

No. 879,180.

PATENTED FEB. 18, 1908.

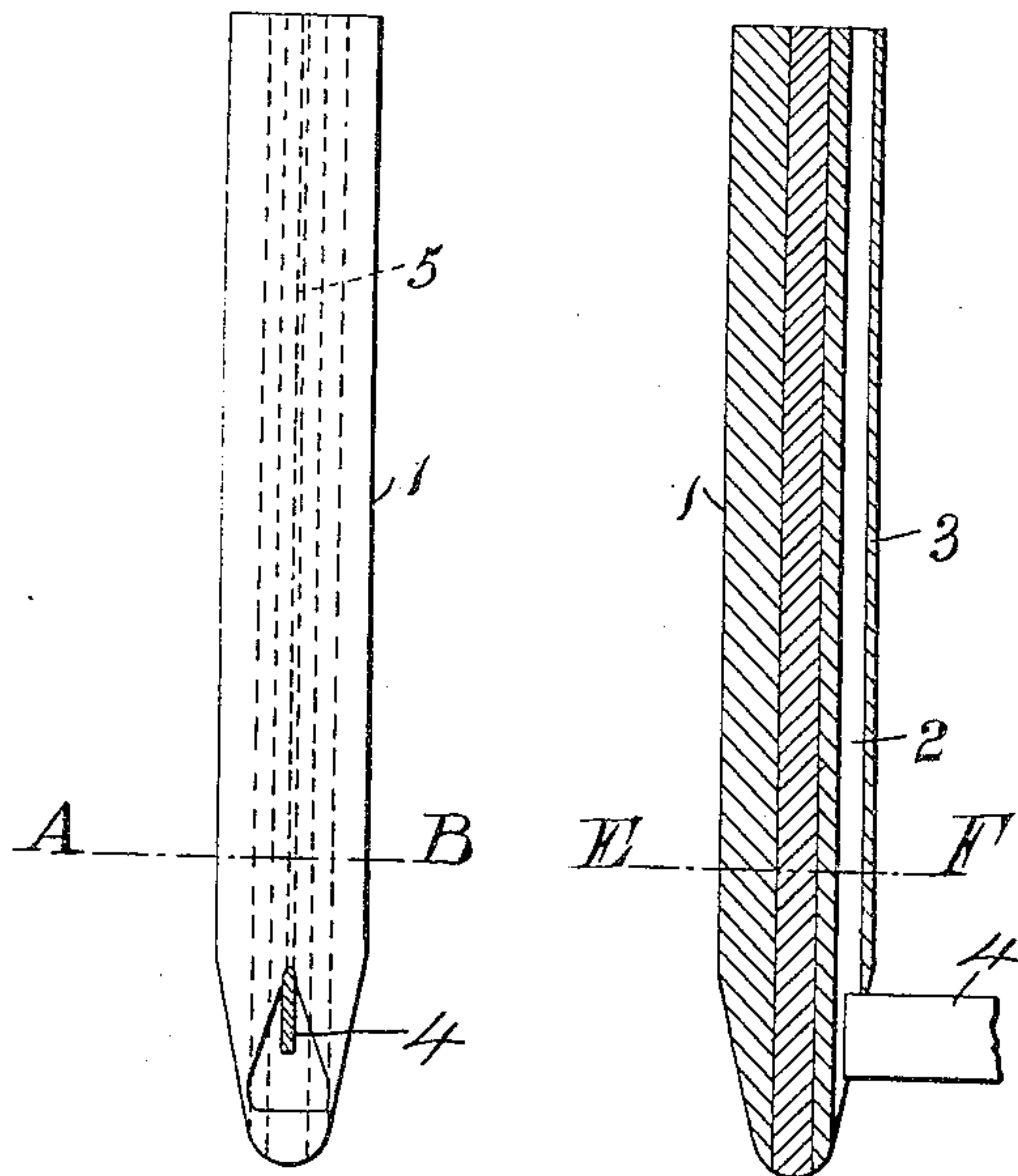
O. KÖNITZER.

ARC LAMP.

APPLICATION FILED JAN. 19, 1906.

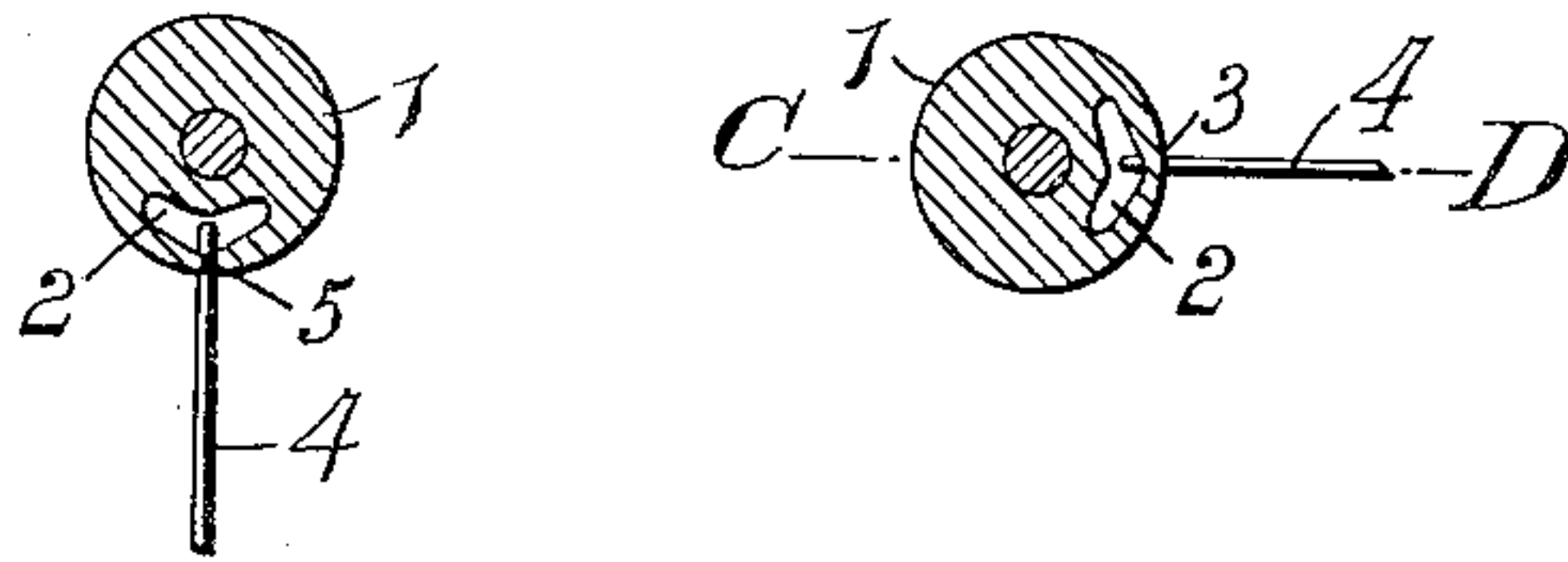
*Fig. 1.*

*Fig. 3.*



*Fig. 2.*

*Fig. 4.*



Witnesses.  
Stanley Wood.  
Robert Bunker Hughes.

Inventor.  
Oskar Köntzger.  
by  
W. E. Lawrence  
Attorney.

# UNITED STATES PATENT OFFICE.

OSKAR KÖNITZER, OF MUNICH, GERMANY.

## ARC-LAMP.

No. 879,180.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed January 19, 1906. Serial No. 296,819.

*To all whom it may concern:*

Be it known that I, OSKAR KÖNITZER, a subject of the German Emperor, residing at Munich, in the Empire of Germany, have invented a certain new and useful Arc-Lamp, of which the following is a specification.

This invention relates to a device for preventing the excessive heating and ultimate destruction of the supporting piece of such arc lamps, in which the mechanism for adjusting the distance between the carbons, which is actuated by the electric current and which is usually of a very complicated character, is replaced by a device acting in a purely mechanical manner and consisting of a supporting piece provided with an edge which cuts through the layer of the carbon resting upon it, that has been rendered porous by the action of the luminous arc, to a depth that corresponds to the burn and so causes the carbon to drop.

Two different forms of carrying out the invention are illustrated in the accompanying drawing.

Figure 1 is a front view. Fig. 2 is a transverse section on the line A—B Fig. 3 a longitudinal section on the line C—D and Fig. 4 a transverse section on the line E—F.

A longitudinal channel, which is filled with air or other comparatively diathermic material, is so provided in the upper carbon electrode 1 that the wall 3 of the carbon electrode is thinnest at the point of contact of the supporting piece 4. The narrow portion of

the electrode resting on the supporting piece 4 will be sufficiently heated to become covered with the porous layer which is necessary to the feeding of the electrodes without the heat of the crater injuriously affecting the supporting piece 4.

The line of contact between the supporting piece 4 and the carbon electrode 1 which corresponds practically with the line passing through the points where the wall 2 is thinnest, may also be determined by arranging in the electrode 1 a narrow slot 5 into the lower end of which the supporting piece 4 fits.

What I claim as my invention and desire to secure by Letters Patent is:—

1. In an electric arc, the combination of an eccentrically perforated carbon and a feed stop engaged by the thin disintegrating wall at the side of said carbon opposite from the major portion of its mass which is involved in the arc.

2. An arc lamp electrode provided with an eccentric longitudinal passage close to one side thereof, and a supporting piece upon which the thin wall of the electrode formed by said channel rests substantially as described.

In testimony whereof I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

OSKAR KÖNITZER.

Witnesses:

ULYSSES J. BYWATER,  
GEORG KÖRNER.