

(No Model.)

L. HEINZE.

HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

No. 343,313.

Patented June 8, 1886.

fig. 1.

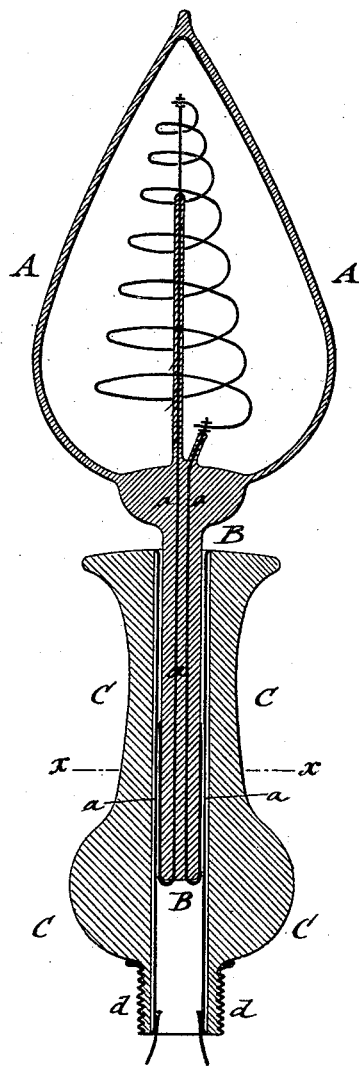


fig. 2.

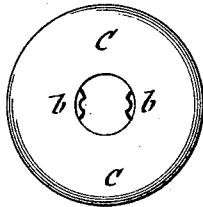
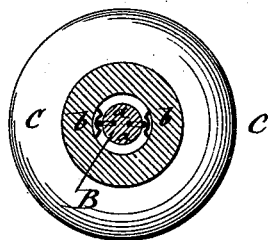


fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

LOUIS HEINZE, OF LYNN, MASSACHUSETTS.

## HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 343,313, dated June 8, 1886.

Application filed November 20, 1885. Serial No. 183,397. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS HEINZE, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful  
5 Improvements in Holders for Incandescent Electric Lamps, of which the following is a specification.

This invention has reference to an improved holder for electric incandescent lamps, by means of which the expensive leading-in wires  
10 of platinum, that connect the light-giving carbon at the interior of the lamp-body with the exterior copper wires, are dispensed with and copper wires used in place of the same, and  
15 wherein the point of electrical contact between the leading-in and the exterior wires can be clearly seen; and the invention consists of a holder for electric incandescent lamps which is made of a tubular body of glass hav-  
20 ing thin metallic contact-plates extending longitudinally through the same, and of an incandescent lamp the bulb of which is provided with an elongated glass stem, and copper  
25 leading-in wires that pass through the stem and are bent up along the same, so as to form contact with the metallic plates of the holder.

In the accompanying drawings, Figure 1 represents a vertical central section of my improved holder for incandescent electric lamps.  
30 Fig. 2 is a top view of the holder with the lamp detached; and Fig. 3 is a horizontal section on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents an incandescent electric lamp of any approved construction, the body or bulb of which is provided with a solid or tubular glass stem,  
40 B, that is equal in length or longer than the bulb itself. The leading-in wires *a a* pass through the stem B, and are melted into the same, and are connected at the inside of the lamp-body with the light-giving carbon. The  
45 ends of the leading-in wires *a a* are bent upward over the lower end of the stem close to the outside of the same, so as to fit the longitudinally-grooved sheet-metal plates *b b*, that

are attached in any suitable manner to a tubular socket or holder, C, and extended longitudinally through the same. The holder C is  
50 made of plain or colored glass, or other suitable transparent material, and in plain or ornamental shape, as required. The lower part of the socket C is provided with a screw-  
55 threaded sleeve, *d*, by which it is screwed into any suitable support. The conducting line-wires are soldered or otherwise attached to the lower ends of the grooved contact-plates  
60 *b b*, the latter being placed in electric contact with the outer ends of the leading-in wires *a*.

In place of the expensive platinum leading-in wires copper wires are used, by which the desired result is accomplished without detriment to the vacuum in the lamp-body, as, owing to the length of the stem, the lower part of the same and the copper leading-in wires are  
65 but little affected by the heat of the incandescent carbon, so that consequently but a small amount of contraction or expansion of the  
70 leading-in wires takes place.

By constructing the stem and holder each of glass the contact between the bent-up ends of the leading-in wires *a* and the grooved plates  
75 *b* can be clearly seen through the same by looking through the spaces between said plates.

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

The glass socket C, provided with the longitudinally-grooved metallic plates *a* on its  
80 interior for connection with the line-wires, in combination with an incandescent lamp, A, having a glass stem, B, the leading-in wires of said lamp being extended through said  
85 stem and bent up along the outer face thereof, whereby they are adapted to form electrical contact with said plates when the stem is inserted in the socket, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence  
90 of two subscribing witnesses.

LOUIS HEINZE.

Witnesses:

HUBERT ROPER,  
SARAH D. BERDGE.