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ELECTRIC LAMP HAVING A REVOLVABLE SHADE STRUCTURE

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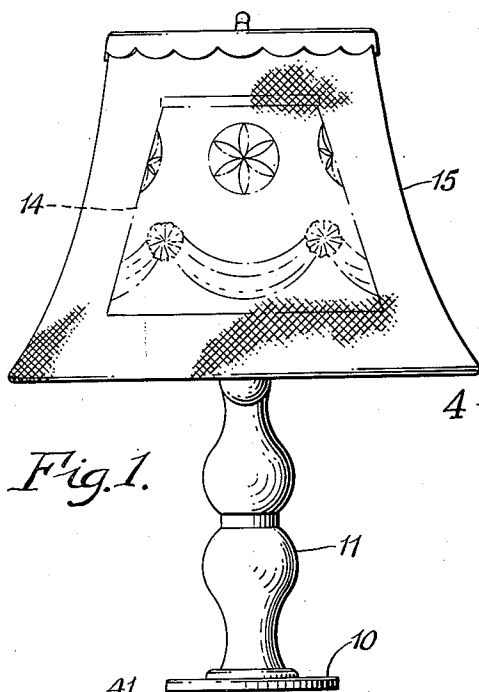


Fig. 1.

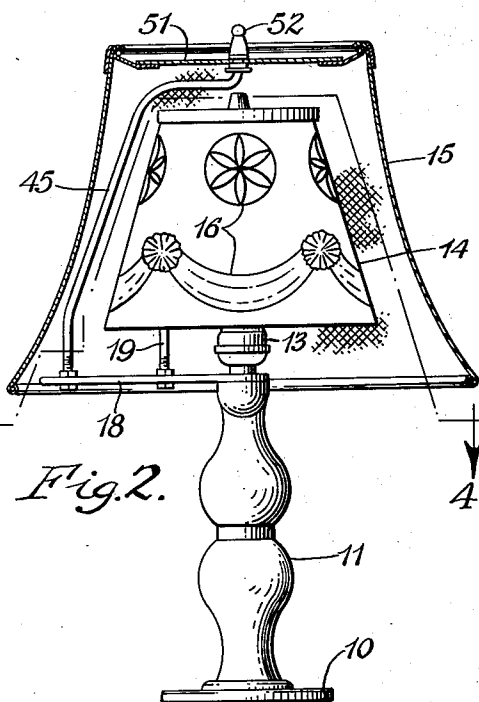


Fig. 2.

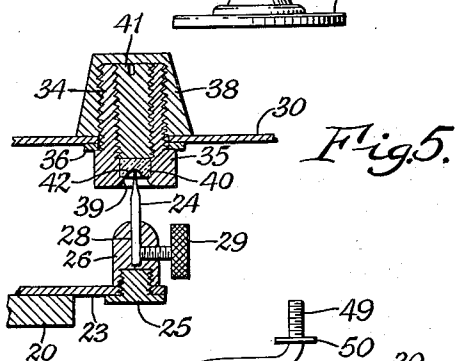


Fig. 5.

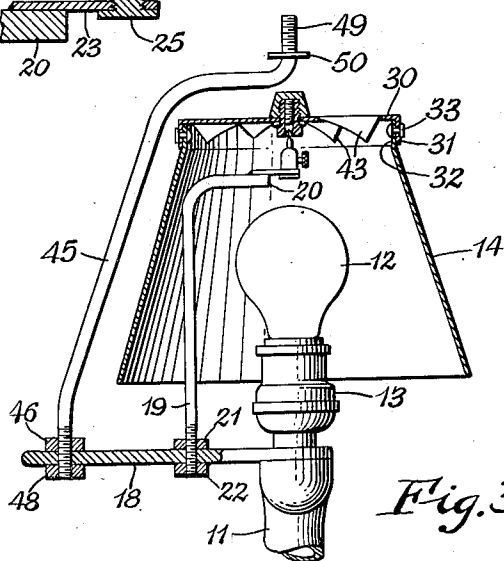


Fig. 3.

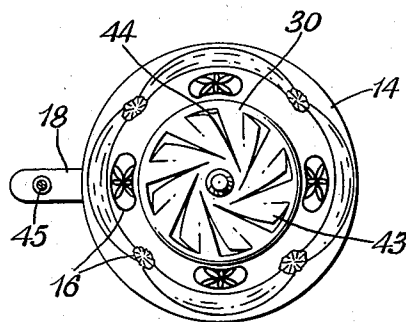


Fig. 4.

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ELECTRIC LAMP HAVING A REVOLVABLE SHADE STRUCTURE

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4 Claims. (Cl. 240—10.1)

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This invention relates to improvements in ornamental lighting devices and more particularly to an electric lamp having a revolvable shade structure.

The primary object of the invention is to provide an electric lamp having a revolvable inner shade which is viewable through a stationary outer shade whereby a highly attractive and ornamental effect is produced, such inner shade bearing indicia or designs of appropriate type to render the lamp suitable for use either in the home or in stores for purposes of attracting attention or advertising.

Another object is to provide such a lamp which is simple in construction, not likely to get out of order, but if so it can be readily repaired including the replacement of parts, and is relatively inexpensive to manufacture.

Other objects and advantages of the invention will be apparent from the following description and accompanying drawings wherein:

Fig. 1 is an elevational side view of an electric lamp embodying the invention.

Fig. 2 is a view similar to Fig. 1 but showing the outer shade in vertical central section so as to expose the inner shade and associated parts.

Fig. 3 is a fragmentary vertical central sectional view, on a slightly enlarged scale, through the revolvable inner shade structure shown in Fig. 2.

Fig. 4 is a view taken along line 4—4, Fig. 2 and showing the revolvable inner shade in elevation and viewed from the top thereof.

Fig. 5 is an enlarged fragmentary section of the means shown in Fig. 3 for mounting the revolvable inner shade for rotation.

The lamp illustrated in the drawings is of the table type and includes a base 10 having an upright pedestal post 11 rising therefrom and an electric bulb 12 arranged in a socket 13 of conventional form mounted in any suitable manner on the upper end of the pedestal 11.

To produce a highly attractive and ornamental effect using the light emitted from the electric bulb 12, a revolvable inner shade 14 surrounds the electric bulb 12 and in turn is surrounded by a stationary outer shade 15. The revolvable inner shade 14 bears indicia or ornamental designs of any desired type, that indicated at 16 in Figs. 1 and 2 being for purposes of illustration only. The skirt portion of the inner shade 14 is shown as being of downwardly flaring frusto-conical form and is made of transparent or translucent material so that the indicia 16 will

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stand out by contrast and be viewable from the exterior of the inner shade. For example, the skirt portion of the inner shade 14 can be composed of a translucent parchment on which the indicia 16 can be painted or otherwise applied in contrasting colors.

The skirt portion of the stationary outer shade 15 is shown as being bell-shaped and is also made of transparent or translucent material so that the design or indicia 16 on the revolvable inner shade 14 can be viewed through the stationary outer shade 15. The skirt portion of the outer shade 15 can be made of any of the usual finely woven textile materials used in conventional types of lamp shades. Further, the skirt portion of the outer shade 15 can be of any color or combination of colors or carry any suitable design for co-operation with the design or indicia 16 on the revolvable inner shade 14. However, no design is shown on the skirt portion of the outer shade 15.

Means are provided for supporting the inner and outer shades 14 and 15 respectively on the pedestal post 11 in such manner that such means are covered by the skirt portion of the outer shade. For this purpose a horizontal arm 18 extends laterally from one side only of the pedestal post 11 at the upper end thereof and can be mounted on this pedestal post in any suitable manner. The horizontal arm 18 is arranged adjacent the lower edge of the outer shade 15 and it is desirable not to have this arm arranged below this edge so that it will not be exposed from the usual angles of view.

A rod 19 is shown as extending vertically upwardly from this horizontal arm 18 adjacent the inner end thereof, the upper end of this rod being bent at right angles as indicated at 20 to extend radially toward the longitudinal axis of the pedestal post 11. While any suitable means for connecting the lower end of the rod 19 on the horizontal arm 18 can be employed, the means shown comprise nuts 21 and 22 arranged above and below respectively the horizontal arm and on the threaded lower end of the rod which extends through a hole provided in this arm, the nut being tightenable against the upper side of this arm and the nut 22 against the lower side thereof. The rod 19 is thus rigidly held on the arm 18.

A bracket 23 is shown as being mounted on the extremity of the upper end portion 20 of the rod 19, the bracket 23 being connected to the rod in any suitable manner such as by welding. The bracket 23 is in the form of a rigid

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metal strip which projects radially inwardly with respect to the longitudinal axis of the pedestal post 11 and on the outer end of this bracket an upstanding pointed spindle or needle 24 is carried. The means for supporting or holding the spindle or needle 24 on the bracket 23 is shown as comprising a screw 25 having its externally threaded shank extending upwardly through a hole adjacent the outer end of the bracket and received in an internally threaded nut member 26 arranged on the upper side of the bracket 23. By turning the screw and nut members 25 and 26 respectively, the same can be firmly clamped to the bracket 23. The nut member 26 is provided with a vertically extending recess 28 opening to the upper end of this nut member. The spindle or needle 24 is removably arranged in this recess 28 and is held fast to the nut member 26 by a thumb screw or set screw 29 arranged in a threaded hole which extends through the wall of the nut member. The inner end of this thumb screw 29 is adapted to engage the lower end of the spindle or needle 24 as shown in Fig. 5. The longitudinal axis of the spindle or needle 24 is substantially coaxial with that of the pedestal post 11.

The inner shade 14 is mounted on the upper pointed end of this spindle or needle 24 for rotation. For this purpose the upper end of the skirt portion of the inner shade 14 is shown as being covered by an end head 30. Referring to Fig. 3, this end head 30 is shown as being provided with a depending continuous annular flange 31 surrounding a cylindrical annular flange 32 formed on the upper end of the skirt portion of the inner shade 14. These flanges 31 and 32 are connected by a series of rivets 33. The end head 30 is shown as being provided with a central opening through which the threaded shank of a screw member 34 extends, the lower end of this screw member being enlarged to provide a head 35 which bears against a lock washer 36 interposed between this head 35 and the lower side of the end head 30. A nut member 38 is arranged above the end head 30 to work on the threaded shank of the screw member 34 and this nut member 38 can be tightened so as to clamp the end head 30 firmly between these members. The screw member 34 is shown as being provided with a central vertical axial passage 39 extending completely therethrough. Adjacent the lower end of the head 35 the axial passage 39 is formed to provide an upwardly facing annular shoulder on which a cylindrical bearing block 40 rests. This bearing block 40 is held against this shoulder by an externally threaded retaining screw 41 arranged in the upper portion of the axial passage 39 which is internally threaded to receive this retaining screw. The lower end of the retaining screw 41 engages the upper side of the bearing block 40 and the upper end of this screw does not extend above the upper end of the screw member 34, as shown in Fig. 5.

The lower face of the cylindrical bearing block 40 is preferably slightly centrally recessed as indicated at 42 to receive the pointed end on the spindle or needle 24 which projects upwardly into the lower end of the axial passage 39. The bearing block 40 is composed of any suitable material which minimizes friction between the pointed end of the spindle or needle 24 and this block is preferably made of quartz.

The inner shade 14 is revolved by the passage of heated air through the end head 30. For this purpose this end head 30 is provided with a series

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of generally radiating downwardly turned vanes or louvers 43 preferably struck out from this end head thereby leaving openings 44 associated with these vanes or louvers 43. The passage of heated air upwardly from the interior of the inner shade 14 through these openings 44 and past the vanes or louvers 43 will cause the shade 14 to revolve on the pointed end of the stationary spindle or needle 24.

Should the point on the spindle or needle become worn, the same can be readily replaced by loosening the thumb screw 29 thereby permitting the spindle or needle to be withdrawn from the recess 28 and be replaced by another needle or spindle which can be made fast to the nut member 26 by again tightening the thumb screw 29. Likewise, if the bearing block 40 becomes worn, the same can be withdrawn from the screw member 34 by first removing the nut member 38 and then unscrewing the retaining screw 41 holding this bearing block in position. With the bearing block 40 so removed from the screw member 34, the dished operative face 42 can be redressed and the block reinserted in the screw member or the defective block can be replaced by a similar bearing block.

The outer shade 15 is mounted in a stationary position and for this purpose an outer rod 45 is shown as being mounted on the horizontal arm 18 adjacent the outer end thereof in a manner similar to that used for mounting the inner rod 19. Thus, the nuts 46 and 48 arranged respectively above and below the horizontal arm 18 and working on the lower threaded end of the outer rod 45 can be tightened against this arm to connect this outer rod rigidly to the horizontal arm 18. The outer rod 45 is preferably shaped to extend generally along the side of the skirt portion of the revolvable inner shade 14 and the upper end of this outer rod is shown as being bent to extend horizontally and over the end head 30 on the inner shade and in spaced relation thereto. The upper end of the outer rod 45 is shown as being turned vertically upwardly so that the longitudinal axis of the upper end portion 49 is substantially coaxial with the longitudinal axis of the pedestal post 11. This upper end portion 49 of the outer rod 45 is externally threaded and an outwardly extending flange 50 is shown as being fast to the outer rod 45 at the lower end of the threaded upper end portion 49.

The outer shade 15 can be of any suitable construction and is shown at its upper end as having a frame member 51 extending transversely across the upper end of the outer shade 15. This frame member 51 may be of the conventional spider-like frame construction conventionally employed in lamp shades whereby the frame member 51 is adapted to receive the upper threaded end portion 49 of the outer rod 45 and rest on the flange 50 and be clamped thereagainst by a nut 52, in the usual manner.

Referring to Fig. 2, it will be seen that support elements including the horizontal arm 18 and inner and outer rods 19 and 45 respectively are completely covered by the skirt portion of the stationary outer shade 15. Further, a lamp constructed as described above can be placed on a table or the like so that these rods 19 and 45 are on the far side of the lamp as usually viewed whereby these rods are generally unnoticed and the revolvable inner shade 14 appears to float during its rotation on the inside of the outer shade 15.

The inner and outer shades 14 and 15 respectively can be readily removed and replaced. Fur-

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ther, the spindle or needle 24 can be readily repaired or replaced as can also the bearing block 40, thereby insuring the continued operativeness of the lamp for indefinite periods of time.

As previously described, the skirt portions of the inner and outer shades can be decorated with any desired indicia or designs for advertising or purely ornamental purposes.

I claim:

1. In a lamp having an electric bulb arranged in a socket on the upper end of a pedestal post, the combination therewith of a stationary outer shade surrounding said bulb, an arm extending laterally from one side only of said pedestal post and arranged above the lower edge of said outer shade, a revolvable inner shade surrounding said bulb and arranged within said outer shade, said inner shade bearing indicia viewable through said outer shade when said bulb is lit, an outer support rod arranged between said shades and mounted on said arm and extending upwardly therefrom, means connecting said outer shade to the upper end of said outer rod to hold said outer shade stationary, an inner rod arranged between said inner shade and lamp bulb and mounted on said arm and extending upwardly therefrom and terminating above said bulb, an end head on the upper end of said inner shade and having openings therein and vanes adjacent said openings whereby air heated by said bulb in escaping through said openings reacts against said vanes to effect rotation of said inner shade, and bearing means supporting said inner shade for rotation on the upper end of said inner rod.

2. In a lamp having an electric bulb arranged in a socket on the upper end of a pedestal post, the combination therewith of a stationary outer shade surrounding said bulb, an arm extending laterally from one side only of said pedestal post and arranged above the lower edge of said outer shade, a revolvable inner shade surrounding said bulb and arranged within said outer shade, said inner shade bearing indicia viewable through said outer shade when said bulb is lit, an outer support rod arranged between said shades and mounted on said arm and extending upwardly therefrom, means connecting said outer shade to the upper end of said outer rod to hold said outer shade stationary, an inner rod arranged between said inner shade and lamp bulb and mounted on said arm and extending upwardly therefrom and terminating above said bulb, an end head on the upper end of said inner shade and having openings therein and vanes adjacent said openings whereby air heated by said bulb in escaping through said openings reacts against said vanes to effect rotation of said inner shade, and bearing means supporting said inner shade for rotation on the upper end of said inner rod, said bearing means comprising an upstanding pointed spindle, a holder on the upper end of said inner rod and having a recess receiving said spindle, a set screw arranged in a threaded hole provided in said holder and engageable with said spindle to secure said spindle firmly on said holder and a bearing member on said end head and engaging the pointed end of said spindle.

3. In a lamp having an electric bulb arranged in a socket on the upper end of a pedestal post, the combination therewith of a stationary outer shade surrounding said bulb, an arm extending laterally from one side only of said pedestal post and arranged above the lower edge of said outer shade, a revolvable inner shade surrounding said bulb and arranged within said outer shade, said

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inner shade bearing indicia viewable through said outer shade when said bulb is lit, an outer support rod arranged between said shades and mounted on said arm and extending upwardly therefrom, means connecting said outer shade to the upper end of said outer rod to hold said outer shade stationary, an inner rod arranged between said inner shade and lamp bulb and mounted on said arm and extending upwardly therefrom and terminating above said bulb, an end head on the upper end of said inner shade and having openings therein and vanes adjacent said openings whereby air heated by said bulb in escaping through said openings reacts against said vanes to effect rotation of said inner shade, and bearing means supporting said inner shade for rotation on the upper end of said inner rod, said bearing means comprising an upstanding pointed spindle on the upper end of said inner rod, a screw member arranged in a hole provided in said end head, a nut member co-operating with said screw member to clamp said end head therebetween, a bearing block arranged on a shoulder provided in an axial passage extending through said screw member, a retaining screw arranged in a threaded portion of said passage and holding said bearing block against said shoulder and the exposed face of said bearing block engaging the pointed end of said spindle.

4. In a lamp having an electric bulb arranged in a socket on the upper end of a pedestal post, the combination therewith of a stationary outer shade surrounding said bulb, an arm extending laterally from one side only of said pedestal post and arranged above the lower edge of said outer shade, a revolvable inner shade surrounding said bulb and arranged within said outer shade, said inner shade bearing indicia viewable through said outer shade when said bulb is lit, an outer support rod arranged between said shades and mounted on said arm and extending upwardly therefrom, means connecting said outer shade to the upper end of said outer rod to hold said outer shade stationary, an inner rod arranged between said inner shade and lamp bulb and mounted on said arm and extending upwardly therefrom and terminating above said bulb, an end head on the upper end of said inner shade and having openings therein and vanes adjacent said openings whereby air heated by said bulb in escaping through said openings reacts against said vanes to effect rotation of said inner shade, and bearing means supporting said inner shade for rotation on the upper end of said inner rod, said bearing means comprising an upstanding pointed spindle, a holder on the upper end of said inner rod and having a recess receiving said spindle, a set screw arranged in a threaded hole provided in said holder and engageable with said spindle to secure said spindle firmly on said holder, a screw member arranged in a hole provided in said end head, a nut member co-operating with said screw member to clamp said end head therebetween, a bearing block arranged on a shoulder provided in an axial passage extending through said screw member, a retaining screw arranged in a threaded portion of said passage and holding said bearing block against said shoulder and the exposed face of said bearing block engaging the pointed end of said spindle.

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(References on following page)

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
D. 129,117	Beardsley et al.	Aug. 26, 1941
290,489	Simpson	Dec. 18, 1883
352,646	Gennert	Nov. 16, 1886
1,066,493	Harrold	July 8, 1913

5

Number
1,178,764
1,865,758
2,398,974

Name	Date
Watanabe	Apr. 11, 1916
Horton	July 5, 1932
Storm	Apr. 23, 1946

FOREIGN PATENTS

Country	Date
France	Dec. 17, 1926
Great Britain	Apr. 1, 1949

Number
614,559
620,939

10