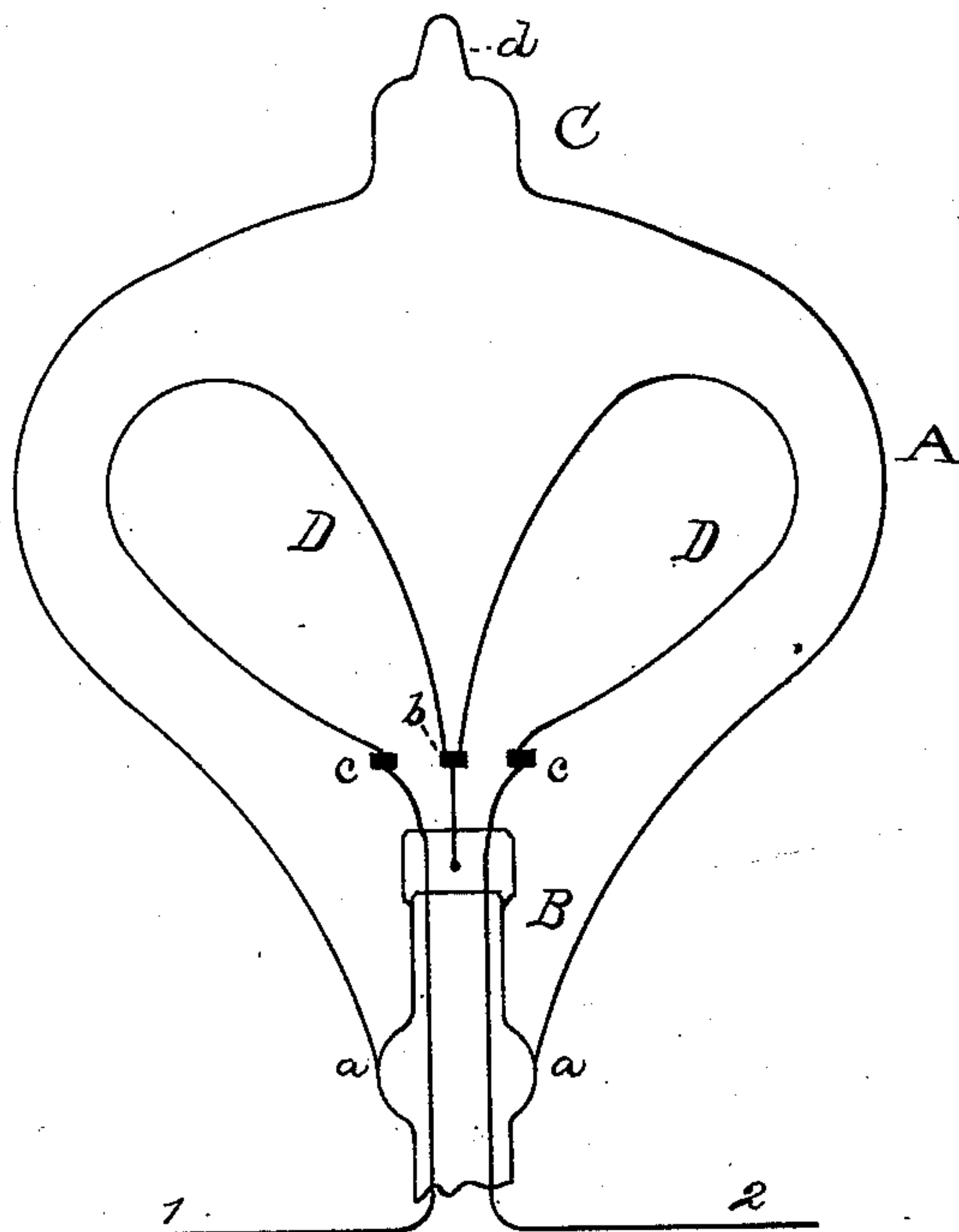


(No Model.)

T. A. EDISON.  
INCANDESCING ELECTRIC LAMP.

No. 273,485.

Patented Mar. 6, 1883.



ATTEST:  
*E. C. Rowlands*  
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# UNITED STATES PATENT OFFICE.

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

## INCANDESCING ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 273,485, dated March 6, 1883.

Application filed November 9, 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  
5 useful Improvement in Incandescing Electric Lamps, (Case No. 508,) of which the following is a specification.

In the use of incandescing electric lamps it may sometimes be desired that the light-  
10 giving body shall be of a broad, flat shape similar to that of a gas-flame. My object is to provide a lamp of this character.

In the lamp which I have devised the incandescing conductor consists of two flexible  
15 "horseshoe-shaped" filaments of carbon, connected together within the globe in series, and diverging or spreading out from each other, so that the effect of a broad, flat flame is produced, the conductor being supported in the  
20 middle from the glass inner stem of the lamp. Such filaments are attached to the inner stem by means of the leading-in wires and a central wire-support sealed therein, and are placed in the lamp together, they being first folded  
25 or bent together, so that they may pass through the opening at the bottom of the globe. The stem is sealed, as usual, in the bottom of the globe. The top of the globe is provided with an opening of sufficient size to admit a suit-  
30 able tool, which is put through this opening and used to bend the filaments apart and into the desired form. By using this process the opening at the bottom of the tube and the stem which is sealed within such opening may  
35 be made of the usual small diameter, whereas if the filaments were spread out before being placed in position a very large opening would be required to allow of their entrance, and a correspondingly large stem would of  
40 course be required to fit closely and be sealed within said opening. After the filaments are placed in position an exhaust-tube is sealed to the top of the globe, through which the air is exhausted, the carbon being heated to incan-  
45 descence during the exhausting process, and the exhaust-tube is then sealed off close to the top of the globe.

By the use of the devices and process described I produce a lamp of very high resistance, and of an ornamental and desirable construction. 50

My invention is illustrated in the annexed drawing, which is a view in elevation of a lamp embodying said invention.

A is the inclosing-globe, and B the inner  
55 glass stem or wire-support through which the leading-in wires 1 2 pass. Such stem is sealed in the bottom of the globe at *a a*. The globe is provided with a projection, C, at its top, which originally is left open. 60

D D are the two carbon filaments, electro-  
plated or otherwise attached together at *b*, and to a supporting-wire sealed into the stem, and attached to the leading-in wires 1 2 at *c c*,  
65 so that they are connected in series. The filaments are folded together, so that they may be passed through the opening *a a*, and after the stem B is sealed within said opening a tool is introduced through C, and the filament bent  
70 apart, as shown. The globe is exhausted through a tube attached at C, and such tube is then sealed off at *d*.

The form of the incandescing conductor and of the globe will be made the subject of an application for Design Patent. 75

What I claim is—

1. The method of manufacturing electric lamps consisting in attaching two flexible filaments connected and folded together to the inner stem or wire-support, sealing such stem  
80 within the bottom of the globe, and then bending said filaments apart and into the shape shown, substantially as set forth.

2. An incandescing electric lamp composed of the globe A, provided with enlargement C, 85 the wire-support B, the diverging filaments D D, the leading-in wires, and the central wire-support, substantially as set forth.

This specification signed and witnessed this 26th day of October, 1882.

THOS. A. EDISON.

Witnesses:

WM. H. MEADOWCROFT,  
H. W. SEELY.