

(No Model.)

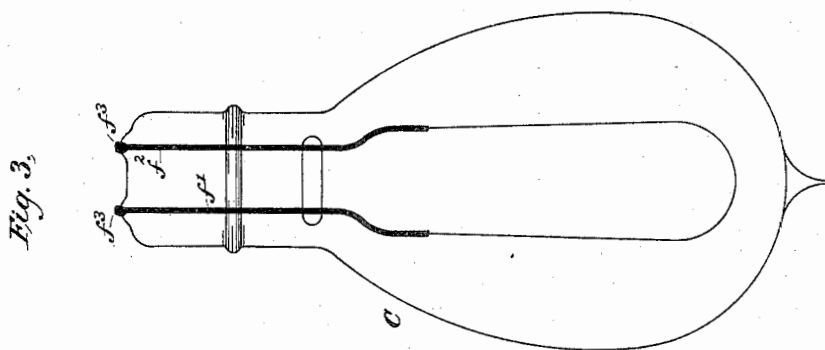
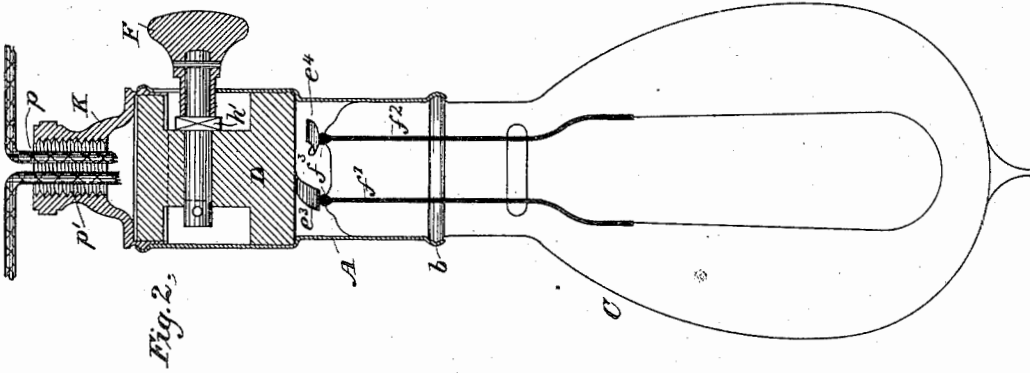
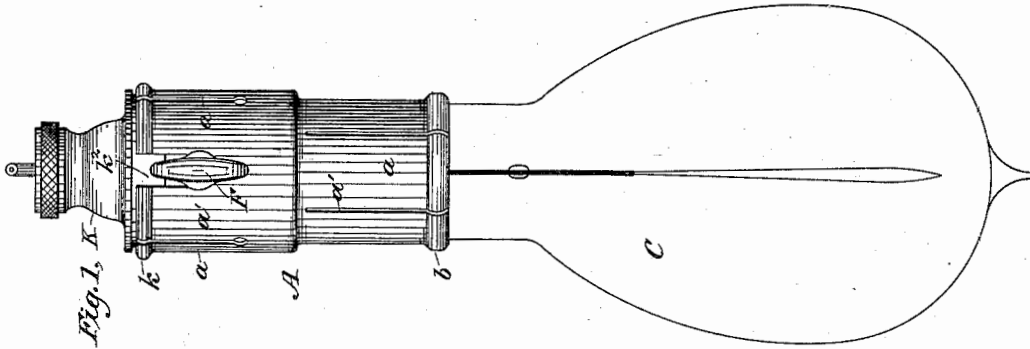
2 Sheets—Sheet 1.

W. STANLEY, Jr.

HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

No. 330,269.

Patented Nov. 10, 1885.



Witnesses

Charles Atney
Rowena C. Gould.

Inventor.

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By his Attorneys

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Fig. 4.

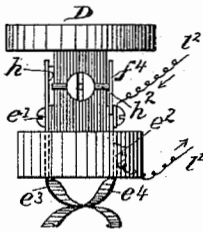


Fig. 5.

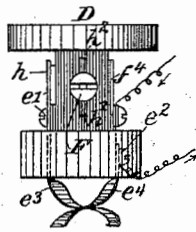


Fig. 6.

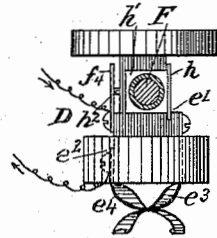


Fig. 7.

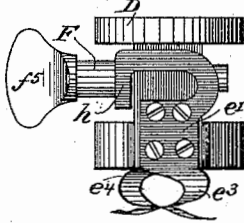


Fig. 8.

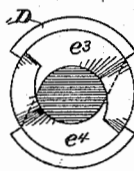


Fig. 9.

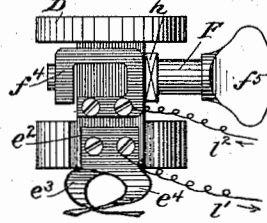


Fig. 10.

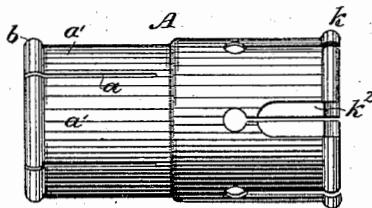
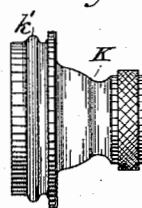


Fig. 11.



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UNITED STATES PATENT OFFICE.

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HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 330,269, dated November 10, 1885.

Application filed August 22, 1885. Serial No. 175,041. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM STANLEY, Jr., a citizen of the United States, residing in Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Holders for Incandescent Electric Lamps, of which the following is a specification.

My invention relates to the construction of holders for receiving the necks of the globes of incandescent electric lights, and thus securing them in position, and at the same time for establishing proper electric connections between the supply-conductors and the electric terminals of the lamp.

The object of the invention is to provide a simple and inexpensive holder, to which the lamp may be easily applied without the use of any technical skill whatever, which shall insure the positive completion of the electrical connections, and which will at the same time not be liable to disarrangement by constant use.

The invention comprises a holder constructed substantially in the following manner: A cylindrical tube of brass or other suitable material is slotted at one end, for the purpose of providing resilient arms for receiving and grasping the neck of the lamp-globe. Around the end of the tube which receives the neck of the globe is formed a groove, into which it is designed that a corresponding annular fillet or bead upon the neck of the globe shall enter. Within the tube is fixed a non-conducting block or support carrying two yielding contact-springs. The terminals of the leading-in wires of the lamp are pressed firmly against these springs when the globe is inserted into the holder. A convenient form of circuit closing and interrupting device, provided with a suitable thumb-piece, is also provided for the purpose of making and severing the connections of one of the main conductors with one of the contact-springs, in order to light or extinguish the lamp. A metal plate, provided at its center with a hollow screw, is inserted in the end of the tube opposite the globe, for attaching the holder to its supporting bracket or fixture. Through this plate it is designed that the supply-conductor shall pass.

In the accompanying drawings, Figure 1 is an elevation, and Fig. 2 a section, of the holder

and lamp. Fig. 3 shows the lamp detached from the holder. Figs. 4, 5, 6, 7, 8, and 9 are views of the circuit controller and conductor. Figs. 10 and 11 show details of the holder.

Referring to the drawings, A represents a tube, preferably of brass, though it may be of other metal or of other suitable material, such as hard rubber. In one end of the tube there are cut a number of longitudinal slits, α , which permit the intervening sections, α' , of the wall of the tube to spring outward. An annular groove or recess, b , is formed around the exterior circumference, near the end of the tube so slotted, into which groove it is designed that a corresponding projection, forming a fillet or bead upon the neck of the globe of the lamp C, shall fit, the resistance of the springs serving to hold it securely in this position after its introduction. In the opposite end of the tube A there is inserted a non-conducting plug or support, D. The portion of the tube which receives this plug may, with advantage, be of slightly greater diameter than the upper portion of the tube. By such construction the plug is prevented from slipping into the upper portion of the tube and out of its proper place. Upon this support there are placed two metallic plates, e' and e'' . These are secured upon opposite sides of the plug, and carry resilient contact arms or springs e^3 and e^4 , respectively, which extend outward in a spiral direction. These contact-springs are designed to be placed in electrical connection with the two leading-in wires f' and f'' of the lamp-globe, when such globe is inserted in the holder. The ends of the leading-in wires are preferably looped or doubled, as shown at f^3 f^3 , for the purpose of providing more rigid contacts. The parts are so adjusted that when the lamp-globe is in position the ends f^3 f^3 will press against the respective spiral contact-arms e^3 and e^4 , which, being resilient, will yield sufficiently to insure good electrical connections. A supply or main conductor, 11, is connected directly with the plate e' . The corresponding conductor 12, is connected with a contact-spring, f^4 . (See Fig. 9.) A contact point, h^2 , carried by the shaft of the key F, is in metallic connection with a square block, h' , also carried upon the key F, and this point is designed to be brought into contact with the spring f^4 by turning the key by means of the

thumb-screw f^5 . The pressure of a resilient extension, h , of the plate e' against the square block h' insures both a good electrical connection and the stopping of the key in either one of two positions—that is to say, so that the flat portion of the handle f^5 will be either vertical or horizontal. When the key is in the position shown in Fig. 5, the circuit will be interrupted. In other words, the light will be turned off; but when in the position shown in Fig. 4 the circuit will be closed from the conductor 12 to the contact-spring f^4 ; thence through the pin or point h^2 , stem of the key F, block h' , resilient extension h , plate e' , and arm e^3 , the light filament by way of the conductors $f' f^2$, thence through the arm e^4 and plate e^2 to the conductor 11.

The lower end of the plug or support D is inserted into a slotted plate, K, which closes the lower end of the tube. This plate is held in position by a coupling-joint consisting of a groove, k , in the tube and a projection, k' , upon the plate, very similar to that employed for holding the lamp-globe at the upper end of the holder. An opening, k^2 , is formed in the lower end of the tube, for receiving the arm of the key and permitting it to turn freely therein.

The conductors for conveying the electric current to the lamp are led to an opening, p , in the plate K, and they pass through suitable apertures in the plug D to the respective springs or contacts. A hollow screw-thread, p' , is formed in the opening for securing the attachment of the holder to a corresponding fixture.

I claim as my invention—

1. The combination, substantially as hereinafore set forth, with a holder for incandescent electric lights, having resilient arms in which there is formed an annular groove, of a globe having an annular bead or fillet fitting within said groove formed upon its neck.

2. The combination, substantially as here-

inafore set forth, with the globe of an incandescent electric light, having an annular bead or fillet formed upon its neck, of a tubular holder having resilient arms and a corresponding annular recess formed therein, contact-points against which the leading-in conductors of the lamp are pressed when said lamp is held in said holder, and a circuit-controller for making and interrupting the circuit of the conductors through said contact-points.

3. An incandescent electric-light holder consisting of a tube having resilient arms formed at each end, a non-conducting support inserted within the same, a yielding contact point or spring carried upon said support, a circuit-controlling device for making and severing the connections therewith, and a metallic plate held in one end of said tube by the resilience of the arms of the corresponding end, substantially as described.

4. A holder for incandescent electric lights, consisting of a tube constructed with resilient fingers or arms at one end, two spirally-shaped contact-springs, one of which is in permanent connection with a supply-conductor, a circuit-controlling key, a contact-spring for governing the position of said key, and a contact-point placed in electrical connection with the other spring or separated therefrom, according to the position of said key.

5. The combination, substantially as hereinafore set forth, of the tube A, having the resilient arms a' , the key F, the yielding springs e' and e^2 , the support for said springs fitting within an enlarged portion of said tube, and the plate P, all organized substantially as described.

In testimony whereof I have hereunto subscribed my name this 10th day of August, A. D. 1885.

WILLIAM STANLEY, JR.

Witnesses:

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CHARLES A. TERRY.