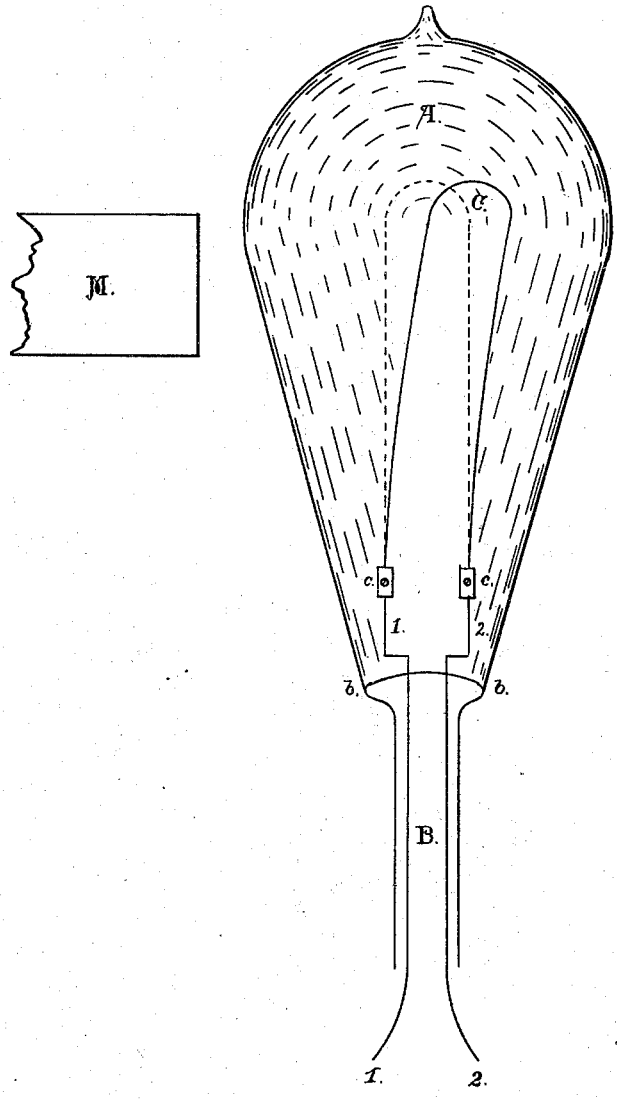
(No Model.)

T. A. EDISON.

STRAIGHTENING CARBONS OF ELECTRIC INCANDESCENT LAMPS.

No. 263,141. Patented Aug. 22, 1882.



ATTEST;
J. L. Clark.
H. W. Howard

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UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF MENLO PARK, NEW JERSEY, ASSIGNOR TO THE EDISON ELECTRIC LIGHT COMPANY, OF NEW YORK, N. Y.

STRAIGHTENING CARBONS OF ELECTRIC INCANDESCENT LAMPS.

SPECIFICATION forming part of Letters Patent No. 263,141, dated August 22, 1882.

Application filed June 24, 1881. (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 Straightening Carbons of Electric Incandescent Lamps, (Case No. 320;) and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

It sometimes happens in the manufacture of the carbon filaments used in incandescent electric lamps, or in the manipulation attendant upon their embodiment in lamps, that they become distorted or crooked, leaning to one side, instead of standing straight within the glass inclosing globe.

The object of this invention is to provide a method of straightening the carbon filament when it has become so bent or distorted. To accomplish this the carbon filament to be straightened, after its embodiment in a lamp, permanent or temporary, is raised to a high degree of incandescence by the electric current. It is preferable that the degree to which it is raised should be somewhat higher than that at which it is intended to use it thereafter. While thus heated the carbon filament is subjected to the action of a magnet placed in close proximity thereto upon the exterior of the glass inclosing globe or chamber. The attraction of the magnet will cause the filament to gradually become straight. When this has been attained the circuit through the carbon is broken and it is allowed to cool. While cooling it is preferable that it remain under the action of the magnet to prevent any electrical carrying during the short time the carbon is still hot after the current has ceased to act, during which period carrying is still likely to occur. After such cooling it will remain straight, especially if used at a lower degree of incandescence than that used during the straightening process.

In the drawing, A represents the glass inclosing globe of an incandescent electric lamp whose carbon filament C is bent or distorted, as shown. As here shown, the lamp is a permanent one, the filament C being secured by clamps *c c* to the terminals of leading-in wires 1 2, which are sealed into the glass tube B, hermetically sealed to the globe A at *b b*. It is evident, however, that the lamp might be a temporary one, used simply for the purpose of the process. The filament C is raised to a high degree of incandescence by connecting 1 2 to a suitable source of electricity. When rendered incandescent the magnet M is brought into close proximity thereto, causing the filament to gradually straighten, as indicated in dotted lines. When straightened sufficiently the circuit through 1 2 is broken and the filament allowed to cool, preferably while under the influence of the magnet M.

What I claim is—

1. The method of straightening a bent or distorted carbon filament in an incandescing electric lamp, consisting in electrically heating the same to a high degree of incandescence, then subjecting the heated filament to the action of a magnet, and then allowing it to cool while still under the influence of the magnet, substantially as set forth.

2. The method of straightening a bent or distorted carbon, consisting in electrically heating the same to a high degree of incandescence and subjecting it to the action of a magnet while so heated, substantially as set forth.

This specification signed and witnessed this 21st day of May, 1881.

THOS. A. EDISON.

Witnesses:

RICHD. N. DYER,

H. W. SEELY.