

a relay comprising a magnet 64, a switch blade 66, and a spring 68 which normally holds blade 66 to the left, thus closing a circuit to brush 48. However, no current can flow through that circuit because brush 48 is on insulation 42.

Whenever the operator wishes to move a screen from inoperative to operative position he closes the proper switch 62 with the immediate result shown at the left-hand unit (Fig. 7). Current flows from source 58 through line 70, switch 62, lines 72, 74, 76 to ground, thus energizing magnet 64, drawing blade 66 to the right to close the circuit to brush 52. The current then flows from source 58 through line 60, line 78, and blade 66 (in its dotted position in left-hand unit) brush 52, metal plate 41, brush 50, motor 28 and line 76 to ground. Whereupon the motor runs until the rotary switch has rotated from its position in the three left-hand units (Fig. 7) to bring insulation 44 under brush 52, as in the right-hand unit (Fig. 7) thereby breaking the motor circuit and stopping the motor with the screen in front of the lamp and the parts as shown in Fig. 3. Magnet 64 is still energized and therefore continues to hold blade 66 to the right as in the left-hand unit (Fig. 7) until the operator opens switch 62, whereupon the magnet is deenergized, spring 68 draws blade 66 to the left to again energize the motor through brush 48, plate 41 and brush 50, causing the motor to rotate in the same direction as before until insulation 42 gets under brush 48, by which time crank pin 32 has reached the top of its stroke and the screen is in its inoperative position (Fig. 4), the other parts having reached their corresponding positions, as indicated in the three left-hand units of Fig. 7.

It is to be understood that the invention is not limited to the specific embodiment herein illustrated and described, but may be used in other ways without departure from its spirit as defined by the following claims.

I claim:

1. A color control apparatus for a light, comprising in combination, a color screen having operative and inoperative positions, an electric motor operatively connected to said screen, a manually operated switch for placing said motor in circuit with a source of electric motive power for operating said motor, and control means actuated by said motor for causing said motor to turn only a predetermined number of revolutions whereby said screen is moved from one of said positions to the other.

2. A color control apparatus for a light, comprising in combination, a color screen having operative and inoperative positions, an electric motor operatively connected to said screen, a manually operated switch and control means actuated by said motor effective to cause said motor to move said screen from a position of rest at one of said positions to a position of rest at the other of said positions successively upon the closing and opening of said switch.

3. A color control apparatus for a spotlight, comprising in combination, a color screen having operative and inoperative positions, a motor adapted to move said screen, a connection between said motor and said screen adapted to start said screen slowly, then accelerate it to a maximum speed at about midstroke and finally to bring it slowly to rest, said connection including a crank, and manually operable control

means for causing said motor to rotate said crank through half a revolution, whereby said screen is moved from one of said positions to the other.

4. The invention set forth in claim 3 in which the next actuation of said motor will rotate said crank through another half revolution to return said screen to its original position.

5. A color control apparatus for a spotlight, comprising in combination, a color screen having operative and inoperative positions, an electric motor adapted to move said screen, a connection between said motor and said screen adapted to start and stop said screen slowly, a manually operated switch for placing said motor in circuit with a source of electric motive power for operating said motor, and control means actuated by said motor for causing said motor to turn only a predetermined number of revolutions, whereby said screen is moved from one of said positions to the other.

6. A color control apparatus for a spotlight, comprising in combination, a color screen having operative and inoperative positions, an electric motor adapted to move said screen, a connection between said motor and said screen adapted to start and stop said screen slowly, a manually operated switch for placing said motor in circuit with a source of electric motive power for operating said motor, and control means actuated by said motor to cause said motor to move said screen from a position of rest at one of said positions to a position of rest at the other of said positions successively upon the closing and opening of said switch.

7. A color control apparatus for a spotlight, comprising in combination, a pivoted color screen having operative and inoperative positions, an electric motor adapted to move said screen about its pivot, a connection between said motor and said screen adapted to start and stop the movement of said screen slowly, said connection including a rotary motor driven member, an arm operatively connected to said screen and extending laterally from said screen pivot, and a link eccentrically pivoted to said motor driven member and connected to said arm, a manually operated switch for placing said motor in circuit with a source of electric motive power for operating said motor, and control means actuated by said motor for causing said motor to turn only a predetermined number of revolutions whereby said screen is moved from one of said positions to the other.

8. A color control apparatus for a spotlight, comprising in combination, a pivoted color screen having operative and inoperative positions, an electric motor adapted to move said screen about its pivot, a connection between said motor and said screen adapted to start and stop the movement of said screen slowly, said connection including a rotary motor driven member, an arm operatively connected to said screen and extending laterally from said screen pivot, and a link eccentrically pivoted to said motor driven member and connected to said arm, a manually operated switch controlling the operation of said motor, and control means actuated by said motor effective to cause said motor to move said screen from a position of rest at one of said positions to a position of rest at the other of said positions successively upon the closing and opening of said switch.

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