

(No Model.)

J. M. A. GÉRARD-LÉSCUYER.

INCANDESCENT ELECTRIC LAMP.

No. 336,637.

Patented Feb. 23, 1886.

Fig. 1.

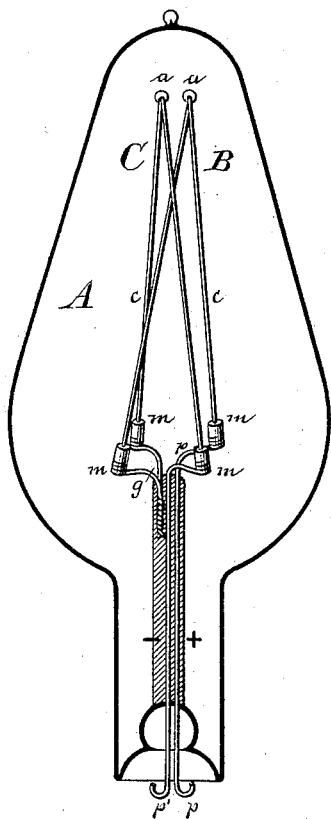
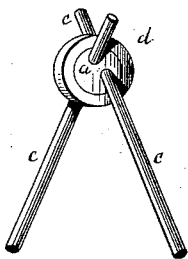


Fig. 2.



WITNESSES:

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INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 336,637, dated February 23, 1886.

Application filed October 24, 1883. Renewed October 22, 1885. Serial No. 180,657. (No model.)

To all whom it may concern:

Be it known that I, JEAN MARIE ANATOLE GÉRARD-LÉSCUYER, of Paris, in the Republic of France, have invented certain new and useful Improvements in Incandescent Electric Lamps, of which the following is a specification.

This invention consists in the combination of two or more carbon filaments arranged in a peculiar manner, as hereinafter described. The invention consists, further, in a peculiar construction of the carbon filament.

In the accompanying drawings, Figure 1 is a vertical central section of an incandescent electric lamp having two carbon filaments arranged in accordance with this invention. Fig. 2 is a perspective view of a carbon filament constructed in accordance with this invention.

The globe or bulb A may be of any ordinary construction and exhausted of air. The platinum conductors for connecting the carbon filaments with the line-wires are inserted in the neck of the globe in the usual manner. Two or more carbon filaments, B C, are employed, each composed of inclined carbon pencils *c*, united at their upper ends. The lower ends of all the pencils rest in suitable supports, preferably in sockets *m*, attached by carbonaceous cement. The intimate contact between sockets *m* and conducting-wires *p p'* is produced by carbonaceous cement in the usual manner. The connections at the upper ends of the pencils of each pair are effected by means of a carbon ball or disk. These balls or disks serve as small reflectors, by which the rays of light are thrown in the direction, or nearly so, of a vertical plane passing through the axes of the pencils, thereby increasing the light at the most advantageous point. The lower end of one of the pencils of the filament B is connected with the positive conductor, and the lower end of one of the pencils of the filament C is connected with the negative conductor *p'*. The lower ends of the other pencils of the filaments are connected together by means of a wire or wires, *g*. In this arrangement the current passes first through both

pencils of one of the filaments, and then through the pencils of the other filament.

I have devised a novel means for connecting the pencils of one or more of the filaments, which consists of a ring of carbon, *d*, through which the upper pencils are projected in opposite directions, and a filling, *a*, of suitable carbonaceous cement; but I do not confine myself in all cases to this specific construction.

For the purpose of protecting the globe, and preventing the deposition of small particles of carbon, which usually takes place in electric vacuum lamps, I have arranged an exterior protecting-globe concentric to the interior globe, so as to protect the surface of the inner globe by an interposed body of air. The exterior protecting-globe is jointed to the neck of the inner globe or detachably cemented thereto, as desired.

I am aware that carbon balls for uniting the pencils are not new, broadly.

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

1. A carbon filament for electric lamps, composed of two carbon pencils and a disk composed of a carbon ring having a filling of carbonaceous cement, through which latter the upper ends of the pencils pass, substantially as described.

2. The combination, in an electric lamp, of a pair of inclined carbon pencils united at their upper ends by a carbon ball or disk, and a similar pair of inclined carbon pencils, also united at their upper ends by a carbon ball or disk, the lower end of one pencil of each pair being connected with the line wire, and the lower ends of the other pencils of the respective pairs being connected with each other by a conducting-wire, substantially as described.

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

J. M. A. GÉRARD-LÉSCUYER.

Witnesses:

J. A. ELSNER,
G. NUSSBAUM.