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DISPLAY OR DECORATION DEVICE

Filed Sept. 9, 1929

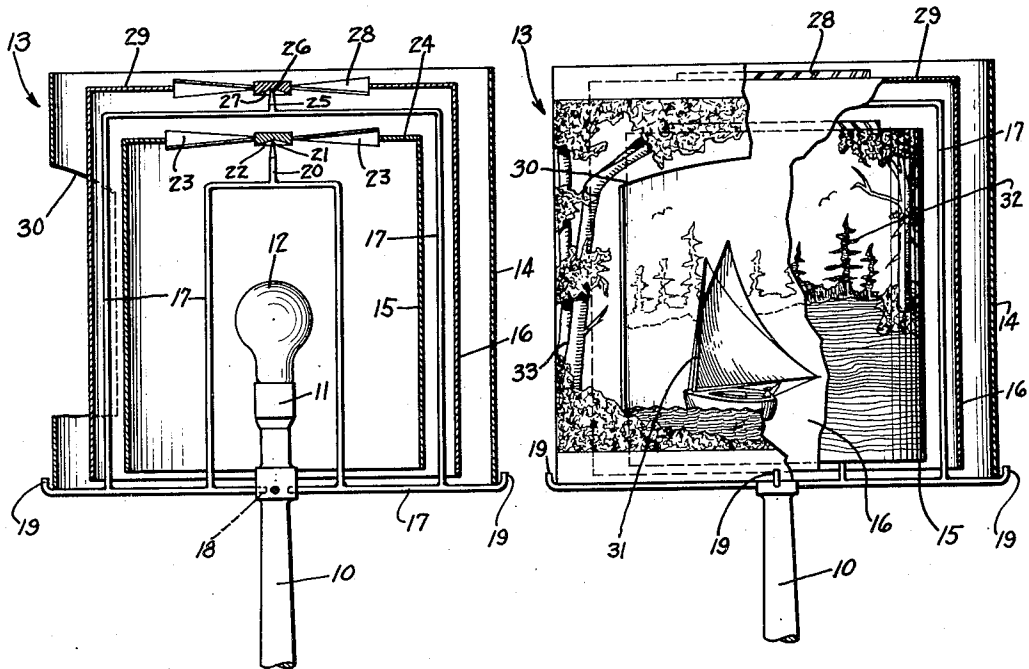


FIG. 1

FIG. 2

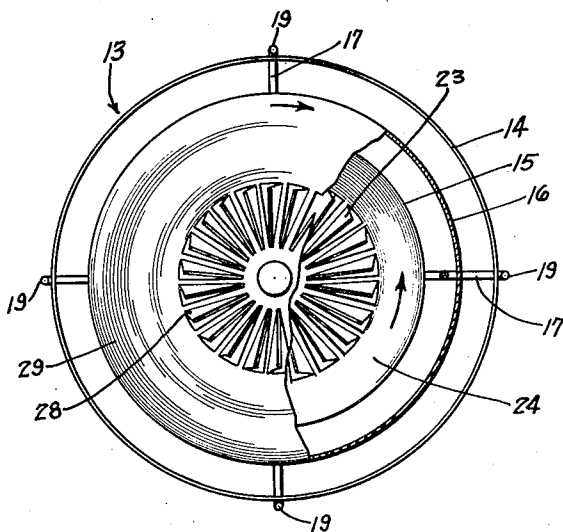


FIG. 3

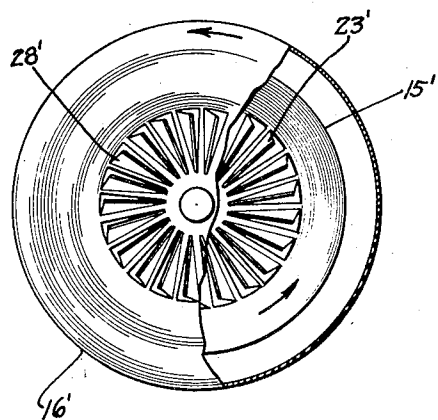


FIG. 4

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DISPLAY OR DECORATION DEVICE

Application filed September 9, 1929. Serial No. 391,305.

The present invention has reference to the type of lamps provided with decorated shades, and more particularly adaptable to use as display devices, although quite suitable and attractive for a variety of other uses, as, for example, in homes, churches, etc.

An object of the invention is to provide a display or decoration device which will present certain improvements over the display or decoration device as illustrated and described in my pending application for patent Serial No. 328,494, filed December 26, 1928.

A further object is to provide a display or decoration device which will include a plurality of decorated shades two or more of which are adapted to be moved relatively to each other in such manner that figures or pictures upon and movable with a moving shade of the device can have apparent motion at a rate of speed faster or slower than the actual rate of speed of the portion of said moving shade having said figures or pictures.

A still further object is to provide a display or decoration device which will include at least three decorated shades two or more of which are adapted to be moved relatively to each other in such manner that figures or pictures upon and movable with a moving shade of the device can have apparent motion at a rate of speed faster or slower than the actual rate of speed of the portion of said moving shade having said figures or pictures, and so that a scenic effect, in which features of all of the shades of the device are comprehended, is presented to the eye of an observer of the display or decoration device.

A still further and more specific object is to provide a display or decoration device which will include a plurality of decorated shades two or more of which are arranged one within the other and are adapted to be rotated relatively to each other in such manner that figures or pictures upon and movable with a moving shade of the device can have apparent motion at a rate of speed faster or slower than the actual rate of speed of rotation of the portion of said moving shade having said figures or pictures.

A still further specific object is to provide

a display or decoration device which will include at least three decorated shades arranged in spaced relation one within the other, two or more of which shades are adapted to be rotated relatively to each other in such manner that figures or pictures upon and movable with a moving shade of the device can have apparent motion at a rate of speed faster or slower than the actual rate of speed of rotation of the portion of said moving shade having said figures or pictures, and so that a scenic effect, in which features of all of the shades of the device are comprehended, is presented to the eye of an observer of the display or decoration device.

A still further specific object is to provide a display or decoration device which will include an outer, decorated, stationary shade, an inner, decorated, rotatable shade within said, outer, decorated, stationary shade, and an intermediate, decorated, rotatable shade between said outer, decorated, stationary shade and said inner, decorated, rotatable shade, wherein said inner, decorated, rotatable shade and said intermediate, decorated, rotatable shade are adapted to be revolved in the same direction, or in opposite directions, in such manner that figures or pictures upon and movable with said intermediate, decorated, rotatable shade can have apparent motion at a rate of speed faster or slower than the actual rate of speed of the portion of the intermediate, rotatable shade having said figures or pictures, and so that a scenic effect, in which features of the outer, decorated, stationary shade, the intermediate, decorated, rotatable shade, and the inner, decorated, rotatable shade of the device are comprehended, is presented to the eye of an observer of the display or decoration device.

A still further specific object is to provide a display or decoration device which will include a plurality of decorated shades two or more of which are adapted to be rotated relatively to each other in such manner that figures or pictures upon and movable with a moving shade of the device can have apparent motion at a rate of speed faster or slower than the actual rate of speed of rotation of the portion of said moving shade having said

figures or pictures, and which will also include means for mounting the rotatable shades one within the other, as well as means capable of revolving said rotatable shades relatively to each other preferred and at any predetermined rates of speed, either in the same direction, or in opposite directions, as may in a particular instance be desirable.

And a still further specific object is to provide a device of the present character which will include a plurality of rotatable shades one mounted within and in spaced relation to another, and which will also include means capable of revolving said rotatable shades relatively to each other at any preferred and predetermined rates of speed, either in the same direction, or in opposite directions, as may in a particular instance be desirable.

While I have in the accompanying drawing illustrated structure designed to put into effect the several features and characteristics of my invention, it is to be understood that the disclosure herein is merely illustrative of principle and intended in no sense as limiting, various changes being permissible within the spirit of the invention and the scope of the claims which follow.

In said drawing:

Fig. 1 is a vertical sectional view of a lamp in which the features of the invention are incorporated, showing all of the shades of the lamp in section and the supports for the shades in elevation, the base of the lamp being broken away;

Fig. 2 is a view of the shade combination of Fig. 1, partially in elevation, partially in section and partially broken away, to better disclose the relation in position, as well as the relation in effect, of the decorated portions of all of the shades with respect to each other.

Fig. 3 is a plan view of the shade of the lamp of Figs. 1 and 2, parts of the movable shades being broken away and in section to better disclose the means whereby said movable shades are rotatable; and

Fig. 4 is a plan view of the movable shades of a lamp of modified construction having the features of the invention, parts being broken away and in section.

With respect to Figs. 1 to 3 of the drawing, numeral 10 represents a standard extending from a lamp base (not shown), 11 designates a lamp socket, and 12 indicates an electric light bulb in said socket.

The display or decoration device of my invention, denoted generally at 13, as disclosed, consists, speaking broadly, of an outer, stationary shade 14, an inner, rotatable shade 15, in spaced relation to and surrounded by said outer, stationary shade, and an intermediate, rotatable shade 16, interposed between said inner, rotatable shade and said outer, stationary shade in spaced relation to each of said inner, rotatable and outer, sta-

tionary shades. For some uses, the two rotatable shades may be employed without the stationary shade.

As shown, all of the shades 14, 15 and 16 are hollow cylinders. Means for supporting the outer shade 14 in stationary position upon the standard may consist of a wire, or wires, 17 seated in any suitable manner upon the standard, as at 18, and having hooked portions, designated 19, against or adjacent to which the lower edge portion of the outer, stationary shade 14 is seated. Means for rotatably supporting the inner, revoluble shade 15 within and in spaced relation to the outer, stationary shade 14, so that it will preferably be concentric therewith, may consist of a needle stem 20 constituting a part of the wire, or wires, 17, and having a needle point 21 engaging a bearing surface 22 axially mounted with respect to blades 23 secured to the top wall 24 of the inner, revoluble shade 15, and horizontally situated above the light bulb 12. Means for rotatably supporting the intermediate, revoluble shade 16 between the inner, revoluble shade 15 and the outer, stationary shade 14, so that it will preferably be concentric to both said inner, revoluble shade and said outer, stationary shade, and at equal distance from each, may consist of a needle stem 25 constituting a part of the wire, or wires, 17, and having a needle point 26 engaging a bearing surface 27 axially mounted with respect to blades 28 secured to the top wall 29 of the intermediate, rotatable shade 16, and horizontally situated above the inner, revoluble shade 15. See Fig. 1. Heat from the light bulb is adapted to strike the blades 23 and 28 in its upward passage, to revolve the inner and intermediate, rotatable shades 15 and 16 on their vertical axes, each in a manner heretofore well known in the present art.

The outer, stationary shade 14 may consist of practically transparent, translucent, or opaque material. When said outer shade consists of opaque material, it will be provided with an opening such as indicated at 30, through which the intermediate and the inner, rotatable shades 16 and 15 will be visible.

The intermediate, or interposed, rotatable shade 16 may desirably consist of practically transparent or translucent material.

The inner, rotatable shade 15 may desirably consist of translucent or semi-transparent material. In some cases perhaps, the inner shade may be desirably practically transparent.

Referring more particularly to Fig. 2, I have there disclosed the interposed, or intermediate, rotatable shade 16 provided with decorations, figures, or pictures 31 to constitute the main part or features of a display. As shown, the decorations, figures, or pictures 31 represent a sail boat in water. Clear-

ly, these decorations, figures, or pictures 31 could represent any articles or things intended to constitute the main part or features of a display, and such main part or features would not evidently, necessarily have to do with advertising.

Also in Fig. 2, I have disclosed the inner, rotatable shade 15 provided with decorations, figures, or pictures 32 intended as suitable background for the main decorations, parts, features, figures, or pictures 31 of the display and contained by the interposed, or intermediate, rotatable shade 16. As shown, the decorations, figures, or pictures 33 represent trees, foliage, etc., to the fore of the sail boat. As before, the elements 33 could represent any articles or things intended as suitable foreground for the main elements 31 of the display.

Also in Fig. 2, I have disclosed the outer, stationary shade 14 provided with decorations, figures, or pictures 33 intended as suitable foreground for the main decorations, parts, features, figures, or pictures 31 of the display and contained by the said interposed, or intermediate, rotatable shade 16. As shown, the decorations, figures, or pictures 33 represent trees, foliage, etc., to the fore of the sail boat. As before, the elements 33 could represent any articles or things intended as suitable foreground for the main elements 31 of the display.

The decorations, figures, or pictures 31, 32, and 33 may be associated with the shades 16, 15 and 14, respectively, in any ordinary manner, or in some preferred manner forming no part of the invention herein.

Hereinbefore I have suggested materials, as transparent, practically transparent, semi-transparent, translucent, and opaque materials, which are suitably utilizable in my display or decoration device to constitute the different shades 14, 15 and 16. It is to be understood, however, that the invention is not restricted to particular types of materials, except that, transparent or translucent materials, or transparent and translucent materials constituting the shades 15 and 16 are, as a whole and taken as a unit, of that desired transparency or translucency best suited to the purpose of allowing the shade 15, or a portion thereof, to be visible through the shade 16, and to allow the shades 15 and 16 to be visible through the shade 14, when this is of transparent or translucent material, to a greater or less extent, depending upon the scenic effect desired.

As will be apparent, the rotatable, decorated, shade 16 is, in the arrangement as fully described, so related to the rotatable, decorated shade 15 and the stationary, decorated shade 14 that a scenic effect, in which features of all of the different elements 31, 32 and 33 of the shades 16, 15 and 14 will be comprehended and blended, will be present-

ed to the eye of an observer of the display or decoration device gazing thereon from position beyond the outer face of the outer, stationary shade of said device.

As will also be apparent, the arrangement of the inner, rotatable or background shade 15 and the intermediate, rotatable or main display shade 16, to revolve relatively to each other in the manner as illustrated and fully described, makes provision whereby the elements 31 upon said intermediate, rotatable shade 16 can have apparent motion at a rate of speed faster or slower than the actual rate of speed of said elements 31, for the reasons that when the inner, rotatable shade 15 is made to revolve in a direction opposite to that in which the intermediate, rotatable shade is revolving at a certain rate of speed, the elements 32 upon the inner, rotatable shade 15, constituting a background of the display, and the elements 31 of the intermediate, rotatable shade 16, constituting the main part of the display, have relatively greater movement with respect to each other than when the background elements 32 are stationary and said elements 31 are revolving at said certain rate of speed, and when said inner rotatable shade 15 is made to revolve in the same direction as said intermediate, rotatable shade is revolving at a certain rate of speed, the elements 32 upon said inner, rotatable shade 15, and the elements 31 upon said intermediate, rotatable shade 16 have relatively less movement with respect to each other than when said background elements 32 are stationary and said elements 31 are revolving at said certain rate of speed. Obviously, the apparent rate of motion of the elements 31 upon the intermediate shade 16 relatively to the actual rate of speed of said elements 31 can be altered to a considerable extent simply by altering the relative rates of speed at which the shades 15 and 16 rotate, either in the same or opposite directions, which alteration of the relative rates of speed of said shades 15 and 16 can be accomplished by suitably altering the blades 23 and 28 driven by heat from the light bulb 12, as will be understood.

That is to say, the rate of speed may be altered by varying the angle of the blades with respect to the source of light and heat to subject more or less of the surface of the respective blades to the action of a draft created.

In the form of the invention disclosed in Figs. 1 to 3, the blades 23 and 28 are set to rotate the shades 15 and 16 in opposite directions, while in Fig. 4 the blades 23' and 28' are set to rotate the shades 15' and 16' in the same direction.

The shades 14, 15 and 16 need not be cylindrical. They may if preferred be of some other shape, as for example, conical, hex-

agonal, octagonal, etc., or some more or less irregular shape.

With more particular reference to the shade combination as disclosed in Fig. 2, when including an opening 30 in an opaque, outer, decorated, stationary shade 14, it will be apparent that the sail boat, or elements 31, will be visible opposite said opening 30 for but a short period of time during each revolution of the shade 16 when revolved in the manner and by the means as described. By rotation of the shade 15, having the background elements 32, in direction opposite the direction of rotation of the shade 16, the sail boat will appear to be moving faster than it is actually moving, and by rotation of said shade 15 in the same direction as the shade 16, the sail boat will appear to be moving slower than it is actually moving. By proper regulation of the relative rates of rotation of said shades 15 and 16, the sail boat can be made to appear to be moving at any desired rate of speed.

I claim as my invention:

1. A display device of the class described, comprising a plurality of decorated shades one within the other, including an inner, movable shade, an outer, stationary shade, and an intermediate, movable shade between said inner and outer shades, means for supporting the stationary shade, and means for supporting and rotating the movable shades, the decorations on the outer, stationary shade representing stationary surfaces and objects, the decorations on the inner, movable shade also representing stationary surfaces and objects, and the decorations on the intermediate, movable shade representing objects that are capable of movement, whereby as the inner and intermediate shades are moved an effect is produced simulating the moving of objects with respect to a fixed foreground and background, said objects appearing to have motion at a rate of speed other than their actual rate of speed.

2. A display device of the class described, comprising a light and heat source, a plurality of decorated shades arranged one within the other and about said light and heat source, including an inner, movable shade, an outer, stationary shade, and an intermediate, movable shade between said inner and outer shades, means for supporting all of the shades relatively to the light and heat source, and means including heat from said light and heat source for keeping the movable shades in motion relatively to each other, the decorations on said inner, movable shade and said outer, stationary shade representing stationary surfaces and objects, and the decorations of said intermediate, movable shade representing objects that are capable of movement, whereby as the inner and intermediate shades are moved an effect is produced simulating the moving of objects with respect

to a fixed foreground and background, said objects appearing to have motion at a rate of speed other than their actual rate of speed.

3. A display device of the class described, comprising a light and heat source, a plurality of decorated shades arranged one within the other and about said light and heat source, including an inner, rotatable shade, an outer, stationary shade, and an intermediate, rotatable shade between said inner and outer shades, means for supporting all of the shades relatively to the light and heat source, means including blades on said inner, rotatable shade arranged above said light and heat source and acted upon by heat therefrom for causing said inner, rotatable shade to revolve about a vertical axis, and means including blades on said intermediate, rotatable shade arranged above said light and heat source and acted upon by heat therefrom for causing said intermediate, rotatable shade to revolve about said inner, rotatable shade, the decorations of said inner, rotatable shade and said outer, stationary shade representing stationary surfaces and objects and the decorations on said intermediate, rotatable shade representing objects that are capable of movement, whereby as the inner and intermediate shades are rotated an effect is produced simulating the moving of objects with respect to a fixed foreground and background, said objects appearing to have motion at a rate of speed other than their actual rate of speed.

4. A display device of the class described, comprising a light source, a plurality of decorated shades at least two of which are arranged one within the other about said light source and are adapted to be rotated relatively to each other, the decorations on an inner, rotatable shade representing stationary surfaces and objects, and the decorations on an outer, rotatable shade representing objects that are capable of movement, and means for rotating said shades relatively to each other in such manner that as the mentioned outer, rotatable shade is moved an effect is produced simulating the moving of objects with respect to a fixed background and at a rate of speed other than the actual rate of speed of rotation of said moving objects.

5. A display device comprising a plurality of decorated shades one within the other, two of said shades being movable relative to each other, decorations on one of said movable shades representing objects capable of motion, decorations on the other movable shade representing stationary objects and means for moving said movable shades in opposite directions to produce an illusion by which said objects appear to have motion at a rate of speed other than the actual rate of movement of said movable shades.

6. A display device comprising a plurality of decorated shades one within the other, two of said shades being movable relative to each

other, decorations on one of said movable shades representing objects capable of motion, decorations on the other movable shade representing stationary objects, means for moving said movable shades in opposite directions to produce an illusion by which said objects appear to have motion at a rate of speed other than the actual rate of movement of said movable shades, and a fixed decorated shade cooperating with said movable shades and serving to accentuate said illusion.

In witness whereof, I have hereunto set my hand this 6th day of September, 1929.

ELSIE H. HORTON.

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