

Feb. 15, 1966

J. BURNBAUM

3,235,722

ILLUMINATING ORNAMENT

Filed May 20, 1963

2 Sheets-Sheet 1

Fig. 1.

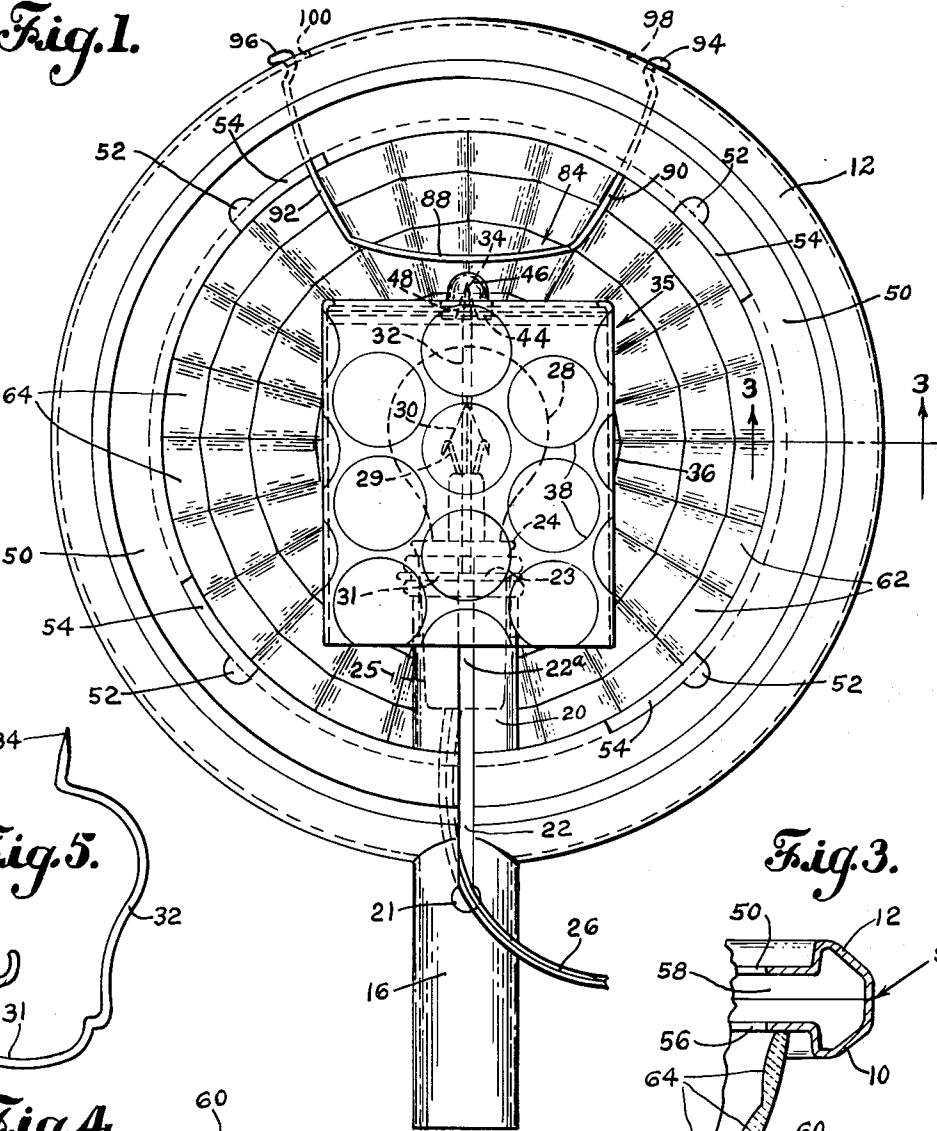


Fig. 5.



Fig. 3.

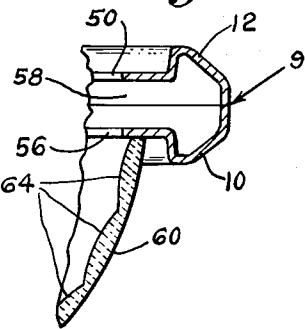
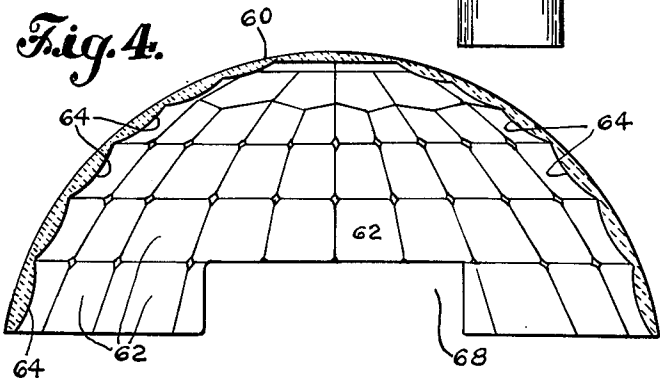


Fig. 4.



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Fig. 2.

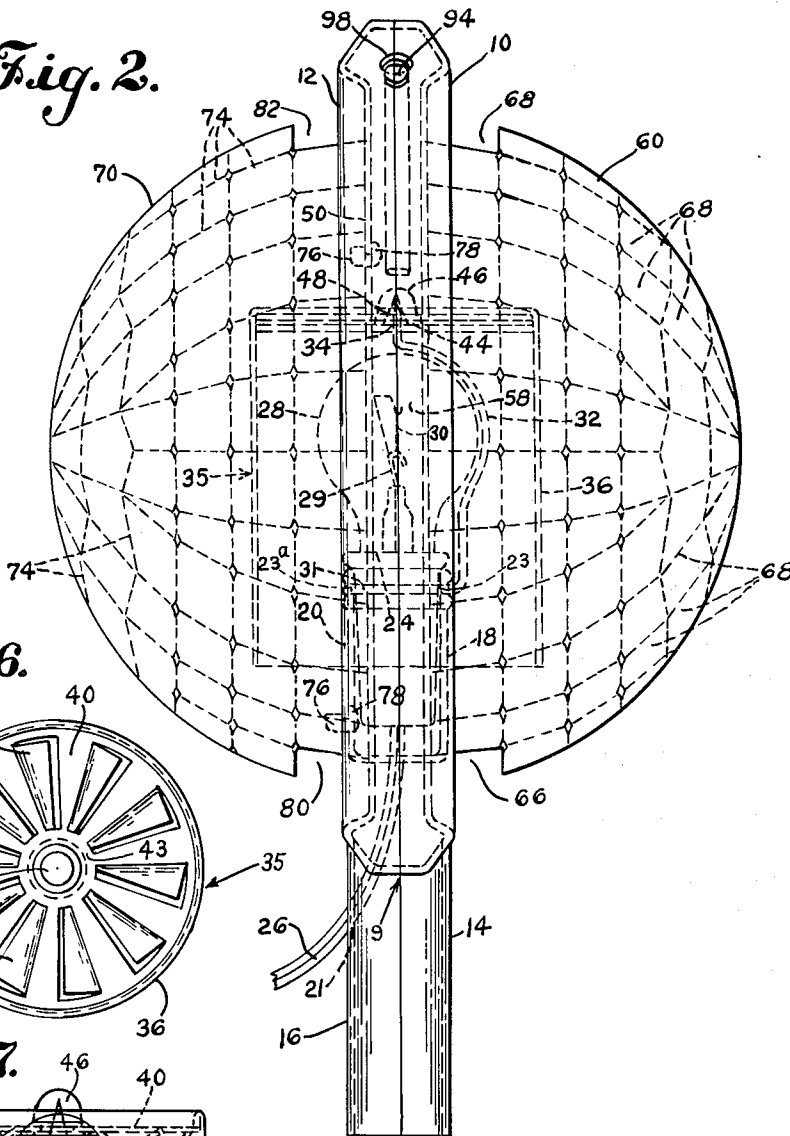


Fig. 6.

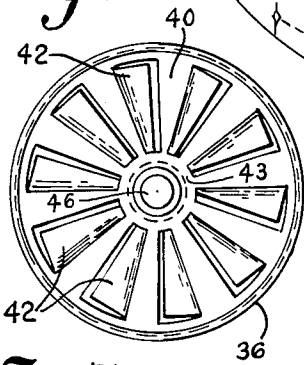
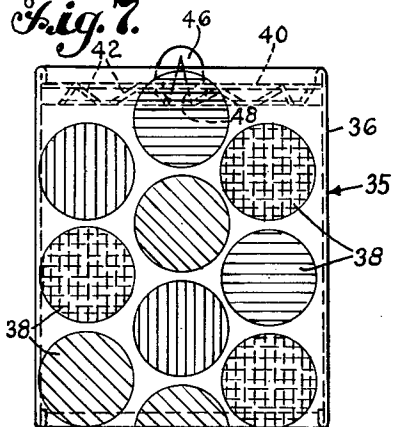


Fig. 7.



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ILLUMINATING ORNAMENT

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5 Claims. (Cl. 240—10.1)

This invention relates to an illuminating ornament having a lens member through which light is transmitted.

One object of my invention is to provide an ornament which has a lens member having a plurality of lens portions whereby images of light may pass from an electric light bulb through a rotator and displayed by means of said lens portions, in enlarged form upon a wall, ceiling and other places.

Another object is to provide said ornament with a portion of a filament within said bulb that has a definite figure or design which will be displayed in changing colors upon a wall, ceiling and other places.

Still another object is to provide such an ornament with a unitary lens member having a plurality of integral lens portion adjoining each other which is formed in a single unit of a plastic material.

A further object is to provide a retainer device with my ornament whereby a rotator is retained in predetermined, rotating position even though the ornament is mounted on a Christmas tree top or other support that does not hold it in a level position.

The foregoing and other objects which will appear as the nature of the invention is better understood, may be accomplished by a construction, combination and arrangement of parts such as is disclosed by the drawings. The nature of the invention is such as to render it susceptible to various changes and modifications, and therefore, I am not to be limited to the construction disclosed by the drawings nor to the particular parts described in the specification; but am entitled to all such changes therefrom as fall within the scope of my claims.

In the drawings:

FIG. 1 is a rear elevational view of my illuminating ornament, the rear lens member being omitted.

FIG. 2 is a side elevational view of my illuminating ornament.

FIG. 3 is a fragmentary sectional view taken on the line 3—3 of FIG. 1.

FIG. 4 is a cross-sectional view of a lens member used in my ornament.

FIG. 5 is a perspective view of a rotator support.

FIG. 6 is a top plan view of the rotator for my ornament.

FIG. 7 is a side elevational view of said rotator, showing it divided into differently colored portions, the colors being represented by the usual color symbols.

As illustrated, my illuminated ornament has a main frame 9 shown as having a front frame or supporting portion 10 and a rear frame or supporting portion 12 and which may be cemented together. Said front portion 10, as shown, has a lower neck or hollow stem portion 14, while said rear portion 12 has a corresponding lower neck portion 16 united to said neck portion 14. In place of said neck portions a base or pedestal, not shown, may be provided. Above said neck portions said frame portions 10 and 12 include socket holder portions 18 and 20 respectively. Said neck portion 16 has an opening 21 therethrough, said frame 12 has a slit 22 and said holder 20 has a slit 22a which slits communicate with said opening 21, and later referred to. Grooves 23 and 23a are formed respectively in said socket holder portions 18 and 20, which grooves are in alignment, being referred to later. An electrical socket 24 fits in said holder portions 18 and 20 and the usual electrical wires

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26 extend through said opening 21 and connect in the usual way to said socket 24. Said wires will extend to a source of electrical current, not shown.

An electrical light bulb 28 fits into said socket 24 to thereby provide illumination for my ornament as well as some heat. The usual filament in said bulb has the usual lower portion 29 and an upper design portion 30 shown in the form of an inverted V or some other definite figure or artistic shape which will appear as such on a wall or the like in the form of a lighted figure.

Extending into said grooves 23 and 23a is a curved base 31 of a wire support or mounting which latter has an intermediate portion 32 extending from said base 31 to a pivot point portion 34.

A light-transmitting rotator 35 has a hollow main body or sleeve 36 shown as cylindrical, which is preferably divided into circular colored portions 38 on which various colors have been indicated by the usual symbols, as in FIG. 7 of the drawings. Attached to said body 36 is a top member 40 from which vanes 42 extend downwardly. Said top 40 and vanes 42 connect to a central portion 43.

A socket body 44 has an upper tapering part 46 tightly fitting into central portion 43. A recess 48 is provided in said socket body 44 which continues into said tapering part 46, terminating in a very small space that receives the tip of said pivot point portion 34. On this latter portion 34 said rotator member 35 freely rotates when air near said bulb 28 is heated and rises to thereby cause said rotative movement by impinging upon said vanes 42.

Said rear frame 12 has an inner rim 50 having a plurality of slots 52 therein and also cut-outs 54 communicating with said slots 52. Said front frame 10 also has an inner rim 56 spaced as at 58 from said rim 50.

A front lens member 60 bulges outwardly and is preferably of semi-spherical or bowl shape preferably presenting a smooth continuous outer surface. Said member 60 is formed with a plurality of lens portions 62, each providing a definite lens to transmit light in the form of a design or designs, such as, for instance, filament design portion 30. Each said lens portion 62 is convex-shaped as at 64 at its inner surface. I desirably provide my lens member in the form of a polyhedron figure having many lens portions, each one of which will individually project a filament design portion 30.

Said front lens member 60 is preferably formed as a unit of a well-known plastic such as polystyrene or an acrylic plastic. I find it desirable to form my lens member into plano-convex lens portions as illustrated in said FIG. 4 since thereby the images projected upon a wall or the like will be spaced apart and each will show clearly and definitely.

At the lower portion of said front lens member 60 a cut-out 66 is provided and also there is a cut-out 68 at the upper portion in alignment with said cut-out 66. These cut-outs provide air draft passages so that heated air will continually rise and be heated by said electric bulb 28 and rotate said rotator 35, thus throwing lighted images of said filament design portion 30 on the ceiling, walls, floor and elsewhere in various changing colors.

A rear lens member 70 is preferably similar in size, shape and otherwise to said front lens member 60 having many lens portions 74 similar to portions 62. Since this rear lens member 70 should desirably be easily removable, it is provided with a plurality of lugs 76, spaced apart, at its outer edge, having angular extensions 78 which are adapted to enter said slots 52, whereupon said rear reflector 70 is rotated slightly to bring said extensions 78 under and in frictional contact with said inner rim 50. To remove said rear lens member 70, it is rotated sufficiently to permit said lug extensions 78 to pass out through said slots 52.

Said rear lens member 70 has a lower cut-out 80 and an upper cut-out 82 which are positioned opposite said front member cut-outs 66 and 68 respectively to allow the free passage of air as above explained.

Said lens members 60 and 70, whether used singly or together, are laterally opposite or adjacent said rotator 35 and are so positioned as to project light from said bulb 28 through said rotator to the exterior such as walls, ceilings and the like.

Since my ornament may be used in positions, such as on a Christmas tree top, that do not provide steady support or even level support, said rotator 35 may often be dislodged from its position on said pivot point portion 34. Accordingly, to keep said rotator in predetermined, rotating position, I provide a retainer device 84 made of metal or flexible material and having a cross piece 88. From the latter I provide fastening means, in the form of a left arm 90 that extends upwardly, and a right arm 92 that also so extends. These arms 90 and 92 each have hooked or locking ends 94 and 96 respectively which extend above, and bear on said main frame 9.

Said arms 90 and 92 pass through said space 58 and respectively through openings 98 and 100 in said main frame 9. The position of said cross piece 88 is close to the top part of said rotative upper part 46, there being only enough space above the latter to permit free rotation thereof.

When my ornament is placed on a tree top or set on a stand, said bulb 28 may be lighted, causing air to rise and impart rotative movement to said vanes 42. Light from said bulb shows through said rotator portions 38, adding the colors thereof to it. The light is individually projected, by means of said lens portions onto a wall, ceiling or the like. Multitudes of the figure or design portion 30 of the filament will simultaneously appear on the latter in various and changing colors and in enlarged form. The size of said figure or design depends upon the distance said lens members 60 and 70 are located from the wall or other outside surface.

What I claim is:

1. An ornament comprising a main frame, lighting means and a rotator support supported by said frame, said lighting means embodying a light transmitting electric bulb, a filament in said bulb having a design configuration, a light-transmitting rotator rotatably mounted on said rotator support and laterally of said filament design configuration and adapted to be rotated by means of said lighting means, a concavo-convex lens member outside of said rotator supported by said frame, said lighting means being adapted to provide light within said rotator, said lens member having a plurality of convex lens portions at its inner surface adjoining each other and being so positioned relative to said rotator whereby light from said filament design configuration is projected exteriorly of said lens member on a surface in the form of said configuration by each of said lens portions, each of the latter being of sufficient area relative to said filament design configuration as to project the whole of the latter.

2. An ornament comprising a main frame having slots therein, lighting means and a rotator support supported by said frame, the latter embodying a front frame section and a rear frame section connected together, a light trans-

mitting rotator rotatably mounted on said rotator support and adapted to be rotated by means of said lighting means, a front lens member and a rear lens member connected to said main frame one of which embodies attaching extensions adapted to enter said slots and removably attaching one of said lens members to said main frame, said lighting means being adapted to provide light within said rotator.

3. An ornament comprising a main frame, lighting means embodying an electric bulb, a filament in said bulb having a design configuration, a rotator support supported by said frame, a light-transmitting rotator rotatably mounted on said rotator support and adapted to be rotated by means of said lighting means, and a bowl-shaped lens member outside of said rotator supported by said frame and having a plurality of lens portions at its inner surface having convex surfaces, said lighting means being adapted to provide light within said rotator, said lens member being so positioned relative to said rotator whereby light from said lighting means is projected exteriorly of the ornament by said lens portions, said lens portions being of such area relative to said filament design configuration that the said filament design configuration is projected exteriorly of the ornament through each of said lens portions.

4. An ornament comprising a main frame, lighting means, a rotator support supported by said frame, a light-transmitting rotator rotatably mounted on said rotator support and adapted to be rotated by means of said lighting means, and a bowl-shaped lens member outside of said rotator supported by said frame and having a plurality of lens portions at its inner surface having convex surfaces, said lighting means being adapted to provide light within said rotator, said lens member being so positioned relative to said rotator whereby light from said lighting means is projected exteriorly of the ornament by said lens portions, said lens portions adjoining each other and each being bordered by four straight lines extending angularly relative to each other.

5. An ornament as set forth in claim 4, and a retainer device above said rotator embodying two arms attached to said frame and a cross piece between and attached to said arms at their lower ends and adjacent to and directly above said rotator support.

References Cited by the Examiner

UNITED STATES PATENTS

1,026,126	5/1912	Roffy	88—24
1,088,378	2/1914	Stollberg	40—39
1,447,589	3/1923	Leech et al.	240—8.22
1,937,138	11/1933	Barclay	240—10.1
2,345,517	3/1944	Weiss	240—10.1
2,726,320	12/1955	Damiano	240—10.1 X
2,737,576	3/1956	Fasson	240—10.1
2,840,689	6/1958	Kazor	240—10.1

FOREIGN PATENTS

71,610	10/1893	Germany.
728,001	4/1955	Great Britain.
838,618	6/1960	Great Britain.

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