June 16, 1936. F. G. TOMPSETT 2,044,551

MOTION LAMP

Filed Aug. 25, 1934

Fig. 1.

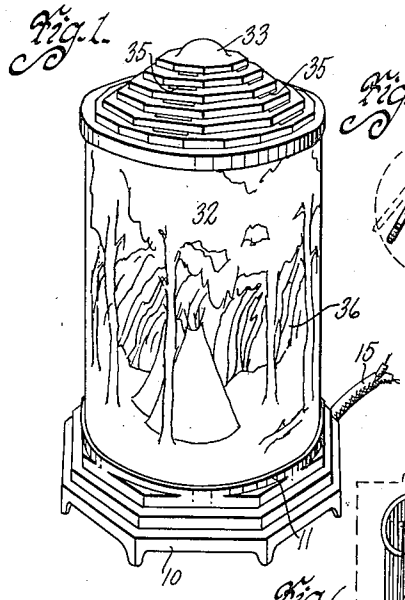


Fig. 7.

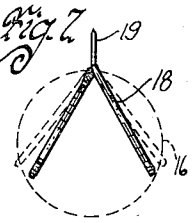


Fig. 2.

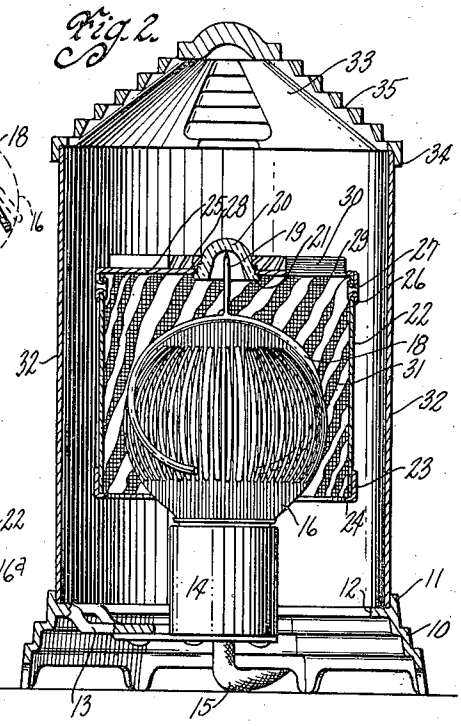


Fig. 6.

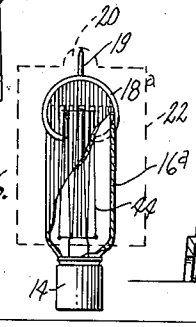
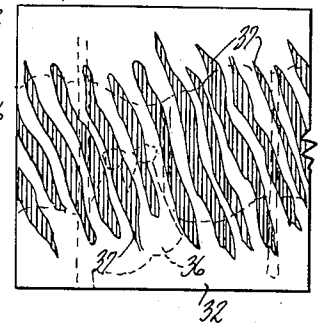


Fig. 3.





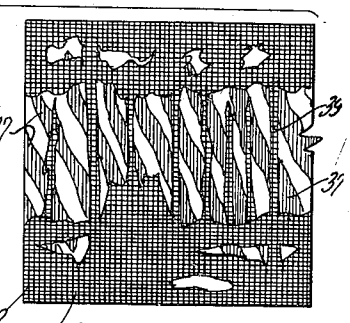
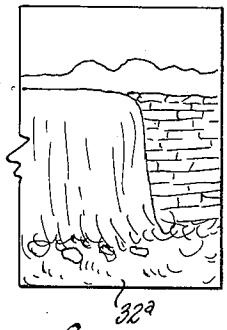
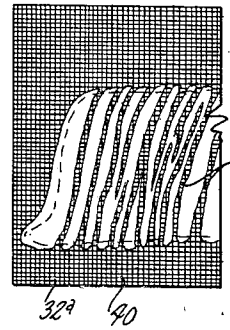


Fig. 4.





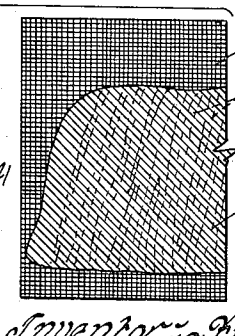
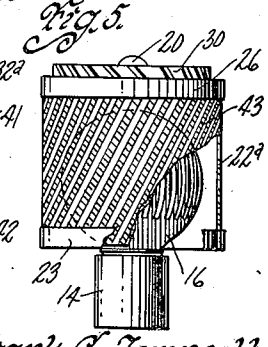


Fig. 5.



Witness
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Patented June 16, 1936 2,044,551

UNITED STATES PATENT OFFICE

2,044,551

MOTION LAMP

Frank G. Tompsett, Omaha, Nebr.

Application August 25, 1934, Serial No. 741,460

1 Claim. (Cl. 40—40)

My present invention relates to a motion lamp having a number of novel features.

It is the purpose of my invention to provide such a lamp, having means whereby the appearance of motion may be produced on an outer, usually cylindrical, screen, and particularly to provide means whereby the artistic effect of the picture on the screen may be heightened.

In this connection, it is my purpose to provide part of a scene or picture on the inside of a screen, so that the outer picture may not appear crowded when the lamp is not lighted, and yet will give the appearance of depth or effect of additional parts or figures when the lamp is lighted.

It is also my purpose in this connection to provide means for giving certain color effects on the outside regardless of the coloring on the light bulb, by providing certain coloring on the inside of the outer screen and also by providing proper coloring on a rotary screen.

Another purpose is to provide in such a lamp a combination including a bulb with substantially upright filaments for enhancing the effect of up-and-down movement on the outer screen.

Still another purpose is to provide novel means for supporting a pivot jewel on a lamp bulb.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my motion lamp, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of the complete lamp embodying my invention.

Figure 2 is a vertical, sectional view of the same.

Figure 3 is a plan view, partly broken away of the outer face of the outer screen with a plan view partly broken away of part of the inner face of said screen at one stage in the completion thereof, and still another plan view of a part of the inner face of the screen completed.

Figure 4 is a view similar to Figure 3 illustrating another type of design on the screen.

Figure 5 is an elevation, parts being broken away, illustrating the rotary screen mounted on the bulb, having a color design thereon for use with the screen shown in Figure 4.

Figure 6 is a side elevation, partly broken away, of a vertically elongated lamp with upright filaments; and

Figure 7 is a side elevation of the means for supporting the jewel on a bulb.

I shall first describe the lamp in a general way, so that its parts may be readily understood, and shall then refer to those features, which have to do with my present invention.

My improved lamp includes a base, indicated by the reference numeral **10**, which is preferably of light weight metal, so shaped and formed as to keep down the shipping weight, and made in any suitable artistic design adapted to support a lamp, having an outer, cylindrical screen.

The base **10** has at its upper periphery an upstanding flange **11**, just below which is an inwardly projecting flange or shelf **12** to support the outer screen hereinafter described. The base **10** is substantially an annular member.

Projecting inwardly from the base is an arm or the like **13**, which at its inner end supports an ordinary lamp socket **14**, which is of the usual type, internally threaded, provided with contact means connected with a two wire insulated cable **15**.

I employ ordinarily a round, electric light bulb **16**, of clear transparent glass. The translucent stripes may be painted on the clear bulb or the whole bulb may be painted or otherwise translucently colored, and part of the coloring may then be removed by scraping or otherwise to form the vertical clear stripes as shown.

On the bulb is mounted the jewel support **18**, hereinafter more fully referred to, having projecting upwardly from the center of the top of the bulb a sharp, pointed, pin-like member **19**. The pin-like member **19** forms a pivot for a jewel **20** of glass or the like, which is somewhat bell-shaped, being hollow underneath, and having at its lower, outer periphery a narrow flange **21**.

Supported on the jewel **20** is a rotary screen **22** comprising a cylindrical member of transparent or translucent material, such for instance as the commercial products known as Kotapack, Cellophane, celluloid or the like. The cylinder of the screen **22** has at the bottom, a thin sheet metal reinforcing, comprising the annular ring **23** with the in-turned flange **24** at its lower edge. This ring also provides sufficient weight to balance and center the rotary screen. At the top of the screen cylinder **22** is a cap **25**, having the down-turned flange **26**. The ring **23** and the flange **26** may be fastened to the material of the cylinder **22** by punching the ring and flange inwardly and by bending the material for gripping the cylinder, as illustrated at **27** in Figure 2. That is to say, the material is punched so as to force part of it inwardly. The edge of the inwardly extending material is then bent, as by a riveting operation to properly engage the screen and cylinder.

The cap **25** has the central opening **28** to receive the jewel **20** and the material of the cap around this opening rests on the flange **21**.

The cap **25** also has a series of radial openings **29** with upwardly inclined plates **30** to form a fan, with blades to be engaged by the upwardly moving current of heated air, for thus causing the rotary screen to rotate on the pivot pin **19**.

The screen may be of transparent, semi-transparent or translucent material, and preferably has the diagonal stripes **31** painted or made of opaque or translucent material, which, however, is less transparent than the screen itself.

I provide an outer, cylindrical screen **32** set on the flange **12**, which is also of transparent, semi-transparent or translucent material. It may be of Cellophane, celluloid, glass or any material adapted for the purpose. This screen will be further referred to later in this description.

A dome-like cap **33** rests on the screen **32** and has the peripheral, down-turned flange **34**. It is also provided with the air vents **35**.

Outer screen

The outer screen **32** has a picture or scene indicated at **36**. The representation of a scene on the screen **32** is omitted from Figure 2 to avoid confusion. The screen of Figures 1 and 3 has a picture or scene **36** representing a forest fire. This may be applied by means of paint, printing, lithographing or otherwise, and is preferably partially opaque and partly translucent. This picture may be of any subject adapted for motion effects.

I have found that a problem arises in connection with these translucent screens due to the fact that when a lamp is not lighted, a more attractive scene is secured by not crowding the picture too much. On the other hand when the lamp is lighted, an effect of distance or perspective may be secured in certain ways. One of these ways is to apply additional features of the scene or picture to the inside of the screen **32**. Thus in Figure 3, the left-hand picture shows a part of the outer face of the screen with the forest fire scene thereon. The middle view shows a part of the inside screen with rather rough, diagonal lines **37**, painted or otherwise colored red. This helps to give the fire effect. I find also that by further painting or otherwise coloring parts of the inside of the screen **32**, as with black paint or other coloring material **38** as shown, a better background is secured when the lamp is lighted, and by adding certain, upright, dark lines or parts or figures as at **39**, there is given the appearance of more trees when the lamp is lighted, and I also thus secure the effect of distance with the dim outlines of trees in perspective. Thus on the inside of the screen **32** are some clear spaces, some red spaces and some dark spaces, in the instance referred to.

The resulting forest fire scene is made much more effective.

It will, of course, be understood that if other than the forest fire scene were used, then the color and arrangement of the lines **37** might be changed, and the color and arrangement of the colored parts shown in the right-hand view of Figure 3 might be changed from those here described.

In Figure 4, I have shown three views of another scene on a screen **32***a* similar to the screen **32**. The left-hand view shows a part of the outer face of the screen representing Niagara Falls. In the middle view of Figure 4, I have shown a portion of the inside of the screen with a dark background **40**, and with dark lines **41**, for example, to enhance the appearance of falling water. In the right-hand view of Figure 4, I have shown the Falls part of the picture with other translucent coloring material, preferably green, as indicated at **42**, for further giving the greenish tinge to the falling water.

I find that the use of the dark background and the green coloring for the Falls helps to eliminate any showing of red in the Falls scene. This result is still further improved by using on the rotary screen **22***a*, similar to the screen **22**, diagonal stripes **43**, preferably of translucent character and green color.

It will, of course, be understood that the additional figures **39** in the form of the device illustrated in Figure 2 must be properly located, shaded and shaped with relation to the scene shown on the outside of the screen, in order to get the most artistic results. The same is true of the background and coloring on the inside of the screen for the screens of Figures 3 and 4, and also of the black stripes and green coloring of the screen of Figure 4.

Bulb

For economy of manufacture, I preferably use for all of my lamps a round bulb, colored red with clear up and down stripes, such as the bulb illustrated in Figure 2 and also in Figure 5. With the background and green coloring as illustrated in Figure 4, I can continue to use the red bulb without getting much, if any red, in the finished Falls scene when the lamp is lighted.

It will, of course, be understood that any preferred color or combination of colors may be used on the bulb.

These bulbs are ordinarily of the type having the substantially horizontal film.

I find that I can further enhance the effect of water falling vertically, by using a vertical, elongated bulb **16***a*, such as that illustrated in Figure 6, provided with the substantially upright filament **44**. With the upright filament, the appearance of up and down motion is more easily produced.

I have found it quite a problem to properly and economically support the rotary screen **22** on the bulb and to provide a suitable bearing for the rotary screen, so that the upwardly moving current of air will always and certainly effect the rotation of that screen. The support **18** above referred to affords very excellent means for securing the desirable results. This support is made originally in the form of a broken ring of resilient wire. The ends are then forced apart until the wire takes on a somewhat spiral appearance, whereupon it can be resiliently snapped on the bulb and will hold its position.

It will, of course, be understood that the pivot **19** is added to the holder before the holder is placed on the bulb. The length and size of the resilient wire of the holder **18** depends upon the type and size of bulb with which it is to be used.

In Figure 6, I have shown a modified form **18***a* of this holder made of such size and shape as to fit an upright bulb of relative small diameter, whereas in Figures 2 and 7, the holder is shown of such size and shape as to fit on a round bulb.

It will readily be seen from the foregoing that numerous variations may be made in the de-

tails of the structure of my improved motion lamp. Any materials suitable for the purpose may, of course, be employed. It is therefore my purpose to cover by my claims any different materials, changes in structure or arrangement of parts, which may come reasonably within the scope of my invention and be distinguished from the prior art.

I claim as my invention:

In a lamp structure for giving the illusion of a forest fire, a base, a light source thereon, an inner rotary screen having markings thereon, and an outer translucent surrounding screen, having a forest fire scene on its outer surface, showing trees, and having on its inner surface substantially vertical dark parts, staggered with relation to the showing of trees on the outer surface, so that when the lamp is not lighted, the trees will not seem crowded in the visible scene, whereas when the lamp is lighted the dark parts will give the appearance of additional trees in the distance.

FRANK G. TOMPSETT.