

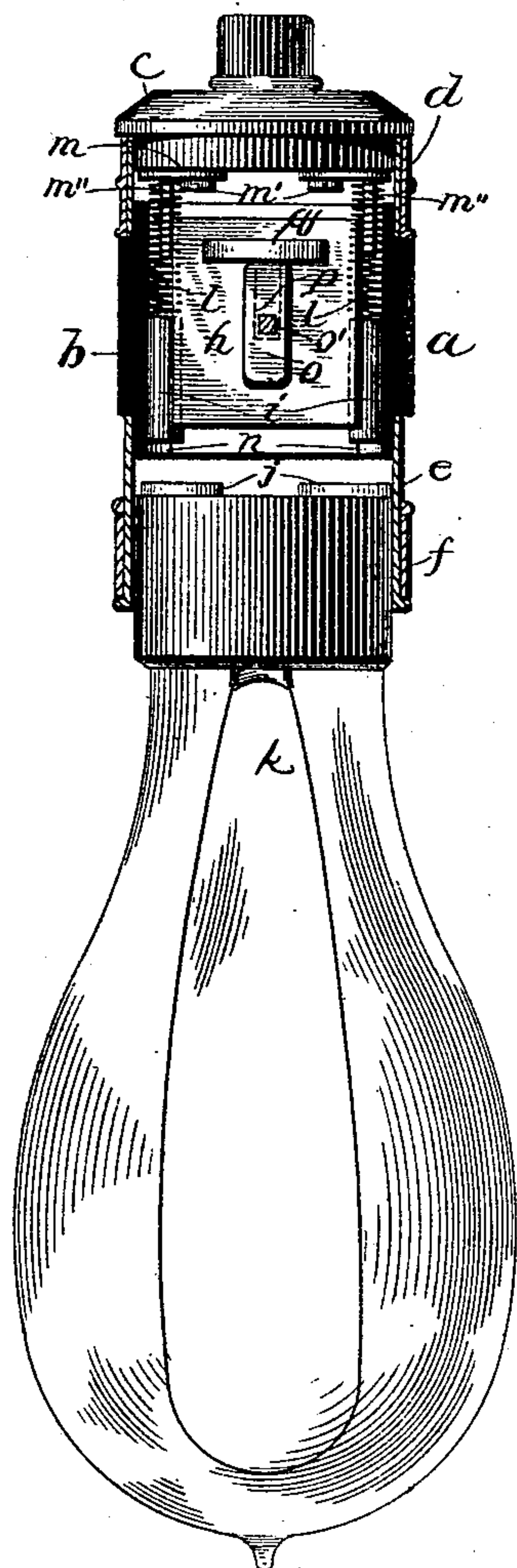
(No Model.)

J. O. PHILLIPS.  
INCANDESCENT ELECTRIC LAMP SOCKET.

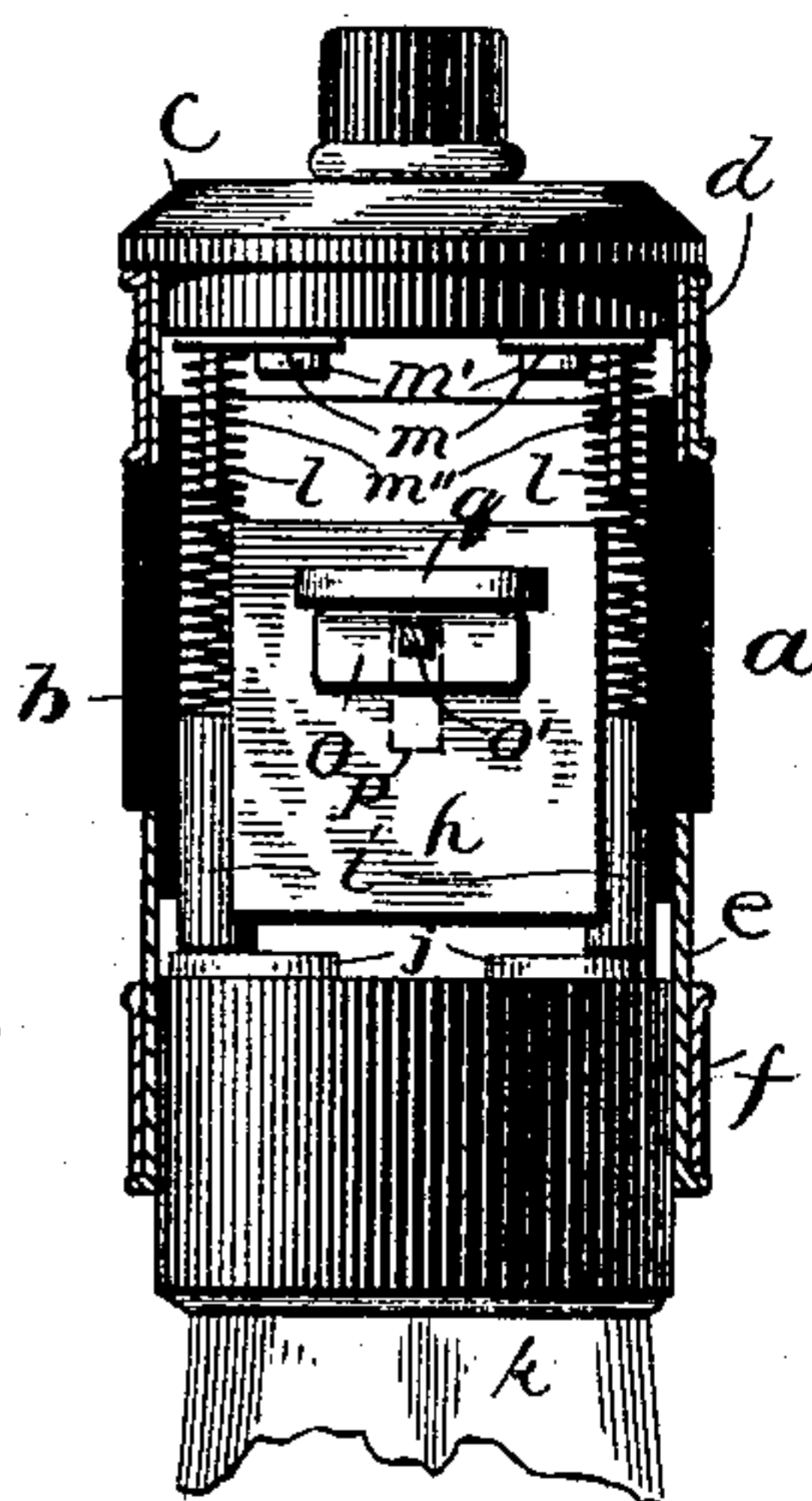
No. 459,514.

Patented Sept. 15, 1891.

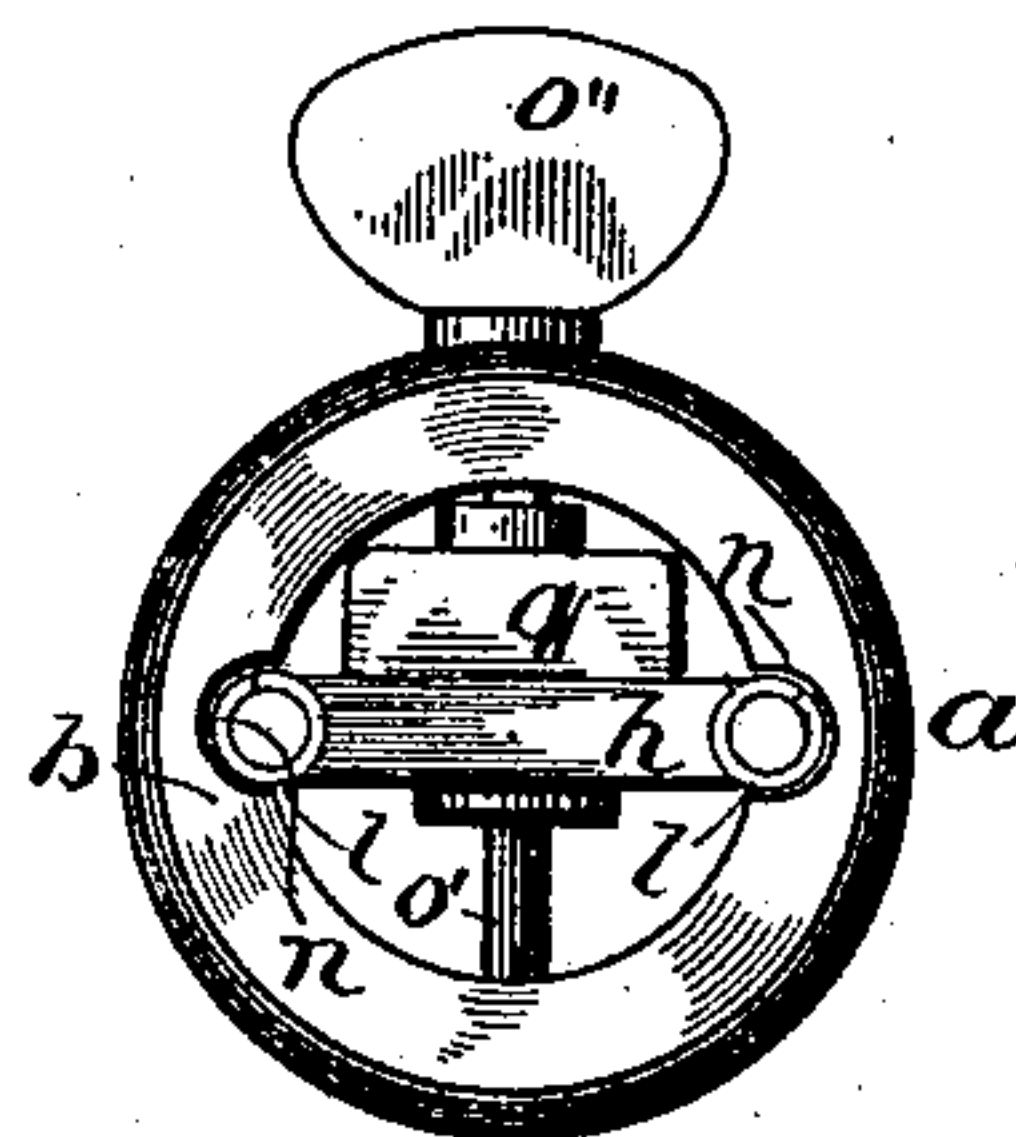
*Fig 1*



*Fig 2*



*Fig 3*



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*per R. G. Phillips*  
his Attorney



# UNITED STATES PATENT OFFICE.

JOHN OTIS PHILLIPS, OF NEW YORK, N. Y., ASSIGNOR TO THE MCCREARY ELECTRICAL SPECIALTY COMPANY.

## INCANDESCENT-ELECTRIC-LAMP SOCKET.

SPECIFICATION forming part of Letters Patent No. 459,514, dated September 15, 1891.

Application filed December 3, 1890. Serial No. 373,475. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN OTIS PHILLIPS, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Incandescent-Electric-Lamp Sockets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates more particularly to pendent incandescent-lamp sockets, and is especially applicable as a double-pole socket.

The object of my device is to provide a switch for turning the light on or off by making simultaneous connection with both terminals of the lamp in a more positive, safe, and efficient manner.

With this purpose in view my invention consists in the peculiar features and combinations of parts more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a sectional elevation of my complete device, in which the contact-points are separated and the circuit broken; Fig. 2, a similar view showing the circuit closed, and Fig. 3 an end view of the interior.

The reference-letter *a* represents the surrounding shell within which the connecting mechanism is located. This shell comprises a central section *b*, composed of hard rubber, a cap *c*, composed of hard rubber and provided with a movable band *d*, having angular fastening-slots, and a lower section *e*, consisting of a stationary shell rigidly attached to the central section *b* and surrounded by a movable band *f*, also having angular slots *g*, like those in the band above. This form of double socket is old and well known to the art and does not require further description.

The novel characteristics of my device are found in the switch mechanism, in which *h* represents a block composed of non-conducting material movable longitudinally and having attached to its opposite sides a pair of metallic conducting-bars *i*, adapted to make contact with the usual yielding brass connections *j* upon the lamp *k* when the latter is inserted within the socket, as shown in Fig. 2.

A pair of coiled metallic springs *l* are fastened to the upper ends of the bars *i* and in electrical contact therewith, so that they will have a constant pressure against terminals *m* of the electric-light wires. These terminals are fastened to the rubber cap *c* by screws *m'*. A pair of arms *m''* extend downward within the coiled springs and serve to keep the springs in place, also to insure a perfect contact. The springs can be made of any good conducting material; but phosphor-bronze is preferred. The bars *i* and springs *l* fit in concavities *n* in the sides of the reciprocating block *h* and hard-rubber section *b*, the latter concavities serving as guides for the bars. The block *h* is reciprocated by means of a cam *o* upon the spindle *o'* of a thumb-piece *o''*. The block is provided with an elongated slot *p*, through which the spindle passes, and it is further provided with a laterally-extending lug *q*, located above the spindle and adapted to be engaged by the cam. The elongated slot *p* permits the block to reciprocate.

The preferred manner of constructing my device having been set forth, I will now proceed to describe its operation. By turning the spindle *o'* the cam *o* is brought into sliding contact with the projection *q*, and, continuing to revolve, it lifts the block *h*, so that the contact-bars *i* are lifted simultaneously from the yielding connections or poles *j*, as seen in Fig. 1, and all electrical connection between the lamp and socket is immediately severed. By this double-pole arrangement it will be impossible to short-circuit the current or to get a shock from the switch or shell. A continued rotary movement of the thumb-piece brings the cam into a horizontal position, as in Fig. 2, and the coil-springs will force the block downward and bring the conducting-bars *i* into electrical contact with the poles *j* of the lamp, and thereby complete the circuit.

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

1. In combination with an incandescent lamp and socket, a pair of electrical conductors movable longitudinally within the socket and insulated from each other, a pair of

springs electrically connected to said conductors and the terminals of the line-wire and arranged to actuate the conductors toward and hold them in contact with the poles of the lamp, as and for the purpose set forth.

2. In combination with an incandescent-lamp socket, a switch consisting of a reciprocating block located within the socket, a pair of electrical connectors located upon opposite sides of said block and adapted to come in contact with the poles upon the lamp, and coil-spring conductors interposed between the ends of said connectors and the terminals of the wires, all arranged and adapted to operate in the manner and for the purpose described.

3. The combination, with an incandescent-lamp socket or similar device, of a reciprocating block carrying electrical connectors having a constant spring connection with the wire-terminals at the end of the socket, and a spindle, cam, and thumb-piece for reciprocating said block, whereby the connectors are thrown into and out of contact with the poles of the lamp, as set forth.

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

JOHN OTIS PHILLIPS.

Witnesses:

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