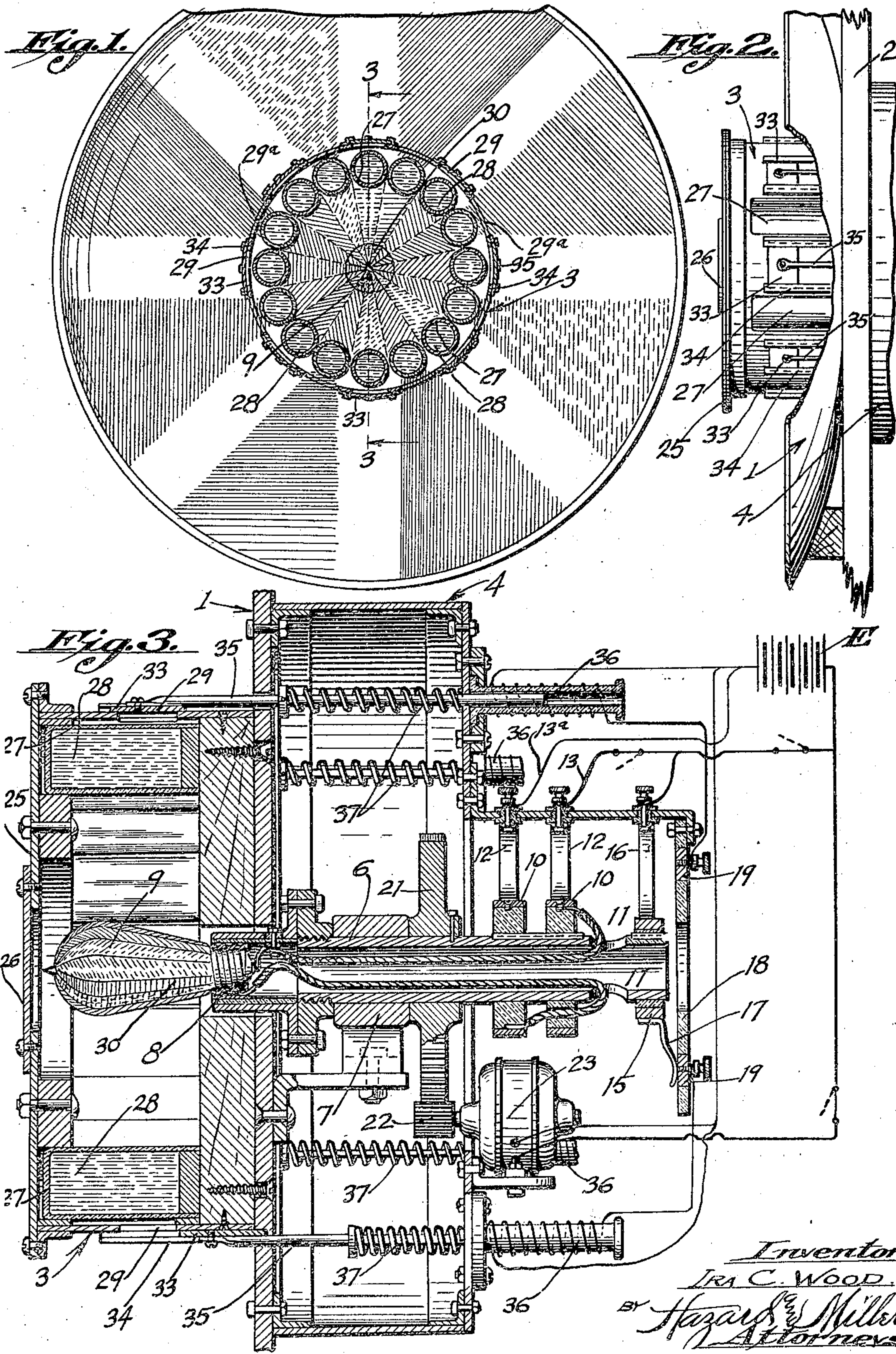


Jan. 2, 1923.

1,440,518.

I. C. WOOD.  
COLORED LIGHTING DEVICE.  
FILED APR. 23, 1921.





## UNITED STATES PATENT OFFICE.

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## COLORED-LIGHTING DEVICE.

Application filed April 23, 1921. Serial No. 463,881.

*To all whom it may concern:*

Be it known that I, IRA C. WOOD, a citizen of the United States, residing at South Pasadena, in the county of Los Angeles and State of California, have invented new and useful Improvements in Colored-Lighting Devices, of which the following is a specification.

This invention is a display device adapted to produce novel and pleasing color effects, and the invention consists essentially of a dished screen member across which rays of variously colored lights are projected so as to produce a pleasing rotating color effect. A casing is mounted at the center of the screen and contains a rotatable source of illumination which is preferably provided with variously colored circumferentially related portions. A plurality of transparencies are provided at the periphery of the casing around the rotatable source of illumination, and closure plates are arranged beyond some of the transparencies, so that by opening and closing the same, certain of the rays of light may be cut off in order to modify and vary the lighting effect produced by the mechanism.

By means of a structure as thus set forth, a remarkable brilliant and beautiful lighting effect may be produced upon the dished screen of the apparatus, and the mechanism will be found of practical advantage as an advertising medium or the like.

The invention will be readily understood from the following description of the accompanying drawings, in which:

Figure 1 is a front elevation of a device constructed in accordance with the invention, and showing the casing and the parts contained therein in vertical section.

Fig. 2 is a side elevation of the mechanism partly broken away.

Fig. 3 is a detail transverse section on the line 3—3 of Fig. 1.

The dished screen of the mechanism is shown at 1 mounted upon a suitable support 2, and the casing 3 projects from the center of the dished screen, while a casing 4 containing the actuating mechanism for the device extends rearwardly from the center of the dished screen.

A conduit tube 6 is journaled in a bearing 7 in casing 4 and terminates in a lamp socket 8 extending into casing 3 and carrying an incandescent lamp 9 which is positioned in said casing. The tube 6 extends rearwardly

beyond casing 4 and is provided with contact rings 10 to which the wires 11 for the lamp 9 are connected. Contacts 12 engage the rings 10 and are connected by positive and negative wires 13 and 13<sup>a</sup> to a suitable source of electrical energy indicated at E.

The tube 6 also carries a contact ring 15 which is engaged by a contact 16 also connected to the positive wire 13. The ring 15 carries a spring contact 17 co-operating with a plate 18 provided with a plurality of circumferentially spaced contacts 19 so that as the tube 6 and lamp 9 rotate, a circuit is successively closed through spring contact 17 and the respective contacts 19 for a purpose to be hereinafter described.

The tube 6 may be rotated by a gear 21 fixed thereon and received within casing 4, said gear meshing with a pinion 22 upon the shaft of a suitable electric motor which is adapted to be energized by the source of electrical energy.

The casing 3 receiving the lamp 9 is provided with a suitable closure plate 25 which preferably has an axially disposed removable plate 26 for the insertion and removal of the incandescent lamp 9. The periphery of the casing is provided with openings 29 and 29<sup>a</sup> alternately disposed around said casing, and a plurality of transparencies 27 shown as glass cylinders are arranged just within the periphery of said casing and opposite the respective openings 29 and 29<sup>a</sup>. These cylinders are filled with variously colored liquids as shown at 28, and the incandescent lamp 9 is preferably variously colored as shown by the strip portions 30 of said lamp circumferentially disposed with relation to one another.

As a consequence it will be noted that the rotating lamp 9 will cause a rotating variously colored source of illumination, which co-operating with the variously colored transparencies around the periphery of the casing and adapted to form a magnifying means, will cause projection of variously colored rays of light across the dished screen of the apparatus, and these rays of light will be constantly changing and blending so as to form an extremely pleasing effect.

In order to still further vary the effect produced by the rays of light passing across the dished screen, the openings 29 in the periphery of the casing are preferably provided with closure plates 33 axially slid-



able in guideways 34 and arranged to be normally closed and automatically successively opened by actuating means controlled by the electrical circuits successively made through the engagement of contact arm 17 with contacts 19, as previously described. As an instance of this arrangement the closure plates 33 are connected to operating rods 35 which extend through electrical solenoids 36.

Springs 37 arranged upon the operating rods normally shift the latter so as to close plates 33, and when the solenoids for the operating rods are energized, the closure plates are shifted to open position against the tension of their springs. The respective solenoids are in the respective circuits closed by contact arm 17 and contacts 19, in order that the solenoids will be successively energized for successively opening the closure plates while contact arm 17 moves over the respective contacts 19.

The construction, as thus set forth, provides a pleasing advertising novelty or other display device which is arranged to form a constantly changing color scheme upon the dished screen of the apparatus, the color scheme providing beautiful blending of the various colors so as to form only varying shades.

Various changes may be made without departing from the spirit of the invention as claimed.

What is claimed is:

1. A display device comprising a rotatable source of illumination having various colored portions circumferentially disposed with relation to one another, and variously colored transparent stationary members arranged in circumferential relation around said rotatable source of illumination.

2. A display device comprising a rotatable source of illumination having various colored portions circumferentially disposed with relation to one another, and variously colored transparent members arranged in circumferential relation around said rotatable source of illumination, and closure plates co-operating with said transparencies to cut off or display light through the same.

3. A display device comprising a dished screen, a casing at the center thereof having variously colored peripheral transparencies, and a rotatable source of illumination within said casing having variously colored portions.

4. A display device comprising a rotatable source of illumination having variously colored portions circumferentially disposed with relation to one another, and variously colored transparent members arranged in

circumferential relation around said rotatable source of illumination, closure plates cooperating with said transparencies, and electro-responsive means for successively opening and then closing said plates.

5. A display device comprising a dished screen, a casing at the center thereof having variously colored peripheral transparencies, closure plates for said transparencies, means for opening and closing said plates, and a rotatable source of illumination within said casing having variously colored portions.

6. A display device comprising a rotatable source of illumination having variously colored portions circumferentially disposed with relation to one another, and variously colored transparent members arranged in circumferential relation around said rotatable source of illumination, closure plates cooperating with said transparencies and having means for successively opening and then closing said plates.

7. A display device comprising a rotatable source of illumination having variously colored portions circumferentially disposed with relation to one another, and variously colored transparent members arranged in circumferential relation around said rotatable source of illumination, closure plates cooperating with said transparencies and having means for successively opening and then closing said plates, said means being controlled by the rotation of said source of illumination.

8. A display device comprising a rotatable source of illumination having variously colored portions circumferentially disposed with relation to one another, and variously colored transparent members arranged in circumferential relation around said rotatable source of illumination, closure plates cooperating with certain of said transparencies, spring means normally closing said plates, electrical solenoids for retracting said plates, and means for closing circuits through said solenoids.

9. A display device comprising a rotatable source of illumination having variously colored portions circumferentially disposed with relation to one another, and variously colored transparent members arranged in circumferential relation around said rotatable source of illumination, closure plates cooperating with certain of said transparencies, spring means normally closing said plates, electrical solenoids for retracting said plates, and contacts for the circuits through said solenoids closed and broken by the rotation of said source of illumination.

In testimony whereof I have signed my name to this specification.

IRA C. WOOD.