

(No Model.)

C. RICHTER.
INCANDESCENT LAMP.

No. 279,811.

Fig. 1. Patented June 19, 1883.

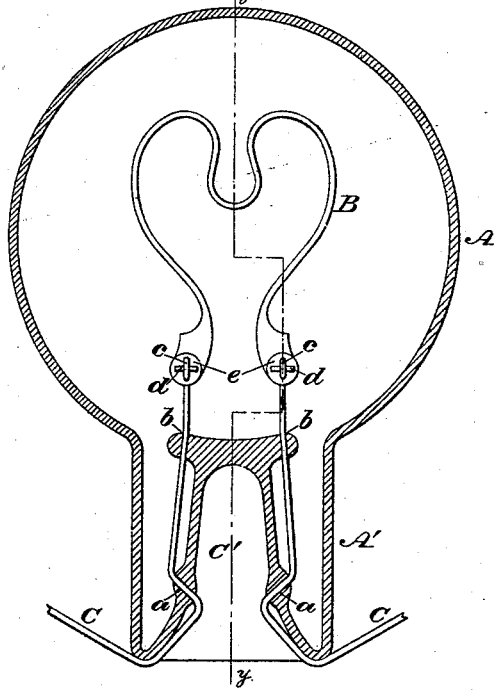
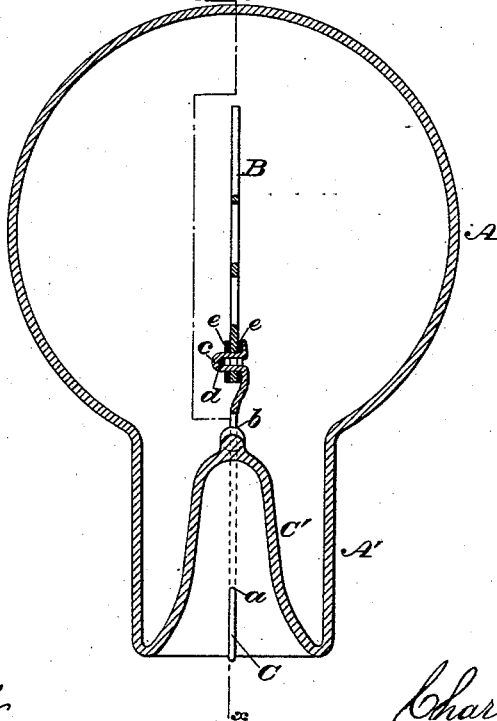


Fig. 2.



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INCANDESCENT LAMP.

SPECIFICATION forming part of Letters Patent No. 279,811, dated June 19, 1883.

Application filed October 9, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES RICHTER, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Incandescent Lamps, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a vertical section in line *x x*, Fig. 2, of the incandescent lamp embodying my invention. Fig. 2 is a vertical section in line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists of means for firmly and securely sustaining the carbon of an incandescent lamp.

It also consists of means for firmly and securely connecting the carbon and its supports.

It also consists of a glass wire-support having the peculiar construction hereinafter set forth.

Referring to the drawings, A represents the hollow transparent globe of an incandescent lamp, and B represents the carbon within the same.

C represents platinum wires, which are connected with the lower ends of the carbon B and sustained on a wire-support, C', within the neck A' of the globe A. The wire-support is formed of glass or other suitable material in the shape of a hollow stopper or elongated cap, having near its bottom openings *a*, extending obliquely downward from the interior of the globe to the hollow central space of said wire-support, and at its top openings *b*, extending vertically through the solid lateral annular expansion of said wire-support, each wire C being passed through one of the upper and lower openings, *b a*, and embedded or otherwise tightly held therein, it being noticed that each wire is connected with the plug at two points—viz., the openings *a b*—and thus sustained at different places. The wires extend below the openings *a* for connections usual in incandescent lamps, and their ends above the openings *b* are connected with the carbon B, as has been stated.

In order to attach the wires to the carbon, I form near the upper end of each wire a loop, *e*, which is inserted in an opening in the lower end or limb of the carbon, and pass through the loop a pin or key, *d*, which serves to hold the loop in position and prevent its disconnec-

tion from the carbon, thus interlocking the carbon and wires.

Platinum washers *e* are applied to the carbon on opposite sides of the place of connection of the wires C, the pins or keys *d* resting against the washers of one side, and the portions of the wires above and below the loops resting against the washers of the other side, as clearly illustrated in Fig. 2.

It will be seen that the carbon is affixed to the wires in a strong, secure, and unyielding manner, the means employed being simple and inexpensive; and as the wires are stiffened by their manner of attachment to the plug, as has been stated, it is evident that the carbon is rigidly, firmly, and reliably sustained within the globe.

The wire-support C' seals the bottom or neck of the globe, and also holds the two wires separate and distinct. It is blown hollow, thus possessing lightness and strength, and admitting of the convenient insertion and fastening of said wires in the openings *a b*, the ready attachment of said plug to the neck or bottom of the globe, and dispensing with filling-blocks of plaster-of-paris, &c. The peculiar shape of the support causes each wire to be bent into two angles at the lower opening of said support, besides being attached at two places—viz., the lower and upper openings, *a b*—wherefore the wire will be firmly sustained and well guarded against accidental displacement.

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

1. The hollow wire-support C', in combination with the globe A of an incandescent lamp and the wires C, said support being provided in its sides with openings *a* and in its top with openings *b*, and said wires being passed inward through openings *a* and upward through openings *b*, substantially as shown.

2. In an incandescent lamp, the carbon, in combination with the sustaining-wires having loops which are fitted in openings in the carbon, and pins or keys which are passed through said loops to interlock the carbon and wires, substantially as and for the purpose set forth.

3. The sealing and wire-sustaining plug C'.
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Witnesses:

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