. 6, thus insuring proper alignment of shade and support. Turning movement of the shade within the support is prevented by contact of the decoration with the struts 16.

For reflecting rays outwardly from the illumination source, there is provided within the shade 18 a reflector 21 which is preferably of silvered metal or equivalent opaque reflecting material. The reflector 21 is also substantially bell shaped but does not include a reduced portion at its inner end. The outer rim of the shade 21 may be reversely bent as at 22 and affords an edge which may extend substantially perpendicular to the flange 19 of the shade. The reflecting rim is of smaller diameter than that of shade flange 19, whereby the reflector may be received within the shade and supported by contact of rim 22 against the inner face of the shade below the flange 19 thereof. The reflector is of curvature different from that of the shade to contact the latter substantially only at rim 22, thereby forming a dead air space between the shade and the reflector to prevent overheating of the shade from the heat generated by the bulb 14. The shade, however, affords complete support for the reflector by suspending the latter from its rim.

The shade has a hub aperture 23, and the reflector an aperture 24, the stem 25 of lamp 14 extends through said apertures and is threaded into the socket 13. The bulb 14 of the lamp is of larger diameter than the apertures 23 and 24 so that the shade and reflector, though they merely rest upon their respective supports, cannot drop out of place if the fixture be moved about or roughly handled. Thus it will be seen that the assembly provides for the axially aligned support and retention of the housing, shade, reflector and lamp.

In the operation of the device when the bulb 11 is energized, light will shine therefrom directly through the inner face of the shade both at the flange 19 and at the windows 17. The major portion of the illumination will be reflected upward from the reflector 21 and cast upon the ceiling. The interposed opaque reflector renders the body of the shade dark, but the protruding rim flange 19 unshielded by reflector 21 appears almost incandescent by contrast, affording a most attractive corona effect.

The lattice work or equivalent effect produced by shade hub 20 within the socket struts affords a miniature lantern effect, light from lamp 14 passing through ornamental windows 17 which are bounded by the opaque rim 15 and the struts 16.

The exterior of the shade is faintly illuminated by reflected rather than by transmitted light. This illumination results more particularly by diffusion from windows 17 and from the corona rim flange 19. Surface ornamentation on the shade will thereby be effectively set off.

The bulb 14 of the lamp assembly is preferably frosted over the upper portion of its surface as indicated, and diffuses the light that is directly cast upon the ceiling and prevents a sharp image of the incandescent filament thereat. The illuminated rim flange 19 moreover aids in shading off the rim of the more or less sharply defined circle of light otherwise cast upon the ceiling from reflector 21.

It will also be noted that the frosting ex-

tends over only the outer top end of the bulb and permits direct impingement of light rays against the flange 19, the body of the reflector 21 and the reduced base 22. Thus the reflector receives a maximum of light from the illuminating source and spreads or diffuses the same over a relatively larger ceiling area.

The invention as herein described will be seen to provide not only simplicity of structure and assembly together with lighting efficiency, but will moreover provide novel lighting effects which are not dependent upon super structures or added parts of any kind. The lantern effect at the base of the shade will be seen to be provided without the use of either separate light sources or additional parts or complicated structures. The corona effect, while in itself new, is provided by a unique simplicity not heretofore attained in any type of lamp. It will also be noted that the assembly is supported and retained in aligned relation without the use of any specific securing means such as screws commonly employed in such assemblies.

It will of course be understood that other types of illuminating sources may be used and that in the use of equivalent illuminating sources an equivalent socket for supporting the source and supply energy or fuel thereto will be utilized without departing from the spirit of the invention.

It will also be understood that, if desired, the reflector may be joined permanently to the shade or may be formed as an integral part thereof, as by application upon the shade of reflecting material by electroplating or the like. The invention is of course not confined to the use in a single device of both the windows and the corona flange, each one being separately applicable in a lamp assembly.

It will thus be seen that there is herein described an apparatus in which the several features of this invention are embodied, and which apparatus in its action attains the various objects of the invention and is well suited to meet the requirements of practical use.

As many changes could be made in the above construction, and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. A lamp assembly including an openwork support having a socket, a shade carried by said support having a reduced portion lodged in the said socket and a reflector supported within said shade and having an axial aperture through which the reduced portion of said shade receives illumination.

2. A lamp assembly including a support having a socket, a shade carried by said support and having a reduced portion lodged in said socket and a reflector within said shade resting therein by rim contact therewith, a rim of said shade protruding beyond a rim of said reflector, said shade having an aperture co-axial with said socket and through which the reduced portion of said shade receives illumination.

3. A lamp assembly including a support, a shade carried by said support and a reflector within said shade said shade extending beyond said reflector to receive the direct impingement of light rays to provide illumination of the edge of the shade to provide a corona effect.

4. A lamp assembly including a socketed base, a lamp shade having a portion thereof receivable within the socket for support by said base and a reflector within said shade, said reflector being supported by the shade through contact of one edge thereof with the inner face of the shade, said reflector being curved inwardly from its contacting edge, for spaced relation of the major portion of said reflector with respect to said shade.

5. A lamp assembly including a support affording a socket and a translucent shade having a reduced portion receivable within said socket an enlarged portion protruding beyond said socket, said socket being apertured to provide for the emission of rays through said shade and said socket and a reflector within the enlarged portion of said shade.

6. A lamp assembly including a support affording a socket and a shade having a reduced portion receivable within the socket of the base, said socket being apertured to provide for the emission of rays through said shade and said socket, said shade including protruding decorations thereon arranged to extend into the apertures of the socket to maintain proper alignment of the shade with respect to the base.

7. An upright indirect lighting fixture including a base affording a socket, a shade receivable in said socket and an enlarged portion extending thereabove, and a reflector mounted within said shade for directing light from said fixture upwardly from said shade and base, the socket of said base being apertured to permit the emission therethrough of rays transmitted through said shade.

8. An upright indirect lighting fixture including a base affording a socket, a shade receivable in said base and a reflector mounted within said shade for directing light from said fixture upwardly from said shade and base, said shade extending beyond said reflector at both edges thereof to permit direct illumination of the shade at both edges,

whereby a corona effect will be provided at one edge of the shade and a lantern effect will be produced at the supported edge of said shade.

9. An upright direct lighting fixture, including a base affording a socket, a shade receivable within said base, and a reflector mounted within said shade for directing light from said fixture upwardly from said shade and base, said shade extending beyond said reflector on one edge thereof to permit the direct impingement of rays from illuminating source within the fixture upon one edge of the shade to provide a corona effect.

10. An upright direct lighting fixture including a base affording a socket a shade receivable in said base, and a reflector mounted within said shade for directing light from said fixture upwardly from said shade and base, said shade including an upstanding flange extending beyond the reflector adapted to receive the direct impingement of rays from an illuminating source within the fixture to provide a corona effect therefor.

11. A lamp assembly including a shade terminating at its rim in a flange extending parallel to the axis of the shade, and a reflector within the shade having its rim within the flange, thus to permit direct impingement of rays from an illuminating source upon the flange, to illuminate the same more brightly than the illumination of the body of the shade.

Signed at New York, in the county of New York and State of New York, this 16th day of June, A. D. 1930.

JACOB H. BLITZER.