

Dec. 28, 1926.

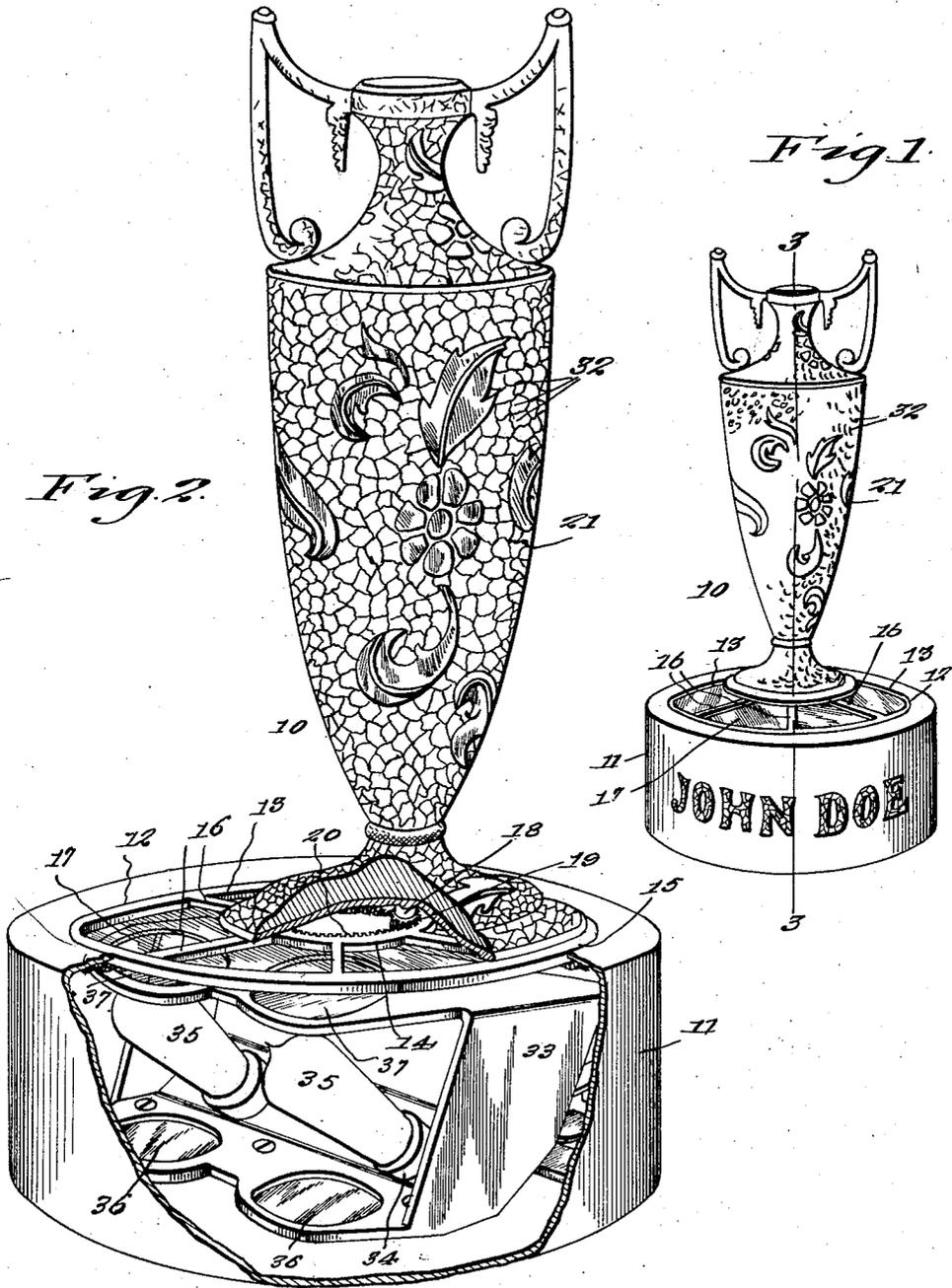
1,612,362

R. M. DECKER

DISPLAY DEVICE

Filed June 19, 1926

2 Sheets-Sheet 1



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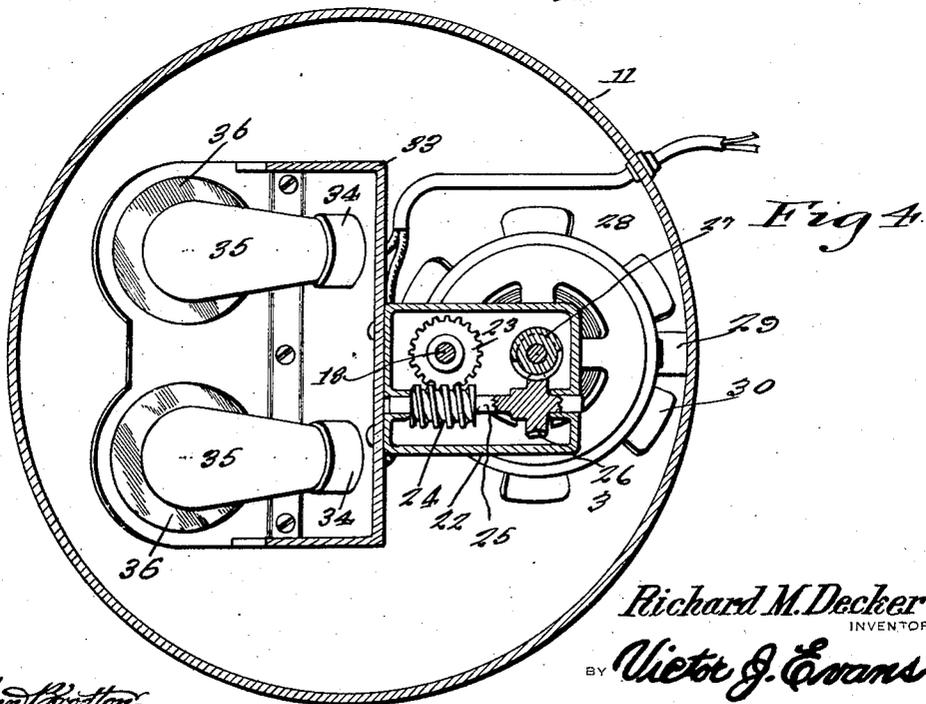
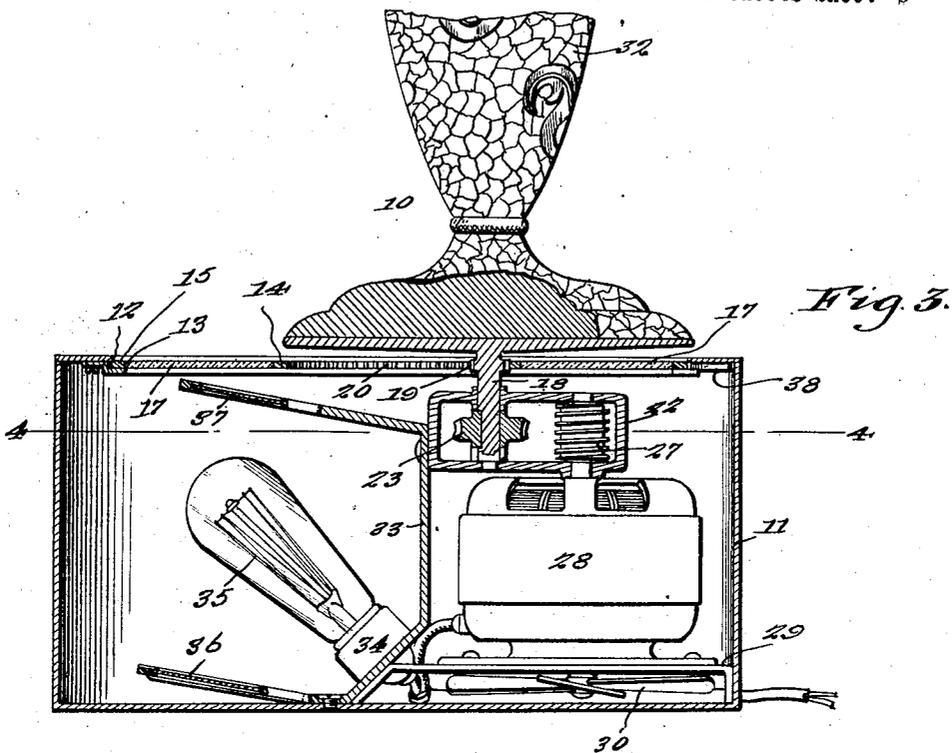
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UNITED STATES PATENT OFFICE.

RICHARD MARKUS DECKER, OF NEW YORK, N. Y.

DISPLAY DEVICE.

Application filed June 19, 1926. Serial No. 117,154.

This invention relates to improvements in display devices.

The principal object of the invention resides in a display device in which the object or article on display is slowly revolved upon a common axis, and upon which varied colored lights are reflected from a point beneath the same, for illuminating purposes, whereby an attractive display is provided.

Another object of the invention is to provide a display device in which the article on display is revolved and has reflecting properties such as small mirrored surfaces on the exterior thereof, which when subjected to the action of various colored lights during the rotation of the same produces a novel illusion for attracting attention when operated in a public place.

With these and other objects in view, the invention resides in certain novel construction and combination and arrangement of parts, the essential features of which are hereinafter fully described, are particularly pointed out in the appended claims, and are illustrated in the accompanying drawing, in which:—

Figure 1 is a perspective view of my improved display device.

Figure 2 is an enlarged perspective view with parts broken away in section.

Figure 3 is a vertical sectional view on the line 3—3 of Figure 1.

Figure 4 is a horizontal sectional view on the line 4—4 of Figure 3.

Referring more particularly to the drawings, the reference numeral 10 designates my improved display device in its entirety, and which includes an annular casing 11, having its top provided with an opening 12, and within which opening, a wheel 13 is mounted, and which wheel comprises inner and outer rings 14 and 15 respectively which are joined by spaced radially extending spokes 16, the spaces between the spokes being closed by panels of translucent glass or isinglass 17, the panels being of different colors.

Extending through the inner ring 14 is a driven shaft 18 having a gear 19 thereon for meshing engagement with the annular series of teeth 20 on the inner ring 14. The upper end of the shaft 18 extends above the top of the casing for the support of the article to be displayed, namely an ornamental vase 21, while the lower end of the shaft extends into a reduction gear housing 22 disposed within

the casing and which shaft carries a gear 23 for meshing engagement with a worm 24 provided on a transversely disposed shaft 25. A gear 26 is also provided on the shaft 25 and meshes with a gear 27 on one end of the driven shaft of an electric motor 28. The motor 28 is supported above the floor of the casing by suitable brackets 29 to allow for the rotation of a fan 30 carried by the other end of the motor shaft, for keeping the interior of the casing in a relatively cool condition during the operation of the device.

The article 21 above referred to is so constructed that the interior of the same is provided with numerous mirrored surfaces 32 for a purpose to be presently described.

Mounted within the casing 11 beneath the rotating wheel 13 is a panel member 33, the back wall of which is disposed at an angle with respect to the vertical axis of rotation of the shaft 18, and which supports a pair of spaced electric sockets 34, for removably receiving electric light bulbs 35. The bottom of the panel carries reflectors 36 which serve to reflect light from the electric bulbs through the lenses 37 in the top of the panel and which register with the colored windows on the wheel 13 as the same rotates.

For the purpose of constantly holding the gear teeth 20 of the ring 14 in meshing engagement with the worm 19, I provide a spring 38 supported at the rear of the casing and bearing against the peripheral edge of the wheel.

From the foregoing description, it will be seen that upon operation of the motor, a slow turning movement is imparted to the shaft 18 due to reduction gearing therebetween, and which serves to revolve the article on display at a relatively slow rate of speed. A slow rotation is also imparted to the wheel 13 through the gear 19 and gear teeth 24 so as to successively present the colored windows in register with the beams of light from the lens 35. The device is primarily adapted for night display and when the electric light bulbs 35 are lighted, beams of light are cast upward toward the revolving base and through the varied colored windows in the wheel 13. The lights are positioned so that one panel cannot span the two beams of light, thus two different colored beams are projected beyond the article 21. Due to the mirrored surfaces on the article and the rotation of the same, the said mirrored surfaces will reflect the dif-

ferent colored lights in the form of an illusion. During the rotation of the wheel, the colored panels will successively come into the path of the light beam thereby continually changing the colors of the light reflected. The device may be used for displaying merchandise for sale by substituting the same for the one shown in the drawings, but such an article as has been shown imparts novelty to the device, and will attract public attention when placed on view.

While I have described what I deem to be the most desirable embodiment of my invention, it is obvious that many of the details may be varied without in any way departing from the spirit of my invention, and I therefore do not limit myself to the exact details of construction herein set forth nor to anything less than the whole of my invention limited only by the appended claims.

What is claimed as new is:—

1. In a display device, an article to be displayed, means for casting a beam of light upon said article, a wheel having translucent panels of varied colors successively movable into the path of said beam of light, and means for simultaneously rotating said article and said wheel in the same direction and at different rates of speed.

2. In a display device, the combination of a driven shaft, an article to be displayed fixedly supported by one end of said shaft, a rotatable wheel having translucent panels of different colors radially arranged therein, co-acting means between said shaft and said wheel for rotating the same simultaneously with said driven shaft, and means for reflecting beams of light from beneath said wheel toward said article, said beams of light being in the path of movement of said translucent panels for successively changing the colors of light reflected on said article.

3. In a display device, an article to be displayed, a rotatable wheel beneath said article and having translucent panels of varied colors radially arranged therein, a plurality of light beams directed upwardly from

beneath said wheel toward said article and within the path of movement of said translucent panels, the said beams of light being so spaced that a plurality of different colored panels are always respectively in the path of said beams of light whereby a plurality of varied colored lights are cast on said article, and means for simultaneously rotating said article and said wheel at relatively different rates of speed.

4. In a display device, the combination of a casing having an open top, a rotatable shaft extending beyond the top of said casing, a rotatable wheel mounted within said casing and having radially arranged translucent panels of different colors, an article to be displayed supported upon the extending end of said shaft, means for rotating said shaft at a relatively slow rate of speed, means for transmitting motion from said shaft to said wheel, a plurality of electric light bulbs within said casing, and reflectors for the respective electric light bulbs for reflecting light therefrom upward toward said article in the path of movement of said translucent panels.

5. In a display device, the combination of a casing having an open top, a rotatable shaft extending beyond the top of said casing, a rotatable wheel mounted within said casing and having radially arranged translucent panels of different colors, an article to be displayed supported upon the extending end of said shaft, means for rotating said shaft at a relatively slow rate of speed, means for transmitting motion from said shaft to said wheel, a plurality of electric light bulbs within said casing, and reflectors for the respective electric light bulbs for reflecting light therefrom upward toward said article in the path of movement of said translucent panels, and means for exhausting heat produced by said electric light bulbs from said casing.

In testimony whereof I have affixed my signature.

RICHARD MARKUS DECKER.