(No Model.)

T. A. EDISON.

INCANDESCENT ELECTRIC LAMP.

No. 264,652. Patented Sept. 19, 1882.

Fig. 1.

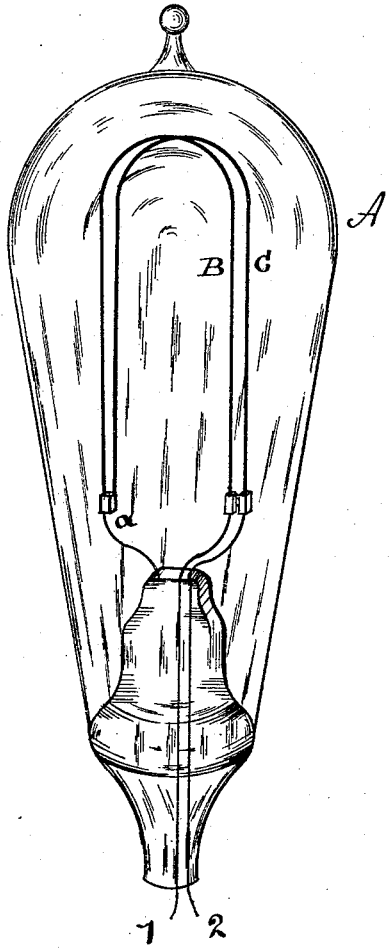
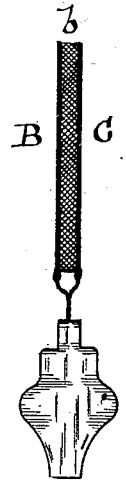


Fig. 2.



WITNESSES:

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THOMAS A. EDISON, OF MENLO PARK, NEW JERSEY.

INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 264,652, dated September 19, 1882.

Application filed August 7, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS A. EDISON, of Menlo Park, in the county of Middlesex and State of New Jersey, have invented a new and useful Improvement in Incandescing Electric Lamps, (Case No. 337;) and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of this invention is to so place two carbon filaments close together in the same incandescent electric-lamp globe that they will remain at the distance apart at which they may be placed without danger of their bending over and approaching each other near enough to allow an arc to form between them. The carbons used are my ordinary arched carbons. Two of these, which are carbonized separately, have each an end electrically connected to an end of the other by electroplating or in other suitable manner, and are placed side by side, parallel, and at the proper distance apart. A filling of an earthy oxide, or other suitable insulating material, is then placed between the filaments, so as to hold them apart. The carbons are then placed in the lamp, their separate ends being electroplated to the leading-in wires of the lamp, after which the lamp is exhausted. During the last stage of the process of exhaustion the carbons of the lamp are heated by an electric current to an incandescence higher than that at which they are intended to be used. This heat decomposes the material between the carbons, which is removed or partially removed from the globe with the air, after which it will be found that the carbons have become fixed rigidly in their position. The lamp is "sealed off," and is then ready for use.

In the drawings, Figure 1 is an elevation of a completed lamp, and Fig. 2 a view of a portion of the two carbons with the separating-filling between them.

A is the inclosing lamp-globe, and 1 2 the leading-in wires.

B C are carbons, united together at *a*, and thus arranged in series in the lamps.

b is the filling of plaster—such as plaster-of-paris—or other suitable material.

The carbons are supported by a wire.

It is evident that the two carbons could be used in multiple arc instead of in series, if one of the leading-in wires were attached at *a*.

What I claim is—

The method of preparing two or more contiguous carbon filaments for use in the same incandescing electric lamp, consisting in separating such carbon filaments by a filling capable of being decomposed or disintegrated by heat, and then fixing the relative position of such carbon filaments, and removing at the same time the separating-filling, by bringing such carbon filaments up to a point of high incandescence, substantially as set forth.

This specification signed and witnessed this 15th day of December, 1881.

THOMAS A. EDISON.

Witnesses:
H. W. SEELY,
RICHD. N. DYER.