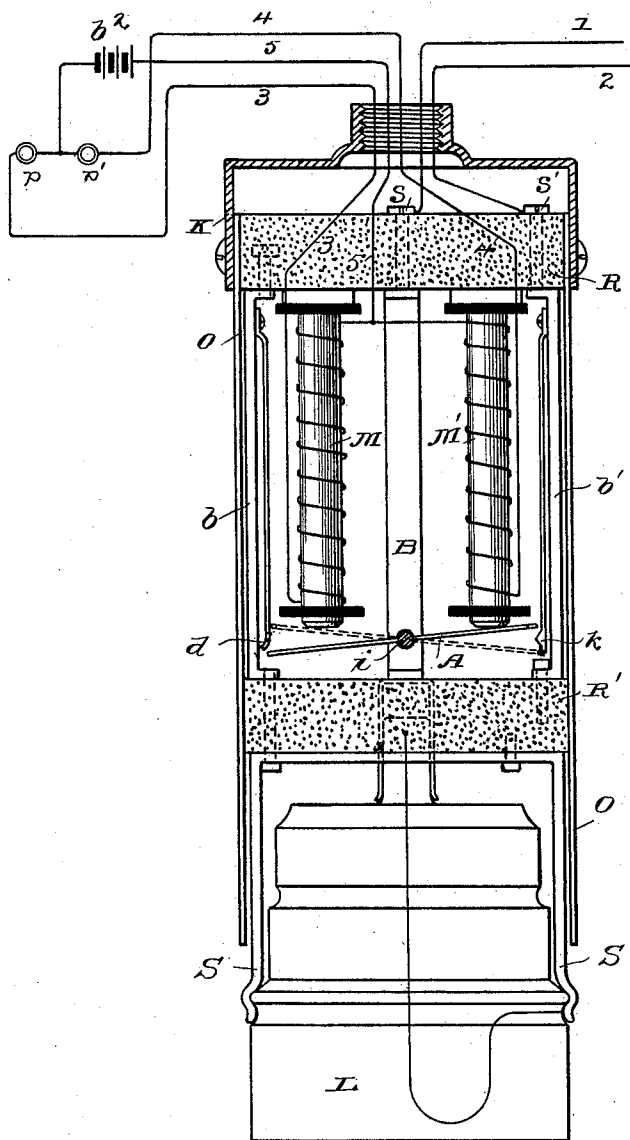


(No Model.)

G. E. PAINTER.
ELECTRIC LAMP SOCKET SWITCH.

No. 466,511.

Patented Jan. 5, 1892.



Witnesses

H. F. Lamb

Stephen J. J. J.

Inventor

Gwynne E. Painter

By Frankland J. J.

Attorney

UNITED STATES PATENT OFFICE.

GWYNNE E. PAINTER, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF
TO JAMES F. MORRISON, OF SAME PLACE.

ELECTRIC-LAMP-SOCKET SWITCH.

SPECIFICATION forming part of Letters Patent No. 466,511, dated January 5, 1892.

Original application filed March 17, 1891, Serial No. 385,399. Divided and this application filed July 24, 1891. Serial
No. 400,620. (No model.)

To all whom it may concern:

Be it known that I, GWYNNE E. PAINTER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Electric-Lamp-Socket Switches, of which the following is a description, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon.

This application is a division of an application filed by me March 17, 1891, Serial No. 385,399.

My invention is an improvement in incandescent-electric-lamp-socket switches, and refers particularly to such switches when operated electrically and by a separate circuit independent of the main supply circuit of the lamp.

The object of my invention is to provide a device whereby any individual lamp may be turned on or off from a distance, said distance being determined only by the length of the circuit through which the mechanism of the switch is energized.

In accomplishing my object I employ small electro-magnets contained within the lamp-socket and a separate circuit to energize them. One advantage of a separate circuit is that the winding of the magnets is not complicated by the varying change of potential of ordinary lighting circuits, as it would be were the magnets in shunt relation to the main circuit. Besides, it is expensive and impracticable to run the comparatively large and expensive conductors of lighting circuits to all points where it would be convenient and desirable to have the controlling push button or levers for operating the lights. An ordinary bell-wire or any small wire of low conductivity will be sufficient to carry the current required to energize the small electro-magnets necessary.

In the drawings I have shown upon an enlarged scale an incandescent-lamp socket, the shell O of which is made in the ordinary manner from brass or any other suitable material. It has the ordinary base K fastened to the shell O, insulating-disks R R', and spring-jaws S S, to hold the lamp L in position.

Upon the insulating-disk R are fixed the electro-magnets M M', which are in circuit with the battery through conductors 3 4 and return 5. Two open-circuit push-buttons p p' are shown for placing either of the magnets desired in circuit with the battery. A bar B extends from one to the other of the insulating-disks R R', and pivotally mounted thereon, but insulated therefrom and in close proximity to the magnets M M', is the armature A. The armature A rocks upon its pivotal support and its ends are engaged, one by a detent k, the other by a friction-spring d, both spring and detent being supported by bars b b' and insulated from the shell O. The pivot i, upon which the armature A rocks, is insulated from the bar B. The screw s, besides holding the bar B in position, is the terminal to which the conductor 1 is attached. This conductor forms one side of the supply-circuit of the lamp L. The other side conductor 2 is connected to S', which retains the bar b' in position. In the position shown the circuit is broken; but if the magnet M be energized by being put in circuit with the battery b² the armature will be drawn up into the position shown in dotted lines. The supply-circuit will then be complete from conductor 1 to binding-screw s, bar B, through lamp L, back through spring d, armature A, as shown in dotted lines, spring-detent k, and conductor 2.

I do not confine myself to the exact details herein described, as the device may be modified in many of its minor details without departing from the spirit of my invention.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with an electric-lamp socket, of two sets of electro-magnets contained within said socket, a separate circuit independent of the lamp-circuit for each set of magnets, a manual switch controlling each of said circuits, a rocking lever controlling the supply-circuit and operated by either set of magnets, and spring-detents connected in the lamp-circuit and arranged to engage the lever, and thereby to control the lamp-circuit in either of its operative positions.

2. An electric-lamp-socket switch comprising—

ing two or more electro-magnets, a circuit independent of the lamp-circuit energizing the electro-magnets, said circuit comprising a conductor to each electro-magnet, a normally-open switch for each conductor, and a common return for all the conductors, and a switch operated by the electro-magnets and controlling the lamp-circuit.

3. The combination, with an electric-lamp socket, of two sets of electro-magnets fixed to an insulating-disk supported within the barrel or shell of said socket, a separate circuit independent of the lamp-circuit for each set of magnets, a manual switch controlling each of said circuits, a rocking-lever armature operated by said magnet, and spring-detents in the lamp-circuit arranged to engage the lever-armature and acting to control the lamp-circuit in either of its operative positions.

4. An electric-lamp-socket switch comprising two insulating-disks in said socket, a pair of electro-magnets fixed to one of said disks, a bar extending from one to the other of said disks, an armature pivotally mounted upon said bar and under the influence of the electro-magnets, spring-contacts in the lamp-circuit making contact with the armature in one of its operative positions and completing circuit therethrough, and a circuit independent of the lamp-circuit energizing the electro-magnet.

In testimony whereof I affix my signature in presence of two witnesses.

GWYNNE E. PAINTER.

Witnesses:

M. HUNTINGTON,
G. A. MULLEN.