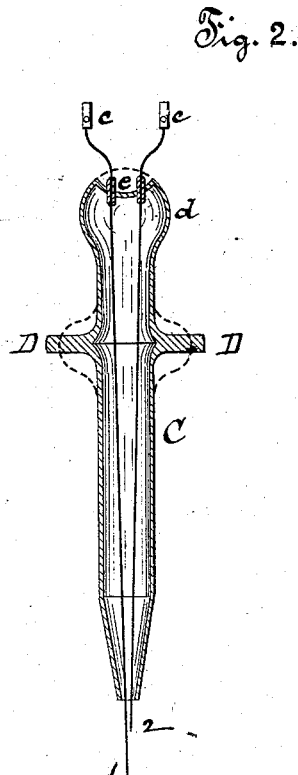
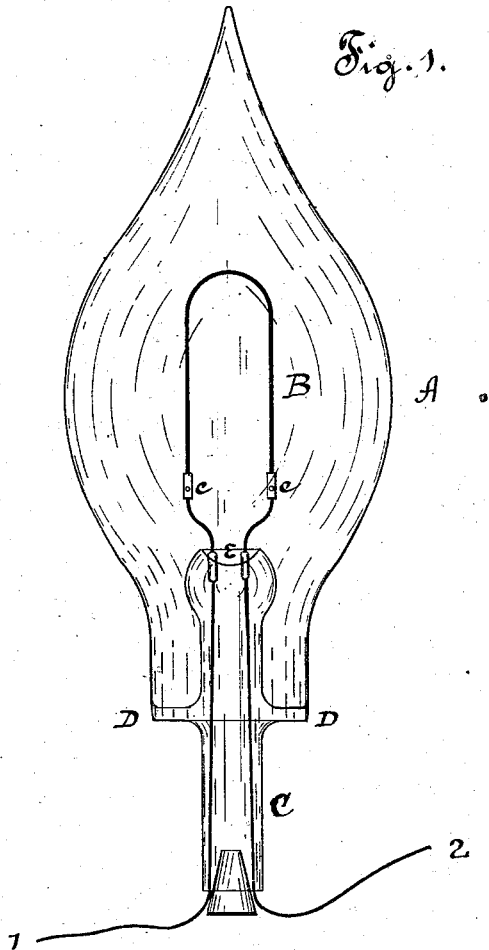


(No Model.)

T. A. EDISON.  
Incandescing Electric Lamp.

No. 239,149.

Patented March 22, 1881.



Attest:  
O. D. Mott  
Atty.

Inventor:  
Thos. A. Edison,  
per Dyer & Miller

Atty.

# UNITED STATES PATENT OFFICE.

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

## INCANDESCING ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 239,149, dated March 22, 1881.

Application filed December 15, 1880. (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; 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.

My invention relates to incandescent electric lamps, and is intended as an improvement on the form shown in Letters Patent No. 230,255, issued to me July 20, 1880.

In the lamp described in the above patent the glass stem through which the wires pass has a round bulb at the top, in which the wires are sealed; and a round enlargement below this bulb, which supports the exterior globe of the lamp. The interior of this globe being a vacuum, while the interior of the inside stem is filled with air, a considerable pressure is exerted on the inner surface of the upper bulb, and this pressure is exerted on the weakest part—a concave surface. Therefore, in my present invention, I make this bulb with a depression in its top, so that the atmospheric pressure is exerted on a convex surface, which is less likely to be injured thereby.

In some cases, instead of a hollow spherical enlargement of the stem as a support to the globe, it may be desirable to use a solid projection extending from the sides of the stem as a support for the globe, and to which the globe is sealed.

My present invention, then, consists, first, in constructing the upper bulb with a concavity or depression in its top; and, second, in a support for the globe formed of a projection extending laterally from the stem and forming a part thereof.

In the accompanying drawings, Figure 1 is

a sectional view of an entire lamp constructed according to my invention, and Fig. 2 a sectional view of the interior glass stem.

The dotted lines in Fig. 2 show the construction of the bulbs, as patented by me in the above-mentioned Patent No. 230,255.

A is the exterior globe, and C the interior glass stem, through which the wires 1 2 of the circuit pass, being sealed in the glass where they pass through it, and terminating in the clamps *c*, which hold the carbon B. At *d* a bulb is blown on the stem, depressed or hollowed out at *e*. At D D an enlargement is also blown on the glass; but while the glass is soft it is flattened down, and forms the projection or ring of glass shown. It is of the same width as the lower part of the globe A, which they support, and to which they are hermetically sealed.

Under some circumstances, and for some purposes, this form possesses considerable advantages over the form before patented by me, inasmuch as the bulb *d* is less liable to breakage, and a better support is afforded for the globe by the projection D D.

What I claim is—

1. In an incandescing electric lamp, the supporting-neck formed with a concavity at the point where the leading wires pass through and are sealed therein, substantially as set forth.

2. The supporting-neck formed with a solid glass projection, to and upon which the inclosing-globe is supported and sealed, substantially as set forth.

This specification signed and witnessed this 3d day of December, 1880.

THOS. A. EDISON.

Witnesses:

H. W. SEELY,  
S. D. MOTT.