Oct. 17, 1939. P. J. PARLATO 2,176,236

LIGHTING FIXTURE

Filed Feb. 18, 1938

Fig. 1.

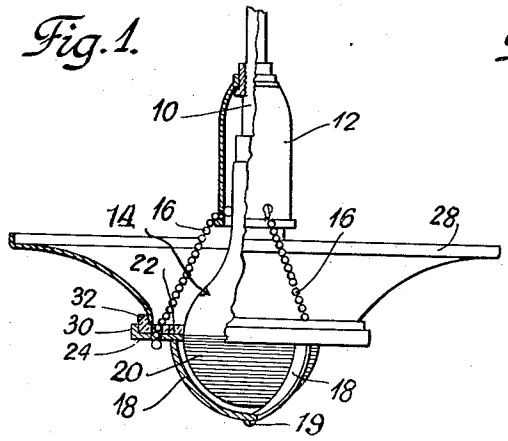



Fig. 2.

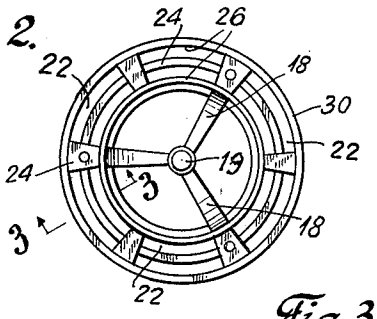
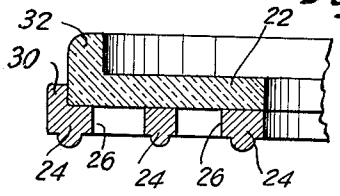



Fig. 3.



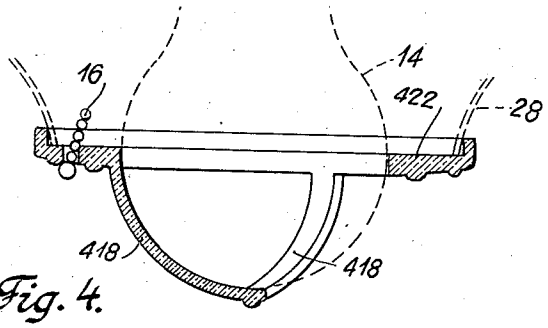
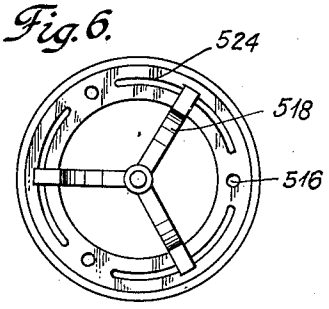




Fig. 4.

Fig. 6.



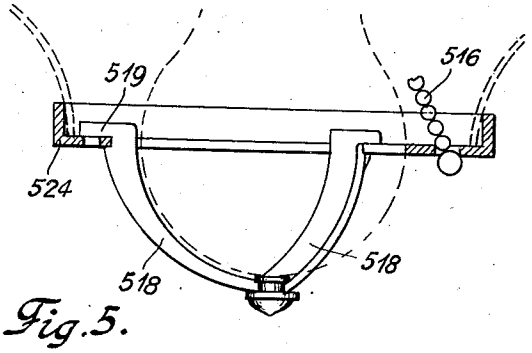




Fig. 5.

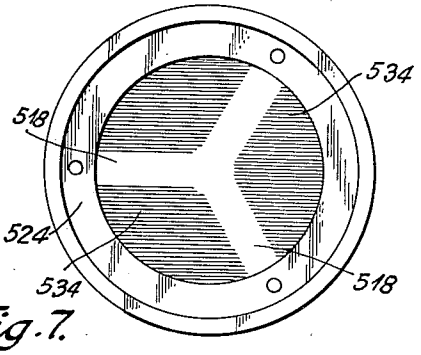



Fig. 7.

Peter J. Parlato INVENTOR.

BY Brown & Jones

ATTORNEYS

Patented Oct. 17, 1939

2,176,236

# UNITED STATES PATENT OFFICE

2,176,236

## LIGHTING FIXTURE

Peter J. Parlato, New York, N. Y.

Application February 18, 1938, Serial No. 191,131

8 Claims. (Cl. 240—78)

This invention relates to lighting fixtures and more specifically to overhead lighting fixtures.

In general, it is an object of the invention to provide a device of the character described, which will efficiently perform the purposes for which it is intended, which is simple and economical of construction, which can be expeditiously, conveniently and safely manipulated, and which can be readily manufactured and assembled.

Another object of the invention is to provide a fixture having interiorly-illuminated, lower, structural elements and such elements so illuminated although the lower end of the light bulbs used have opaque or slightly translucent covers thereover; to provide a fixture having structural elements which extend beneath such a bulb and cover and which may be at least faintly illuminated from the bulb, as by a light-transmitting glass above the upper edge of such cover; and to provide such fixtures where the under side of an opaque reflector is indirectly illuminated independently of, or simultaneously with, the illumination of the lower structural members.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises an article of manufacture possessing the features, properties, and the relation of elements which will be exemplified in the article hereinafter described, and the scope of the application of which will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description, taken in connection with the accompanying drawing, in which:

Figure 1 is a view, partly in elevation and partly in vertical section, of a device embodying one form of the invention;

Fig. 2 is a view as seen from below of the lower part of the device shown in Fig. 1;

Fig. 3 is a view, in section, of a portion of the device shown in Fig. 1 and taken along the line 3—3 of Fig. 2;

Figs. 4 and 5 are views similar to Fig. 1 of modifications of the device shown in Fig. 1;

Fig. 6 is a view as seen from below of the device shown in Fig. 5; and

Fig. 7 is a view as seen from below of a modification of the device shown in Fig. 5.

The present invention contemplates, among other forms, an indirect lighting unit having structural and decorative elements on the under side and extending across the bottom thereof which are illuminated sufficiently to be visible by, but not necessarily directly from, the principal light source.

In Figure 1, 10 denotes a lamp socket suspended or supported in any suitable fashion. From or with socket 10 there may be supported the light unit and/or reflecting units. As shown, a sleeve 12 is screwed onto and surrounding socket 10. An electric light bulb 14 may be screwed into and extend downward from socket 10. Supporting means are provided for hanging the various reflectors from the sleeve 12. These may take any convenient form such as a plurality of chains 16 detachably secured, each at a respective end, to the sleeve.

Suspended in one way or another from the chains 16 are a plurality of ribs 18 spaced at their upper ends and approaching each other at their lower ends where they may be integral with each other or connected to each other as at the connection 19. They define a space interior to them in which an electric light bulb may be positioned. They may be concave outward in accordance with any shape of a bulb. They may actually support the bulb.

In general, it is intended that the ribs 18 be visible even though no direct rays from the bulb strike them. To assist in this, ribs 18 may be of smooth or polished metal.

The light from the bulb 14 may be principally directed upward by a reflecting cap or cover 20 on the lower side of the bulb. It may be on the inside or outside thereof and may or may not conform to the bulb shape. It may be spaced from the bulb envelope. It extends to the upper ends of the ribs.

Above, or in the neighborhood of, the upper ends of the ribs, means are provided for indirectly illuminating the ribs. This may take the form of a reflecting annulus 22 preferably of glass which extends above the upper edge of the cover 20 and intercepts some of the light rays. Its upper surface may be frosted or cut at an angle or otherwise arranged so as to direct those rays downward to give at least a relatively soft glow toward and onto the ribs. Beneath the annulus 22 there is an opaque annulus 24 preferably of metal. It may support the glass ring 22 and be supported by chains 16. It may be connected to and support ribs 18. It has vertical openings 26 through it leading to the superposed ring 22, which openings may be directed toward the ribs 18.

Reflector 28 extends upwardly and outwardly and is positioned to reflect upwardly light received upon its upper surface from the bulb 14. Reflector 28 may be supported directly from

chains 16 and support in turn the ring and annulus, or it may rest on ring 22 or annulus 24. As shown, the ring 22 has an outer upstanding flange 32 radially inward of flange 30. The lower edge of reflector 28 seats on ring 22 radially inward of flange 30. Reflector 28 is preferably opaque.

If now, the lower end of the bulb is covered as by a coating or a cap or cover, borne by the bulb or surrounding elements, light escapes from the bulb over the upper rim of the cover onto the upper side of reflector 28 and also into the glass ring 22. The latter, due to its general cloudiness or to its surfaces, glows and reflects light through the openings 26 illuminating the ribs 18. The flange 32 also transmits light to the under side of reflector 28 so as to give at least a soft illumination thereof.

The coating, cap or cover is preferably opaque. It may be metallic. It may be very slightly translucent. The opacity may arise from the material comprising the lower end of the bulb.

In the case where there is no covering 20 or the like, the other parts function to illuminate those parts which are not directly in the path of the light rays and, in that way, the ribs 18, for example, instead of appearing dark, have their outer surfaces independently lighted.

In the modification shown in Fig. 4, the ribs 418 are supported by the glass annulus 422. They may also be of glass and be integral with the annulus. As before, if the lower end of the light bulb is covered, the ribs 418 are illuminated from the annulus but, in this form, they are interiorly lighted so that they glow. They may be slightly milky. They may be colored glass. Thus, they may seem to be congealed shafts of glowing light extending under the device as a whole.

In the modification shown in Fig. 5, the glass ribs 518 are supported by the annulus 524 which is supported by supports 516. The upper end 519 of each rib catches the light from above and illuminates the interior of the ribs as described in connection with Fig. 4. Between the ribs 518, there may be frosted or dark glass not lighted from above, or metal or opaque panels 534, as shown more fully in Fig. 7.

The light sources referred to herein as lamps or bulbs may be of any convenient design and need not be bulbous in contour, although that is a preferred form. They may be raised or lowered relatively to the parts surrounding them by moving those parts by screwedly changing the position of the sleeve 12 with respect to the socket 10. The opaque covering on the bulbs may have a portion thereof removed or absent so as to give a decorative design. The amount of light emitted through such a design may be negligible.

Any element which is capable of surrounding another element may be used as an equivalent in place of those elements which are described herein as annular. The surrounding elements may be rings, polygons, etc., with many flat, outer, peripheral sides, for example. Translucent materials such as the translucent plastics may be used in place of, and with effect equivalent to, the glass mentioned herein.

Since certain changes may be made in the above article and different embodiments of the invention could be made without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

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

1. In a device of the character described, the combination comprising a supporting element, an annular metallic element supported by said supporting element and having vertical openings therethrough, an annular glass element supported by said metallic element and positioned over said openings, an annular opaque reflector extending upward and outward and supported by one of said elements, depending, metallic, outwardly-bulging ribs joined at their lower ends and supported by one of said elements, an electric light within the space defined by said ribs, and an opaque covering associated with the illuminated end of said light and extending upward as far as said glass element, said glass element being adapted to receive light over the edge of said covering and to reflect said received light down through said openings and adjacent said ribs to illumine said ribs with at least a faint glow and to reflect said received light against the lower surface of said opaque reflector, the lower surface of said reflector being positioned to receive only such reflected light, the upper surface of said reflector being positioned to receive light direct from said electric light.

2. In a device of the character described, the combination comprising a supporting element, an annular metallic element supported by said supporting element and having vertical openings therethrough, an annular glass element supported by said metallic element and positioned over said openings, depending, metallic, outwardly-bulging ribs joined at their lower ends and supported by one of said elements, an electric light within the space defined by said ribs, and an opaque covering associated with the illuminated end of said light and extending upwardly as far as said glass element, said glass element being adapted to receive light over the edge of said covering and to reflect said received light down through said openings and adjacent said ribs to illumine said ribs with at least a faint glow.

3. In a device of the character described, the combination comprising an annular opaque element having a vertical opening therethrough, an annular glass element associated with said opaque element and positioned on said opening, means for supporting said elements, depending opaque ribs approaching each other at their lower ends and supported by one of said elements, an electric light within the space defined by said ribs, an opaque covering associated with the illuminated end of said light and extending upward as far as said glass element, said glass element being adapted to receive light over the edge of said covering and to reflect said received light down through said opening and against said ribs to illumine said ribs with at least a faint glow.

4. In a device of the character described, the combination comprising an annular opaque element having a vertical opening therethrough, an annular glass element associated with said opaque element and positioned on said opening,

means for supporting said elements, depending opaque ribs approaching each other at their lower ends and supported by one of said elements, an electric light within the space defined by said ribs, said glass element being adapted to receive light from said electric light and to reflect said received light down through said opening and against said ribs to illumine said ribs with at least a faint glow.

5. In a device of the character described, the combination comprising an annular opaque element having a vertical opening therethrough, an annular glass element associated with said opaque element and positioned on said opening, means for supporting said elements, depending opaque ribs approaching each other at their lower ends and supported by one of said elements, an electric light within the space defined by said ribs, an opaque covering associated with the illuminated end of said light and extending upward as far as said glass element, said glass element being adapted to receive light over the edge of said covering and to reflect said received light down through said opening and against said ribs to illumine said ribs with at least a faint glow, and an annular opaque reflector extending upward and outward and supported in association with the first-mentioned elements.

6. In a device of the character described, the combination comprising an annular opaque element having a vertical opening therethrough, an annular glass element associated with said opaque element and positioned on said opening, means for supporting said elements, depending opaque ribs approaching each other at their lower ends and supported by one of said elements, an electric light within the space defined by said ribs, an opaque covering associated with the illuminated end of said light and extending upward as far as said glass element, said glass element being adapted to receive light over the edge of said covering and to reflect said received light down through said opening and against said ribs to illumine said ribs with at least a faint glow, and an annular opaque reflector extending upward and outward and supported in association with the first-mentioned elements and positioned to receive light on its under surface from said glass element.

7. In a device of the character described, the combination comprising a supporting element, an annular element supported by said supporting element and having vertical openings therethrough, an annular glass element supported by the first-mentioned annular element and positioned over said openings, an annular opaque reflector extending upward and outward and supported by one of said elements, depending ribs joined at their lower ends and supported by one of said elements, an electric light within the space defined by said ribs, and an opaque covering associated with the illuminated end of said light and extending upward as far as said glass element, said glass element being adapted to receive light over the edge of said covering and to reflect said received light down through said openings and adjacent said ribs to illumine said ribs with at least a faint glow and to reflect said received light against the lower surface of said opaque reflector, the lower surface of said reflector being positioned to receive only such reflected light, the upper surface of said reflector being positioned to receive light direct from said electric light.

8. In a device of the character described, the combination comprising a supporting element, a planar element having a central opening and supported by said supporting element and having vertical openings therethrough, reflecting means for reflecting light from above said openings down through said openings, an opaque reflector having a central opening and extending upwardly and outwardly and above said planar element, spaced ribs joined at their lower ends and depending below said planar element, an electric light within the space defined by said ribs, and an opaque covering associated with the illuminated end of said light and extending upward substantially as far as the top of said planar element, said reflecting means being positioned to receive illumination which has come from said light over the edge of said covering and to reflect said received illumination adjacent said ribs to illumine said ribs with at least a faint glow and to reflect said received light against the lower surface of said opaque reflector, the lower surface of said reflector being positioned to receive only such reflected light, the upper surface of said reflector being positioned to receive light direct from said electric light.

PETER J. PARLATO.