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A. JANOWITZ

2,334,492

DECORATIVE ILLUMINATING DEVICE

Filed Aug. 30, 1941

Fig. 1.

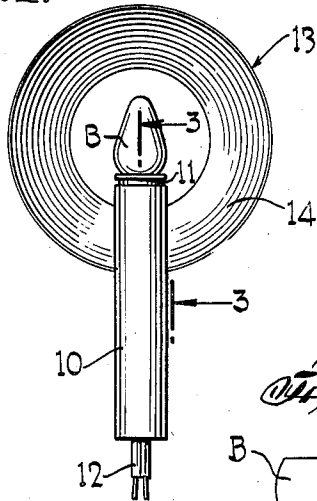


Fig. 2.

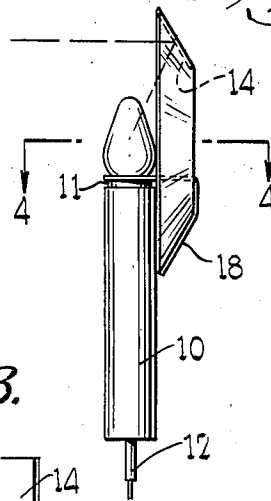


Fig. 3.

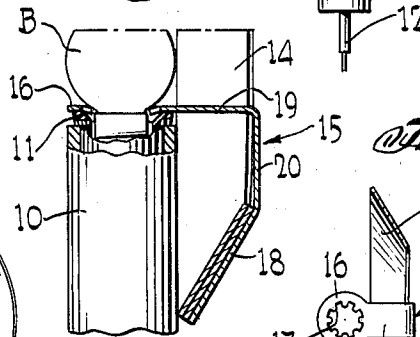


Fig. 5.

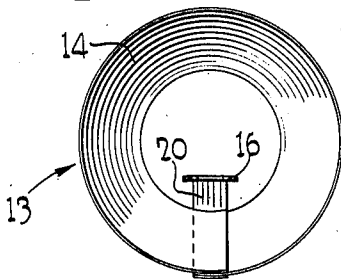


Fig. 4.

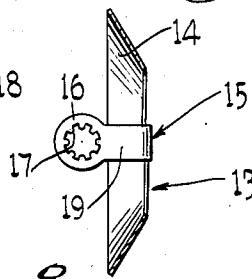


Fig. 6.

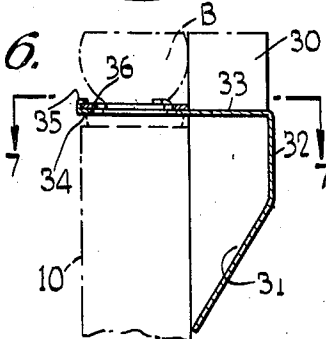


Fig. 8.

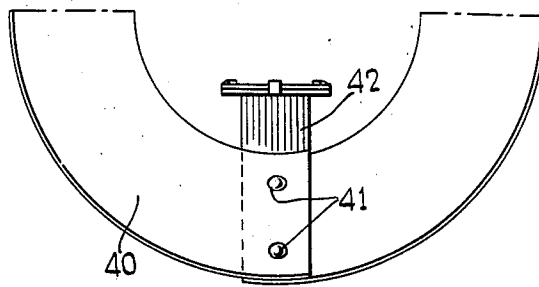
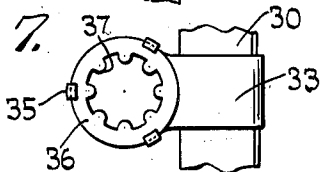


Fig. 7.



INVENTOR.

ARNOLD JANOWITZ

BY

Wm. J. Jankiewicz
ATTORNEY

UNITED STATES PATENT OFFICE

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DECORATIVE ILLUMINATING DEVICE

Arnold Janowitz, New York, N. Y., assignor to
Noma Electric Corporation, New York, N. Y., a
corporation of New York

Application August 30, 1941, Serial No. 408,913

12 Claims. (Cl. 240-10)

My invention relates to decorative illuminating devices.

One of the objects of my invention is to provide an illuminating device of improved construction which when illuminated will cast a broad halo of light spaced from the source of illumination.

Another object of my invention is to provide an illuminating device of the character described wherein the supporting means for the halo forming portion is concealed, thereby causing the halo to stand out in contrast to its background.

A further object of my invention is to provide an illuminating device of the character described simple in construction, easy to assemble and highly effective as a decorative device.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the claims.

In the accompanying drawing, in which are shown various possible embodiments of this invention,

Fig. 1 is a front elevational view of an illuminating device constructed in accordance with my invention;

Fig. 2 is a side view thereof;

Fig. 3 is an enlarged fragmentary view partially in section taken along line 3-3 of Fig. 1;

Fig. 4 is a sectional view taken along the line 4-4 of Fig. 2, but with the electric candlestick removed;

Fig. 5 is a front view of the halo member shown apart from the candlestick;

Fig. 6 is a fragmentary sectional view similar to Fig. 3 of a halo member embodying a modified form of my invention;

Fig. 7 is a view taken along the line 7-7 of Fig. 6; and

Fig. 8 is a fragmentary front view of a halo member embodying still another form of my invention.

The illuminating device constructed in accordance with my invention may be applied to any suitable type of illuminating fixture, but for convenience I have shown, in Figs. 1 through 3 of the drawing, my invention as applied to an electrical candlestick type of illuminating fixture.

Referring in detail to the drawing, 10 comprises a tubular member, which may be a part of a candle-simulating member or any other suit-

able fixture, having a standard type of miniature electric bulb socket 11 for a miniature bulb B of any suitable type and shape to serve as the source of illumination.

In accordance with my invention, I have provided a halo-producing member 13 which in the form shown in Figs. 1 through 5, comprises a symmetrical annular segment 14 of a reflecting surface such as a cone or a paraboloid. The segment is preferably wide enough to cast a broad halo and its inner periphery is spaced a substantial distance from the bulb B so as to allow the halo reflected from the segment 14 to stand out clearly when the source of illumination B is energized. The contour and angular inclination of the reflecting surface of the segment 14 should be such that when it is permanently disposed in predetermined position in back of the center of illumination of the bulb B and is substantially symmetrically disposed around such center, said segment will reflect light forwardly in an annular beam which is distinctly visible as a halo from directly in front of the device and at a considerable distance therefrom.

The segment 14 may be formed from a strip of transparent flat polished plastic material, such as Celluloid, synthetic resin of the phenol or urea formaldehyde condensation, or other type, or cellulose acetate. The strip may first be cut out from a piece of flat stock in the form of an annular disc. A short piece of the disc is then removed and the ends of the resultant circular arc overlapped as shown in Figs. 3 and 5 and cemented together. The formed surface will be a frustum of a cone whose apex angle is determined by the annular length of the piece which was removed from the disc and the degree of overlap of the ends.

Means is also provided for maintaining the reflecting segment 14 in proper predetermined position relative to the source of illumination. Such means comprises a strip 15 of plastic material similar to the material forming the reflecting segment. Said strip has one end thereof enlarged to provide a horizontal apertured circular disc 16 having a plurality of co-planar radially extending fingers 17 uniformly spaced around its inner periphery. The ends of the fingers 17 define a circle of slightly smaller diameter than that of the threaded brass shell on the base of the lamp B. Due to this construction, when the lamp base is inserted through the aperture in the disc 16, the fingers 17 will be deflected as shown in Fig. 3 and frictionally grip said base. In addition, when the lamp is fully screwed into the

socket 11, the disc 16 will be gripped between said socket and the glass envelope of the lamp which abruptly swells out adjacent the lamp base. The other end 18 of the strip is permanently secured to reflecting segment 14 by a plastic cement, such as acetone. The end 18 preferably underlies the overlapping cemented ends of the reflecting segment to preserve a neat appearance. The two ends of the strip 15 are connected by a right angled portion comprising a horizontal leg 19 coplanar with the disc 16 and a vertical leg 20 angularly disposed with respect to the inclined end 18. By constructing the support as above described, the halo will be reflected forwardly at right angles to the vertical axis of the bulb B and may be made to face in any desired direction by rotating the strip 15.

The width of the strip 15 is no greater than the diameter of the cylinder 10 which is disposed immediately in front of the strip, so that when the illuminating device is viewed from the front, the supporting means is concealed. In this manner a space is provided between the source of illumination and the reflecting segment 14, which renders the background of the halo devoid of light and causes the halo to appear to be unsupported or suspended in air.

In Figs. 6 and 7 I have shown a modified form of my invention, the essential difference between this modified form and that illustrated in Figs. 1 through 5 being that the halo member and supporting means therefor are made from metal instead of a plastic material. In this form of my invention the halo member and supporting means are formed in a single integral piece from thin flat metal stock. The halo member 30 comprises a conical segment whose front surface 31 may be silvered to enhance its reflecting property. Projecting vertically upwardly from its inner periphery is a leg 32 from whose extreme top edge extends a horizontal arm 33. The forward end of said arm is enlarged to provide an apertured circular disc 34 having three peripherally disposed projections 35. Overlying the disc 34 is a fiber insulating washer 36 having a plurality of fingers 37 similar to the fingers 17 in the first described form of my invention. The projections 35 are bent around the edge of the washer 36 to permanently hold the same in place.

In Fig. 8 I have shown still another modified form of my invention, wherein a differently fashioned metal halo member is employed. In this embodiment the halo member 40 comprises a conical segment of thin metal formed by cutting an annular disc from flat metal stock, removing a circular segment and then overlapping the ends which are permanently connected by rivets 41. The metallic portion of the supporting means 42, which may be of the same type as that described in Figs. 6 and 7, is cut out at the same time as the annular disc so as to be integral therewith.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

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

1. An illuminating device of the character de-

scribed comprising an elongated illuminating member including a support, a socket at the top of said support and an electric lamp mounted in said socket; a reflecting member comprising a symmetrical annular segment of a reflecting surface; and means cooperating with said elongated illuminating member for supporting said reflecting member with the longitudinal axis of said elongated illuminating member disposed at right angles to and transecting the axis of symmetry of said reflecting member and with the center of illumination of said electric lamp lying on said axis of symmetry so that light cast by said electric lamp on said reflecting member will be reflected as an annular beam of light encircling said lamp; the inner periphery of said reflecting member being spaced outwardly from said electric lamp and said device having no members associated therewith which are disposed between said elongated illuminating member and said reflecting member and visible from the front of said device, whereby light emanating from said electric lamp is not visible between said lamp and said reflecting member and said annular beam appears to be unsupported.

2. An illuminating device of the character described comprising an elongated illuminating member including a support, a socket at the top of said support and an electric lamp mounted in said socket; a reflecting member comprising a symmetrical annular segment of a reflecting surface; and means cooperating with said electric lamp for supporting said reflecting member with the longitudinal axis of said elongated illuminating member disposed at right angles to and transecting the axis of symmetry of said reflecting member and with the center of illumination of said electric lamp lying on said axis of symmetry and forwardly of said reflecting member so that light cast by said electric lamp on said reflecting member will be reflected as an annular beam of light encircling said lamp; the inner periphery of said reflecting member being spaced outwardly from said electric lamp and said device having no members associated therewith which are disposed between said elongated illuminating member and said reflecting member and visible from the front of said device, whereby light emanating from said electric lamp is not visible between said lamp and said reflecting member and said annular beam appears to be unsupported.

3. An illuminating device of the character described comprising an elongated illuminating member including an electric lamp and a support therefor, a reflecting member symmetrically disposed with respect to and positioned behind the center of said lamp, said reflecting member comprising a symmetrical annular segment of a reflecting surface, and means cooperating with said electric lamp for supporting said reflecting member with the longitudinal axis of said elongated illuminating member disposed at right angles to and transecting the axis of symmetry of said reflecting member, said supporting means being disposed immediately behind said support for the electric lamp, the inner periphery of said reflecting member being spaced outwardly from said electric lamp, whereby light emanating from said electric lamp is not visible between said lamp and said reflecting member and said annular beam appears to be unsupported.

4. An illuminating device of the character described comprising an elongated illuminating member including a support, a socket at the top of said support and an electric lamp mounted

in said socket; a reflecting member comprising a conical frustum; and means cooperating with said electric lamp for supporting said reflecting member with the longitudinal axis of said elongated illuminating member disposed at right angles to and transecting the axis of symmetry of said reflecting member and with the center of illumination of said electric lamp lying on said axis of symmetry and forwardly of said reflecting member so that light cast by said electric lamp on said reflecting member will be reflected as an annular beam of light encircling said lamp; the inner periphery of said reflecting member being spaced outwardly from said electric lamp, and said device having no members associated therewith which are disposed between said elongated illuminating member and said reflecting member and visible from the front of said device, whereby light emanating from said electric lamp is not visible between said lamp and said reflecting member and said annular beam appears to be unsupported.

5. An illuminating device of the character described comprising an elongated illuminating member including a support, a socket at the top of said support and an electric lamp mounted in said socket; a reflecting member comprising a conical frustum of transparent material; and means cooperating with said electric lamp for supporting said reflecting member with the longitudinal axis of said elongated illuminating member disposed at right angles to and transecting the axis of symmetry of said reflecting member and with the center of illumination of said electric lamp lying on said axis of symmetry and forwardly of said reflecting member so that light cast by said electric lamp on said reflecting member will be reflected as an annular beam of light encircling said lamp; the inner periphery of said reflecting member being spaced outwardly from said electric lamp, and said device having no members associated therewith which are disposed between said elongated illuminating member and said reflecting member and visible from the front of said device, whereby light emanating from said electric lamp is not visible between said lamp and said reflecting member and said annular beam appears to be unsupported.

6. For use with an electric light bulb supported in a socket, a frusto-conical reflecting member whose inner periphery is substantially larger than the illuminating portion of said light bulb whereby light emanating from said electric light bulb will be reflected forwardly from said frusto-conical member in an annular beam and will not be visible between said bulb and said reflecting member, and means for supporting said reflecting member, said means comprising a strip of material having an apertured end adapted to be interposed between said bulb and said socket, the other end of said strip being permanently attached to said reflecting member.

7. For use with an electric light bulb supported in a socket, a frusto-conical reflecting member whose inner periphery is substantially larger than the illuminating portion of said light bulb whereby light emanating from said electric light bulb will be reflected forwardly from said frusto-conical member in an annular beam and will not be visible between said bulb and said member, and means for supporting said member, said means comprising a strip of material having an apertured end adapted to be interposed between said bulb and said socket, the other end of said strip being permanently attached to said

frusto-conical member, the forward face of the latter being disposed behind the apertured end of said strip.

8. For use with an electric light bulb supported in a socket, a frusto-conical member of transparent material whose inner periphery is substantially larger than the illuminating portion of said light bulb whereby light emanating from said electric light bulb will be reflected forwardly from said frusto-conical member in an annular beam and will not be visible between said bulb and said member, and means for supporting said member, said means comprising a strip of transparent material having an apertured end adapted to be interposed between said bulb and said socket, the other end of said strip being permanently attached to said frusto-conical member, the forward face of the latter being disposed behind the apertured end of said strip.

9. For use with an electric light bulb supported in a socket, a frusto-conical reflecting member whose inner periphery is substantially larger than the illuminating portion of said light bulb whereby light emanating from said electric light bulb will be reflected forwardly from said frusto-conical member in an annular beam and will not be visible between said bulb and said member, and means for supporting said member, said means comprising a strip, one end of said strip being enlarged and having an aperture adapted to be slipped over the base of said light bulb with said enlarged end interposed between said bulb and said socket, said enlarged end being adapted to be horizontally disposed, the other end of said strip having an inclined portion permanently attached to said frusto-conical member and an intermediate portion integrally connecting both ends of said strip.

10. For use with an electric light bulb supported in a socket, a frusto-conical member whose inner periphery is substantially larger than the illuminating portion of said light bulb whereby light emanating from said electric light bulb will be reflected forwardly from said member in an annular beam and will not be visible between said bulb and said member, and means for supporting said member, said means comprising a strip, one end of said strip being enlarged and having an aperture adapted to be slipped over the base of said light bulb with said enlarged end interposed between said bulb and said socket, said enlarged end being adapted to be horizontally disposed, the other end of said strip having an inclined portion permanently attached to said frusto-conical member and an intermediate portion integrally connecting both ends of said strip, said intermediate portion including a horizontal leg co-planar with said enlarged end and a vertical leg extending upwardly from said inclined end.

11. For use with an electric light bulb supported in a socket, a frusto-conical reflecting member of metallic material whose inner periphery is substantially larger than the illuminating portion of said light bulb whereby light emanating from said electric light bulb will be reflected forwardly from said frusto-conical member in an annular beam and will not be visible between said bulb and said member, and means for supporting said member, said means comprising a strip of metallic material integral with said frusto-conical member and having an apertured end adapted to be interposed between said bulb and said socket.

12. For use with an electric light bulb sup-

ported in a socket, a frusto-conical reflecting member of metallic material whose inner periphery is substantially larger than the illuminating portion of said light bulb whereby light emanating from said electric light bulb will be reflected forwardly from said frusto-conical member in an annular beam and will not be visible between said bulb and said reflecting member, and means for supporting said member, said means comprising a

strip of metallic material integral with said member and having an apertured end adapted to be interposed between said bulb and said socket, said frusto-conical member comprising a flat circular segment whose ends are disposed in adjacent relationship, and means to hold said ends in such relationship.

ARNOLD JANOWITZ.